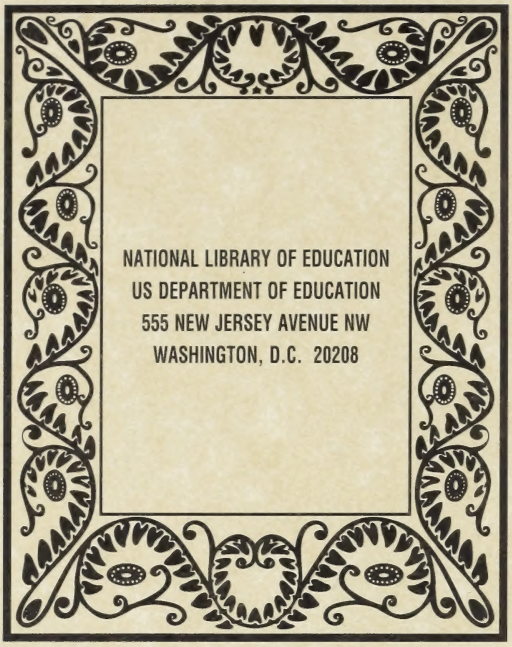

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U.S. Office of Education

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U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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ANNUAL REPORT

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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

As of June 30, 1960

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KATHERINE B. OETTINGER. *Chief, Children's Bureau.*

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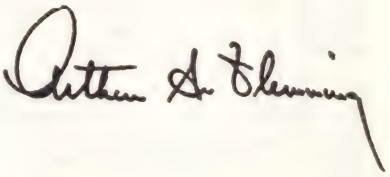
Letter of Transmittal

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,

Washington, D.C., December 1, 1960.

DEAR MR. PRESIDENT: I have the honor to submit herewith the annual report of the Department of Health, Education, and Welfare for the fiscal year ending June 30, 1960.

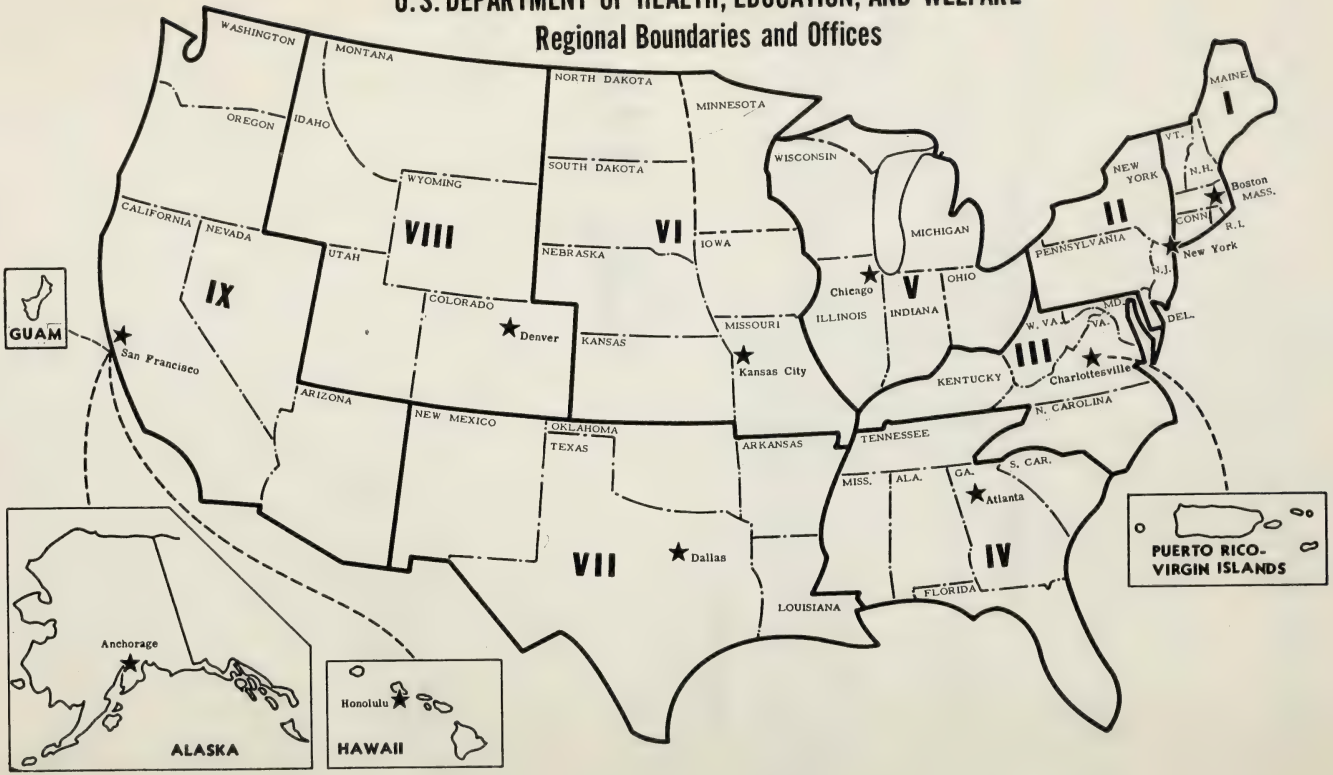
Respectfully,



Secretary.

THE PRESIDENT,
THE WHITE HOUSE,
Washington, D.C.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Regional Boundaries and Offices



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[A detailed listing of the contents of this report, by topic headings, will be found on pages 307–314.]

Office of the Secretary

THE OFFICE of the Secretary consists of the immediate offices of the Secretary and Under Secretary and also includes a number of staff functions that are concerned with matters of departmentwide importance.

The principal staff officers in the Office of the Secretary are the Assistant Secretary (assigned to matters concerning security, civil defense, and international activities); the Assistant Secretary for Legislation; the General Counsel; the Special Assistant to the Secretary for Health and Medical Affairs; the Assistants to the Secretary for Program Analysis and for Public Affairs; and the Directors of Administration, Field Administration, Special Staff on Aging, and Public Information.

In addition to administering the Department, the Secretary serves as the Chairman of several interdepartmental committees. These include: The Federal Radiation Council, established to advise the President with respect to radiation matters directly or indirectly affecting health; the Interdepartmental Committee on International Health Policy, which advises the Secretary of State as to objectives, establishing long-range goals, and planning programs in the field of international health; and the Federal Council on Aging, established to carry on continuing reviews of Federal programs for the aging and to make recommendations to the President and to the agencies as appropriate. The Secretary is a member of the President's Council on Youth Fitness.

The Under Secretary serves as the Acting Secretary in the absence of the Secretary and has also been given primary responsibility for specific programs in the Department. The Under Secretary coordinates, guides, and evaluates the Department's programs and activities in the field of aging; has general supervision of the Special Staff on Aging; serves as Chairman of the Working Group of the

Federal Council on Aging; and was responsible for the Department's activities concerning the 1961 White House Conference on Aging and the 1960 White House Conference on Children and Youth.

The Under Secretary represents the Department on a number of interdepartmental committees, including the Rural Development Program, a cooperative effort of Federal, State, and local governments, and civic leaders to help low-income rural families; the Interdepartmental Committee to Coordinate Federal Urban Area Assistance Programs in behalf of communities suffering persistent unemployment; the Outdoor Recreation Resources Review Committee; the Advisory Board on Economic Growth and Stability, which assists the Council of Economic Advisers to the President; and the Board of the Federal Woman's Award.

The Under Secretary also has received Presidential assignments as Chairman, President's Committee on Fund-Raising Within the Federal Service; Member, U.S. official delegation to Poland for an exchange visit with Polish officials; U.S. Delegate, United Nations Seminar on Participation of Women in Public Life, Bogota, Colombia, May 1959; and U.S. Delegate, Eleventh General Conference of UNESCO, Paris, France, November–December 1960.

Office of Assistant Secretary (Security, Civil Defense, International Activities)

The Department and its operating agencies participate directly in international activities through the United Nations and its specialized agencies, the Organization of American States and other inter-American groups, and a variety of governmental and nongovernmental, technical, scientific, and professional international bodies and regional associations which conduct programs of primary interest to this Department.

Department officials took part in 188 international meetings during fiscal year 1960. In addition, Department personnel have conducted surveys and studies for a wide variety of international agencies or served as advisers and specialists on technical assistance programs. In the foreign policy field the Department serves in an advisory capacity to the Department of State.

In fiscal year 1960, 6,256 foreign nationals from more than 60 countries and non-self-governing territories received training or orientation by agencies of the Department—an increase of approximately 26 percent over fiscal year 1959.

The Office of Internal Security is responsible for establishing and maintaining an effective internal security program and has both staff and operational responsibilities. The Office handled more than 5,000 security investigations during the year.

The Office of Defense Coordinator is responsible for day-to-day relations with all the defense activities of the Department and represents the Secretary on numerous planning and review boards and committees presided over by the Office of Civil and Defense Mobilization (OCDM). This Office also supervises a small permanent cadre at a relocated headquarters site and conducts an annual test program. Planning was advanced during the year for the conversion of Department manpower and resources to provide emergency health and welfare services in the event of an attack.

Office of Assistant Secretary (for Legislation)

This Office assists the Secretary and other officials in formulating the Department's legislative program and presenting it to the Bureau of the Budget and to Congress and also coordinates and reviews all legislative proposals on which the Congress requests the Department's views.

The Office of the Assistant Secretary (for Legislation) includes the Congressional Liaison Office, which serves as the focal point for communications between Congress and the Department; keeps the Secretary and Assistant Secretary advised of congressional reaction to and status of legislation in Congress; and advises officials of needs for development of information to assure proper congressional understanding of Department programs.

Since the creation of the Department in 1953, dramatic progress has been made in the national effort to achieve improved health, better education, and greater economic security. The administration has supported and obtained legislation to strengthen the Nation's educational system, broaden coverage and increase benefits under social security, expand the rehabilitation program which offers new hope for the disabled, strengthen our research efforts in science and medicine, provide more adequate health services and facilities, provide improved protection to consumers against harmful or mislabeled foods, drugs, and cosmetics, and provide improved medical aid to the aged.

Office of General Counsel

The General Counsel is the chief legal officer of the Department, and his office furnishes all legal services to the various operating agencies and units of the Department.

During fiscal year 1960, litigation arising out of the old-age, survivors, and disability insurance program continued to increase dramatically to the point where it exceeded in volume that in any other single area in which suits are brought against the Government.

Eighty percent of the 637 actions instituted in the past year involved the disability freeze and benefit provisions of the law—provisions which, with the recent removal of the 50-year age limitation, can be expected to generate more and more complex and time-consuming litigation.

Another area of ever-growing importance is that of enforcement of the Water Pollution Control Act. Formal hearings were called at Sioux City, Iowa, and St. Joseph and Kansas City, Missouri, involving the interstate effects of pollution originating at those cities. In the case of St. Joseph it became necessary to request the Attorney General to institute suit to secure abatement of pollution. This litigation, now pending in the United States District Court for the Western District of Missouri, is the first of its kind.

In important litigation under the Federal Food, Drug, and Cosmetic Act, the Office successfully defended the Department's action in revoking certificates for coal-tar dyes which had been issued before their danger became known. It won a protracted case against one of the most widely distributed nostrums for arthritis, Tri-Wonda, by establishing that the drug was a totally worthless one. It established the criminal responsibility of a medical doctor for dispensing amphetamines outside the course of his professional practice; it completed its program of finally closing the notorious Hoxsey Cancer Clinic in Dallas, Texas; and it is proceeding vigorously with an important test case involving slack-filled packages.

In the first court test in the program of school construction in federally affected areas, the Commissioner of Education's denial of a school construction grant to a local educational agency was upheld by the U.S. Court of Appeals on the ground that the agency had not met the showing required by law of an undue financial burden on its taxing and borrowing authority.

Special Assistant to the Secretary (Health and Medical Affairs)

The Office of the Special Assistant reviews the health and medical programs of the Department and advises the Secretary with respect to the improvement of such programs and on necessary legislation in the health and medical fields. Liaison is maintained with professional and voluntary medical, hospital, and other health organizations, with other organizations and associations concerned with health affairs, with other Government agencies, and with Members of Congress and congressional committees. Special service rendered by this office involves coordination of departmental activities in radiological health including staff work in connection with activities of the Federal Radiation Council.

Office of Assistant to the Secretary (for Program Analysis)

This Office aids the Secretary in identifying major emerging problems, policy issues, and gaps in Department programs; helps the Secretary appraise program needs and recommends program action including new legislation; provides staff assistance to the Secretary and other top staff in the review and development of Department policies; analyzes the Federal-State implications of programs and program changes; and maintains departmental liaison with the Advisory Commission on Intergovernmental Relations and with private foundations.

During the year three publications, the annual "Health, Education, and Welfare Trends," the monthly "Health, Education, and Welfare Indicators," and the annual "Handbook on Programs of the U.S. Department of Health, Education, and Welfare," were revised and expanded.

Office of Administration

This Office is the Secretary's principal staff unit for the Department's fiscal, management, personnel, and housekeeping operations. The Office carries out these operations through the Office of Financial Management, Office of Management Policy, Division of Personnel Management, and the Division of General Services. It participates actively in the formulation of Department policy; manages the Department's money; establishes Department personnel policies; is in charge of such specific functions as management analysis, incentive awards, and records management; and operates a central library and other services for the Department.

The Office of Management Policy staff conducts surveys and studies of significant organization and management problems which cut across operating agency lines. During the past year, this staff conducted a comprehensive survey of construction and leasing activities throughout the Department and developed materials to assist operating personnel in the preparation and review of construction proposals; in cooperation with the Division of Personnel Management, launched a study of data-processing needs for personnel management to develop a more economical and efficient system of processing personnel actions and to develop an improved personnel reporting system; and conducted an organization study of the audit of grants and contracts for research and training by nonprofit institutions as a basis for improvement of the audit function.

Two documents were issued by the Office of Management Policy to provide general guidelines for the improvement of data-processing activities within the Department.

The Division of Personnel Management is primarily responsible for providing overall direction, coordination, and policy leadership.

One development that has received wide attention in and out of Government is a plan for the gradual retirement of older workers who do not want to stop working altogether when they reach retirement age. Under this plan the length of the workday or workweek can be adapted to the current abilities and energy of the retiring worker, or other appropriate adjustments can be made in work activities.

The Office of Financial Management is concerned with all aspects of fiscal administration. It is responsible for analyses of the Department's program budgets, development of fiscal policy and procedures, and conduct of internal audit. The Director is also the Budget Officer for the Department and represents the Secretary at the Bureau of the Budget, with the Congress, and with operating agency heads during negotiations or hearings on budget matters.

During fiscal year 1960, this Office has conducted several reviews and made many evaluations. A major financial management study of Gallaudet College was made in cooperation with the Bureau of the Budget. A study was launched to investigate the requirements and problems in converting the payroll operation to an automatic data-processing system.

The Division of General Services is responsible for the development and administration of departmental policies and procedures in the areas of real and personal property management, procurement and supply management, printing management, communications, library services, and visual aids. The Division is also responsible for the administration of a working capital fund which is the financing medium for the bulk of administrative services provided for headquarters' units.

In fiscal 1960 the Division issued new and revised policies and guidelines to improve administrative functions. A major step forward was the modernization of the Department's printing plant to afford better and more timely service to expanding operating programs.

Office of Field Administration

This Office is responsible for the general supervision and coordination of the activities of the Department's nine regional offices and provides specialized services through four divisions.

The Regional Directors, as the principal representatives of the Secretary in their respective regions, work with Governors and principal State and local officials on matters involving Federal-State and local

problems; and make available to these officials, community groups, and others information regarding the activities of the Department.

During the year the Division of Field Management established committees in the regional offices for rural and urban area assistance.

The Division of Grant-in-Aid Audits reviewed expenditures totaling approximately $4.75 million under the Department's 33 grant programs.

Under the direction of the Division of Surplus Property Utilization, personal property donations reached $400,660,692 as measured by acquisition cost, and real property transfers reached $23,355,370. Five years ago these figures were $204,497,417 and $13,567,628, respectively. Approximately 78 percent of the personal property was distributed to educational institutions, 10 percent to health institutions, and 12 percent to civil defense organizations. Donations of equipment useful in science teaching programs and machine tools useful in vocational education continued to play an increasingly important part in the overall program.

The Division of State Merit Systems reviews State personnel plans and operations, certifies compliance with Federal standards, and provides technical assistance for improvement of administration. During the fiscal year the majority of State personnel plans were reviewed, and examination materials were prepared and supplied to 41 States for 490 classes of positions. Technical advice plus the examination material assisted the States in their recruiting and selection programs involving 900,000 job applicants.

Special Staff on Aging

The Special Staff on Aging, established in 1956, coordinates the development of Department policies and programs in the field of aging. This unit has representatives in each of the nine regional offices of the Department and works closely with the States and with national organizations in establishing programs on aging throughout the country.

During the year the Special Staff on Aging was concerned principally with preparations for the 1961 White House Conference on Aging; served as secretariat to the National Advisory Committee for the White House Conference on Aging; made grants totaling $759,200 to States and Territories to assist them in preparing for the White House Conference, and prepared for publication reports and recommendations submitted by the States and Territories. Also during the year the Special Staff issued a number of new publications and expanded the Department's monthly bulletin, "Aging."

Assistant to the Secretary (for Public Affairs)

The Assistant to the Secretary for Public Affairs serves as the Secretary's principal staff adviser on major public relations policy; helps formulate Department policy relating to public information affairs; and as occasion arises serves as the Secretary's spokesman in discussions with heads of operating agencies, Members of Congress, and others on matters involving the Secretary's and the Department's public information policies.

Office of Public Information

The Director of Public Information is the chief information officer of the Department. He advises the Secretary on Department policies and operations involving public information, publications, reports, and other information matters, and directs the Office of Public Information, which coordinates all information policies, services, and activities of the Department.

During the year, the Office of Public Information participated in the preparation of more than 60 statements issued by the Secretary at 24 news conferences, prepared or reviewed and issued more than 500 press releases, and reviewed and approved for publication approximately 300 printed documents produced by the Department and its operating agencies. Also during the year, the Office participated extensively in preparing for and conducting the public information aspects of the White House Conference on Children and Youth and in similar preparations for the 1961 White House Conference on Aging; answered hundreds of written and oral inquiries about Department activities and materials; prepared or assisted in the preparation of 50 or more addresses by Department officials; and prepared about 25 articles for encyclopedias and other publications. The Office also inaugurated a study to determine the extent to which existing review policies meet the current needs of the Department and its operating agencies in the field of public information.

Table I.—*Grants to States: Total grants under all Department of Health, Education, and Welfare programs, fiscal year 1960*

[On checks-issued basis]

States, Territories, and possessions	Total	Social Security Administration	Public Health Service [1]	Office of Education	Office of Vocational Rehabilitation	White House Conference on Aging	American Printing House for the Blind [2]
Total	$2,730,641,306	$2,106,328,929	$217,515,554	$357,020,720	$48,606,903	$759,200	$410,000
Alabama	80,435,586	63,329,492	6,438,838	8,608,552	2,036,745	15,000	6,959
Alaska	10,029,944	2,263,427	147,546	7,492,974	110,997	15,000	
Arizona	26,380,743	16,340,457	1,827,698	7,765,577	428,577	15,000	3,434
Arkansas	43,272,823	34,141,571	4,467,808	3,531,233	1,111,893	15,000	5,318
California	282,010,464	225,581,317	10,812,725	42,789,413	2,778,184	15,000	33,825
Colorado	47,447,460	36,896,039	2,152,706	7,823,727	555,794	15,000	4,194
Connecticut	21,433,998	16,299,036	2,026,545	2,692,535	391,157	15,000	9,725
Delaware	4,392,609	2,502,713	637,750	1,057,488	181,212	12,200	1,246
District of Columbia	10,685,771	9,132,640	956,478	347,915	232,887	15,000	851
Florida	80,253,332	62,705,676	6,534,488	9,262,718	1,723,567	15,000	11,883
Georgia	85,869,533	68,153,335	7,113,633	8,258,474	2,318,545	15,000	10,546
Hawaii	10,355,045	4,218,072	2,010,927	3,884,371	224,851	15,000	1,824
Idaho	12,524,026	7,232,904	2,202,876	2,896,786	175,639	15,000	821
Illinois	109,932,768	91,552,225	9,045,299	7,243,650	2,055,837	15,000	20,757
Indiana	37,279,673	25,880,790	5,568,056	5,318,647	505,008		7,172
Iowa	37,998,452	30,439,559	3,520,957	3,033,531	984,968	15,000	4,437
Kansas	36,951,262	25,793,666	3,318,554	7,223,855	595,537	15,000	4,650
Kentucky	57,735,472	48,243,310	5,174,215	3,760,073	537,586	15,000	5,288
Louisiana	118,134,250	106,120,910	6,544,010	4,222,103	1,225,024	15,000	7,203
Maine	19,304,006	14,667,494	1,870,622	2,465,039	284,848	15,000	1,003
Maryland	33,012,630	18,886,595	2,679,368	10,835,351	587,867	15,000	8,449
Massachusetts	75,464,095	62,682,190	4,593,776	7,322,255	831,394	15,000	19,480
Michigan	79,119,054	61,300,489	7,984,797	8,384,575	1,415,442	15,000	18,751
Minnesota	47,556,910	38,258,776	4,646,362	3,547,570	1,081,635	15,000	7,567
Mississippi	50,383,829	39,648,235	4,490,785	5,347,098	878,152	15,000	4,559
Missouri	104,146,041	90,545,309	6,680,405	6,016,035	882,606	15,000	6,686
Montana	12,365,905	6,931,859	1,563,611	3,644,597	219,197	5,000	1,641
Nebraska	20,315,768	14,500,815	2,261,512	3,188,832	346,995	15,000	2,614
Nevada	5,209,352	2,742,311	633,348	1,755,544	62,663	15,000	486
New Hampshire	7,902,131	4,703,412	1,399,932	1,676,519	108,992	12,000	1,276
New Jersey	37,867,831	26,388,160	3,462,067	6,788,097	1,199,616	15,000	14,891
New Mexico	27,312,517	16,587,936	948,394	9,515,050	242,885	15,000	3,252
New York	172,021,517	145,977,389	10,054,368	12,717,548	3,213,541	15,000	43,671
North Carolina	72,622,368	53,143,250	9,464,723	7,852,948	2,133,440	15,000	13,007
North Dakota	10,976,131	7,264,619	1,409,867	2,021,073	264,630	15,000	942
Ohio	104,464,228	85,083,904	8,930,002	9,237,922	1,175,245	15,000	22,155
Oklahoma	91,941,263	75,748,634	3,002,982	11,955,298	1,216,553	15,000	2,796
Oregon	23,392,863	18,122,832	2,054,792	2,531,096	663,369	15,000	5,774
Pennsylvania	115,585,901	88,300,385	11,632,104	12,379,236	3,229,667	15,000	29,509
Rhode Island	14,234,067	9,781,006	1,616,798	2,512,691	307,417	15,000	1,155
South Carolina	31,157,832	22,338,305	3,054,807	4,937,695	807,740	15,000	4,285
South Dakota	13,908,160	8,844,371	1,388,275	3,371,863	287,223	15,000	1,428
Tennessee	57,682,702	44,015,341	6,822,179	5,317,888	1,504,149	15,000	8,145
Texas	163,035,141	127,162,691	9,507,601	24,697,763	1,638,653	15,000	13,433
Utah	14,669,990	9,718,679	1,585,925	3,040,395	308,502	15,000	1,489
Vermont	6,784,297	5,001,624	974,565	607,691	184,961	15,000	456
Virginia	46,992,566	18,475,788	6,293,569	20,920,009	1,280,329	15,000	7,871
Washington	55,304,921	40,156,326	3,399,824	10,803,087	923,208	15,000	7,476
West Virginia	37,034,631	28,826,502	4,192,444	2,790,286	1,205,719	15,000	4,680
Wisconsin	40,004,855	30,426,601	4,298,815	4,147,257	1,109,615	15,000	7,567
Wyoming	6,015,552	3,098,479	1,347,231	1,456,812	97,392	15,000	638
Canal Zone	91						91
Guam	1,764,955	189,743	141,025	1,375,853	58,334		
Puerto Rico	17,327,638	9,598,741	2,581,265	4,471,427	658,561	15,000	2,644
Virgin Islands	636,357	382,999	46,305	174,698	22,355	10,000	

[1] Excludes $242,255 paid to water pollution interstate agencies.
[2] Includes permanent annual appropriation of $10,000.

Social Security Administration

Social Security in 1960

Social security is today an accepted part of our culture and an essential bulwark of our economy. So affirmed the Secretary of Health, Education, and Welfare on the occasion of 1960 observances marking a quarter century since the August 14, 1935 signing of the Social Security Act. Fittingly, this year's report takes stock of the achievements of the past 12 months against a background of social security's 25 years of progress toward the place it now occupies in American life.

Elaborating on the twenty-fifth anniversary theme, the Commissioner of Social Security pointed out that the Social Security Act recognized the national interest in and the national scope of the problem of income security. In the midst of immediate need of devastating proportions, it established programs to prevent future dependency. The social insurance programs started in 1935 have since proven their value in periods of economic prosperity as well as temporary economic downturn.

The principle of shared responsibility for public assistance for needy persons and for health and welfare services manifested in the Federal grants to the States under the Social Security Act has also been firmly established.

In the years since 1935, programs established by the Social Security Act have been expanded and new programs added. Old-age benefits have become old-age, survivors, and disability insurance, and its coverage has been extended to almost the entire working population. Benefits have been increased not only to adjust to the changed value of the dollar but also to reflect in part the rising level of living for the population as a whole.

In our total social security system, primary reliance and emphasis have been placed on the contributory earnings-related programs—

old-age, survivors, and disability insurance and unemployment insurance—as the basic source of protection, for almost all Americans, against commonly shared risks to income. Under both of these programs, Americans earn their security as they earn their living, and benefits paid are varied—within limits—with the individual's customary level of living and his economic contribution to society as measured by his earnings. Because benefits under old-age, survivors, and disability insurance and unemployment insurance are payable when due no matter what nonwork income the individual may have, the social insurance programs have served to encourage other means of protection, through private employee-benefit plans and individual action.

No preventive measures, however, can anticipate all problems of need. An essential part of our social security system therefore is a flexible program of public assistance. Assistance can seek to rehabilitate and to avert perpetuation of poverty and dependency through successive generations.

The Federal Government for many years now has shared with the States in the cost of aid to the permanently and totally disabled as well as old-age assistance, aid to dependent children, and aid to the blind. The Federal share in the assistance programs has been increased over the years and provision has been made for proportionately more help to those States where need is greatest and income and fiscal ability least. Payment for medical care through public assistance has been made easier by the provision for Federal matching of direct payments to the suppliers of such service.

From the beginning, the Social Security Act has provided encouragement and support for health and welfare services. The programs for maternal and child health services and crippled children's services have expanded in scope. Both in these and in the child welfare services program, Federal financial support and Federal leadership have served to stimulate State and local action. Explicit recognition of the importance of services to promote self-help and increase the independence of persons receiving public assistance was written into the Federal act in 1956.

The Social Security Amendments of 1960, in the process of enactment at the end of the fiscal year and signed into law by President Eisenhower during the 25th anniversary year, will further improve the social security status of the American people.

Among the several improvements are provisions for increased Federal participation in the financing of State payments to suppliers of medical care for the needy aged and for inauguration of Federal grants to States for programs for the aged who do not receive old-age assistance but who are unable to pay medical bills.

For the aged who are able to provide for their maintenance but who do not have sufficient income or other resources to provide necessary medical care, the new law can operate as follows:

- States starting such programs have wide latitude in determining under what conditions aged persons can qualify for benefits. Each State develops its own test.
- States decide what hospital, medical, and surgical benefits are available to persons who qualify. The benefits are as liberal as the States wish to make them. The only Federal requirement as to scope of services is that the program must include both institutional and noninstitutional services.
- To help finance the program, the Federal Government makes available, beginning October, 1960, whatever funds are necessary to pay from 50 to 80 percent of the cost of the benefits, with the exact percentage determined on the basis of the per capita income of each State.

The Social Security Amendments of 1960 also increase to $25 million each the ceilings on the amounts authorized to be appropriated annually for maternal and child health services, crippled children's services, and child welfare services. Additionally, research or demonstration projects grants to institutions of higher learning and other agencies and organizations are authorized in the field of child welfare.

In the old-age, survivors, and disability insurance program, the law makes these changes:

- Most importantly, the age 50 limitation for disability benefits is eliminated. Disabled workers and their dependents no longer have to wait for the otherwise eligible disabled worker to become 50 years of age to receive benefits.
- The retirement test is liberalized effective January 1961. Before this date a worker under age 72 earning more than $1,200 would lose 1-month's benefit for every $80 or fraction of $80 by which his earnings went over $1,200. Now the law provides that $1 in benefits will be withheld for every $2 of earnings between $1,200 and $1,500, and $1 in benefits will be withheld for each $1 in earnings above $1,500. Thus a beneficiary can work in a job paying more than $1,200 knowing that he will always have more in benefits and earnings combined than he would have if he limited his earnings to that figure. The provision that full benefits are payable for any month in which earnings do not exceed $100 remains in effect.
- Monthly benefit amounts for children of deceased workers are increased to an amount equal to three-fourths of the worker's benefit amount, subject to the maximum family benefit.

- Certain work requirements determining eligibility under the program are liberalized.
- Benefit payments can go to survivors—most of them aged widows—of workers who had acquired 6 quarters of coverage and who died before 1940.

Among the anticipated results upon the effective dates of these changes, were these: 125,000 additional disabled workers and a like number of their dependents—a total of 250,000 persons—would qualify for disability benefits; increased benefits would go to about 400,000 children; 425,000 additional people—workers, dependents, and survivors—would become eligible for benefits.

These potential beneficiaries would now be added to the 14.3 million persons already receiving old-age, survivors, and disability insurance benefits at the end of the fiscal year, or 1.1 million more beneficiaries of this income maintenance program than a year before. Benefit payments during the fiscal year were being made at an annual rate of $10.8 billion. Of those receiving benefits, 11.5 million were age 62 or over, 2.4 million were young survivors and dependents, and 371,000 were disabled workers age 50–64.

In the public assistance programs, almost 2.4 million persons were receiving old-age assistance, more than 3 million children and their adult caretakers were receiving aid to dependent children, 363,000 persons were receiving aid to the permanently and totally disabled, and 108,000 were in receipt of aid to the blind. In addition, some 971,000 persons were receiving general assistance financed from State and local funds.

June payments under the four federally aided public assistance programs were made at an annual rate of $3,358 million, $131 million above the June 1959 rate. Data for fiscal year 1960 show that the Federal share of these payments totaled 58.6 percent, the State share was 33.7 percent, and the local share 7.7 percent.

In all, almost 7 in 8 of the Nation's 15.7 million persons 65 and over at the end of the year had income from social insurance and related programs, public assistance, or both. This is in contrast to the situation at the end of 1934 when little more than 10 percent of all aged persons had income from such sources and about half, it is estimated, were mainly or wholly dependent on relatives or friends for their support.

At the end of fiscal year 1960, total payments under social security and related programs were made at an annual rate of $26 billion, $2.1 billion above the July 1959 rate. Rising old-age, survivors, and disability insurance benefits accounted for over half of the increase. Social security payments represented 6.4 percent of total personal

income in June 1960, compared with 6.2 percent in that month a year earlier and 6.6 percent in June of recession year 1958.

Federal credit unions, by promoting systematic savings and the use of funds thus accumulated for consumer loans at reasonable rates of interest, continued their part in promoting the Social Security Act objective of increasing family security. Continued growth of these credit unions brought their aggregate assets to almost $2.4 billion at the end of 1959 and membership to 5½ million.

The Social Security Administration had 26,071 employees on duty at the end of fiscal year 1960. The great majority of these employees were in district offices and other offices of the Bureau of Old-Age and Survivors Insurance.

The White House Conference on Children and Youth, held in Washington from March 27 to April 2, brought together individuals and groups sharing a deep concern over the opportunities for children and youth to realize their full potential for a creative life in freedom and dignity. About 7,600 persons attended the meetings, including 1,400 youngsters and 500 visitors from foreign countries. National organizations, State and local groups, and Federal agencies were represented.

The two advisory councils created by the 1958 amendments to the Social Security Act submitted their recommendations and findings to the Secretary of Health, Education, and Welfare and to Congress at the end of 1959. The Advisory Council on Public Assistance reviewed the status of the public assistance program in relation to old-age, survivors, and disability insurance, the fiscal capacities of the States and the Federal Government, and other factors affecting the Federal and State shares in the program. The Advisory Council on Child Welfare Services reviewed the child welfare provisions of the Social Security Act, the current child welfare programs, and made recommendations for future changes in these provisions.

At fiscal year's end, active preparations for the 1961 White House Conference on Aging were under way at community, State, and national levels. The theme of the conference is "Aging with a future—every citizen's concern." While the principal concern of the Social Security Administration at the conference will be with matters affecting income security, its overall objectives encompass social as well as economic needs.

The March 1960 report of hearings of the subcommittee of the Ways and Means Committee of the House of Representatives to study the administration of the social security laws stated that the disability insurance program, on the whole, has been fairly administered with great capacity by excellent public officials.

Hearings and Appeals

Old-age, survivors, and disability insurance claimants are guaranteed the right of appeal and review. Largely as a result of the addition of disability benefits to the program in 1956, requests for hearings increased 512 percent in 3 years, from 3,800 in 1955 to 23,250 in 1958. The hearing workload on July 1, 1959, was 12,445 cases, of which 9,475 were related to disability issues. During the fiscal year 13,355 additional requests for hearings were received, 9,540 of them on disability issues. By the end of the year the pending load had been reduced to 5,960.

Requests for Appeals Council review of hearing examiners' decisions increased from 1,780 in 1957 to 5,000 in 1958. During fiscal year 1960, 7,300 cases were received for Appeals Council action, of which 5,650 were on disability issues. The pending load of 2,510 cases on July 1, 1959, was reduced to 1,685 by July 1, 1960.

After reviewing the program operations, the Subcommittee on the Administration of the Social Security Laws of the House Ways and Means Committee reported that "by and large, the subcommittee is satisfied that the Social Security Administration has done an admirable job in handling the 'appeals crisis' occasioned by the disability provisions. The subcommittee believes that the great majority of hearing examiners are performing an exceedingly difficult task with tact and competency. Our random survey of disability applicants who have had hearings shows that the great preponderance believed they had been treated courteously and afforded a fair hearing. This is true even though a great many were not satisfied with the result in their case."

International Activities

The Social Security Administration, through participation in international activities relating to social security, again added to mutual knowledge and insights on social welfare matters among nations of the world. Increased international cooperation was evident in Social Security Administration participation in expert groups concerned with program development, recruiting specialists for the United Nations, and providing training services for foreign nationals coming to the United States through both governmental and nongovernmental programs.

Prominent among the wide range of international organization functions in which top Social Security Administration officials and specialists participated were meetings and other activities sponsored by the International Social Security Association, United Nations agencies, the International Labor Organization, and the Organization of American States. Such participation included attendance of the

Commissioner of Social Security at the October 30–November 9 Rome meeting of the Bureau of the International Social Security Association, the Commissioner's appointment to the International Labor Organization's Committee of Social Security Experts, and the Chief Actuary's chairing of the Second International Conference of Social Security Actuaries and Statisticians, in Rome, October 22–October 28.

As in past years, the Social Security Administration cooperated with the International Cooperation Administration in recruiting experts in the fields of social welfare and maternal and child health. Fourteen experts were assigned to ICA overseas missions for some period during the year. The experts served in nine countries.

There was increased cooperation in recruiting for United Nations social welfare positions. Cooperation was also given to the Department of State in recruiting social workers for overseas teaching positions.

The Social Security Administration cooperated with the Department of State in developing U.S. materials for the next United Nations Biennial Report on Family and Child Welfare and other special international studies. Increased interest in social welfare internationally was reflected in a number of United States Information Agency requests for assistance in overseas exhibits.

Social Security Administration programs became a part of the curriculum of the State Department's Foreign Service Institute for the first time, with an International Service staff member presenting materials and leading discussions.

During the fiscal year the Social Security Administration's International Service planned training programs or conducted training sessions for 1,040 visitors from 75 countries. Requests for the training came through the International Cooperation Administration, the United Nations, the World Health Organization, and increasingly through Department of State exchange programs, and various foundations and agencies. Of the nations represented by the trainees, 18 were Asian countries, 14 were African, 20 were European, and 18 were Latin American. Ethiopia, French West Africa, Guinea, Malta, and Nicaragua sent representatives for the first time.

Old-age, survivors, and disability insurance benefits at the end of the fiscal year were being paid at the rate of $5.9 million a month to more than 90,000 beneficiaries in 101 countries. Teams of experts from the Bureau of Old-Age and Survivors Insurance visited points in the Pacific area and Hong Kong during the year in connection with administration of the benefits.

Other intercountry interests and activities included Children's Bureau consultation to numerous agencies in connection with intercountry adoptions and Bureau of Public Assistance cooperation with

the Department of State in developing plans for assistance and services for repatriated American nationals.

Old-Age, Survivors, and Disability Insurance

In commenting recently on the significant advances made in the old-age, survivors, and disability insurance program, the Director of the Bureau of Old-Age and Survivors Insurance noted that "Today, 25 years after the enactment of the original Social Security Act, the old-age, survivors, and disability insurance program is firmly established as the basic method in the United States of assuring income to individuals and families who suffer a loss of earnings when the worker retires, becomes disabled, or dies." At the close of the fiscal year, more than 14 million people were receiving old-age, survivors, and disability insurance benefits, and this number was increasing by about 90,000 a month. On January 1, 1960, 72 percent of the people aged 65 and over were eligible for old-age and survivors insurance benefits; 90 percent of the mothers and children in the Nation could count on monthly benefits if the family earner dies, and about 46 million workers were insured against loss of earnings because of disability.

A significant development soon after the close of the fiscal year was the enactment of the Social Security Amendments of 1960. This new legislation eliminated the age-50 restriction on the payment of disability benefits, changed the retirement test provision so as to improve incentives to work, and liberalized the insured status requirements. The amendments also included provisions to encourage disabled people who are doubtful as to whether their work attempts will be successful to return to work; to make some further extension of coverage; to increase benefit amounts for children of deceased workers in certain cases; to improve the benefit protection for dependents and survivors of insured workers in specified situations; to simplify the method of computing benefit amounts; and to make several changes of a technical nature removing anomalies in the law and facilitating administration of the program.

During the year, the Subcommittee on the Administration of the Social Security Laws of the Committee on Ways and Means of the House of Representatives surveyed Bureau administration of the disability insurance program. At the conclusion of the hearings, the chairman of the subcommittee stated that ". . . on the whole the program has been administered very fairly and with great capacity by excellent public officials." A preliminary report of the

hearings recommended that several areas of administration be taken under study.

Several of the recommendations made by the subcommittee resulted in legislative proposals that were adopted and enacted in the 1960 amendments. Other recommendations were administrative; some of these have already been put into operation.

The Bureau's Central Study Staff which had been organized in January 1959 to conduct a detailed study of the entire old-age, survivors, and disability insurance claims process from receipt of application to certification of payment recommended that the Bureau proceed with all possible speed toward the fullest use of integrated and automatic data processing systems. The recommendation was approved by the Director and the Commissioner, and a Bureau Central Planning Staff was established to spearhead the planning and coordination essential to the successful execution of the recommendation.

The initial application of electronic data processing to payment center operations was installed in the Baltimore Payment Center during fiscal 1960 and will be extended to the other payment centers in January 1961.

The new Social Security Building in Baltimore County was completed during the year. Relocation of the Bureau staff, except the Baltimore Payment Center and operating segments of the Division of Disability Operations, was completed in April 1960. A contract has been let for construction of an annex to house the Division of Disability Operations and the Baltimore Payment Center; occupancy of the annex is planned for the spring of 1962. The consolidation of Bureau operations will bring about greater efficiency and improved service to the public.

Total administrative expenses of the Bureau in fiscal year 1960 amounted to approximately 2.03 percent of tax contributions and 2.05 percent of benefit payments.

What the Program Is Doing

Beneficiaries and benefit amounts.—During the fiscal year ended June 30, 1960, benefits paid under the old-age, survivors, and disability insurance program totaled $10,798 million. Monthly benefit payments during the 12 months were 15 percent greater than the amount for the preceding fiscal year and totaled $10,632 million; this amount includes $528 million paid to disabled workers aged 50–64 and their dependents. Lump-sum death payments rose 11 percent to $166 million.

The number and amount of monthly benefits in current-payment status showed substantial gains. In June 1960 almost 14.3 million beneficiaries were receiving benefits at a monthly rate of $889.9

million—increases from June 1959 of 1.1 million in number of beneficiaries and $84.3 million in amount of monthly benefits. The increase in number was 8 percent, and the rise in the monthly amount almost 11 percent. The increase in the monthly rate resulted from (1) the growth in the total number of beneficiaries and (2) the rising proportion of benefits based on recent higher earnings with as many as 5 years of lowest earnings and periods of total disability omitted from the benefit calculation.

Men aged 65 or over and women aged 62 or over made up almost 11.5 million (80 percent) of the beneficiaries—7.8 million of them were retired workers and 3.7 million were the wives and dependent husbands of retired or disabled workers and the widows, dependent widowers, and dependent parents of workers who had died. Of the remaining 2.8 million (20 percent), 1.9 million were children, about 534,000 were mothers, and 371,000 were disabled workers aged 50–64.

About 2.2 million monthly benefits were awarded in fiscal year 1960. New highs were reached for child's benefits (380,000) and mother's benefits (94,000). Contributing to the record number of child's benefit awards were the 62,000 made to children under age 18 of disabled-worker beneficiaries and the 33,000 to disabled dependent children aged 18 or over of disabled, deceased, or retired workers. Monthly benefits were awarded to 176,000 disabled workers aged 50–64.

Lump-sum death payments during fiscal year 1960 numbered 819,000, about 62,000 more than the previous high established in fiscal year 1959. About 788,000 deceased workers were represented in these awards. The average lump-sum amount per worker was $210.40.

In June 1960, the average old-age insurance benefit paid to a retired worker who had no dependents also receiving benefits was $70 a month. When the worker and his wife both received benefits, the average family benefit was $123. Families consisting of a widowed mother and two children received on the average $173. Among beneficiaries on the rolls at the end of June 1960, whose benefits are based on earnings after 1950, the average for a retired worker with no dependents receiving benefits was about $78, for an aged couple about $133, and for a widowed mother and two children about $199.

Disability provisions.—During the fiscal year, about 190,000 workers—those under age 50 as well as those aged 50 or over—were found to be disabled; their social security records were frozen to protect their benefit rights. Those aged 50–64 qualified for monthly disability benefits calculated as though the worker had already reached retirement age at the time his disability began. Applications from about 105,000 workers were denied because of failure to meet the test of disability.

The number of disabled workers aged 50–64 receiving disability insurance benefits rose 35 percent in the fiscal year and totaled 371,000

in June. About 151,000 benefits were being paid in June to dependents of disabled-worker beneficiaries. Moreover, on June 30, 1960, there were an estimated 101,000 disabled workers under age 50 with an established disability freeze.

By the end of 1959, the latest date for which this information is available, about 68,500 persons were receiving old-age benefits increased by an average $9.41 a month because their social security records were frozen for periods while they were disabled before reaching retirement age. The higher benefits were attributable both to the exclusion of a period of disability, and to the dropping of as many as 5 years of lowest earnings in computing the worker's average monthly wage in cases where the worker had retired without qualifying for a dropout and eligibility for the dropout therefore stemmed from the disability freeze. About 22,900 wives and young children of retired workers and about 26,900 widows, children, and dependent parents of workers who had their social security records frozen before death were also receiving larger monthly benefits because of the freeze. For the same reason, lump-sum death payments in 1959 based on the earnings records of 13,800 deceased workers were increased by an average of $23.33 per worker.

Child's monthly benefits are payable to disabled persons aged 18 or over—dependent sons and daughters of deceased, disabled, or retired insured workers—whose disability began before age 18. During the fiscal year 28,000 persons met the disability requirements for child's benefits and 4,000 failed to meet the test of disability. By the end of June 1960 such child's monthly benefits were being paid to 95,000 persons at a monthly rate of $4.1 million. About 13,600 women—who would not otherwise receive benefits—were receiving wife's or mother's benefits as the mothers of disabled persons receiving child's benefits.

The protection provided.—Of the population under age 65, an estimated 68 million were insured at the beginning of the calendar year 1960. Some 34 million of these people were permanently insured—that is, whether or not they continued to work in covered jobs, they will be eligible for benefits when they reach retirement age, and their families are protected if they die. (Included in this total were some three-fourths of a million women aged 62–64 who were already eligible for old-age benefits but on a reduced basis.) The remaining 34 million were insured but must continue in covered work for an additional period to be insured permanently. Nine out of ten of the mothers and young children in the Nation were assured that they would receive monthly benefits in case of the death of the family breadwinner. An estimated 46 million of the insured persons under age 65 also met the insured status requirements for protection against the risk of long-term and severe disability.

Of the 15.7 million people aged 65 or over in the United States at the beginning of 1960, 72 percent were eligible for benefits under the program. Sixty-four percent were actually receiving benefits, and 8 percent were not receiving benefits because they or their husbands were receiving substantial income from work. Taking into account the liberalization in the requirement for fully insured status provided by the 1960 amendments, the percentage of aged persons who will be eligible for benefits at the beginning of 1961 is estimated to be 77. This percentage is expected to rise to 82 by the beginning of 1966.

The coverage of the program.—An estimated 75 million persons worked under old-age, survivors, and disability insurance during the calendar year 1959. In addition, about 1 million persons employed in the railroad industry had, in effect, joint coverage under the railroad retirement and old-age, survivors, and disability insurance programs. Altogether, including State and local government and nonprofit employees for whom coverage is available on a group-election basis and members of the Armed Forces, nine-tenths of all persons in paid employment in the United States were covered or eligible for coverage under the program.

Of workers not covered and not eligible for coverage, about one-third were covered by Federal, State, or local retirement systems. The remaining two-thirds—7 percent of the Nation's paid employment—consisted generally of persons who are not regular workers and are for the most part self-employed persons and domestic and farm workers who did not meet certain requirements of the law as to the amount of their earnings or the length of time worked.

Income and disbursements.—Expenditures from the Federal Old-Age and Survivors Insurance Trust Fund during the fiscal year totaled $11,055 million, of which $10,270 million was for benefit payments, $583 million for transfers to the railroad retirement account and $202 million, including Treasury Department costs, for administrative expenses. Total receipts were $10,343 million including $9,843 million in net contributions and $500 million in interest on investments. Disbursements exceeded receipts by $713 million, the amount of the decrease in the trust fund during the year. At the end of June 1960 this fund totaled $20.8 billion.

Total assets of the old-age and survivors insurance trust fund, except for $1,080 million held in cash, were invested in United States Government securities as required by law; $3.3 billion were invested in public issues (identical to Treasury securities owned by private investors), and $16.4 billion were invested in securities of varying maturities issued for purchase by the trust fund. The average interest rate, figured on the coupon rate and face amount of all investments of this fund at the end of the fiscal year, was 2.63 percent.

The Federal Disability Insurance Trust Fund was created by the Social Security Amendments of 1956. Contributions to this fund first became payable in January 1957. Benefit disbursements began in August 1957. Expenditures from the Federal Disability Insurance Trust Fund during fiscal year 1960 totaled $560 million, of which $528 million was for benefit payments and the remainder—some $32 million—for administrative expenses. Total receipts were $1,061 million, including $987 million in net contributions, $26 million in transfers from the railroad retirement account, and $48 million in net interest. Receipts exceeded disbursements by $501 million, the amount of increase in the fund during the year. At the end of June 1960, the fund totaled $2,167 million.

Assets of the disability insurance trust fund consisted of $2,101 million in U.S. Government securities and a cash balance of $66 million. The invested assets consisted of $83 million in public issues and $2,017 million in securities of varying maturities issued for purchase by the trust fund. The average interest rate, figured on the coupon rate and face amount of all investments of this fund at the end of the fiscal year, was 2.64 percent.

Administering the Program

The Bureau's planning theme for fiscal year 1960 was based on the premise of a relatively normal workload situation and called for continuation of efforts to achieve the best possible level of internal administration and service to the public. By the beginning of the fiscal year, new workloads stemming from the 1958 amendments had been well assimilated and the amount of work on hand at various work stations was generally current. Workload receipts during the year were slightly lower than expected and the workload-to-staff relationship was more favorable than in recent years, when staffing was undesirably tight. As a result, the Bureau was able to intensively study its operations and to take steps to achieve improvement.

Bureau staff at the end of the fiscal year totaled 25,079, not including 77 employees for whose services the Bureau is reimbursed. Manpower used during the year totaled 25,878 man-years, including 538 man-years of overtime. Overtime, however, as a percent of over-all staff time totaled only 2.0 percent, continuing the decreasing pattern of the past few years. In 1957, for example, overtime usage was equivalent to 9.4 percent of the total staff time.

In the course of the year, the Bureau received more than 2,451,000 claims for old-age and survivors insurance benefits and approximately 438,000 claims for disability insurance benefits and the disability freeze. More than 3,345,000 new social security accounts for individuals were established and over 2,915,000 duplicate account number

cards were issued during the year. In addition, approximately 263,000,000 earnings items were received for posting to individual earnings records. The Bureau also processed 2,388,290 requests for changes in personal data pertinent to the records of individual accounts and issued approximately 1,370,000 statements of earnings. During the same period, district offices received more than 10,320,000 inquiries concerning the old-age, survivors, and disability insurance program.

The subcommittee appointed by the Chairman of the Committee on Ways and Means to study the administration and operations of the social security laws started hearings in November 1959 on Bureau administration of disability insurance. As mentioned earlier, several of the subcommittee's recommendations were adopted and enacted in the 1960 amendments.

Much Bureau staff time had been devoted prior to the hearings to the preparation of a large volume of technical and program material required by the subcommittee in its study. This material furnished the basis for a "Disability Insurance Fact Book" released by the subcommittee in September 1959. The fact book, containing background information about the disability program, was designed to serve as a ready reference guide for the subcommittee members and their staff.

The interest expressed by the subcommittee concerning the availability to the public of rulings and procedures governing administration of the old-age, survivors, and disability insurance program gave added impetus to the Bureau's three-fold program for publication of these materials. This continuing program includes the first edition of the "Social Security Rulings," a revised edition of the "Social Security Handbook," and the updating and expansion of the Social Security Regulations.

The first quarterly issue of "Social Security Rulings," containing rulings in various areas, announcements of changes in the Social Security Act and Social Security Regulations, and items of public interest, was distributed in July. The new edition of the "Social Security Handbook" was also completed, and the revised issue distributed shortly after the end of the year. The Handbook, containing 242 pages of text, a detailed index of subject matter, and a chapter on related programs, is directed to people who want a more thorough understanding of the program than can be obtained from informational pamphlets. The work of updating and expanding the Regulations was started early in the fiscal year and was well under way by June. A draft of major additions to that part of the Regulations pertaining to rights and benefits based on disability was prepared by the end of the fiscal year and was being cleared for publication.

Pursuant to a recommendation of a committee of business leaders under the chairmanship of Mr. Reinhard A. Hohaus which studied

Bureau operations in fiscal year 1958, a Central Study Staff was organized in January 1959 to conduct a detailed study of the entire old-age, survivors, and disability insurance claims process from receipt of claim to certification of payment. The Study Staff submitted its formal report to the Director in September 1959, recommending "that the Bureau proceed with all possible speed toward the fullest exploitation of integrated and automatic data processing equipment and systems and that the Bureau make such changes in process, assignment of functions, and organization as may be necessary and feasible." The recommendation was approved, and a Central Planning Staff was established to spearhead the planning and coordination essential to the successful execution of the recommendation. The recommendation calls for an ultimate claims system in which all action stations will be linked by a data transmission system and for the use of electronic data processing equipment in the preparation of earnings statements, beneficiary recordings, claims payment, and adjustment processes. During the fiscal year, much of the planning and testing for the development of this system was completed.

The initial application of electronic data processing to payment center operations was installed in the Baltimore Payment Center beginning with certification of disability insurance benefit payments for September 1959. In May 1960, electronic data processing operations were extended to old-age and survivors insurance claims serviced by this payment center. Accounting records controlling the disability beneficiary roll and the roll of beneficiaries living abroad were converted from punch cards to magnetic tape, and programs and procedures were installed to perform on electronic data processing equipment the accounting and certification operations essential to the payment of these claims. These new techniques have resulted in simplified operations and the reduction of processing time, as well as permitting electronic updating of beneficiary rolls. Because punch cards used in check writing are now being produced as a by-product of electronic data processing operations, the Treasury Department was able to convert its payment records from addressograph plates to tabulating cards. In addition, the magnetic tape records in the Baltimore Payment Center have been expanded to include additional data such as name and address for check writing purposes and for use in automatic preparation of certificates of award and related forms and notices. Electronic data processing is scheduled for extension to other payment centers in fiscal year 1961.

Most of the basic planning for the transitional phase of electronic data processing operations has, likewise, been completed.

During the fiscal year, extensive research on the feasibility and general outline of a national data transmission system was conducted with communications companies, and a pilot installation was designed.

The pilot system, involving 26 district offices in one region, 3 payment centers, one regional office, and headquarters offices in Baltimore, will be operated from July through December 1960. Data and experience obtained from the pilot test will serve as guides in the development of equipment needs, circuitry and procedures, in establishing the final nationwide system.

One of the highlights of the year was the completion of the new Social Security Building on the outskirts of Baltimore. Relocation of the Bureau staff, except the Baltimore Payment Center, and operating segments of the Division of Disability Operations, from 11 scattered locations in downtown Baltimore occurred in January through April 1960 with no interruption of operations. During the next fiscal year, the organizational and functional changes resulting from the move will be surveyed to identify any additional changes which appear to be warranted and would result in an improved operation. On Saturday, June 18, a Family Day Open House was conducted and about 6,000 visitors toured the building. A formal dedication ceremony was held on July 1, and a Community Open House on August 16 provided further opportunity for some 3,600 guests to visit the building. To date, there have been visitors from 22 States, Washington, D.C., Puerto Rico, and several foreign nations. Construction of an annex to house the Baltimore Payment Center and operating segments of the Division of Disability Operations will be started in the fall of 1960, with completion scheduled for the spring of 1962. The establishment of these units in 1954 and 1958 increased space needs beyond the capacity of the new building as originally planned in 1953 and necessitated this additional construction.

Significant improvements in the earnings record operation were achieved in fiscal year 1960 through the use of new and improved electronic data processing equipment and the extension of electronic data processing operations resulting from the introduction of this equipment. During the year, 3 Model III–IBM–705 electronic computers were placed in operation in the new Social Security Building, replacing 2 Model II computers of lesser speed and capacity. The installation of these machines was timed to coincide with occupation of the new building. The new computers presented opportunities for increased speed and efficiency in the mass processing of earnings record data; two of the most important of the improvements are described below.

In the first half of the fiscal year, a series of pilot tests was conducted to validate programs and procedures developed for the extension of electronic data processing in the operations concerning the processing of earnings record items. The use of electronic data processing was introduced into the processing function immediately after initial punching of earnings cards. Subsequent operations, formerly per-

formed on punch card equipment, required physical manipulation of individual cards for each item, and a series of electric accounting machine reproducing, sorting, tabulating, re-sorting, listing, and auditing processes. With the use of magnetic tape, the data are now processed through a series of operations on the IBM Model III–705 computer; the manipulation of data and the sorting and balancing operations are performed by the computer itself.

Another important improvement resulting from use of the Model III–705 is in file reference techniques. The Model III has made it possible to search the entire reference file for summary earnings data (to be used primarily in connection with applications for benefits and requests for earnings statements) within 2 days at less cost than the former search requiring 3 days. Plans are now being developed to perform the complete file search on a daily basis.

The Bureau has relieved employers using electronic data processing systems compatible with Bureau equipment of some of their reporting burden by permitting them to submit their quarterly wage reports on magnetic tape. Currently 17 employers who report approximately 1,480,000 earnings items quarterly are reporting by this means. The tapes are processed through the Model III–705 and all necessary processing operations are performed electronically. This system of reporting has resulted in reducing both the cost and the time required to process the earnings items without placing any additional burden on the employers.

During recent years, considerable progress has been made in obtaining quarterly earnings reports earlier and in a form that permits more rapid posting to individual accounts. A system was inaugurated during the past year whereby quarterly earnings reports from 16 employers having 50,000 or more employees are transmitted via the servicing district offices rather than through the Internal Revenue Service. These employers currently report approximately 1,800,000 items quarterly. Quarterly tax reports are thereby received earlier—the average time was improved by 14 days in the quarter ending December 1959—assuring a more level workload at the start of the quarter and thus making more efficient use of staff and equipment. During the coming year, plans have been made for extending this procedure to employers with 20,000 or more employees. It is estimated that the planned extension will result in the direct submittal of approximately 1,500,000 earnings items from 87 additional employers.

With a large part of the earnings record operations now highly automated, the Bureau has been giving careful consideration to the manual operations still remaining. Among these, top priority is being given to studies seeking an acceptable microfilm substitute for the SS–5 file, which occupies approximately 36,000 square feet of floor space and is used to house all original applications for social security account

numbers and subsequent changes in these records. The Bureau is collaborating with private industry in the research and development of the special photo-electronic process required for this project. A general description of the file and its usage has been provided to engineers conducting the research and development of the special processes. In the meantime, detailed cost estimates for the operation and maintenance of the present file are being developed for comparison and evaluation of any proposals that may be developed.

During the year, the Bureau continued efforts to have greater emphasis placed on complete and accurate wage and self-employment income reporting, and auditing activities. The Bureau prepared a detailed proposal under which the Internal Revenue Service would undertake a number of canvassing, auditing, and returns-processing activities designed to serve old-age and survivors insurance needs. The proposal was submitted to Internal Revenue Service for consideration as a budget item in the development of their own plan for improvement in the collection of social security tax contributions. In addition, the Bureau has prepared specifications under which the Bureau would do the canvassing, auditing, and processing activities that seem to be essential to complete coverage, proper reporting, and prompt and accurate processing of tax returns. All of these activities will be studied and developed in greater detail in the coming fiscal year as a joint effort of the Bureau and the Internal Revenue Service.

An on-the-spot study and evaluation of the program in Europe was conducted in the summer of 1959. A survey team of two Bureau representatives visited Italy, France, Spain, and Greece to explore ways and means of facilitating the claims process and expediting service to claimants and beneficiaries in Europe as well as to insure the validity of benefits being paid. After returning to the United States in September 1959, the survey team made interim reports to the Bureau executive staff and an informational report was prepared for all Bureau employees. The final report was submitted to the Office of the Director in May 1960 and is now under study.

Of the 14.3 million persons receiving old-age, survivors, and disability benefits at the end of fiscal year 1960, 93,600—about one-half of one percent—were living outside the United States. This figure includes persons traveling or living abroad temporarily.

During the year, an agreement was negotiated with the Veterans Administration whereby its staff and facilities in the Philippines will be utilized, on a reimbursable basis, for services in connection with old-age, survivors, and disability insurance affairs originating in that area. Following negotiation of the agreement, a Bureau team was sent to Manila to coordinate the transfer of functions, train the Veterans Administration staff in old-age, survivors, and disability

insurance program and procedures, and to survey and report on problems of program administration in the Far East. The Veterans Administration office in Manila was opened to the public for old-age, survivors, and disability insurance business in May 1960.

Legislative Developments During the Year

The most important measure affecting old-age, survivors, and disability insurance was the enactment, soon after the end of the fiscal year, of P.L. 86–778, the Social Security Amendments of 1960. This legislation was signed by the President on September 13.

PROVISIONS OF THE 1960 AMENDMENTS

Liberalizing the insured status requirements.—The work requirements are liberalized so that, to be eligible for benefits, a person needs one quarter of coverage for every 3 calendar quarters elapsing after 1950 (or after the year in which he attained age 21, if that is later) and before the year in which he reached retirement age or died, whichever first occurred. In any case, as before, a person needs not less than 6 nor more than 40 quarters of coverage. (Calendar quarters in a period of disability are not counted as elapsed quarters unless they are quarters of coverage.) Under prior law, the requirement was one quarter for every 2 elapsed quarters before the quarter in which those events occurred.

About 400,000 additional people—workers, dependents, and survivors—were made immediately eligible for monthly benefits as a result of this change. Of this total, about 250,000 were aged 65 and over. By January 1, 1966, an estimated 1,000,000 persons will be eligible for monthly benefits who would not qualify under prior law. Of this total, some 700,000 will be aged 65 and over.

Improving incentives to work under the retirement test.—The retirement test—the provision in the law under which old-age and survivors insurance benefits are paid only to those people (under age 72) who have retired or who do not have substantial earnings from work—is charged beginning with 1961 by eliminating the requirement for withholding a month's benefit for each $80 of earnings above $1,200 and providing instead for withholding $1 in benefits for each $2 of earnings between $1,200 and $1,500, and for each $1 of earnings above $1,500. There has been no change in the provision which specifies that regardless of the amount of annual earnings no benefits will be withheld for any month in which the beneficiary neither earns wages of more than $100 nor renders substantial services in self-employment.

The new test reduces the deterrent to work that existed under the prior test, since a beneficiary can accept a job at any earnings level

above $1,200 knowing that he will always have more in combined benefits and earnings than he would have if he limited his earnings to $1,200. Under the new test about 400,000 people will start to get benefits or will get more benefits for 1961 than they would if the law had not been changed.

A test of this general sort was discussed in the Department's report on the retirement test that was submitted to the Committee on Ways and Means of the House of Representatives in March 1960.

Increasing the benefit amounts for children in certain survivor cases.—The benefit of each child of a deceased worker is now three-fourths of the primary insurance amount of the deceased worker (subject to the maximum amount payable to the family). Heretofore, it had been one-half of the primary insurance amount, plus one-fourth of the primary insurance amount divided by the number of children. About 400,000 children will receive higher benefits as a result of this change, beginning with the check for December 1960.

Improving the benefit protection available to dependents and survivors of insured workers in specified situations.—Benefits are now provided for the survivors of workers who had acquired 6 quarters of coverage and who had died before 1940. (Under prior law, monthly survivor benefits were payable only in the case of deaths after 1939.) About 25,000 people—most of them aged widows—were made eligible for benefits by this change.

Benefits are also now payable to a person as the wife, husband, widow, or widower of a worker if this person had gone through a marriage ceremony in good faith in the belief that it was valid, if the marriage would have been valid had there been no impediment, and if the couple had been living together at the time of the worker's death or at the time an application for benefits was filed. Benefits can also be paid to the child or stepchild of a couple who had gone through a marriage ceremony even though an impediment prevented the ceremony from resulting in a valid marriage. For the purposes of these provisions, an impediment is defined as an impediment resulting from a previous marriage—its dissolution or lack of dissolution—or resulting from a defect in the procedure followed in connection with the marriage.

A child can now get benefits based on his father's earnings even though, at the time of his father's death, he was living with and being supported by his stepfather. The change extends to the child living with his stepfather the protection already afforded on the father's earnings for other children, including children living with and being supported by other relatives.

A wife, husband, or stepchild can become entitled to benefits based on the earnings of a retired or disabled worker if the relationship to the worker has existed for at least one year. This time requirement in

cases where the worker is alive is the same as that which now applies when the worker is deceased.

Simplifying the method of computing the average monthly wage, on which benefit amounts are based.—Under the previous law, a person's average monthly wage was computed over a span of time that varied with the age of the person at the time he filed an application for benefits or for a benefit recomputation (and could also vary depending on whether he worked before attaining age 22). As a result, a person's benefit amount could vary with the date on which he applied for benefits. Thus, a person who did not understand the rather complicated provisions of the law, or did not know what his earnings would be in future years, occasionally could find that he had not applied for benefits at the most advantageous time. The average monthly wage now is figured from a constant number of years for each particular person, regardless of when he actually applies for benefits. The number is generally equal to five less than the number of years after 1950 and before the year in which the worker attained retirement age (65 for men and 62 for women).

Elimination of age-50 requirement for eligibility for disability insurance benefits.—Benefits for disabled workers under age 50 will be payable for the first time for November 1960. The elimination of the requirement that a person must have attained age 50 in order to be eligible for disability insurance benefits closes an important gap in the protection offered under the old-age, survivors, and disability insurance program. The need for benefits is as great, or greater, for the severely disabled under age 50 as it is for those age 50 or over. Disabled workers under age 50 are more likely than the older disabled workers to have a dependent family and less likely to have savings. Perhaps 125,000 workers—and at least that many dependents of these workers—will be able to qualify for benefits immediately.

Trial period of work for disability beneficiaries.—Under the new law, beneficiaries who go to work despite severe handicaps can continue to be paid their benefits for 12 months—whether they go to work under a vocational rehabilitation plan or on their own. Before the enactment of the amendments only disabled persons who returned to work under a State-approved vocational rehabilitation plan could continue to draw benefits during such a trial work period.

On the basis of the first 9 months—not necessarily consecutive—in which they work, a decision will be made as to whether the work done by the beneficiary shows that he has regained his ability to work. If he is found able to engage in substantial, gainful activity, and therefore is no longer disabled within the meaning of the law, he will still receive benefits for 3 additional months. The amendments also provide that beneficiaries who recover from their impairments before they have worked 9 months, as well as beneficiaries who recover before

they have tested their ability to work, will receive benefits for 3 months after recovery. This provision for the payment of benefits after recovery recognizes that a person who recovers from a severe and long-term impairment, especially if he has spent a long period in a hospital or a sanitarium, may require benefits for a brief interval during which he is becoming self-supporting.

For disability beneficiaries on the benefit rolls at time of enactment of the legislation, the first month a trial-work period can begin is October 1960. For future cases the period will begin with the month in which a person becomes entitled to benefits on account of disability.

Modification of waiting period in cases of recurring disability.—The amendments provide that workers who become disabled a second (or subsequent) time will not be required to undergo another six-months' waiting period if the prior period of disability was terminated no more than 5 years before the onset of the current disability. The provision is designed to remove a possible deterrent to the disabled individual's return to work in cases where he is in doubt as to whether his attempt to work will prove successful.

Family employment.—The family employment exclusion is changed to provide coverage for certain services performed after 1960 by parents in the employ of their adult children. The services covered are those performed by the parent in the course of the employer's trade or business. Domestic services in or about the child's home and other work not in the course of the child's trade or business continue to be excluded.

Guam and American Samoa.—The amendments extend coverage to about 8,000 employees and self-employed persons in Guam and about 2,000 in American Samoa. In general, coverage is effective beginning January 1, 1961. Employees and officers of the Government of Guam will be covered on a compulsory basis but their coverage will not become effective until the Governor of Guam certifies that the Guamanian Government wants its officers and employees to be covered. A comparable provision is included for employees of the Government of American Samoa. Filipino workers who come to Guam under contracts to work temporarily are excluded from coverage.

Employees of nonprofit organizations.—The amendments eliminate the requirement that two-thirds of the employees of a nonprofit organization must concur for the organization to elect coverage for its employees. Another provision permits certain earnings reported by nonprofit organizations (that failed to comply with the requirements for extending coverage to these employees) to be credited to the worker's account.

Ministers.—Most ministers and Christian Science practitioners who have had earnings for at least 2 years were, prior to the passage of the amendments, barred from electing coverage. The amendments

permit them an additional opportunity, generally until April 15, 1962, to make the election.

Employees of foreign governments and international organizations.—The amendments extend coverage on a compulsory basis to service performed within the United States by United States citizens in the employ of foreign governments or their wholly-owned instrumentalities and of international organizations. These employees, numbering about 5,000, will be covered as though they are self-employed persons. Coverage is effective beginning with taxable years ending on or after December 31, 1960.

Employees of State and local governments.—The 1960 amendments contain a number of provisions that are designed to facilitate the coverage of public employees. The most important of these is a provision permitting groups of public employees who are brought under the program after 1959 to have their coverage begin as early as the first day of the fifth year preceding the year in which their coverage is arranged (but not before 1956). Another provision places a time limitation on the period within which the Secretary may assess unpaid social security contributions and on the period during which contributions that a State has erroneously paid may be refunded. This provision is comparable to the statute of limitations of the Internal Revenue Code applying to nongovernmental employment.

Employees of Farm Credit Banks.—Other legislation enacted by the 86th Congress (P.L. 86–168) provides coverage for persons who first enter after December 31, 1959, the employ of Federal land banks, Federal intermediate credit banks, and banks for cooperatives.

Implementing certain recommendations made by the Advisory Council on Social Security Financing.—In general, the procedure relating to the investment of the old-age, survivors, and disability insurance trust funds is strengthened by making the interest earnings of the trust funds more nearly equivalent to the rate of return being received by people who buy Government obligations in the open market.

Miscellaneous.—Other changes, mostly of a technical nature, were made to simplify the law and make it fairer and to facilitate administration of the program.

Special Study Requested by the Congress

The Committee on Ways and Means of the House of Representatives, in connection with its consideration of proposed changes in the Social Security Act, requested that the appropriate Federal agencies accelerate their efforts in finding a workable and sound solution to the problem of providing old-age, survivors, and disability insurance protection for Federal civilian employees, and to report it to the Congress at the earliest opportunity.

Surveys of the Status of Beneficiaries Under the Old-Age, Survivors, and Disability Insurance Programs

The Bureau of Old-Age and Survivors Insurance is conducting surveys of the resources of beneficiaries, from several different aspects. One type of survey, conducted periodically between the years 1941 and 1957, has provided a picture of the economic situation of beneficiaries in a given year. Another type of survey, to be conducted for the first time in the spring of 1961, is designed to show what happens to retired people over the course of years.

The Bureau in its earlier surveys has obtained information on the sources and amount of the income of beneficiaries, the extent of their home ownership, the amount of their other assets and liabilities, and their expenditures on such items as housing, medical care, and health insurance. In the forthcoming retirement history study the Bureau will attempt to obtain similar information but over a prolonged period of years. To do this, a sample of persons will be interviewed shortly after they come on the benefit rolls, and again a year later and every 2 or 3 years thereafter for a period of 12 years, to measure the long-term changes in the situation of beneficiaries and their adjustments to such changes.

In the field of disability, a survey has been planned in order to remedy the lack of information on the economic situation of persons drawing disability benefits. The survey has been designed to obtain current data as well as information needed to plan a long-term study of a sample of disabled persons.

A study of persons recently granted public assistance is being planned by the Bureau of Public Assistance and the Bureau of Old-Age and Survivors Insurance, to determine why some public assistance recipients do not receive old-age, survivors, and disability insurance benefits and why some old-age, survivors, and disability insurance beneficiaries require public assistance. After a representative sample of persons granted assistance is obtained from the State public assistance agencies, information regarding the old-age, survivors, and disability insurance status of these recipients will be obtained from Bureau of Old-Age and Survivors Insurance records and through home interviews.

Another study in preparation by the Bureau of Old-Age and Survivors Insurance is a survey of State and local government retirement systems, which has been designed to compare the benefits and contributions of these systems before old-age, survivors, and disability insurance coverage with the combined benefits and contributions under both old-age, survivors, and disability insurance and State and local systems.

Program Simplification

Considerable progress was made in the Social Security Amendments of 1960 under the Bureau's program for achieving a simpler old-age, survivors, and disability insurance program—one that is easier to understand, accept, and administer. Major simplifications were achieved in the computation of benefits, the payment of the lump-sum death benefit, and the amount of the benefit payable to surviving children.

Other simplifications made in the 1960 amendments involved (1) the conditions under which a benefit amount can be recomputed, (2) the dependency requirements of a child on his natural or adopting father, (3) the determination of fully insured status, (4) the granting of quarters of coverage for cases of maximum earnings in years before 1951, (5) the duration-of-relationship requirements, and (6) the determination as to whether an individual entitled to disability insurance benefits is able to engage in substantial gainful activity.

Other simplification proposals were also developed but because of time limitations and other factors they were not submitted to the Congress during the 1960 legislative session. As a result, there is now accumulated a backlog of these proposals, and they will be available for presentation to the Congress when revisions of the Social Security Act are again considered.

Financing the Program

The old-age, survivors, and disability insurance system, as modified by P.L. 86–778, has an estimated benefit cost that is very closely in balance with contribution income. In enacting the 1960 amendments Congress again made clear its intent that the program be self-supporting from contributions of covered workers and employers. Careful review was given to long-range actuarial cost estimates prepared for use of the congressional committees in their legislative considerations. The program as amended continues to be financed on an actuarially sound basis.

The difficulties involved in making exact predictions of the actuarial status of a program that reaches into the distant future are widely recognized. If different assumptions as to, say, interest, mortality, retirement, disability, or earnings had been used, different results would have been obtained. Accordingly, no one set of estimates should be looked upon as final. It is the Department's policy continually to re-examine the long-range cost estimates of the program in the light of the latest information available.

Old-age and survivors insurance benefits.—The level-premium cost of old-age and survivors insurance benefits after 1959, on an interme-

diate basis, assuming interest at 3.02 percent and earnings at about the levels that prevailed during 1959, is estimated at 8.42 percent of payroll (after adjustments to allow for administrative expenses and interest earnings on the existing trust fund). The level contribution rate, equivalent to the graduated rates in the law, is estimated at 8.18 percent of payroll, leaving a small actuarial insufficiency of 0.24 percent of payroll. In view of the very long range over which these projections are made, and the many variable factors included, the insufficiency is so small that the system may be considered in actuarial balance.

Disability insurance benefits.—The Social Security Amendments of 1956 established a system for financing disability benefits which is entirely separate from the financing of old-age and survivors insurance benefits. The level-premium cost of the disability benefits (adjusted to allow for administrative expenses and interest) on an intermediate basis is 0.56 percent of payroll. Contribution income has been specifically allocated to finance these benefits; this income is equivalent to 0.50 percent of payroll, leaving a small actuarial insufficiency of 0.06 percent of payroll. Considering the possible variability of cost estimates for disability benefits over the long-range future, this small deficiency is not significant.

Public Assistance

The 25th anniversary of the federally aided public assistance programs in August 1960, and preparation of special reports and other technical materials for Congress during the year served to focus attention on program evaluation. The concentrated study of many facets of the program revealed the important role of public assistance in meeting individual want during the past quarter century, identified areas still needing consideration, and produced guidelines for further developments that can have significant impact on the lives of many in the Nation in the years ahead.

Congressional consideration of various proposals for helping to meet the medical care needs of the American people also resulted in the passage of legislation in August 1960 making more adequate provision for the medical care of old-age assistance recipients, as well as of the aged who can meet their maintenance needs but do not have sufficient resources for the costs of their medical care.

A Quarter Century in Retrospect

The flexibility inherent in the public assistance programs has permitted their adaptation to changing needs in the rapid economic and social change of the past quarter century. For example, between February 1936, when public assistance payments were first made with

Federal financial participation, and January 1940, when the first monthly benefits were paid under old-age and survivors insurance, the public assistance programs carried major responsibility for providing basic economic security to the needy aged and blind and for needy children in their own homes deprived of parental support or care because of the death, disability, or absence of a parent.

However, as amendments in the ensuing years liberalized insurance benefits and extended coverage (until 9 out of 10 persons in the working force and their dependents are now covered), the public assistance programs shifted into the secondary and supplementary role originally intended. By June 1960, fewer than 6 million persons were receiving federally aided public assistance in contrast to over 14 million receiving insurance benefits.

Similarly, adaptations have been made in the coverage and the services provided under the public assistance programs as the major factor contributing to dependency has changed from unemployment in the early 1930's to disability, chronic illness, advanced age, and family disruption in the 1950's.

LEGISLATIVE CHANGES

Legislative changes *prior to 1960* which broadened the scope and coverage of the public assistance programs include:

1. establishment of a new federally aided category of aid to the permanently and totally disabled in 1950;

2. extension of the federally aided assistance programs to Puerto Rico and the Virgin Islands in 1950, and to Guam in 1958;

3. provision for Federal financial participation in State public assistance expenditures for:

a. aged, blind, or disabled recipients who are patients in public medical institutions, in 1950;

b. costs of medical care or other remedial care paid directly to doctors, hospitals, and other suppliers of such services, in 1950;

c. needy adult caretakers of children in the ADC program, in 1950; and

d. children 16 and 17 years of age without regard to school attendance, and children living with first cousins, nieces, and nephews (in addition to previously specified relatives) in the ADC program, in 1956; and

4. emphasis on the provision of social services to help recipients achieve increased self-care, self-support, and stronger family life, in 1956, by:

a. clarifying the objectives of public assistance as including both financial assistance and other services, and

b. recognizing that the cost of providing such services is a proper cost of administering public assistance.

Other amendments from 1939 through 1958 made various changes that increased Federal grants to the States by:

1. *raising the maximum* on the monthly amount of assistance for which Federal financial participation would be available (e.g., from $30 a month for an individual old-age assistance payment in 1935 to a $65 monthly average payment per recipient in 1958);

2. *increasing the proportion* of Federal participation in that part of the assistance payment subject to Federal sharing (e.g., from ½ of the monthly money payment to old-age assistance recipients in 1935 up to 4/5 of the first $30 a month average payment plus half the balance for money payments to recipients up to a $60 maximum, and half of separate payments to vendors for medical and remedial care up to $6 per recipient in 1956); and

3. *changing the basis of Federal financial participation* in the second part of the payment (1958) so that:

a. the Federal share was related to a single maximum average expenditure per recipient for both money payments to recipients and vendor payments for medical care;

b. the maximum amount of State expenditures for public assistance, including medical care, in which the Federal Government will participate was established for each program at an amount equal to $65 a month times the number of aged, blind, and disabled recipients in the State and to $30 times the number of recipients in ADC; and

c. the fiscal ability of each State was taken into account in determining the Federal share of that part of a State's average expenditure per recipient above $30 in the adult categories and $17 in aid to dependent children.

Amendments to the Social Security Act in August 1960 made it possible for the Federal Government to help States provide more medical care for older people after October 1, 1960. (See details on pages 47–48.)

INCREASING ACCEPTANCE OF PUBLIC WELFARE MEASURES

Changes in the public assistance provisions of the Social Security Act reflect changing attitudes toward the alleviation of destitution. As the Nation became industrialized, we moved from the earlier general belief that almost everyone could achieve security for himself and his family through his own effort and that most people who needed community help were shiftless or lazy, to a growing awareness that individuals were increasingly subject to the impersonal forces of a money economy. The typical American family changed from a large, highly integrated, self-sufficient farm family to a smaller city family dependent on wages and subject to strains that weaken family co-

hesion. Many individuals and families became less able to provide for their own economic security in the face of hazards encountered by most people from time to time.

The depression years in the 1930's also helped to change the thinking of many, for there was much evidence that destitution can result not only from personal inadequacies but from forces over which the individual has little or no control. The growing number of dependent aged persons and young children also created new economic and social problems. Increasing acceptance of the concept that it is economically unsound as well as morally wrong to let people go without needed help led to the planning which culminated in the passage of the Social Security Act.

Higher regard for the individual.—Many provisions of the public assistance titles of the Social Security Act also reflect increasing concern about the importance of respecting the dignity of the individual and recognizing his rights as well as his responsibilities. For example, the definition of assistance as a money payment, in contrast to the earlier usual relief in kind, leaves with the needy person responsibility, like that of others in the community, for deciding how best to use his income to meet his basic maintenance needs. Provision is made for a hearing before the State agency to protect individual rights when a needy person has been denied aid or is dissatisfied with the amount of his assistance payment, or when his application has not been acted upon with reasonable promptness. To safeguard his privacy, disclosure by the agency of personal information is prevented for purposes other than the administration of the program. To raise standards for the care and protection of needy people in institutions, a 1950 amendment requires the State to designate an authority responsible for establishing and maintaining standards for institutions in which recipients of federally aided assistance reside.

Provisions for costs of medical care improved.—Amendments to the act in 1950, 1956, and 1958 were designed to improve medical care provisions for the needy. In 1950, the definition of "assistance" was broadened to include vendor payments (payments for medical care and other remedial care made directly to the suppliers of such services). However, the amount subject to Federal financial participation had to come within the maximum individual assistance payments specified in the act. In 1956, in addition to Federal participation in individual money payments, provision was made for separate Federal sharing in a State's total expenditures for vendor payments under each program up to one-half of the sum of $6 multiplied by the number of adult recipients and $3 multiplied by the number of child recipients per month. In 1958, the basis for Federal sharing in State expenditures was changed to bring both money and vendor payments within a new single averaging formula. This made it possible for the Federal

Government to share with the States in larger medical expenses in individual cases. (For provisions of 1960 amendments relating to medical care, see pages 47–48.)

By June 1960, 44 out of 54 jurisdictions had some provision in their public assistance programs for costs of medical care through the vendor payment. This method of payment was used for hospitalization in 33 jurisdictions, for practitioners' services in 30, and for nursing home care in 15; and a combination of the vendor method of payment and the money payment (within the limits of the State's maximum on individual assistance payments) was used by 7 jurisdictions to meet an established rate for nursing home care. Some of the 44 jurisdictions using the vendor payment, and 6 out of the 10 remaining jurisdictions, also provided for some items of medical care in the money payment to the recipient.

Welfare services strengthened.—A 1956 amendment clarified the scope of Federal financial participation in the costs of providing staff services in addition to financial aid. This legislation stimulated or renewed activities by the States in helping needy persons to find and use their own strengths and other available resources to develop their potential for more satisfying and independent living. Although the extent and quality of services vary greatly across the country, heartening advances are being made. More people are being helped to greater self-sufficiency, with some savings in assistance costs; and the benefits of cooperative effort by public and voluntary agencies and other groups in the community are being demonstrated.

Services most generally provided have been in relation to the health needs of children and adults, and to the improvement of home conditions for children. For example, public assistance workers have increasingly provided or arranged for services that enable the needy aged or disabled person to remain in his own home and with his family and friends as long as possible. Some skilled workers have helped with more intangible but equally serious emotional problems. Projects in several States have arranged for specialized services and home-helps that enable some aged persons in nursing homes and mental hospitals to return to normal living patterns in the community. Other projects, using a team including doctors, rehabilitation and employment counselors, and social workers to consider latent capacities and resources of handicapped individuals, have helped some disabled persons to become self-supporting or to embark on plans for at least partial rehabilitation.

AREAS IDENTIFIED AS NEEDING FURTHER CONSIDERATION

The 25th anniversary of the federally aided public assistance programs marked a significant milestone of progress in the Nation's concern for its needy. But it also identified groups for whom public

assistance is not generally available, as well as program areas needing further strengthening.

State and/or locally financed general assistance or institutional care is provided for many temporarily or permanently unemployable needy persons not included within the scope of the federally aided public assistance programs. However, no provision is made for general assistance in 17 States for employable persons and their families who are needy and have no other resources available to them even when limited education, lack of job skills, or discrimination prevents their earning enough to live decently and healthfully; or when they are unemployed, even though they are ineligible for unemployment insurance, receive benefits too small to maintain them, or have exhausted their benefits. In a few States, only some of these people in the direst circumstances can receive some assistance at some time. Nonresidents in most States are aided only in emergencies, and effort is made to return them to their State of residence as quickly as possible; only 13 jurisdictions have no durational residence requirement. Limited, if any, financial assistance is available under private auspices to most of these needy persons.

In many States, public assistance programs have come a long way during the past 25 years in providing more help and in extending such help to additional groups of needy people. Federal, State, and local governments have increased their expenditures substantially. But with limited funds, rising costs, and the shrinking value of the dollar, fewer than half the States are fully meeting "need,"[1] judged by standards they themselves have set. The other States either impose maximums on the monthly amount of assistance any individual or family may receive or meet only a specified proportion of need.

In some States the standards themselves are inadequate. They either have not been revised in content or priced recently enough to maintain their currency in providing generally accepted and validated essentials of living. Other inadequacies result from State policies for evaluating the resources of recipients—for example, counting as income from relatives expected contributions that fail to materialize.

Only limited funds are available for general assistance in many States. Therefore, stringent standards are applied in determining the degree of destitution that must exist before such assistance is granted. The amount of the assistance payment is necessarily at a level below those in the federally aided programs. The estimated average amount of general assistance *per case* in June 1960 was $67.48 (nearly half are family cases with about 4.6 persons per family), compared with $58.06 *per recipient* of federally aided old-age assistance (excluding vendor payments for medical care under each program).

[1] "Need" is defined here as the gap in income between the total cost of living essentials set by the State and the individual's resources to meet that cost.

Inadequate provision to meet medical care costs.—Although some progress has been made in providing for more medical care services for more needy persons, wide variations exist both among the States and among the categories of needy persons in the types and quantities of medical care provided through public assistance or other State and local resources.

Medical care provisions in most public assistance programs include only a few medical services. For example, in June 1960, 8 of the 33 jurisdictions that provided for hospitalization through public assistance vendor payments restricted their payment to care necessitated by acute illness or injury. (Seven of the 20 jurisdictions without provision for hospitalization under public assistance have other State systems of hospital care or other known sources available to needy persons.)

The amount provided for medical care within the money payment is sometimes limited by the State's maximum on assistance payments. Average monthly expenditures per assistance recipient for vendor payments for medical care in June 1960 were $11.67 for the disabled, $10.52 for the aged, $6.36 for the blind, and $1.71 for a recipient of aid to dependent children. Comparable averages for recipients of general assistance are not available.

Because of the high cost of medical care, it is evident that the unmet need is still considerable, since public assistance recipients include persons most in need of medical care and yet least able to pay for it. The increased Federal help to the States authorized by the 1960 amendments should make it possible for States to raise both the quality and quantity of medical care for many in need of such care.

Disparity between provisions for the needy aged and those for dependent children.—The national average monthly payment, including vendor payments for medical care, amounts to $67.90 for an aged recipient compared with the $29.08 payment per recipient of aid to dependent children (June 1960). This disparity may be related, to some extent, to the greater need of the aged for medical care and the availability of more care for them in many States. But undoubtedly it also reflects greater public acceptance of old age as a reason for dependency than of divorce, separation, desertion, or unmarried parenthood—the causes for the dependency of about 60 percent of the children receiving aid to dependent children today.

Inadequate provision of other social services by qualified staff.—The 1956 "services amendment" stimulated increased planning for the provision of other welfare services to help needy persons increase their capacity for self-care or self-support and to maintain and strengthen family life. However, because of staff limitations and heavy workloads, many States' services plans, in general, attempt to define real-

istically their responsibility by limiting the problems for which services would be provided, limiting services to those required in the determination of eligibility for money payments, or giving only those services that can be provided during regular contacts for eligibility determination.

The States are increasingly aware of the importance of making staff time available for supportive services in addition to financial aid needed by many of the aged, the disabled, and one-parent families. But large caseloads, high staff turnover, and lack of staff skills also limit the availability and quality of services that can be provided by most agencies, since this kind of help often requires additional time and usually needs the knowledge and skill that come from professional social work training. The fact that only about 2 percent of public assistance caseworkers have had full social work training and only 15 percent partial training reflects not only the nationwide shortage of social workers but also the handicap under which public assistance agencies labor because of their relatively low salaries (in comparison with those in other governmental and voluntary agencies), heavy workloads, and the complex of professional and clerical content in the job.

Although the "training amendment" in 1956 authorized additional Federal funds to help States to increase the number of persons qualified for work in the public assistance programs, no funds have been appropriated.

Considerations for the Future

Recommendations for dealing with some of the problem areas identified through its study of the programs are included in the report of the Advisory Council on Public Assistance. This Council was established under a 1958 amendment to the Social Security Act to review the status of the public assistance program in relation to old-age, survivors, and disability insurance, the fiscal capacities of the States and the Federal Government, and any other factors bearing on the amount and proportion of the Federal and State shares in the public assistance program.

Their report, *Public Assistance—A Report of the Advisory Council on Public Assistance*, submitted to Congress on December 31, 1959, including recommendations that reflect the consensus of a 12-member group with wide diversity of backgrounds and interests, points up significant areas for further consideration. For, while most of the recommendations deal with Federal-State methods of sharing the financial burden of assisting persons in need, they do so with a focus on finding ways of meeting unmet needs, improving assistance stand-

ards, and strengthening family life. They recommend, for example, that—

Coverage be extended to all needy persons regardless of the cause of their need by:

a. using Federal grants-in-aid to encourage States to include additional needy persons, such as the unemployed, the underemployed, and the less seriously disabled (and to reevaluate exclusions now in the law specifically directed to needy persons in certain institutions and foster homes)—giving the States freedom of choice in determining whether to administer public assistance as a single program or as separate categorical programs, and suggesting several options: a single category for all financially needy persons, adding a new category of general assistance to existing categories, retaining one or more existing categories and consolidating remaining needy groups in a single category, or expanding existing federally aided categories to include additional needy persons;

b. expanding the aid to dependent children program to include any financially needy children living with any relative in their own home; and

c. limiting the use of Federal grants-in-aid to State programs imposing no residence requirements for eligibility.

Standards of assistance be raised by:

a. creating greater public understanding as to what constitutes a level of living sufficient to maintain health and well-being, with Federal leadership in (1) the development of up-to-date budget guides for typical families, (2) requiring States to report on the relationship of their own budgets and actual payments in relation to these budgets, and (3) publishing the data from individual State reports;

b. extending the scope and improving the quality of medical care for which assistance payments are made without reducing money payments to recipients (through cooperative efforts of Federal and State governments and voluntary agencies, with greater Federal leadership and the help of a broadly constituted Medical Care Advisory Committee);

c. raising Federal matching maximums per recipient high enough so as not to hamper State efforts to provide assistance at levels adequate for health and well-being and to meet rising costs of basic living requirements and medical care;

d. raising Federal matching maximums per recipient for ADC to an equitable relationship with the other programs, with any differences reasonably related to differences among the groups in the cost and content of their living requirements; and

e. encouraging the States to apply the same assistance standards to all categories of needy persons and to ensure that similar treatment is accorded to persons in similar circumstances.

Individual and family life be strengthened by:

a. appropriating funds authorized by Congress in 1956 for research and demonstration projects relating to strengthening family life and the reduction and prevention of dependency;

b. establishing a national institute (comparable to the National Institutes of Health) to conduct studies and demonstration projects leading to strengthening of family life;

c. urging the Federal Government to encourage States to utilize appropriate available services of voluntary agencies, as well as involving them in studying problems of family disintegration and breakdown and in developing coordinated programs for strengthening of family life; and

d. assisting the States to increase the number of staff qualified to provide services needed by public welfare recipients to help prevent dependency and promote social rehabilitation by: (1) providing 100 percent Federal funds both to States for training public welfare personnel and to accredited graduate schools of social work for training in strengthening family life and caring for the needs of the aging; and (2) encouraging States to establish and maintain salaries of public welfare personnel at levels required to obtain and retain competent personnel.

Other recommendations concerning fiscal and administrative operations include support of the "open-end" method of appropriating Federal funds and the statement that the proportionate Federal share of the Nation's total public assistance expenditures, including general assistance, should not be less than is provided under the Social Security Amendments of 1958. Measures are also recommended to extend coverage and increase social insurance benefits with a particular view toward reducing the need for public assistance. The Federal Government was also urged to encourage the States to establish appropriate advisory committees and in other ways to stimulate public interest and increase public knowledge of the role of public welfare programs, since "the more a community becomes a part of a public welfare program, the better it will be."

Similarly, the Bureau's report, *Illegitimacy and Its Impact on the Aid to Dependent Children Program*, gives many significant guidelines that can contribute to a better understanding of illegitimacy and to plans for dealing with it more constructively.

This report, prepared by the Bureau of Public Assistance at the request of a congressional committee and issued in April 1960, outlines factors contributing to the increase in illegitimacy. It identi-

fies the problem of illegitimacy as one that long preceded the establishment of public assistance programs; and is a social problem at all income levels, with many underlying causes. It also points out that the concentration within aid to dependent children of families whose need is associated with socially disapproved behavior has increasingly made this program a target of criticism as more information has become available about the causes of dependency. Earlier concern related more to families where the father deserted; recently, attention has been focused largely on families where the father has not married the mother.

One in 25 of our Nation's children is illegitimate; one in each 200 illegitimate children is in need. The socially unacceptable behavior of the parents of needy illegitimate children has been widely publicized and used by some as the basis of proposed legislation and administrative regulations directed against the aid to dependent children program in general. Most of these State legislative proposals have never become operative. But others, which indirectly control the assistance payment through eligibility conditions and low payments, have resulted in depriving already disadvantaged children of needed support and care. The focus of concern—the 1 in 6 children receiving aid to dependent children whose need is directly related to unmarried parenthood—while of grave significance, has tended to obscure the value of the program in sustaining hundreds of thousands of needy children and in helping thousands of families to remain together—a sound investment in the physical and emotional well-being of our growing generation.

The report also cautions that the problem of the child or the community is not solved by denying assistance while leaving the child in endangering conditions. It suggests that any lasting solution must deal with the causative factors and must move forward on many fronts.

The report, *Characteristics of General Assistance in the United States*, prepared by the Bureau and printed by the Senate Special Committee on Unemployment Problems in November 1959, provides a compilation of information about the basic characteristics of general assistance on a nationwide basis which can be helpful in the consideration of measures to deal with the needs of individuals not included within the scope of the federally aided public assistance programs. Information for each State, as of January 1959, includes a general description, conditions of eligibility, standards of assistance and payment, and administration under general assistance; as well as information about other aid from public funds.

In 1960, published information on the Nation's public assistance programs was more comprehensive than ever before. In addition to the material already mentioned, *Characteristics of State Public Assistance Plans*, a periodic publication of the Bureau of Public Assistance cover-

ing the federally aided programs, was reissued in March 1960. A release, *Summary Information on Medical and Remedial Care Provided in Approved State Public Assistance Plans*, was prepared as of June 1960. The December 1959 issue of the *Trend Report—Graphic Presentation of Public Assistance and Related Data* (published annually for the past 5 years) also provides selected data on the development of the special types of public assistance under the Social Security Act since 1935.

Developments in 1960

NEW LEGISLATION

In the closing days of the 86th Congress, the widespread consideration given to various methods of helping to meet the medical care needs of the aged resulted in amendments to the Social Security Act which provide for a new program of medical assistance for the aged, effective October 1, 1960.

Under a revised Title I, "Old-Age Assistance and Medical Assistance for the Aged," Federal funds are available to the States to enable them to provide assistance for persons 65 years of age and over who are not recipients of old-age assistance but who, although able to meet normal expenses, have insufficient income and resources to meet the costs of necessary medical services. Under the new program, the basis of eligibility is intended to be more liberal than under old-age assistance, a durational residence requirement is prohibited, and the types of medical care provided must include noninstitutional as well as institutional care. Federal participation in payments made by the State to suppliers of medical care is not restricted by any specific maximum on either individual or average payments. The Federal share ranges from 50 to 80 percent depending upon the relationship between the per capita income in the State and the national per capita income.

The amendments also provide for increased Federal financial participation, effective October 1, 1960, in payments made by the States to suppliers of medical care in behalf of recipients of old-age assistance. In addition to the usual share in assistance payments up to a monthly maximum of $65 per aged recipient, the Federal Government will provide an additional amount based on expenditures for payments to suppliers of medical care up to a monthly maximum of $12 per recipient. For States with average monthly payments of $65 or more, the Federal share of the average amount of vendor medical payments up to $12 that brings the average payment above $65 will be the Federal medical percentage (ranging from 50 percent to 80 percent, depending on the State's per capita income), or 15

percent of the average vendor medical payment up to $12, whichever is the larger. For States with average monthly payments under $65, the additional Federal share will be 15 percent of the average vendor medical payment up to $12.

The 1960 amendments also permit Federal financial participation for the first time in State vendor medical care payments (under both the new medical care program and the old-age assistance program) in behalf of patients in a medical institution as a result of a diagnosis of tuberculosis or psychosis for 42 days after such diagnosis.

To help Puerto Rico, the Virgin Islands, and Guam provide more medical care, the 1960 amendments increase the dollar limitation on the total amounts of Federal funds they may receive annually. However, the increase is available only for medical care payments made in behalf of recipients of old-age assistance to cover the costs of the Federal share above that otherwise applicable. Expenditures under the new program of medical assistance for the aged do not come under this dollar limitation.

To help States evaluate and improve their public assistance programs and their programs of medical assistance for the aged, the Department was directed to develop, or make revisions in, recommended guides or standards relating to the level, content, and quality of medical care and medical services, and to collect and publish information related thereto.

Amendments to the Social Security Act also provide that, effective July 1, 1962, a State agency in determining need for blind assistance, *must* disregard the first $85 of earned income per month plus one-half of earned income in excess of $85. Until then, beginning October 1, 1960, a State is *permitted* to disregard the first $85 per month and one-half of the excess or to continue to apply the $50 per month exemption as under the old law. Special legislation providing for the approval of the Missouri and Pennsylvania blind assistance plans, due to expire June 30, 1961, was extended to June 30, 1964.

Legislation was also passed by the 86th Congress authorizing the Department of Health, Education, and Welfare to provide reception service and hospitalization at Saint Elizabeths Hospital, or elsewhere, for repatriated mentally ill Americans. (See pages 55–56 for further information on this provision.)

TRENDS IN CASELOADS AND EXPENDITURES

With the initiation during the year of the four federally aided public assistance programs in Guam, and the establishment of an aid to the permanently and totally disabled program in Iowa, 54 jurisdictions now administer federally aided programs of old-age assistance, aid to dependent children, and aid to the blind; and 50 jurisdictions

administer federally aided programs for needy persons who are permanently and totally disabled. General assistance in some form for some persons is available in all 54 jurisdictions.[2]

About 6.8 million persons were receiving aid in June 1960 under the five public assistance programs (including general assistance). This total is only slightly higher (19,000) than a year earlier.

Two federally aided programs showed increases in caseloads in June 1960; aid to dependent children, with 3,025,000 persons in 794,000 families including 2,330,000 children—a 3.3 percent, 2.2 percent, and 3.7 percent increase respectively; and aid to the permanently and totally disabled, with 362,800 persons—a 7 percent increase. The other federally aided programs showed decreases; old-age assistance, with 2,358,600 persons—a drop of 2.5 percent; and aid to the blind, 108,000 persons—a drop of 1.3 percent. Similarly, the 971,000 persons (in 367,000 cases) receiving State and/or locally financed general assistance in June 1960 represented a 5.3 percent and a 3.7 percent drop, respectively, compared with June 1959.

Total assistance expenditures, *including* vendor payments for medical care for all five programs for the fiscal year 1960 were $3,705 million—a 3.6 percent increase over expenditures in 1959, reflecting in part the effort of some States to offset the continuing rise in living costs.

In aid to dependent children, the national average payment was $29.08 per recipient in June 1960, compared with $28.38 a year earlier. State average payments ranged from a low of $9.50 in Alabama (except for $3.85 in Puerto Rico) to a high of $46.53 in the State of Washington.

In old-age assistance, the average payment was $67.90 per recipient in June 1960, compared with $64.76 in June 1959. Average payments ranged from a low of $29.75 in Mississippi (except for $8.24 in Puerto Rico) to $109.11 in Colorado.

In aid to the permanently and totally disabled, the average payment per recipient was $65.74 in June 1960, compared with $63.37 a year earlier. The average payment varied from a low of $30.33 in Mississippi (except for $8.75 in Puerto Rico) to $128.62 in Connecticut.

In aid to the blind, the average payment per recipient was $72.81 in June 1960, compared with $69.04 a year earlier. Average payments ranged from a low of $38.65 in Mississippi (except for $8.27 in Puerto Rico) to $125.73 in Massachusetts.

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[2] General assistance, which is wholly State and/or locally financed, is administered by the State public assistance agency through its local offices in 19 jurisdictions; supervised by the State public assistance agency through local offices which are branches of county or municipal government, usually also servicing federally aided programs, in 9; administered by the local political jurisdiction in 9, with specifically limited responsibility exercised by the State public assistance agency; and administered by the local agency in 17, with no responsibility exercised by the State agency.

In State and/or locally financed general assistance, *excluding* vendor payments for medical care, the average payment *per case* was $67.48 in June 1960, compared with $65.78 in June 1959 (46 percent were family cases including an average of 4.6 persons per family). Average payments ranged from a low of $12.67 per case in Alabama (except for $12.65 in Puerto Rico) to $102.78 per case in New Jersey.

The number of beneficiaries receiving old-age assistance to supplement their social insurance benefits continued to increase. In February 1960, about 675,600 old-age assistance recipients, or 28.5 percent (compared with 26.7 percent in 1959 and 19.2 percent in 1955) were receiving assistance to supplement insurance benefits because these benefits and other personal resources were insufficient to meet their basic and/or special needs, such as medical care. The percentage of recipients of other types of public assistance who also received old-age, survivors, and disability insurance benefits was considerably smaller; for example, 16 percent of those receiving aid to the blind, 7 percent of those receiving aid to the permanently and totally disabled, and 5.2 percent of all families receiving aid to dependent children.

Source of funds for public assistance payments.—Of $3,705 million expended for the five public assistance programs in fiscal 1960, about 51.9 percent or a little over $1,922 million came from Federal funds, 36.3 percent, or $1,343 million, from the States, and 11.9 percent, or $440 million, from the localities (of which $425 million was spent for general assistance).

For the four special types of public assistance, the Federal share of total costs was 58.6 percent; the State share, 33.7 percent; and the local share, 7.7 percent.

PROGRAM AND ADMINISTRATIVE DEVELOPMENTS

The influence of study and evaluation was also reflected in various program developments. Efforts to learn more about the causes of dependency and characteristics of persons receiving public assistance, which sharpened the outline of areas of need and made more clearly visible significant factors contributing to dependency, have already resulted in advances in implementing recommendations growing out of the past year's study.

For example, a staff paper was developed establishing a position on each of the 20 recommendations made by the Advisory Council on Public Assistance, and work was initiated on several. These included exercising greater leadership in working with the States to improve standards of assistance, medical care, and the administration of the aid to dependent children program, especially in relation to provision of services, policies relating to problems of "unmarried parenthood," and community planning.

In addition, since many States are concerned about "suitability of home" provisions, and a few have considered or enacted legislation making "suitability of the home" a condition for receipt of assistance under the aid to dependent children program, consideration was given to policy questions involved, and to planning to meet the needs of children affected by such provisions.

Cooperative activity continued with the Children's Bureau toward the goal of utilizing the full potentials of both the aid to dependent children and the child welfare services programs in dealing constructively with the factors contributing to the dependency of children. Further interpretation was made of the policy statement on Public Assistance-Children's Bureau program relationships prepared for the use of the States in clarifying the functions and responsibilities of each program in providing services to children in their own homes, and help was given to States to achieve more effective day-by-day cooperation between public assistance and child welfare services at State and local levels.

The Bureau also participated in the development by the National Social Welfare Assembly of an interpretative document on the aid to dependent children program to encourage understanding and support and cooperative service from local voluntary agencies. The resulting pamphlet, *ADC: A Family Service—The Community Responsibility*, has had wide distribution and use.

Bureau staff participated in several areas for the White House Conference on Children and Youth held in the spring of 1960. Materials were provided for use in preparation for the conference, and conference materials were distributed to State welfare agencies for their use. Several members of the Bureau staff served as delegates or resource persons in workshops and helped in providing facilitating services. Follow-up activity included participation with the Interdepartmental Committee on Children and Youth in planning for an evaluation of the conference and in implementation of recommendations.

Efforts were also continued in strengthening services for the needy aged and the ill and disabled through joint activity with interested national groups, preparation of informational and interpretive materials, and consultation to the States. A specialist on aging was also added to the Bureau staff.

Bureau activity in preparations underway for the White House Conference on Aging, to be held in January 1961, included staff serving as Technical Director for the Conference Section on Family Life, Family Relationships, and Friends, and on the Technical Committee for the Conference Section on Social Services; preparation of background papers on income maintenance, social services, and family life

for use of the States in planning for the Conference; participation in planning the general and orientation sessions of the Conference, the outlines of content for small work groups, selection of speakers and discussion leaders, and identification of possible resource persons; and work with the Special Staff on Aging of the Department and the SSA Committee on Aging in reviewing and commenting on various aspects of overall Conference planning.

Cooperative work with other organizations in this area included planning a seminar on casework services for older persons with the National Social Welfare Assembly, American Public Welfare Association, and the Family Service Association of America; participation with the American Public Welfare Association in preparation of a statement on the social service needs of older people and the role of public welfare; and leading institutes and giving papers on various aspects of aging at meetings sponsored by various organizations. The Bureau has also continued active participation on the executive committee of both the National Conference on Homemaker Services and the National Committee on Homemaker Service to assist in the development of plans for a permanent organization which would promote and coordinate homemaker services at the national level.

Through preparation of informational and interpretative materials and consultation, help was also given to the States in the provision of services to the needy aging and to the ill and disabled. For example, a pamphlet was issued on *Services for Older People*, interpreting the roles of the public assistance programs and the Bureau of Public Assistance in relation to older persons. Interpretative and standards material in relation to the development of homemaker services to meet the needs of families, the ill, and older persons was also provided for the use of interested States.

Implementation of a plan of exploration with each State with reference to the service aspects of its programs, evaluation of its experience in providing services, determining next steps, and identifying ways in which the Bureau can be helpful, revealed great interest and activity and identified specific areas for further Bureau planning. Evidence of increasing interest in State public assistance agencies in developing homemaker services is especially heartening. So is the joint planning by the Bureau and the Office of Vocational Rehabilitation in connection with study of Arizona's services to the blind to strengthen the work of both agencies with the States in their use of vocational rehabilitation resources for helping handicapped public assistance recipients, and to help State welfare staffs develop appropriate social services aimed at rehabilitation.

Continuing effort was made to improve staff competence in State and local agencies by encouraging State agencies to provide for academic training under the 50–50 Federal matching provisions for the

costs of administration, by developing other methods of improving staff competence, and by making more effective utilization of professionally trained staff. The Bureau also provided two short-term training seminars for approximately 100 State public assistance field representatives; follow-up sessions were planned for October and November 1960. The first seminars were focused on ways of helping State and local staff further the program objectives of helping public assistance recipients achieve increased capacity for self-support, self-care, and strengthened family life. Emphasis for the second sessions was to be on methods used in carrying out the State field representative's job, and in deepening knowledge about policy development, community planning and supervision especially in relation to group training.

Orientation was also provided in Washington by central office staff for new State administrators. They were introduced to sources of information available to help them understand the mutual and related responsibilities of the State and Federal Governments in administering the public assistance and child welfare programs, and acquainted with the specialized services available to the States from the central office, and how these services support and supplement the work of the regional staff.

Consultation and technical assistance was given to States to improve their administrative management and to make more effective use of staff. Studies of organization and procedures were made to help States simplify the work of professional staff through reducing the volume of paper work, streamlining procedures, and transferring nonprofessional functions to clerical workers. An ad hoc committee on workload standards, with representation from public and voluntary agencies, participated in considering methods of establishing appropriate workload standards for public assistance agencies. A group of 31 welfare finance officers and tabulating equipment supervisors from 19 States with centralized fiscal operations also met in Washington to consider how State agency fiscal operations can be carried out most effectively and what planning should be undertaken prior to deciding on installing electronic data processing equipment. In addition, materials were developed to help States improve their supervision of local agencies, simplify the work of professional staff, and determine when they should convert machine operations to automatic data processing systems.

Continuing efforts were made to improve methods for conducting the administrative review of State and local operations. They included field testing of work materials and instructions in reviewing practice in relation to the application process, hearings, money payments, and guardianship; and the revision of instructions for broadening the statewide review of eligibility determination to include social services.

Miss Kathryn D. Goodwin was appointed to the position of Director of the Bureau of Public Assistance in August 1959. A change in Bureau organization structure provided for the establishment of two new positions. One is that of Assistant Director, responsible for (1) providing general direction of the administrative activities of the Bureau and of the civil defense emergency welfare activities assigned to the Bureau, and program planning for repatriation of American nationals and for refugees and immigrants; and (2) assisting the Director in the direction and coordination of Bureau activities. The other is that of Assistant Director for Program Operations, a position which raises the status of field program operations and provides a better basis for coordinating regional activities with top-level planning of the Bureau. A new Civil Defense Emergency Welfare Services Unit was also established within the Office of the Director. The Unit carries responsibility for developing and maintaining plans for a state of readiness to provide welfare services in a civil defense emergency, and for continuity and restoration of peacetime programs.

Civil defense emergency welfare services.—Following limited activity in 1958 in planning for emergency organization and operations during a war disaster, activities were resumed early in 1959 on preparations for civil defense emergency welfare activities which the Office of Civil and Defense Mobilization planned to assign to the Department.[3] In the latter part of 1959, the Department of Health, Education, and Welfare was given primary responsibility for (1) developing and coordinating the overall emergency welfare program through joint planning with other appropriate Federal agencies and voluntary organizations; and (2) preparing basic national guidance materials for State and local use.[4]

Within the Department, primary responsibility for emergency welfare was assigned to the Bureau of Public Assistance, under the direction of the Commissioner of Social Security. This assignment was based on the concept of built-in emergency welfare service planning by using fully the regional structure and existing channels of Federal-State-local counterpart relationships in the welfare field. The scope of the assignment includes nationwide guidance to States in planning, mobilizing, and organizing for welfare service responsibilities in relation to survival aid and services; feeding; lodging; clothing; locating and reuniting families; care of groups needing specialized services, such as unaccompanied children, the aged, the handicapped; and post-attack transitional financial assistance, counseling, and wel-

[3] Under an allotment to the Department by the Office of Civil and Defense Mobilization.

[4] Under Emergency Welfare Annex 19 to the National Plan for Civil Defense and Defense Mobilization and a memorandum of understanding between OCDM and the Department of Health, Education, and Welfare.

fare services to families and individuals. It also includes aid to welfare institutions under national emergency or post-attack conditions; and all other feasible welfare aid and services to people in need during any degree of a national emergency pre- and post-attack.

Emphasis during 1960 was focused on organization, recruitment, orientation to the emergency welfare services responsibilities, and development of national guidance materials for use by the States. A Children's Bureau child welfare specialist prepared the material relating to the care of children. Draft materials were reviewed in mid-June by an ad hoc advisory committee representing State and local public welfare and civil defense departments, national and local voluntary agencies, a public housing agency, a metropolitan school system, other offices of DHEW, OCDM, the Department of the Army, Housing and Home Finance Agency, and the Post Office Department.

Repatriation of American citizens.—The Bureau has continued to assist the Department of State in arranging for the reception and care of repatriated American nationals who need special help upon arrival in this country. During the past year, assistance was requested by the Department of State in behalf of 63 cases involving 126 individuals from 27 different countries. Through the cooperation and help given by public and private welfare agencies, primarily in New York, it was possible to secure emergency reception services, transportation, hospitalization, and other services in behalf of these repatriates.

However, many repatriates no longer can claim State residence and are not eligible for public aid or hospitalization in States which have residence requirements for the receipt of such services. This, plus the fact that there are no Federal funds for this purpose, makes the development of satisfactory relocation plans a time-consuming and difficult process, and places an unusually heavy burden upon health and welfare facilities in the port of entry.

Late in the fiscal year, regional offices were provided with copies of the Department of the Army's draft plan for assistance to the Department in the reception and provision of services to American civilians repatriated from foreign countries during a period of international tension or emergency. The operation of DHEW plans in this regard, which envisage the cooperation of State and local public and private welfare agencies, requires the enactment of legislation to provide a statutory base and appropriation authority to enable the Federal Government to assume its proper share of the expenses of the services required by repatriates.

Legislation to facilitate the repatriation of all United States nationals, which was submitted to the Congress in 1959 culminating a long period of program development and interdepartmental negotiation, passed the Senate but did not secure House Committee action during the last session of Congress. The 86th Congress, however, did

take action to assist one group of repatriates by passing Public Law 86–571 on July 5, 1960, authorizing the Department to provide for reception and hospitalization at Saint Elizabeths Hospital, or elsewhere, of repatriated mentally ill Americans. This authority, when supported by an appropriation, will facilitate the repatriation of the mentally ill.

Services to refugees and immigrants.—Following active participation in the 1957 temporary program of the President's Committee on Hungarian Refugees, and in the 1958 sessions of the Departmental Committee on Refugees and Immigrants established to implement a task force report on the Department's role in future refugee activities, Bureau activity during the past year was directed primarily toward developing statements and position papers on proposed legislation and program planning for services to refugees and immigrants. It also prepared comments on a 1959 draft Joint Congressional Resolution to provide for the resettlement in the United States of 1,000 difficult-to-resettle refugees, and developed a plan of follow-up steps based on a study of sample cases referred by the Department of State.

International activities.—Cooperative work with the SSA Office of International Activities during the past year included central office planning for and consultation to foreign visitors, and interpretation of U.S. social welfare programs to individuals and international groups referred by various Government agencies. Bureau staff in regional offices also provided consultation and planned or arranged observation programs in cooperation with State and local public and voluntary welfare agencies for visitors from 20 countries.

Bureau staff prepared comments on various United Nations' documents, provided material required by the United Nations for their World Report on Social Development, and prepared pertinent sections of the United Nations Biennial Report on Family and Child Welfare (1960). A Bureau staff member served as one of the eight United States Government representatives to the 11th Pan American Child Congress held in Bogota, Colombia, in November 1959. She also participated, prior to the Congress, in the preparation of the United States' official report on social welfare programs for children and, subsequently, in outlining the major results of the Congress to be reported to the Department of State.

Children's Bureau

Some Facts and Figures About Parents and Children

Births continue to be more than 4 million a year but the crude birth rate and the rate per thousand women of child bearing age have dropped slightly since the peak of the 1950's.

The estimated number of children under 18 in the civilian population of the United States in 1959, including Alaska but not Hawaii, was 64 million, 36.5 percent of the total population.

Provisional statistics indicate that the infant mortality rate for 1959 and the early months of 1960 has decreased slightly from the high point of 27.1 per thousand live births in 1958. Death rates for babies less than 3 days old have changed very little in the past 2 decades. Nonwhite infants still have a higher mortality rate than white infants.

Numbers, rates, and ratios of births out of wedlock continue to increase. The estimated number for 1958 was 208,800. The ratio per 1,000 live births increased over 1957 from 47.4 to 49.6 and the rate per 1,000 unmarried women aged 15–44 years from 20.9 to 21.0. While 40 percent of these births were to mothers under 20 years of age, the rate for such mothers declined slightly from 1957 to 1958.

In March 1959, 13.6 million married women were in the labor force and of these, 12.2 million had husbands living at home. Thirty-one percent of all wives were in the labor force. A large part of the increase in 1959 over 1958 occurred among married women 35 years old and over; relatively few of these women have children of preschool age. However, nearly 7.5 million mothers with children under 18 and nearly 3 million with children under 6 were in the labor force in March 1958.

In 1958, for the 10th consecutive year, juvenile delinquency cases increased over the previous year. The increase for 1958 was 7 percent when traffic cases were excluded. The rise, however, was much less than in other recent years and exceeded only slightly the 6 percent estimated increase in the child population. Arrest data for 1959 (preliminary) reported by the Federal Bureau of Investigation for 980 cities show that the arrests of children under 18 years increased by 5 percent over 1958. This is the lowest percentage increase noted for any year since 1954.

Major Trends

The Golden Anniversary White House Conference on Children and Youth held in Washington March 27–April 2, 1960 was the high point of the year for the Children's Bureau. Many months of planning involving hundreds of thousands of people preceded it.

Bureau personnel were involved in Conference preparation in a wide variety of ways. Regional staff worked actively with State Committees for Children and Youth and State public agencies in support of these Committees. Many of the technical specialists in the central office contributed to Conference publications, and recommended speakers, work group leaders, and resource persons. The Bureau provided the technical staff for preparation of the chartbook

sponsored by the Federal Interdepartmental Committee on Children and Youth.

At the close of the year, the Bureau was making an intensive exploration as to how the findings of the White House Conference might be implemented through its various programs. Unquestionably, these findings will influence child life throughout the Nation and throughout the world for years to come.

The review of the White House Conference findings was being undertaken in relation to the statement of 10 year goals developed by the Bureau during fiscal years 1959 and 1960.

Undoubtedly the goals' document will prove to be a benchmark for the Bureau as an interpretation of how Bureau programs can and should meet the needs of children in the years ahead.

Two reports to the Congress—The Report of the Advisory Council on Child Welfare Services and the Joint Children's Bureau-National Institute of Mental Health Report on Juvenile Delinquency—represented major Bureau accomplishments during fiscal 1960.

During fiscal 1960 the Children's Bureau and the Women's Bureau of the Department of Labor were actively planning together for the National Conference on Day Care to be held November 17 and 18, 1960 in an effort to stimulate the development of day-care services throughout the country.

Legislative Developments During the Year

The year 1960 marks a milestone in the legislative history of the Children's Bureau. For the first time in many years, legislation was enacted which substantially broadened the statutory authority under which the Bureau operates, thereby enabling the Bureau to serve children better.

The first piece of this legislation was the International Health Research Act. This Act grants new powers to the Secretary of Health, Education, and Welfare, in carrying out his responsibilities under the basic 1912 act which established the Children's Bureau. Among these new powers are authorization for establishing and maintaining fellowships and making grants for fellowships, and authorization for making grants for research, in carrying out the purposes of the Act. These purposes are twofold: (1) to advance the status of health sciences in the United States and thereby the health of the American people through cooperative endeavor with other countries in health research, and health training; and (2) to advance the international status of the health sciences through cooperative enterprises in health research, research planning, and research training.

The second piece of legislation of major significance to the Bureau is contained in the 1960 Amendments to the Social Security Act.

These amendments authorized a new program, with a separate appropriation in such sums as the Congress may determine, of grants for research or demonstration projects in the field of child welfare. Such grants may be made to public and voluntary agencies and organizations, and to institutions of higher learning. The health titles were also broadened so that special project grants may be made directly to institutions of higher learning. These amendments also increased the amounts authorized for annual appropriation to $25 million for each of the three grant programs under Title V of the Act which are administered by the Bureau. The amounts of the previous authorizations were: maternal and child health services, $21,500,000; crippled children's services, $20,000,000; and child welfare services, $17,000,000.

On September 7, 1959, the President approved H.J. Res. 317 to change the date of Child Health Day to the first Monday in October. The Department had transmitted a bill for this purpose to the Congress earlier in the year. The new date will permit the United States to link its Child Health Day observance more closely to Universal Children's Day, which many nations observe on October 1.

1960 White House Conference on Children and Youth

The Golden Anniversary White House Conference on Children and Youth was held March 27–April 2, 1960 in Washington, D.C. This was the sixth White House Conference called by a President of the United States since 1909 for a nationwide stocktaking of the needs of children and youth.

The participants numbered 7,600 persons, including 1,400 young people and 548 international guests from 86 countries. The Conference theme was: "To promote opportunities for children and youth to realize their full potential for a creative life in freedom and dignity."

A 92-member National Committee appointed by the President was responsible for the direction of the Conference. This Committee was composed of leaders in education, health, social work, recreation, religion, and many other fields concerned with children and youth.

Statewide committees were appointed by the Governor of each State and Territory at the request of the Secretary of Health, Education, and Welfare. The Children's Bureau served as the focal point in the Federal Government for the Conference planning and received Congressional appropriations in 1959, 1960, and 1961 totaling $500,000 for the Conference and its immediate followup activities. Additional funds totaling $568,155 were contributed by foundations, national organizations, industry, and individuals.

The Conference opened on Sunday evening, March 27, with a plenary session attended by 12,000 people and addressed by President Dwight D. Eisenhower. For the next three mornings, Conference par-

ticipants gathered first in theme assemblies of 1,500 and then in smaller Forum meetings which averaged 350 each. In the theme assemblies, they heard leading authorities speak on ideals and values, and on economic, social, cultural and technological factors affecting children and youth today. In the Forums, experts presented facts and issues related to specific aspects of the life of children and youth.

For three afternoons, the participants joined workgroups of 30 to 35 members; against the background of the morning talks, they discussed assigned topics and formulated recommendations for consideration by the Forums. These totaled 670 and are published in a pamphlet: *Recommendations: Composite Report of Forum Findings* available through the Government Printing Office. The full Conference met at the National Guard Armory on Friday morning for an overview of the findings and an address by the Honorable Arthur S. Flemming, Secretary of Health, Education, and Welfare.

Publications prepared in advance of the Conference include *Children in a Changing World*, a chart book prepared by the Federal Interdepartmental Committee on Children and Youth; the *States Report on Children and Youth*, summarizing the content of the 55 State and Territory reports; *Focus on Children and Youth*, based on materials submitted by the national organizations; *Children and Youth in the 1960's* and *Reference Papers on Children and Youth*, prepared by specialists to supply information on specific questions in the Conference program; and *The Nation's Children*, a three volume collection of background essays outlining major developments relating to children and youth in the past decade. A volume of *Conference Proceedings* will be released in the early fall of 1960.

The National Committee worked through a series of committees of its own membership. In addition, it used the auspices of three major bodies to assure full participation in Conference preparation: (1) National Council of State Committees for Children and Youth, consisting of Governor-appointed committees in 50 States, 3 Territories, the District of Columbia, and the Commonwealth of Puerto Rico; (2) the Council of National Organizations for Children and Youth, with a membership of nearly 600 national lay and professional groups concerned with the physical, mental and spiritual well-being of children and youth; and (3) the Federal Interdepartmental Committee on Children and Youth which is an affiliation of 34 agencies of Government having programs affecting children and youth.

At the request of the National Committee and in conjunction with it, the two national councils and the Interdepartmental Committee have jointly established the National Committee for Children and Youth to stimulate and coordinate the effective utilization of the Conference findings and forum recommendations during the decade ahead.

Federal Interdepartmental Committee on Children and Youth

The Interdepartmental Committee on Children and Youth, established in 1948 to provide an opportunity for the exchange of information among Federal agencies with program interests in children, held regular monthly meetings during the past year. Its major activity during fiscal 1960 was related to preparation for the 1960 White House Conference in response to the request of the President's National Committee for the Interdepartmental Committee to serve as the main channel for Federal agency participation in the Conference. One of its major contributions was the development of the chart book, *Children in a Changing World.* In addition it made available to the National Committee the knowledge, experience, and resources of the Government agencies. Over 400 persons from Federal agencies attended the Conference. Key persons from many agencies contributed professional papers for the background publications of the Conference and served as speakers and resource consultants.

Programs of the Bureau

RESEARCH IN CHILD LIFE

The Bureau's research staff has a major responsibility for carrying out the legislative mandate "to investigate and report upon all matters pertaining to the welfare of children." In addition to conducting its own studies and cooperating in joint studies, the Bureau stimulates other agencies to undertake research in child life by formulating the questions needing study, developing research methods, and providing technical advice and assistance.

Among studies receiving major emphasis were a study of infant mortality trends and a pilot survey, preparatory to a national study, of the incidence and prevalence of cystic fibrosis—a major childhood disease. Work continued on devising statistical measures of child health and health services, on the uses of maternity statistics, and on the revision of the diagnostic classification of crippled children. Another fact-finding study centered on children with congenital heart disease treated at regional heart centers.

In response to a Congressional request the Bureau, in conjunction with the National Institute for Mental Health, conducted numerous studies and reviews in the area of juvenile delinquency. The Bureau helped prepare *The Report to the Congress on Juvenile Delinquency* and has published a series of 16 pamphlets addressed to a technical audience entitled *Juvenile Delinquency: Facts and Facets.* In order to obtain basic data on youth attitudes and values, arrangements have

been made with Washington University in St. Louis to begin one of the studies of teenage culture which it is hoped to initiate in several communities.

Other projects included participation in the Department's work on the National Survey of Social Welfare Manpower, a national survey of licensed day-care facilities, and preparing the report on the study of the outcome of independent adoptions.

During the year, the Bureau compiled and published current statistical data received from State agencies administering the maternal and child health, crippled children's, and child welfare programs. It also published statistical data on voluntary child welfare services, the work of juvenile courts and public training schools for juvenile delinquents, and on adoption programs. During fiscal 1960 a publication, *Trends—Child Welfare Services*, *Juvenile Court Cases*, *Crippled Children's Services*, *Maternal and Child Health Services* supplemented and summarized these reports.

As part of its research interpretation activities the Bureau helped prepare the chart book and produced a number of Fact Sheets for the Golden Anniversary White House Conference on Children and Youth. Working papers were prepared for the Advisory Council on Child Welfare Services. Progress continued on the revision of *Prenatal Care* and work began on the revision of *Your Child From One to Six*, two among many of the publications for parents on child growth and development. Two issues of *Research Relating to Children*, an inventory of current research in child life, were published during fiscal 1960 and a special listing *Research Relating to Mentally Retarded Children* was prepared. Also published was *Some Guide Lines for Evaluative Research*, an examination of the problems in research on evaluating efforts to bring about social or emotional change in individuals.

The research staff worked with or gave consultation requested by State health and welfare departments, national organizations, and university groups on studies of such subjects as accident prevention, correlates of handicapping conditions in childhood, cultural aspects of delinquency, child-rearing practices, illegitimacy, marital problems, adoption, and day-care services.

MATERNAL AND CHILD HEALTH SERVICES

All States, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam receive Federal funds to extend and improve services for promoting health of mothers and children.

For the fiscal year 1960, the appropriation for maternal and child health increased to $17,500,000, with $1 million earmarked for services to mentally retarded children.

The infant mortality rate which went up in 1957 for the first time in 22 years continues at a relatively high level.

The 1956 rate was 26.0; in 1957 it was 26.3; in 1958, 27.1. The preliminary rates for 1959 and 1960 are: 26.4 and 25.7 (7 monthly only) respectively.

In 1957, for the first time in 29 years, the maternal mortality rate did not fall but rather stood still for a year, i.e., the rate remained 4.1 for both 1956 and 1957; in 1958 it declined again to 3.8. The lack of progress shown in 1957 was due to an increase of nonwhite rates from 11.1 in 1956 to 11.8 in 1957; the maternal mortality rate for white mothers decreased from 2.9 to 2.8 in these years.

Concern regarding the relatively high level of infant mortality has been reflected in increased activity in State programs, including studies and services. Some of the studies aimed at pinpointing specific problems, needs and gaps in services have included surveys of communities to locate those women with no or inadequate prenatal care, the characteristics of these women, their pregnancy outcome in comparison to the community as a whole.

Because the great bulk of infant deaths now occur very early in the first year of life, more than one-third on the first day, approximately half in the first three days, nine out of ten in the first five months, and because nearly three times as many deaths are due to prenatal and natal causes as to postnatal causes, major program emphasis is on the mother *before* the birth of the child. Extension of prenatal services to population groups, not previously receiving care, in both urban and rural communities, including renewed efforts of public health agencies to bring services to mothers *early* in pregnancy, is an example of widespread State activity.

The increase in maternity services is reflected in the number of women who received maternity medical clinic service in 1958, viz., 266,028 mothers, an increase of 10.7 percent over 1957 when 240,630 mothers received such care. Nursing services to maternity patients increased even more, viz., 25.9 percent from 446,843 mothers visited in 1957 to 562,487 in 1958. Dental treatment to maternity patients more than doubled between 1957 and 1958. Mothers receiving hospital inpatient care under the maternal and child health program, chiefly hospitalization for complications of pregnancy, increased from 39,562 in 1957 to 40,910 in 1958.

An important factor in both maternal and infant health and maternity care has been the sheer number of births, especially since 1946 when birth rates have been at a consistently high level. In the 12 years (1946–1957) the number of births increased by almost 30 percent and by nearly a million births.

Certain other demographic changes also point to reasons for the intensification of services. Neither the infant mortality level nor the rate of decline are uniform for all areas or population groups. In 1958 the infant mortality rate for the State with the highest rate,

Mississippi, 41.0 was nearly double that for the State with the lowest rate, Rhode Island, 21.3. The infant mortality rate for nonwhite infants in 1958 was close to twice that for white infants, 45.7 and 23.8 respectively.

In addition, the nonwhite infant mortality rate did not decline (1956–57). Between 1950 and 1958 nonwhite births increased from 13.8 percent to 15.0 percent of total births; the estimated number of births to unwed mothers increased from 141,600 to 208,700; births to women under 20 increased from 12.1 percent in 1950 to 13.5 percent in 1958; family size increased as illustrated by the fact that the number of fifth and later pregnancies increased from 12.5 percent in 1950 to 16.1 percent in 1958—all of which are factors contributing to higher infant mortality rates.

Services to children under the maternal and child health program (except for services to mentally retarded children) were not increased in all categories. Nearly 1.45 million children received services in well-child conferences in 1958, a 9.2 percent increase over 1957; the number of infants seen increased somewhat more than the number of preschool children, 10.6 percent as compared to 8.2 percent. Nursing service was given to more than 3 million in 1957. The number of premature infants hospitalized increased by 11.3 percent to a total of 5,794 infants. The number of children receiving dental treatments remained about the same, an increase of 0.4 percent to nearly 509,000 in 1958.

On the other hand, the number of children receiving pediatric clinic service declined 1.2 percent to about 145,000 and of those receiving hospital inpatient care (exclusive of prematures) 28 percent, to about 21,000.

School health examinations increased by 17.5 percent; physicians giving examinations to nearly 2.6 million children in 1958. More than 5.0 million school children received visual screening tests, a 23.5 percent increase; nearly 3½ million had audiometer screening tests, a 19.4 percent increase.

The number of children immunized against smallpox, 2.7 million; diphtheria, 3.2 million; pertussis, 2.3 million, and tetanus, 3.0 million, increased. Although the number immunized against polio was 5.2 million (greater than the number immunized against any of the above diseases), it represented a 56 percent decrease in the number of children immunized against polio (11.8 million in 1957 to 5.2 million in 1958) and as contrasted to 13.2 million in 1956.

States showed increased interest in broadening their programs to areas which have heretofore been considered ancillary to maternal and child health such as homemaker and day-care services and parent education.

During the past year, clinic services including complete evaluation, diagnosis, and followup care were provided through special programs of maternal and child health for almost 9,000 mentally retarded children and their families. In addition, over 1,800 requests for services which could not be handled were received by these programs. The movement toward earlier casefinding and identification of retarded children is continuing and is reflected by statistics on new cases seen in these special programs (31.2 percent were under 4 years of age and 75.6 were under 9 years of age).

The increase in numbers of children served directly by these special programs is primarily a reflection of greater selectivity and flexibility in the use of diagnostic approaches coming with staff experience.

Actual expansion of services to mentally retarded children and their families during the past year through this program has occurred primarily through the greater involvement of local resources and the concentration of project staff time on inservice training programs. These efforts have resulted in the tremendous increase in the availability of services to the retarded provided by local individuals and agencies which previously had not been interested or had not felt competent to provide such services.

Interest in developing screening, detection, and treatment programs for phenylketonuria has continued to mount on the part of State and local health services. While screening programs for well baby populations have been developed in almost half of the States, the major efforts during the past year have been on screening high risk groups (institutions for the mentally retarded and retarded children in special classes). In such groups the incidence of the condition is about 1 percent of the population. Such screening permits easy location of families in which the condition occurs and, on this basis, it is possible to locate infants in these families who may have the condition and can be treated. This type of pursuit of high risk groups has yielded a high return of infants who have the condition and in whom it is believed mental retardation can be prevented through a special diet. Spot surveys seem to indicate that as many as 12 to 15 percent of the children in affected families located through high risk group surveys have the condition but are undiagnosed and untreated.

CRIPPLED CHILDREN'S SERVICES

All the States (excepting Arizona), the District of Columbia, Puerto Rico, the Virgin Islands, and Guam are participating in the crippled children's program. Although the State agency auspices vary, the objective is uniform, namely; to locate children who require care and to provide restoration through diagnosis, medical and surgical treatment, and alleviation of unfavorable social and psychologi-

cal influences which adversely affect the degree and duration of the disability. The appropriation for crippled children's services is $16 million, $4 million less than the amount authorized.

State crippled children's programs throughout the country served more than 325,000 children in 1958, an increase of 3.9 percent over the year before. This represents over 50 percent more children receiving physician's services in 1958 than at the beginning of the decade. During these years the number of handicapped children under care in official programs rose from 3.9 per 1,000 children under 21 in the United States to 4.8 per 1,000.

Broadening the crippled children's program to include children handicapped with conditions not formerly covered continues. Examples of categories receiving increased attention by States are: cystic fibrosis, nephrosis, and neurological defects. Services for children with multiple handicaps, such as the so-called brain-damaged child and the deaf-blind child, are increasing.

Physician's services to children increased whether given in the clinic, office, home, hospital, or convalescent home. Though the number of children receiving care in hospitals or convalescent homes increased slightly, the trend toward smaller average number of days of care in hospitals and convalescent homes continued.

The proportion of children with congenital malformations continues to increase so that they now constitute 26.4 percent of the total cared for under the crippled children's program (1958). One of the largest increases in the number of children with any one condition was in children with congenital malformation of the circulatory system. Reflecting scientific advances in the treatment of congenital heart disease and the availability of services made possible through a special appropriation for services to these children, plus use of some regular crippled children's funds, the number of children served increased from 2,200 in 1950 to more than 12,000 in 1958, an increase of about 450 percent.

The increase in funds for congenital heart disease made it possible for regional heart centers to reduce the backlog of cases waiting for treatment; the additional funds also relieved in most States the critical shortage of funds which was resulting in curtailment of services for all crippled children. As more hospitals throughout the country meet the standards of the American Heart Association for centers performing heart surgery, an increasing number of States are able to treat children in their own facilities.

As State maternal and child health programs of hearing conservation have expanded the need for standardization of screening procedures has become more urgent. Therefore, the Children's Bureau arranged a conference of nationally recognized leaders in the hearing field. They reviewed the present status of hearing testing programs

and developed a set of recommendations covering the technical aspects of testing procedures for hearing loss.

To bring latest advances in hearing aids and surgery of the ear to children who need them, the State crippled children's agencies are caring for an increasing number of children with hearing loss and diseases of the ear, viz., 19,700 in 1958 as compared to 12,500 in 1950. The extensive problem of chronic middle ear infection in certain children, such as the Indian children of the Southwest, children in Alaska, Hawaii, and Guam is being reduced.

CHILD WELFARE SERVICES

The report of the Advisory Council on Child Welfare Services, transmitted to the Secretary and the Congress on December 28, 1959, was an event of major significance for child welfare programs throughout the country. Both the accomplishments and inadequacies of the Nation's child welfare programs were studied by the Council.

The 15 recommendations made by the Council range from a new, broad definition of child welfare services to urging that the Children's Bureau be expanded so that it could continue in its national leadership role.

In what is doubtless the Council's most controversial recommendation, it proposed that the Federal Government pay part of the total cost of public child welfare services of each State through grants-in-aid on a variable matching basis and with provision for an open-end appropriation. However, pending passage of such Federal participation in the total cost of child welfare services, the Council recommended "That the authorization and appropriation for child welfare services be raised substantially." The Council declared that the goals set forth for improvement in the structure and implementation of child welfare services "represent stern reality in that they reflect the changes in our society in the last decade." To meet these changes "will require the most imaginative and creative planning that our nation can muster."

Good progress was made in the further implementation of the 1958 amendments to Title V, part 3 of the Social Security Act. The Federal share provision became effective July 1, 1959. An evaluation of the first year's experience was being made at the close of this fiscal year. The reallotment provision, based upon the experience in 1959 and 1960, has proved on the whole to be useful and effective. Four States released $130,650. This money was allocated to 18 States as an addition to their initial allotment. While none of the 18 States received the full amount they requested, allocations ranged from $1,023 to $16,693.

Although the $13,000,000 appropriation for the 1960 fiscal year was the largest ever made for the child welfare services program, it was not sufficient to make fully effective the new allotment formula. As a result 36 States received the "base allotment," as provided in the 1958 amendments. State plans and budgets provided for some new developments, but the Federal allotments for the most part were used to meet the costs of the on-going child welfare programs.

State reports continue to stress the drain on State health, welfare, and education appropriations caused by the increasing child population. That the States have need for additional funds and the ability to use them is evidenced by the following tabulation:

Year	Appropriation	Payments	In Federal Treasury, June 30	
			Amount	Percentage
1960	$13,000,000	$12,902,037	$97,963	0.8
1959	12,000,000	11,833,299	166,701	1.4

The balance of 0.8 percent remaining in the Federal Treasury this year represents a record "low."

A great number of shifts in top State welfare personnel this past year accelerated the joint planning by the Children's Bureau and the Bureau of Public Assistance for orientation of new State administrators. The Division of Social Services within the Children's Bureau made arrangements for orientation of four administrators under this plan.

The Division also developed a plan for orientation of new child welfare directors to the Children's Bureau. Three groups were brought into the Bureau during the year and arrangements were made for one director on an individual basis. States represented included Maine, Michigan, New Hampshire, Ohio, Rhode Island, Tennessee, West Virginia, Utah, and Virgin Islands.

The difficulty of maintaining consistent, overall leadership in State child welfare programs is underscored by the situation in Regions I and V. New administrative people were appointed in 5 of the 6 States in Region I. There have been 3 new directors of child welfare in Region V this past year, with Ohio announcing late this spring a second change in less than a year. Such changes not only influence program development but affect considerably the focus of consultation to States by the Federal staff.

Relatively little substantive legislation affecting child welfare was passed in the States this fiscal year. Many of the State legislatures were not in session or were in session for consideration of special budget matters. Perhaps the most significant law in terms of its im-

plications for children was one enacted in New York—the Interstate Compact on Child Placement. The Compact was developed by the State of New York Joint Legislative Committee on Interstate Cooperation, affiliated with the Council of State Governments. The purpose of the Compact is to protect children involved in interstate placements, so that they will have "the maximum opportunity to be placed in a suitable environment and with persons or institutions having appropriate qualifications and facilities to provide a necessary and desirable degree and type of care." It relates specifically to situations where appropriate public officials or social agencies are responsible for the placement. The hazards would be reduced by the provision for uniform and orderly procedures, defining responsibilities of sending and receiving States, and providing penalties for nonperformance. These protections were agreed upon at a conference called by the New York Joint Legislative Committee. Participants included State Attorneys General, public and voluntary child-placing agencies from the northeast States, plus staff from the Children's Bureau and Child Welfare League of America. The New York bill becomes effective September 1, 1960. It is hoped that other States will adopt the Compact as quickly as their State situations permit.

The need for qualified personnel in child welfare continues to be acute. Several States during the past year have planned for a substantial expansion of educational leave programs. This represents a positive step forward toward the goal of improved child welfare services. New York, New Jersey, Ohio, and Pennsylvania are all making provision for an increased number of individuals to attend schools of social work; it is estimated that over 175 staff members will be in school from these 4 States alone. Ohio's 50 represent more than twice the number of educational leave grants from this State in years past.

In adding to actual numbers of staff, progress nationally was slow. As of June 1958, there were 6,631 full-time child welfare staff. In June 1959, the number was 7,026. Staff needs, on the other hand, were rapidly increasing in regard to coverage of existing services and for extending both basic and specialized child welfare services. A pamphlet, *In Search of Staff for Child Welfare*, prepared by the Bureau's specialist on staff development this year, brings together a number of recruitment methods which have proven successful in the public child welfare programs.

Heartening gains were made on both the Federal and State level in joint planning for the welfare of families and children. The Children's Bureau-Public Assistance policy statement on Social Services to Families and Children was released on September 14, 1959. Staff of the two Bureaus, both in Washington and in the Regions, have been considering how best to implement the new policy state-

ment. Children's Bureau and Public Assistance staff in Regions III, IV and V report fruitful joint discussion and exploration with States in these regions on the implications of the document, particularly on how to strengthen services in ADC families.

Child welfare and public assistance personnel in those States in which "suitability of home" legislation was passed have been particularly active in working together. They are concerned, as are the two Federal Bureaus, that every effort be made to offer as much protection as possible to children and families in the administration of these laws.

Preparation of a *Technical Manual on Social Services for Emergency Welfare Services* represented another cooperative planning and work area for the two Bureaus. A child welfare specialist on civil defense planning was employed by the Children's Bureau for this purpose. This specialist and other Children's Bureau staff participated in an Ad Hoc Advisory Committee on Emergency Welfare Services to review the manual material.

Development within the States of other services to children in their own homes, such as day care and homemaker services, continued to be uneven. Major problems continue to block effective development of homemaker services, including (1) financing; (2) a functional definition of homemaker services acceptable to both the health and welfare fields; (3) a strong national voluntary agency to take leadership; and (4) limited service from public agencies at all governmental levels.

Following the National Conference on Homemaker Service in February 1959, both the National Committee on Homemaker Service and the Executive Committee of the National Conference have continued meeting to plan for the development of a national homemaker service organization. Recently a proposal has been adopted by the Executive Committee that such a permanent organization be established to coordinate homemaker services at the national level and offer consultant services to communities wishing to develop these services. The Children's Bureau as well as other national public and voluntary agencies are represented on the Executive Committee.

The decision to hold a national day care conference in Washington during November 1960 was made with the hope that such a conference will center attention on "an urgent and growing national need." It is being called under the joint sponsorship of the Children's Bureau and the Women's Bureau of the Department of Labor.

A number of reports and papers are being prepared for the use of participants and a special day care film, produced cooperatively with the Pennsylvania Department of Public Welfare, will be available for showings. Responses to the national Children's Bureau-Women's Bureau day care survey made last year indicated that resources exist throughout the country that could provide support for needed pro-

grams if interpretation of the need and the vehicles for coordination of effort were to be increased and strengthened.

Several noteworthy advancements can be reported in other child welfare areas:

1. An important step toward improvement of adoption services was taken at a 1-day meeting called by the Bureau in May 1960. Representatives of the American Medical Association, the American Academy of Pediatrics, the American Academy of General Practice, the American College of Obstetrics and Gynecology, the American Bar Association and the Child Welfare League of America considered concrete ways of achieving cooperation among these national organizations in the field of adoptions. It was the first time that these national medical groups and the American Bar Association have met together on this subject.

2. Joint meetings of Children's Bureau and Public Assistance staff in Regions I and V were held to review a statement developed by central office specialists of the Children's Bureau and the Bureau of Public Assistance on *Services to Unmarried Parents; More Effective Approaches Through Public Welfare.*

3. Some movement occurred in the development of much-needed small group homes for adolescents, primarily under voluntary auspices. Agencies in Connecticut, Illinois, Virginia, and Wisconsin are involved.

4. The Bureau's specialist on social services to mentally retarded children gave consultation to the Southern Regional Educational Board on setting up a joint training project for attendant personnel in southeastern institutions for the mentally retarded. Immediate objectives were to develop a core curriculum and to train key personnel to administer and supervise the teaching process. Conferences were also held with the National Institute of Mental Health and the Office of Vocational Rehabilitation in regard to training needs of social workers and rehabilitation counselors in providing services for the mentally retarded.

5. Division of Social Services staff have participated in a number of special meetings called to consider the needs of children of migratory workers. Among these were a meeting of the President's Committee on Migratory Labor and the Migrant Ministry of the National Council of Churches, and an Atlantic Seaboard conference called by the Council of State Governments to consider day care needs of these children. Concern regarding the adequacy of care available for children whose mothers are employed in the domestic agricultural field has led the Senate Appropriations Committee to direct the Children's Bureau to report by February 1, 1961 "on this problem and the measures to alleviate the adverse conditions which exist."

An appreciable and increasing amount of staff time of the Division of Social Services was devoted to activities in the international area. Highlights include: participation by the Bureau's specialist on group care in the Eleventh Pan American Child Congress in Bogota, Columbia; preparation by Division staff of materials for the official United States reports to the above Congress and to the Lisbon meeting of the International Union for Child Welfare being held in July 1960; preparation of materials for special United Nations reports.

State and local community planning efforts for children this past year were focused, in the main, upon preparation for the 1960 White House Conference on Children and Youth. Having returned to their local communities, the many citizens and agencies are now turning their efforts to "follow-up." By the end of the fiscal year State committees were in the process of putting the Conference recommendations into effect. Indications are that an encouraging number of permanent organizations have already been established or are being planned.

Greatest expressed needs are for dynamic leadership and consultation from the national level, plus funds from State sources to continue committee work. Division of Social Services staff, both central office and regional, participated in the Conference and accepted special work assignments during the sessions. Two of the Division's specialists shared authorship on a paper dealing with care of children away from their own homes for the White House Conference volume *Reference Papers on Children and Youth.*

JUVENILE DELINQUENCY SERVICE

Juvenile delinquency continues to be a subject of great public interest and concern. Congress continued to be active. One bill (S. 694) passed the Senate. It provided for Federal assistance for projects which will demonstrate or develop techniques leading to the solution of delinquency control problems. Several bills essentially the same were introduced in the House. One bill (H.R. 12108), reported out of committee, provided for Federal grants or contracts to carry out projects with respect to techniques and practices for the prevention, diminution and control of juvenile delinquency, and for training of personnel.

That the interest of States continues is evidenced by the fact that the National Governors' Conference passed a resolution establishing a committee on juvenile delinquency "to help marshal all public and private efforts to combat juvenile delinquency and to serve as liaison with the several agencies of the Federal Government, with the several State governments and with the public and private agencies working in the field of juvenile delinquency prevention."

During the year, a considerable amount of staff time was devoted to the Joint Report of the Children's Bureau-National Institute of Mental Health on Juvenile Delinquency. This involved attendance at meetings, development of material, as well as consultation and review of material. Staff specialists in juvenile delinquency also devoted time to White House Conference planning, involving consultation and participation in the Conference as resource persons.

Because of the above activities and work planning, which emphasized the development of written material, the volume of consultation was slightly less this year. Consultation, either in the field, by correspondence, or office interviews was provided in response to almost 700 requests. All but three of the States received some type of consultation service during the year. In addition, over 50 foreign visitors, representing 26 countries, were provided program information and technical assistance through office interviews.

In the spring of 1959, with the aid of Children's Bureau staff, a meeting was convened in Washington attended by staff members of municipal and State youth commissions having delinquency prevention responsibilities. Its purpose was to exchange information and discuss problems of mutual concern. This was the first joint meeting of State and municipal commission representatives as each group met separately the previous year. Forty-four participants from 19 States, 17 representing local commissions, and 23 State commissions, took part.

Of particular interest at the local level is the establishment of metropolitan government in the greater Miami area. Progress to date has been confined pretty much to physical services such as water supply, sewage disposal, and fire and insect control. Some indications exist of the possible development of a metropolitan system of youth services and programs. Such a development would have significance for all social services.

In February, the Children's Bureau convened a 2-day conference of a small group composed of social workers, law enforcement officers and probation personnel to identify and discuss the problems which inhibit the development of close working relationships between law enforcement officers and youth workers, particularly those working with hostile anti-social gangs. The trend for police departments to drop certain activities related to recreation or social services continues. The International Association of Chiefs of Police has recently indicated its position that the provision of such services are not appropriate departmental functions.

A major staff project in the area of training this year was the conducting of a week-long National Workshop on Training for Probation Services in Juvenile Courts. This workshop, made possible

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by a Ford Foundation grant, was sponsored jointly by the Children's Bureau, the National Council on Crime and Delinquency, the Council on Social Work Education, and Wayne State School of Social Work.

The purpose of the workshop was to reexamine the knowledge, skills, and attitudes needed to work with children on probation and to develop effective ways through professional education and in-service training of getting such knowledge and skills to probation officers without professional training. The workshop was attended by 24 participants, educators, and program personnel from 18 different States. In addition to the above project, the staff conducted numerous workshops and institutes.

Another significant trend is the growing awareness on the part of schools of social work of the needs of the correctional field, and their expanding activity in this area. More schools of social work are beginning to develop field work placements in corrections, add faculty members with correctional competence and develop an educational partnership with State and local correctional agencies.

Several States are adding facilities for the care of delinquent children. Interest in the use of camps for the care and treatment of delinquent children also has continued. Since work on written guides was emphasized during the year and because of the great demand for consultation concerning the establishment and operation of camps, a substantial block of time was devoted to the development of a new publication, *Camps for Delinquent Youth: A Guide to Planning.*

Another new publication, *Detention Planning*, was produced to help meet the ever increasing requests for consultation on detention care and planning. Because of general interest of citizens in juvenile delinquency, another non-technical publication, *A Look at Juvenile Delinquency*, was produced. Ten other articles on juvenile delinquency were written by Bureau staff and appeared in professional publications or were issued as one of the *Facts and Facets* series.

Cooperative work was carried on with the National Council on Crime and Delinquency, American Correctional Association, Council on Social Work Education, Child Welfare League, the National Council of Juvenile Court Judges, National Social Welfare Assembly, and the Family Service Association of America.

INTERNATIONAL COOPERATION

The usual fall and spring sessions of the Executive Board of UNICEF were held with the Chief and the Deputy Chief of the Bureau on the United States delegation. Beginning in 1961 only one main meeting a year, in June, will be held to consider policy, with two meetings per year of the Program Committee to pass on projects. This change in procedure is expected to produce more efficient oper-

ation. The United States contribution increased to $12,000,000 but the percent which this may be of the total contributions by all countries was reduced to 48 percent. Though it appeared at first that all the United States money could not be taken up by UNICEF, before the close of the year contributions from other Governments were sufficient to make the full United States amount available.

At the spring session, the United States had the satisfaction of seeing the first fruits of its efforts to launch UNICEF into social services for children. Four projects were approved, all rather simple beginnings, but soundly planned by an expert consultant working through the Bureau of Social Affairs.

With 10 years experience in a long-range program, UNICEF is undertaking two program studies, one on training projects to which it has given assistance, with a view to recommendations on the future of this activity, and the other a study of children's needs carried out in a manner to help countries assess their own needs and make plans to meet them.

The Chief of the Bureau headed the official United States Delegation to the Eleventh Pan American Child Congress in Bogota, Colombia. A member of the Division of Social Services was also a delegate. Other staff members attended the Second World Conference on Medical Education in Chicago, the Ninth International Congress of Pediatrics in Montreal, and the First International Medical Conference on Mental Retardation in Portland, Maine.

A Bureau proposal for a United States-Russian Exchange in the area of maternal and child health was requested by the Public Health Service and was developed. An Exchange with Russia was subsequently arranged by the Public Health Service on maternal and child care and related research and the Children's Bureau will be represented on the United States team.

Preparation of material for reports to the United Nations required an unusually large amount of time this year. In addition to the United Nations Biennial Report on Family, Youth, and Child Welfare and Administration of Social Services, material was prepared for the United Nations Yearbook on Human Rights. The United Nations also requested a special report, for this year only, on *Experience in the Field of Social Development of Potential Assistance to Underdeveloped Countries.* Comments on documents and position papers related to the International Labor Organization, the Food and Agriculture Organization, and the World Health Organization were prepared. Material was also prepared for the use of the delegates to the Pan American Child Congress in Bogota, and for a United States Delegate at meetings of the South Pacific Commission.

Working relationships, including correspondence and exchange of materials, have continued with the Inter-American Children's Institute, the Pan American Health Organization, and a number of international voluntary organizations whose program, in whole or in part, is related to children.

Under the continuing cooperative program with the International Cooperation Administration, the Bureau's staff in its Division of International Cooperation recruits United States specialists for maternal and child health and child welfare positions abroad, provides technical materials, advice, and information as requested, and plans and arranges training programs for persons from other countries.

Seven maternal and child health and child welfare specialists recruited and backstopped by the Bureau worked as consultants in seven countries. A maternal and child health nurse was in Guatemala and a pediatric nurse in India. A medical social worker was in Peru, a child welfare worker in El Salvador, and a consultant on juvenile delinquency in Korea. There were two maternal and child health physicians, one in Iraq and one in Paraguay.

Of the 76 students for whom the training branch of the Division arranged long-term programs of study and observation during the year, 36 were doctors, 17 were nurses, 1 was a health educator, and 22 were social workers.

The International Cooperation Administration was the sponsoring agency for 50 of the participants, the United Nations for 9, and the World Health Organization for 12. Three Swedish child welfare workers were sponsored by the International Education Exchange Service of the Department of State. One physician came through the Asia Foundation, another was sponosored by the American Association of University Women.

The trainees came from 38 countries, with Indonesia having sent the largest number, 10; Thailand and India, 8 each; and Brazil, 6.

The 36 physicians were interested in increasing their competency in pediatrics, maternal and child health, or obstetrics and gynecology. The field of interest for most of the nurses was pediatric nursing, with a few in maternity or a combination of maternity and pediatric nursing. All of the social workers had a primary interest in training for work with children. Of the 22 social workers, 3 had major interest in group work with children, 1 was a medical social worker, and 1 a psychiatric social worker. The majority of the social workers came for general child welfare.

For a variety of reasons—the language problem, the accreditation status of the trainees' former education, the time span permitted, and the type of training requested by the sponsoring agency—most of the trainees who take academic work enter the schools of medicine, nursing, and social work as special students and not as candidates for de-

grees. During the year, however, two students obtained master's degrees in social work, one nursing student received a bachelor's degree, and two physicians received the degree of master of public health. The trend toward training physicians in the specialties of obstetrics and pediatrics to equip them to teach in medical schools continued. This effort to upgrade medical education is now being extended to nursing education in the same countries.

One hundred and fifty-eight short-term visitors from 60 countries came to the Bureau during the year. These were visitors studying in this country under the auspices of another Federal agency such as the International Educational Exchange Service of the Department of State, a private organization such as the National Council of Jewish Women, other agencies within the Department of Health, Education, and Welfare, or who are on their own. Their one common interest is some aspect of services for children which leads them to the Bureau for orientation to its programs, for consultation with Bureau specialists, and for conferences with staff of other agencies arranged by the Bureau.

Federal Credit Unions

The accomplishments of the Federal credit union program during the 1950's, spectacular though they were, served merely as a jumping-off point to even greater achievements in the years that lie ahead. The Federal credit union program rounded out a quarter of a century of service to the members in 1959, and by the end of that year, more than 9,400 Federal groups were serving 5½ million members. During this first 25-year span of operations, the Federal program has grown from a handful of change—$7.75 worth—pooled in 1934 by a few persons in Texarkana, Texas, to start Federal Credit Union Number 1 to a total of $2,353 million in assets at the end of 1959.

The decade ahead will present new challenges and new problems, but at the same time it will afford even greater opportunities for service to the members, not only in the financial field, but in the broad area of social welfare services as well. Continuing encouragement of thrift and expansion of financial counseling to members of Federal credit unions are only two of the services provided by these groups.

Early in fiscal year 1960, Congress provided the impetus for an expanded Federal credit union program by passing, without a single dissenting vote, a modern Federal Credit Union Act[1] which places greater responsibilities on the Federal credit union officials and enables them to provide better services to the members. The new act streamlines administration of the program, thereby increasing efficiency of

[1] Public Law 86–354, signed by the President on September 22, 1959.

operations with concomitant reduction in operating expenses. Savings thus achieved will enure to the benefit of the members in the form of expanded services.

The Federal credit union program is designed to serve two primary purposes: (1) To encourage thrift through systematic saving, and (2) to provide a source of credit to the members through loans for provident and productive purposes. The data in Table 11 reveal to some extent the progress that has been made in these areas. Growth is further revealed in the averages that follow:

Year ended Dec. 31—	Average membership	Average shares	Average loans	Year ended Dec. 31—	Average membership	Average shares	Average loans
1934	83	$7	(1)	1947	376	$133	$194
1935	156	19	(1)	1948	401	144	227
1936	180	28	(1)	1949	405	157	260
1937	213	37	(1)	1950	427	170	299
1938	230	43	(1)	1951	456	185	297
1939	268	51	(1)	1952	482	209	351
1940	302	58	(1)	1953	495	236	388
1941	337	69	(1)	1954	498	259	394
1942	331	81	(1)	1955	517	282	447
1943	337	90	$112	1956	539	303	479
1944	344	102	118	1957	561	324	516
1945	324	116	130	1958	577	348	535
1946	346	123	159	1959	597	368	593

[1] Basic data not available.

By the end of 1959, average savings (shares) of Federal credit union members had risen to $368, and loans to members averaged $593. Aggregate savings, meanwhile, passed the $2-billion mark in 1959, and loans to members stood at $1.7 billion at the year-end.

The Bureau of Federal Credit Unions, which is charged with the responsibility for administering the Federal Credit Union Act, is constantly alert to the changing conditions and new problems created by growth of the credit unions. Examination and supervision of the Federal groups represents the major phase of Bureau operations, and is carried on through 10 regional offices. Field examiners, who work out of these offices, represent the Bureau's primary contact with the Federal credit unions, and training programs conducted by the Bureau are consequently directed principally to the examiners. The Bureau's goal is to examine all active groups at least annually, though difficulty in recruiting and maintaining a full staff of examiners sometimes results in a completion rate somewhat below 100 percent. In fiscal year 1960, for example, 92 percent of the scheduled examinations were completed.

In addition to the continuing growth in the program throughout the fiscal year, it was necessary to set aside staff time during the last half of the period to implement the 1959 amendments to the Federal Credit Union Act. Development of new standard bylaws for Federal credit unions to reflect changes in the law and revision of most

of the Bureau's publications were accomplished by fiscal year's end.

Improvement of communications between the Bureau and Federal credit unions, and between the Bureau and the general public represents an area of emphasis that received attention during fiscal year 1960, and this activity will continue throughout the ensuing fiscal year. An important step in this area was preparation of a special 25th Anniversary issue of the Bureau's annual *Report of Operations—Federal Credit Unions.* The *Report*, which normally presents data for the current calendar year, was expanded to include a brief summary of legislative and other developments during the first 25-year span of operations; also, selected data for each year 1935–59 were presented in 20 supplementary tables which are intended to serve as a source for research and other purposes. A companion report on State-chartered credit unions was in preparation as the fiscal year ended.

The Federal Credit Union Act of 1959 represents a major step forward in Federal credit union operations. It does not, however, change the nature and scope of Federal credit unions, which are privately owned corporations designed to function in the short-term consumer credit area.

Table 1.—*Social Security Administration: Funds available and obligations incurred, fiscal years 1960 and 1959* [1]

(In thousands, data as of June 30, 1960)

Item	Funds available [2]		Obligations incurred	
	1960	1959	1960	1959
Total	$2,274,364	$2,181,896	$2,268,911	$2,180,025
Grants to States:				
Public assistance	2,037,500	1,957,960	2,033,761	1,957,098
Old-age assistance			1,157,523	1,132,194
Aid to the blind			48,824	47,619
Aid to dependent children			660,232	626,546
Aid to the permanently and totally disabled			167,182	150,739
Maternal and child health and welfare services	46,500	45,000	46,218	44,728
Maternal and child health services	17,500	16,500	17,443	16,494
Services for crippled children	16,000	16,500	15,873	16,401
Child welfare services	13,000	12,000	12,902	11,833
Administrative expenses: [3]	190,364	178,936	188,932	178,199
Office of the Commissioner [4]	613	610	602	596
Bureau of Old-Age and Survivors Insurance [5]	181,600	170,614	180,476	170,087
Bureau of Public Assistance	2,345	2,164	2,280	2,142
Children's Bureau [6]	2,300	2,172	2,278	2,165
White House Conference on Children and Youth	200	150	198	150
Bureau of Federal Credit Unions	3,306	3,226	3,098	3,059

[1] Funds available and obligations reported by administrative agencies.

[2] Funds made available by regular and supplemental appropriations, authorizations, transfers, allotments, recoveries, and fee collections for services rendered.

[3] Funds made available and obligations incurred for salaries, printing and binding, communications, traveling expenses, and all other objects of expenditure.

[4] Appropriations by Congress from general revenues accounted for approximately 55 percent of the administrative expenses of the Office of the Commissioner in 1959 and 1956; balance from old-age and survivors insurance trust fund.

[5] Administrative costs of the old-age, survivors, and disability insurance program which involved benefit payments of $9,388,000,000, in 1959 and $10,798,000,000, in 1960. Does not include construction costs of new buildings as follows: *Funds available:* 1959, $8,979,461; 1960, $7,633,774. *Obligations incurred:* 1959, $1,345,587; 1960, $2,454,189.

[6] Includes expenses for investigating and reporting on matters pertaining to the welfare of children authorized by the act of 1912, as well as expenses for administration of grants to States.

Table 2.—*Financing social insurance under the Social Security Act: Contributions collected and trust fund operations, fiscal years 1958–60*

[In millions; independently rounded]

Item	1960	1959	1958
Contributions collected under—			
Federal Insurance Contributions Act [1] [2]	$10,830	$8,460	$8,193
Federal Unemployment Tax Act [3]	341	324	336
State unemployment insurance laws [4] [5]	2,165	1,675	1,500
Old-age and survivors insurance trust fund:			
Receipts, total	10,342	8,109	7,824
Net appropriations and deposits	9,843	7,565	7,267
Net interest and profits on investments [6]	500	540	557
Expenditures, total	11,055	9,377	8,041
Monthly benefits and lump-sum payments [7]	10,270	9,049	7,875
Transfers under financial interchange with railroad retirement account	583	121	
Administration	202	206	166
Assets, end of year	20,829	21,541	22,813
Disability insurance trust fund:			
Receipts, total	1,061	928	942
Net appropriations and deposits	987	895	926
Transfers under financial interchange with railroad retirement account	26		
Net interest and profit	48	33	16
Expenditures, total	560	360	180
Monthly benefits	528	339	168
Administration	32	21	12
Assets, end of year	2,167	1,667	1,099
State accounts in unemployment trust fund:			
Receipts, total	2,351	2,126	1,794
Deposits [5]	2,169	1,946	1,575
Interest	182	179	220
Withdrawals for benefit payments	2,366	2,797	2,926
Assets, end of year	6,673	6,688	7,360

[1] Contributions on earnings up to and including $4,200 a year in 1958, and $4,800 a year beginning Jan 1, 1959. Contribution rate paid by employers and employees: 2¼ percent each beginning Jan. 1, 1957; 2½ percent each beginning Jan. 1, 1959; 3 percent each beginning Jan. 1, 1960. Contribution rate paid by self-employed: 3⅜ percent beginning Jan. 1, 1957; 3¾ percent beginning Jan. 1, 1959; 4½ percent beginning Jan. 1, 1960. Includes deposits by States under voluntary agreements for coverage of State and local employees. Includes deductions to adjust for reimbursements to general funds of the Treasury of the estimated amount of employee taxes subject to refund on wages in excess of wage base.

[2] Includes old-age and survivors insurance and, beginning Jan. 1, 1957, disability insurance contributions.

[3] Prior to 1957 tax could be paid in quarterly installments by employers of 8 or more; beginning Jan. 31, 1957, tax payable annually on preceding year's wages by employers of 4 or more. Rate is 3 percent on first $3,000 a year of wages paid to each employee by subject employer. Because of credit offset of up to 90 percent of amount assessed that is permitted for contributions paid under State unemployment insurance laws (or for full contribution if reduced by State experience rating provisions), effective rate is 0.3 percent of such wages.

[4] Contributions plus penalties and interest collected from employers and contributions from employees, reported by State agencies.

[5] Contributions and deposits by States usually differ slightly, because of time lag in making deposits. Deposits in the State accounts also include loans from the Federal unemployment account of the unemployment trust fund and the distribution of Federal tax collections among the States under the Employment Security Administrative Financing Act of 1954.

[6] For 1958 includes interest transferred from the railroad retirement account under the financial interchange provisions of the Railroad Retirement Act, as amended in 1951 and 1956.

[7] Represents checks issued.

Source: Compiled from *Final Statement of Receipts and Expenditures of the United States Government*, other Treasury reports, and State agency reports.

Table 3.—*Old-age, survivors, and disability insurance: Number of families and beneficiaries receiving benefits and average monthly benefit in current-payment status, by family group, end of December 1959 and November 1958* [1]

[In thousands, except for average benefit]

Family classification of beneficiaries	December 31, 1959			November 30, 1958 [1]		
	Number of families	Number of beneficiaries	Average monthly amount per family	Number of families	Number of beneficiaries	Average monthly amount per family
Total	10,112.8	13,703.9		9,189.5	12,430.1	
Retired-worker families	7,525.6	9,931.6		6,920.7	9,147.3	
Worker only	5,320.7	5,320.7	$68.70	4,871.8	4,871.8	$62.60
Male	2,755.3	2,755.3	78.00	2,587.3	2,587.3	70.70
Female	2,565.4	2,565.4	58.70	2,284.5	2,284.5	53.50
Worker and aged wife	2,029.4	4,058.8	121.60	1,901.5	3,803.0	111.20
Worker and young wife [2]	.8	1.6	118.60	.7	1.4	105.20
Worker and aged dependent husband	14.7	29.3	103.60	14.3	28.5	94.40
Worker and 1 or more children	44.8	102.5	118.90	30.0	71.1	109.80
Worker, wife aged 65 or over, and 1 or more children	13.0	39.9	157.30	10.3	32.5	140.30
Worker, young wife, and 1 or more children	102.1	378.3	151.70	92.0	338.7	132.50
Worker, husband, and 1 or more children	.2	.5	123.70	.1	.2	126.70
Survivor families	2,252.8	3,312.0		2,031.1	3,014.9	
Aged widow [3]	1,380.1	1,380.1	56.70	1,224.0	1,224.1	51.90
Aged widow and 1 or more children	11.4	23.6	111.20	6.9	14.2	105.50
Aged widow and 1 or 2 aged dependent parents	.1	.3	130.50	[4]	[4]	[4]
Aged dependent widower	1.9	1.9	53.40	1.6	1.6	48.90
Widower and 1 or more children	[5]	[5]	92.60	[5]	[5]	86.90
Widowed mother only [2]	1.1	1.1	55.40	1.2	1.2	51.00
Widowed mother and 1 child	159.7	319.4	129.70	149.0	298.0	117.00
Widowed mother and 2 children [3]	106.4	319.2	170.70	104.4	313.2	151.70
Widowed mother and 3 or more children [3]	108.2	520.1	178.60	99.1	473.6	150.70
Widowed mother, 1 or more children, and 1 or 2 aged dependent parents	.4	1.6	219.40	[4]	[4]	[4]
Divorced wife and 1 or more children	.3	.9	166.80	.3	.9	141.40
1 child only [3]	282.6	282.6	56.90	261.1	261.1	51.80
2 children	110.4	220.8	101.30	100.0	200.1	88.90
3 children	36.1	108.4	129.50	34.0	102.1	115.40
4 or more children	21.6	97.1	148.00	21.3	94.9	125.50
1 or more children and 1 or 2 aged dependent parents	.8	1.8	136.80	[4]	[4]	[4]
1 aged dependent parent	29.8	29.8	59.60	26.5	26.5	53.30
2 aged dependent parents	1.7	3.3	104.80	1.7	3.4	97.60
Disabled-worker families	334.4	466.4		237.7	268.1	
Worker only	275.3	275.3	87.90	223.2	223.2	81.70
Male	206.3	206.3	91.90	175.6	175.6	84.70
Female	69.0	69.0	76.10	47.7	47.7	70.60
Worker and aged wife	17.4	34.8	135.90	4.8	9.7	128.80
Worker and young wife [2]	.2	.5	133.20	0	0	0
Worker and aged dependent husband	.2	.3	116.60	[5]	[5]	101.60
Worker and 1 or more children	11.2	28.2	153.90	2.3	5.6	146.70
Worker, wife aged 65 or over, and 1 or more children	[5]	.1	204.00	[5]	[5]	197.00
Worker, young wife, and 1 or more children	30.1	121.1	185.60	7.4	29.5	167.80

[1] To effect the benefit increases provided by the 1958 amendments, certain operations affecting statistical data on monthly benefits in current-payment status were suspended for December 1958; figures on benefits in current-payment status as of the end of December 1958 are therefore not available, but the corresponding data as of the end of November 1958 are shown in their place.

[2] Benefits to children were being withheld.

[3] For November 30, 1958, includes a few cases where there is also a parent's benefit in current-payment status.

[4] Not available. Data for families with parent's and other survivors' benefits in current-payment statu on November 30, 1958 are included in other family groups; see footnote 3.

[5] Less than 50.

Table 4.—*Old-age, survivors, and disability insurance: Number and amount of monthly benefits in current-payment status at end of June 1960 and amount of benefit payments in fiscal year 1960, by State* [1]

[In thousands]

Beneficiary's State of residence	Monthly benefits in current-payment status, June 30, 1960						Benefit payments in fiscal year 1960			
	Total		OASI [2]		DI [2]		Total	OASI [2]		DI [2]
	Number	Monthly amount	Number	Monthly amount	Number	Monthly amount		Monthly benefits	Lump-sum death payments	
Total	14,261.8	$889,863	13,740.3	$851,791	521.6	$38,071	$10,797,995	$10,103,919	$165,772	$528,304
Alabama	223.9	11,267	210.3	10,425	13.6	842	137,635	123,936	2,309	11,390
Alaska	5.8	336	5.6	322	.2	14	4,219	3,945	84	190
Arizona	79.0	4,919	74.5	4,573	4.5	346	60,000	54,318	850	4,832
Arkansas	153.0	7,544	146.3	7,133	6.7	411	91,692	84,702	1,252	5,738
California	1,105.3	72,019	1,070.1	69,130	35.2	2,889	872,832	819,863	13,155	39,814
Colorado	118.1	7,239	114.8	7,000	3.3	239	87,450	83,053	1,146	3,251
Connecticut	217.4	15,410	211.1	14,891	6.3	518	186,983	176,518	3,166	7,299
Delaware	31.6	2,039	30.4	1,950	1.1	88	24,763	23,134	425	1,204
District of Columbia	47.5	2,892	45.9	2,765	1.7	127	35,251	32,791	718	1,742
Florida	454.8	29,197	436.9	27,863	17.9	1,334	353,224	330,430	4,273	18,521
Georgia	234.4	11,946	220.2	11,057	14.3	890	146,326	131,426	2,614	12,286
Hawaii	29.1	1,663	28.0	1,586	1.1	77	20,299	18,922	271	1,106
Idaho	51.8	3,120	50.4	3,023	1.4	97	37,702	35,872	518	1,312
Illinois	816.8	54,950	791.7	52,947	25.1	2,003	666,765	627,849	10,851	28,065
Indiana	405.4	25,863	392.8	24,913	12.5	950	313,419	295,499	4,603	13,317
Iowa	256.3	15,715	250.8	15,312	5.5	403	189,651	181,545	2,525	5,581
Kansas	185.8	11,032	180.9	10,683	4.8	350	133,442	126,692	1,955	4,795
Kentucky	261.6	13,789	246.6	12,919	15.0	870	167,921	153,432	2,431	12,058
Louisiana	174.0	9,276	163.6	8,625	10.3	652	113,542	102,529	2,085	8,928
Maine	99.5	5,894	96.1	5,668	3.4	227	71,438	67,213	1,026	3,199
Maryland	187.7	11,675	180.8	11,152	6.9	523	142,321	132,341	2,716	7,264
Massachusetts	492.7	33,079	477.2	31,891	15.5	1,188	401,184	378,024	6,360	16,800
Michigan	607.1	41,637	586.8	39,983	20.3	1,653	504,299	474,298	7,343	22,658
Minnesota	282.7	17,488	276.7	17,049	6.0	438	211,065	202,189	2,882	5,994
Mississippi	149.7	6,756	142.6	6,353	7.0	403	82,325	75,493	1,317	5,515
Missouri	387.5	23,567	374.6	22,639	12.9	928	285,466	268,442	4,089	12,935
Montana	56.1	3,559	54.5	3,442	1.6	117	43,010	40,835	616	1,559
Nebraska	126.8	7,557	124.2	7,374	2.5	184	91,277	87,426	1,310	2,541

Nevada	15.1	987	14.5	942	.6	46	12,058	11,180	262	616
New Hampshire	61.2	3,870	59.5	3,742	1.7	128	46,921	44,358	772	1,791
New Jersey	507.9	35,331	492.0	34,018	15.9	1,314	428,835	403,324	7,116	18,395
New Mexico	43.7	2,298	41.9	2,182	1.8	115	28,097	25,965	522	1,610
New York	1,463.8	99,425	1,416.6	95,651	47.3	3,774	1,206,515	1,133,945	19,582	52,988
North Carolina	302.6	15,285	285.7	14,245	16.9	1,040	186,857	169,287	3,232	14,338
North Dakota	47.5	2,821	46.7	2,770	.8	51	33,970	32,861	454	655
Ohio	776.1	51,415	749.0	49,313	27.2	2,102	623,453	584,889	9,029	29,535
Oklahoma	173.8	9,842	167.3	9,377	6.5	465	119,458	111,306	1,742	6,410
Oregon	166.6	10,744	162.0	10,381	4.6	363	129,873	123,093	1,734	5,046
Pennsylvania	1,019.7	67,593	978.9	64,431	40.7	3,162	821,118	764,195	13,029	43,894
Puerto Rico	94.5	3,123	92.6	3,053	1.9	69	36,915	35,610	453	852
Rhode Island	84.6	5,610	81.6	5,378	3.0	232	67,984	63,740	995	3,249
South Carolina	143.3	7,087	134.2	6,532	9.0	555	86,905	77,687	1,607	7,611
South Dakota	57.4	3,360	56.2	3,286	1.1	74	40,491	38,980	536	975
Tennessee	255.2	12,911	242.5	12,122	12.7	789	157,242	143,994	2,397	10,851
Texas	562.3	30,991	539.7	29,455	22.5	1,536	377,598	349,862	6,271	21,465
Utah	53.4	3,337	52.2	3,243	1.3	94	40,390	38,515	568	1,307
Vermont	38.1	2,274	36.7	2,181	1.4	94	27,561	25,859	380	1,322
Virgin Islands	1.1	45	1.1	44	(3)	1	527	510	7	10
Virginia	259.8	14,073	245.5	13,156	14.3	917	171,695	156,272	2,941	12,482
Washington	239.8	15,674	232.9	15,119	7.0	555	189,818	179,282	2,717	7,819
West Virginia	180.4	10,294	165.6	9,382	14.8	912	125,705	111,494	1,682	12,529
Wisconsin	357.5	22,847	348.0	22,113	9.5	733	276,296	262,219	3,924	10,153
Wyoming	21.6	1,338	21.0	1,292	.6	46	16,208	15,337	252	619
Foreign	93.6	5,862	91.8	5,718	1.8	144	70,004	67,438	678	1,888

[1] Distribution by State estimated.

[2] Benefits under the old-age and survivors insurance (OASI) part of the old-age, survivors, and disability insurance program are payable from the OASI trust fund to old-age insurance (retired-worker) beneficiaries and their dependents and to survivors of deceased workers. Benefits under the disability insurance (DI) part of the program are payable from the DI trust fund to disability insurance (disabled-worker) beneficiaries and their dependents.

[3] Less than 50.

Table 5.—*Old-age, survivors, and disability insurance: Selected data on employers, taxable earnings, and contributions, by State, for specified periods*

[In thousands, except for average taxable earnings. Includes data for State and local governments covered under elective provisions]

State	Employers reporting taxable wages July–September 1959 [1]	Calendar year 1957 [2]			
		Workers with taxable earnings [3]	Amount of taxable earnings [4]		Amount of contributions [5]
			Total	Average per worker	
Total	4,140	71,000	$181,421,000	$2,560	$7,968,700
Alabama	59	1,070	2,160,000	2,020	95,100
Alaska	4	80	176,000	2,200	7,800
Arizona	26	430	942,000	2,190	41,400
Arkansas	36	530	900,000	1,700	38,900
California	368	6,030	15,863,000	2,630	696,800
Colorado	42	690	1,488,000	2,160	64,600
Connecticut	64	1,180	3,231,000	2,740	142,800
Delaware	13	250	621,000	2,480	27,500
District of Columbia	31	480	1,012,000	2,110	45,100
Florida	126	1,810	3,423,000	1,890	149,700
Georgia	85	1,420	2,706,000	1,910	119,100
Hawaii	11	200	477,000	2,380	21,000
Idaho	15	260	546,000	2,100	23,300
Illinois	227	4,560	12,169,000	2,670	534,400
Indiana	92	1,950	5,079,000	2,600	223,300
Iowa	67	1,110	2,505,000	2,260	105,400
Kansas	51	870	1,881,000	2,160	81,100
Kentucky	60	980	1,994,000	2,030	86,300
Louisiana	64	1,060	2,213,000	2,090	97,300
Maine	25	400	776,000	1,940	34,000
Maryland	70	1,200	2,821,000	2,350	124,500
Massachusetts	122	2,270	5,647,000	2,490	249,900
Michigan	154	3,310	9,377,000	2,830	414,500
Minnesota	73	1,310	3,111,000	2,370	134,000
Mississippi	37	610	999,000	1,640	43,500
Missouri	108	1,870	4,314,000	2,310	188,600
Montana	17	280	632,000	2,260	27,100
Nebraska	35	620	1,232,000	1,990	52,300
Nevada	7	130	280,000	2,150	12,300
New Hampshire	17	280	590,000	2,110	25,900
New Jersey	152	2,690	7,085,000	2,630	312,600
New Mexico	19	300	562,000	1,870	24,500
New York	496	8,210	21,800,000	2,660	962,200
North Carolina	94	1,650	3,218,000	1,950	140,900
North Dakota	14	240	468,000	1,950	19,000
Ohio	203	4,030	10,991,000	2,730	484,700
Oklahoma	52	870	1,803,000	2,070	78,400
Oregon	41	740	1,760,000	2,380	77,000
Pennsylvania	249	4,810	12,556,000	2,610	554,000
Puerto Rico	18	460	452,000	980	19,800
Rhode Island	21	380	886,000	2,330	39,100
South Carolina	46	800	1,520,000	1,900	66,900
South Dakota	16	240	477,000	1,990	19,600
Tennessee	75	1,270	2,513,000	1,980	110,100
Texas	223	3,540	7,558,000	2,140	330,900
Utah	17	340	736,000	2,160	32,300
Vermont	11	150	314,000	2,090	13,700
Virginia	86	1,380	2,811,000	2,040	123,600
Virgin Islands	1	10	13,000	1,300	500
Washington	65	1,160	2,854,000	2,460	124,900
West Virginia	37	690	1,645,000	2,380	72,700
Wisconsin	89	1,580	3,955,000	2,500	171,900
Wyoming	9	150	298,000	1,990	12,900
Foreign [6]	----------	90	214,000	2,380	9,500
Ocean-borne vessels	----------	140	395,000	2,820	17,800
Uniformed services (on basic pay)	----------	3,510	5,372,000	1,530	241,700

[1] State data represent number of employers reporting taxable wages by the State of their reporting headquarters. An employer is a legal entity such as a corporation, partnership, or single ownership for which a single tax return is filed. Excludes agricultural employers.

[2] Includes self-employment.

[3] State data represent workers employed in the State at some time during the year. Workers employed in more than 1 State are counted once in each of the States in which employed.

[4] Represents taxable earnings in the State in which workers were employed. Averages are rounded to nearest $10.

[5] Contributions based on a worker's annual taxable earnings, not more than $4,200 in 1957. Contribution rate was 2¼ percent each for employees and employers, and 3⅜ percent for self-employed persons.

[6] Refers to employment of United States citizens outside listed States or other areas by American employers and their foreign subsidiaries.

Table 6.—*Old-age, survivors, and disability insurance: Selected data on benefits, employers, workers, and taxable earnings for specified periods, 1958–60*

[In thousands, except for average monthly benefit and average taxable earnings; corrected to Sept. 29, 1960]

Item	1960	1959	1958
	Fiscal year		
Benefits in current-payment status (end of period):			
Number (OASI and DI)[1]	14,261.8	13,181.4	11,905.3
Number (OASI)	13,740.3	12,820.2	11,704.9
Number (DI)	521.6	361.2	200.4
Old-age (retired-worker)	7,813.0	7,295.6	6,638.5
Disability (disabled-worker)	370.8	275.2	200.4
Wife's or husband's (OASI and DI)	2,279.9	2,141.8	1,947.4
Wife's or husband's (OASI)	2,223.5	2,108.5	1,917.4
Wife's or husband's (DI)	56.4	33.2	
Child's (OASI and DI)[2]	1,903.5	1,747.7	1,571.9
Child's (OASI)[2]	1,809.1	1,694.8	1,571.9
Child's (DI)[2]	94.4	52.8	
Widow's or widower's	1,471.3	1,322.0	1,172.8
Mother's	387.9	366.5	344.9
Parent's	35.5	32.7	29.4
Total monthly amount (OASI and DI)	$889,863	$805,545	$659,684
Total monthly amount (OASI)	$851,791	$778,404	$644,773
Total monthly amount (DI)	$38,071	$27,141	$14,911
Old-age (retired-worker)	$575,295	$526,701	$436,244
Disability (disabled-worker)	$33,123	$24,324	$14,911
Wife's or husband's (OASI and DI)	$87,701	$81,295	$67,821
Wife's or husband's (OASI)	$85,676	$80,096	$67,821
Wife's or husband's (DI)	$2,025	$1,199	
Child's (OASI and DI)[2]	$84,789	$76,209	$61,471
Child's (OASI)[2]	$81,865	$74,591	$61,471
Child's (DI)[2]	$2,924	$1,618	
Widow's or widower's	$84,229	$74,359	$60,457
Mother's	$22,609	$20,760	$17,241
Parent's	$2,117	$1,896	$1,538
Average monthly amount:			
Old-age (retired-worker)	$73.63	$72.19	$65.71
Disability (disabled-worker)	$89.33	$88.40	$74.42
Wife's or husband's (OASI and DI)	$38.47	$37.96	$34.83
Wife's or husband's (OASI)	$38.53	$37.99	$34.83
Wife's or husband's (DI)	$35.92	$36.09	
Child's (OASI and DI)[2]	$44.54	$43.61	$39.11
Child's (OASI)[2]	$45.25	$44.01	$39.11
Child's (DI)[2]	$30.98	$30.62	
Widow's or widower's	$57.25	$56.25	$51.55
Mother's	$58.29	$56.65	$49.99
Parent's	$59.67	$58.02	$52.34
Benefit payments during period:			
Monthly benefits (OASI and DI)	$10,632,223	$9,238,753	$7,900,638
Monthly benefits (OASI)	$10,103,919	$8,899,522	$7,732,218
Monthly benefits (DI)	$528,304	$339,231	$168,420
Old-age (retired-worker)	$6,803,466	$6,041,417	$5,245,777
Disability (disabled-worker)	$450,114	$311,105	$168,420
Supplementary (OASI and DI)	$1,183,515	$1,007,142	$860,488
Supplementary (OASI)	$1,105,325	$979,016	$860,488
Supplementary (DI)	$78,190	$28,126	
Survivor	$2,195,128	$1,879,089	$1,625,953
Lump-sum death payments	$165,772	$149,625	$142,714
Insured workers (midpoint of period—Jan. 1):[3]			
Fully insured			
Currently but not fully insured			
Estimated number of employers reporting taxable wages, 1st quarter of fiscal year	[4] 4,140	[4] 4,090	[4] 4,060
	Calendar year		
Estimated number of workers with taxable earnings	75,000	73,000	70,000
Estimated amount of taxable earnings	$213,000,000	$202,000,000	$181,000,000
Average taxable earnings[5]	$2,840	$2,770	$2,590

[1] Benefits under the old-age and survivors insurance (OASI) parts of the old-age, survivors, and disability insurance program are payable from the OASI trust fund to old-age insurance (retired-worker) beneficiaries and their dependents and to survivors of deceased workers. Benefits under the disability insurance (DI) part of the program are payable from the DI trust fund to disability insurance (disabled-worker) beneficiaries and their dependents.

[2] Includes benefits payable to disabled persons aged 18 or over—dependent children of disabled, deceased, or retired workers—whose disability began before age 18.

[3] Estimates of insured workers have not been adjusted to reflect changes in insurance status arising from: (1) provisions that coordinate the old-age, survivors, and disability insurance and railroad retirement programs and (2) wage credits for military service. Estimates are only partially adjusted to eliminate duplicate count of persons with taxable earnings reported on more than 1 account number.

[4] Excludes agricultural employers.

[5] Rounded to nearest $10.

Table 7.—*Special types of public assistance under plans approved by the Social Security Administration: Number of recipients and average payment, June 1960, and total payments to recipients, by program and State, fiscal year 1960*

[Includes vendor payments for medical care and cases receiving only such payments; data corrected to October 15, 1960]

State	Old-age assistance			Aid to dependent children						Aid to the blind			Aid to the permanently and totally disabled		
	Number of recipients, June	Payments to recipients		Number of recipients, June			Payments to recipients			Number of recipients, June	Payments to recipients		Number of recipients, June	Payments to recipients	
		Average payment, June	Total, fiscal year (in thousands)	Families	Total [1]	Children	Average payment per family, June	Average payment per recipient, June	Total, fiscal year (in thousands)		Average payment, June	Total, fiscal year (in thousands)		Average payment, June	Total, fiscal year (in thousands)
Fiscal year:															
1958	2,460,299	$61.38	$1,798,374	728,255	2,733,146	2,092,216	$102.39	$27.28	$815,196	108,336	$66.72	$85,397	312,585	$60.69	$212,209
1959	2,419,885	64.76	1,858,004	777,632	2,929,986	2,246,965	106.94	28.38	956,380	109,445	69.04	89,066	339,214	63.37	244,664
1960	2,358,600	67.90	1,894,639	794,435	3,025,483	2,330,202	110.75	29.08	1,021,097	107,979	72.81	92,309	362,832	65.74	271,208
Alabama	98,937	53.03	58,163	21,374	85,686	67,058	38.07	9.50	8,858	1,609	39.34	732	12,248	36.13	5,197
Alaska	1,437	64.64	1,106	1,226	4,228	3,167	111.91	32.45	1,552	106	71.85	86	----------	----------	----------
Arizona	13,962	61.66	10,351	7,348	29,284	22,433	121.02	30.37	10,103	843	72.25	724	----------	----------	----------
Arkansas	55,695	52.94	33,399	7,099	27,035	21,214	61.99	16.28	5,178	2,027	56.59	1,327	7,201	39.45	3,181
California	255,071	90.37	270,869	75,539	268,457	210,367	162.83	45.82	141,168	13,750	107.18	17,647	9,129	93.52	8,640
Colorado	50,865	98.65	60,767	7,343	28,435	22,312	128.21	33.11	10,591	284	81.45	270	5,610	68.89	4,480
Connecticut	14,433	109.11	19,466	7,445	25,115	18,846	155.56	46.11	14,145	294	96.82	387	2,170	128.62	3,445
Delaware	1,293	50.00	802	1,632	6,220	4,796	87.40	22.93	1,650	248	71.58	214	363	66.29	291
District of Columbia	3,098	65.10	2,434	4,578	20,434	16,174	150.24	33.66	7,424	225	70.16	192	2,779	75.60	2,415
Florida	69,519	56.87	46,163	24,987	91,249	71,520	61.04	16.72	19,270	2,526	61.46	1,830	9,212	63.89	6,505
Georgia	96,459	47.29	55,055	15,183	56,387	43,666	88.00	23.70	16,050	3,567	52.51	2,226	21,510	51.84	12,597
Guam	69	24.97	16	98	552	461	66.12	11.74	70	4	[2]	1	43	[2]	11
Hawaii	1,428	64.16	1,091	2,405	9,357	7,448	130.65	33.58	3,876	80	67.18	68	1,017	77.67	959
Idaho	7,307	68.77	5,838	2,133	7,891	5,817	149.99	40.54	3,560	167	72.98	144	1,035	73.11	854
Illinois	73,288	73.88	64,922	35,564	148,900	115,355	163.66	39.09	67,746	3,001	82.11	2,948	18,406	82.81	17,497
Indiana	27,502	62.96	20,846	11,501	42,423	32,096	102.43	27.77	13,958	1,824	73.96	1,619	----------	----------	----------
Iowa	34,255	81.40	31,469	9,169	33,892	25,577	138.10	37.36	13,845	1,433	97.40	1,540	372	82.20	[3] 104
Kansas	28,404	80.01	27,345	6,161	23,277	18,267	139.22	36.85	9,877	602	82.50	594	4,224	84.39	4,206
Kentucky	56,116	46.04	30,419	20,226	72,642	54,643	77.40	21.55	18,225	2,424	44.60	1,499	7,647	45.71	4,201
Louisiana	125,095	71.56	102,337	25,114	102,962	79,951	97.78	23.85	27,427	2,750	81.83	2,503	16,498	56.34	10,434
Maine	11,715	67.77	9,233	5,788	20,443	15,109	97.06	27.48	6,625	440	64.53	356	2,144	68.46	1,624
Maryland	9,414	61.79	6,889	8,610	35,913	28,207	122.88	29.46	12,727	456	64.74	349	6,180	65.14	4,652

Massachusetts	78,646	99.15	96,181	14,499	48,944	36,796	147.05	43.56	25,868	2,150	125.73	3,020	10,348	121.89	14,454
Michigan	61,183	72.50	53,505	26,747	95,465	70,207	130.23	36.49	41,173	1,770	80.04	1,665	4,745	85.68	4,552
Minnesota	46,743	88.73	49,386	10,123	34,789	27,081	155.70	45.31	17,603	1,057	95.33	1,286	2,423	61.11	1,696
Mississippi	79,863	29.75	28,652	19,902	77,033	60,414	41.08	10.61	9,504	6,414	38.65	2,906	11,683	30.33	3,745
Missouri	115,714	60.01	83,117	26,905	102,383	77,598	87.28	22.94	28,320	5,079	65.00	4,004	15,341	62.04	11,324
Montana	6,881	64.00	5,387	1,886	7,008	5,506	123.67	33.28	2,770	349	76.20	314	1,280	72.73	1,179
Nebraska	14,910	71.27	12,778	2,791	10,668	8,183	113.67	29.74	3,725	841	88.62	913	1,820	71.68	1,450
Nevada	2,600	71.26	2,207	1,146	3,871	3,019	89.25	26.42	1,155	184	99.62	211			
New Hampshire	4,846	77.48	4,549	1,061	4,066	3,075	155.42	40.56	1,831	247	81.25	234	427	93.45	450
New Jersey	18,911	90.32	19,677	14,672	51,192	38,820	161.40	46.26	23,774	935	85.56	949	6,825	93.83	7,052
New Mexico	10,823	68.18	8,539	7,774	30,388	23,447	123.68	31.64	10,428	380	62.83	290	2,446	66.36	1,877
New York	82,209	107.92	105,345	66,748	264,718	200,402	168.21	42.41	132,835	3,899	109.98	5,155	36,724	103.97	45,361
North Carolina	48,349	42.86	24,342	26,840	106,448	82,204	77.49	19.54	24,247	5,172	55.17	3,250	18,772	48.93	10,425
North Dakota	7,239	85.33	7,580	1,846	6,920	5,386	143.96	38.40	3,131	98	72.29	90	1,169	91.06	1,282
Ohio	89,299	74.72	76,063	26,274	104,623	79,951	118.62	29.79	34,509	3,515	73.59	2,878	12,160	73.47	9,497
Oklahoma	89,491	79.30	84,081	18,111	64,243	48,802	111.90	31.55	23,529	1,857	97.46	2,113	9,337	88.80	9,545
Oregon	16,916	74.97	16,045	5,899	21,151	16,001	135.32	37.74	9,613	265	82.29	269	4,882	81.87	4,998
Pennsylvania	50,010	68.11	41,191	48,044	189,637	144,405	124.11	31.44	71,649	17,721	74.09	14,794	17,496	60.82	12,181
Puerto Rico	39,215	8.24	3,902	56,396	217,178	172,673	14.84	3.85	9,765	1,904	8.27	186	22,399	8.75	2,306
Rhode Island	6,736	78.37	6,332	4,406	16,050	12,099	131.36	36.06	6,938	123	75.39	108	2,850	83.88	2,772
South Carolina	32,201	43.50	15,606	9,527	37,927	29,949	61.16	15.36	6,393	1,707	46.13	882	7,785	47.87	3,782
South Dakota	8,846	61.63	6,533	3,162	10,947	8,216	107.01	30.91	3,974	166	60.99	119	1,155	63.97	842
Tennessee	54,635	43.44	28,427	22,065	81,592	61,687	70.26	19.00	18,156	2,767	47.36	1,590	9,142	47.03	4,696
Texas	221,706	52.91	140,666	20,158	83,826	64,000	71.66	17.23	18,466	6,359	58.37	4,415	6,243	54.30	3,734
Utah	7,866	72.50	6,528	3,482	12,583	9,399	139.80	38.68	5,361	200	71.42	171	2,351	77.78	2,040
Vermont	5,593	63.05	4,045	1,271	4,532	3,396	109.05	30.58	1,586	137	62.80	98	907	64.35	629
Virgin Islands	561	23.66	162	268	922	768	48.21	14.01	133	19	(2)	6	107	26.64	34
Virginia	14,529	44.31	7,654	9,478	38,015	29,933	84.18	20.99	9,273	1,232	54.19	779	6,305	49.88	3,600
Washington	48,853	87.19	51,640	11,722	40,188	31,347	159.51	46.53	21,473	723	95.57	834	6,811	97.89	7,716
West Virginia	19,373	39.06	8,658	20,572	80,285	62,667	95.30	24.42	22,363	1,015	40.71	493	7,370	41.57	3,454
Wisconsin	35,239	82.72	34,040	9,420	34,548	26,336	162.62	44.34	16,452	969	86.66	974	3,219	104.09	2,785
Wyoming	3,252	72.16	2,843	717	2,561	1,951	130.69	36.59	1,175	65	72.25	58	522	70.61	456

[1] Includes as recipients the children and 1 parent or other adult relative in families in which the requirements of at least 1 such adult were considered in determining the amount of assistance.

[2] Average payment not computed on base of fewer than 50 recipients.

[3] Represents data for January–June 1960.

Table 8.—*Special types of public assistance under plans approved by the Social Security Administration: Federal grants to States and total expenditures and percent from Federal funds, by program and State, fiscal year 1960*

[Includes vendor payments for medical care; amounts in thousands; data corrected to Oct. 15, 1960]

State	Federal grants to States [1]					Expenditures for assistance and administration							
						Old-age assistance		Aid to dependent children		Aid to the blind		Aid to the permanently and totally disabled	
	Total	Old-age assistance	Aid to dependent children	Aid to the blind	Aid to the permanently and totally disabled	Amount	Percent from Federal funds	Amount	Percent from Federal funds	Amount	Percent from Federal funds	Amount	Percent from Federal funds
Fiscal year:													
1958	$1,745,173	$1,052,708	$525,318	$44,192	$122,955	$1,911,217	55.4	$902,651	58.7	$92,549	47.8	$238,037	52.3
1959	1,957,098	1,132,194	626,546	47,619	150,739	1,973,089	58.3	1,056,630	59.1	96,806	49.6	273,288	55.3
1960	2,033,761	1,157,523	660,232	48,824	167,182	2,014,736	58.1	1,130,515	58.9	100,202	48.9	302,925	55.8
Alabama	57,332	44,850	7,634	587	4,260	60,741	73.3	9,740	79.8	772	75.8	5,592	76.1
Alaska	1,821	735	1,032	54	----------	1,209	62.9	1,644	63.1	96	57.2	----------	----------
Arizona	16,075	7,676	7,910	489	----------	10,611	72.2	10,465	75.0	754	65.8	----------	----------
Arkansas	33,202	25,334	4,282	978	2,608	34,602	73.1	5,541	80.2	1,376	72.3	3,506	74.3
California	221,327	136,130	72,970	7,690	4,537	291,513	46.9	162,680	45.1	19,588	38.8	10,363	46.0
Colorado	36,277	25,414	7,499	171	3,193	63,000	40.4	11,894	63.5	310	55.1	5,131	62.3
Connecticut	15,447	7,599	6,486	157	1,205	20,775	38.5	15,337	43.9	410	39.4	3,736	33.7
Delaware	2,241	580	1,311	141	209	883	66.5	1,850	71.9	247	57.9	349	60.8
District of Columbia	7,895	1,552	4,840	122	1,381	2,639	62.3	8,098	60.3	205	59.4	2,582	55.0
Florida	57,384	33,930	17,228	1,335	4,892	48,703	69.7	21,415	79.1	1,943	68.7	7,248	67.5
Georgia	66,716	42,302	12,899	1,692	9,823	57,894	73.3	17,196	75.6	2,345	72.3	13,534	72.0
Guam	60	10	41	1	8	19	50.0	77	50.0	1	49.9	14	49.3
Hawaii	3,859	670	2,607	48	533	1,191	62.9	4,433	59.0	80	59.0	1,084	52.8
Idaho	6,880	4,102	2,068	104	606	6,113	69.5	3,859	54.9	157	65.1	937	64.4
Illinois	89,436	39,780	38,351	1,696	9,609	71,505	56.8	74,244	52.5	3,386	51.2	19,605	51.1
Indiana	24,737	13,529	10,177	1,031	----------	22,851	62.5	15,495	67.6	1,874	55.9	----------	----------
Iowa	29,603	19,547	9,086	843	128	33,672	60.4	15,041	60.0	1,677	50.9	[2] 136	54.7
Kansas	25,351	16,309	6,333	344	2,365	29,188	56.4	10,716	58.5	639	53.9	4,549	53.0
Kentucky	43,081	23,401	15,104	1,238	3,337	31,687	74.0	19,541	77.3	1,575	74.0	4,553	73.1
Louisiana	104,149	72,549	21,852	1,572	8,176	107,300	67.6	30,607	74.6	2,661	59.2	11,912	70.0
Maine	13,271	6,668	5,145	257	1,201	9,669	70.3	7,028	74.2	371	69.2	1,781	66.9
Maryland	17,974	4,696	9,911	236	3,131	7,381	63.9	14,197	67.1	374	63.0	5,098	62.6
Massachusetts	62,962	42,414	13,619	1,156	5,773	103,010	42.2	28,860	46.0	3,192	36.0	15,891	36.2
Michigan	59,803	32,523	23,975	925	2,381	57,736	57.6	43,930	55.4	1,737	52.9	4,857	49.0
Minnesota	37,386	25,987	9,495	629	1,275	52,113	51.1	19,329	49.6	1,386	45.4	1,904	66.8

Mississippi	38,296	24,093	8,547	2,318	3,338	30,457	78.2	10,715	78.7	3,067	75.2	4,326	75.8
Missouri	89,489	57,292	21,932	2,331	7,934	86,779	66.3	30,260	72.5	4,360	54.0	12,043	65.6
Montana	6,578	3,722	1,846	205	804	5,805	65.1	3,080	61.8	364	58.2	1,324	59.0
Nebraska	13,087	8,699	2,852	513	1,023	13,728	65.3	4,058	72.4	972	53.6	1,631	63.3
Nevada	2,426	1,392	916	119	----------	2,399	58.4	1,396	66.9	243	43.5	----------	----------
New Hampshire	4,124	2,642	1,091	134	258	4,890	57.1	2,027	54.5	254	54.4	528	48.7
New Jersey	25,294	9,579	11,152	545	4,018	21,662	47.3	25,861	44.8	1,103	49.1	8,393	44.4
New Mexico	15,972	6,272	8,031	229	1,440	9,131	69.8	11,271	72.7	314	72.7	2,090	68.9
New York	144,013	47,078	73,350	2,350	21,234	117,514	40.7	153,867	48.5	6,011	39.8	52,604	41.9
North Carolina	51,279	19,171	21,305	2,604	8,199	25,622	74.6	26,092	77.9	3,658	70.8	11,207	72.8
North Dakota	6,961	4,307	1,917	58	679	8,141	53.4	3,415	57.0	103	59.5	1,420	49.0
Ohio	76,800	44,284	24,468	1,950	6,099	80,971	56.4	37,762	66.5	3,268	60.0	10,577	58.2
Oklahoma	75,540	51,871	17,214	1,073	5,382	86,676	60.0	24,707	70.7	2,188	49.9	10,137	53.8
Oregon	17,936	9,296	5,677	144	2,820	17,668	54.3	10,876	51.8	291	50.5	5,590	49.5
Pennsylvania	85,941	25,191	49,610	3,196	7,944	44,249	59.6	78,782	63.3	15,446	21.4	13,960	58.2
Puerto Rico	8,500	2,032	5,089	101	1,279	4,410	47.1	10,904	46.0	223	47.1	2,755	47.1
Rhode Island	9,421	3,597	4,248	65	1,511	6,848	53.3	7,527	56.4	121	54.3	3,072	50.1
South Carolina	21,428	12,203	5,483	689	3,053	16,547	74.8	6,986	79.6	944	73.7	4,135	73.7
South Dakota	8,475	4,772	2,957	90	655	6,997	71.0	4,331	69.7	132	70.2	932	70.0
Tennessee	42,898	22,363	15,566	1,240	3,730	30,219	74.1	19,687	78.4	1,679	73.3	5,153	72.6
Texas	124,697	102,807	15,924	3,199	2,768	145,087	71.3	20,047	79.7	4,600	70.2	4,215	69.3
Utah	9,476	4,380	3,649	116	1,331	6,853	67.8	5,850	61.1	179	65.0	2,145	61.7
Vermont	4,719	2,910	1,268	67	474	4,284	71.3	1,734	71.8	105	71.0	679	70.7
Virgin Islands	206	100	83	4	19	201	50.0	183	50.0	8	50.0	42	50.0
Virginia	17,162	6,012	7,657	629	2,863	8,379	73.3	10,358	75.5	879	70.8	4,089	71.3
Washington	38,905	25,669	9,536	376	3,325	54,173	48.4	22,970	44.5	882	43.6	8,186	42.3
West Virginia	27,649	6,829	17,705	401	2,714	9,128	75.8	23,168	76.3	524	74.6	3,775	73.9
Wisconsin	29,366	18,910	8,542	546	1,368	36,844	53.2	18,061	48.6	1,065	51.8	3,058	42.0
Wyoming	2,852	1,764	762	36	290	3,070	58.6	1,325	55.5	62	58.0	495	58.0

[1] Based on cash advanced for the year; may differ slightly from fiscal-year expenditures from Federal funds reported by States.
[2] Represents data for January–June 1960.

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Table 9.—*Maternal and child health and welfare services: Grants to States for maternal and child health services, services for crippled children, and child welfare services under the Social Security Act, by program and State, fiscal year 1960* [1] [2]

[In thousands]

State	Maternal and child health services	Crippled children's services	Child welfare services
United States	$17,442.5	$17,088.1	$12,902.0
Alabama	544.9	546.4	349.7
Alaska	138.6	196.6	60.2
Arizona	161.0		125.3
Arkansas	282.6	260.1	234.9
California	896.6	950.0	589.9
Colorado	355.8	214.4	147.7
Connecticut	259.3	232.7	118.2
Delaware	106.3	99.2	64.2
District of Columbia	222.9	200.2	70.3
Florida	520.7	342.8	287.3
Georgia	491.9	538.2	391.2
Hawaii	156.2	148.4	81.8
Idaho	155.5	115.4	77.0
Illinois	462.3	592.7	437.8
Indiana	336.7	368.2	314.9
Iowa	251.9	356.2	260.6
Kansas	202.8	245.8	183.6
Kentucky	370.0	478.0	350.3
Louisiana	370.6	405.2	288.4
Maine	146.5	120.7	106.0
Maryland	429.2	313.4	192.5
Massachusetts	371.3	342.7	150.5
Michigan	663.3	615.5	458.3
Minnesota	388.0	546.4	289.4
Mississippi	392.0	398.4	315.3
Missouri	348.1	331.8	280.8
Montana	129.0	170.8	101.6
Nebraska	130.9	91.8	149.0
Nevada	160.6	90.9	43.0
New Hampshire	102.2	105.2	75.0
New Jersey	253.2	247.8	211.6
New Mexico	198.6	151.2	114.0
New York	773.8	638.9	626.5
North Carolina	695.1	643.2	539.5
North Dakota	113.4	111.0	114.8
Ohio	670.8	548.8	492.3
Oklahoma	249.7	258.8	211.5
Oregon	160.8	191.1	164.3
Pennsylvania	830.7	714.9	594.4
Rhode Island	155.4	110.0	85.6
South Carolina	369.6	384.7	314.2
South Dakota	56.2	105.7	110.5
Tennessee	531.7	457.8	358.4
Texas	715.5	953.3	653.3
Utah	73.7	96.8	108.0
Vermont	109.7	97.0	75.8
Virginia	488.4	461.4	365.5
Washington	269.7	206.5	192.2
West Virginia	230.8	278.9	252.9
Wisconsin	322.5	361.0	301.1
Wyoming	102.6	92.8	65.0
Guam	58.3	53.1	
Puerto Rico	371.6	416.3	310.8
Virgin Islands	93.0	89.0	45.1

[1] On checks issued basis.

[2] Includes $1,215,200 derived from $1.5 million supplemental appropriation to be used only for children with congenital heart diseases to remain available until June 30, 1960.

Table 10.—*Federal credit unions: Assets and liabilities, Dec. 31, 1959, and Dec. 31, 1958*

Assets and liabilities	Amount			Percentage distribution	
	Dec. 31, 1959	Dec. 31, 1958	Change during year	Dec. 31, 1959	Dec. 31, 1958
Number of operating Federal credit unions	9,447	9,030	417		
Total assets	$2,352,813,400	$2,034,865,575	$317,947,825	100.0	100.0
Loans to members	1,666,525,512	1,379,723,727	286,801,785	70.9	67.8
Cash	137,677,971	154,257,791	−16,579,820	5.8	7.6
United States bonds	110,328,752	94,897,483	15,431,269	4.7	4.7
Savings and loan shares	363,003,574	347,411,329	15,592,245	15.5	17.1
Loans to other credit unions	50,217,364	35,073,948	15,143,416	2.1	1.7
Land and buildings	7,778,138	6,084,555	1,693,583	.3	.3
Other assets	17,282,089	17,416.742	−134,653	.7	.8
Total liabilities	2,352,813,400	2,034,865,575	317,947,825	100.0	100.0
Notes payable	58,427,188	37,481,165	20,946,023	2.5	1.8
Shares	2,075,055,019	1,812,017,273	263,037,746	88.2	89.1
Regular reserve	91,733,369	75,810,826	15,962,543	3.9	3.7
Special reserve for delinquent loans	4,674,782	4,579,416	95,366	.2	.2
Other reserves [1]	4,629,088	3,881,182	747,906	.2	.2
Undivided earnings	106,259,883	93,922,039	12,337,844	4.5	4.6
Other liabilities	11,994,071	7,173,674	4,820,397	.5	.4

[1] Reserve for contingencies and special reserve for losses.

Table 11.—*Federal credit unions: Number of members, amount of assets, amount of shares, and amount of loans outstanding, Dec. 31, 1934–59* [1]

Year	Number of operating Federal credit unions	Number of members	Assets	Shares	Loans outstanding
1934 [2]	39	3,240	$23,300	$23,100	$15,400
1935	772	119,420	2,372,100	2,228,400	1,834,200
1936	1,751	309,700	9,158,100	8,510,900	7,343,800
1937	2,313	483,920	19,264,700	17,649,700	15,695,300
1938	2,760	632,050	29,629,000	26,876,100	23,830,100
1939	3,182	850,770	47,810,600	43,326,900	37,673,000
1940	3,756	1,127,940	72,530,200	65,805,800	55,818,300
1941	4,228	1,408,880	106,052,400	97,208,900	69,484,700
1942	4,145	1,356,940	119,591,400	109,822,200	43,052,500
1943	3,938	1,311,620	127,329,200	117,339,100	35,376,200
1944	3,815	1,306,000	144,365,400	133,677,400	34,438,400
1945	3,757	1,216,625	153,103,120	140,613,962	35,155,414
1946	3,761	1,302,132	173,166,459	159,718,040	56,800,937
1947	3,845	1,445,915	210,375,571	192,410,043	91,372,197
1948	4,058	1,628,339	258,411,736	235,008,368	137,642,327
1949	4,495	1,819,606	316,362,504	285,000,934	186,218,022
1950	4,984	2,126,823	405,834,976	361,924,778	263,735,838
1951	5,398	2,463,898	504,714,580	457,402,124	299,755,775
1952	5,925	2,853,241	662,408,869	597,374,117	415,062,315
1953	6,578	3,255,422	854,232,007	767,571,092	573,973,529
1954	7,227	3,598,790	1,033,179,042	931,407,456	681,970,336
1955	7,806	4,032,220	1,267,427,045	1,135,164,876	863,042,049
1956	8,350	4,502,210	1,529,201,927	1,366,258,073	1,049,188,549
1957	8,735	4,897,689	1,788,768,332	1,589,190,585	1,257,319,328
1958	9,030	5,209,912	2,034,865,575	1,812,017,273	1,379,723,727
1959	9,447	5,643,248	2,352,813,400	2,075,055,019	1,666,525,512

[1] Data for 1934–44 on membership, assets, shares, and loans outstanding are partly estimated.
[2] First charter approved October 1, 1934.

Public Health Service

Health of the Nation

THE HEALTH of the American people continued at a high level during 1960. The utmost vigilance, however, is required not only to maintain personal and community health at this relatively high degree but also to meet the needs that stem from our rapidly changing and increasingly complex society.

In this latter respect, problems which have always been serious have become intensified. This is particularly true in the fields of water and air pollution, sewage treatment requirements, and the challenges presented by the Atomic Age.

Paradoxically, progress in solving old problems has given rise to a multitude of more resistant new problems. For example, medical science and public health action, by the very act of saving lives, have prolonged the span of life and, thus, have contributed to the steady growth in the number of aged persons in our population. In the years preceding the conquest of the lethal diseases of childhood, a large proportion of aged persons now living would not have survived the first decade of life. Now, in the closing years of their lives, they present a complex pattern of chronic disease problems that have usurped the erstwhile supremacy of the infectious diseases.

Although these and other conditions constitute health portents of no minor moment for the future, there is every reason to expect that public health and medical science, if consistently sanctioned by the people, strengthened by voluntary groups of health-minded citizens, and responsively supported by funds and legislation, will be enabled to sustain currently favorable health trends and project them into the future.

HEALTH RECORD

In recent years, reported births, sickness, and death rates have presented markedly changed conditions for the two extremes of life. Great gains in life expectancy for the young have been accompanied by increases in death rates among aged persons.

The death rates for infants [1] under 1 year and for mothers in childbirth, for example, have declined in the last decade. The infant death rate dropped 10 percent, from 29.2 deaths per 1,000 live births in 1950 to 26.4 in 1959. The maternal mortality rate for 1959 was 3.7 per 10,000 live births compared with 8.3 in 1950—a 55 percent drop.

Deaths from childhood diseases declined sharply. Scarlet fever and streptococcal sore throat, diphtheria, whooping cough, and measles caused about 5 deaths for every 100,000 youngsters under 15 years of age in 1950. In 1959, however, these diseases were responsible for only about 1 death per 100,000 population in this age group.

The death rates for a number of infectious diseases which affect the young and the old alike have also dropped since 1950. Thus, the death rate for tuberculosis was 22.5 per 100,000 population in 1950, compared with 7.1 in 1958, and 6.5 in 1959. There have also been proportionately fewer deaths from syphilis, particularly among infants.

The seasonal influences of influenza were mild in 1959 compared with 1958. The influenza and pneumonia death rate (except for pneumonia of the newborn) dropped from 33.2 per 100,000 population in 1958 to 31.2 in 1959. A similar decline was noted in the number of deaths in older people with cardiovascular disease.

Death rates for suicide, homicide, and accidents have decreased since 1950. After increasing to age 65, the suicide rate levels off. The homicide rate is highest among young adults. Most fatal accidents, except for motor-vehicle accidents, tend to occur at the two ends of life. No definite trend has been apparent for motor-vehicle accidents, but the death rate has remained at a high level. It was 23.1 per 100,000 in 1950 and 21.5 in 1959. For all other accidents, however, the death rate dropped from 37.5 in 1950 to 30.7 in 1959.

In contrast to the generally favorable trend of the infectious diseases, the chronic maladies characteristic of the latter part of life continued to exact a heavy toll of lives. Together, diseases of the heart and blood vessels and cancer accounted for 70 percent of all deaths in 1959. The death rate for the major cardiovascular-renal diseases was 516.2 per 100,000 in 1959, compared with 510.8 in 1950. The 1959 cancer death rate was 147.4, substantially higher than the 139.8 rate of 1950.

The trend in the Nation's health is summed up in the life expectancy figure. Over the last few years this indicator has changed

[1] All vital data are for calendar years. The marriage, divorce, and death figures for 1959 are final. Other figures are provisional.

only slightly, in contrast to the rapid increase in life expectancy in the first half of the century.

The average length of life for the entire population increased from 66.8 years in 1947 to 69.6 years in 1954, but the figure has remained practically unchanged since then. It was 69.6 years in 1956 and 69.4 years in 1958, and a provisional table for 1959, the latest year for which average length of life has been calculated, yields a figure of 69.7 years. The average length of life in 1958 was 67.2 for white males, 73.7 for white females, 60.6 for nonwhite males, and 65.5 for nonwhite females. The average length of life for women has been increasing more rapidly than for men, and the gap between the white and nonwhite population has continued to decrease.

BIRTHS, MARRIAGES, AND DIVORCES

The Nation's birth rate has remained at a high level since the end of World War II, while the death rate has declined slightly. In 1959 there were 4,292,000 live births in the United States—0.9 percent above the total for 1958 and close to the past record (4,308,000) in 1957. These figures include an adjustment for underregistration. The crude birth rate was 24.3 per 1,000 population, compared with rates of 24.6 and 25.3 for 1958 and 1957, respectively. Since there were 9.4 registered deaths per 1,000 people in 1959, the rate of natural increase (the excess of the birth rate over the death rate) came to 14.9 per 1,000 population—nearly the same as the 1958 rate of 15.1. The 1959 figures include Alaska for the first time.

The estimated number of marriages performed in 1959 was 1,414,000 or 3.0 percent more than the figure for 1958. The rate per 1,000 population was 8.5, compared with 8.4 in 1958.

The estimated number of divorces, including reported annulments, granted in 1959 was 395,000, 7.3 percent above the figure for 1958. The divorce rate per 1,000 population was 2.2, compared with a rate of 2.1 in 1958.

Funds and Personnel

In 1960, the total funds available to the Public Health Service amounted to $1,013.6 million (see table 1, page 172). Of this amount, about $840.8 million were appropriations and authorizations. The balance was made up of repayments for services given other agencies and of unobligated balances from previous years.

Approximately 70 percent of the total funds available was disbursed to the States and to agencies and institutions outside the Federal Government for disease control, general health services, construction of health facilities, environmental sanitation installations, and for medical and dental research. The remainder was expended to support

Public Health Service hospitals, foreign and interstate quarantine activities, Indian health services, and the direct services specified in Federal law as responsibilities of the Service.

The Public Health Service had 26,430 full-time employees at the close of fiscal year 1960. The total staff included 1,666 members of the regular Commissioned Corps of the Service, 2,034 members of the Reserve Corps on active duty, 116 members of the Commissioned Reserve on temporary training duty, and 22,614 full-time Civil Service personnel.

National Library of Medicine

Substantial increases were achieved in the Library's accessions through development of new bibliographical selection sources and institutions offering exchange items. The collection increased to 1,049,261 items as of June 30, 1960.

BOARD OF REGENTS

The Board of Regents met twice during the year, on November 13, 1959, and April 11, 1960. At the first meeting the Board examined and approved the proposed budget for fiscal year 1961, and inspected the new machine processing system used in publishing the *Index Medicus*. At the second meeting, the Board observed a demonstration of the working prototype of a mobile camera, discussed the question of using automatic data processing techniques, and reviewed preliminary estimates of the budget for fiscal year 1962.

THE NEW BUILDING

Only 31 percent of the Library's new building, begun June 17, 1959, had been constructed by the end of the fiscal year. The building schedule had specified 54 percent completion by that time. Unexpected blasting operations necessitated by extensive rock formations were principally responsible for this retarded progress.

INDEXING SERVICES

Mechanization of copy preparation for publication of the Library's monthly index of medical literature was completed. With the January 1960 issue, the old *Current List of Medical Literature* became the new *Index Medicus*. In 1961, the *Index Medicus* is expected to include 136,000 journal articles, an increase of almost 15 percent over the number indexed in 1959.

ORGANIZATIONAL CHANGES

Two major organizational changes were made, so as to accelerate the processing of library materials and to improve services to users. Acquisitioning and cataloging, formerly performed in separate units, were combined in a Technical Services Division. The interlibrary

loan program was strengthened by merging functions previously performed by three separate divisions and giving responsibility for them to a new Circulation Division.

INTERLIBRARY LOANS

Interlibrary loans increased 30 percent in fiscal year 1960, rising to 95,595 compared to 72,728 for the prior year. This added burden on the Library's facilities prompted the initiation of a study designed to provide data on which to base the development of more efficient procedures in the servicing and the use of the Library's collections.

PROGRAM STATISTICS

During fiscal year 1960 the Library acquired 16,028 books, 69,103 serial pieces, and added 1,090 new serial titles. Four hundred and twenty old and rare items were purchased for the History of Medicine collections. The staff cataloged 22,395 titles, and 2,302 pictures and portraits were added to the art collection. There were 135,366 volumes circulated; 9,046 reference questions were answered; and 151 bibliographies were prepared on special subjects. A total of 18,168 main entries were published in the 1959 segment of the quinquennial *National Library of Medicine Catalog;* 112,304 items were published in the *Current List of Medical Literature* and the *Index Medicus* from 1,626 journal titles.

In response to 90,984 requests, more than 2 million pages of medical literature were microfilmed. For preservation purposes, an additional 1.2 million pages were microfilmed.

Public Health Methods

The Division of Public Health Methods provides staff services to the Surgeon General, develops and conducts research studies directed toward evaluation of health and related problems in the population, and participates in public health planning activities to meet current and foreseeable needs. The Division edits and publishes the monthly *Public Health Reports*, the official technical journal of the Public Health Service, and conducts the National Health Survey.

FUTURE NEEDS FOR PHYSICIANS

The Surgeon General's Consultant Group on Medical Education, appointed in December 1958 to study the question of how the United States is to be supplied with an adequate number of well-qualified physicians, submitted its report to the Surgeon General in September 1959. The basic finding is that the United States faces a growing shortage of physicians. Among the consultant group's recommendations are the establishment of some 20 to 24 new 2-year and 4-year medical schools, expansion of existing schools, and financial aid for both the schools and medical students.

NATIONAL HEALTH SURVEY

During the year, the National Health Survey made progress toward all three of its major goals; The Health Interview Survey, the Health Examination Survey, and developmental and evaluation studies. Data from the continuing nationwide health interviewing provided the basis for reports on disability days; limitation of activity and mobility; chronic respiratory conditions; heart conditions and high blood pressure; types of injuries; and volume, interval, and frequency of dental visits.

A new series of reports for population groups, the first three of which deal with children and youth, veterans, and Hawaii also made use of these data.

Questions on types of accidents causing injuries and on health insurance coverage were added to the interview. The Health Examination Survey team, using specially designed mobile equipment, conducted two "stands" (at Philadelphia, Pennsylvania, and Valdosta, Georgia) of the first cycle of the Health Examination Survey.

ENVIRONMENTAL HEALTH STUDY

At the request of both Appropriations Committees of the Congress, the Public Health Service conducted a study of environmental health problems and the organization of facilities to meet them. Among the recommendations of the report of the study, which was submitted to the Congress in January 1960, was the more effective integration of environmental health activities at all levels of government, including the activities of the Public Health Service. The study was centered in the Division, with assistance given by other units of the Service and by a special panel of outside advisors.

HOMEMAKER SERVICES

The Division prepared and published *Homemaker Services—Report of the 1959 Conference.* That conference was sponsored by eight constituent units of the Department of Health, Education, and Welfare and twenty-six national voluntary agencies. In addition, the Division participated in the planning and conduct of two follow-up meetings called by the National Health Council on recommendation of the executive committee of the 1959 conference. The report of the first meeting, which dealt with "Personal Care in Homemaker Service Programs," was prepared in the Division and published in the July 1960 issue of the American Medical Association's *Homemaker Services Bulletin.* The second meeting dealt with the "Role of Voluntary Health Agencies in Homemaker Service Programs."

STUDIES AND REPORTS

A new publication in the Health Manpower Source Book series, presenting basic data pertinent to three health professions—physicians, dentists, and professional nurses—was prepared in cooperation with

the Division of Dental Resources and the Division of Nursing Resources. The data were selected to provide information to persons engaged in administering health services or in planning educational programs for the large number of health personnel that now are and will be needed to meet the demands of our expanding population.

The seventh listing of the Clearinghouse on Morbidity Projects was published. These listings are designed primarily to inform research workers of research projects underway and studies not yet published which may have bearing on their work.

Other studies completed during the year include long-term trends in illness levels; the economic effects of public health programs in underdeveloped countries; hospital use in Hagerstown, Maryland; State and local government expenditures for health and hospitals; and health manpower 1930–75. The Division also provided technical assistance and consultation as requested by State, regional, and professional organizations.

WORK IN PROGRESS

Work underway includes a national survey of medical group practice; work with the Division of Hospital and Medical Facilities and a committee of the Association of American Medical Colleges on the development of guides for the construction of medical schools; compilation of a textbook on the administration of community health services in cooperation with the City Managers Association and the American Public Health Association; a study of trends in medical practice; a study of social welfare manpower; a study of practical nurse education in cooperation with the National League for Nursing and the American Nurses' Association; a study of the baccalaureate origins of physicians; the tenth in the Health Manpower Source Book series, which will present data on physicians, dentists, and veterinarians by county; and development of a guide for community surveys of long-term patients and resources for their care.

The National Institutes of Health

Medical research throughout the Nation continued to expand during fiscal year 1960, with Government supporting a little more than half. The National Institutes of Health, research arm of the Public Health Service at Bethesda, Maryland, awarded 80 percent of its $430 million total appropriation to aid research projects, training, and construction in non-Federal institutions. In approving the grants, the Surgeon General followed the recommendations of distinguished private citizens composing the National Advisory Councils. NIH programs emphasize research on the chronic diseases, which have become increasingly significant as infectious diseases decline.

Substantive highlights of the NIH program included collaborative studies of perinatal disease, the cancer chemotherapy program, collaborative research in psychopharmacology, the field of viruses and cancer, the development of a program in mathematics and physical biology, activities concerning the development of a live-virus polio vaccine, new construction at Bethesda, programs to support research in other countries and exchange of scientists and scientific information, establishment of programs for training in basic sciences, and the program of grants for construction of health research facilities.

Grants and training awards were made in unprecedented number—18,624. Criteria established by the President with a view to assuring program quality despite rapid growth were applied to new grant applications, and the ratio of approvals to applications was about 1 to 2. Totals of all grants and training awards approved for payment from 1960 funds are tabulated (table 3) on page 175.

Increased responsibilities have necessitated reorganization of the Office of the Director. As approved by the Surgeon General, the new organizational plan (1) establishes the position of Deputy Director, NIH, with special responsibility for the coordination of policy for extramural programs; (2) broadens the scope of the associate director for intramural research under the new title Director of Laboratories and Clinics; and (3) provides for five top-level staff positions with titles of Associate Director—four covering extramural activities (research grants, training, institutional relations, and collaborative research) and one for the intramural area of clinical care administration. Offices for program planning, research information, administrative management (headed by the Executive Officer of NIH), and international research activities complete the Director's Office. The Director is also aided by the Advisory Policy Committee of Institute Directors.

Clinical, laboratory, and office facilities are under construction at Bethesda. A four-story surgical wing at the Clinical Center, started in August 1959, will incorporate many innovations for the advancement of surgery on the heart and nervous system. A two-wing general office building with space for 1,900 employees was started in October 1959. H-shaped, it will consist of a south wing with 11 stories and a north wing with 5. Buildings to house the National Library of Medicine, National Institute of Dental Research, and Division of Biologics Standards progressed through the fiscal year. The DBS building was dedicated June 30 by his Majesty Bhumibol Adulyadej, King of Thailand. Other projects included purchase of a 513-acre site near Poolsville, Md., for an animal farm.

In light of its expanding extramural programs, NIH recognizes a growing obligation to help grantee institutions sustain initiative.

Institutional strength and stability are goals in a strong program of training awards, grants enabling schools to develop ways of producing medical scientists, development of extramural research centers and primate colonies, and a trend toward larger grants for more broadly defined objectives.

In addition to the appraisals of the NIH program implicit in the participation of its hundreds of non-Federal advisors, several special appraisals were made by non-Federal groups. For the Senate Appropriations Committee, consultants under the chairmanship of Dr. Boisfeuillet Jones rendered a comprehensive assessment entitled *Federal Support of Medical Research.* An NIH task force studied the impact of NIH grant programs on medical schools. Forces that may be expected to shape future trends in NIH programs include the need for balanced development of research resources and the opportunities afforded by new techniques and specialties for probing deeper into the unknown.

The following reports on the seven Institutes, Clinical Center, and four Divisions represent significant advances in program development as well as in knowledge of health and disease.

Division of Biologics Standards

The Division is responsible for administering the control requirements with respect to the safety and potency of biological products that are entered into interstate and foreign commerce. The regulatory function is carried out through issuance of establishment and product licenses, following determination that prescribed standards of safety, purity, and potency have been met. At the end of the year, 182 establishment licenses and 1,252 product licenses were in effect.

Tests are performed at the rate of approximately 3,400 a year. In addition, approximately 4,000 vials of physical reference standards prepared by the Division are distributed annually to manufacturers and to laboratories engaged in biological standardization.

The flexibility of the Division's research program has made it possible to keep pace with the accelerated production of biological products. The production of inactivated poliomyelitis vaccine continued to be closely monitored, but increasing interest in the development of a live attenuated poliovirus vaccine called for intensive study of the three sets of Type 1, 2, and 3 poliovirus strains used in worldwide field trials. The Division's safety testing program, which over the past 4 years has involved the use of 20,000 monkeys, provided invaluable experience in inoculation methods as well as interpretation of data on the neurovirulence for monkeys. These data enabled

the PHS Committee on Live Poliovirus Vaccine to recommend virus strains that could be considered as the most satisfactory for the production of such vaccines.

The Division's expanded laboratory facilities have made possible a broader program of investigation in the field of rickettsial diseases, including development of specific requirements for rickettsial antigens. Basic research on the physical and chemical factors that determine the biological properties of bacteria, rickettsia, and viruses, as well as their host cells, has become an integral part of the Division's research program.

A program for the investigation of the immunological and physicochemical properties of blood proteins, including coagulation systems, provides essential information to support control functions in the area of blood and blood products.

Biophysical studies in progress include an investigation of the mechanism of thermal inactivation of viruses, determinations of the relative susceptibility of animal viruses to photodynamic inactivation, development of methods for differential inactivation of simian viruses in suspensions of live attenuated polioviruses, and the study of the effects of various physical and chemical stresses upon metabolism of tissue culture cells.

Division of General Medical Sciences

Established in July 1958, the Division administers NIH grant programs for research in the sciences basic to medicine and biology, in environmental and public health, and in certain clinical sciences. The Division also administers the grant programs for training investigators in the basic biomedical sciences, provides fellowships for general research training, and directs the NIH Center for Aging Research. There was a total increase of more than 21 percent in the research program over the previous year, with particularly noteworthy increments in studies of the chemistry of life processes, biology of human development, and environmental health.

A number of important research advances have resulted from the Division's grant programs. These include new knowledge on the role of ribonucleic acid in defending the body against disease—potentially another step forward in understanding the importance of genetics in man's health. Another DGMS-supported scientist has found that the juvenile hormone, once thought to exist only in insects, occurs also in human tissue, raising questions about its importance in the biological process of aging.

Other recent scientific achievements promoted by the Division's work relate to the value of folic acid in treating megaloblastic anemia;

new findings in connection with galactosemia; the importance of essential fatty acids in preventing disease; the mechanism by which reserpine promotes gastric ulcers; the nature of damage caused by chronic lead poisoning to female reproductive functions; new data on the controlling mechanism of mitosis; the effects of certain drugs on pregnant women; the way the unborn child is nourished by the mother; and the function of the larynx.

During the past year the DGMS training programs, which include support for graduate research training and also research fellowships at several levels, were enlarged sharply to help meet national needs. The graduate training program, under which funds are provided to medical schools, universities, and other institutions for the training of investigators in the basic biomedical sciences, increased 75 percent over fiscal year 1959, with relatively great increases in the number of fellowships.

At the end of fiscal 1960 these programs were providing various levels of basic training for more than 3,500 persons across the Nation. Since July 1958, when the Division was providing support for graduate research training in two areas, Epidemiology and Biometry, the Division has established full-time, regular programs in nine additional fields—the Anatomical Sciences, Biochemistry, Developmental Biology, Genetics, Microbiology, Pathology, Pharmacology, Physiology, and Physical Biology.

Three new activities added to the Division's responsibilities during fiscal 1960 were the Clinical Research Center Program, the Russian Scientific Translation Program, and the Foreign Grants and Awards Program.

Establishment of the Clinical Research Center Program by NIH was directed by the Senate Committee on Appropriations (Report 425, 86th Congress, First Session). The purpose of the program is to help meet national needs for specialized facilities in support of clinical research in a broad spectrum of diseases. Grant funds are made available to local sponsoring institutions across the country, such as medical schools and research hospitals, for the establishment of special research facilities, centers, or units. The funds pay for the renovation and equipping of facilities, the major costs of patient care, supporting laboratories, and staff salaries. Grants were made to eight institutions.

The Russian Scientific Translation Program, transferred to this Division during the year from the Division of Research Grants, has the assignment of translating, through contracts or grants, Russian documents in the fields of medicine and biology, and distributing them among appropriate groups in the American scientific community.

The Foreign Grants and Awards Program, also transferred to DGMS from DRG, has the prime NIH administrative responsibility

for those grants and awards, in research and training, involving foreign nationals. The program also provides the means for outstanding scientists and recent postdoctorates from U.S. and foreign institutions to work at NIH for training purposes for specified periods of time.

CENTER FOR AGING RESEARCH

Scientific interest in research in aging, as measured by the NIH programs, reached a new level during fiscal 1960. The dollar value of all grants for research in aging on January 31, 1960, was approximately $12.5 million.

The Center for Aging Research, a component of DGMS, fosters research and research training projects in aging and serves as the NIH focal point for information on the grants and programs in gerontology. In July 1960 the Center published "Research Highlights in Aging" (Public Health Service Publication No. 779), which is a review of more than 500 selected scientific papers reporting on research projects in aging under support by NIH.

Division of Research Grants

The Division of Research Grants served as the administrative center of the $302-million extramural grant and award programs of the National Institutes of Health. This dollar total represents the largest increase in funds for medical research in the history of the extramural program. In fiscal 1960 this responsibility included the administration of the research grant and fellowship programs, newly assigned functions in the area of research training, and direct management of the $30-million-a-year Health Research Facilities Construction Program. Because the need for research facilities was still acute in 1958, the 86th Congress extended the original three-year Health Research Facilities program to include fiscal years 1959 through 1961.

The Division was assigned in 1960 the administration of the NIH training grant and traineeship awards, in view of the expansion and complexity of supportive training of research manpower. Responsibilities in this area parallel those of the Division in the research grant program: receiving and assigning applications, reviewing budget requests of applications, establishing policies and procedures for payment and management of grants and awards, maintaining central records, providing information on these programs, and establishing review committees.

To maintain the high standards of review for the growing number of research grant applications, the Division increased the number of study sections from 32 to 36. These study sections, whose primary function is technical review of applications, have also continued their

program activities by stimulating and planning an increased number of meetings and seminars to exchange, gather, and publish information on specific health problems and needs.

Division of Research Services

An increase in the number of mathematicians on the staff of the Division of Research Services led to a rapid expansion in electronic data processing. As a result, the number, kinds, and complexity of research studies programed on the electronic computer have increased greatly, and the use of the computer approximates the saturation level of three shifts a day. Studies of computer equipment requirements were begun in relation to forecasts of expanded NIH computation and data processing needs.

The Division expanded its range of services in other areas including scientific instrumentation design, and in the design and planning of laboratory facilities. A master site plan developed for the new animal farm will become the basis for architectural design and construction of research facilities to be located there. The plan is essentially a projection of the building and terrain requirements for studies of animals in their natural environment as well as for long-term holding of large animals, such as cows, horses, and swine, and the production of selected laboratory animals.

Clinical Center

The Clinical Center continued to fulfill its mission of providing hospital and laboratory research facilities to the seven National Institutes of Health. Optimal utilization of research beds was maintained for the second year. Physician referrals continued to come from all sections of the United States and many foreign countries.

Construction of the new surgical wing, started early in 1959, was about half completed by the end of the fiscal year, and is scheduled for occupancy early in 1961.

Intensified efforts were made to expand the sources of recruiting "normal control" patients. A new contract was activated with one university, an expanded contract with another; and special arrangements with Federal prisons were initiated. Consequently the volunteer admissions of normal controls were increased by 20 percent over the previous year.

Many well-qualified young physicians continued to seek appointments as Clinical Associates or Fellows in the Center's advanced clinical research training program. During fiscal 1960 approvals were gained from American Boards for two new residency programs, Dermatology and Periodontal Disease.

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The NIH visitor program, conducted by the Clinical Center since 1958, continues to reflect the widespread interest in basic medical research and the rapidly increasing volume of clinical research throughout the country. During the past year eleven major lectures, medical meetings, and scientific symposia were held. Many distinguished professional and scientific visitors were registered from foreign countries. In addition to the regular annual lectures and symposia, a number of closed-circuit television programs were presented to visitor groups.

Institute of Allergy and Infectious Diseases

Studies by Institute scientists and grantees during the year challenged old concepts, established new knowledge, and gave hope for effective therapy against several infectious diseases.

An experimental feat performed in the Institute's Laboratory of Parasite Chemotherapy—the transmission for the first time of monkey malaria to man through the bite of an infected mosquito—has demonstrated the need for re-examining long-established knowledge on the transmission cycle of this disease. Heretofore, malaria investigators throughout the world held that types of malaria which infect animals cannot be transmitted to man by the bite of the infected mosquito. No one can yet say whether this finding will have any practical effect on present worldwide malaria eradication programs.

Experimental animal studies have yielded promising results in the treatment of schistosomiasis, a parasitic disease widespread in many parts of the world. The effectiveness of tartar emetic or stibophen, combined with glycerin, against experimental infection of *Schistosoma mansoni* in mice indicated that glycerin as an adjuvant of heavy-metal compounds could also be tested profitably against other schistosome infections.

Investigations by scientists of the Institute, University of Maryland, and the Communicable Disease Center added weight to the thesis that viruses may be an important cause of the respiratory disease in cattle known as shipping fever, and suggest that domestic animals may serve as reservoirs of the parainfluenza 3 virus. The three-year research program resulted in the recovery of parainfluenza virus from specimens not only from different parts of the United States but from Tahiti and Japan.

In the area of diagnosis, Institute scientists developed a simple and rapid test for lupus erythematosus, a connective tissue disease related to rheumatoid arthritis. The new flocculation test seems to be more specific than the widely used cell test.

Institute scientists discovered that filarial worms may be visualized by a simple fluorescent method in a patient receiving tetracycline. The finding offers diagnostic and therapeutic possibilities.

An investigation by the Institute's Rocky Mountain Laboratory of outbreaks of Asian influenza on St. Paul and St. Lawrence Islands in the Bering Sea emphasized the value of infectious disease studies in remote communities as a source of epidemiological information. More than 80 percent of the population of each island was infected, and in each case the researchers were able to identify the source of infection and the precise time limits of virus activity.

Research by an Institute scientist and a grantee may provide information for future analysis, improvement, and standardization of house dust extracts widely used in allergy diagnosis and desensitization. They reported on a purified polysaccharide fraction that gives a characteristic skin reaction in specifically sensitive individuals.

Bacteriological and virological studies by the Institute's Middle America Research Unit, Gorgas Hospital, and U.S. Army scientists resulted in the first description of a natural infection of swine with the encephalomyocarditis virus. Further study of the agent, which has been implicated as a cause of human disease, is under way.

GRANT-SUPPORTED RESEARCH

An Institute grantee at Harvard University developed a simple and reliable test for the detection of early cases of pyelonephritis, a disease which occurs widely in pregnant women and persons suffering from obstructive diseases of the urinary tract. The test, coupled with known therapy, clears the way for the virtual elimination of pyelonephritis among pregnant women.

A study by grantees at the New York Hospital-Cornell Medical Center demonstrated that experimental staphylococcus infections previously thought to be penicillin-resistant can be effectively treated by the antibiotic if therapy is begun promptly and administered in sufficient dosage. Their laboratory experiments significantly reduced the mortality of mice exposed to a highly virulent strain of staphylococcus.

Grant-supported investigations at the California State Department of Public Health disclosed that mumps virus may mimic paralytic poliomyelitis. The disclosure resulted from the clinical testing of patients previously diagnosed as having the latter disease.

Grantees at Yale University School of Medicine isolated eastern equine encephalitis virus for the first time from the *Aedes vexans* mosquito. Their findings help clarify the epidemiological significance of this mosquito which feeds readily on man and animals.

Institute of Arthritis and Metabolic Diseases

In celebrating its tenth anniversary this year, the Arthritis Institute could reflect upon a decade of substantial progress in the fields of arthritis, diabetes, and other fields of interest.

ARTHRITIC DISEASES

The physician has been provided with a whole spectrum of new anti-inflammatory drugs for treating rheumatoid arthritis. These new drugs, which are much more potent than cortisone and produce fewer side effects, received intensive clinical testing at the Institute and other research centers. Although they cannot cure the disease, they provide relief from pain and swelling for thousands of patients.

Strong clues to the basic cause of rheumatoid arthritis have been uncovered through intensive laboratory studies. This year, for example, Institute grantees at the Hospital for Special Surgery in New York City were able for the first time to find the rheumatoid factor in tissue cells. Although considerable research has been done on this factor, and its presence in the blood is considered diagnostic of rheumatoid arthritis, the role it plays in the disease is not fully understood. The rheumatoid factor has many of the characteristics of an antibody, a protein substance which in some cases provides immunity to a particular disease, such as diphtheria or measles, and in others is the basis for a hypersensitive state such as hay fever or asthma. In rheumatoid arthritis, such antibodylike material suggests the presence of an antigen, or some substance of a deleterious nature to which the body is abnormally sensitive.

This theory has now received further support from the discovery of rheumatoid factor in the plasma cells and germinal-center cells of the body, since both of these cell types are usually engaged in antibody production. In addition, in another disease closely related to rheumatoid arthritis, called Sjogren's syndrome, Institute scientists have found evidence of a basic disorder in antibody production.

In studies of gout, Institute scientists have found that an experimental drug, DON, synthesized by a private pharmaceutical laboratory, can slow the body's overproduction of uric acid, a common feature of the disease. Although the drug produces undesirable side effects and has little practical value, it points the way toward the development of similar compounds that will slow uric acid production without toxicity.

DIABETES

Of major research interest to the Institute is diabetes, probably the best known and most important of the metabolic diseases. One of the most dramatic developments in this field has been the recent and widespread use of oral antidiabetic drugs, which have enabled thousands of diabetics to substitute a tablet for their regular injections of insulin.

Three years of experience with these new blood-sugar-lowering compounds has made it clear that they are not "miracle drugs." They cannot cure diabetes. They are most valuable in cases of mild, recently acquired diabetes, and least effective in young patients. One

promising application of the oral drugs is in diabetes prevention. Research results are still inconclusive, but Institute grantees at the University of Michigan have found indications that these compounds cause some improvement in "pre-diabetic" persons who are susceptible to diabetes and may develop the disease later in life.

A diabetes study by grantees at Yale University indicated that strict low-fat diets can lower the amount of fatty substances in the patient's blood, increase the body's ability to handle excess sugar, and benefit the eye complications that often accompany diabetes and lead to blindness. Other diabetes researchers at Harvard Medical School and Peter Bent Brigham Hospital have found that adipose (fat) tissue, far from being merely a storage place for body fat, may well be a major site of insulin action in the body.

OTHER METABOLIC DISEASES, BASIC RESEARCH

This year the Institute strengthened its research programs in two other areas, gastroenterology and cystic fibrosis. A new gastroenterological unit has been established to carry out intensive studies of the diseases grouped under the term "malabsorption syndrome"—disorders in which the absorptive capacity of the small intestine has been affected. A new pediatric metabolism branch has also been established at the Institute and is concentrating on metabolic studies of cystic fibrosis, an often fatal disease of childhood.

During the past year accomplishments in basic research were highlighted by the awarding of the Nobel Prize in Medicine for work done on the synthesis of nucleic acids. This year's recipients were Dr. Arthur Kornberg, a former chief of one of the Institute's laboratories and now at Stanford University, and Dr. Severo Ochoa, an Institute grantee at New York University.

Other developments in basic research included the discovery of the first eight-carbon sugar to be found in nature.

The pharmaceutical industry began to market the new Institute-developed pain killer, phenazocine, which is many times more powerful than morphine. Patent rights to this synthetic analgesic have been assigned by its discoverers to the U.S. Government, which in turn has made them available to all countries of the world.

Cancer Institute

Cancer is one of the major health problems of our time. Annually over 500,000 Americans acquire the disease and about 260,000 die of it. Over $12 billion is lost to the Nation each year because of cancer.

To meet this growing problem, the National Cancer Institute has continued to explore the major research areas of prevention, detection, and treatment. Advances in fundamental knowledge of biochem-

istry, tumor-host relationships, and the nature of cellular growth give promise of still greater gains in the attack on malignant disease.

Research into the causes of cancer may lead to more effective prevention. Recent studies have centered on viruses as possible causative agents in some human malignancies. The National Cancer Institute has expanded its virus-cancer program and attracted leading virologists, both here and abroad, to the field.

In its new diagnostic research program, the Institute is seeking methods of detecting cancer at the earliest possible stage. Blood and other body fluids from cancer patients and well persons are being studied in an effort to find consistent patterns that will reveal the presence of early malignant disease. Research with exfoliative cytology, the microscopic examination of cells that collect in body fluids, may lead to more prompt detection of cancer of many sites. This technique has been successfully used for several years in the detection of uterine cancer.

In the area of treatment, hope for the cancer patient who is beyond the reach of surgery and radiotherapy lies in research to develop new anticancer drugs and improve techniques of administering them. Under the national cancer chemotherapy program, new drugs are being tested at the rate of 50,000 per year, and about 110 drugs are being evaluated in studies involving 8,000 patients.

National Cancer Institute scientists continued studies of the polyoma virus, which produces some 23 different forms of cancer in mice and also induces tumors in rats and hamsters. Studies of resistance to the development of tumors in mice showed that mothers exposed to an environment contaminated by the virus conferred greater immunity to their offspring than did mothers in an uncontaminated environment.

Since viruses live and reproduce only within cells, one of the most useful ways of studying them is in tissue culture. For many years blood serum has served as an excellent nutrient for cells cultured in glass. But serum contains inhibitors of viral growth and therefore is not satisfactory as a medium for the culture of viral materials. In an effort to overcome this obstacle, an Institute pathologist developed a medium in which serum is replaced by fat-free milk, which presumably does not contain virus inhibitors. Use of this medium may permit more detailed studies of the effects of viruses upon cells, particularly the role of viruses in the production of cancer.

The use of an alkylating agent, cyclophosphamide, in the treatment of mice with advanced leukemia increased their average survival time up to 200 percent. The investigations showed that cyclophosphamide gives better results than either of two well-known anticancer

drugs, methotrexate and nitrogen mustard. The new drug is being tested in cancer patients, and preliminary results appear encouraging.

Malignancies within the central nervous system are not easily accessible to treatment with anticancer drugs, because no such drug will pass from the blood to the cerebrospinal fluid. Institute scientists have investigated the so-called "blood-brain barrier," and have developed a method that will quantitatively determine to what degree drugs will pass through it. In these studies, it was found that the blood-brain barrier is not as specific as was once thought and appears to have properties very similar to other biological membranes. With better understanding of the problem and utilization of the new method, it may be possible to develop anticancer drugs that will penetrate the barrier when administered into the blood stream.

Normal serum from human and other species was found to exert a lethal effect on mouse tumor cells in the test tube. Tumor cells mixed with human serum failed to grow when injected into mice, while control cells gave rise to progressive growth of tumors within 8 to 12 days after inoculation. A natural antibody from normal serum seemed to be responsible. The investigators conclude that such an antibody may serve as a barrier against invasion by foreign cells.

The significance of cancer cells circulating in the blood was further studied. A greater frequency of cancer cells in both peripheral and tumor-area blood was found in patients with inoperable cancer than in patients whose disease could be treated surgically. Research is now aimed at learning how this finding can be useful in the management of malignant disease.

An epidemiological study of patients with uterine cancer revealed that the survival rate today is substantially better than it was 25 years ago. The improvement is associated with increased use of surgery and possibly the more widespread use of the cytologic test. The investigators showed that the five-year survival rate among patients treated surgically for localized uterine cancer is almost 90 percent. They also pointed out, however, that the mortality rate for breast cancer has not declined in the past quarter-century. They suggested that increased survival rates for breast cancer patients will come from the development of new techniques rather than refinement of those now in use.

GRANT-SUPPORTED RESEARCH

National Cancer Institute grantees at the University of Southern California reported studies of the irritating effect of cigarette smoke on the lining of the lung. Such irritation is not produced by cigarette smoking alone, but is traceable to other environmental agents as well. The investigators suggested that the actual harm and possible carcinogenic effect of smoking come from the deposition of irritating

particles, resulting in impairment of the normal cleaning action of the lungs.

Grantees at Harvard University and the Children's Medical Center showed that administration of the antibiotic, actinomycin D, enhances the effects of radiation treatment. Smaller dosage of radiation can be used in combination with this drug, and hence less damage is done to normal tissue. In addition, favorable results of longer duration were achieved by this combination of treatments.

Grantees at Tulane University, Charity Hospital, and the U.S. Public Health Service Hospital in New Orleans reported results of an investigation involving isolation-perfusion chemotherapy. This procedure involves isolating the tumor-bearing area from the rest of the circulatory system and introducing into it high concentrations of anticancer drugs. Of 73 patients with various forms of cancer treated in this study, 60 responded favorably and 22 showed complete disappearance of their disease.

Institute of Dental Research

The discovery of a means of significantly controlling dental decay by fluoridation does not alter the fact that the causes of this widespread disease are still obscure. Research therefore continues to provide new knowledge to augment or challenge existing concepts of etiology and control of caries and other principal oral diseases.

Dental decay has been produced in germfree animals by inoculating their mouths with a single strain of streptococcus bacteria. Moreover, in conventional animals with a presumed hereditary resistance, it has been possible to initiate carious lesions by exposure to specific bacteria recovered from a caries-susceptible strain. These studies have stimulated interest in the possible transmissible nature of the disease.

Investigations using the electron microscope have provided further basic information on the formation and calcification of bones and teeth and on their ultimate structure in the fully mature state.

A better understanding of the essential role of connective tissue in periodontal disease has been gained from the development of highly useful histochemical stains. These have made possible the identification of a heretofore unknown connective tissue fiber, observation of previously unrecognized connective tissue changes in a degenerative neurological disease, and diagnostic differentiation between tissue adjacent to malignant and nonmalignant tumors.

Epidemiological studies of oral disease in relation to nutrition have been completed in Alaska, Ethiopia, Peru, Ecuador, Vietnam, and Chile. Results showed caries levels to be generally low by U.S. standards, but periodontal disease to be more prevalent and severe. Prom-

ising leads suggest correlations of these findings and general oral health with nutritional status.

GRANTS AND AWARDS

The Institute increased its support of dental research projects, particularly in the broad fields of periodontal disease, oral congenital anomalies, and dental caries. For example, grantees at the Harvard School of Dental Medicine reported on significant electron microscopy studies of calculus, a material associated with periodontal disease. Gains made in the field of cleft lip and palate research were identified with an expanded research program at New York University. And virtually all of the Nation's dental schools contributed new knowledge in studies of dental and other oral diseases.

Progress in the area of training was seen in the establishment of additional research training centers and in supplemental support to current training programs.

Heart Institute

The National Heart Institute vigorously pursued the conduct and support of research on cardiovascular disease, the leading cause of death in the United States.

Arteriosclerosis, the most prevalent form of heart disease, and one of the most difficult to approach because of its gradual onset and complex physiology, received the greatest research emphasis. In this disease, deposits of fatty materials slowly accumulate on the walls of arteries, impeding blood flow. The year's progress against arteriosclerosis has been in the understanding of hormones, protein structures, enzymes, and physiological mechanisms involved in the storage, transport, and utilization of these fatty substances.

For example, previous NHI work had led to the realization that the well-known hormone, adrenalin, is involved in the normal mobilization of stored fats into the blood to sustain life processes during emergencies. The studies have now shown that excess adrenalin, acting in concert with cortisone, another adrenal hormone, can cause a striking increase in the cholesterol-bearing lipoproteins in the blood. Since secretion of both hormones increases in subjects exposed to physical and emotional stresses, the finding suggests plausible links between high-tension living, high blood cholesterol, and arteriosclerotic deposits.

Several methods were developed for lowering blood cholesterol levels through alteration of diet and through certain drugs which inhibit cholesterol synthesis in the body. Studies showed, however, that the latter approach seems to bring about the appearance of cholesterol's immediate chemical precursor, which is normally absent from the

blood. This opened to question the desirability of such practices at the present state of knowledge.

Research in the field of hypertension, or high blood pressure, continued along two lines: clarification of the processes causing the disorder, and direct attempts to improve hypotensive drug therapy. Trials of members of a new class of compounds, known as monoamine oxidase inhibitors, produced promising results. These substances, which act indirectly on blood-pressure-regulating hormones, enabled scientists to uncover important new physiological information, and offered the prospect of greatly improved drugs for treating patients. Another group of compounds, the decarboxylase inhibitors, which block production of aromatic amines suspected of being important in the development of hypertension, were given clinical trials.

Among the year's developments in the field of surgery was the replacement of a patient's diseased mitral valve with an artificial one made of flexible plastic foam reinforced with dacron. Another development was establishment of the diagnostic value of radioactive krypton gas for detecting and locating cardiac shunts, or abnormal openings in the partition separating the heart chambers. Other studies showed that the use of potassium citrate for arresting heartbeat during surgery entails too much danger of irreversible heart failure and led to the abandonment of the drug by NHI in favor of the anoxic method of cardiac arrest. This method interrupts blood flow through the heart by intermittently clamping off the aorta.

Gas chromatography, already shown to be an extremely reliable method for the quantitative and qualitative analysis of fatty components of blood and atherosclerotic deposits, was adapted for the separation and analysis of steroids.

Studies in the biology of aging produced the discovery that insoluble solids called age pigments, long known to be present in some tissues of aged persons, accumulate in the cells of the human heart muscle at a constant rate throughout life, beginning in the second decade. They ultimately displace as much as ten percent of the cellular volume. The accumulation appears to meet criteria set forth for a "basic biological aging process."

GRANT-SUPPORTED RESEARCH

Investigations of the delicate balance normally maintained in the blood between coagulation and clot dissolution support the idea that the balance is upset in blood-clotting diseases. Heart Institute grantees at Wayne State University, Detroit, reported in 1960 that they have prepared a clot-dissolving enzyme from thrombin, a blood constituent normally involved in coagulation, and have demonstrated its effectiveness in dogs. The work is believed to open possibilities for human application.

Comparison of aortic and coronary atherosclerosis in the United States, Jamaica, Japan, and India by a group of grantees at Harvard University showed a greater severity of intimal alteration in the U.S. than in the other groups. The study also showed that in Japan and Jamaica, the atherosclerosis was more severe in the aorta than in the coronaries.

In studies at Columbia University, further evidence was found linking oversecretion of the hormone, aldosterone, with malignant hypertension through at least initial success in treating patients with "blocking" chemicals which prevent the biological action of the hormone.

A three-year study was begun in five PHS hospitals to test various drugs for hypertension. Three hundred outpatients will participate at Staten Island, Baltimore, Norfolk, New Orleans, and San Francisco.

At the Cleveland Clinic in Cleveland, Ohio, two artificial heart prototypes were designed and tested in dogs and in a mock circulatory system.

Several types of artificial heart valves, made from various plastics, were developed by grantees at the University of Minnesota in Minneapolis. One valve of the "flap" type shows definite clinical promise in severe rheumatic heart disease.

At the same institution, a portable, electric cardiac pacemaker was reported for treating patients with complete heart block and found capable of maintaining normal heart rhythm for periods up to fifteen months. Complete heart block may occur as a result of heart surgery, atherosclerosis, infection, or certain drugs. The transistorized pacemaker maintains the heart beat until the diseased or injured tissue regenerates and the heart's own pacemaker can resume normal function.

A new surgical technique developed at Baylor University, Houston, Texas, is reported to permit removal of atherosclerotic obstructions to blood flow in small arteries. A knitted dacron patch is applied to the incision left after removal of the obstruction. This overcomes the problem formerly posed by constriction of the inner diameter of the artery at the incision site during the healing process.

Institute of Mental Health

Throughout the Institute special attention was given to problems of current public concern. The Institute collaborated with the Children's Bureau in drawing up a report to Congress on what can and should be done about juvenile delinquency. Through a grant to the North American Association of Alcoholism Programs, it launched a five-year study of alcoholism in the United States and Canada. The

NIMH program also stressed mental retardation, childhood psychoses, and aging.

New and improved methods for the care, treatment, and rehabilitation of the mentally ill continued to receive great emphasis. Evidence that past efforts have borne fruit is the fact that in 1959, for the fourth consecutive year, there were fewer patients in mental hospitals at the end of the year than at the beginning.

SUPPORT OF RESEARCH

During fiscal year 1960 NIMH supported over 1,000 research grants—in psychiatry, sociology, anthropology, biochemistry, neurophysiology, and more than a score of other disciplines. The breadth and diversity of the research reflects the policy of the Institute to leave no area unexplored that might contribute to the understanding and amelioration of mental illness.

A heavy share of the grant investment was for research into the underlying physiology of schizophrenia. With increased precision of biochemical research, serious doubts have been cast on earlier attempts to relate abnormal body chemistry to mental illness. New evidences of such a relationship, however, continued to emerge from grant-supported research. Support was also given to numerous studies of the psychiatric and socio-environmental aspects of schizophrenia.

Studies of drugs used in mental illness continued to increase under grants from the Psychopharmacology Service Center. Investigations started earlier were beginning to yield results. Some of the most definitive findings came from outpatient studies of the effectiveness of drugs in treating relatively chronic schizophrenic patients in the community. One such study has conclusively shown that drugs play a very important part in preventing relapse in schizophrenics released to the community after two or more years of hospitalization.

Many of the grants were for studies concerned with children. Some of them focus on childhood schizophrenia and others on less serious but more prevalent disorders. Juvenile delinquency was under study in 47 grant-supported projects. Support was also given to studies of normal growth and development, since a more accurate knowledge of normal physical and psychological functioning at different stages is needed as a baseline against which to measure and evaluate behavioral deviations.

BASIC RESEARCH

In the Institute's own facilities, work was going forward on a wide variety of basic and clinical investigations. Scientists in a number of basic laboratories are endeavoring to relate brain structure and function to behavior. For example, the Laboratory of Animal Behavior is using experimental animals to study the effects of brain

lesions on learning. In the Laboratory of Neurophysiology, scientists are investigating the role of the limbic system ("primitive brain") in shaping behavior. Other neurophysiological studies have shown that sleep is associated with an alteration of the pattern of cerebral activity, and that normal behavior is at least partially dependent on continuous sensory input of the brain.

Investigators at the NIMH Addiction Research Center in Lexington, Kentucky, were principally concerned with studies on the addiction liabilities of new drugs. They conducted several clinical studies on alcoholism. They also investigated psychological and behavioral changes induced by several drugs of particular significance in mental health research, among them LSD–25 (which produces schizophrenia-like effects), chlorpromazine (a tranquilizer), and alcohol.

A project for testing research instruments and methods of evaluating the effectiveness of drug use and "milieu therapy" in a mental hospital population was conducted by a group of scientists at the Neuropharmacology Research Center located in Saint Elizabeth Hospital. It showed that such studies can be pursued in a typical State hospital setting, and mapped out a feasible way to conduct them.

The Section on Aging in the Laboratoryy of Psychology organized and edited the "Handbook on Aging and the Individual: Psychological and Biological Aspects." The book is an authoritative technical summary of the scientific and professional literature on the psychological and social aspects of human aging. Five of the 24 chapters were written by NIMH staff members.

CLINICAL INVESTIGATIONS

The Laboratory of Clinical Science concentrated on biochemical research to investigate the possible relationship between some forms of mental illness and biochemical processes in the brain and nervous system. To date, the schizophrenic patients studied, either individually or as a group, have shown little abnormality in the research completed.

A number of laboratories have participated in an extended study of healthy elderly men and a companion study of men with mild diseases (mostly vascular), which will give insight into the psychological, physiological, psychiatric, and socio-psychological aspects of aging. A monograph is planned to include the results of this collaborative effort.

Scientists in the Child Development Section continued intensive research on mother-child relationships and on the ways in which early environmental factors affect intellectual and personality growth. They have developed a research instrument by which they can record and compare research data on the emotional variables that enter into the mother-child relationship.

A new research undertaking, known as the Bio-Social Growth Center, is designed to investigate emotional, biological, and cultural factors as they influence personality from the earliest prenatal period of growth through infancy and early childhood.

Scientists in the Personality Development Section have carried forward a project for studying the behavior of competent adolescents, and particularly in learning how they cope with the stresses of the transition period from high school to college. They have studied the adaptive behavior and problem-solving techniques of 20 selected students before and during their freshman year. They are further attempting to make systematic comparisons of these students with some who broke down in the freshman year.

COMMUNITY SERVICES

Federal, State, and local funds budgeted by the States for community mental health services reached a new peak of $65 million in fiscal year 1960. Federal grants-in-aid of $5 million represented only 8 percent of the total funds budgeted. Originally, Federal grants-in-aid for community mental health services were offered the States on a 2:1 matching basis. The ratio was changed at the beginning of fiscal 1960 to a 1:1 matching basis.

The Community Services Branch expanded its program of technical and professional assistance to the States through personnel from the central and regional offices and by workshops and conferences conducted as Technical Assistance Projects. Under the Mental Health Projects Grants Program, NIMH supported 132 projects to develop and test new and improved methods for the care, treatment, and rehabilitation of the mentally ill.

TRAINING

The Institute made some major adjustments in the timing of the training grants awards and in administrative procedures to accommodate the recipient institutions in developing their programs for training students. Funds were granted to projects in several new or expanded fields of professional training: graduate mental health research in the biological and social sciences; the psychiatric training of general practitioners; and the teaching of undergraduate medical students in the field of human behavior.

Institute of Neurological Diseases and Blindness

Neurological and sensory disorders constitute the primary cause of permanent crippling in the United States and rank third as the cause of death. New statistics emphasize again the extent to which long-term disability is caused by neurological disorders and the importance of the prenatal, birth, and early life period of development.

Because researchers are convinced that conditions existing during the early periods of life are responsible for a large percentage of disabilities which may continue throughout life, a major attack has been made in this area by the Institute. The Collaborative Project on Cerebral Palsy, Mental Retardation, and other Neurological and Sensory Disorders of Infancy and Childhood completed its first year of study in January 1960, after two and a half years of intensive preparation. In addition to about 5,516 mothers and 4,593 babies studied in the pretest phase of the project, about 8,029 mothers and 4,400 babies had been studied in the study series as of May 31, 1960. In the broadest sense, the objective is to evaluate those factors influencing the health of mothers and children throughout the Nation.

Of all the chronic neurological disorders of childhood and adolescence, mental retardation and cerebral palsy affect the most lives. In mental deficiency, the fact that galactosemia and phenylketonuria can both be ameliorated by special diets has provided increasing incentives and hope in the search for other similar anomalies. A simple mass screening test for phenylketonuria has been developed, and there is now no reason for this cause of mental deficiency to go undetected and bring irreparable brain damage. Technical advances have demonstrated that mongolism is attributable to a chromosome abnormality which probably develops at the time of ovulation. Up until five years ago, kernicterus was responsible for one percent of admissions to institutions for the mentally defective. As a result of the effective campaign against kernicterus, one institution now reports that over the past three years not a single case of mental retardation or cerebral palsy attributable to kernicterus has been admitted.

Studies in neurochemistry relating to epilepsy have revealed that gamma-aminobutyric acid, present in relatively large amounts in the normal brain, may regulate a portion of the available energy and affect levels of functional activity within the brain. Investigators are attempting to alter the level of this compound to determine the effect of this change on seizure activity.

Closely connected with the study of the formation of myelin is the evaluation of "allergic encephalomyelitis"—the inflammatory process through which the myelin is destroyed in certain allergic conditions which have at least superficial resemblances to multiple sclerosis. The method of production of this disease in animals is now well established, and this year brought further clarification of the specific chemical fraction responsible for producing the destructive reaction.

In disorders of vision, an outstanding development in the cataract program is the demonstration of minute changes in the structures and fibers of the cataractous lens. An important cause of blindness in the older age group is glaucoma. Investigations continue on the effects

of various drugs such as acetazolamide on relieving the intra-ocular pressure associated with this disorder. The Institute, in cooperation with the Bureau of State Services, has launched a five-year cooperative study to evaluate techniques currently used to detect and identify glaucoma.

Progress continues in basic research studies of the nerve pathway by which the brain itself controls the sensitivity of hearing. The arrangement of the nerve terminals and manner of distribution within the ear have been determined. Other connections of the cochlear nucleus have been studied, and two new bundles of efferent nerve fibers have been identified. In addition, the Institute's collaborative project includes correlations of hearing and speech disorders with events of pregnancy and labor.

GRANT-SUPPORTED RESEARCH

In the Institute's cooperative project on aneurysms, the surgical approach to intracranial aneurysms is being evaluated and refined. The initial results of the cooperative anticoagulant study have revealed that the use of anticoagulants does not produce a dramatic change in over-all mortality. This study is providing information on certain benefits to be derived from this therapy, its limitations, the types of cases in which therapy is desirable, and the complications to be avoided.

This year the Institute has launched a new epidemiological program to determine variations in the incidence and character of cerebrovascular disease in different countries. A research grant for the planning of this international study of the epidemiology and neuropathology of strokes has been awarded by NINDB to the World Federation of Neurology, with headquarters in Antwerp, Belgium. This project proposes to investigate factors which cause strokes in different national, ethnic, racial, and cultural groups throughout the world.

Special attention is also being given by the Institute to research directly related to the aging process of the central and peripheral nervous system. Colonies of aging animals are being maintained in various centers for research on alterations in the physical and chemical structures of tissues as aging progresses.

Bureau of Medical Services

The Bureau of Medical Services provides medical and health services to groups of citizens designated by the Congress as beneficiaries of the Federal Government, conducts clinical research, and maintains training programs for medical and health personnel.

Federal beneficiaries include the American Indians and Alaska Natives, American seamen, personnel of the U.S. Coast Guard and Coast and Geodetic Survey, Armed Forces dependents, Federal prisoners, and others. They receive medical care through Public Health Service hospitals and clinics located on Indian reservations, in port cities, Federal prisons and elsewhere.

The Public Health Service hospitals are prominent among the Nation's primary resources for the training of physicians, nurses, and other health personnel. Clinical research into many aspects of medicine is conducted in these hospitals, including the specific fields of narcotic addiction and leprosy.

The Bureau of Medical Services is also responsible for protecting the United States against quarantinable diseases from abroad, assisting by means of funds, architectural planning, and expert counsel in the construction of community hospitals and health facilities, and for developing the Nation's dental and nursing resources.

Hospitals and Outpatient Facilities

The Division of Hospitals operates a medical care program for an estimated 371,000 persons who are legally entitled to care from the Public Health Service. These include American merchant seamen, officers and enlisted men of the U.S. Coast Guard, officers and crew members of the U.S. Coast and Geodetic Survey, commissioned officers of the Public Health Service, civilian employees of the Federal Government injured in performing their work, active and retired members of the Federal uniformed services and their dependents, and several other groups. Patients with leprosy and narcotic drug addicts as defined by Federal law, are cared for in the Division's special hospitals.

At the end of fiscal 1960, there were 15 Public Health Service hospitals, 25 outpatient clinics, 110 outpatient offices conducted under contract arrangement with community physicians.

The Public Health Service tuberculosis hospital at Manhattan Beach, Brooklyn, New York, was closed June 15, 1960, because the number of patients had been declining for 5 years, while the operating costs had been increasing. At year-end, Public Health Service beneficiaries in the New York area who have tuberculosis were being examined by physicians of the Service hospital on Staten Island to determine whether they would be treated in general hospitals or in the Veterans Administration tuberculosis hospital in West Haven, Connecticut.

VOLUME OF SERVICES

Admissions to the Public Health Service hospitals in 1960 totaled 50,485—an increase of 1.4 percent over 1959. There were 874 babies

born, compared with 720 the year before. The average daily inpatient census declined 2.8 percent, to 4,994; the greatest decrease was among tuberculosis patients. The number of outpatient visits was about the same—nearly 1,185,800.

GENERAL HOSPITALS

Admissions to the 12 general hospitals totaled 45,878. Included were both male and female patients of all ages with a wide range of health problems. These hospitals provide general, medical, and surgical services, and each has an outpatient section. They are located in major port cities—Boston, New York, Baltimore, Norfolk, New Orleans, Galveston, Chicago, Detroit, San Francisco, Seattle—and in Savannah and Memphis.

The patients receive care similar to that given in community hospitals. Among the merchant seamen and Coast Guard members who make up most of the patient census, the five leading causes of admission are: diseases of the digestive system, accidents, diseases of the genito-urinary system, respiratory conditions, and diseases of the bones and organs of movement.

NARCOTIC ADDICTION

The Public Health Service Hospital at Lexington, Kentucky, celebrated its 25th anniversary in May 1960. This hospital and the Service hospital at Fort Worth, Texas, which opened in 1938, are neuropsychiatric hospitals devoted primarily to the treatment of narcotic addiction as defined by Federal law. They also treat persons with mental illness who are entitled to care as beneficiaries of the Federal Government.

In 1960, the two hospitals admitted 4,607 patients, an increase of 6.1 percent. Of these, 4,163 were addicted to the use of narcotics; this was an increase of 4.6 percent over the previous year. The average daily census of 1,915 was almost the same as for the previous year. The census of drug-addiction patients was 1,315—which was 1.3 percent higher than in 1959.

Eighty-seven percent of the patients who were admitted to the two hospitals for treatment of narcotic addiction entered voluntarily, but voluntary patients made up only 37 percent of the average daily patient census. This comparison shows that addict patients who are not required to remain in the hospital usually give up their treatment before they have derived the full benefits from it.

Staff members of both hospitals participated in conferences, workshops, seminars, and meetings concerned with problems of narcotic addiction called by agencies in California, New York, Illinois, Tennessee, and Washington, and gave consultative services in Texas and Kentucky. In November 1959, mental health consultants from

Regional Offices of the Department of Health, Education, and Welfare in San Francisco, Chicago, and New York met at Lexington with representatives of both the Lexington and Fort Worth Public Health Service hospitals, the National Institute of Mental Health, the Office of the Surgeon General, and the Bureau of Medical Services, to exchange information on assistance available to narcotic addicts of community, State, and Federal origin. The urgent need for local post-hospital treatment and follow-up services was a major point of discussion.

The Lexington and Fort Worth hospitals provided extensive orientation and training to more than 50 professional visitors—physicians, public officials, and others—from various States and from Puerto Rico, Brazil, Iran, Belgium, Japan, New Zealand, Scotland, Thailand, and other foreign countries.

LEPROSY

The Public Health Service Hospital at Carville, Louisiana, is a principal center for the treatment and study of leprosy (Hansen's Disease) and for investigation of the many social problems that accompany it.

In 1960, there were 85 admissions to the Carville hospital compared with 62 the previous year. The average daily inpatient census moved slightly upward from 277 to 281.

An epidemiology branch was established and work was started on a national leprosy register. The register will include the more than 2,000 cases admitted in Carville since establishment of the hospital plus other cases known to physicians in the United States; also, identification of the contacts of these cases and the physicians who are keeping them under observation.

A clinic for leprosy patients was opened at the Service hospital in San Francisco. A consultant in leprosy meets patients bi-monthly. X-ray, laboratory, and other services of the hospital are available to them. Their records are studied by the Carville staff by means of inter-hospital communications channels. The clinic also provides follow-up services for West-coast patients who have been discharged from Carville.

At the request of the Secretary of the Interior, the Surgeon General sent a medical team to American Samoa in May 1960 to investigate leprosy. The epidemiologist from Carville and the consultant in leprosy at the San Francisco hospital spent three weeks investigating every known or suspected case of leprosy in American Samoa as well as selected groups of the general population. Tissue specimens and blood samples were still under laboratory analysis when the fiscal year ended.

More than 9,400 persons visited the Carville hospital during the year, including 582 physicians and 542 nurses. They came from 15 States and from Argentina, Brazil, Canada, China, Guatemala, India, Japan, Korea, Malaya, and Mexico. Twenty-four seminars were attended by a total of 586 persons. An outstanding example was the seminar for 29 missionaries of various Protestant denominations.

MEDICARE

The Dependents' Medical Care Act of 1956 authorized the Division's hospitals and clinics to admit active and retired members of the Federal uniformed services and their dependents and the dependents of deceased members of these services. This program, popularly called MEDICARE, has resulted in increased utilization of PHS facilities by these patients each succeeding year. In 1960, MEDICARE inpatient admissions in PHS hospitals increased 6 percent to 15,247; meanwhile their average daily census rose 2.4 percent, to 636. Outpatient MEDICARE visits numbered 413,393, an increase of 8.4 percent. The daily census of PHS patients in hospitals of the Department of Defense averaged 124, while the number of Defense Department beneficiaries in Public Health Service hospitals averaged 268.

TRAINING MEDICAL CARE PERSONNEL

Nearly 300 physicians, dentists, pharmacists, and dietitians took internship or residency training in Public Health Service hospitals in 1960. Ten of the hospitals are approved for postgraduate medical training by the American Medical Association's Council on Medical Education and Hospitals. Residency training is offered in a dozen medical specialties. Nine of the hospitals have American Dental Association approval for internships in dentistry. In Seattle, the hospital has a residency in prosthodontia; on Staten Island, a residency in oral surgery; in New York City, the outpatient clinic has an approved rotating dental residency. The Staten Island hospital provides residency training each year for one graduate student from the Columbia University School of Public Health and Administrative Medicine. This institution is visited annually by students in Columbia's course in hospital administration as the representative Federal hospital in the New York metropolitan area.

Four nurses responsible for inservice training of nurses at Public Health Service hospitals conducted a two-months pilot course in cardiovascular research methods and techniques, at the Clinical Center of the National Institutes of Health. The experience gained was studied to establish guidelines for future programs of research training for nurses in other clinical specialties.

Through the hospitals' various affiliations with colleges and technical schools, more than 100 undergraduates obtained practical ex-

perience and clinical instruction in physical therapy, occupational therapy, vocational therapy, social service, medical technology, and dental hygiene. The hospital on Staten Island continued to provide the clinical nursing portion of the training course for hospital corpsmen given by the U.S. Coast Guard.

CLINICAL INVESTIGATIONS

Clinical and basic research conducted in Public Health Service hospitals includes both individual projects and inter-hospital investigations. A number of studies are associated with research activities of outstanding medical institutions, such as the Tulane University and Stanford University medical schools.

Staten Island, New Orleans, and San Francisco Public Health Service Hospitals have full-time directors of research, trained in leading university laboratories. Four other Service officers received similar training in 1960.

The 1960 appropriation act for the Department of Health, Education, and Welfare authorized Public Health Service hospitals to obtain research grants from the National Institutes of Health on the same basis as non-Federal institutions.

The Baltimore, Norfolk, New Orleans, San Francisco, and Staten Island hospitals are cooperating in a three-year study of effectiveness of various drugs in treating essential hypertension. NIH grants totaling $154,000 have been approved for this research.

PROGRESS IN ADMINISTRATION

Management appraisal surveys were conducted at the hospitals in Galveston and on Staten Island. These included observation and evaluation of current operating methods.

On the grounds of the Carville hospital ten new cottages for married patients were built, and two dormitories were converted to apartments. Ten new staff quarters were also completed, and extensive renovations were made to the gate house and the administration building.

FEDERAL EMPLOYEE HEALTH PROGRAM

The Federal Employee Health Program aims to promote and maintain health and well-being among Federal employees. It plans and conducts activities encompassing public health, preventive medicine, and emergency medical care. Health units are operated on a reimbursible basis, for Federal agencies requesting this service. The medical care activities of the program are carried on in cooperation with employees' private physicians.

In 1960 three new health units were added, bringing the total to 32; these serve more than 53,000 employees located in 128 Federal agency programs. The number of physicians in the health units was in-

creased from 10 to 17. There were 1,753 physical examinations given Federal employees over the age of 40, as compared with 348 in 1959.

All employees served by the 32 health units may receive poliomyelitis and influenza immunizations at minimum cost without leaving their offices for more than a few minutes. From January through June 1960, approximately 20,000 polio immunizations were given 11,000 individuals. In the same period, almost 3,000 influenza immunizations were given. More than 2,000 immunizations for Rocky Mountain Spotted Fever were given in endemic areas, also 250 tetanus immunizations in places where there was unusual hazard. Vision tests and glaucoma tests were offered through all health units. Plans were completed to offer diabetes detection tests in 1961.

FREEDMEN'S HOSPITAL

In addition to operating the Public Health Service hospitals, clinics, and outpatient offices, the Division of Hospitals also supervises the administration of Freedmen's Hospital, a general medical and surgical hospital in Washington, D.C.

There were 13,945 patients admitted to Freedmen's Hospital in 1960, slightly more than in 1959. The average daily inpatient census declined from 362.4 to 352.9, reflecting a small decrease in the average stay. Outpatient department visits declined from 97,298 to 95,414. The number of long-term patients was fewer than in previous years. Nevertheless the hospital experienced serious crowding at several periods of the year, especially in the medical and obstetrical departments.

All training accreditations were maintained. The hospital served as the clinical teaching center for juniors and seniors of Howard University's College of Medicine. It also gave approved internship and residency training, and conducted approved teaching programs in nursing and X-ray technology.

A total of 47 residents received advanced training in the departments of medicine, surgery, neuropsychiatry, obstetrics and gynecology, and pediatrics. There were 7 medical interns, 2 dental interns, and 9 research fellows.

Twenty-seven students were graduated from the Freedmen's Hospital School of Nursing, bringing the total number of graduates to 1,401. Ten dietetic interns, two pharmacy interns, and eight students of X-ray technology completed training.

More than 50 clinical research projects were in progress at the hospital, and some 40 scientific articles by staff members were published or were in preparation.

The hospital's pressing need for better facilities grows more acute as time goes by. It has become increasingly difficult to give medical

care and to conduct teaching programs acceptably in facilities no longer equal to the demand for modern services.

Foreign Quarantine

So long as significant outbreaks of infectious diseases are still occurring in other parts of the world, our Nation cannot be complacent about its freedom from outbreaks of quarantinable diseases. The speed and volume of traffic to the United States from abroad is constantly increasing. There is always a chance, therefore, that cases of contagious disease may enter the country. To prevent this, personnel of the Division of Foreign Quarantine stand vigilantly on guard at all ports of entry.

The last outbreak of quarantinable disease in this country known to have originated in international traffic was the smallpox outbreak in New York City in 1947. Since then, a few persons infected with this disease have been intercepted at the ports by Foreign Quarantine personnel.

Smallpox continued to challenge international quarantine control in 1960. It occurred in about 60 international airport and seaport cities of 21 countries. The most serious outbreak was in Moscow where 11 cases were reported including one brought in from the Far East. The disease was confined to the city by means of a mass vaccination program and the requirement that all persons entering Moscow have recent vaccination. Explosive outbreaks of smallpox occurred also in newly established countries of Africa, particularly in port areas. Epidemics were reported by several countries of central Africa. The disease remained endemic in countries of the Far East and a few countries of South America. A few cases were reported aboard ships.

Yellow fever reappeared in the Sudan for the first time in several years; more than 100 cases were reported. The disease also spread into adjacent provinces of Ethiopia and the Belgian Congo. Another major outbreak of yellow fever occurred in a new agricultural area of La Paz Department, Bolivia. Sporadic cases occurred in Ghana, Nigeria, Brazil, Colombia, Peru, and Venezuela.

Cholera epidemics continued to be confined to countries of the Far East. Fewer cases were reported than in previous years. Most recently cholera reappeared in Akyab, Burma. An epidemic in Thailand lasted 17 months, ending in October 1959.

The international seaports and airports of the world remained free of plague. The disease was still present in rats and other rodents in some areas of the Americas, Africa, and Asia, and spread to the human population in several instances. Outbreaks of human plague

were reported by Indonesia, Southern India, Vietnam, Ecuador, and Peru. Countries of Africa reported sporadic cases.

In the United States, five cases of plague were reported. One, laboratory-acquired, was in Maryland; four were in the West and Southwest. None was significant to international traffic. Immediate field investigations in an affected area in New Mexico revealed an epizootic that first decimated the wood rats and then spread to rabbits and possibly other hosts. Further field investigations are being made. The increase in cases during the year and the growth and movement of population in the United States suggest the need for comprehensive field studies of sylvatic plague.

Sporadic cases of louse-borne typhus were reported in several ports of Africa, Asia, and South America. The disease was present also in Mexico.

Louse-borne relapsing fever is endemic in Ethiopia. More than 8,000 cases were reported in calendar year 1959, nearly double the number reported in 1958. Single cases were reported in Tunisia, the Belgian Congo, Nigeria, Somaliland Protectorate, Bolivia, Peru, Cyprus, Turkey, and Afghanistan.

NONQUARANTINABLE DISEASES

The Public Health Service, the U.S. Department of Agriculture, and State and local health authorities in Texas were concerned with protecting against introduction of anthrax from Mexico. A significant outbreak of anthrax occurred in cattle in Matamoros, Mexico. Five human cases were reported there; the infections were mild, responding to antibiotics. A problem was presented by the fact that residents of Brownsville, Texas, often buy meat in Matamoros. The Service was informed that anthrax had also occurred in 1959 in a herd of cattle brought into Brownsville from Matamoros, and that four persons contracted anthrax from direct contact with the infected cattle. These cases were successfully treated.

An outbreak of Japanese B encephalitis in Korea subsided in October 1959, primarily because of cooler weather. Ten provinces reported 1,886 cases and 521 deaths from July 30 to October 7.

Nigeria reported a major epidemic of meningitis (meningococcal)—the first in a decade; up to April 24, 1960, there were 33,470 cases and 2,320 deaths reported. About 35 to 40 percent of the cases were in children. The disease was controlled through treatment and isolation of patients by mobile health teams under direction of four physicians.

INTERNATIONAL TRAFFIC

In calendar year 1959 more than 7 million persons from the United States traveled in other countries. The risk of introduction of disease by this moving population is reduced by vaccination of travelers

before they leave home. Vaccinations required and recommended for international travelers are stated in the Public Health Service booklet "Immunization Information for International Travel."

In the 1960 fiscal year inspections of aircraft for quarantine or immigration-medical purposes continued in about the same volume as in the preceding year—70,383 in 1960 compared with 70,607 in 1959. The increased use of jet aircraft, with greater passenger capacity, was evidenced by a 16.4 percent increase in quarantine inspections of persons arriving by air, from 1,859,843 in 1959 to 2,165,664 in 1960. Inspections of ships decreased slightly, from 33,271 in 1959 to 33,180 in 1960. Quarantine inspections of persons arriving by ship increased from 1,955,760 to 1,967,997.

Travelers subject to quarantine inspection arriving in the United States by all modes of travel, including land entry from the interior of Mexico, decreased slightly, from 5,264,354 in 1959 to 5,186,789 in 1960. This change was accounted for by a decrease in inspections of persons arriving by land from the interior of Mexico from 1,448,751 to 1,053,128. It was necessary to detain only 37 persons in isolation in 1960, compared with 607 in 1959. The number of persons who were allowed to continue to their destinations in the United States, but were subject to medical supervision for a time, was 54,459 compared with 117,310 in 1959.

MEDICAL EXAMINATIONS

General program.—The downward trend during 1958 and 1959 in number of aliens examined by medical officers abroad was reversed in 1960. The number of alien applicants for visas who were examined increased from 155,068 in 1959 to 173,402 in 1960. Those examined were, as before, mostly immigrants. Aliens examined on arrival at United States ports increased 10.3 percent, from 2,669,768 in 1959 to 2,945,264 in 1960. Of the aliens examined abroad, 1,602 were found to have diseases or conditions excludable under the immigration law. Among those examined at ports in this country 2,331 were found to have excludable diseases or defects; many had been so diagnosed abroad, but were admitted under special provisions of the immigration law.

At the close of 1960, Korean orphans immigrating to the United States under the sponsorship of a prominent agent were arriving properly attended and in good condition. Earlier, many Korean orphans arrived here in a poor condition of health, suffering from malnutrition, enteritis, pneumonitis, scabies, impetigo, or other illness; in a few instances, they died on their way to this country or soon after they arrived. This situation has been corrected, as the result of conferences of division personnel with the State Department and with a physician representing the sponsoring agent, and

by field visits of the division's medical examiner from Hong Kong.

Immigration of aliens with tuberculosis.—The immigration of certain aliens who have tuberculosis continued for the third year under Public Law 86–253 (amending Public Law 85–316). Under this law, quarantine officers abroad examined 400 aliens with confirmed or suspected tuberculosis during the year, compared with 1,073 in 1959; 794 aliens were placed under health controls after arrival in the U.S., compared with 1,445 in 1959.

Migratory farm labor.—In the program of recruiting agricultural workers from Mexico, 431,631 laborers were examined, with 7,033 rejections, at three migratory centers in Mexico; 477,710 examinations were made, with 5,114 rejections, at five border reception centers in the United States.

At the reception centers 438,493 serologic tests for syphilis were made (an increase of 29.3 percent over 1959), and 21,776 positive reactors were detected. The rate of detection of positive reactors decreased from 61 per thousand laborers tested in 1959 to 49.7 per thousand in 1960, indicating the result of treatment given in the program.

YELLOW FEVER RECEPTIVE AREAS

American Samoa, the Trust Territory of the Pacific Islands, and the Ryukyu Islands were added to the yellow fever receptive area in territories for which the United States is responsible. Action was begun to remove the following from the yellow fever receptive area: Arizona, New Mexico, Oklahoma, and the part of Texas west of a line from Del Rio to Wichita Falls; this decision was based on the fact that no *Aedes aegypti* mosquitoes—which can carry the disease—have been found in these areas in recent years.

ENTOMOLOGY PROGRAM

The program for controlling the yellow fever mosquito (*Aedes aegypti*) was carried into nearly 150 international traffic areas in the South, along the Mexican border, and in Puerto Rico and the Virgin Islands. Results were favorable.

Insecticide resistance studies were undertaken at Miami and New Orleans, using laboratory-reared *Aedes aegypti* larvae. The Miami studies showed evidence of slight tolerance to DDT. Other insecticides are used in the control program.

Many species of mosquitoes and other insects of medical importance on aircraft and on ships arriving in this country were intercepted by quarantine personnel. Insecticides were applied to a large number of these conveyances.

OTHER QUARANTINE ACTIVITIES

Standard aircraft quarantine procedures were instituted, providing for simplification of inspections at airports. Emphasis was placed on

measures affording greatest protection against bringing in disease, with minimum interruption of international traffic. The Air Transport Association of America commented: "Your new procedures will enable the United States to demonstrate an effective quarantine facilitation program essentially based on efficient management practices."

Effective June 10, 1960, the Surgeon General added Jamaica to the quarantine-exempt areas. This action was based on a study by personnel of the Division of Foreign Quarantine and the Communicable Disease Center.

Measures were taken to have adequate immunity maintained by persons working in airport and seaport areas whose occupation brings them in contact with traffic from abroad. Quarantine officers asked the cooperation of local health authorities in emphasizing the importance of current immunization. Among those for whom smallpox vaccination every 3 years was recommended are personnel of Federal inspectional services, airline employees, taxi drivers serving airports and seaports, and personnel of hotels and hospitals in cities where international airports or seaports are located. Yellow fever vaccination every 6 years was recommended for persons who may deal with planes or ships arriving from a yellow fever infected area.

Quarantine service on the Mexican border was strengthened by extension of inspection coverage from 922 to 2,110 hours per week. Higher standards were adopted for appointment of inspectors, and an intensive staff training program was begun.

The position of epidemiologist for the European area was established, and the Public Health Service medical officer stationed at the U.S. Embassy in London was given this additional duty. The purpose is to effect liaison with foreign health authorities on problems concerning unusual occurrence of communicable disease, and to assist in a sound approach to related quarantine measures in this country.

Principal Domestic Field Offices were established in El Paso (centralizing responsibility for activities along the entire Mexican border) and in New York (centralizing responsibility for activities from Chicago to Norfolk).

Progress in Indian Health

The first Public Health Service hospital for Indians was dedicated on May 21, 1960, at Shiprock, New Mexico.

Shiprock Hospital signalizes the constantly improving health services given Indians and Alaska Natives by the Public Health Service as well as the increasing effort of American Indians to improve their own health and living conditions.

Major emphasis in the Indian health program in 1960 was placed on improving the quality of health services available to the Indian people. Medical care and preventive health services were provided in hundreds of facilities located as close as practicable to the homes of the widely scattered peoples.

To meet the needs of about 342,500 Indians and 37,500 Alaska Natives (Aleuts, Indians and Eskimos) the Division of Indian Health operates a far-reaching health program. This program provides essential services through its 52 hospitals, 23 health centers, 20 school health centers, and field clinics at almost 300 locations. In addition, hospital and medical services through community sources are financed by the division by means of contracts with private physicians, dentists, non-Federal hospitals, and State and local agencies.

The year 1960 was the fifth since the transfer of the Indian health program from the Bureau of Indian Affairs to the Public Health Service. The following accomplishments are noteworthy.

The passage of Public Law 86–121, Indian Sanitation Facilities Act, in July 1959 and the authorization of $200,000 to put it into effect, made possible the initiation of 39 emergency community environmental sanitation projects. Twenty-nine of these were completed within eight months.

A village clinic program was begun in Alaska. For the first time, medical officers, accompanied by public health nurses or technicians conducted regular monthly one-to-three-day clinics in 18 villages. They also visited many other villages enroute, thereby making medical care available to about 10,000 Alaska Natives in all. In this way the division was able to increase preventive health services, intensify case-finding, and provide treatment for acute medical problems, in isolated areas hitherto seldom visited.

Two custom-made dental trailers, completely equipped and entirely mobile "offices on wheels," were placed in operation in the Albuquerque and Phoenix areas, to extend the horizon of dental health services, particularly to children.

The ever-increasing understanding and acceptance of modern health and medical care by Indians themselves was evident during the year.

GENERATIONS OF NEGLECT

A backlog of disease and disability accumulated through generations of neglect poses formidable problems for the staff of the Division of Indian Health. The majority of Indians still live in isolated circumstances. Most of the reservations and villages are remote, sparsely settled, and hard to reach. Health resources and services taken for granted by most of the U.S. population are not readily available to Indians.

Death rates from such preventable diseases as gastroenteritis, influenza, pneumonia, and tuberculosis run up to eight times higher than in the general population. Water supplies, which are often polluted and generally are inadequate for domestic needs, frequently must be hauled for long distances. Infant deaths have always been excessive: deaths occur among Indian infants during the first year of life at twice the rate of that for other babies born in the United States. Accidents in and around the household take considerable toll. Over-crowded, substandard housing, dietary deficiencies, lack of opportunity to learn or practice the simplest basics of personal hygiene or community health protection—all contribute to poor health and the high death rate.

IMPROVED THERAPEUTIC SERVICES

Perhaps the most impressive health success story of recent time among Indians concerns tuberculosis. Once the principal cause of death, tuberculosis now ranks eighth. There has been a continuous decline in the number of deaths and a reduction in morbidity. During 1960, the average daily census of tuberculosis patients in Indian hospitals fell almost 20 percent.

The upward trend in general patient admissions continued, with an increase of nearly 5 percent over 1959. The total of almost 77,000 hospital admissions set another all-time high.

Births in Indian hospitals increased more than 500 over 1959, to a total of 8,330. Increasing numbers of Indian mothers now seek modern medical and hospital care.

A greater quantity and a higher quality of direct pharmacy services were provided by 41 pharmacists assigned to 31 Indian hospitals and 2 health centers. Well over 80 percent of the inpatients and more than half of the outpatients served by Public Health Service Indian health facilities benefited from this improved function.

Though the number of nurses available in 1960 was still too small to meet all the nursing needs, improvement was made. There was a gain of 102 professional nurses. Eighty-eight were assigned to hospitals, 2 to public health field stations, and 12 to clinics, outpatient services, and schools.

The social workers of the division devoted the greatest proportion of their time to children's problems and to assisting the handicapped and chronically ill. Increased emphasis was placed on broader participation in community programs and on cooperative planning with public and private social agencies.

Bearing directly on improvement in quality of services was the training given to young Indian people who are interested in participating as workers in the health program. In 1960 the two schools of

practical nursing, at Albuquerque, New Mexico, and Mount Edgecumbe, Alaska, graduated 74 students, who were assigned to positions to Indian health facilities. Inservice dental assistant training at Mount Edgecumbe and the Intermountain School, Utah, was given to 20 young Indians. Two dental assistants received training at Owyhee, Nevada. Nineteen sanitarian aides were graduated from the basic inservice course offered at Phoenix, Arizona; 9 received refresher training at Fairbanks, Alaska; and 14 completed advanced training at Window Rock, Arizona.

IMPROVED PREVENTIVE HEALTH SERVICES

A continuing cooperative research project with the National Institutes of Health is expected to provide long-needed information about the nutritional status and dietary intakes of children. Plans were made for additional research of this nature in 1961.

Much remains to be done in the field of mental health. The mental health demonstration project of the Division of Indian Health and the Bureau of Indian Affairs at the Flandreau Indian Vocational High School in South Dakota, in which the National Institute of Mental Health also participates, developed two major efforts during the year. Primary effort was directed toward maintaining and expanding individual and group services to emotionally disturbed students. The second effort centered on providing basic data for a continuing study of mental health problems at the school.

Notable progress has been made against trachoma, an eye disease that can cause blindness. Under the direction of an internationally recognized trachoma expert, the virus has been isolated and grown. Since trachoma is rarely seen in medical centers, every physician entering the Indian health program was given help in recognizing trachoma in its early stages so that cases could be found and treated before irreversible changes in the eyes took place. Division personnel in the Southwest reported that treatment of trachoma victims was resulting in a cure rate of 85 to 90 percent. The Trachoma Manual and Atlas, published by the division in 1958, was revised in 1960 because of worldwide interest in the subject.

Closely coordinated liaison among Federal, State, and local health agencies was responsible for improved use of community health resources to serve Indians. Activities to assure continued construction of community hospitals, under terms of Public Law 85–151, for joint use by Indians and other patients, were strengthened. Under this law, the Public Health Service is authorized to participate financially in construction of such community facilities.

Because of the declining number of tuberculosis patients, hospital services were discontinued at the PHS Sanatorium in Tacoma, Washington. The few remaining patients from Washington, Alaska,

Montana, Oregon, Idaho, and other States were returned to hospitals closer to their homes. Inpatient care at the Cheyenne Agency in South Dakota was suspended because of the flooding of all homes, buildings and roads in the area by Army engineers developing the Missouri River Basin project. The health facility that had been there was replaced by a new 30-bed hospital at Eagle Butte, built by the Corps of Engineers.

DENTAL SERVICES

Major attention in 1960 was directed toward dental services for the children of school age and younger. The goal is to prevent or minimize the accumulation of dental defects and infections such as is now present in the adult Indian population as the result of years of neglect.

Contract dental care was expanded to provide better dental services where direct service is less practicable. Two hundred private dentists under contract in 1960 provided treatment for 5,180 patients. Corrective dental health services were given to 72,000 persons at 78 regular clinic locations and more than 200 temporary locations. The division's dental staffs handled nearly 160,000 visits.

The dental trailers put into use in the Albuquerque and Phoenix areas made it possible to bring dental services into localities where the Indian children have never had the benefits of examination and treatment.

In Alaska, dental service was greatly improved. Thirty-three villages were visited by dental staff teams, who stayed from a few days to a month. Again the greater part of the service was directed toward children; emergency care was given for all ages. Dental health conditions in villages visited were found to be deplorable. There is acute need for further expansion of dental health services for Natives in the Alaska villages.

ENVIRONMENTAL SANITATION

On July 31, 1959, the President approved Public Law 86–121, the Indian Sanitation Facilities Act, which clarified and extended the authority of the Surgeon General of the Public Health Service with regard to aid to Indian tribes and Alaska Natives for construction of domestic and community sanitation facilities. An appropriation of $200,000 was made in the fall of 1959. The Division of Indian Health immediately programmed 27 projects to overcome emergency water supply problems in Indian communities in ten States. Additional emergency projects were undertaken later. Of the 39 projects started, 29 were completed by June 30, 1960. This work was accomplished with the full cooperation of the Indian people, who contributed many hours of volunteer labor and agreed to take responsibility for operating and maintaining the completed projects.

The Indian Tribes cooperated more fully than ever before in the activities of sanitarian aides. Indians trained in the basic elements of sanitation and educational techniques, through visits, demonstrations, and technical assistance, helped with the education of their own people in health and sanitation practices in the home and community. The aides received professional guidance from engineers and sanitarians. In Alaska, this program was carried out in 25 Native villages under contract with the Alaska Department of Health and Welfare.

The division supported special studies, at the PHS Arctic Health Research Center in Anchorage, Alaska, on practicable facilities for water supply and waste disposal in Native villages and on improving methods of curing fish and protecting food.

PROGRESS TOWARD NEW AND IMPROVED HEALTH FACILITIES

New hospitals were opened at Shiprock, New Mexico, and Eagle Butte, South Dakota. The Shiprock hospital, dedicated in May 1960, is a modern 75-bed health facility. Built at a cost of nearly $1.7 million, it integrates inpatient and outpatient services with all phases of public health activities. The Eagle Butte hospital with 30 beds, replaced an outmoded structure. It was built by the Army engineers and opened for patients in March 1960.

Construction of a new 200-bed regional hospital and medical center at Gallup, New Mexico, and a new 50-bed health facility at Sells, Arizona, neared completion. The procurement of equipment and the selection and assignment of staffs were beginning as the fiscal year ended.

Construction was started on new hospitals at Kotzebue, Alaska, and Keams Canyon, Arizona.

Major modernizations of the hospitals at Rosebud and Pine Ridge, South Dakota; Browning, Montana; and Whiteriver, Arizona, were nearing completion. Alterations and additions were completed at several hospitals including those at Santa Fe, New Mexico; Sacaton, Arizona; and Fort Belknap, Harlem, Montana.

The critical shortage of housing for the physicians, nurses, and other members of the staffs was being alleviated by the construction of 88 new permanent housing units, from fiscal 1960 funds totaling $2.5 million.

COOPERATION WITH STATES AND COMMUNITIES

Joint planning with State agencies was consistently the method used to stimulate the fullest possible participation of Indians in State and community life. Ten major meetings resulted in working agreements with the departments of health concerned. It will soon be possible for American Indians and Alaskan Natives to obtain conveniently located and markedly improved health services throughout their immediate and adjacent areas.

Hospital and Medical Facilities

Out of the recent appraisal of the Hospital and Medical Facilities construction program—now in its 13th year—has come abundant evidence of the need for long-range, community-wide, as well as State and National planning.

Hospitals and other health facilities are built to serve generations of patients. Structural durability is essential. Structural adaptability is even more important. Today, when a community, or a group of public-spirited citizens, plans a general hospital, they must consider the changing requirements of modern medicine; for example, possible treatment in the general hospital for patients with tuberculosis or mental illness; increasing preventive medical services for persons of all ages. In addition, consideration must be given to coordination of hospitals with other community health service, such as welfare agencies, rehabilitation and home care services.

In recognition of these factors, the Division of Hospital and Medical Facilities was instrumental in establishing several special planning committees. The guidelines and principles they lay down are expected to (a) stimulate more accurate planning and coordination of health facilities, and (b) provide increased national leadership in planning.

The committees are concerned both with medical facility planning and with hospital research. Some are sponsored in collaboration with other agencies and professional associations. They are at work on such problems as planning coordinated areawide health facilities and determining the facility needs of the mentally ill and the tuberculous.

In addition, a number of studies and surveys were conducted by the Division covering a wide range of subjects—investigations of various aspects of "Progressive Patient Care," a study of representative medical schools in connection with developing architectural guide material, an examination of modernization needs of the Nation's health facilities, an analysis of national goals for health facility construction, a study relating to the collection of uniform hospital data, and studies leading to the development of a hospital prototype that will give maximum protection from fall-out.

PROGRESSIVE PATIENT CARE

In ever-increasing numbers, hospitals are adopting one or more of the elements of "Progressive Patient Care"—a concept whereby patients are grouped according to the degree of their illness rather than type of illness. Studies have been initiated to determine: (a) The number of beds which should be allotted to intensive care, intermediate care, and self-care units in hospitals; (b) the costs in the various units; (c) the differing organizational patterns in teaching hospitals,

fulltime staff hospitals, and departmentalized hospitals; (d) the patient's acceptance of the pattern of care given in intensive care units; and (e) the effect of intensive care on the incidence of complications in certain diseases.

MEDICAL SCHOOL STUDY

In collaboration with the Division of Public Health Methods, the division began a study of medical school facilities, as requested by a committee appointed by the Association of American Medical Colleges. Public Health Service representatives surveyed typical medical school facilities throughout the Nation. Findings will be used as a basis for guide material on requirements for medical school facilities.

MODERNIZATION NEEDS OF HOSPITALS

A nationwide survey by the division showed that $3.6 billion would be required for needed modernization and replacement of general hospitals, public health centers, and State-owned mental hospitals.

FALLOUT-PROTECTED HOSPITAL

Under a contract with the Office of Civil and Defense Mobilization, the division developed a 150-bed model hospital which will offer structural protection against fallout in case of nuclear attack. An exhibit and a publication were prepared to show the details.

CHANGING NEEDS AND EMPHASIS OF PROGRAM

Considerable progress has been made in the construction of general hospital beds and facilities. State agencies report that 79 percent of the need for general hospitals was met in 1960 as compared with 77 percent during the previous year and 59 percent in 1948 when State records first became available. On the other hand, there is still a great shortage in long-term care facilities. The lack of chronic disease hospitals continues to be the Nation's greatest gap in health facilities. Only 15 percent of the need has been met. The second greatest need is the nursing home. Only 40 percent of the Nation's requirements for nursing homes has been met.

According to State plans on January 1, 1960, 845,000 additional beds in all types of hospitals were still needed. In addition, 257,000 additional beds in nursing homes were needed for skilled nursing care.

Population growth, the increased need for medical and nursing care of the aging and chronically ill, the increased demand for hospitalization from all age groups, and the obsolescence rate of hospitals tend to offset the progress of new construction in narrowing the gap between beds available and beds needed.

SCALE OF OPERATIONS

As of June 30, 1960, some 5,200 Hill-Burton projects had been approved for Federal assistance. The total cost was estimated at $4.4 billion, of which the Federal contribution was $1.3 billion. There were 3,564 projects, providing 149,898 beds, complete and in operation; and 1,350 projects, to provide 56,882 beds, under construction. The remaining 285 projects were in the preconstruction stage; these will provide 12,480 beds. A grand total of 219,260 hospital beds and 1,453 health units for outpatient care will be available as a result of these projects.

The majority of applications approved in this program are for general hospitals. As of June 30, 1960, 62 percent of the projects were general hospitals adding 173,213 beds; 3 percent were mental hospitals adding 15,558 beds; 1 percent, tuberculosis hospitals adding 7,404 beds; 3 percent, chronic disease facilities adding 10,031 beds; 5 percent, nursing homes adding 13,054 beds; and 16 percent were public health centers and State health laboratories; 7 percent, diagnostic centers; and 3 percent, rehabilitation centers.

Dental Resources

The continuing decline in the number of dentists in relation to population is a serious challenge to the Nation's health. If the dental care which the population of the future will demand is to be provided, it will be necessary to halt this decline and develop an adequate number of dentists to meet the demand.

National leadership in efforts to solve the dental manpower problem has been the responsibility of the Division of Dental Resources, and all its activities have been directed toward that goal. Statistical studies have estimated future manpower requirements. Research and experimentation in dental education and technology have been conducted to find ways to improve the dental student's training and increase his skills and productivity as a practitioner. Advisory and information services have encouraged the development of voluntary dental prepayment plans that enable more people to purchase regular dental care.

ASSESSING MANPOWER REQUIREMENTS

Knowledge of the active dental force, its size and distribution is essential in manpower planning. A series of regional surveys published by the division to provide long-term analyses of trends in manpower requirements and supply have stimulated programs of dental school expansion and construction.

"The Dental Profession in the Midwest," the fifth regional study, was prepared for publication in 1960. A survey of the Middle Atlantic States, which will complete the series, was initiated. The regional surveys form the basis for a project that will estimate national dental manpower needs through 1980.

INCREASING UTILIZATION OF AUXILIARY PERSONNEL

An announcement that the American Dental Association and the American Association of Dental Schools would sponsor a conference on utilization and training of dental assistants in the fall of 1960 brought national recognition to the division's experimental work in dental education.

Employment of auxiliary dental personnel, such as the chairside assistant, is an effective method of expanding available dental services, because it enables the dentist to treat more patients. The chairside assistant project instituted by the division in six dental schools in 1956 seeks the most effective method of teaching dental students to work with assistants. At an evaluation conference in January 1960, representatives of these schools unanimously recommended that the training be given to every dental student.

Related projects undertaken during the year were directed toward increasing the supply of qualified dental assistants. Production was begun on a motion picture which will be used in recruitment of dental assistants. Experimental programs designed to establish a standard training course for chairside assistants were planned, under agreements signed with four educational institutions: University of New Mexico; Boise (Idaho) Junior College; Montgomery Junior College, Takoma Park, Md.; and Kirkman Technical High School, Chattanooga, Tenn.

FINANCING DENTAL CARE

Establishment of voluntary prepaid dental care programs and budget payment plans is effectively lowering the cost barrier that prevents potential patients from obtaining the care they need. To encourage development of such programs, and the resulting increased use of dental services, the division has served as an advisory and information center on dental care economics.

In 1960 the division published studies describing the history, operating methods, and extent of utilization of three plans: (1) A program of dental care for public assistance beneficiaries offered by the Washington Dental Service Corporation; (2) a budget payment plan developed by the Kanawha Valley, West Virginia, Dental Society; and (3) the dental care program of the St. Louis Labor Health Institute of the International Brotherhood of Teamsters. In addition, a glossary of terms used in dental prepayment was compiled and widely distributed.

Continuing projects included the collection of data on utilization of services in a privately operated dental clinic and in a dental maintenance care program developed by a union.

TECHNOLOGICAL ACTIVITIES

Dentists of the division continued to conduct dental examinations for the National Health Survey. The index for measuring dental malocclusion which the division developed was among the epidemiological examination procedures tested in a research project in Idaho. A committee of representatives of the American Dental Association and the American Association of Dental Schools was established to work with the division in a study of space and equipment requirements of dental schools.

Nursing Resources

In the fall of 1959 and the spring of 1960, 13 Pennsylvania hospitals completed studies of their nursing personnel at work. Meanwhile in the Middle West, three hospitals in Indianapolis concluded similar studies of their nurses' activities. At about the same time on the West Coast, plans began for 10 hospitals in San Francisco to study nurse utilization in their day-to-day operations. Several hospitals halfway round the world in Delhi, India, made the initial move toward conducting the first nursing activity studies in their country.

For each of these studies, a consultant of the Division of Nursing Resources played a leading role by teaching the method of studying nursing activities which the division has developed. Staff members of the participating hospitals learned how to observe, record, and analyze what professional nurses, practical nurses, and nursing aides actually do in their specific hospital settings.

A division consultant spent three months in India under auspices of the International Cooperation Administration, assigned to assist the Indian Nurses Association in a survey of the nation's nurse supply. By invitation of the association, she also spent part of her time teaching the study method to the staffs of several hospitals in Delhi.

The division's study method continued to show its worth in dollars saved and in increased time spent by nurses in direct care of patients. Repeatedly, studies of this kind have clearly revealed that numerical shortages of nurses, although still great for the Nation as a whole, are more apparent than real in some situations. When nurses are relieved of non-nursing duties, often there actually are enough nurses with time enough to meet the needs of all their patients.

SCOPE OF DIVISION ACTIVITIES

To improve further and increase the kind and amount of nursing that patients receive, the division provides consultation to States,

hospitals, professional organizations, and other agencies and groups working to meet community health needs. The division's staff consultants carry out studies of major problem areas in nursing. Considerable effort is devoted to stimulating extramural research of importance to nursing, and to motivating capable nurses and other professional people to pursue careers in nursing research. The professional nurse traineeship program has been extended and expanded. Consequently, the number of nurses adequately trained for positions of leadership has thus been increased.

A nurse consultant of the division served on the faculty of the Second International Seminar on Nursing Research sponsored by the International Council of Nurses in Delhi, India, in the spring of 1960.

ASSESSMENT OF NURSING NEEDS

During the year Kansas completed a survey of its nurse supply, thus joining a long list of other States that have made such surveys with the assistance of the division. Mississippi received consultation in a resurvey of nurse supply. Massachusetts was completing a survey.

In Kansas, the present deficit was estimated at about 1,800 professional nurses. Further, it found that an inordinately large proportion of nurses holding leadership positions—ranging from 42 to 100 percent in all categories of nursing—were not adequately prepared for their jobs.

In all, more than 200 large hospitals have now received assistance to conduct nursing activity studies. A 16mm sound filmograph, "How to Observe Nursing Activities," developed in 1959, has been helpful in extending the use of the activity study technique. Efforts were continued to determine how this technique can be more effective in hospitals of less than 50 beds.

The division attempted to provide all possible assistance with a relatively small staff of nurse consultants. A major need is to provide more follow-up consultation on activity studies. Only by follow-up can the assistance be provided that hospitals need in order to act on their study findings and insure the use of professional nursing skills at the patient's bedside. So far, it has not been possible to meet fully all requests for initial assistance and for follow-up consultation.

PART-TIME NURSES

In cooperation with the American Hospital Association, the division began a study to find answers to the following questions: How much nursing is done by professional nurses employed part-time? Do they continue working part-time in the same hospital for many months or years? Or do they serve part-time in first one hospital

and then in another? How much of a contribution do they make?

The division first sought information on part-time staff nurses from several hundred general hospitals throughout the Nation. It then planned to obtain directly from nurses who are employed part-time more detailed information by questionnaire.

EMOTIONAL NEEDS OF EXPECTANT MOTHERS

Public health nurses on the staffs of local health departments routinely work with young married women expecting their first babies; they see the expectant mothers either in the health department's prenatal clinics or during regular home visits. How sensitive are these nurses to the emotional needs of young expectant mothers? Are the nurses enough aware of the symptoms that augur present or future emotional problems requiring specialized help?

A nurse consultant in mental health assigned to the division has been directing an exploratory study designed to answer these questions. The study is also intended to determine whether a relationship exists between the public health nurse's sensitivity to emotional symptoms and selected personal characteristics of the nurse herself.

OTHER STUDIES IN PROGRESS

A study was being developed to find out the nursing needs of small hospitals. The number of small hospitals throughout the Nation has steadily increased; they differ from large hospitals in various ways. The study is planned to be primarily descriptive in nature. It is expected to provide valuable information for future work with small hospitals and their staffs.

Progress was made on a study of the characteristics of nursing supervisors. Another deals with the career goals of high school students.

Work was completed on a study designed to measure the change of attitude among nurses toward their profession. Comparative data were obtained on a small group of nurses during their senior year as students and later during their active practice of nursing.

RESEARCH GRANTS AND FELLOWSHIPS

The division continued to stimulate research having importance for nursing, as part of its programming responsibilities for extramural nursing research projects and fellowships. Increasing emphasis was placed on research in clinical nursing. Efforts were directed toward stimulating the kind of training researchers need to conduct clinical nursing studies.

Research projects approved in 1960 are concerned with various aspects of nursing care; the changing role of nurses as scientific and technologic advances are applied to patient care; adequacy of nursing education for the nurse's changing role; and other allied subjects.

Forty-one research grants were awarded, compared with 37 in 1959. These represented investments of $1,208,300 and $976,300, respectively, in the improvement of nursing service.

Expansion of the research fellowship program was even greater, making it possible for more nurses to prepare for careers in research. Full-time fellowship awards were made to 43 nurses in the amount of $197,700, compared with 16 fellowships totaling $70,000 in 1959. Awards for part-time study were made to 36 nurses, the same number as in 1959.

PROFESSIONAL NURSE TRAINEESHIPS

Congress in 1959 approved legislation extending the professional nurse traineeship program for an additional 5 years until June 30, 1964. The legislation also provided for the use of traineeship funds for short-term training courses for nurses. Both 5-year extension and short-term training were recommended in August 1958 by the national conference for evaluation of the traineeship program.

In the 4 years since it was begun, the professional nurse traineeship program has been of aid in meeting the need for nurses with leadership and teaching talents. Several thousand nurses have received advanced training in administration, supervision, and teaching; the amount awarded in the traineeships was about $16.9 million.

The number of participating schools of nursing and schools of public health sponsoring advanced programs of study has risen to 87. In 1960 they received grant awards totaling more than $5 million to provide traineeships to nurses.

Policies were developed to guide the award of traineeship grants for short-term training. These intensive courses give nurses the opportunity to update their skills in nursing administration, supervision, and teaching. Before the year ended, 37 grants had been awarded to sponsors of a total of 75 short-term courses; the sponsors included the Western Interstate Commission on Higher Education, universities, general hospitals, State health departments, and State professional nursing organizations.

Medical Services for Federal Agencies

The medical care programs of the Coast Guard, the Federal Bureau of Prisons, the Maritime Administration, and the Bureau of Employees' Compensation were carried on by Public Health Service officers who are assigned to these agencies on a reimbursable basis.

UNITED STATES COAST GUARD, TREASURY DEPARTMENT

Health and medical services of the U.S. Coast Guard were given by 97 Public Health Service officers, including 47 dentists, 34 physi-

cians, and 12 nurses. Medical officers served aboard vessels engaged in operations of ocean weather station VICTOR in the Pacific and stations BRAVO and COCA in the Atlantic, and with other cruise ships as needed. Doctors and dentists served aboard the vessel making the annual Bering Sea Patrol and the icebreaker used in operation DEEP FREEZE V.

PHS officers were assigned to Washington headquarters of the Coast Guard; to the Coast Guard Academy, New London, Connecticut; to various shore stations; and to the vessel COURIER stationed in the Mediterranean broadcasting Voice of America programs.

The physicians aboard the cutter on the Bering Sea Patrol, from Seattle to Point Barrow, Alaska, and return, examined and treated Alaska Native families gathered at health clinics in the schoolhouses of some 25 villages visited. The dental officer gave treatments and X-ray examinations, performed extractions, and put in fillings.

BUREAU OF PRISONS, DEPARTMENT OF JUSTICE

For the thirtieth year, the Public Health Service provided medical, psychiatric, psychological, dental, nursing, and related health services for Federal prisoners. There were 22 hospitals and 8 infirmaries to provide care for the 23,000 prisoners.

Psychiatric services were strengthened by the assignment to operating programs of three psychiatrists who were trained at the Menninger Clinic under sponsorship of the Bureau of Prisons and the National Institute of Mental Health. This helped to keep up with the increasing demands for psychiatric diagnostic and treatment services, which are required under the provisions of the Youth Corrections Act, the New Sentencing Act, and the Act providing for the care and custody of insane persons charged with or convicted of offenses against the United States.

The staff at the reformatory for youthful offenders at Lompoc, Cal., which serves as a diagnostic center for the West Coast area, completed 87 psychiatric evaluations for Federal courts. Similar requests were made of medical staffs of several other institutions.

Medical staffs made some increase in the psychiatric services given prisoners. Treatment included use of the newer psychopharmacologic agents.

The number of narcotic addict offenders committed with long sentences has substantially increased. In 1960 the medical staff at the New York City Detention Headquarters treated 326 offenders for acute symptoms of withdrawal from drugs; most of them required hospital treatment. The medical staff at the Leavenworth penitentiary in Kansas began a special study of addict offenders to obtain information needed to develop future programs for the care of this group.

New forms of group therapy were initiated because the use of group techniques enables staffs to extend their services with increased efficiency. At the National Training School for Boys, Washington, D.C., the psychologists held regular group meetings with an entire cottage of 70 to 90 boys. This proved a valuable means of relieving emotional and personality disturbances which often occur in newly committed youths. At 7 institutions, group programs were in progress to facilitate the training of personnel in the handling of emotionally disturbed offenders. The medical officer at the Federal Correctional Institution, Tallahassee, Florida, established a group program for treatment of diabetic prisoners. Group techniques are used in teaching proper diet and hygiene and in treating the psychosomatic complications of diabetes.

At five institutions, special clinics have been set up for treatment of acne. Observation of young prisoners with scarred and blemished skin has shown indications of causal relationships between the individual's inadequate personality pattern and his skin condition.

Pioneering efforts in research continued. The staff at Ashland, Ky., has undertaken a project to determine effectiveness of group counseling in a correctional institution. The psychologist at the Medical Center for Federal Prisoners in Springfield, Mo., continued work on a multiple-approach personality inventory test. The staff at Atlanta, Ga., cooperated with Emory University in studying effects of various drugs in causing mental symptoms. As an outgrowth of this project, a large sample of the Atlanta prison population is being studied to determine the incidence of symptoms of personality and character disorders.

Requests for prisoner volunteers to participate in medical research projects increased. Cooperation in significant research continued to be a major concern of the prison medical service.

Preliminary studies were made, with the assistance of the National Institute of Mental Health, looking toward the construction of a new 600-bed psychiatric facility, which is badly needed because of overcrowding at the Medical Center in Springfield. Among construction projects completed during the year was the modernization and renovation of the hospital at the Federal Reformatory in Chillicothe, Ohio. Installation of modern dental equipment was completed in all the institutions.

The prison hospitals provided a total of 407,709 hospital relief days. Medical staffs performed 843 major operations and 5,849 minor operations. Outpatient departments gave 914,700 treatments. Physicians gave 31,498 physical examinations. The two institutions for women reported 30 births. Deaths in all institutions totaled 52.

MARITIME ADMINISTRATION, DEPARTMENT OF COMMERCE

Medical and dental care for the cadet midshipmen, faculty, and staff members of the U.S. Merchant Marine Academy, Kings Point, New York, was provided by a medical officer and two dental officers of the Public Health Service assigned to the Maritime Administration. The medical officer in charge of the Public Health Service hospital on Staten Island acted in an advisory capacity to the academy in connection with the health program.

There were 485 admissions to the academy's Patten Hospital. Emergency medical care was available at the North Shore Hospital, a general community hospital in Manhasset, 12 miles away, where cooperation of the staff was excellent.

Outpatient treatments and services, including physical examinations and inoculations of cadets, totaled 10,233. Dental visits numbered 3,304.

In Washington, the Public Health Service physician serving as Chief Medical Officer for the Maritime Administration provided professional counsel to the insurance department and to the local Office of Seamen's Services in preparation of clinical abstracts.

BUREAU OF EMPLOYEES' COMPENSATION, DEPARTMENT OF LABOR

Medical officers of the Public Health Service assigned to the Bureau of Employees' Compensation, U.S. Department of Labor, administer the medical care program for the Federal Employees' Compensation Act and other compensation acts. Medical care, including treatment for injuries and physical and vocational rehabilitation services, is provided by medical officers and facilities of the Public Health Service, by other Federal medical establishments and by private physicians. Medical services are provided for traumatic injuries and for all diseases that have work-connected causes.

Increased attention was given during 1960 to the physical and vocational rehabilitation of injured Federal employees with emphasis on aiding those having a minor physical impairment and a major mental or psychoneurotic involvement. Special services for ionizing radiation injuries, hospital staphylococcus infections, and forest fire injuries were also provided.

Bureau of State Services

The major function of this Bureau is to encourage the rapid and widespread application of health knowledge. New environmental health hazards, resulting from industrial and population growth, and the chronic diseases, which are mounting as the communicable diseases

decline, have received special emphasis in Bureau programs. This emphasis has been given without diminishing efforts in the control of those communicable diseases which continue to be constant threats to the health of the American people.

The Divisions operated by the Bureau of State Services in fiscal year 1960 were: General Health Services, Special Health Services, Public Health Nursing, Dental Public Health, International Health, Communicable Disease Center, Engineering Services, Radiological Health, Health Mobilization, and Water Supply and Pollution Control.

Division of General Health Services

The programs administered by the Division of General Health Services include the Arctic Health Research Center, the National Office of Vital Statistics, program development, public health education, State grants, and professional training and traineeships. International education and exchange activities were transferred to the Division during the year (November 1, 1959).

STATE GRANTS

For fiscal year 1960, a total of $269,475,000 was available for grants-in-aid to States and territories to conduct public health programs and to build hospitals and other health facilities. This total reflects an increase over the preceding year of $2 million divided equally between heart disease control and mental health programs. The amounts of actual payment and the purposes for which they were made are as follows:

General health services	$14, 985, 422. 00
Venereal disease special projects	[1] 2, 371, 491. 73
Tuberculosis control	3, 993, 078. 00
Mental health activities	4, 911, 490. 00
Cancer control	2, 190, 090. 00
Heart disease control	2, 904, 661. 00
Hospital and medical facilities construction	143, 432, 545. 87
Waste treatment works construction	40, 295, 227. 03
Water pollution control	[2] 2, 900, 827. 00

[1] Includes $634,086.73 supplies and services furnished in lieu of cash.
[2] Includes $242,255.00 paid to interstate agencies.

Other funds used to help strengthen State and local health programs were: $1,904,224.48 for traineeships for professional public health workers; $122,465.27 for training and demonstration projects in air pollution control; $952,497.99 for grants to schools of public health in the provision of public health training; and $225,239.66 for cancer demonstration projects, which includes $13,132.66 for personal services furnished in lieu of cash.

ARCTIC HEALTH RESEARCH CENTER

The Arctic Health Research Center is the only research unit of the United States which is concerned exclusively and comprehensively with the health problems associated with life in low temperature areas. Although the installation is small and progress is hampered by the absence of basic data long available for other parts of the world, the range of research projects is extensive. The 58 papers prepared by 18 Center scientists during the year for professional groups and journals, national and international, is indicative of substantial progress.

In epidemiological studies, emphasis is placed on field and laboratory investigations of disease outbreaks and endemic diseases in Alaska. Serology as a tool of epidemiology is being used increasingly, with assistance from the Rocky Mountain (Montana) Laboratory. Serologic evidence of tularemia has been found to be widespread among Eskimo and Indian men from all over interior Alaska. Brucellosis is known to occur among caribou-eating groups.

Also in collaboration with the Rocky Mountain Laboratory, a search has been started for Arbor viruses in Alaska. Specimens of tissue and sera from various migratory birds will be obtained and examined for antibodies against equine encephalitides and psittacosis.

Further study of the adaptation of man to cold environments has been implemented through arrangements with the University of Alaska to use electronic equipment and trained assistants in assessing degree of adaptation through training and repeated exposure to moderately cold temperatures.

Recent reports from the Center have established that hereditary methemoglobinemia is an enzymatic defect. A test for the enzymatic deficiency has also been developed that is a relatively easy and practical laboratory procedure.

In connection with cystic hydatid and alveolar hydatid diseases, all suspects are now given a battery of serologic tests through cooperative arrangements with Public Health Service hospitals in Alaska. A serological test has been worked out which promises to be specific for alveolar hydatid disease.

This year marked the first successful winter-long operation of an air lock system developed to prevent freezing of water supply lines during intervals between pumping periods. Other studies in environmental sanitation involve a windmill-driven generator to provide heat for thawing, ground water reconnaissance in 15 villages, sewage stabilization lagoons, experimental recirculating waste treatment units, and inventories of food fishes and their parasites.

NATIONAL OFFICE OF VITAL STATISTICS

National vital statistics are based on reports of births, deaths, fetal deaths, marriages, divorces, and notifiable diseases that are collected

by non-Federal registration officials. They are used to plan programs in public health, medical and demographic research, education, social welfare, business, and government.

The National Office of Vital Statistics is engaged in a continuing program to increase the completeness and accuracy of vital data and to make them more comparable by coordinating the registration and statistical practices of the States and other gathering jurisdictions. As part of this effort, the eighth national biennial meeting of the Public Health Conference on Records and Statistics was held in June 1960. The Conference is an organization of study groups on problems of interest to producers and consumers of vital statistics, inside the Public Health Service and the Department, and elsewhere.

In addition to publishing basic annual data, the National Office of Vital Statistics originates and supports research designed to improve statistical methods, increase the exactitude of vital data, deepen and extend interpretive techniques, and broaden the use of statistics as a meaningful source of insight into the measurable values of society.

As an example of its support of important research in vital statistics, the National Office in January 1960 began serial publication of new fundamental studies in birth statistics developed by the Scripps Foundation for Population Research. These studies will give a more exact and detailed picture of the fertility experience of American families based on annual birth rates for mothers by their exact years of age for first, second, and succeeding birth orders. After the initial presentation has been completed, the National Office of Vital Statistics will carry on similar researches.

In addition to giving a more precise perspective on birth rates, this approach will identify any changes that may be occurring in the most fertile ages for childbearing.

PROGRAM DEVELOPMENT

Within the Program Development Branch, there is clear evidence that research in public health practice is receiving increasing attention and support among health departments, voluntary agencies, and schools of public health. Requests for information on research grants in this field, and for liaison, workshop, and consultation services have steadily mounted during the year.

The Branch also conducts intramural studies to define community health needs and resources, health attitudes, and survey techniques. Final reports on two such studies are nearly complete: one study was carried out in a Great Plains county that lacked local health services; the other explored the nature of anxieties relating to illness.

The Branch is the focal point in the Public Health Service for the development of school health and rural and migrant health programs. A major aim is to coordinate the interests and resources of agencies

and groups involved in each activity. To this end, staff members participated in many working conferences at national, State, and local levels. A national institute was held for professors of health education in schools of education, in co-sponsorship with the National Education Association. A study was initiated on the health beliefs and behavior of East Coast migrants and the intermediaries to whom they turn for health assistance. New program aids and data were prepared for field and interagency use.

PUBLIC HEALTH EDUCATION

Through consultation, research, and training activities, the Public Health Education Branch assisted States and local health departments, units of the Public Health Service, educational institutions, and other organizations in developing health education programs that will influence health habits of the general public and special groups. Full-time health education consultants are serving in 6 of the 8 Regional Offices.

The Branch concentrated on stimulating badly needed research in health education, particularly by official and voluntary health agencies. Several regional seminars were held, designed to sensitize organizations to the importance of such research as well as to develop research competence. By the end of the fiscal year, several research projects had been initiated in the field.

TRAINING

The public health traineeship program was extended by The Congress for an additional 5 years, through June 30, 1964. During 1960, traineeships were awarded to support the graduate or specialized public health training of 622 physicians, nurses, engineers, sanitarians, dentists, health educators, and other professional personnel needed in modern public health practice. The annual appropriation for grants to accredited schools of public health for the provision of comprehensive professional training was increased to $1 million for fiscal year 1960, as against $450,000 for 1959.

INTERNATIONAL EDUCATION AND EXCHANGE BRANCH

Programs of study and observation were arranged and supervised for 640 international health students and visitors representing 89 countries during 1960.

A total of 126 training facilities were utilized including schools of public health, medicine, and nursing; clinical institutions; and 16 Public Health Service installations.

Division of Health Mobilization

The Division of Health Mobilization has responsibility for coordinating Public Health Service activities conducted under assignment

by the Office of Civil and Defense Mobilization, to ensure health services for the civilian population in the event of disaster.

The health mobilization program encompasses the preparation of national emergency plans and the development of preparedness programs covering (1) health services; (2) development, utilization, and emergency management of health manpower; (3) availability of essential health resources through such activities as stockpiling of scarce items and materials and stimulating increased commercial inventories; (4) community water supplies; (5) a program of guidance and consultation to public and private health services regarding disaster preparedness measures; and (6) individual self-help measures.

Priority is being given to the development of an Emergency Health Service to function during a national emergency. This organization will provide for the coordination of personnel of the Public Health Service, Food and Drug Administration, Office of Vocational Rehabilitation, medical personnel from the Children's Bureau, and personnel from the Veterans Administration and other Federal agencies with health capabilities.

As part of the vital function of training, three nationwide courses were given during the year in basic concepts of health mobilization for civil defense. Approximately 300 members of medical and health-related professions attended. Several thousands more received mobilization information through special briefing sessions and various education media.

Research efforts were directed to the development of (1) a scale model Civil Defense Emergency Hospital for training purposes; (2) a self-help procedures manual; (3) standardized medical treatment procedures for use with austere resources; (4) efficient methods for the emergency management of health manpower.

Region III, DHEW, was selected as a pilot area to develop and test procedures for regional and State operations. Fifty PHS reserve officers were recruited and trained to serve in their local communities to assist in the implementation of emergency operational survival plans.

Health Mobilization Program Representatives were recruited and assigned to each PHS regional office, each OCDM regional office and to nine States.

Division of Public Health Nursing

The Division of Public Health Nursing has been active this past year in four broad areas: 1) the extension of health department services to the care of the sick at home, 2) the improvement of management practice in public health nursing, 3) new developments in public

health nursing education, and 4) research in public health nursing practice.

Consultation has been given at national, State and local levels on the first three of these subjects. Plans have been developed to examine various methods of providing comprehensive nursing services and to stimulate nursing care programs in every State.

Substantial progress has been made in the improvement of nursing administrative practices and is well demonstrated by the number of agencies instituting work measurement procedures. Since 1953 when this program was begun in one large county health department, 32 local health departments have established these procedures and are utilizing the resulting data to plan and analyze their programs.

The method of documenting changes in the health status of patients has been refined and is ready for more extensive trials. Through the use of this method in one agency it was learned that the nurses provided service for 158 public health nursing problems found among the 89 patients studied. Within three months, over 70% of these problems showed definite improvement or were entirely eliminated.

The twentieth census of nurses employed for public health work in the United States and its territories has been completed. This census showed a relatively small increase, 16 percent, since 1950 in the number of nurses employed by local official and other agencies. A sharp increase of 89 percent in the number of nurses employed by boards of education was also shown.

Division of Special Health Services

The Division of Special Health Services is responsible for the programs directed toward specific health problems or particular population groups. Emphasis is placed on such major health problems as chronic illness control and the health of the aged. Division programs are: medical aspects of air pollution, accident prevention, occupational health, cancer, and control of tuberculosis, heart disease, and other chronic diseases.

CANCER CONTROL PROGRAM

Forty-nine Community Cancer Demonstration Projects were supported from funds appropriated by Congress for the first time this fiscal year. Public health agencies and nonprofit organizations and educational institutions were recipients of about $1,400,000 in project grants administered by the Cancer Control Program. The purpose of these grants is to aid in demonstrating ways in which confirmed techniques in cancer control can be applied widely in communities with a resultant reduction in the cancer death rate. Major emphasis was placed on projects involving cytologic examinations. The break-

through in cytology, as an aid in finding early cases of cancer, promises to reduce substantially the death rate from cervical cancer. Project grant funds supplement the $2,250,000 which was granted to help support State health department programs.

The Program, with assistance from the National Cancer Institute, prepared a position statement on smoking and lung cancer for the Surgeon General. The article, which concluded that "the weight of evidence at present implicates smoking as the principal etiological factor in the increased incidence of lung cancer," was published in the November 28, 1959, issue of the Journal of the American Medical Association. Two exhibits on the subject were displayed at national and regional medical meetings.

In six regional meetings, the status of national, State, and local public health efforts in cancer control was explored, and plans were made by which technical assistance can be furthered. Two regional meetings were also held with private practitioners to discuss potentials in cancer control and their ideas for applying existing knowledge.

The Program's efforts to increase cytological examinations for cervical cancer among women who are Federal beneficiaries of public medical care resulted in the examination of more than 40,000 women in 12 different projects.

HEART DISEASE CONTROL PROGRAM

The Heart Disease Control Program supports and promotes widespread use of the products of research in cardiovascular disease. It stimulates joint activities among Federal, State, and local health agencies and the health professions to reduce heart disease occurrence, disability, and death. The work of 64 medical and other professional officers assigned to States on request covers the broad spectrum of heart disease control—clinical work, applied research, and public health activities.

On October 29, 1959, Secretary Flemming announced the validation of the fluorescent antibody technique for the rapid identification of Group A beta hemolytic streptococci in human throat smears. Since that time, the Program has sponsored training in the technique for health department laboratory technicians of 27 States and Puerto Rico and has contracted with each of the participating agencies for validating data and other information. Full participation from the States and territories is expected by January 1961, thus bringing the prevention of first attacks of rheumatic fever and glomerulonephritis a step closer to reality.

Community studies were planned which will help provide a scientific basis for deciding whether the lives of moderate hypertensives can be prolonged by early treatment. A test of a heart sounds recorder for use in finding heart abnormalities among school children was

continued in Chicago, under sponsorship of three local groups and the Public Health Service. To develop a rational basis for primary prevention of coronary heart disease, the Program supported many projects seeking to identify and measure factors associated with the disease in different population groups; diet, obesity, stress, and ethnic factors are currently being investigated by epidemiological techniques. To demonstrate ways of making the latest measures in stroke rehabilitation services available to communities, the Program participated in projects with eleven State and local health departments. In these projects, knowledge is being applied to restore stroke patients to activities of daily living.

The program worked with cooperating groups to develop and test new electrical and electronic aids for physicians in diagnosing heart disease. Means by which electronic computers and observer instruments can be related are being studied. The long-range goal is to make it possible for each physician to have, at his patient's bedside, the equivalent of diagnostic services that are now available only in large medical centers.

CHRONIC DISEASE CONTROL PROGRAM

Health departments in increasing numbers are being assisted by the Chronic Disease Program in developing effective measures for early detection and prevention of long-term disability and improvement of care for the chronically ill and the aged.

Program Services

Continuous diabetes detection programs are gaining wider acceptance by small health departments and clinics with low budgets and small volume screening goals. This is the result of practical procedures worked out and recommended by the Program in the use of inexpensive, hand-operated blood testing equipment developed a year ago.

Mobile testing equipment is being used in multiple screening programs for detecting diabetes, glaucoma, brucellosis, obesity, and heart abnormalities. These programs are bringing detection services to widely scattered rural population centers.

Strike Back at Arthritis, a booklet produced in collaboration with the Arthritis and Rheumatism Foundation, provides physicians and health agencies with a tool for preventing or minimizing the crippling effects of the disease. A similar Public Health Service booklet, produced two years ago, dealing with the crippling results of stroke is widely used by medical and ancillary professional groups in professional training and in disability control programs.

Programs to improve care given in nursing homes have been enhanced by a joint agreement with the American Red Cross and Amer-

ican Nursing Home Association to use authorized Red Cross Nurse instructors to train nursing home aides. The Red Cross has already trained 3,000 nursing home aides in 33 States and the District of Columbia in care techniques developed by the Public Health Service.

An inventory of existing home care programs in the United States, being made in conjunction with the American Medical Association, will be valuable to communities intending to or carrying out such programs.

Operational Research

Validation of diabetes detection tests continues. Screening of 22,000 expectant mothers during a six-year study of the effects of abnormal carbohydrate metabolism in pregnancy has been completed. Preliminary data indicate that pregnant women with abnormal glucose tolerance are more likely to develop diabetes, and that there is a greater than expected incidence of diabetes among their children.

Screening and diagnostic tests for glaucoma are being evaluated in collaborative studies under way at four universities. These studies, supported by 5-year grants from the Public Health Service, will help standardize early detection procedures.

TUBERCULOSIS CONTROL PROGRAM

The most significant event for the Tuberculosis Program in fiscal 1960 was the Arden House Conference on Tuberculosis, held November 29 to December 2, 1960, and co-sponsored with the National Tuberculosis Association. The Conference was called to discuss ways of putting existing control techniques to most effective use in speeding the consistent decline of tuberculosis as a major hazard to the public health. The 18 conferees, men and women of national eminence in public health and related fields, made 12 recommendations for the improvement of tuberculosis control in the United States.

The major recommendation was for the widespread application of chemotherapy as a public health measure. This means aggressive effort to treat—with proper combinations of drugs over a sufficient period of time—all persons with tuberculosis who are sources of infection in the community. In many communities, treatment of tuberculosis patients is obstructed by insufficient or poorly utilized resources. Although there may be enough hospital beds, outpatient facilities as well as coordinated hospital and outpatient care are often inadequate. There is a shortage of physicians trained in treating tuberculosis, and frequently the services of those available are not advantageously utilized. Laboratory and X-ray services in many areas need to be expanded. In some areas, many clinic patients must

pay for drugs—a requirement that too often either inhibits their seeking care or interrupts its course, to the patient's damage.

The major recommendation, which indicates community action against these problems, together with the other 11 recommendations are now guides for the Tuberculosis Program's continuing technical assistance to the States, and have been the subject of State and Regional conferences.

In research, the Program has reported on findings in the fields of atypical mycobacterial infections, tuberculin sensitivity, and chemotherapy evaluation. A concentrated effort was made to call to the attention of the medical profession the results of a Program study which demonstrated that the drug, isoniazid, will prevent practically all the serious extrapulmonary complications of primary tuberculosis in infants and young children. Research is also continuing on other prophylactic applications of this drug.

OCCUPATIONAL HEALTH PROGRAM

In protecting the health of American workers, Occupational Health Program personnel studied numerous operations, ranging from celery growing to uranium mining. Through combined on-the-site studies and laboratory research, Program dermatologists pinpointed the cause of a troublesome skin disease among celery workers. The uranium mining study, now in its 11th year, involves health hazards with a long latent period. Although lung cancer findings are not yet conclusive, a vigorous educational program is underway which may ultimately result in the adoption of recommended measures to control exposures to radiation in the mines. Other continuing major studies included the effects of industrial noise on hearing loss and silicosis among metal miners.

In addition, extensive laboratory research probed into how ever-multiplying toxic agents and conditions affect the worker's health, how their effects may be detected early before irreversible damage occurs, and how they may be effectively controlled.

It has been shown that the tolerance developed by the lung tissue of animals repeatedly exposed to ozone is increased by prior exposure to lower doses of certain other irritating substances such as nitrogen peroxide, thiols, and oil mists.

Also of significance are animal studies which indicate that a high-salt diet may reduce nervous system injury from carbon disulfide, a chemical used largely in the manufacture of viscose rayon and cellophane.

Developments in environmental evaluation techniques include comprehensive experimentation with an electronic dust counter, direct reading devices for toxic gases, and ion exchange separation proce-

dures. These devices are being utilized in habitability studies aboard nuclear submarines and in industrial hygiene investigations.

Consultation was provided to official agencies, industry, and labor in solving baffling cases of worker illness and in developing and strengthening occupational health programs. Training activities to increase technical competence in official agencies were intensified. In addition, a prototype training course in occupational health for local health officers was presented to indicate how health department staffs can contribute to this field of health.

The Occupational Health Program was designated the national center responsible for obtaining abstracts of United States literature in the occupational health field as part of a new world-wide abstracting service established by the International Labor Organization.

AIR POLLUTION MEDICAL PROGRAM

In furtherance of its three-fold objective—to determine the adverse effects of air pollution on human health, to develop methods of minimizing such effects, and to help health authorities in applying these findings—the Program benefited during FY-1960 by its 1959 reorganization. Two new sections, Laboratory Investigations and Community Investigations, and several specialized research units concerned with auto exhaust, eye irritation, and pulmonary function were engaged in the conduct or direction of research activities, which now utilize about 95 percent of the Program's resources and staff.

The number of research projects under way has risen from 7 in 1956 to 44, as of July 1, 1960, and the projects completed from zero to 13. In addition the Program maintains technical cognizance over an additional 30 research grant projects.

Highlights of the Year's Progress

FY-1960 marked the first published results of long-term studies which combined air measurements and other engineering techniques with statistical, epidemiological, and animal laboratory studies . . . also the first published results of studies of the relationship of specific air pollutants to a specific disease.

The Program rendered assistance to the State of California in setting up the first legal standards for motor vehicle exhaust fumes and for air pollutants in general. It also intensified sharply its research on the chronic biologic effects of long-term exposures of plants, animals, and human beings to air pollution containing irradiated auto exhaust components.

The Program's progress was accomplished in close collaboration with the Air Pollution Engineering Program. By year's end, plans were well advanced for the integration of these two Programs into a New Air Pollution Division.

ACCIDENT PREVENTION PROGRAM

The Accident Prevention Program continued to identify major problem areas through research and to develop programs of prevention.

Program Activities

A research project to determine the relationship of health and physical status of drivers to motor vehicle accident experience was inaugurated in cooperation with the State of Connecticut. During the next year approximately 10,000 drivers in this State will receive multiple screening examinations in a mobile unit. The screening results and diagnosis of each driver will be related to his automobile accident experience since 1952 and his traffic violation experience since 1959.

An intensive nationwide effort was undertaken to trace and locate 2,000 small house trailers equipped with a gas heater produced by one manufacturer which was found to be defective. Every means of mass communication was used to warn trailer owners about the heater and through the combined efforts of State and local public health departments and the manufacturer most of the trailers and heaters were located and the owners warned of the hazard. A total of sixteen deaths from carbon monoxide poisoning occurred as a result of the use of this heater.

Utilizing the information obtained from the epidemiologic study of fires and explosions in Mississippi County, Arkansas, a prevention program was developed. The most frequent causes of fires were found to be defective electrical equipment or wiring and defective petroleum heating or cooking stoves.

Preliminary tabulations indicate that accident injury cases treated in physicians' offices and hospitals in the five-county area surrounding Harrisonburg, Virginia, have decreased significantly since the demonstration project began in 1958. This project was developed to demonstrate the effect of a broad, intensive educational program upon the incidence of accidental injuries in a community.

In cooperation with the American Medical Association and the National Safety Council a nationwide campaign to encourage the installation and use of automobile seat belts is being conducted. Seat belt manufacturers report a 300-percent increase in sales over last year.

State and Local Developments

An increasing public health interest in accident prevention throughout the country is apparent. There are now 365 local poison control centers in 52 of the States and territories. Twenty-eight individuals are now working full time on various accident prevention activities in State or local public health agencies in 17 different States.

Division of Radiological Health

In its second year, the Division of Radiological Health made good progress in all phases of its primary mission, which is to help develop a nationwide Federal-State structure of radiological health programs and facilities commensurate with the needs of the general population. Underlying that mission is the rapid and continuing expansion in usage of various forms of ionizing radiation sources in the healing arts, in vitally important research, in industry, agriculture and transportation, and in national defense.

Broad public and official support of the Division's mission and program was evidenced by the increased funds authorized by the Congress—$622,688 in fiscal year 1959; $2,844,900 in fiscal year 1960—and by the cooperation received from other Federal agencies, State governments, educational, research and professional organizations, and the public press.

Of particular significance were these closely related developments: creation of the Federal Radiation Council by Presidential Executive Order with a mandate to advise the President and provide guidance to Federal agencies; a presidential order that the Department of Health, Education, and Welfare intensify its radiological health efforts and assume primary responsibility within the Executive Department for collation, analysis, and interpretation of environmental radiation levels; the naming of the Secretary of the Department as the first Chairman of the Federal Radiation Council; and the delegation by the Secretary to the Public Health Service of the principal elements of these efforts and responsibilities.

Attainment of a coordinated nationwide environmental radiation surveillance network neared reality in fiscal year 1960, aided by the opening of two new regional laboratories at Montgomery, Alabama, and Las Vegas, Nevada, and the expansion of the milk sampling network from 12 to 59 stations. Construction was begun on a third laboratory, at Rockville, Maryland, to specialize in X-ray protection studies and training. When fully operational, these new facilities will greatly enhance research and training activities as well as surveillance. The Service's Sanitary Engineering Center at Cincinnati continued as the principal resource for research in methodology for the radiochemical analysis of air, water, milk and food samples, and for short-term technical training.

The ability of the Division to render technical assistance to State health agencies is steadily increasing. During the year, full-time radiological health specialists were on assignment to 4 regional offices and 13 States; inventories of 40 State programs were completed; and numerous medical or dental X-ray surveys initiated—all these activi-

ties being pointed toward development of State capabilities in radiological health.

Significant progress was made toward closing the gap in our knowledge of the effects on specific population groups of chronic, low-level radiation exposure from various sources and in various localities. The bulk of the Division's rapidly expanding research program—both direct and supported—is designed for this purpose, 17 additional studies having been initiated during the year.

Implementing the presidential directive, a comprehensive data collation, analysis, and publication program was begun, and numerous other activities either initiated or expanded. These include: a program of public education and information: training in radiological health techniques of 961 personnel from public health and allied professions; and designation of 49 PHS personnel to receive specialized university instruction. Technical advice and liaison was provided to Federal agencies, universities, and professional and industrial groups with an interest in radiological health.

Division of Engineering Services

The Division of Sanitary Engineering Services provides training, technical assistance and consultation to State and local health departments, industry and other groups on the engineering aspects of environmental health problems. Division programs are: air pollution engineering, milk and food sanitation, general engineering, and engineering resources and training. The research center for these programs is the Robert A. Taft Sanitary Engineering Center in Cincinnati. This Center also carries out research for the Divisions of Radiological Health and Water Supply and Pollution Control.

ROBERT A. TAFT SANITARY ENGINEERING CENTER

The Robert A. Taft Sanitary Engineering Center combines in a single installation research, training, and technical assistance on engineering aspects of environmental public health problems. The Center serves the environmental health divisions of the Public Health Service through its facilities for research in air pollution, milk and food sanitation, radiological health, and water supply and pollution control. Its research staffs also provide technical consultation and assistance to other Federal and State governmental units and industrial groups. A special training program conducts professional level intensive short-term courses for scientists, engineers, and public health workers from State agencies, industry, universities, and other Federal agencies.

ENGINEERING RESOURCES AND TRAINING

The development, training, and improved professional status of sanitary engineers both in and out of the Public Health Service

was fostered during the year through the medium of traineeships, in-service training, research grants and fellowships, research training grants, and cooperation with universities, professional, and technical organizations.

The 1960 roster of sanitary engineers was begun in cooperation with the National Science Foundation. Arrangements for a survey of future manpower needs in sanitary engineering are underway.

GENERAL ENGINEERING PROGRAM

Special Citations and Letters of Commendation for excellence in sanitation were awarded to 9 railroads and 24 vessel companies. Two of the vessel companies won Special Citations for the fifth consecutive year. A higher level of surveillance was reflected by a 10-percent increase in operational inspections on railroads and a 15-percent increase on vessels engaged in interstate travel. The program was expanded to handle sanitation problems related to food service and to servicing areas for jet aircraft on commercial airlines. More than 200 new aircraft and vessels were issued Certificates of Sanitary Construction. An interdepartmental Committee on Sewage and Waste Disposal from Vessels was formed to investigate and recommend treatment and disposal methods. Initial steps were taken to formulate standards on vessel sanitation for the World Health Organization similar to those now in use on airport sanitation.

Final revisions to technical manuals dealing with sewage disposal, school sanitation, and mobile home parks were prepared for publication. In cooperation with the American Public Works Association, work began on a new supplement to the refuse disposal practices manual. Joint activities with industry and other agencies led to the preparation of a supplement to the "Handbook on Sanitation of Airlines." Final drafts of the revised National Plumbing Code were submitted for committee review. Field testing of a new guide for evaluation of community environmental health facilities and services was conducted in six metropolitan areas.

Three research projects in water supply were begun including one to investigate the relationships of turbidity to incidence of infectious hepatitis. A comprehensive nation-wide inventory of interstate carrier water supplies was completed. A program for surveying approximately one-third of these supplies annually was established. The "List of Accepted Equipment" was increased by 1,373 new items, some 324 of which required modification prior to acceptance.

MILK AND FOOD SANITATION PROGRAM

Continued growth, through increasing State and local participation in the State-Public Health Service voluntary program for the certification of interstate milk shippers, was shown during the year by

the certification of 80 additional shippers, making a total of 700 in 36 States, receiving milk supplies from more than 100,000 dairy farms. In shellfish control, approximately 1,400 shippers were certified. Improvements in the certification program were effected through meetings and seminars held in shellfish producing areas. All of the coastal States, except Alaska, have currently endorsed State-Public Health Service shellfish programs. Close operating contacts are being maintained with Canadian authorities under the terms of a bilateral agreement.

Research at the Sanitary Engineering Center shows that the strontium-90 and cesium-137 levels in milk decreased substantially since the cessation of nuclear weapons testing late in 1958. Short half-lived fallout is no longer detectable in milk. More than 50 State agencies are cooperating in a national program for standardization of milk laboratory procedures. Recently developed assay procedures for shellfish poisons have been evaluated, standardized, and applied to the public health control of shellfish growing areas. Improved methods for the bacteriological examination of shellfish have been developed.

The ordinance and code part of a proposed new Food Service Manual to replace the 1943 Ordinance and Code Regulating Eating and Drinking Establishments is expected to be published by July 1961. Participation with national public health and sanitation organizations and industry in the development of sanitary standards for milk and food equipment resulted in the completion of 12 such standards. More than 130 seminars and training courses attended by over 6,000 individuals were sponsored or participated in by the Program.

AIR POLLUTION ENGINEERING PROGRAM

During fiscal year 1960, the Ad Hoc Committee on National Goals in Air Pollution Research—established by the Program at Secretary Flemming's request after the National Conference on Air Pollution in late 1958—completed its intensive study in preparation for a final report. This report recommends desirable national levels of support during the next 10 years for air pollution research and delineates the proper research responsibilities, and suggested expenditures, of the Federal Government, States, communities, and industry.

Research continued to dominate Program activities, with major emphasis on the auto exhaust problem; the research facility at the Sanitary Engineering Center—one of the most comprehensive of its kind in the country—has begun to produce findings of real significance: on the relationships among fuel composition, engine operating cycles, and exhaust gas composition; and on biological effects (in cooperation with the Air Pollution Medical Program).

Other Highlights of the Year's Progress

In collaboration with the Weather Bureau, the Program worked out an experimental plan for forecasting air pollution potential in the eastern half of the United States. Extensive studies were initiated on the possible hazard to public health from air pollution as a result of increasing the content of tetraethyl and tetramethyl lead in motor fuel. The National Air Sampling Network was further expanded and a good start made, with improved instruments, on sampling of gaseous air pollutants.

Late in fiscal year 1960, P.L. 86–493 was passed. It provides for intensive PHS study (and report to Congress) on motor vehicle exhausts. This will enlarge the scope of the Program's work.

Division of Water Supply and Pollution Control

The increasing importance of water to an expanding population and industry focused national attention on water quality management. The growing stature of the Federal water pollution program, raised in 1959 to Divisional status, is reflected in expanding activities and increased services to the States.

To determine reliable pollution trends, the National Water Quality Network of stream sampling stations was enlarged to 75. Continuing data have been collected, analyzed and published on water and waste treatment facilities and needs. Economic evaluations of water pollution continue.

Public Health Service research at the Sanitary Engineering Center and through grants to universities has been intensified, especially in water and waste treatment and water quality effects of pesticides, radioactive and petro-chemical wastes.

An intensive study in the Arkansas-Red River Basin to develop plans to control brine pollution is now in its fourth year and is reaching usable conclusions. Groundwork has been laid for an inventory of Federal establishments to determine the extent of and remedial measures for pollution coming from these installations.

Incentive grants under P.L. 660 for municipal sewage treatment plant construction reached $180 million at the end of fiscal year 1960. Of 2,156 projects approved under the grant authority, 1,031 were completed and 682 under construction. Over 90 percent of the grant funds has gone to communities of under 100,000 population.

Continued assistance to States through the enforcement provision of P.L. 660 is resulting in measurable benefits. Thirteen actions, affecting some 4,000 miles of interstate streams, have been taken. Continuing files are maintained on 2,000 problem areas. Involved in fis-

cal year 1960 actions were: the Missouri River, St. Joseph and Kansas City municipal areas involving the States of Kansas and Missouri; the Animas River, Colorado-New Mexico; the Columbia, Washington-Oregon; Bear River, Idaho-Wyoming-Utah; North Fork of the Holston River, Tennessee-Virginia. Also the largest comprehensive water pollution cleanup yet undertaken was launched in the Colorado River Basin, involving seven States.

Determination of water supply requirements in conjunction with U.S. Army Corps of Engineer impoundments continued. A water use survey of the Delaware River Basin was concluded. Special reports were compiled for the Senate Select Committee on National Water Resources.

Communicable Disease Center

The Communicable Disease Center, Atlanta, Ga., is the national resource for the prevention and control of infectious diseases. It conducts epidemiological, field, and laboratory studies and provides various types of technical assistance to the States. Because infectious diseases are a universal problem, many are the target of international health efforts. CDC cooperates with the World Health Organization through representation on expert advisory panels and committees and as a laboratory diagnostic and study center. It also provides technical support and personnel as needed for the health programs of our own country's International Cooperation Administration.

At year's end, CDC took possession of its new headquarters facilities adjacent to the Emory University campus in suburban Atlanta. The Center will continue to study certain diseases at strategically placed field stations throughout the country.

EPIDEMIC AND DISASTER AID

CDC gave epidemic aid in 41 instances, most commonly in connection with outbreaks of infectious hepatitis, poliomyelitis, staphylococcal infections, aseptic meningitis, encephalitis, and acute gastroenteritis. It also conducted several hundred field investigations of epidemic outbreaks and individual case problems involving a wide variety of diseases. Disaster aid was furnished to 5 States.

REPRESENTATIVE FIELD AND LABORATORY STUDIES

Venereal diseases.—The incidence of venereal diseases continued to mount throughout the country during the year, with infectious syphilis and gonorrhea up 52.7 percent and 4 percent respectively over the 1959 figures. Eleven States and the District of Columbia recorded increases ranging from 60 percent to 325 percent for infectious syphilis.

Slightly more than one-half of the reported 369,554 cases of venereal disease were found in 51 of the largest cities.

A Public Advisory Committee on Venereal Disease Control was established to study the current situation and suggest ways of improving the technology and administrative pattern of VD control.

CDC supported epidemiologic and casefinding services in 43 States and Territories through 85 project grants totalling $2,619,309 of Federal funds and the assignment of 226 medical and paramedical personnel to health departments. Laboratory personnel visited 19 State, 3 PHS, and 5 Latin American laboratories and held syphilis serology workshops in 13 States for 489 participants from 261 laboratories. All States and Territories and 5 foreign countries participated in the serologic evaluation study.

Excellent agreement of results was obtained in a large-scale comparison of the Rapid Reagin diagnostic test with unheated serum and the VDRL slide test. The Rapid Reagin test is more economical of time, space, and personnel, and the New York City laboratory plans to use it in screening tests, following reactives with confirmatory tests.

For the first time, a rapid, cheap, effective method is within reach for detecting gonorrhea in the female. The delayed fluorescent antibody method gives results equal to those of the best culture methods, both in the infected and carrier states.

There is no evidence of increased sensitization of syphilitic patients to penicillin administered in conventional dosages. This drug appears to be less bactericidal to gonococci than formerly thought, and other antibiotics are being tried *in vitro*.

Poliomyelitis and aseptic meningitis.—Polio epidemics occurred characteristically in urban slum areas among unvaccinated preschool children, although one, in Seattle, Wash., affected unvaccinated adult males also. The national total of 5,200 cases of polio with 60-day residual paralysis was 50 percent above 1958 and double the 1957 figures. In Massachusetts and several other areas, Type III outbreaks were disturbing, but the most severe epidemic, in Des Moines, Iowa, was caused by Type I poliovirus.

A study was started on the susceptibility of newborn infants to living, attenuated poliovirus strains which might confer immunity to the natural, virulent strains. Clear differentiation of polio and aseptic meningitis caused by ECHO and Coxsackie viruses is essential to measuring the effectiveness of polio control programs. A surveillance program was undertaken in several large cities to record variations in incidence of the polio and other enteroviruses and to evaluate the long-range effect of living poliovirus vaccines.

Infectious hepatitis.—Infectious hepatitis, a disease that recurs in long-term cycles, increased sharply, with epidemics reported and studied in all parts of the country. Even higher incidence is anticipated for the coming year.

Respiratory infections.—Asian influenza epidemics reappeared with sharp increases in influenza-pneumonia mortality and total mortality particularly among older age groups in all geographic areas. A national influenza program is being developed to encourage annual influenza immunization of older persons and those with chronic illness.

In the second year of study of respiratory illnesses among CDC laboratory personnel and their dependents, the *Myxovirus parainfluenza* viruses were the most important cause of illness both in adults and children. Previously these agents have been associated primarily with respiratory diseases in children. Their contribution to disease in the population at large is still uncertain.

Hospital-acquired infections.—Requests from States for epidemic aid, consultation, phage typing, and diagnostic reagents, together with observations made during research studies in hospitals, testify to the continued importance of the problem of staphylococcal and other hospital-acquired infections.

CDC is investigating the role of environmental factors in the spread of these infections and the efficacy of germicides. A comprehensive monograph on microbiological air sampling was published, covering a decade's work by both the Communicable Disease Center and the Army Chemical Corps.

Laboratory studies have shown that *in vitro* conversion of phage types occurs among certain epidemic strains of staphylococci. Long-term epidemiologic evidence seems to support the hypothesis that these changes also occur in nature as a result of action of phages within the strains themselves.

Encephalitis (arthropod-borne).—In an outbreak of eastern encephalitis in southeastern New Jersey, 21 of 33 human cases died. The causative virus was isolated from birds, horses, human cases, and, for the first time, from the mosquito, *Culex restuans.* CDC continued its studies on the ecology of arthropod-borne viruses throughout the country.

Brucellosis.—An outbreak of 117 cases of brucellosis among employees of a swine slaughtering plant in Iowa was the largest epidemic of this disease recognized and investigated in a packing plant in this country. For the first time, *Brucella* organisms were isolated from the air; contact is generally considered to be the mode of transmission. Recent trends indicate that brucellosis is becoming a problem mainly among swine packing-plant workers.

Leptospirosis.—The largest outbreak of leptospirosis recognized so far involved more than 80 cases in Iowa. Exposure apparently occurred in swimming holes near a river. The causative organism isolated from human cases was also found to be prevalent in cattle that had access to these streams.

VECTOR CONTROL

Thirty-four community vector control programs in Oklahoma and 17 in adjoining States have developed as satellites to the original demonstration project begun by CDC in Oklahoma. A similar intrastate expansion is occurring around a demonstration in Pennsylvania.

The discovery last year that vapors from closed bags of DDVP could kill malaria mosquitoes in ventilated huts stimulated studies on the residual fumigation technique. A formulation of DDVP in an inert carrier has been developed which will release insect-killing vapors from a small cartridge for a period up to three months.

A relatively low-cost rubber orifice disk has been developed which reduces both the amount of insecticides needed and the exposure of spraymen to compounds used in the control of disease-carrying insects.

Two critically ill patients with parathion poisoning recovered within 30 minutes after a new experimental chemical, 2–PAM, was administered.

LABORATORY SERVICES AND NEW TECHNIQUES

More than 64,000 specimens were referred to the CDC laboratories by State and local health departments, Federal agencies, research groups, and foreign countries.

The Center produced and distributed, in addition to the amounts required in its own programs, some 50,000 ml. of diagnostic reagents, 905 shipment-lots of tissue culture media, 4 mammalian cell-line seed cultures, and other diagnostic materials.

The fluorescent antibody (FA) technique, which reduces the time and effort required for specific identification of disease organisms, successfully passed field tests for gonorrhea, streptococcal disease, and rabies. It is now ready for practical application on the *Brucella* organisms and work is proceeding on other potential BW agents. It appears to be as sensitive as conventional methods for the detection of enteropathogenic coli. Cells of the fungus, *Histoplasma capsulatum*, have been detected in tissue smears of experimentally infected animals and in soil samples from this country, Tanganyika, and Venezuela. The soil tests were accomplished in a few hours and the results were confirmed by mouse technique—a method requiring 3 months. Studies are underway to determine the permissible ranges of variation in technical application of the FA techniques and to discover and define optimal conditions for carrying out each important

step, so that the method can be readied for routine application to problems in public health laboratories generally. Development of a chromatographic adsorption technique for the purification of fluorescein-labeled globulin permits staining of the plague organism in impression smears of body fluids and tissues of infected laboratory and wild rodents, without nonspecific staining.

INTERNATIONAL COOPERATION

Studies have been undertaken in collaboration with the World Health Organization on the standardization and evaluation of serologic and immunologic methods for the diagnosis of schistosomiasis. In Puerto Rico, results obtained with the skin test were comparable to those obtained by stool examination.

CDC continued to operate as the International Influenza Center for the Americas. During the year, 86 influenza virus strains were submitted to the Center for antigenic analysis.

At the request of the Pan American Sanitary Bureau, a team from CDC studied the epidemiologic, entomologic, and operational data on malaria in El Salvador, Nicaragua, and Costa Rica.

TRAINING

More than 3,700 persons from State and local health departments, Federal agencies, academic institutions, industry, and numerous organizations received organized training from CDC in various aspects of communicable disease control. An additional 229 persons from other countries also received training.

Division of Dental Public Health

The Nation's dental health problem was attacked along a broad front through studies of fluoridation, dental care for the chronically ill and aged, utilization of dental assistants, defluoridation of water to prevent fluorosis, intraoral cytological testing for the early detection of oral cancer, and the nature and cause of periodontal disease.

The Division assisted health departments in promoting fluoridation, administering dental health programs, planning and conducting field studies, and recruiting personnel.

FLUORIDATION

About one out of every three persons using central water supplies, or 37.1 million in 1,922 communities, was drinking water containing fluoride added through controlled fluoridation. In fiscal year 1959, 35.6 million persons in 1,814 places drank fluoridated water. In addition, about 7 million persons in 1,903 communities used water containing enough fluoride naturally to reduce tooth decay.

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STUDIES

Dental examinations at Bartlett, Texas, and Britton, South Dakota, where the water has been defluoridated for about 8 years, showed defluoridation was effective in preventing fluorosis.

A contract was negotiated for designing and testing radically new defluoridation equipment which is expected to reduce costs and prevent cyclic fluctuation of fluoride levels.

A study was begun to determine some of the factors influencing community acceptance or rejection of water fluoridation.

Another study was begun in Minnesota to determine the value of intraoral cytological testing for the early detection of oral cancer. Of major interest are the usefulness of the intraoral smear as an earlier indication of cases for biopsy, correlation of biopsy and smear findings, and the acceptance and use of this technique by the dental and medical professions.

As a part of the Kansas City study of dental care for institutionalized homebound chronically ill patients, begun last year, a program was instituted for training senior dental and dental hygiene students in caring for the chronically ill.

Another study was begun on the nature and cause of periodontal disease.

DEMONSTRATIONS

A pilot demonstration of the utilization of trained chairside dental assistants was begun in Knoxville, Tennessee.

Two fluoridation demonstrations were initiated, one in Will County, Illinois, the other in Allegheny County, Pennsylvania. These projects will demonstrate the operation and servicing of fluoride feeders designed for individual homes. Half will be in rural homes and half in Suburban areas.

Division of International Health

The Public Health Service, through the Division of International Health, represents the United States in international health organizations; provides program and policy guidance to the Department of State on international health matters; and provides technical aid to the International Cooperation Administration and its overseas missions.

Until November 1, 1959, when the Division was transferred from the Bureau of State Services to the Office of the Surgeon General, it was responsible for planning and supervising training programs in the U.S. for foreign health and medical personnel. With the reorganization, the training function was transferred to the Division of General Health Services in the Bureau of State Services.

During the year, Service personnel served on official U.S. delegations to major international meetings, including conferences of the World Health Organization, the Pan American Health Organization, and the South Pacific Commission. The Surgeon General was Chairman of the U.S. Delegation to the 13th World Health Assembly in Geneva in May. The Division assisted the State Department in developing official U.S. policy on questions which came before these and other international organizations with health-related programs, including United Nations Children's Fund, Food and Agriculture Organization, and International Labor Organization.

Public Health Service personnel served international organizations in their personal technical capacities during the year, either as members of WHO expert panels or as short-term consultants to WHO and PAHO. Service officers also participated in international nongovernmental meetings in their fields of specialty. About 130 Service officers were assigned to International Coooperation Administration overseas missions during the year.

The Division played an increasingly active role in the U.S.-U.S.S.R. medical exchange program, arranging for U.S. missions in pathology and radiobiology to go to the Soviet Union and for Soviet missions in microbiology, radiobiology, and metabolic diseases to visit the U.S. In November a new exchange agreement was signed, providing for direct negotiation between the Public Health Service and the Soviet Ministry of Health for future exchanges. (Medical exchanges under a previous agreement were negotiated by the Department of State with the assistance of the Public Health Service.) The new 2-year agreement provides for exchange of 5 technical missions, exchange of 20 individual scientists for periods of from 3 months to a year and joint sponsorship of 3 scientific conferences: in poliomyelitis, heart diseases, and cancer. Two of these conferences were held during the year under review: A conference on polio was held in Moscow, May 12–16, with 13 U.S. and 15 Soviet scientists participating, and a conference on heart diseases was held in Washington, D.C., May 9–18, with 4 Russian and 9 U.S. scientists participating.

The Division completed studies of health conditions and resources in Mexico, Nigeria, Republic of the Congo (formerly Belgian Congo), Morocco, and Colombia, bringing to 21 the number of studies completed in the International Epidemiological Series.

Table 1.—*Statement of appropriations, authorizations, and obligations, fiscal year 1960*

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Total	$840,853		$34,349	$129,496	$1,013,640	$857,256
Appropriations, PHS	840,734		34,349	129,322	1,004,405	848,993
Control of tuberculosis	6,452		20		6,472	6,444
Control of venereal diseases	5,400				5,400	5,337
Assistance to states, general	24,497		405		24,902	24,728
Communicable disease activities	8,158		548		8,706	8,683
Sanitary engineering activities	15,720		1,192		16,912	16,746
Foreign quarantine activities	4,686		306		4,992	4,968
Construction, mental health facilities, Territory of Alaska				6,500	6,500	6,500
Equipment, communicable disease center				792	792	792
Hospitals and medical care	51,600		5,750		57,350	57,156
Salaries and expenses, hospital construction services	1,650				1,650	1,612
Indian health activities	45,245		739	[1] 455	46,439	45,686
Construction of Indian health facilities	4,946			[2] 3,207	8,153	4,364
Grants for hospital construction (1960–61)	186,200				186,200	59,140
Grants for hospital construction (1959–60)				95,726	95,726	95,313
General research and services, National Institutes of Health	45,994				45,994	45,789
National Cancer Institute	91,257		1		91,258	85,031
Mental health activities	68,090		40		68,130	67,583
National Heart Institute	62,237		7		62,244	61,572
Dental health activities	10,019		3		10,022	9,971
Arthritis and metabolic disease activities	46,862		438		47,300	46,620
Allergy and infectious disease activities	34,054		8		34,062	34,034
Neurology and blindness activities	41,487		1		41,488	40,249
Operations, National Library of Medicine	1,566		12		1,578	1,549
Research facilities construction and site acquisition	150				150	147
Construction of library facilities				2,241	2,241	314
Grants for waste treatment works construction (1960–61)	45,000				45,000	39,723
Grants for waste treatment works construction (1959–60)	1,816			8,442	10,258	8,442
Grants for waste treatment works construction (1957–60)				657	657	657
Construction of animal quarters, Hamilton, Montana	150				150	150
Construction of Biologics Standards Laboratory Building			74	54	128	92
Construction of surgical facilities				308	308	100
Construction of Dental Research Building				1,193	1,193	887
Grants for construction of health research facilities	30,000			40	30,040	30,039
Construction of animal quarters				154	154	
General office building				9,553	9,553	7,332
Retired pay of commissioned officers	[3] 1,682				1,682	1,682
Salaries and expenses	5,816		55		5,871	5,736
National Institutes of Health Management Fund			24,679		24,679	24,476
Consolidated Working Fund, HEW, Grants for Research			71		71	6
Appropriations, special project funds made available by other agencies					8,942	8,055
Salaries and expenses, Bureau of Prisons, (transfer to HEW, PHS)					2,071	2,070
American Sections, International Commissions, State, (transfer to HEW, PHS)					74	73

[1] Liquidation of contract authorization obligated in fiscal year 1959.
[2] Does not include amount of $159,412.60 which was reappropriated.
[3] Does not include $43,147.75 to be deappropriated.

Table 1.—*Statement of appropriations, authorizations, and obligations, fiscal year 1960*—Continued

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Salaries and expenses, Office of Civil and Defense Mobilization (transfer to HEW, PHS)					$179	$179
Research and development, Office of Civil and Defense Mobilization (transfer to HEW, PHS)					236	147
Farm labor supply revolving fund, Bureau of Employment Security, (transfer to HEW, PHS)					585	549
General Administrative expenses, Section 411, Mutual Security Act, executive, (transfer to HEW)					35	33
Technical cooperation, general executive, (transfer to HEW) (annual)					1,964	1,951
Technical cooperation, general executive, (transfer to HEW) (no year)					2,296	1,586
Defense support, general executive, (transfer to HEW)					206	184
Special assistance, general, executive, (transfer to HEW)					246	233
President's Contingency Fund, executive, (transfer to HEW)					27	27
Salaries and expenses, Office of Civil and Defense Mobilization, (transfer to HEW, Office of Secretary)					1,023	1,023
Gift funds donated for general and specific purposes	$118.7			$174.0	292.7	208.3
Patients' benefit fund, Public Health Service hospitals	39.0			20.5	59.5	35.3
Public Health Service unconditional gift fund	28.7			57.8	86.5	74.6
Special Statistical Work, Vital Statistics	10.0				10.0	0.5
Public Health Service conditional gift fund	41.0			95.7	136.7	97.9

Table 2.—*Commissioned officers and civil service personnel as of June 30, 1960*

	Full-time						Part-time			
			Civil Service							
	Grand total full time	Commissioned officers	Total	Washington metropolitan area	States	Outside United States	Total part time	When actually employed [1]	Without compensation	Other
Public Health Service	26,430	[2] 3,816	22,614	9,757	12,707	150	1,337	607	217	513
Office of the Surgeon General	801	182	619	579	40		19	6	10	3
Immediate Office of the Surgeon General	31	8	23	23						
Division of Finance	141		141	139	2					
Division of Administrative Services	131	6	125	90	35		1	1		
Division of Personnel	156	17	139	139			3			3
Division of Public Health Methods	122	5	117	114	3		13	5	8	
Division of International Health	37	8	29	29			1		1	
Offices Other Than Immediate Office of the Surgeon General (Information, Executive	45		45	45			1		1	
Details to Other Agencies	138	138								
Bureau of Medical Services	13,056	1,730	11,326	1,366	9,881	79	716	343	57	316
Office of the Chief	29	4	25	25						
Division of Dental Resources	41	11	30	30			111			111
Division of Foreign Quarantine	613	45	568	33	468	67	40	15	6	19
Division of Hospital and Medical Facilities	109	7	102	101	1		9	9		
Division of Hospitals	6,263	1,047	5,216	214	4,990	12	359	235	21	103
Freedmen's Hospital	805		805	805			42		17	25
Division of Indian Health	4,792	407	4,385	112	4,273		151	83	13	55
Division of Nursing Resources	48	13	35	35						
Details to Other Agencies	356	196	160	11	149		4	1		3
Bureau of State Services	4,451	1,005	3,446	1,099	2,335	12	254	96	125	33
Office of the Chief	124	7	117	117			10		10	
Division of Dental Public Health	55	17	38	38			9	2	5	2
Division of General Health Service	418	39	379	321	58		75	21	53	1
Division of Public Health Nursing	13	6	7	7						
Division of Radiological Health	266	120	146	70	76		4	1		3
Division of Health Mobilization	62	17	45	44	1					
Division of Engineering Services	417	73	344	61	283		27	15	4	8
Division of Special Health Services	678	190	488	338	143	7	40	21	11	8
Division of Water Supply and Pollution Control	285	75	210	88	122		16	13	2	1

Communicable Disease Center	1,271	227	1,044	5	1,035	4	64	18	40	6
Regional Offices	844	216	628	10	617	1	9	5		4
Details to Other Agencies	18	18								
National Institutes of Health	7,910	899	7,011	6,510	442	59	345	161	25	159
Office of the Director	875	5	870	870			6		1	5
National Cancer Institute	1,125	182	943	787	156		41	14	2	25
National Heart Institute	559	127	432	339	93		33	7	2	24
National Institute of Allergy and Infectious Diseases	554	99	455	275	152	28	7	1	2	4
National Institute of Arthritis and Metabolic Diseases	486	101	385	385			27	16	5	6
National Institute of Dental Research	150	39	111	110		1	13	10		3
National Institute of Mental Health	666	94	572	532	40		58	21	3	34
National Institute of Neurological Diseases and Blindness	400	43	357	327		30	33	24	3	6
Clinical Center	1,544	129	1,415	1,415			94	51	6	37
Division of Biologics Standards	197	24	173	173			2		1	1
Division of Research Grants	360	13	347	347			20	11		9
Division of Research Services	903	36	867	866	1		5	1		4
Division of General Medical Sciences	91	7	84	84			6	5		1
National Library of Medicine	212		212	203			3	1		2

[1] Excludes those part-time employees not in pay status during the month of June 1960.

[2] Includes 1,666 Regular Corps Officers, 2,034 Active Reserve Officers, and 116 Commissioned Reserve Officers on Temporary Training Duty.

Table 3.—*Research grants and awards, fiscal year 1960*

Program	Research grants		Construction grants		Research fellowships				Training grants		Traineeships	
					Full-time		Part-time					
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Total	11,572	$198,719,397	171	$30,786,106	2,468	$14,023,560	1,261	$817,112	2,626	$73,744,160	526	$3,051,862
Allergy and infectious diseases	1,508	21,056,625			233	1,064,748			156	3,550,578		
Arthritis and metabolic diseases	2,083	30,729,199			66	436,906			270	5,904,838	65	405,410
Cancer	1,793	34,370,440			431	2,030,354	272	176,256	220	5,878,406	273	987,494
Dental research	372	4,508,299			57	395,932	392	254,016	55	1,125,216		
General medical sciences	1,361	26,018,186			652	5,013,787	421	272,792	351	13,292,994		
Heart	2,064	35,947,109			449	2,608,566	84	54,432	358	8,869,542		
Mental health	1,182	22,808,798			484	1,996,889			974	27,810,927		
Neurological diseases and blindness	1,209	23,280,741			96	476,378	92	59,616	241	7,311,659	188	1,658,958
Division of Research Grants			171	30,786,106								

Table 4.—*Payments to States, fiscal year 1960* [1]

[In thousands]

State	Venereal disease special projects	Tuberculosis control [4]	General health	Mental health	Cancer control	Heart disease control	Water pollution control	Hospital and medical facilities construction	Waste treatment works construction
Total	[2] $2,371	$3,993	$14,985	$4,911	$2,190	$2,905	[3] $2,659	$143,433	$40,295
Alabama	45	92	403	98	51	78	58	4,623	991
Alaska		21	61	41	3	8	14		
Arizona	18	54	127	37	17	1	24	1,095	463
Arkansas	75	64	255	55	34	43	40	2,967	1,029
California	33	290	895	326	151	148	137	6,458	2,385
Colorado	14	33	165	44	25	44	30	1,300	499
Connecticut	10	38	131	54	26	40	46	1,124	557
Delaware	17	15	28	34	5	15	30	478	20
District of Columbia	63	37	50	40	9	32	18	392	342
Florida	76	91	393	119	57	77	61	4,353	1,315
Georgia	196	85	426	111	56	82	63	5,015	1,115
Hawaii		22	58	41	8	32	26	758	
Idaho	5	15	91	41	13	34	20	1,312	673
Illinois	205	236	626	235	56	110	114	5,923	1,589
Indiana		77	340	112	52	69	67	3,704	1,148
Iowa	10	35	262	71	22	34	43	2,793	589
Kansas	43	34	206	55	31	37	36	2,017	861
Kentucky	38	103	357	91	48	73	56	3,671	654
Louisiana	52	76	330	89	46	66	53	5,287	546
Maine		23	108	40	18	38	26	1,194	425
Maryland	42	82	213	74	34	55	52	1,549	597
Massachusetts		100	332	108	63	71	76	3,087	763
Michigan	86	148	535	196	85	96	91	5,774	1,012
Minnesota	4	49	301	89	40	63	50	3,128	878
Mississippi	70	60	356	74	44	71	51	2,902	909
Missouri	46	94	351	111	58	72	54	4,621	1,294
Montana	15	21	83	41	13	25	19	1,001	346
Nebraska	13	24	155	35	24	10	20	1,175	766
Nevada	7	12	43	27	5	9	9	386	136
New Hampshire		12	56	39	10	13	24	1,086	160
New Jersey	65	108	351	139	66	74	80	1,508	1,090
New Mexico	24	32	110	41	15	37	21	215	461
New York	317	393	1,000	383	180	156	169	5,664	1,565
North Carolina	135	87	475	135	66	56	78	7,757	747
North Dakota	13	16	99	41	14	35	20	829	343
Ohio	33	174	643	233	109	113	114	6,253	1,258
Oklahoma	18	53	236	62	34	54	35	2,080	495
Oregon	10	34	159	46	19	31	31	1,092	634
Pennsylvania	122	233	803	283	137	137	135	7,921	1,897
Rhode Island		22	65	40	12	28	37	1,109	303

South Carolina	94	60	316	75	38	67	53	1,697	665
South Dakota	8	9	102	41	15	8	21	964	220
Tennessee	88	104	395	102	50	74	62	4,968	1,008
Texas	137	160	834	199	116	132	108	6,242	2,108
Utah		13	93	39	6	16	22	981	417
Vermont		15	53	41	8	28	20	494	315
Virginia	55	97	370	108	50	51	60	4,310	1,193
Washington	4	53	205	65	32	52	41	1,973	977
West Virginia	16	54	216	44	30	41	39	2,952	801
Wisconsin	7	60	315	99	43	66	62	2,601	1,045
Wyoming		10	53	40	7	20	15	577	643
Guam		9	9	31	1	8		83	
Puerto Rico	35	147	339	74	37	71	23	1,990	48
Virgin Islands	7	7	7	22	1	4	5		

[1] Additional amounts as follows were paid during fiscal year 1960: $1,904,000 under title I, Public Law, 911, 84th Congress, and 86–105, 86th Congress, for the public health traineeship program; $122,000 under Public Law 159, 84th Congress, for the Public Health Service air pollution training and demonstration programs; $952,000 under Public Law 85-544, 85th Congress, to schools of public health for the provision of public health training; $225,000 under Public Law 86-158, 86th Congress, for community cancer demonstration projects, including $13,000 personal services in lieu of cash.

[2] Includes $634,000 in services and supplies in lieu of cash.

[3] Excludes $242,000 paid to water pollution interstate agencies under Public Law 660 as follows: $12,000 to New England Interstate Water Pollution Control Commission; $38,000 to Interstate Commission on the Delaware River Basin; $27,000 to Interstate Commission on the Potomac River Basin; $52,000 to Interstate Sanitation Commission; $110,000 to Ohio River Valley Water Sanitation Commission; $3,000 to Klamath River Compact Commission.

Office of Education

I. *Responsibility for Public Education*

THE LOCAL SCHOOL DISTRICT, the State, and the Federal Government each have an important part to play in the growth of American public education. The role each assumes today in carrying forward this enterprise is linked to the history of the Nation from colonial times onward.

THE ROLE OF LOCAL COMMUNITIES

In the days of the early settlers, schools were maintained by various church congregations or were established in towns by action of the town councils. Before the middle of the 17th century, Massachusetts colonists began setting aside certain tracts of land for the support of local schools. This practice later developed into a fairly uniform policy throughout the New England colonies and was followed to some extent in the other colonies.

Since the birth of the Nation the States, while possessing legal authorization for the establishment and administration of their public schools have, nevertheless, delegated to local communities considerable responsibility, especially for the operational management of elementary and secondary schools and community colleges. In fiscal 1960 local agencies assumed about 56 percent of the cost of operating these schools.

THE STATE ROLE

In 1785, about 3 years before the ratification of the Constitution, the Second Continental Congress enacted the basic land ordinance, which regulated the disposition of public lands in the western territory and "reserved the lot No. 16, of every township, for the maintenance of public schools within the said township." In 1787 the same Congress, in one of its last acts, established the Northwest

Ordinance which declared that "schools and the means of education shall forever be encouraged" in the new areas.

In fulfillment of this directive, the people within each State have through their elected representatives determined the structure, the scope, and the means for meeting the educational aspirations of the citizens. These representatives have provided for a State department of education to be the chief educational agency at the State level to discharge in various degrees its major functions—leadership, regulatory, and operational—for the common school system. For higher education, there is yet no comparable agency at the State level in most States. At the present time about 40 percent of the total funds for the operation of public elementary and secondary schools are derived from State sources.

THE FEDERAL ROLE

The pattern of the Federal Government's concern for education which had been set in the acts of 1785 and 1787 was further established when Congress passed the Morrill Land-Grant Act of 1862. By this act, additional public lands, or their equivalent, were given to the States for the support of public higher education within the States. Since that time, numerous Congressional acts have assisted and supported our educational structure, always operating within the well-established policy of primary State responsibility.

The most prominent development during recent years in the field of financing public education has been a growing conviction on the part of a number of nationwide educational associations and organizations and of a large segment of the public, that the Nation must improve public education by increasing the school revenues.

In 1955 the White House Conference on Education recommended a substantial increase in funds for public education. Similar recommendations were urged by the President's Committee on Education Beyond the High School in 1957, in the Rockefeller Report on Education in 1958, by the Problems and Policies Committee of the American Council on Education in the same year, by the President's Science Advisory Committee in 1959, by the Educational Policies Commission of the National Education Association and the American Association of School Administrators in 1959, and by the White House Conference on Children and Youth in 1960.

THE UNITED STATES OFFICE OF EDUCATION

Established in 1867, the U.S. Office of Education continues to be the only Federal agency whose total concern is education. During the past few years as the problems of education have become more complex and solutions to them have increasingly involved the material and manpower resources of the Nation, the responsibilities and activities of the Office of Education have greatly enlarged.

This growth was the result primarily of a need to examine through research and study the whole educational process in order to discover new goals, new approaches, new applications, new measurements, in line with the demands of the times, and to administer additional legislative provisions and conduct the programs which grew out of these laws.[1]

More recently, it became apparent that there were needs in education and needs to be met through education which could be supplied only through a nationwide pooling of resources, coordination of efforts, and exchange of experience and research findings. As a means toward this end, the Office of Education during this fiscal year increased its field staff to facilitate carrying on the basic functions of the Office.

Limited decentralization of certain Office activities in assigned areas had taken place as early as 1940. In implementing the provisions of the Lanham Act, the Office of Education provided professional consultative services to the Federal Works Agency in the program of school construction in housing areas developed for workers in national emergency efforts. These services required that specialists be available in an assigned geographic area on a continuous schedule. Legislation passed in 1950, providing financial assistance for school construction and for current school expenditures in federally affected areas, required the placing of 40 Office of Education specialists in regional areas to assist in administering the provisions of that legislation. Administration of the National Defense Education Act of 1958 (except title IX) required the appointment of 14 regional staff members—9 in the interest of higher education programs and 5 in the interest of programs administered through the States.

With the expansion of field services through the nine regional offices of the Department of Health, Education, and Welfare during fiscal 1960, the Office of Education made its basic services more immediately available to help meet educational needs and problems wherever they occur.

The Commissioner appointed a regional representative—an educational generalist with the background of an outstanding career and demonstrated ability in public education, administration, and higher education—to each of these nine offices. The regional representative acts for the Commissioner in providing information within his geo-

[1] The U.S. Office of Education was established by Congress for the purpose of collecting and disseminating statistics and facts, and promoting the cause of education. The Office had approximately 1165 employees at the end of fiscal year 1960. Its budget for salaries and expenses was $9,600,000. Federally appropriated amounts were administered by the Office for the following Federal programs: Vocational education, $40,863,393; land-grant colleges, $5,051,500; school assistance to federally affected areas, $247,435,000; cooperative research, $3,200,000; library services, $6,131,000; and defense education activities, $159,700,000; expansion of teaching in education of the mentally retarded, $1,000,000.

graphic region. These services, like all those offered by the Office, are conducted in harmony with the principle of rendering assistance without interference.

This administrative extension of the Office of Education makes possible a much more intimate appraisal of the problems and needs of an area or specific locality and reduces the response interval between field and Office to a minimum. It makes available to the Commissioner the services of nine field representatives through which he keeps abreast of educational needs and developments throughout the Nation. In supplying information and counsel for the conduct of conferences, workshops, and demonstrations, this arrangement permits better coordination of effort between Department of Health, Education, and Welfare and regional offices, State educational agencies, and private institutions.

The Future Role of the Office of Education.—A number of developments for the improvement and extension of Office services are on the horizon. In order to plan properly for the schools of tomorrow, there must be a continuing supply of comparable, complete, accurate, and up-to-date information about the conditions and progress of educational and cultural institutions and activities in our own Nation and in other countries of the world as well. Development in cooperation with the States of a modern nationwide intercommunicating system for providing needed information about education is a matter of major importance. It is necessary first of all to obtain agreement on standard definitions of needed items of information and their universal application. Competencies in educational accounting, high-speed machine and electronic technology for recording, storing, retrieving, and analyzing are essential elements of such an intercommunicating system of educational information. Thus, a truly modern Office of Education data center, serving the needs of the Nation in cooperation with State and local data centers, would provide a sound basis for decision making about education.

Research and experimentation for the improvement of educational practices must be accelerated, and the Office must stimulate ways to bring about prompt and comprehensive extension of newly discovered, adequately tested and improved methods and media of instruction. Research must also probe the foundations of education in an endeavor to discover the motivations of human behavior and the processes of learning.

The leadership role of the Office of Education is a major function. As coordinator of the Nation's educational interests, the Office can, through the experience and specialized training of its professional staff members, identify important emerging educational issues and problems of concern. It can stimulate study, deliberation, and plans

for conferences, and provide demonstrations through which it can alert the profession and the people concerning these issues and problems, and it can encourage consensus in ways to deal with them. It can diagnose incipient educational ills or weaknesses and help to solve those problems before they become critical. Finally, it can identify imbalance and recommend action necessary to restore a sound balance in the total educational structure. Only thus can educational opportunity be genuinely available to every person in the Nation.

Fiscal year 1960 was a year for stock-taking. Great issues, national and worldwide, were focused in this year. In the status of each of these issues education, or the lack of it, had its part, and in the outcome of each issue education will play a much larger and more crucial part. Whatever the goals may be, education today is a paramount concern of every nation. Never before has education been so linked with the personal destiny of every citizen and with the destiny of the free world.

The past decade has witnessed the greatest revival of popular interest in education in the United States since the land-grant college movement placed the specific benefits of higher education within the reach of more of the people. The great debate of the past 10 years has surged around every feature of our educational structure—educational philosophy and goals; organization, administration, and finance; housing and facilities; curriculum and methods. Nothing has escaped the scrutiny of both educator and layman.

The problems which face education today, however broad and diverse, may be summarized in five simple questions: (1) What are our educational goals? (2) How shall we provide physical facilities and equipment? (3) How shall we provide teachers and how shall they be trained? (4) What shall we teach to insure full development of the potential of each student? (5) How shall we teach—what communications media shall be used?

These problems are the result, in general, of five underlying causes, conditions, or forces present in our society today. They are: (1) the population explosion and changing population structure, (2) the expansion of knowledge, (3) the urge for quality or excellence in education, (4) the national emergency—the threat of communism, and (5) the need for international educational cooperation and assistance. As we have become increasingly aware of these basic causes, the importance and urgency of the problems engendered by them have likewise increased.

Throughout the body of this report these problems and their causes will be discussed, not by answering directly the questions enumerated or in probing the causes listed, but by showing, wherever appropriate, the relationship of Office activities to them.

In this report, these are treated in a discussion first of elementary, secondary, and adult education; second, of higher education; third, of research and experimentation; fourth, of educational statistics and information; and fifth, of international educational relations.

II. *Elementary, Secondary, and Adult Education*

THE ROLE OF STATE DEPARTMENTS OF EDUCATION

The emerging position of State education agencies, as primary leaders in the accelerating improvement of American education, is one of the most significant phenomena of recent years. This expanding State role may well be the key to providing education adequate to the Nation's increasing responsibilities, while preserving our traditional and valuable decentralization of responsibility in education.

State leadership, which was originally limited primarily to collecting and reporting information, and the support of minimal standards through teacher certification, has expanded in uneven stages, in response to public realization of increasing educational needs. Vast economic, social, and technological changes and the enormous growth of public education in the 20th century made new demands upon our decentralized system of education. As public education grew in size and complexity, people came to demand a more comprehensive realization of the democratic ideal of equality of educational opportunity, an essential feature of a free society.

This demand could not be met when local school units existed in isolation. Wide differences in ability among local communities to support educational programs, and the inadequate programs offered in some localities, came to be looked upon as matters affecting the welfare of all people in the State and all people in the Nation.

In recent years, new patterns of State support in financing of education to guarantee every child in the State a foundation educational program have been adopted in many States. With statewide minimums set, the State agencies then assisted and encouraged local units to exceed the minimums and to diffuse good practices. In meeting the demands for more and better services required by a rapidly expanding public education enterprise, the State departments have been elevated to a leadership position.

To administer effectively their expanded programs, more suitable structures were required in the State departments of education. Particular attention has been given recently to better methods of selection, composition, and tenure of State boards of education. The boards have been given more authority and responsibility over the total State educational program. There has been special concern to find more suitable methods for selecting the chief State school officer and his

staff. The position of chief State school officer continued to gain in prestige and importance during the past few years as persons of outstanding competence and ability were selected to administer expanded programs.

In the 1950's every State department of education was reorganized in some manner to promote structural unification or functional coordination. Laws were passed in eight States to give the State board of education the power to appoint the chief State school officer. Twenty-two States now do this. All States enacted legislation in the 1950's to promote functional coordination of State department of education operations. This was accomplished mainly through a more precise delineation of the duties and responsibilities of State boards of education and chief State school officers. The trend has been toward increasing the authority of the State board of education to determine the broad policy and direction of the State public educational enterprise; concurrently, the chief State school officers have been given more authority as professional leaders and administrators.

With State and local educational goals set at higher levels, the people in the States want to see tangible results that justify the increased expenditures. They want to know what kind of educational programs they should have, how they can get good teachers, how instruction can be improved. The State departments are, therefore, increasingly emphasizing *quality* factors in their leadership and research programs.

An outstanding recent example is the progress made by the States in providing leadership services to enable local schools to improve their science, mathematics, and foreign language instruction. In this they were aided by provisions of title III of the National Defense Education Act. Two years ago there were only 33 State specialists in the fields of science, mathematics, and foreign language; now there are 194. The significance of this increase is indicated by the activities of these specialists. These supervisors are developing State standards for equipment and minor remodeling of classrooms, assisting in determining teacher qualifications, conducting local and regional workshops for teachers working on local curricular projects, demonstrating equipment and effective teaching techniques, undertaking research in the fields concerned, and developing curriculum guides. Aided by title V(A) of the NDEA, State departments of education increased the number of their guidance and counseling personnel from 76 to 177 during the past 2 fiscal years.

The State educational agency can give better leadership and service when it has the facilities, personnel, and know-how to assess the status of the educational program within the State at any given time. States have been making substantial progress toward a more rapid

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and uniform system of gathering, analyzing, interpreting, and disseminating information about education. Federal financial assistance authorized in title X of the NDEA has greatly intensified and amplified activities for providing more adequate information about education. Working closely with the local educational agencies and the Office of Education, State educational agencies are improving record-keeping procedures and are adopting standard educational terminology and units of measure. During the year, the Office of Education published handbooks with standardized definitions on financial accounting for school activities and on property accounting for State and local school systems. These handbooks supplement two others recently developed, one on basic items of educational information at the State level and the other on financial accounting.

Timely and reliable facts and figures will further advance the increasingly important research function of the State departments of education. This research function promises to become central to all departmental activities.

State leadership is being directed toward the full and best use of all available resources, including the findings of research. It has fostered improvements through the development of local initiative and experimentation. Though State departments have been strengthened with more money and with more power and authority, they are exerting their greatest influence by the increasing excellence of their leadership.

QUALITY EDUCATION FOR ALL

Identifying talents of all children and youth and providing quality education for all are recognized to be increasingly important in a rapidly changing and highly interdependent, complex world. Providing educational opportunities that will help each individual become as effective and as productive as his ability permits is essential, not only for his own well-being, but for the good of the whole society, because quality education for each fosters the continuous improvement of democracy for the benefit of all.

IDENTIFYING TALENT OF ALL YOUTH

By 1975, according to U.S. Department of Labor estimates, this country will have need for more than twice as many scientists, engineering workers, technicians, and college workers as it now has. The number of teachers needed in elementary and secondary schools is expected to increase by approximately 25 percent, and a rise of 30 percent is expected in the number of physicians. Job opportunities for skilled workers and clerical workers will increase by about 25 percent—while little or no growth is expected in the number of needed unskilled workers.

National manpower needs in the years ahead call for the full utilization of the talents of all citizens. Modern society requires the special skills of the scientist, the physician, the linguist, the teacher, the technician, the creative artist, and the operator of complex machinery. It is, therefore, imperative for the Nation and the individual that every youngster have the education appropriate for his special talents and needs.

During the past year many school systems throughout the United States took steps to insure the full development of all children. To identify the strengths of children, educators used a variety of methods and techniques. In particular, guidance and testing programs during the past year received added attention as a means of finding, conserving, and developing all types of talent. The underachiever, the school dropout, the student following a course of study not suited to his abilities and aptitudes, the slow learner, the culturally deprived youngster—all represent an incalculable loss to themselves and to the Nation. A trained guidance counselor, working in cooperation with teachers and parents, can assist the student in understanding himself, his environment, and his educational and vocational opportunities and requirements. The counselor thus helps the student to achieve self-motivation—one of the prime objectives of the guidance process. Organized programs for the identification of abilities, aptitudes, and skills of secondary school students are now available to about 75 percent of the Nation's public and nonpublic secondary schools.

Although an equivalent of 15,800 full-time guidance counselors were employed in 1959, there was still need for an estimated 20,000 additional secondary school counselors to raise the existing ratio of 1 counselor for every 600 students to the desired ratio of 1 for every 300 students. Qualification standards for counselors vary, but there is a definite trend to require a master's degree, or the equivalent with a guidance major for full-time counselors.

The importance of early identification of a child's potential is now generally recognized. However, the methods and techniques used in working with elementary school children must be adapted to their age and level of maturity. Attempts are now being made to define the problems of training specialists on this level. As yet, only a few colleges are offering adequate training programs for elementary school guidance workers. Essentially the elementary school teacher should serve as counselor with appropriate assistance from guidance specialists.

Academic abilities and aptitudes on both elementary and secondary levels can be measured with more confidence than those in the social and esthetic areas. However, abilities in music, art, creative writing, the dance, and social participation can be identified by teachers through

records and observation of present performance. Evaluation based on these records and observations can be used to some degree in counseling the students.

The passage of the National Defense Education Act of 1958, which made special provisions for State-administered programs of counseling, guidance, and testing, has contributed not only to the identification of talent in mathematics, science, and foreign languages (areas initially receiving the greatest attention), but also to the discovery of students talented in other areas.

QUALITY EDUCATION AND SCHOOL LIBRARIES

School administrators, in working toward quality education, are concerned with the improvement of school library services. Recent publications of various national educational organizations reflect renewed interest in the potentialities of the school library for strengthening elementary and secondary schools. *Elementary School Buildings—Designs for Learning*, published in 1959 by the Department of Elementary School Principals, NEA, in a discussion of functional design, states on page 146: "Elementary school libraries will soon be conceived as teaching materials centers rather than static book collections. Expanding elementary school library services will soon require suites of rooms to accommodate not only book collections and reading tables but also larger informal reading and browsing areas, librarian work offices, inactive material storage space, professional teacher libraries, student typing and writing cubicles, recording and listening tables, and science equipment areas." In the November 1959 issue of *The Bulletin of the National Association of Secondary School Principals*, Paul E. Elicker, then executive secretary of the Association, states, "Today the school library is an essential part of the teaching-learning situation in all effective secondary-school programs." *Standards for School Library Programs* published in March 1960, by the American Library Association was prepared by the American Association of School Librarians in cooperation with 19 national educational and lay organizations and is based on research in school libraries of superior schools. These standards reflect, therefore, two strong trends in school library service—cooperation of school librarians with other educators, and research for school library development.

However, a post card statistical survey of centralized school libraries and librarians for 1958–59 in all school districts of 150 or more pupils, recently completed by the U.S. Office of Education, showed wide gaps between averages for the schools in the survey and the new national standards of the American Library Association for school libraries. Only 34 percent of elementary schools in the survey had centralized school libraries, and only 65 percent of the school librarians serving

public schools met minimum standards for professional education. In 1958–59, there were over 10 million pupils enrolled in elementary schools without libraries, and over 600,000 pupils enrolled in secondary schools and combined elementary-secondary schools without libraries. The average expenditure during 1958–59 for books even in schools *with* centralized libraries was only $1.60 per pupil, whereas the national A.L.A. standard is $4 to $6 per pupil. The average number of volumes per pupil in total centralized school libraries was 5.3; the new standards recommend 10 books per student. These statistics give evidence of the need for augmented developmental services and research in problem areas for the school library field.

Several major research studies of national scope concerned with school libraries have been undertaken. Under the Cooperative Research Program of the U.S. Office of Education, phase I of a study was made by Rutgers University, to develop instruments to measure the effectiveness of elementary school libraries, and determine the relationship of scores on these instruments to other factors in the school and community situation. In phase II, not yet undertaken, these instruments will be applied in a large and representative group of elementary schools. *State Department of Education Responsibilities for School Libraries*, a survey conducted by the U.S. Office of Education, at the request of the Council of Chief State School Officers, was published in June 1960. It is a status study of State department of education services to school libraries in the 50 States of the United States. The Study Commission of the Council of Chief State School Officers is developing a policy statement on State department of education responsibilities for school libraries, based on this status study. The project is an example of cooperative endeavor by administrators and school library supervisors to improve the quality and scope of school service through State department of education leadership.

BALANCE IN THE CURRICULUM

Concurrent with the attention being paid to the identification of the abilities of all youth is an insistence upon curricular balance. For three years prior to 1959–60, the education of the academically talented student received particular emphasis and the curriculum was shaped to some extent to his needs. This emphasis continues, but during the past year additional efforts were made to secure a balance in the curriculum through increased attention to the talents of all youth. The trend toward curricular balance can be discerned in efforts to improve instruction for each pupil through experimentation, inservice education of teachers, and research in curricular organization and content.

In many schools the process of identifying the pupil's abilities and needs begins as early as the first grade and continues until the pupil

leaves school. Cumulative record cards which show a pupil's mental and achievement test scores, his grades, personal interests, hobbies, and various personal characteristics are being used by more and more teachers as a resource to improve the quality of instruction and to achieve a balanced education for each pupil. These cumulative records are usually maintained by teachers and guidance counselors who may gather additional information about a student's home and school problems and activities.

The trend toward a more balanced curriculum is evident also in the general improvement of instructional offerings in the various subject matter areas. A better balance in the areas of science, mathematics, and modern foreign languages is being achieved through the use of up-to-date laboratory equipment, made possible under the provisions of title III of the National Defense Education Act. By extending the teaching of these subjects to the full range of elementary and secondary grades, a greater number of our youth are receiving balanced, quality instruction in these areas of knowledge.

In the English language arts, the teachers are currently concerned with each pupil's special aptitudes and problems in speaking, writing, and literary appreciation; his strengths and weaknesses in reading and in the use of oral and written language; his reading interests and level of literary appreciation; and the works of literature read by the pupil as well as his reaction to each selection. Through such means as these, a highly individualized program of English language arts is being made available to the pupil.

In the social studies area greater emphasis is also being placed on citizenship education for its exercise in our own Nation and for world understanding. Through the study of geography and associated information concerning the background and customs of the peoples of other lands, through international exchange correspondence and projects, and through the study of a wider range of modern foreign languages (now begun in the elementary grades more frequently than in the past), students are becoming better equipped for social and political responsibility in today's world. From kindergarten and elementary grades through secondary school levels, social studies programs are giving priority to citizenship education.

The Office of Education assisted in the promotion of efforts to make health and safety teaching more effective than ever before, with the idea of helping all youth, academically talented and otherwise, to profit fully from their program of studies.

Many educators now believe that the different forms of creativity whether they occur in scientific invention, industrial design, business management, astronomy, mathematics, education, housekeeping, art, music, drama, and dance, or the dynamics of personal relationships, are all facets of the same basic phenomenon of creativity.

The promotion of arts experiences in the curriculum is one way to help educate for creativity. Realizing that the arts as well as the sciences can be explored as parts of the same reality, study of the various arts is important in balancing the curriculum experiences in our schools.

Teachers must help children and young people appraise their abilities, search out their talents, and know of the opportunities available to them in our technological society. Industrial arts enable students to express themselves concretely, think in special relationships, manipulate materials toward definite goals, control tools and machinery, develop pride in personal work. To be liberally educated in today's world, the individual needs technical understanding.

The trend toward better curricular balance is but one indication of the effort now being made in schools throughout the Nation to assure a quality education for every individual. This abiding concern for the individual was reflected in the theme of the Golden Anniversary White House Conference on Children and Youth held in fiscal 1960—"a creative life in freedom and dignity." The 7,600 conference participants, representing all age groups and all walks of life, recognized the vital importance of making special educational efforts for the individual in the decade ahead. Additional evidence of this concern is the emphasis now being placed on vocational education and special education for exceptional children and youth.

The achievement of balance in the curriculum is a difficult and continuing problem. If schools are to maintain the wholesomeness of experience, all aspects of learning must be adequately represented. A curriculum has to be so designed that general needs of all are met at the same time that special needs of the talented are provided for. The single most significant development of our aerospace age is the *increased rate of change.* Schools keep this fact in mind as they strive for a balanced curriculum for American children and youth.

MEETING VOCATIONAL EDUCATION NEEDS

Many youth desire to prepare for various occupations by pursuing secondary school courses which are designed to fit persons for useful employment. This vocational preparation is a Federal-State program of cooperation which has, from its beginning in 1917, been based upon the fundamental idea that vocational education is essential to the national welfare. Although its curriculum is designed to produce well-rounded citizens, its special purpose is to provide education to prepare workers for occupations in the fields of agriculture, distribution, home making, trades and industry, practical nursing, and for occupations requiring highly skilled technicians.

In recent years vocational education programs have been directed toward a larger segment of the secondary school enrollment. For ex-

ample, home-making teachers, school administrators, and supervisors, working toward the goal of strengthening family life, have sought to redirect their programs to reach more high school students—the college bound, those who marry soon after graduation, and those who go immediately into a wage-earning occupation.

The Office of Education has recently stimulated action and aided the States in the development of research, especially through coordinating cooperative research projects, to provide sound bases for improving and revising secondary school programs for serving a larger number of students in vocational education fields.

Many well-prepared teachers of home economics are needed to meet the growing needs. The States have made an effort to recruit and prepare more teachers and to evaluate teacher preparation programs to meet present-day needs. Foremost is the teacher's need for a liberal education and a professional education that will best fit her for broad responsibilities.

Enrollments in trade and industrial education for high school youth have increased annually for more than a decade. It is expected that enrollments will grow steadily as the need for additional skilled workers increases, as programs are organized in areas not now being served and as additional States encourage the establishment of larger units of school administration. Industry continues to decentralize, moving to expanding population areas.

Because trade and industrial education is generally offered in the more populous centers, many youth living in rural areas have had no opportunity to pursue courses in this field which lead to useful employment. Investigations are being made to determine ways by which youth in rural areas can acquire learning experiences which will prepare them for work in industry.

Recent technological innovations have caused great changes in job requirements of industry. Schools are recognizing the increasing need for curriculum review and revision to assure up-to-date course offerings for students who would seek employment in industry.

Conducted as a part of the program of trade and industrial education are an increasing number of courses in practical nurse education. Hospitals and other health agencies have cooperated in the development of new programs which provide, under professional supervision, both inschool instruction and hospital clinical experience. Improved teaching practices and curriculum materials have resulted from the combined effort of the States and local school authorities and the professional groups concerned with nursing and nurse education.

While the number of people engaged in farming is decreasing, the agricultural product today is constantly increasing. This fact, combined with the rapid increase in population and the increasing need

for able individuals with farm experience backgrounds, constitutes a vital problem for those who are responsible for vocational agriculture programs for farm youth. The successful farmer of today must continually keep up to date technically and mechanically; he must be able to make correct managerial decisions and successful business transactions. In this period of rapid social, economic, and technological change, some adjustment of the curriculum, therefore, will no doubt be necessary. The need for well-qualified teachers of vocational agriculture continues.

Distributive education in the secondary schools is a cooperative part-time inschool program and at-work experience to provide young persons interested in distribution with the required skills and knowledge. The curriculum has been strengthened to include a study of distributive organizations; of marketing, including wholesaling, retailing, buying, selling, and pricing; of factors affecting marketing, including advertising, display locations, and lay-out; and of the consumer in the marketing process.

The Area Vocational Education program, providing for the training of highly skilled technicians under authority granted by title VIII of the National Defense Education Act, has now been in operation for two years. In fiscal 1960, every State participated in the program. Preparatory courses were available to secondary school students in the upper levels of their classes, to high school graduates who wished to pursue technical training in their thirteenth and fourteenth years of schooling, and to adults of any age who were able to meet admission qualifications.

Rigorous preparatory training programs, usually 2 years in length, were organized for a number of technician occupations, including electronics, mechanical drafting and design, instrumentation, engineering aids, industrial chemistry, data programing, and metallurgy. Short extension training courses involving the applications of science and mathematics were offered in the fields of communications, data processing, electronic drafting and design, industrial planning, instrument control, power operation and distribution, jet and rocket propulsion, and airframe structure.

Large enrollments continued in the various Area Vocational Education programs during 1960. Thus, the Area Vocational Education program is providing new opportunities for the training of many youth and adults who were previously unable to obtain training because they did not live in or near a center where training was available.

Vocational Education for Adults.—Vocational education for adults plays an essential role in maintaining America's high rate of production and consumption and, as a consequence, its high standard of living. Adult workers in any field, through training in skills and

knowledge related to their occupations, can adapt themselves to technological changes and other developments in their occupations, become more productive, prepare themselves for advancement, and increase their earning capacity. Vocational education programs provide instruction for out-of-school youth and adults both employed and temporarily unemployed in part-time schools and extension classes conducted at hours of the day or evening when they are free to attend. More than half of all persons enrolled in programs of vocational education are adults or youth who have left the full-time school. The needs of special groups are more and more recognized—mobile families, aging family members, young homemakers, and handicapped homemakers.

The general character of several occupations is changing. The need for related technical knowledge by workers in many occupations is reflected by a continuing demand for trade extension training and the reevaluation of course content in several programs. Evening trade extension programs have expanded to accommodate employed workers who need skills and related knowledge to retain their present jobs or to prepare themselves for promotional opportunities. The nature of the instruction is flexible so as to adapt to the changing technological needs of the employed worker.

Distributive education focuses directly on distributive personnel within the framework of their careers. About 88 percent of the total enrollment in distributive education is accounted for by extension classes, which encompass training for broad or specialized career objectives and for problem solving at high levels of distributive businesses.

The States have recently devoted considerable attention to the problems of young men who are striving to become established in the business of farming. The pressure of continuing to remain on the farm in the face of progressive narrowing of the margin of profit derived from farm products is great. In view of these problems and pressures, there has been a substantial increase in the number of students who have enrolled in vocational agricultural education classes during the past few years. Adults who are established in farming have attended classes in relatively large numbers.

In Area Vocational Education programs in fiscal 1960 the number of short unit extension courses (on-the-job training courses) for workers employed in technical pursuits was larger than the number attending preparatory (inschool) courses. Some unique courses such as electronic data programing, and vacuum tube technology were organized to meet the specific employment needs of students who had left the full-time school.

Industry, distribution, and agriculture require men and women with a high degree of manipulative skill, technical knowledge, and adaptability. The percentage of unskilled workers in our labor force is steadily declining; the percentage of semiskilled and skilled operatives is increasing. Technological advances will continue to increase the demand for highly skilled technical workers. Vocational education programs, which serve both youth and adults, will therefore be of increasing importance to our social and economic life in the years ahead.

MEETING SPECIAL EDUCATION NEEDS

Special education, within the framework of American education, is dedicated to providing suitable educational opportunity to every exceptional child who can benefit. Included are those who have marked physical handicaps, severe mental limitations, serious social and emotional problems, as well as those with remarkable gifts and talents. To open the doors of opportunity the school systems must make many adjustments and add special features to the usual school program. Some children and youth can progress best in special schools, others in special classes in regular schools. Some need only part-time special education services. For other children, the school must go to the hospital, the institution, the convalescent home, or under certain conditions to the child's own home.

A comprehensive program includes careful evaluation and placement of children, adjustments in curriculum, specially prepared teachers, adapted school housing and equipment, and coordination with other related professional services. Few American communities have reached this ideal for all of their exceptional children, but it is a goal toward which the Nation as a whole is moving at an accelerated pace.

A quarter of a century ago, only about 750 local public school systems reported enrollments of exceptional children and youth in special education programs. By 1948, that number had doubled, and 10 years later it had reached a total of nearly 3,700. The 1958 survey revealed that many of these school systems were located in less populated sections of the country and that some draw into their programs handicapped or gifted children from as many as 10 or 20 of the neighboring towns and villages.

Another indication of progress in this segment of American education is the rapid rise in the number of handicapped and gifted children in various types of special education programs. Enrollments in special schools and classes of the public day schools alone increased about 130 percent in the decade 1948–58. This is more than three times the rate at which the *total* public elementary and secondary school enrollments increased during the same 10-year period.

The special education enrollments for each area of exceptionality for 1958 as reported by the local public school systems in 48 States are given below:

Area of Exceptionality	*Number of Pupils*
Total	860,814
Blind	2,742
Partially seeing	8,266
Deaf	6,162
Hard of hearing	13,037
Speech impaired	474,643
Crippled	28,355
Special health problems	21,714
Socially and emotionally maladjusted	27,447
Gifted	52,005
Mentally retarded (upper range)	196,785
Mentally retarded (middle range)	16,617
Other [1]	13,041

[1] "Other" includes the following pupils reported in combined categories of exceptionality: Blind and partially seeing, 119; deaf and hard of hearing, 1,993; speech impaired and hard of hearing, 4,493; crippled and special health problems, 4,686; special health problem and socially maladjusted, 22; upper and middle range mentally retarded, 1,403; and multi-handicapped, 325.

When public and private residential school enrollments (based on preliminary tabulations of the 1958 survey) and estimates of private day school enrollments are added, the total number of handicapped and gifted pupils receiving special education may well reach a million and a quarter. Nevertheless, special education programs are lagging far behind actual needs. While the arrears vary somewhat from one type of exceptionality to another, it is estimated that at present over the total program, not more than 1 child in 4 is receiving specialized education suitable to his needs. In the field of mental retardation, for example, of the estimated number of more than 1 million children of school age needing special educational services, approximately 243,000 were reported in special classes in both day and residential schools in 1958.

Although there are many reasons for this lag—for example, the fact that many exceptional children live in areas which are remote from centers where programs of special education have been developed—the principal deterrent to growth at present is lack of qualified personnel. In recognition of this need, the Office of Education, in collaboration with leaders throughout the Nation, has conducted a nationwide study and published a series of reports on the competencies which are desirable for teachers and other special educators in the various areas of exceptionality. State departments of education are continuing to develop and improve certification standards for teachers in the specialized areas.

To assist in relieving the critical shortage in qualified personnel, a graduate fellowship program has been developed in one of the areas of exceptionality under the provisions of Public Law 85–926. Grants for fellowships are allocated to colleges and universities for the preparation of college instructors to conduct programs for the training of teachers of the mentally retarded. Grants for fellowships are also made available to State educational agencies for the preparation of leadership personnel to direct and supervise educational programs for the mentally retarded.

A third aspect of the program being developed under provisions of Public Law 85–926 will be initiated in fiscal year 1961. Grants will then become available to stimulate the development of graduate programs in the education of the mentally retarded in those parts of the Nation where opportunity for professional preparation in this field is either nonexistent or inadequate.

During 1960, which was the first year of this program, grants were made for 177½ fellowships, at an average individual cost of about $5,600 and a total cost of about $994,800. Of these, 84⅓ were used by 19 institutions of higher learning (under sec. 1), and 93⅙ were used by State educational agencies (under sec. 2). All but 7 States participated in the first year of the program. As these figures indicate, there has been a vigorous response from all parts of the Nation to this opportunity for advanced study in the field of education of the mentally retarded. Experience indicates that not only will the demand for these fellowships continue, but that in the years ahead there will be keen competition for the fellowships.

Progress toward the goal of securing sufficient numbers of qualified special educators has, in recent years, gone hand in hand with progress in attaining new knowledge and new insight into some of the crucial problems confronting educators of the various types of exceptional children. The contribution of the Federal Government, particularly through the cooperative research program of the Office of Education, has been a significant one. From the inception of this program in July 1956 to the present time, contracts have been drawn with colleges, universities, and State education agencies for somewhat more than 100 research projects in the field of special education.

Nearly two-thirds of these studies focus on the education of mentally retarded children. The remaining one-third center around crucial problems in the education of children who are blind, deaf, hard of hearing, speech impaired, socially maladjusted, or gifted. Findings from a large number of these research projects are already available for use in making improvements of existing programs or as a basis for planning new programs for handicapped and gifted children.

Chief among the byproducts of this relatively new nationwide focus on research in the education of exceptional children has been an intensified interest among teachers in the findings of experimental studies. With this activated interest, supported by continued interpretation and communication of findings, it is anticipated that today's research will be effectively translated into tomorrow's educational programs for exceptional children and youth.

MEETING LIFELONG-LEARNING NEEDS

Lifelong learning is rapidly becoming a recognized and legitimate concept in American education. The rapidity of technological development and the complexity of present-day social, economic, and international problems has made it necessary for education to become a process of lifelong learning to enable each citizen to function efficiently as an individual and to contribute effectively as a citizen.

During the past year a leading educational periodical, *The Overview*, cited statistics which indicated there were more adults in the United States engaged in formal programs of education than there were students enrolled in schools from kindergarten through graduate school. The Bureau of the Census in the October 1957 *Current Population Survey* estimated that about 9 million adults were attending formal classes which met three or more times. Additional millions are attending educational programs of an informal nature.

Organized lifelong learning is encouraged, sponsored and operated by many types of institutions, agencies and organizations. Among these are our public school districts, public and private community or junior colleges, public and private colleges and universities, private schools specializing in programs such as trade or business oriented enterprises, labor organizations, businesses and industrial establishments, public and school libraries, the Agricultural Extension Service, hospitals, museums, various government agencies, and the many clubs, associations, and voluntary groups which provide a planned educational program for their members or for the general public.

The various programs of adult education are as numerous as are the bodies of knowledge known to man. These programs include civic and public affairs, general education (including most of the common areas of study), home and family living, Americanization or training for future citizenship, technical education for the development of occupational or business skills, agriculturally oriented training programs, education for the worthy use of leisure time, personal and group relationship training, remedial education, health and safety education, religious training, depth education in professional or managerial skills, and competencies and training oriented to the functions of our armed forces.

Methodological approaches to the education of adults are quite different from those used on other levels of education. Studies may be carried on through formal classes, discussion groups, forums, television and radio education, correspondence or home study, conferences and institutes.

Technical education for adults has been stimulated through grants and leadership provided under title VIII of the National Defense Education Act. In the past year, four State departments of education have added personnel who are responsible for adult education programs.

Because adult education programs have a variety of sponsors and because the importance of lifelong learning has only recently been recognized, there is great need for the cooperative development of standardized terminology and definitions through the creation of a handbook of basic items on adult education. Until this is done, it will be impossible to describe satisfactorily the magnitude and status of adult education or to collect adequate and consistent data. The Office of Education has proposed that such a document be developed.

The demand for leadership personnel educated specifically for adult education roles has been increasing. Heretofore, many of the administrators and teachers in adult education, of necessity have had to obtain their training and experience outside the field. Today, however, 15 universities provide graduate education through the doctorate in the field, and many others offer one or more courses at the graduate level. Many universities are now studying the development and/or expansion of their graduate training programs in adult education. The Office of Education has provided consultative leadership to the Commission of Professors of Adult Education in an effort to clarify and systematize graduate education programs. Under title IV of the NDEA (National Defense Fellowships), the Commissioner of Education has approved at one university a graduate program of study in adult education for the training of doctoral candidates and has awarded five fellowships for study in this field.

There is urgent need to establish a clearinghouse for the nationwide collection and dissemination of information on all aspects of adult education, including a bibliography of published and unpublished research studies. During fiscal 1960 a committee representing all national-level organizations serving adult education met to develop a plan for such a facility, including the coordination of services from organizations now serving as clearinghouses in specific areas of adult education.

An expanded program of research relating to adult education is being stimulated by the Office of Education. A Cooperative Research project, entitled "Attitudes Toward Adult Education by Social Class"

is currently being conducted at the University of California at Berkeley. An exploratory conference of persons engaged in adult education research was held during this year to discuss, among other topics, research completed, in progress, or projected. During the past year, one issue of the *Review of Educational Research* was devoted to adult education.

The education of the migrant is another area of particular concern to those in adult education. Adult educators and other citizens are working vigorously to solve the problems related to cultural deprivation, lack of occupational training, and apathy toward citizenship responsibilities.

Adult educators are also concerned with the education of older citizens. The forthcoming White House Conference on Aging has stimulated interest in education for older citizens. In addition, every State is conducting research in this area; and, on the local level, many public school systems are experimenting with programs for aging citizens.

Adult education is concerned with individuals' needs, and many of these needs are of a highly specialized nature. The growing awareness and acceptance of the principle of lifelong learning indicate the necessity of a greater allocation of America's educational resources to this task. Of the total enrollment in programs of vocational education for which grant funds were used, about 50 percent were persons who had left the full-time day school. Most of them were employed workers. Discussion of these programs may be found on pages 193–195.

Lifelong Learning and the Public Library.—Opportunities for continuing education beyond formal schooling represent a fast growing need in these rapidly changing times.

Throughout the Nation, the American public library is helping to meet this educational and cultural need of the community it serves. In its individualized services, the public library recognizes no age or educational barrier, but provides resources and guidance alike to the business executive, the professional man, the farmer, the mechanic, the senior citizen, the teenager, the housewife, the immigrant, the schoolchild, the college student, and to the citizen studying local, national, and world problems. To all, the public library is a continuing source of aid in self-education, in cultural appreciation, in increased vocational competence, and in the constructive use of leisure time—truly a "university of the people."

Basic to the fulfillment of these and related responsibilities is the public library's collection, a collection which today goes beyond books to include other informational media such as films, slides, pictures and prints, maps, recordings, documents, newspapers and magazines. These materials are selected and classified not only according to subject areas covered but also according to reading levels. Readers' advisory

services are provided to direct those who wish assistance in pursuing their studies.

In addition to this very personalized service to the individual, the public library also initiates, supports and participates in educational, civic, and cultural activities of the community. Program-planning guidance is provided to a variety of civic, service, cultural, and professional groups and organizations. Discussion programs, lectures, forums, exhibits, and film programs are sponsored. Many public libraries are engaged in radio and television activities such as book talks, story hours, and a presentation of highlights of the library's many resources and services.

Through a network of central libraries and neighboring branches, public libraries extend their resources throughout their area of service. Where branch libraries or stations cannot be established, bookmobiles provide public library service—in housing centers, recreation camps, at the village crossroads, at farm meetings, at nursing and convalescent homes, and at shopping centers.

The Library Services Act (Public Law 597, 84th Congress) authorizes an appropriation of $7.5 million annually for 5 years for grants to States for the extension of public library service to rural areas without such service or with inadequate service. Since this act was passed in 1956, significant developments have taken place throughout the Nation.[2] Some of these developments, after 3 years, are listed below:

Thirty million rural people enjoy new or improved public library services.

State funds for the development of rural public library service have increased 54 percent, and local appropriations for rural public libraries have increased 45 percent.

County and regional library developments have brought public library service for the first time to over 1 million rural children and adults and substantially improved service to 7.6 million more.

Over 65 rural counties and an equal number of New England towns formerly without any public libraries are now receiving library service.

Approximately 200 new bookmobiles have been placed in operation in rural areas.

More than 5 million books and other informational materials have been added to the resources of rural communities.

Over 400 counties and 645 New England towns are participating in the demonstration and development of county and regional library systems by either introducing library service where it has never been available or by improving inadequate book and information services.

The library needs of rural areas are great. At the close of fiscal 1960 there were still approximately 25 million people in rural areas

[2] The Library Services Act was extended by President Eisenhower's signing of Public Law 86–679 on August 31, 1960, thereby extending the act for 5 years beyond June 30, 1961.

without public library services. There were about 21 million more who had not benefited by cooperative State-local-Federal library development projects under the Library Services Act. There were roughly 250 counties in the United States still with no public library services within their borders.

ORGANIZATION AND ADMINISTRATION

The upsurge of interest in improving and upgrading the public schools has led to an acute realization that quality education for every boy and girl is dependent upon sound local school system organization and administration. Efficiently organized school districts and more effective utilization of staff personnel are essential if the public schools are to be strengthened.

SCHOOL DISTRICT REORGANIZATION

In the American pattern of administering public education, good schools are dependent upon soundly organized local school systems. Experience has shown that small school districts usually have limited financial resources and, therefore, cannot provide a varied curriculum, adequate school facilities, comprehensive pupil personnel services, and competent teaching and staff personnel.

Of the Nation's 42,000 school districts (including nonoperating districts), 7 out of 8 have fewer than 1,200 pupils; only 3 States have no school systems enrolling fewer than 1,200 pupils.

In addition, school districts with fewer than 1,200 pupils average nearly 1 more teacher per 100 pupils than districts with more than 1,200; and districts with fewer than 300 pupils average nearly 2 more. These figures suggest the poor use of manpower by small districts, a waste which the Nation, faced with a continuing teacher shortage, can ill afford.

The number of school districts has been reduced from 95,000 in 1948 to 53,000 in 1957 and 42,000 in 1960. Most of the decrease since 1957 took place among districts enrolling fewer than 1,200 pupils. The decrease was most pronounced in systems enrolling fewer than 150 pupils. However, despite this trend, nearly half of all school systems still have fewer than 50 pupils.

The Office of Education through the consultative services offered by its specialists has aided State and local school officials and local planning groups in stimulating efforts toward reorganization of inefficient and inadequate school districts. The need for studies in local school system organization and administration becomes more urgent in the face of rising school enrollments, shortage of teaching staff, and increasing strain on local school finance sources. In carrying out these broad purposes, three exploratory studies relating to organizational characteristics of medium- to large-size school systems were completed in 1960.

STAFFING

America's program to provide a system of free public education for some 36 million children is founded upon the teacher as the basic unit of instruction. It is through this basic teacher unit that all other efforts in education—administration, housing, instructional services—are directed. It is only through the continued interest in and support of programs directed at improving the quality of teacher performance that organizations external to the classroom can influence significantly the educational program received by America's youth.

The growth in the school population has created a marked increase in the demands for teacher personnel. Furthermore, the changing nature of our society has, with new demands and expectations for the schools, created the need for certain specialized personnel offering supporting services to the classroom teacher.

During fiscal 1960, the Office studied the need for an increasing number of professionally qualified and competent teachers for America's public elementary and secondary schools. Related problems of improved staff salaries, teacher selection procedures, and of preservice and inservice teacher education were also explored. These studies will be of great benefit to those who plan and administer the programs in our public schools during the coming years.

Several factors have contributed to the development of programs directed at improving the quality of the instructional program. One, of course, is the combination of a great national interest in our schools and the increased lay involvement in school policy development.

An additional stimulation has come from national groups, either privately or publicly supported, concerned with special areas of the curriculum. Changes in methods of instruction, utilizing technological aids, and changes in organization for learning, such as team teaching, have profound implications for staff selection and assignment as well as for staff preservice and inservice programs.

Parallel to this concern for improving the quality of the instructional program is the need to attract a sufficient number of competent individuals into the teaching profession. Current estimates indicate a need for approximately 50,000 teachers annually merely to meet the projected increase in pupil enrollment. The past year has seen considerable interest, and acceptance, of the use of teacher aids, theme readers, and other paraprofessionals. However, even by making the most optimistic evaluation possible of such programs, there is every indication that education will be short in available staff, and at a salary disadvantage when competing with other professions for staff selection.

In order to fulfill the urgent needs in strengthening local school systems, the Office of Education plans to intensify its efforts in conduct-

ing studies on school board organization and practices; the external relationships existing between school and community; procedures and practices for attracting, developing, and holding competent staff personnel; and procedures involved in establishing soundly organized school districts.

HOUSING AND FACILITIES

It is generally recognized and often asserted that both teachers and pupils need proper tools if pupils are to be given an opportunity to develop their abilities—whether abstract, artistic, mechanical, or social—to a maximum level. The school plant, one of the tools essential to education, includes all physical facilities and equipment required for implementing an instructional program that will make this development possible. The significance of this concept is illustrated by the fact that, during the 10-year period from 1949–50 through 1958–59, the people of the United States approved the construction of approximately 565,000 public elementary and secondary classrooms for their children. Nevertheless, there was a reported shortage of 132,400 classrooms in the fall of 1959. In an effort to reduce this shortage, local school districts reported plans for the construction of 62,700 additional rooms during 1959–60.

Current trends and predictions indicate that, for the decade from 1959–60 through 1968–69, there will be a need for 607,600 classrooms and related facilities, of which 416,600 will be required during the first half of the decade (1959–60 through 1963–64). Assuming that the construction schedule for 1959–60 is met, the need would then be 544,900 classrooms for the remaining 9 years in the decade, of which 353,900 would be required for the first 4 years. If this schedule is met, it seems probable that, for the 5-year period from 1964–65 through 1968–69, a total of 191,000 additional classrooms will meet the anticipated requirements.

The amount of all capital-outlay expenditures for public education currently exceeds $3 billion per year. Now at an all-time high, these expenditures will need to rise sharply during the next 10 years. Present capital-outlay expenditures, plus interest payments, account for nearly one-fourth of the total annual expenditure for public education. Other school plant services account for about 10 percent of the total annual expenditure—3 percent for maintenance and 7 percent for school plant operation.

The size of current annual expenditures for public education plus the fact that about one-fourth of the country's population spend their working days in schools, either as pupils or as employees, make public education the Nation's largest enterprise. Those who are responsible for planning, constructing, equipping, and operating our schools must have information, equated to dollars-and-cents costs, that will enable

them to make wise decisions concerning the health, safety, intellectual development, and physical welfare of pupils as well as others who use school facilities.

The Office of Education has a responsibility at the national level for collecting and disseminating accurate information on all phases and aspects of the school facilities program. Traditionally, it has provided this information through consultative services and through published reports to State and local school officials and other organized regional groups. These services should be expanded and continued, but the total effort should not stop here.

Recognizing the importance of research and experimentation relating to school sites, buildings, and equipment, the Office of Education recently initiated a project which could make it the center of information on research and related material on school facilities. Beginning on a small scale, the Office has undertaken, among other things, to collect and disseminate information regarding (1) existing research and related materials, (2) topics which represent problem areas in this field, (3) sources of information about such research, and (4) organizations which are or may be engaged in research or studies in this field.

A number of recent technological studies and experiments may influence decisions regarding school facilities. The adoption of a standard module for school construction, for example, could cut school construction costs and at the same time permit greater flexibility by allowing a building to be put together in any number of different and appropriate architectural arrangements. Coordination of the development of new construction materials and experiments with new construction techniques may reduce both the construction cost and the amount of time required for construction. Cost studies of various types of heating, ventilating, and cooling systems may influence design patterns, improve health conditions, and remove certain safety hazards. Results of studies on the physical characteristics of children have already brought about improvements in design, fabrication, and flexibility of school furniture and equipment. Data produced by studies on the interrelationship of light and color may produce significant changes for the improvement of visual conditions in classrooms.

There are other factors and emerging concepts which influence the planning of school facilities. The concept that gifted children require special learning experience has definite implications for both space arrangement and types of equipment. A wider use of special provisions for children with mental, emotional, and physical handicaps creates a need for special equipment and diversified types and arrangements of space. Expanded school offerings have become important

factors in planning school facilities. The enrichment of science, mathematics, and language programs under the provisions of the National Defense Education Act has stimulated interest in the design of instructional rooms and in the quantity and types of instructional equipment used for these subject areas. Experiments with reading groups indicate that a revision in room sizes is needed. Expansion of the educational program to include summer sessions, extracurricular seminars, before- and after-school sessions, and Saturday classes must be considered when new facilities are planned.

Newer instructional methods may also influence school plant needs. Special space arrangements are required for the satisfactory use of mechanical and electronic teaching aids. Large-group instruction, now deemed feasible for some subject areas, requires more space than the conventional type class. Facilities for closed-circuit television, a recent innovation in instructional method, must be planned with special care.

Another trend which influences school facility planning is the increasing use of school facilities by community groups. In this instance, decisions must be made with respect to frequency of use, group sizes to be served, and types of equipment which will be required by these groups.

In addition to providing leadership and consultative services in the areas of long-range planning, functional planning, school plant administration, building technology, and school equipment, the Office of Education provides similar services in the area of property management. With an estimated current investment of $30 billion in public school property—sites, buildings, and equipment—increasing emphasis is being given to its management. Adequate training, supervision, and work standards for maintenance personnel is now considered essential to a properly functioning educational program. The services performed by them can prevent undue depreciation of school property; protect it against misuse, vandalism, and other damaging activities; eliminate numerous fire hazards and prevent others from developing; contribute to the health and safety of pupils and school employees; and create an environment that is conducive to educational efficiency.

III. Higher Education in the United States

Higher education in the United States began with the establishment in the American Colonies, primarily under religious auspices, of nine colleges patterned after the British colleges of Oxford and Cambridge Universities, but without university organization relating the colleges to each other. In all, 182 permanent colleges were founded in the United States before the Civil War. The 1959–60 *Education Direc-*

tory (*Part 3: Higher Education*) lists 2,011 institutions of higher education.

ANALYSIS OF INSTITUTIONS

Several factors have combined to make education beyond the high school in the United States a veritable patch-work quilt of institutions differing widely in size, in quality, and in kind. First, the educational pyramid tapers very slowly, as a direct result of the Nation's commitment to the ideal that every American boy and girl shall be not only permitted but encouraged to develop individual capacities to the fullest. Of each 1,000 pupils who entered the fifth grade in the fall of 1950, 885 entered high school (9th grade) in the fall of 1954; 584 graduated from high school in the spring of 1958; and 308 (or more than half those completing high school) entered college during the academic year 1958–59.

The second factor in the diversity of the Nation's institutions of higher education is their disparate origins—most were initiated under various private or religious auspices and still reflect a correspondingly varied assortment of objectives, methods, and policies.

A third factor in institutional diversity is the fact that the tax-supported institutions, which accommodate 59 percent of the students, are themselves supported and controlled by different agencies and groups. The 50 States, and in many cases the counties within these, the local school districts, and even individual municipalities have their own colleges for which they or their constituted officials select boards of control.

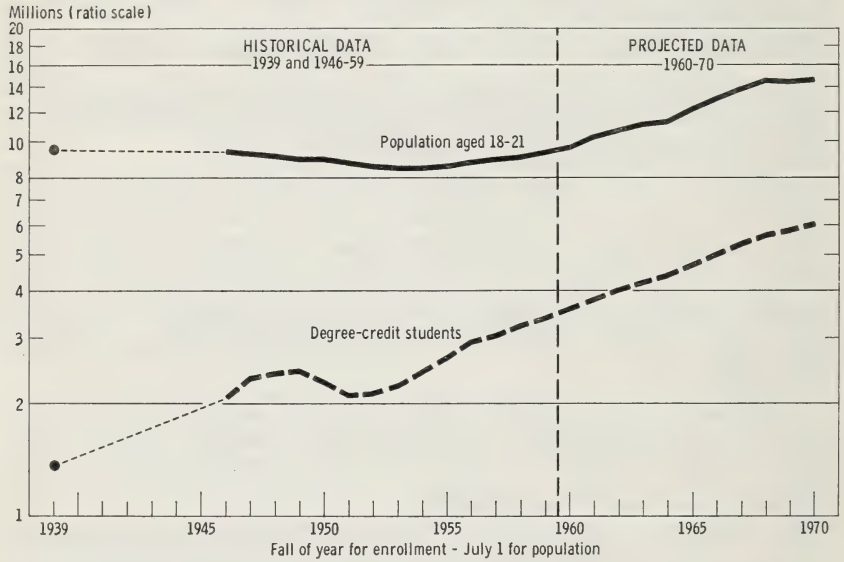
Of the 2,011 institutions of higher education listed in the *Directory*, 1,313 operate under private or denominational control, and 686 under State, county, district, or municipal control. Twelve are under the control of the Federal Government.

Enrollments of degree-credit students in 1,952 of the 2,011 institutions totaled 3,402,297 in the fall of 1959, a 4.4-percent increase over the preceding year. In addition to the degree-credit students were an estimated 250,000 in college-level terminal-occupational curricula. Of the total degree-credit enrollment, 41.1 percent was in private or church-controlled institutions, and 58.9 percent in tax-supported institutions. More than 460,000 degrees were awarded by the Nation's institutions of higher education during 1958–59: 9,360 at the doctoral level, 69,497 at the second level (master's except first professional), and 385,151 at the bachelor's and first-professional degree level.

For the Nation's colleges and universities the 1959–60 academic year was marked by an awareness of the broadening dimensions of impending problems, and a deepening sense of urgency regarding them. In large measure this was due to anticipation of the effects of the tidal wave of enrollments which has moved slowly through the elementary schools during the last decade and has now en-

gulfed the high schools as well. Every area of planning for higher education—organization, facilities, staffing, curriculum, finances—was dominated during 1960 by the sober realization that there remained little more time in which to prepare for the rise in enrollments which has just begun to make itself felt in the colleges. Enrollments will probably achieve maximum rate of rise about 1965, but will probably not reach their crest before 1968 or even later. Chart 1 shows for comparison, the total degree-credit enrollments of the Nation's colleges and the population aged 18–21 years, as recorded for 1939 and 1946–59, and as projected for 1960–70.

Chart 1.—TOTAL DEGREE-CREDIT ENROLLMENT IN RELATION TO POPULATION AGED 18–21: CONTIGUOUS UNITED STATES, FALL 1939 AND FALL 1946 THROUGH FALL 1959, WITH PROJECTIONS TO FALL 1970



Source: U.S. Department of Health, Education, and Welfare; Office of Education. *Opening Fall Enrollment in Higher Education, 1959: Analytic Report.*

In the fall of 1959 the Nation's 512 2-year colleges enrolled a total of 411,495 degree-credit students, a 6.5 percent increase over the preceding year, and accommodated in addition nearly 500,000 students in organized occupational curricula, adult education, extension and other special categories. Not included in these junior college totals are the enrollments of approximately one hundred separately organized 2-year units of university systems, which should be considered in any assessment of the junior college movement as a whole.

The most dramatic development in the 2-year college movement in the United States continues to be the rapid increase in the number of public junior colleges, particularly in the eastern part of the country. Florida, Maryland, New York, and Virginia are moving ahead

rapidly in organizing new 2-year colleges. Evidence of an awakened interest in this type of institution is also seen in New Jersey, Rhode Island, and Massachusetts. Massachusetts established its first State supported junior college in 1960, and Rhode Island enacted legislation to launch a system of 2-year colleges beginning in 1962. There is thus considerable evidence that the movement toward establishment of 2-year colleges in communities anticipating large increases in student population, as was recommended by the President's Committee on Education Beyond the High School in 1957, will be a significant factor in the Nation's efforts to accommodate increasing enrollments in higher education.

During 1960 the Office moved rapidly to sketch in bold outlines the crisis that will confront the Nation's colleges and universities in the middle and late 60's. In 1959 it had published the first of five parts of the comprehensive national survey of higher education facilities, *Part 1: Cost and Financing of College and University Building, 1951–1955.* In 1960 it completed *Part 2: Planning for College and University Physical Expansion*, and proceeded with *Part 3: Inventory of College and University Physical Facilities.* Utilizing both the completed and ongoing portions of this survey, the Office projected during 1960 a realistic and challenging estimate of the physical plant needs for the decade just beginning, as follows:

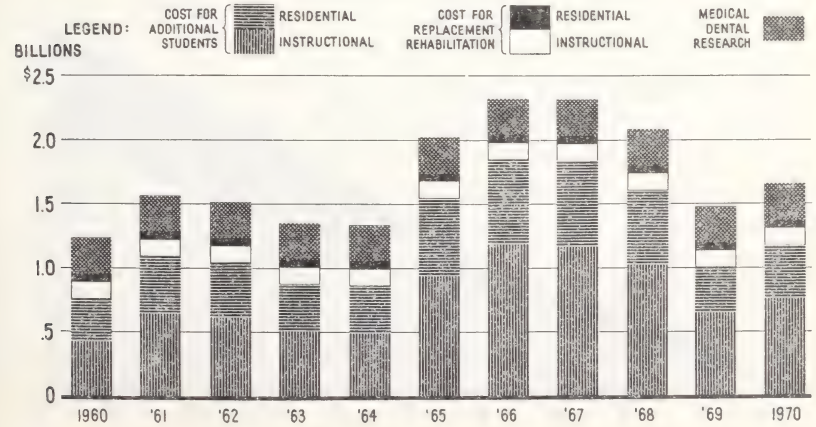
(1) $2.1 billion for replacement and rehabilitation of buildings which are now, or will become during the decade, unsatisfactory, unsafe, or obsolete;

(2) $13.7 billion for expansion of facilities to accommodate increased enrollments; and

(3) $3.3 billion for increased and improved facilities for research and professional training.

The total facilities requirements, as projected year by year for the next decade, are shown in chart 2.

Chart 2.—ANNUAL NEED FOR PHYSICAL PLANT EXPENDITURES FOR HIGHER EDUCATION, BY FUNCTION, 1960–70



On the basis of its survey of institutional plans for construction of new facilities (and rehabilitation of those in existence), the Office compared the projected facilities needs and the projected institutional expenditures for 1960–70, year by year, as shown in chart 3. In chart 4 the cumulative projected expenditures are compared with cumulative total need, showing that by 1965 a cumulative gap of $2.9 billion, and by 1970 a gap of $5.2 billion, will have widened between expenditures for facilities and actual need, unless ways are found to increase expenditures beyond present institutional plans.

Identified as far more serious than the need of $19 billion in ten years for facilities is the anticipated necessary increase of annual expenditures for current operation of institutions of higher education, from $5 billion in 1960 to at least $12½ billion in 1970. For the bene-

Chart 3.—ANNUAL NEED FOR PHYSICAL PLANT EXPENDITURES COMPARED WITH PROJECTED INSTITUTIONAL EXPENDITURES, 1960–70

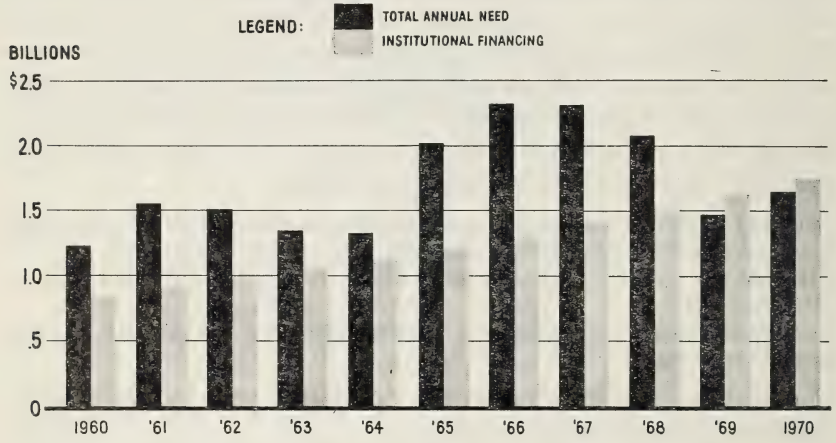
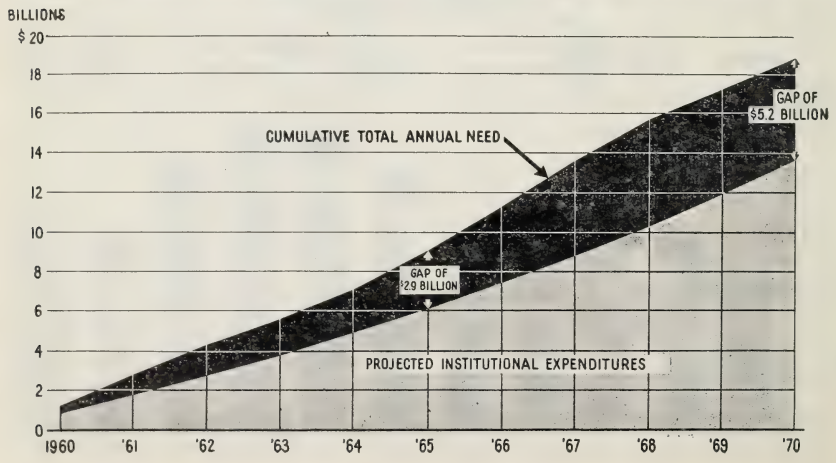


Chart 4.—CUMULATIVE NEED FOR PHYSICAL PLANT, HIGHER EDUCATION, 1960–70



fit of those who will have to deal with this problem at institutional, State, and national levels, the Office published in 1960 detailed analyses of institutional income and expenses for current operations, in its *Biennial Survey of Education*, and in other reports.

Timing its efforts to coincide with a significant upsurge in higher education planning at State, regional and institutional levels, the Office accelerated and expanded its services to those engaged in planning activities. Materials published in this effort included the annual *Review of State Legislation Relating to Higher Education*, the survey and analysis of *State Boards Responsible for Higher Education*, and the annual compilation, *Higher Education Planning and Management Data*. The Office assisted in the development of coordinating mechanisms within both public and private agencies for higher education, prepared for publication a report on *Criteria for the Establishment of Two-Year Colleges*, and provided extensive consultive services to institutions, boards of control, and State and other higher education officials.

The Office's goal in all this effort was to promote the quality and efficiency of higher education in general through the establishment of patterns for collective action within the bounds of freedom and flexibility. In conducting surveys such as *Higher Education in the Tidewater Area of Virginia* (completed in 1960), and *Higher Education in South Dakota* (in progress during 1960), the Office has provided significant service in interpreting, to those responsible for higher education planning, the needs and potentialities of institutions and areas. In particular, the Office has found itself in a position to ease the stress between institutional and organizational leaders and the representatives of public agencies in matters affecting budget and program planning.

STAFFING AND UPGRADING OF PERSONNEL

Having experienced increasing difficulty in the recruitment of professional staff, college and university administrators became aware during 1960 that the staffing of the Nation's colleges will become at least as serious a problem as the provision of facilities in the decade just begun. The Office's most recent report on *Faculty and Other Professional Staff in Institutions of Higher Education* indicates that in 1957–58 the Nation's institutions of higher education employed approximately 335,000 professional staff members in teaching (of degree-credit courses), administration, and research, full-time and part-time—the total constituting the equivalent of approximately 250,000 full-time professional staff members. From the report and existing trends, plus the enrollments projected for the decade, it is anticipated that full-time equivalent professional staff will rise from

approximately 280,000 in 1960 to 400,000 in 1970. When to the yearly increments required by increasing enrollment are added the numbers necessary to replace those lost by death, retirement, or change of profession, it is estimated that during the decade it will be necessary to employ about 336,000 new professional staff members for the Nation's colleges.

The qualitative aspects of this need for new professional staff members are as serious as its magnitude. Assuming that half the yearly supply of doctorates take positions in higher education (at the present rate of production of 9,360 per year), only about 46,800 of the 336,000 new professional staff members, or 13.9 percent, will have doctor's degrees at the time they enter the profession. The extent to which doctoral production must be increased in order to maintain even the present quality of entering staff can be judged by comparing the figure of 13.9 percent with corresponding ones of 31.4 percent (with doctor's degrees) for entering teachers in 1953–54, 26.7 percent for 1955–56, and 23.8 percent for 1958–59.

In the brief period of time since the conclusion of World War II, the Nation's universities have become a major research enterprise. In 1957–58 approximately 30,000, or about 13 percent, of all full-time-equivalent professional staff in the Nation's colleges and universities were engaged full time in the pursuit of organized (or separately budgeted) research; by 1959–60, the estimated full-time-equivalent had advanced to approximately 40,000, or about 15 percent of the total. The projection of total professional staff to 1970 given above assumes that the full-time-equivalent total of personnel engaged in research will increase from 40,000 in 1959–60 to 80,000 in 1970. Annual expenditures for organized research in colleges and universities are now close to the $1 billion mark.

During fiscal 1960 the Office also analyzed and interpreted the problems relating to staffing the Nation's colleges and began the difficult task of establishing guidelines and goals in the production of needed members of new professional staff. These services will be especially valuable to those responsible for planning expansion of graduate programs, the administration of financial aid to graduate students, and the expansion and maintenance of professional staff for undergraduate programs. In addition the Office reported extensively on the slow rise of faculty and staff salaries in the Nation's institutions, calling attention to the fact that unless the salaries were increased more rapidly than those in other occupations (to offset a trend in the reverse direction over several decades), the problem of recruiting higher education staff from among the persons who become suitably qualified in the next decade will be increasingly difficult. From the 1930's to 1956–57, the pay, in stable dollars, of a full professor at Yale, Columbia, Johns Hopkins or Harvard decreased about

20 percent; in the same period the salary of an average member of the labor market rose 50 percent in stable dollars.[3]

Average salaries for full-time faculty members in all 4-year undergraduate colleges rose from $6,160 in 1957–58 to $6,810 in 1959–60, an increase of 10.6 percent in two years. This is far less than sufficient to produce doubled faculty salaries in the decade which began in 1957, as recommended by the President's Committee on Education Beyond the High School. Average salaries in private institutions ($6,510 for 1959–60), which are lower than in public institutions ($7,040), showed the larger increase, 14.2 percent in two years, compared with 8.8 percent in public institutions.

MANPOWER—GRADUATE AND PROFESSIONAL EDUCATION

The staff requirements of institutions of higher education in the present decade constitute one of several factors which will greatly increase the load on the Nation's graduate and professional schools. There can be no doubt about the imminent upsurge in college enrollments at the undergraduate level. The implications for graduate and professional education, though not quite so obvious, are equally certain when viewed in the light of the unfolding pattern of American manpower.

The Department of Labor has called attention to three factors which will alter the distribution and character of American manpower during the 1960's. First, a larger number of people will be seeking work in the labor market. Second, there will be a continuation of the trend toward white collar occupations. Third, there will be a rise in training and educational requirements of jobs of almost all kinds.[4] During the 1960's the number of workers in the country will rise by about 14 million, an increase of nearly 20 percent. The number of professional, technical and kindred workers for whom special training is required, however, is expected to increase almost 60 percent between 1957 and 1970. But according to the projections there will be a slight *decline* in the total number of workers in the 35–44 age group, as a result of the low birth rates of the 1930's. For all these reasons it is urgent that every effort be made to increase the number of young people who equip themselves, academically and professionally, for the many types of jobs that will require more education and more training than ever before.[5] Recognizing this need, the Office has prepared periodic reports on enrollments in organized occupational curriculums, on professional and graduate education and other subjects relating to the problem of trained manpower. Looking to the future, the Office in 1960 included in a reexamination of its program of educa-

[3] *Financing Higher Education, 1960–70,* McGraw-Hill Book Company, 1959.
[4] *Higher Education,* December 1959.
[5] Newell Brown, "Manpower and Higher Education in the 60's," *Higher Education,* December 1959.

tional data-gathering a consideration for a comprehensive analysis of the oncoming manpower supply as it moves through the educational system. In connection with its NDEA Counseling and Guidance Institutes, the Office also began to develop a long range approach to the problem of guidance of American youth in a way consistent with the national pattern of opportunity and manpower needs. Likewise, in view of the anticipated load on the Nation's graduate and professional schools in the middle and late 1960's, the Office accelerated its study of graduate and professional programs, giving particular attention to their capacities and potential for expansion.

STUDENT ASSISTANCE

The rapid rise of tuition and fees in the Nation's colleges and universities during the last few years has become a matter of increasing concern—and of debate. Many educators and business leaders, citing the American ideal of equal opportunity and the evidence that higher education has become a social and economic necessity for able youth, hold that tuition, fees, and other costs should be kept low, particularly in the public colleges and universities. Others argue that costs of attending college have increased less rapidly than has disposable income over the last two decades, and that the families of students can afford to pay a substantial share of the cost of higher education. A few persons have gone so far as to say that the colleges should charge the student the full cost of his education—that he should borrow what his family and he cannot pay at the time.

A study of 196 representative institutions of higher education, 1939–58,[6] shows that between 1939 and 1949 tuition and fees rose 44 percent in public institutions and 50 percent in private institutions. During 1949–58, these charges rose 60 percent in public and 75 percent in private institutions. The cost of living index rose 71 percent from 1939 to 1949, but only 21 percent from 1949 to 1958. In contrast, median family income in families with heads 35 to 54 years of age rose 132 percent from 1939 to 1949, and 64 percent from 1949 to 1957.

Despite disagreement on what proportion of the income of institutions of higher education should be derived from charges to the students, there seems to be almost universal agreement on the desirability of scholarships and other forms of aid to college students. The pattern of such aid has altered significantly in the last few years. The number of scholarships and fellowships awarded by individuals, foundations and corporations has increased. The institutions have greatly increased the number of their scholarship grants, both funded and unfunded. The most significant developments in the student assistance area, however, have been the Student Loan and Graduate Fellowship programs set up under the NDEA, and the rapid increase in State

[6] Lanora Lewis, *College and University Business*, December 1959.

scholarship and loan guarantee programs. The preliminary report of a 1960 Office study of State programs of financial assistance for college and university students discloses 148 such programs in 44 States. Data obtained on 73, or fewer than half of these, list 42,791 students benefited by a total expenditure of nearly $16 million.

IV. *Research and Experimentation in Education*

THE SETTING OF RESEARCH IN EDUCATION

The complexities of modern-day life have led to the development of educational needs which the pioneers in this field could scarcely have anticipated. Problems associated with the increase in population, the expanding amount of knowledge, and the movement of hitherto unknown nations into world prominence, all combine to make the tasks of today's educators the most challenging in world history. If education is to face the challenge, master the difficulties, and assume the role of leadership, the increased performance and utilization of research and experimentation is essential.

Educators have long sought for better ways to use existing knowledge. They have also sought new knowledge in subject matter fields and in the realm of pedagogy itself. Yet, not until recent decades has the field of research in education begun to approach the stature which it must attain. During those years, research in education has moved from man's attempt to solve his problems by merely rearranging old knowledge into new thought patterns, to the intensive description, systematic analysis, and experimentation which results in strengthening the substantive areas of knowledge and improving the processes of instruction, organization, guidance, and administration in our schools.

Measured in terms of employment, annual expenditures, rate of expansion, capital facilities, and clientele, education is one of the Nation's largest "growth industries." Many successful American industries spend from 3 percent to as much as 9 percent of their sales dollar in research and development. Nevertheless, despite the expansion and growth potential of education, it has been one of the slowest "industries" to profit by research, experimentation, and development, especially when a change involved abandoning of old methods, old processes, and old products to which people had become attached.

SUPPORT OF RESEARCH AND EXPERIMENTATION IN EDUCATION

On the other hand, it is encouraging to see that increased expenditures for research in education are being used by many sources as a tool for improving education. Private philanthropic foundations, voluntary health and welfare agencies, academies of science, scientific and professional agencies, local and national research institutes, private business and industry, and the Federal Government are pro-

viding an ever-increasing flow of funds, varying from a few thousand to millions of dollars, for educational research and experimentation. Some organizations provide support for research on basic issues only, others support only the applications of research, and still others support programs between these two extremes. Some agencies support research in any field of education, while others limit their support to chosen areas.

During the last decade Federal contributions to research in educational institutions have been increasing rapidly. During the fiscal year of 1951, Federal contributions for research in all educational institutions totalled $64 million. While the exact figures are not yet available for the fiscal year covered by this report, the figure for fiscal year 1959 was $223 million. The size of the increase in this last decade is certainly a strong indication of the growing concern for and support of research in educational institutions. However, providing funds for the support of research in educational institutions is not necessarily the same as providing funds for research in education. An important way to improve education is through the expenditure of funds for research in education as a field of study itself. The Office of Education is now engaged in supporting this type of activity. Certain phases of research in education are being furthered by the staff specialists who conduct various types of status and information studies. However, research activities administered but not performed by the Office of Education are supported through the National Defense Education Act of 1958, and the Cooperative Research Program, authorized by Congress in 1954.

Under the provisions of the National Defense Education Act of 1958, a number of educational research programs have been carried on during the past 2 years. Under title VI, the Office of Education approved 115 projects involving research, experimentation, development of specialized instructional materials, and studies and surveys relating to the improvement of modern foreign language teaching. One hundred twenty-three contracts were negotiated in support of these projects. During the first 2 years of the act, a total of $6,455,086 was designated for research and studies contracts. For fiscal years 1961 and 1962, continuation costs for some of these contracts total $2,035,355. Title VI authorizes a contract program only, with no provision for grants-in-aid.

In the development of this research program the Office of Education sought the advice and counsel of more than 250 leading scholars and specialists. Additional individuals and groups have worked under contract to carry out a broad range of studies and surveys such as evaluation of language institutes, inventory of resources and practices at language and area centers, development of archives dealing

with all the languages of the world, and collection of statistics on the status and trends of language study.

Entire new experimental courses of study are being developed for the secondary schools. Covering 6-year sequences and oriented to the audiolingual approach, the first-year materials in Spanish, French, German, Russian, and Italian are receiving field trials in more than 100 school field centers in 1960–61. More than a dozen colleges are under contract to experiment with new methods and programs for training more proficient future language teachers. Other research deals with the use of special equipment and devices such as films, filmstrips, language laboratories, and teaching machines.

The ability of American education to teach effectively many of the so-called neglected but significant languages of the world depends upon the availability of adequate instructional materials. To fill this need, a vast materials-development program has been initiated in 78 languages not commonly taught in the United States, from major world languages such as Hindi, Arabic, and Chinese to lesser but strategic tongues such as Swahili, Tibetan, and Thai. This program will go a long way toward filling the present gaps in instructional manuals, grammars, dictionaries, readers, and other teaching materials.

Under title VII of the NDEA the Office of Education is assisting and fostering through grants or contracts, research and experimentation in the uses of new educational media such as motion pictures, radio, and television; and is disseminating information, directly or through contracts, concerning the educational uses of these media. During fiscal years 1959 and 1960 the Advisory Committee on New Educational Media approved 116 project proposals for grants totaling $7.5 million to bring the projects to completion.

Research projects funded under title VII are being carried on primarily in colleges and universities. The research relates to every instructional level from kindergarten to university, and concerns all of the broad content areas of learning. These projects reflect especially the emerging interest in the possibilities of television for large-group instruction and of teaching machines for individualized learning. Over half of the grants awarded to date focus upon these two methods of instruction.

The Cooperative Research Program of the Office of Education was developed with the purpose of seeking new knowledge and new applications for existing knowledge in the field of education. Therefore, no limits have been established on the nature or topic of the studies which can be supported under this program. Rather than establishing rigidly limiting categories under which all research proposals must be subsumed, the Cooperative Research Program receives all proposals

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which relate to the field of education, and evaluates them for approval on the basis of their significance to education, the quality of research design, the quality and promise of the staff and facilities at the institution proposing the study, and the economic efficiency of the proposed research. From the time the program began operation on July 1, 1956, through June 30, 1960, the Research Advisory Committee of this program has recommended a total of 373 projects out of a total of 1,091 received. For these 373 approved projects, the total estimated Federal obligations, including those contracts for which negotiation was yet pending at the close of fiscal 1960, will reach $15.8 million. Again, the success of this program in encouraging colleges, universities, and State departments of education to increase the scope of their research activities indicates a realization that research is the key to tomorrow's growth, that the future of education depends on learning new facts about education and better ways to utilize the knowledge we already possess.

THE POTENTIAL OF RESEARCH IN EDUCATION

Research in education as a key to tomorrow can be demonstrated in many ways. However, one of the most graphic methods is a rather simple statement of questions which now concern educators, and for which research is now seeking the answers. An analysis of the 46 research proposals recommended by the Cooperative Research Program's Advisory Committee in May 1960 reveals some of the questions for which answers are currently being sought. Illustrative areas of study and questions follow:

Creativity and Giftedness:

How can the identification of gifted students be improved?

Education of the Handicapped Child:

Can the comprehension level and knowledge of blind children be increased through the use of recordings to supplement their Braille reading? How should this material be presented so as to achieve maximum learning?

Elementary Education:

To what extent are pupils in the primary grades capable of learning the basic abstract mathematical concepts?

Vocational Education:

How are talent and giftedness being identified among students in vocational schools?

Higher Education:

How do the academic and student subcultures on a campus—for example, fraternities, academic clubs, dormitories—influence pupil achievement in college?

School Administration:

Can persons who have potential abilities to serve effectively as public school administrators be identified systematically?

Guidance and Counseling:

What are the causes of indecision in career decision-making and how can they be alleviated?

School Finance:

What are the relationships and the implications of the relationships between tax payments and benefits received in school districts?

International Education:

Can, and is, education being used in other countries to contribute to the achievement of national development goals?

These are some of the key questions which should be answered if educational programs and emphases are to be wisely planned, and if a satisfactory measure of success in our educational efforts is to be realized. Yet even if all of these questions are answered through the research and experimentation now in progress, we will have investigated only a few of many problems which continue to face our educational leaders and the citizens whose future depends on education.

The United States of America has long been recognized as a leader in the field of education as well as other fields of human activity. Today, that leadership is being challenged. We must no longer procrastinate in developing educational programs which will assure the continuation of our leadership. In developing these programs, research and experimentation must light the way to the progress that is necessary.

V. *Educational Statistics and Information*

For many years, various groups have sought to identify the types of educational information needed by government agencies at the national, State, and local levels; by the general public; and by the educational community. The U.S. Commissioner of Education has from time to time appointed advisory groups of national leaders to examine the Office's program of statistics and other information on education. The most recent of these groups, the Advisory Committee of Users of Educational Statistics, which has met periodically for the last 2 years to review the program of the Office, completed its final report in May of 1960. Groups of professional statisticians also have examined the procedures and program of the Office in this area several times in the last few years.

There is general agreement among all qualified individuals who have reviewed the Office's informational program that several major shortcomings currently exist: (1) lack of information on many questions bearing on national educational policy, (2) limited dependability and compatibility of present educational data from different sources, (3) lack of currency in the information available, (4) the high unit cost of available items of national information, and (5) incomplete dissemination of existing knowledge.

For some time the Office of Education has been actively engaged in effecting improvements in its statistical and other informational

services. Through the joint efforts of its management staff, subject matter specialists, and statistical personnel, a new procedure for the unification of survey planning has been initiated. This coordinated planning should result in earlier identification of gaps in knowledge, in elimination of overlap in projects undertaken, in a more effective schedule of operations, and in the improvement of statistical standards.

Important progress has been made in several areas within the last year. First, a study of the feasibility of use by the Office of different and more speedy types of statistical processing equipment has been completed. Investigation of the capabilities of recently developed electronic data processing equipment leads to the conclusion that the availability of such equipment has implications for the statistical program of the Office.

Second, under the authority of title X of the National Defense Education Act, the Office made steady progress during fiscal 1960 in developing cooperative relationships with State education agencies, and in improving statistical procedures in State education offices. Communication between the Office and the field is increasing and is becoming constantly more efficient. Progress was also made in the assembly of information on the use of Office-sponsored handbooks for setting up records in and making reports by local school districts, and in gathering information on the extent of use of machine processing procedures in local school districts and institutions of higher learning.

Standard terminology and definitions of items of educational information, contained in such Office of Education handbooks and manuals as the *Common Core of State Educational Information*, *Financial Accounting for Local and State School Systems*, and *Accounting for School Activity Funds*, were adopted by additional States as a result of this program. Many States began a systematic collection of basic items of information and indicated a desire to share such information with the Office. Preparation by the Office of a handbook on school personnel was underway during the year.

Although not under title X authority, similar cooperative activities are being carried on with higher education leaders in institutions and professional organizations. During the fiscal year, the Office took a more active leadership role in working with such institutions toward the development of a cooperative program of information about higher education.

Third, a procedure has been initiated whereby the Office's statistical program is being unified so as to prevent duplication of effort, overlapping of surveys, and obtaining the same items of information on more than one questionnaire.

An important accompanying activity was the development of item analyses of all Office periodic survey forms so that an authoritative

list of such items will be available for use by those who need to know what items are now being collected or have been collected in the past. The basic items needed to produce the derived items now obtained are also being ascertained so as to eliminate as far as possible the continued collection of derived items on the traditional type of questionnaire.

During the closing months of fiscal year 1960 a special Office-wide task force began the work of investigating the need for and the feasibility of developing a nationwide cooperative system of educational information. The work of this task force was supported by the services of consultants with expert knowledge of the educational system of the Nation and of recent technological advances in information storage and retrieval.

VI. *International Education*

INTERNATIONAL EDUCATION AND NATIONAL POLICY

There is a growing belief that the future of mankind may depend upon the outcome of a race between the accomplishments and goals of education in the free world and in the totalitarian states, and that if education for a free society does not win, the world may experience a disaster, the nature and extent of which are unknown. In one year, thirteen new nations in Africa, all critically lacking in trained manpower, are achieving independence. The success or failure of any one of these nations, or of similar emerging nations in Asia, or Latin America, may have repercussions involving the whole world.

The great need of the new nations is to develop their human resources to enable them to make use of their natural wealth, to establish stable and effective governments, and to take their place as equals in the community of nations. The development of human resources is a function of education. Thus education becomes a major instrument of international as well as national policy.

It is national policy among the developing nations, who comprise about half of humanity, to give education a top priority as a tool to develop among their people the capacity to survive and to build a good life. It is national policy for many of the older nations to offer educational assistance to the younger peoples. The Soviet Union is offering educational assistance as a manifestation of communist policy, and the free world is providing educational assistance as a demonstration of democratic principle. Thus the classroom in Africa, parts of Latin America, and of Asia, becomes a battleground of ideas. Here the nature of man's future may be determined by the contest between democratic and totalitarian concepts.

American education has today major responsibilities not known a few years ago. In a time of increasing scarcity of competent teachers,

we must share many of our best teachers with those whose need is greater. At a time when plans for the future education of American children tax anticipated fiscal and academic resources, we must also plan for the growing needs of our friends among the new nations. American education is no longer only American; as an instrument for the creation of a free world, American education is also international education. These developments have placed serious new responsibilities on the Office of Education.

There is a growing need for research in educational trends and developments abroad, both behind the curtains and in the free world. Each year the publications of the Office in the international area grow in quality and numbers. Since 1955 the Office has published more than 400 titles in comparative and international education.

But the largest international responsibility of the Office is to help Americans. The Office provides a variety of traditional services, by collecting and disseminating information on foreign education, by coordinating American educational representation with international organizations, and by analyzing foreign academic credentials. The Office also helps States and communities to broaden the foundations of American education by including in our schools information about the non-Western world. There is a keen and growing awareness that if Americans are to win in the educational race, and are to give the help needed by the new nations, Americans must be better, more intensively, and more broadly educated than ever before.

Americans have felt for some time that if they are to give maximum educational and technical assistance to the peoples of other countries and if they are to possess maximum understanding of these peoples, they must in greater numbers be familiar with the languages and cultural backgrounds of the countries in which they are serving either as official representatives of the United States or in a private capacity. The Language Development Program, authorized under title VI of the NDEA, came into being because of this need. Under this program, language proficiencies, teaching materials, and materials concerning historical and cultural backgrounds of the areas where the languages are used, are being developed in many languages not commonly taught in the United States. These languages range from major languages of the world to many of the lesser but strategic tongues. A fuller account of this program is given on pages 216–217.

INTERNATIONAL EDUCATIONAL EXCHANGE

The Office continued to conduct three major programs under agreements with the Office of Educational Exchange (formerly the International Educational Exchange Service) and the International Cooperation Administration of the Department of State: the Teacher Exchange Program, the Teacher Development Program, and the Technical Assistance Training Program in Education. The total number

of participants in the three major programs was 1,998. In addition, it provided extensive services to other visitors.

The Teacher Exchange Program.—The Teacher Exchange Program continued to expand, both in the number of participants and in the number of participating geographic areas. In 1959–60, the total number of participants was 619, distributed as follows: teacher interchanges, 150 pairs (300 teachers); other United States teachers assigned abroad, 133; other foreign teachers assigned in the United States, 31; seminars abroad for United States teachers and administrators, 155.

Because of the great interest in the seminar for school administrators, first initiated in 1959 when over 500 applications were received for 20 vacancies, two seminars were offered in 1960, each one accommodating 20 participants. One was held in France and Finland, the other in Norway and Italy. A new summer seminar was introduced in Brazil for teachers of the history and geography of the Americas and teachers of Portuguese.

The International Teacher Development Program.—Programs were conducted for 486 visiting educators from 65 countries. Of these, 310 participated in the regular six-month program. Seventy-nine attended two workshops arranged by the Office at the University of Puerto Rico. The remainder participated in summer programs or in individualized special projects.

The seminar in Puerto Rico, initiated in 1956 to provide study opportunities for Latin Americans who do not have an adequate knowledge of English to participate in the regular program in the United States, has become so popular that two seminars were offered for the first time. Participants in the second seminar were brought to the mainland for brief visits to New York, Philadelphia, and Washington.

The University phase of the regular six-month program was conducted at 11 institutions in 9 States. In January and February, these participants spent six weeks in intensive observation of school systems in 23 States. The combined number of visits to different communities by participants in the total program reached 1,040.

The Technical Assistance Training Program.—The number of participants in this program increased from 647 in 1958–59 to 893 in 1959–60. Especially noteworthy was the sharp increase in the Near East and Africa area, from 182 to 330. A substantial increase was also shown in the Far East, from 274 to 338. Countries with 50 or more participants included Indonesia, the Philippines, Thailand, Vietnam, The United Arab Republic, Iraq, and Turkey. A total of 50 countries were represented. Training was provided in approximately 60 different fields at almost 150 training centers. In addition, participants visited many other educational institutions and industries for brief periods.

Services to "Secondary" and "Nonprogram" Visitors.—Inherent in its position as the agency which represents education in the Federal Government, the Office has a responsibility to provide services in its field to visitors not assigned to the three budgeted programs described above. 'Secondary" visitors are grantees under United States Government-sponsored exchange programs who are assigned to other agencies for training, but who come to the Office for brief periods; "nonprogram" visitors are those not on United States Government-sponsored programs who receive assistance from the Office in planning and conducting their educational activities in the United States. In 1959–60, the number of "secondary" and "nonprogram" visitors reached 448, an increase of 138 over the previous year. Services to these visitors were provided primarily by staff assigned full-time to other programs.

Exchange of Materials.—Materials pertaining to the international and comparative study of education are collected from many sources, and are placed on exhibition in the Educational Materials Laboratory at the U.S. Office of Education. They are intended for use by interested specialists and visitors. Office publications are also sent to other countries in accordance with official arrangements.

As Office specialists visit other countries they (1) bring back examples of educational materials used in schools abroad, official publications, programs of study, and university and school catalogs; and (2) arrange for direct exchange of informational and service publications with materials centers in other countries.

Credential Evaluation.—The Office of Education provides an advisory service for evaluating foreign academic credentials in terms of approximate equivalent levels of education in the United States. The purpose of this service is mainly to assist educational officials in American schools, colleges, universities, State education agencies, and other institutions and organizations in making credential evaluations. About 4,437 sets of foreign academic credentials were handled in fiscal 1960. Several types of publications helpful to persons dealing with such credentials are regularly developed by the Office.

AMERICAN SPECIALISTS ABROAD

The United States Government endeavors to share our vast human and professional resources with less fortunate peoples of the world. Education is an essential aspect of the technical assistance made available by the United States in most of the countries of South America, the Near East and Africa, the Middle East, and the Far East. This program and a similar but largely complementary technical assistance program of the United Nations require approximately 900 direct-hire educational technicians. There are also a number of foundations in the United States which conduct educational programs in foreign countries.

The Office of Education has responsibility for recruiting educational specialists for the technical assistance programs of the International Cooperation Administration and UNESCO. Approximately 100 technicians are recommended to ICA each year. Two or more candidates are recommended to UNESCO for each vacancy, since American educators must compete for selection with candidates from other countries.

INTERNATIONAL BUREAU OF EDUCATION

The admission of the United States into membership in the International Bureau of Education in July 1958 was the culmination of more than 20 years of United States cooperation with this oldest international educational organization. Following are a few pertinent facts concerning this organization.

History.—The International Bureau of Education whose headquarters are in Geneva was first established as a private organization in 1925. Its purpose was to serve as a center for the exchange of information on educational matters. After operating for 3 years on a private basis, it was reestablished in 1929 as an organization to which governments might belong directly or through their ministries of education.

Organization.—The IBE is governed by a council which meets annually in July, and by a smaller executive committee which meets in February. The President of the council is traditionally from France, and customarily the chairman of the Executive Committee is from Switzerland. The IBE Secretariat is dedicated to furthering IBE's purpose as a "centre of information and research in connection with all matters concerning education."

International Conference.—In 1932 and 1933, the Bureau invited nonmember governments to send observers to the Council's annual meeting. The interest thus aroused among educators in various parts of the world led to the establishment of an annual International Conference on Public Education. Between 50 and 60 countries prepare reports on the status of education in these countries, and on educational topics selected for discussion at the Conference. IBE and UNESCO have jointly sponsored the Conference since 1947.

Membership.—In 1960, 44 nations from all parts of the world were members of the IBE. The United States, which joined in July 1958, was the first English-speaking country to assume membership. Increasingly English is being used by participants in the Conference although simultaneous interpretation in French, Spanish, Russian, and English is regularly provided.

Other Activities.—IBE has served since its inception as a clearing house of information on education. It maintains a library of over 100,000 volumes on education, and possesses a unique collection of materials on school legislation, approximately 15,000 textbooks, and more than 14,000 volumes of children's literature from many parts of the world.

The Bureau has published more than 200 volumes. These publications include the *International Yearbook of Education* which contains a world survey of educational developments in 60 or more countries. A quarterly *Bulletin,* issued by the IBE alone, contains information on education in various parts of the world and reviews of recent educational publications.

Function of the Office of Education.—The Office of Education serves as secretariat for United States membership to the International Bureau of Education and assumes responsibility each year for preparing the yearly reports. It also designs an exhibit interpreting aspects of education in this country. In the

selection of delegates to attend the conference and in the coordination of United States efforts both in the United States and in Geneva, the Office provides services of its own specialists and enlists the cooperation of persons and agencies both within and outside government.

OFFICE RELATIONS WITH OTHER INTERNATIONAL ORGANIZATIONS

Increased activity and interest regarding international organizations marked the work of the Office during the year. Among the major efforts in this area were the following:

The Commissioner of Education attended the Seventh National Conference of the United States National Commission for UNESCO. He was also chairman of the United States delegation and a working member of a regional seminar on education held in Brisbane, Australia, by the South Pacific Commission.

The Office nominated United States educators to participate in a number of international meetings. Among these were a training course on Over-All Educational Planning, held by the Organization of American States in Bogota, Colombia, and a seminar on educational materials sponsored by the New Zealand Commission for UNESCO.

Major projects completed during fiscal 1960 included the United States Chapter for the UNESCO *World Survey of Education, Vol. III, Secondary and Vocational Education;* material for a report to UNESCO on international programs in Education, Science, and Culture; and a chapter on education for the United Nations Economic and Social Council to be included in the *Report of Experience in the Field of Social Development of Potential Assistance to Under-Developed Countries.*

COMPARATIVE EDUCATION

The perspective gained from examining the educational systems of other countries has always been important and is especially so at the present time as the United States marshals its resources to maintain its position of world leadership. Basic research in the field of comparative education has been carried on for many years by the Office of Education, and with increasing vigor in the last few years as additional funds and staff have been devoted to this purpose.

The Office in recent years has sent a growing number of people to various countries to study foreign educational systems, and has held conferences on various aspects of foreign education.

Comparative education, involving as it does comparisons between countries, must be conducted with a great deal of care. An educational system has meaning chiefly when considered within the cultural setting of a particular country. A comparative education study brings us a greater understanding of a foreign educational system and a glimpse of the essential character of the country itself. Most important of all, comparative education gives us insight into the workings of our own education system and the goals and aspirations of

our society. It opens our eyes to new possibilities, to the universality of certain basic educational problems, and to the close relationship of education and the forces at work in a society.

In the fiscal year 1960 the Office published major bulletins on teacher training in the Netherlands, Belgium, and Luxembourg, and on education in Brazil, Haiti, and the Soviet Zone of East Germany. There were, moreover, less comprehensive publications on education in 13 of the West European countries, 9 of the countries of the Near East and North Africa, and 2 countries of East Europe. Publications concerning various aspects of education in the Soviet Union and Communist China totaled 4. A general bibliography on education in most of the major countries of the world and more detailed bibliographies on education in Poland and the Soviet Union were also published.

Comparative education specialists were sent to Africa (9 countries), to the Far East (Japan, Taiwan, Hong Kong), and to Afghanistan and Iran for the purpose of gathering materials for future publications on education in these areas. In conjunction with the East-West contacts program, the Office of Education sponsored two visits to the Soviet Union by teams of American specialists, one for the teaching of foreign languages and the other to study educational research procedures used in the Soviet Union.

Two major conferences were sponsored by the Office during the year, one on education in England and the other on how American education is interpreted abroad. Comparative education specialists presented papers or served as panelists for meetings relating to foreign education sponsored by the Organization of Arab Students in the United States, the University of Florida's Annual Conference on the Caribbean, the Ibero-American Institute, a special subcommittee of the Organization of American States, the Institute of International Education, the National Association of Foreign Student Advisers, the American Association of Collegiate Registrars, and the Council on Evaluation of Foreign Student Credentials.

This year the Office also embarked on a project of systematic analysis of the educational system in Communist China. The previously mentioned trip to the Far East is part of this endeavor as is a forthcoming conference on Chinese Communist education (August 1960).

More detailed reports of activities for fiscal 1960 will be published separately for the following Federal programs administered by the U.S. Office of Education:

1. Financial Assistance for Areas Affected by Federal Activities, and School Construction in Areas Affected by Federal Activities
2. National Defense Education Act of 1958
3. Cooperative Research
4. Vocational Education (including Practical Nurse Training)

Table 1.—*Enrollment in 50 States and District of Columbia, 1958–59 and 1959–60*

[Office of Education estimates]

Grade level and type of school	1958–59	1959–60
Kindergarten through grade 8:		
Public school system (regular full-time)	26,700,000	27,800,000
Nonpublic schools (regular full-time)	5,000,000	5,400,000
Other schools [1]	180,000	180,000
Total, kindergarten through grade 8	31,880,000	33,380,000
Grades 9 through 12:		
Public school system (regular full-time)	8,300,000	8,400,000
Nonpublic schools (regular full-time)	1,000,000	1,100,000
Other schools [1]	90,000	90,000
Total, grades 9 through 12	9,390,000	9,590,000
Kindergarten through grade 12:		
Public school system (regular full-time)	35,000,000	36,200,000
Nonpublic schools (regular full-time)	6,000,000	6,500,000
Other schools [1]	270,000	270,000
Total, kindergarten through grade 12	41,270,000	42,970,000
Higher education: Universities, colleges, professional schools, junior colleges, normal schools, and teachers colleges (degree-credit enrollment)	3,600,000	3,750,000
Total, elementary, secondary, and higher education	44,870,000	46,720,000

[1] Includes Federal schools for Indians, federally operated elementary-secondary schools on posts, model and practice schools in teacher training institutions, subcollegiate departments of colleges, and residential schools for exceptional children.

Table 2.—*Supply and demand for elementary and secondary public and nonpublic school teachers: Continental United States (excluding Alaska), 1959–60*

[Office of Education estimates]

Item	Elementary and secondary	Item	Elementary and secondary
Supply		*Demand*	
Total classroom teachers 1958–59	1,493,000	Total classroom teachers 1958–59	1,493,000
Less teachers with substandard credentials in public schools preceding year (Fall 1958)	92,300	Total classroom teachers needed to meet enrollment increases in 1959–60	70,000
Qualified classroom teachers, preceding year	1,400,700	Total classroom teachers needed 1959–60	1,563,000
Less qualified teachers not returning to classroom service in 1959–60 [1]	152,700	*Less* qualified teachers from regular sources in classroom service, 1959–60	1,368,000
Qualified teachers of the preceding year returning to classroom service in 1959–60	1,248,000	Supply needed from other sources, 1959–60	195,000
Newly trained teachers entering classroom service [2]	97,000	To be met by the re-entrance of former teachers into the profession, employment of teachers with substandard credentials, further overcrowding of classes, or curtailment of curriculum. (The corresponding figure for 1958–59, using the same dropout rate, is 182,000 [1]).	
Teachers with substandard credentials becoming fully certificated [3]	23,000		
Total qualified teachers from regular sources in classroom service, 1959–60	1,368,000		

[1] This figure for the number of qualified teachers not returning to classrooms is estimated on the basis of a 10.9 percent dropout rate. The total is approximately 50,000 higher than would be obtained by using the dropout rate of 7.5 percent employed in previous years. The advisability of using the new rate was indicated by the results of a survey conducted by the Office of Education.

[2] Derived from *The 1959 Teacher Supply and Demand Report*, National Education Association, Research Division. Computed as 83.3 percent of newly certificated inexperienced elementary teachers, and 67.8 percent for high school teachers.

[3] One-quarter of the teachers with substandard credentials the preceding year, probably a generous estimate. No data available.

Table 3.—*Grants and other financial assistance to States, Office of Education, for fiscal year 1960* [1]

States and outlying parts of the United States	Colleges for agriculture and the mechanic arts	Cooperative vocational education	Maintenance and operation of schools (Public Law 874)	School construction (Public Law 815)	Library services	Defense educational activities	Mentally retarded	Total
Total [2]	5,051,500	39,140,434	[3] 166,660,734	70,553,170	7,036,729	[4] 68,506,824	71,327	357,020,719
Alabama	100,541	1,063,459	4,134,169	1,178,556	207,576	1,924,249		8,608,552
Alaska	71,283	85,978	4,937,070	2,273,264	46,657	78,720		7,492,973
Arizona	77,477	204,863	3,910,640	3,360,417	72,485	139,691		7,765,576
Arkansas	89,047	780,559	953,655	660,185	164,544	883,240		3,531,233
California	175,599	2,083,982	26,023,090	12,396,011	239,322	1,869,372	2,033	42,789,412
Colorado	83,218	340,791	4,657,958	1,482,603	88,084	1,162,940	8,132	7,823,726
Connecticut	90,022	352,160	1,504,810	360,626	67,807	317,107		2,692,535
Delaware	73,172	185,836	641,028		48,391	109,059		1,057,488
District of Columbia		117,625				230,289		347,914
Florida	97,644	641,558	4,765,332	1,577,909	146,259	2,025,014	9,000	9,262,718
Georgia	104,360	1,094,212	4,650,651	1,364,942	223,578	820,728		8,258,473
Hawaii	74,985	180,891	958,511	2,330,961	55,087	283,933		3,884,370
Idaho	75,871	231,670	1,313,116	602,442	85,934	587,751		2,896,786
Illinois	156,905	1,682,459	2,911,440	1,072,962	230,178	1,186,055	3,650	7,243,650
Indiana	109,244	963,233	862,161	1,438,320		1,945,686		5,318,646
Iowa	96,145	849,945	597,624	318,876	213,719	957,220		3,033,531
Kansas	89,005	577,369	4,527,154	1,467,086	76,570	486,667		7,223,854
Kentucky	99,374	1,065,690	1,113,299	205,963	221,203	1,054,541		3,760,073
Louisiana	96,768	871,379	849,597	268,053	158,010	1,978,294		4,222,102
Maine	79,115	231,634	1,400,588	367,808	61,052	322,391	2,450	2,465,039
Maryland	93,371	447,163	5,487,449	4,250,791	72,000	484,574		10,835,350
Massachusetts	116,788	733,176	4,768,743	573,097	80,000	1,050,448		7,322,254
Michigan	133,559	1,358,365	920,041	2,800,457	221,976	2,950,174		8,384,574
Minnesota	99,750	935,247	413,809	246,113	172,203	1,678,280	2,166	3,547,570
Mississippi	91,735	961,493	1,348,521	684,269	193,061	2,068,017		5,347,097
Missouri	109,448	1,084,681	2,050,041	931,751	198,893	1,641,219		6,016,035
Montana	75,895	205,305	1,414,747	1,520,194	72,427	356,026		3,644,596
Nebraska	83,222	441,703	1,557,295	485,835	108,519	512,256		3,188,832
Nevada	71,596	179,589	1,226,881	124,835	68,141	84,499		1,755,543
New Hampshire	75,319	173,264	1,034,802		62,015	331,118		1,676,519
New Jersey	118,233	767,848	3,079,175	963,315	97,403	1,756,621	5,500	6,788,096
New Mexico	76,794	235,333	4,036,614	4,429,888	73,042	663,376		9,515,050
New York	217,933	2,482,102	3,416,560	1,586,921	249,152	4,761,827	3,050	12,717,547
North Carolina	110,518	1,500,204	2,011,507	703,359	302,331	3,223,393	1,633	7,852,948
North Dakota	76,180	288,687	336,233	845,927	42,146	422,098	9,800	2,021,072
Ohio	149,269	1,670,421	4,139,409	1,048,253	270,635	1,952,603	7,331	9,237,922
Oklahoma	92,278	736,475	6,615,389	3,066,253	99,815	1,345,086		11,955,297
Oregon	85,175	389,785	851,685	266,000	89,514	848,936		2,531,096
Pennsylvania	174,719	2,118,946	5,166,227	6,096	250,486	4,662,760		12,379,235
Rhode Island	77,899	173,149	1,607,652	242,489	59,305	352,195		2,512,690
South Carolina	91,117	732,732	2,890,143	525,502	127,918	567,630	2,650	4,937,694
South Dakota	76,511	287,001	1,698,838	958,222	82,462	268,828		3,371,863
Tennessee	102,835	1,123,383	1,891,600	226,395	219,097	1,751,043	3,532	5,317,888
Texas	146,920	1,993,378	11,099,365	4,575,261	288,142	6,591,644	3,050	24,697,762
Utah	76,871	189,731	1,645,421	689,843	74,658	363,868		3,040,395
Vermont	73,768	187,365	64,664		63,385	218,507		607,690
Virginia	103,104	987,317	13,007,273	4,003,652	211,253	2,607,408		20,920,009
Washington	93,730	542,274	7,100,291	1,353,152	125,287	1,588,351		10,803,087
West Virginia	90,005	628,224	115,532		167,674	1,788,849		2,790,286
Wisconsin	104,260	960,903	555,663		190,468	2,328,611	7,350	4,147,257
Wyoming	72,898	170,986	660,542	198,800	50,291	303,293		1,456,812
Guam		64,069	711,730	519,500	15,495	65,058		1,375,852
Puerto Rico	50,000	742,086	2,949,537		220,000	509,802		4,471,426
Virgin Islands		42,730	75,439		11,079	45,449		174,697

[1] On a checks-issued basis. Does not necessarily agree with allotments or expenditures for a given year.
[2] Inasmuch as the cents have been dropped from this table, a totaling of any column may or may not equal the total given for that column.
[3] Does not include payments made to Army, $5,274,916.85; Navy, $1,367,808.36; Air Force, $1,482,562.09.
[4] Does not include amounts paid for loans and repayable advances or amounts paid to institutions under the National Defense Education Act, $60,264,003.12.

Food and Drug Administration

THE FOOD and Drug Administration is in a period of transition, of growth from a small organization to one adequate to meet the heavy responsibilities recognized by a committee of distinguished citizens appointed in 1955 to appraise its operations. Laws enacted since then for better public protection have required substantial additional personnel and facilities.

A management consultant firm employed to review field operations, in a report issued early in 1960, recognized the growing demands being made upon FDA by the development of new products and manufacturing processes. It affirmed the recommendations for additional manpower made in 1955 by the Citizens Advisory Committee. The report recommended continuing the present system of FDA Districts, and increasing the number and staff of Resident Inspection Posts. It also called for additional measurements of workload and work accomplishment to ascertain how well the consumer is being protected.

Program planning is being conducted on a long-range basis. The groundwork is being laid for systematic reporting of statistical data that can be used for program formulation, direction, and evaluation. Plans for the coming year include securing more information concerning the firms whose operations are subject to the Food, Drug, and Cosmetic Act, and their products. Plans also call for increasing from 77 to 130 the number of carefully designed regulatory programs that will be given major emphasis.

Further planning is directed toward setting the goals of industry compliance to be sought from year to year in view of increased enforcement and educational facilities available. To accomplish this, and the other program-planning activities, advanced data-processing techniques must be employed.

Training programs during the year were largely devoted to the field force. Supervisory personnel have a serious responsibility in training

the new inspectors and chemists in the specialized techniques required for modern regulatory work. They must also keep experienced members of the staff informed on new developments in microanalysis, radiological instrumentation, and new chemical and bacteriological methods required in pesticide, food additive, and antibiotic detection and measurement.

A series of newsworthy events about FDA programs and activities during the year caused a flood of inquiries concerning the safety of the food supply, and of lipsticks. Each development is covered in more detail later in this report. The largest food sampling and testing program in FDA history began in November 1959 when shipments of cranberries were found to be contaminated by a weedkiller known to cause cancer in test animals. The public needed assurance that the testing and labeling practices put into effect for the entire crop would make it safe to serve the traditional holiday menu.

Not long afterwards, findings that a hormone (stilbestrol), to caponize poultry artificially, remained in some parts of the treated birds required negotiation and announcement of industry agreements to discontinue such treatments and withdraw treated birds from the market.

Concern likewise arose about the safety of lipsticks after proposals were published to ban most of the coal-tar colors that could be certified for use in them. This was necessary because the law, subsequently amended, prohibited certification of such colors as safe and suitable for use if they were harmful in any quantity, without regard to the concentration normally used.

Accurate press reports about these regulatory and administrative actions had to compete with sensational magazine articles and books charging that poisons are rampant in the Nation's food supply. Some consumers were alarmed, others became aware for the first time of the complex problems involved in the use of chemicals to produce, process, package, and transport food crops. Thousands of consumer inquiries came to the Division of Public Information, each letter calling for an answer as to FDA's views, and assurance that every possible precaution is being taken to protect public welfare.

A Consumer Inquiries Branch was established in the Division to answer such correspondence informatively and more efficiently. New publications were developed covering major topics of interest. A booklet, "What Consumers Should Know About Food Additives" and a circular, "Food Facts vs. Food Fallacies" were reprinted by industry organizations and widely distributed to libraries, schools, and other educational institutions.

Millions of growers and processors also received FDA educational material through organizations that could reach specific groups. Efforts were made particularly to reach growers who do not ship

their products directly in interstate commerce, but whose products eventually move interstate. Agricultural teachers received copies of "Grain Sanitation," "Clean Corn," "Milk and Cream—How to Comply with the Federal Food, Drug, and Cosmetic Act," and "Protecting Crops and Consumers," and requested thousands of copies for use in their classes. Milk and dairy associations distributed over a million copies of a message to farmers entitled "Keep Residues of Drugs and Pesticides Out of Milk." The first million was used so quickly that an immediate reorder was required. This was the first time FDA had ever attempted to place an official notice about the law into the hands of every member of such a large industry group.

The program of interpretive releases for the trade and public press has been expanded in order to explain the many new regulations and policy statements that have been issued, and to promote better public understanding of complex issues.

The Consumer Consultant program was reactivated by appointing a Consumer Programming Officer to plan and coordinate the activities of 20 consumer consultants located in the Districts. The function of the consultants is to provide planning personnel with information needed to appraise the effectiveness of consumer protection. The consultants also help to disseminate FDA information to consumer groups through talks and meetings and by radio and television appearances, to the end that informed public opinion will be the basis of recommendations for better protection.

The basic 1961 fiscal year appropriation is $16.8 million, a $3 million increase over that for 1960. In addition, $100,000 was appropriated for preliminary planning of an animal research facility. A supplementary appropriation of $1.2 million was enacted to implement new laws signed July 12, 1960—the Color Additive Amendments and the Hazardous Substances Labeling Act.

The 1961 appropriation provides for 2,199 positions in FDA, including 451 in programs resulting from legislation enacted after the Citizens Advisory Committee study was made in 1955. On the basis of a projected 15-percent annual increase from the 1956 total of 877, the Citizens Committee goal for 1961 is 1,763, or 15 positions more than the 1,748 actually provided for work covered by their recommendations, and not counting personnel provided for the new programs.

Seventy-five percent of the increase in basic funds is budgeted for improved field operations, including an increase in inspectors which will permit inspecting plants at a rate of once in 4½ years in comparison with about once in 5½ years in fiscal 1960. The 1961 budget provides funds for the continuation of a planned program of renovating FDA's District office facilities, on a 2-year schedule. Funds are requested for fixed equipment during the first year, and for special items of portable scientific and administrative equipment

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during the second year. The 1961 budget provides funds to complete Los Angeles and Buffalo District offices begun in 1960, to begin the first-year renovation of Boston, Cincinnati, Kansas City, and Minneapolis Districts, and for the partial financing of first-year costs to renovate New York District. With a new building for Detroit opened a year ago, new quarters for Atlanta dedicated in June 1960, and the new Dallas District to be opened in January 1961, 10 of the 18 Districts will be modernly and efficiently housed by 1962.

Congress appropriated $15.1 million for construction of an FDA headquarters in Washington. This will alleviate the acute shortage of laboratory and office space which the Citizens Advisory Committee had pointed to in 1955. The expansion program it recommended, and which won the support of the Administration, Congress, and the public at large, has now made headquarters space even more inadequate. The staff has been dispersed into scattered locations at the expense of efficiency. Existing antiquated facilities are not suitable for the advanced experimentation required today to keep up with the technological advances of the regulated industries. Therefore, the facilities planned, both in Washington and the field, are not luxuries, but are necessities to meet the demands of increasing responsibilities, numerical growth, and scientific progress.

An adequate animal research facility is imperative. Experimental animals have been required for decades in conducting drug bioassays for compliance with U.S. Pharmacopeia standards. By 1935, pharmacology had become so important to FDA evaluations of safety that a new Division was formed and staffed with experts. The 1938 Act, with its provisions for control of safety of new drugs before marketing, materially added to the responsibilities of this Division and required an increase in the number of experimental animals to be housed. Antibiotics certification tests further expanded the animal colony. The Pesticides Chemicals Amendment of 1954, and, more extensively, the Food Additives Amendment of 1958, made the housing problem for necessary research animals even more acute. Every effort is being exerted to provide better housing for the animals.

The 25-percent increase for headquarters operations will be utilized to improve basic and applied research on food additives and pesticides, to obtain the results of experience with new drugs after they are in widespread use, and to give increased attention to food standards. Funds are also provided for the study of radiological contamination of foods, drugs, and cosmetics. Specific problems that also will be studied will include bacterial contamination of frozen foods, the possibility of carcinogens finding their way into foods, and toxic properties of fatty acids, all of which are under intensive investigation by industry scientists.

Efforts to improve public understanding of regulatory programs and thereby promote voluntary compliance will also be stepped up under the provisions of the 1961 budget.

Food, Drug, and Cosmetic Act

ON THE FOOD FRONT

One of the major disasters of the year in its effect on interstate supplies of foods and drugs was the explosion in the downtown area of Rosenberg, Oreg., of a truck loaded with 2 tons of dynamite and 4½ tons of ammonium nitrate. Two grain elevators, a soft-drink bottling plant, some drugstores, and a drive-in ice cream establishment were among the establishments wrecked with glass particles contaminating the foods and drugs. FDA assisted State and local health and food officials in segregating contaminated lots, which were destroyed under the supervision of these officials.

The Montana earthquake in August caused great injury to vacationers but there were few food and drug establishments in the disaster area requiring attention.

Potential Health Hazards

Radiation and Civil Defense.—In August the President established the Radiation Health Council and designated the Secretary of Health, Education, and Welfare as its chairman. Under this program FDA has been given the responsibility for determining, establishing, and enforcing permissible levels of radioactivity in foods, drugs, and cosmetics; monitoring such products to determine levels of radioactivity; conducting research for identification and evaluation of radioactivity in foods, drugs, and cosmetics, and decontamination techniques for affected products, and for the training of Federal, State, and local food and drug officers and professional and technical employees of regulated industries in such methodology and techniques; approving radioactive drugs used in diagnosis and treatment; conducting regulatory work to combat "radioactive" quackery; and for disseminating information about these activities.

Twenty-six persons were assigned to the radiological program for this fiscal year 1960; it will be augmented in 1961 with a budgeted staff of 116. The 11 civil defense positions are financed by funds appropriated for the Office of Civil and Defense Mobilization.

During the year a number of reports were made of samples collected from various parts of the country and tested for total beta radiation, as a check on fallout contamination. This program covered about 6,000 samples of 50 different foods, including some imported articles. Although tabulations have not been completed, there appears to be a general decline in total radioactivity except for tea, alfalfa, and

spinach. Brewing of the tea and processing of the spinach significantly reduced the levels of radioactivity in those commodities as consumed.

With the cessation of large-scale nuclear weapons testing in October 1958 the shorter-lived isotopes from fallout apparently have decreased considerably and new methods to isolate individual isotopes must replace the "total beta" measurements which have been used for fallout comparisons.

Tests were begun for Strontium 90 in wheat, cabbage, and potatoes grown in 12 States and soybeans from one of them. Examination of individual samples showed levels within the limits recommended by the National Committee on Radiation Protection as permissible for lifetime exposure.

The FDA Civil Defense Training Program for Federal, State, and local food and drug officials, designed to help them safeguard the food and drug supplies of the Nation in case of enemy attack, was reactivated in 1960. Basic changes were made in the original course to conform to new developments in chemical, biological, and radiological weapons since 1957. More time was given to practical exercises and less to the more technical aspects of the course. The revised training courses held at 10 field Districts and in Washington, D.C., were attended by 337 people, including new FDA employees, State and local food and drug officials, and members of regulated industries. The remaining Districts will be covered in 1961. The course presented the effects of theoretical chemical, biological, and radiological attacks on food and drugs, procedures for testing exposed food and drugs, and the decontamination or destruction of contaminated food and drugs.

The Biological Warfare Research Program was limited to building an organization necessary to perform the research operations, and acquiring a thorough understanding of the problem. A Biological Warfare Research Branch has been created. The program being developed is designed to study the vulnerability of wholesale packages of foods and drugs to bacteriological agents introduced during overt or covert attacks, and to develop simple procedures that will be critically needed following any enemy attack for decontamination of affected products. It is hoped that this program may be expanded by similar studies of products in retail containers and by the determination of the longevity of potential agents in various foods held under usual storage conditions.

Food additives.—Regulations promulgated under the Food Additives Amendment to the Act are discussed under "Changes in the Law and Regulations." Some industry groups were at first surprised to learn that the term "food additives" covers much more than the mere deliberate addition of substances to foods in the process of manufac-

ture, where the manufacturer knows exactly what he is putting in, how much is involved, and whether or not its safety has been established.

Illustrations of such possibilities and problems include compounds formed by chemical reaction during the process of manufacture; residues of insecticides and cleaning materials used in food plants and processing equipment; compounds to prevent corrosion in boilers, which may be carried by steam into the food; substances which migrate to the food from packaging materials, printing ink, and mold inhibitors used on fruit containers; and drugs added to animal feeds either to treat disease or promote growth.

FDA staff members gave talks to industry associations throughout the year to promote better understanding of the specialized problems confronting them. In contrast to the food industry which had long experience in operating under the Food, Drug, and Cosmetic Act, many of these groups were facing Federal regulatory procedures for the first time, some with apprehension.

The use of stilbestrol for the artificial caponizing of poultry was authorized in 1947, after a 2-year study of new-drug applications showing that no significant residues of the drug would remain in the edible tissues of treated birds. Since it was known that this hormone could cause cancer in experimental animals, a policy statement was issued in May 1959 that under the Food Additives Amendment provisions, no further new-drug applications could be made effective for such substances and that all sanctions then in effect would be reviewed. An extensive reexamination of the use of stilbestrol in the raising of beef cattle, sheep, and poultry showed no detectable residues in meat from treated animals but small residues were found in the skins, livers, and kidneys of treated poultry.

Authorized manufacturers were requested to suspend production of stilbestrol for use in poultry immediately, and representatives of the poultry industry and the retail food industry were requested to arrange for the immediate discontinuance of the sale of treated birds to consumers. Their agreements to do so were announced on December 10, 1959. Approximately 1 percent of the poultry crop was involved. (See also "New Drugs.")

Consumers, too, need to know more about food additives. Writers of sensational articles and books are frightening many people with false conclusions about the safety of the food supply, as mentioned in the introductory chapter. FDA published a booklet in January entitled "What Consumers Should Know About Food Additives" to explain to the public that food additives are an integral part of the tremendous progress being made in modern food technology and that the new law establishes safeguards to prevent the use of new, untested substances.

The Food Additives Amendment became fully effective on March 6, 1960. Attention was given to food additives during 3,700 factory inspections, with referral to FDA headquarters of any findings requiring administrative or scientific review.

Pesticides.—The enforcement of the 1954 Pesticide Chemicals Amendment is one of FDA's major problems. Approximately 2 million growers are using several hundred million pounds of pesticides yearly in the production of our foods. Approximately 23 percent more field time was spent on this project than in the previous year in surveillance of pesticide practices of growers, the collection and examination of samples, educational work, and the development and improvement of analytical methods.

Sixty seizures totaling 1,377 tons were made during the year of raw agricultural commodities containing unpermitted pesticide chemicals or residues in excess of established tolerances, and processed foods having unpermitted pesticide chemical residues. In volume, the largest seizures involved 738 tons of apple pomace stored in farm silos. This pomace consists largely of the skin and extracted pulp of apples, the byproduct of the manufacture of vinegar, cider, applesauce, and other apple products. It contains a concentrate of pesticide residues much greater than the apples from which it is derived. FDA investigations showed that when cattle were fed apple pomace DDT appeared in the milk and meat, and a policy statement was issued that articles containing such residues were in violation of the Food, Drug, and Cosmetic Act. Most of the apple-processing plants arranged to have the pomace hauled to dumps but some of it found its way into the silos of dairy farmers. After the seizures were adjudicated, the pomace was taken from the silos, spread on the fields, and plowed under.

In its impact on the public as well as the industry, the action taken involving cranberries containing aminotriazole by far dominated all of the other enforcement work. Although the tonnage destroyed after seizure was approximately one fifth of that of the apple pomace, more than 3 million pounds of the 1957 crop, which had been held until the residue status was cleared, were in the process of being destroyed voluntarily when contamination was discovered in the 1959 crop going to market.

The use of aminotriazole as a weed killer on cranberry bogs began in the 1957 growing season before it was registered with the U.S. Department of Agriculture on a no-residue basis, with directions calling for use not later than 7 to 10 days *after* harvest. These directions were widely disseminated after the registration in January 1958, and a large volume of the 1957 crop known to have had application of the weed killer during the growing season was set aside in freezer storage pending an expected establishment of a residue tolerance. Petitions for

such a tolerance were withdrawn when evidence developed that aminotriazole caused thyroid tumors in experimental animals. When there were rumors that the chemical was being misused, FDA chemists began working to perfect methods to detect it in the cranberries. When the method was finally available in the fall of 1959, samples of cranberries were examined for aminotriazole and interstate shipments found contaminated were seized and the facts were announced to the public.

Because of the approaching holiday season, FDA launched into the most extensive sampling and testing program it had ever undertaken for a single commodity. Press, radio, and television kept the public informed of day-by-day progress on the clearance program—some papers even going into detail as to the procedures of the time-consuming tests and the elaborate equipment required. Agreement was reached with the industry on a plan for labeling cranberries tested and found free of aminotriazole so that the buying public could identify these cranberries and buy them with confidence.

In October 1959 it was announced at a milk industry meeting that FDA was starting to sample milk with a view to regulatory action on shipments containing residues of antibiotics and pesticides. This followed a 5-year period of FDA investigational surveys and an educational program in which agricultural and industry groups had participated. After this announcement schools were set up to teach the methods involved in detecting and measuring drug and pesticide residues. State and local officials attended 12 antibiotics and 13 pesticide methods schools, and there was also participation by key industry technologists who could train other industry control people in their use.

State and local agencies examined more than 50,000 samples for antibiotic residues, issued warnings when they were found, and in some cases refused to permit deliveries until the milk was found free of contamination. They were also active in tracing sources of contamination in the eight shipments of dairy products that were seized by Federal action because of pesticide residues. These consisted of six lots of evaporated milk, one of condensed milk, and one of butter.

Eight carloads (346 tons) of mercury-treated grain diverted from seed use to food channels were seized. Other pesticide residue seizures included celery to which Parathion was applied in many times the recommended amounts, Bibb lettuce, spinach, and dried beans. The lettuce was produced in greenhouses where it was protected from outdoor conditions and a fungicide (PCNB) which was registered on a "no-residue" basis was applied. The firm, when notified by FDA that the lettuce contained an unpermitted residue, persisted in shipping it and advised dealers not to hold it pending Government analysis. The Department of Agriculture then issued a notice that the labeling of

pesticides is approved only for normal outdoor use, and should not be followed for greenhouse growing unless specific directions appear on the label for such use.

Food poisoning.—Forty-five outbreaks of suspected food poisoning involving approximately 3,600 persons were investigated by FDA during the year. Insanitary handling or prolonged holding under inadequate refrigeration continued to be the underlying cause of a majority of the outbreaks.

In two outbreaks, foods in interstate commerce appeared to be involved, one of these was associated with a product in an apparently defective container. Investigation revealed that the remainder of the lot was satisfactory. Whipped oleomargarine held without refrigeration in retail stores was responsible for the illness of 36 persons. Investigation revealed the presence of enterotoxic *Staphylococci* in samples of the product. Lots involved were not of recent production and no outstanding lots were found on the market.

Botulinus in home-canned foods was responsible for 4 outbreaks involving 10 persons with 3 deaths.

To Keep Food Clean

Although first attention must be given to keeping potentially dangerous food from reaching consumers, 75 percent of the food seizures were based on filth and decomposition. A total of 6,898 tons were seized in 571 actions. Of these, 336 seizures involved merchandise that became unfit after interstate shipment.

As the result of FDA inspections disclosing merchandise that would be subject to seizure if shipped, owners voluntarily destroyed an additional 6,913 tons of unfit food in 1,133 actions. They also reported 251 plant improvements costing nearly 3 million dollars in structural changes, repairs, new equipment to contribute to sanitary operations, and hiring of new sanitarians. Many other firms are continuously improving their plants and operations without reporting details and costs to inspectors, or suggestions being required. In either case, such actions provide long-range consumer protection.

One of the largest voluntary recalls and destructions followed national press publicity given to seizure in Hawaii of a small lot of spaghetti in tomato sauce following a factory inspection indicating that the spaghetti used had been prepared and held under insanitary conditions permitting insect contamination. The home office in the East sent top management representatives to the California branch to correct the situation. The manager was relieved and the plant shut down for cleaning. About $100,000 worth of the product was recalled from the market and destroyed, and approximately 120,000

pounds of spaghetti ingredients that had been held under insanitary conditions were converted to animal feed.

In general, warehouse conditions have improved as a result of constant pressure and legal actions. Inspections made at food-storage warehouses, including wholesale grocers, chainstore warehouses, cold-storage warehouses, and other establishments where food is stored for subsequent distribution, totaled 3,653, a slight increase over the 3,218 warehouse inspections made in 1959.

Seizures were made of 146 lots found contaminated with filth, 13 prosecution actions were filed, and 3 injunctions were requested to prevent the distribution of food that had become contaminated while held for sale. In two of these cases improper use of a toxic rodenticide was also a factor. In another case where injunction was under consideration the firm and the building owner made extensive repairs of the warehouse, destroyed rodent-contaminated and insect-infested merchandise, and thoroughly cleaned the premises, thus attaining the objectives of an injunction without formal action.

The largest warehouse seizure involved a million pounds of rodent-contaminated sugar in the spring of 1960. A few months earlier a relatively small portion of this large lot was found contaminated and seized but the owner did not take the necessary steps to keep rodents from defiling the remainder of the lot.

A warehouse owner fined $3,000 for insanitary storage conditions resulting in the contamination of cereals and ready-mixes had been convicted on the same charges within a year. The Federal judge, at sentencing, said he would be fully justified in imposing a prison sen-

Table 1.—*Actions on foods during the fiscal year 1960*

Projects	Seizures	Criminal Prosecutions instituted	Injunction petitions
Total	757	61	10
Beverages and beverage materials	13	0	
Bakery, ready to eat cereal, and macaroni products	9	12	
Cereals and grain products:			
Human use	101	2	4
Animal use	7	2	
Chocolates, sugars, and related products	26	4	1
Dairy products:			
Butter and churning cream	19	5	
Cheese and other dairy products	12	0	
Eggs and egg products	21	4	1
Flavors, spices and condiments	16	3	
Fruits and fruit products	63	1	1
Meat products and poultry	9	0	
Nuts and nut products	91	4	
Oils, fats, and oleomargarine	7	1	
Seafood	65	2	1
Vegetables and vegetable products	102	8	1
Miscellaneous foods (mixed lots)	5	0	
Warehouse foods	147	13	3
Food for special dietary uses [1]	38	0	
Food adjuncts	1	0	

[1] Includes vitamin products intended as food supplements.

tence, and warned the defendant that he must choose between keeping his warehouse clean or getting out of the food business.

During the educational campaign to keep pesticides and antibiotics out of the milk supply the message of clean milk and cream was continued. A trend from farm-separated to creamery-separated cream, with collections in bulk tank trucks is creating a problem for the milk station in identifying the farmers who are not following recommended practices of protecting milk from filth and decomposition. In deliveries in cans from individual farms the collecting stations could determine objectionable lots by sediment tests and reject them. Shrinkage in the volume of production, consolidation to larger manufacturers with better quality control concepts, and a marked switch from sour to sweet cream for butter making have resulted in a decrease in regulatory actions, from 18 seizures of filthy butter and churning cream in 1959 to 8 in 1960.

One firm that had continued the manufacture of sour cream butter was prosecuted for the shipment of adulterated cream and with its officers, was fined $9,000, the heaviest fine of the year, and the heaviest meted out to a creamery in recent years. The firm has announced that it will discontinue manufacturing sour cream butter.

The clean grain program was continued through talks at meetings and discussions with many members of the trade, participation in grain association schools, distribution of sanitation leaflets, and inspections of elevators and bulk shipments. The program was furthered by inspectors of the Commodity Stabilization Service who followed up on FDA's reports of violative elevators storing CSS grain, and issued warnings that licenses would be suspended for elevators that did not protect the grain from rodents and insects. Their actions stimulated repairs and diversion of contaminated grain to feed use before it could contaminate incoming clean grain.

Four injunction petitions were forwarded to the Department of Justice to prevent the shipment for human consumption of adulterated wheat held under insanitary conditions. Seizures of bulk lots of grain contaminated by rodents were made in 27 actions involving 1,395 tons.

Continued sanitary improvement was noted in most processing plants, but one large candy factory was enjoined from shipping contaminated products from a factory heavily infested by insects and rodents. Two large lots of contaminated cocoa beans had been seized at this factory, and factory inspections in October, December, and January disclosed intensive infestation of the plant's equipment as well as in raw materials and finished chocolate products, despite previous warnings. The injunction restrained the firm from shipping approximately 300,000 pounds of products manufactured under these insanitary conditions.

Improved sanitary conditions were found in the crab-picking plants of the Chesapeake Bay area. A South Carolina crabmeat packer was fined $500, given a 1-year suspended sentence, and placed on probation by a judge who commented that crabmeat, usually consumed without further cooking, should be produced under the very best conditions. Rodents, insects, and insanitary personal habits are intolerable, he added, and those who cannot produce crabmeat under the best of conditions should get out of the business.

The problem of diversion of incubator reject eggs to human food channels by an organized group of bootleg-type racketeers has been discussed in previous reports. In the Southeast, a permanent injunction was granted to prevent the interstate shipment of lots located last year, fines were levied against another firm and its operator, and additional seizures were made. At Nashville, three key individuals in the racket were sentenced to 4-month prison terms for shipping frozen candling rejects for food use. They had been involved in Federal jurisdictions elsewhere and had had their cases transferred to the Federal court at Nashville, expecting lighter penalties. A convicted principal in the East Coast diversion of rotten incubator reject eggs into foods, pleaded guilty to violating terms of a 5-year probationary sentence and was sentenced in November 1959 to 3 months in jail, for shipping reject eggs from Connecticut to New York for breaking out and packing in 30-pound cans to be frozen and distributed to New York and New Jersey food processors.

Fines were also imposed against operators in Florida and Texas. The ringleaders of this group apparently have diverted their activities to other enterprises, but such a profitable racket is difficult to suppress and others will continue to attempt it. For example, a new bootleg incubator reject enterprise was uncovered as a result of information received from Michigan authorities that some hatcheries were making shipments from that State.

Surveillance was established and a truckload of more than 600 cases was seized while in transit in northern Indiana. This type of enforcement requires extensive time, unusual hours, and coordinated efforts of Federal, State, and local officials.

Pocketbook Protection

The 1959 report described a nationwide check of the net weight of packaged foods and announced the initiation of a seizure program when significant shortages are encountered and attention to net contents practices of food packers as a part of each food-plant inspection. Products seized for short weight or volume during the fiscal year included popcorn, candy, spices, frozen strawberries, stuffed olives, nuts and nut products, cooking oil, canned peppers, tomato sauce, and soup mix.

Among the products seized for failure to comply with official standards were various "chocolate" items made with cocoa, and others low in chocolate, cocoa containing cocoa shell, enriched flour deficient in enrichment and failing to bear mandatory labeling information as to its vitamin and mineral properties, low-fat butter, cheese made from unpasteurized milk and not held the required 60 days, tuna failing to meet fill-of-container standards, canned peaches containing mixed pieces of irregular size, jams low in fruit content, margarine masquerading as butter and other margarine failing to bear mandatory labeling, canned beans with excessive fiber, and canned peas not labeled to show that they had been prepared from dried peas.

Another type of violation affecting the family food budget is failure of unstandardized items to meet the ingredient statements on their labels—through substitution of cheaper ingredients than the purchaser is led to expect. Seizures for such violations included coffee with dextrose and undeclared artificial flavoring, cream pies without the whipped cream they were declared to contain, fish fillets unlabeled as to species or packer, shrimp with broken pieces substituted for whole, whiting not fully dressed as labeled, vanilla containing artificial vanilla, monosodium glutaminate "extended" with salt, choke cherry preserves with artificial coloring, imitation lemon juice, watered orange juice, poultry falsely labeled "pheasants and guinea hens," blended oils low in or without the olive oil claimed, and unlabeled pizza sauce. Among the deceptive animal feeds seized were meat scraps containing bristle, horn, hoof, and other non-edible animal parts, and cottonseed meal low in declared protein.

DRUGS AND DEVICES

Recalls.—Thirty-five defective or misbranded drugs were recalled by manufacturers during the year, 11 at the request of FDA. Eighteen were defective in composition because of low potency, deterioration, lack of sterility, etc. Six were recalled because they caused injuries—three earwax removers that caused inflammation in some users, an arthritis ointment that caused burns, and two veterinary preparations that were toxic to pigs. Another recall was made by an importer of an injection drug when studies in England indicated that large doses caused cancer in experimental animals.

Nine of the recalls were made to correct labeling—five were labeled with the names of other drugs, three required changes in ingredient statements, and one was labeled for over-the-counter sale, whereas it was limited to prescription dispensing by the terms of its new-drug application.

Illegal Sales of Prescription Drugs

A tragic episode in Arizona just before Christmas dramatized anew that drivers using amphetamines endanger our highways—a cattle

truck speeding down the wrong side of the highway collided with a bus, killing 9 people, injuring 31, and causing more than $100,000 worth of property damage. Amphetamine tablets were found in the demolished cab of the truck and the drug was found in the blood of the dead driver, who had been on the road 48 hours without sleep.

A step-up in enforcement against illegal sales of amphetamines and barbiturates by persons unlicensed to dispense prescription drugs and untrained in the responsibilities attendant to such sales, is reflected in the fact that more court prosecution cases involved unauthorized sources than licensed pharmacists and drug stores, 82 and 80, respectively.

Although many cases were brought against truckstops, cafes, small peddlers, etc., the primary objective was to uncover their suppliers. Large quantities of amphetamines were seized after arrests of wholesale peddlers who had agreed to deliver the drugs to FDA inspectors they believed to be middlemen for truckstops.

In volume the largest case involved more than 786,000 tablets seized from the dwelling and car of partners who have been charged with conspiracy to violate the Food, Drug, and Cosmetic Act. Such wholesale operators are the keymen in the situation; many of them have criminal records for other underground activities.

Five cases were brought against medical practitioners, frequently tied up with truck-driver peddlers, on the charge of dispensing drugs without the physician-patient relationship so essential to good medical practice. Of 187 criminal actions charging drug violations 167 were based on illegal sales. Individuals and firms involved totaled 276.

Adulterated and Misbranded Drugs and Devices

A serious threat to the production of prescription drugs of standard purity and potency was an independent testing laboratory which was giving faked data on the drugs it tested for small drug manufacturers. The firm offered complete drug analytical work, including chemical, bacteriological, and animal testing.

FDA investigators found that the firm lacked the facilities to perform the work. FDA laboratory scientists prepared samples for analysis known to have different purity and composition than those declared on the label; the testing firm reported that they complied with the label statements. The fictitious information the firm supplied its customers included data for establishing the safety of a new drug. Prosecution resulted in fines, a 1-year suspended jail sentence for the president of the firm, and a 3-year probation under strict supervision by FDA.

Of equal danger to public health is the apparently widespread counterfeiting and repacking of potent drugs by bootleg-type operators who do not hold effective new-drug applications or have adequate con-

trol systems. Just as the fiscal year ended, FDA Districts were working with State drug officials and private investigators in developing evidence of large-scale distribution of counterfeits of trademarked new drugs, including some still in the stage of clinical investigation by the originators.

The 1959 report described two cases based on counterfeits of well-known brands of tranquilizers. The head of one firm then under indictment received a 6-month suspended jail sentence and is now working as a salaried employee of another drug firm; his former firm is out of business and his associate in the venture, who received a fine, has abandoned the drug business.

Inadequate manufacturing controls were found in a number of cases, resulting in nonsterile injection drugs or drugs below or above their labeled potency. In one prosecution case in which the firm and its president were fined $3,500 a prescription drug was 2½ times its labeled strength. The firm had a long history of failure to control the potency of its products, and had been previously fined for subpotency of vitamins. Charges were filed in 20 drug and device and 4 vitamin seizures that the items involved failed to meet standards set forth in official standards or their own labeling.

False and misleading claims were charged in 158 seizures of drugs, vitamin and dietary items, and therapeutic devices. Thirty-six of these were based principally on unfounded claims of weight reduction, and in many of the 38 vitamin and food supplement seizures such claims were prominent. Many of the purported reducers depended upon the supposed benefits of appetite depressants whose effectiveness has been disproved by controlled clinical tests conducted by a research group which included an FDA physician. In April a circuit court, in rejecting an injunction appeal by the distributors of a widely advertised product of this type, accepted the affidavits of medical experts that this drug (phenylpropanolamine) does not possess significant appetite-depressing properties as claimed.

Another "appetite suppressant" offered for weight reduction was tartaric acid in cigarettes promoted by such slogans as "puff your pounds away" and "watch your weight go up in smoke." A Federal court affirmed the Government's view that these cigarettes were not effective for weight reduction, and upheld the seizure in November 1959.

Other so-called weight reducers seized were supplements to low-caloric diets which would alone, if followed, result in weight reduction.

The devices seized because of unfounded claims for weight reduction were largely mechanical vibrators and massagers, usually promising "spot reduction."

Among the purported cancer "cures" each also offered for various other serious conditions were colored lamps sold as do-it-yourself

assembly kits, consisting of a lamp base, electrical fixtures and wiring, and five colored plastic slides. In addition to claims for cancer, this lamp was promoted in accompanying literature for glaucoma, arthritis, tuberculosis, scarlet fever, measles, influenza, and among others, "all diseases which may afflict the body of man." On June 7 a Federal court in Los Angeles issued a condemnation order for the seized lamp units and a permanent injunction against further distribution.

Another "cancer cure" consisted of tape-recorded organ music of "Smoke Gets In Your Eyes" priced at $500, including a "sound therapeutic vibrator" that could be made from widely available parts for $35. The patient could get the "message" and "treatment" by listening to the music with earphones and through electrical energy supplied by two wire-connected pads, with current pulses varying in voltage with loud or soft music. It was offered not only for cancer, but for diagnosing and treating pathological conditions of the head, lungs, heart, stomach, gall bladder, spleen, appendix, spine, cataracts of the eyes, and germ diseases.

Another device that was seized and distribution of which was halted provided two to three times the amount of radioactivity in a radium watch dial contained in eight quartz tubes imbedded in a plastic barrel. Another quartz tube containing blood taken from the patient was placed in the barrel, refrigerated for 24 hours, and reinjected into the patient in order "to establish the normal chemistry" of the body. It was recommended for cancer, diabetes, arthritis, anemia, and bone ailments and was used extensively in the treatment of mentally retarded children. At the end of the year it was under a temporary restraining order.

Most of the devices seized were innocuous apart from claims that turned people away from competent medical treatment, but danger to health was charged in seizures of nine shipments of a breast developer with a mechanical pump suction, best described as a modified milking machine, and in an injunction case involving a gynecological device.

False representations are still being made that vitamins, minerals, organically grown items, and various nutritional supplements are required to prevent or cure diseases caused by diets alleged to be universally deficient in nutritive value. FDA has continued its campaign to educate the public in the true value of nutritional advancements on the one hand, and the falsity of certain types of claims on the other. Typical are claims that the average American has a severe dietary problem because foods grown on depleted soil, or processed in accordance with our modern custom, lack essential nutrients that must be supplemented to prevent, cure, and alleviate many disease conditions.

A press conference by the Secretary of Health, Education, and Welfare, calling public attention to such misrepresentation, brought

one firm nationwide attention by release of a series of correspondence between the firm and the Secretary. When the prosecution case against the firm was tried there was no contest and a $1,500 fine was assessed. Five other actions were brought for illegal sales promotion of nutritional items with unfounded medical claims.

Another firm and its officers, enjoined in 1950 from making claims through literature or house-to-house salesmen, for its vitamin-mineral preparation in violation of the Federal Food, Drug, and Cosmetic Act, were ordered by the Federal Trade Commission to cease and desist from making false claims, including: That the decree of injunction amounted to an endorsement of their product by the U.S. district court and the Food and Drug Administration; that the allowable claims listed in the injunction applied only to the product and to no competitive product; and that no other seller of vitamin and mineral products has the right to submit its promotional literature to the Food and Drug Administration for inspection and comment.

In a policy statement published in December, FDA warned that any claim, direct or implied, in the labeling of fatty substances offered to the general public that they will prevent, mitigate, or cure diseases of the heart or arteries is false and misleading, and will cause such substances to be misbranded. Many firms had been attempting to capitalize on the widespread interest in the possible relationship between blood cholesterol levels and heart and artery diseases. Legitimate research and clinical evaluation of unsaturated fats is under way, but the present data are incomplete and contradictory and promotion based on them is misleading. A number of seizures were based on false claims that the articles would lower blood cholesterol.

A best seller on folk medicine by a New England physician, was given wide publicity in popular magazines. In it he attributed miraculous curative powers to a combination of honey and vinegar. A local woman devised a "recipe" for the mixture and it was purchased by a national distributor of miscellaneous household products other than foods. A big publicity campaign was launched, with a tie-in to the book. Seizures were made as soon as interstate shipments began. The manufacturer is now attempting to devise labeling that will not misbrand the product.

Other products seized for false and misleading claims were not concentrated in any specific category, but included tonics, ointments, herbs, and other products with misleading claims for lay treatment of arthritis, respiratory troubles, canker sores, sexual maladjustments, and "that tired feeling."

New Drugs

During the fiscal year 480 new drug applications were received, 112 of which were for veterinary drugs. Within the same period 268

applications became effective, which includes 46 for veterinary drugs. Eight hundred and nineteen supplements, providing for changes in effective applications, and including 115 for veterinary drugs, were given favorable action.

Two effective applications were suspended without contest, and notice of hearing with respect to refusal of an application was given in one instance which resulted in its voluntary withdrawal. Requests for the voluntary suspension of 10 applications providing for the use of diethylstilbestrol as implants or injections in poultry were made to the respective firms. Notices of hearing issued to three of these firms which did not consent to suspension.

Among the new products introduced during the year were three antibiotics, one administered orally for fungus infections of the skin, scalp and nails, one for amoebic and bacillary dysentery and one for fungus infections of the vagina; a new anticancer agent; seven diuretics for the treatment of edema; a new anti-inflammatory corticosteroid and three steroids for enhancing the building-up processes of the body; a progesteronelike steroid, as an oral contraceptive agent; seven agents useful in the therapy of psychiatric conditions, five of which have a tranquilizing action and two of which are essentially stimulating. The list of new drugs for the year also includes a muscle relaxant, an antiepileptic, three products for the treatment of Parkinson's disease, two antihistamines, one narcotic for the control of pain, a barbiturate for general anesthesia by intravenous injection, a local anesthetic, a drug for lowering blood cholesterol, one for decreasing blood coagulation, an anticholine-sterase for the treatment of glaucoma, an enzyme to assist in the surgical removal of cataracts, an appetite depressant, a drug for the treatment of pinworms, three drugs to decrease nasal congestion, and an antiseptic gargle. One of the drugs introduced for veterinary medicine was a tranquilizer for use in chicken and turkey feed to combat "stressful environmental conditions" and aortic rupture in turkeys.

COSMETICS AND COLORS

A recall of a home-permanent kit was made by a cosmetic manufacturer when injury complaints were received of painful irritation when the neutralizer it contained inadvertently got into the eyes of some users. The firm notified retailers to stop selling the home-permanent kit and set it aside until the neutralizer solution was replaced.

A product labeled "Oil of Bergamot Synthetic" was seized because it consisted of imitation oil of bergamot and olive oil. A second cosmetic was misbranded by claims in an accompanying leaflet in violation of the drug provisions of the law. It was falsely represented to improve the hair and skin, help build blood, curb the appetite and

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aid in losing weight, and to contain the amino acid necessary for tissue growth.

No court actions were taken against violative colors.

CERTIFICATION SERVICES

Coal-tar colors.—All coal-tar colors used in foods, drugs, and cosmetics (except hair dyes) must be from batches certified by FDA as harmless. In 1960, 5,588 batches representing 7,806,139 pounds were certified, and 40 batches representing 38,812 pounds, rejected.

Insulin.—All batches of insulin must be tested and certified before distribution. Examination of 350 samples resulted in the certification of 285 batches of 7 insulin drugs and 58 batches of materials for use in making insulin-containing drugs.

Antibiotics.—The predistribution testing and certification of certain antibiotics is also provided by amendments to the act. Examinations were made of 16,601 batches of penicillin, chlortetracycline, bacitracin, chloramphenicol, streptomycin, dihydrostreptomycin, tetracycline, neomycin, nystatin, novobiocin, erythromicin, polymyxin B, oleandomycin, and amphotericin B during the fiscal year. The last seven antibiotics are not included in the certification amendments, but are tested when they are mixed with those requiring certification. Seventy batches were found to be unsatisfactory by either FDA or the manufacturer for failing to meet the following standards: Potency (43), sterility (10), streptomycin content (5), pharmaceutical attractiveness (4), moisture (4), pyrogens (2), and solubility (2).

Enforcement of Other Acts

A total of 114,174,657 pounds of tea was examined under the Tea Importation Act. Rejections for failure to measure up to the standards set by the U.S. Board of Tea Experts totaled 222,736 pounds, or less than 0.2 percent. Five rejections were appealed to the U.S. Board of Tea Appeals, which upheld the decision of the FDA examiner in four cases and sustained the appeal in one.

A bowl cleaner was seized for failure to bear the word "poison" as required by the Caustic Poison Act.

No permits were issued for importations of milk from foreign countries, nor were any actions instituted under the Filled Milk Act.

New Court Interpretations

Two petitions for certiorari were filed with the Supreme Court during the fiscal year.

The Supreme Court denied the petition for review of a color case, thus upholding the Secretary's order delisting yellow colors No. 3 and No. 4 for use in foods.

Following their convictions for selling amphetamine drugs in violation of the Durham-Humphrey Amendment, which had been upheld by the Circuit Court of Appeals, a medical doctor and his wife filed petitions with the Supreme Court requesting review of their convictions. Certiorari was denied and the defendants are now serving their sentences.

A district court found for the Government in a case involving a manufacturer's request for a declaratory judgment that sodium nitrite and sodium nitrate at 200 p.p.m. or less in fish is generally recognized as safe. The court declined to substitute its scientific judgment for that of the Food and Drug Administration and held that the declaratory judgment procedure is not the proper way to handle questions under the Food Additive Amendment to the Federal Food, Drug, and Cosmetic Act but rather they should be handled under the Administrative Procedures Act.

In a seizure against chocolate mint candy alleged to be deceptively packaged, the district court found against the Government on the grounds that the package label bore an accurate statement of the quantity of contents and the type of package used was necessary to protect the mints during shipment. The Government has appealed.

A part-time pharmacist and drug salesman was convicted and sentenced under the Food, Drug, and Cosmetic Act to 8 years for the unauthorized sale of prescription drugs, including narcotics, without prescription. He appealed the conviction on the grounds that the Food and Drug Inspectors to whom he sold the drugs had used unfair means to induce the sales or, in other words, had entrapped him. Since the conduct of the inspectors was well within the permissible limits spelled out in the decisions covering the law of entrapment, the Court of Appeals for the 8th Circuit upheld the district court.

The U.S. Court of Appeals for the 5th Circuit upheld FDA's ballistic-type evidence proving the shipment of prescription drugs from an out-of-State manufacturer on the basis of their identity. A microanalyst identified them by means of punchmarks and other microscopic findings.

A district court ruled in a case involving seizure of cigarettes intended for reducing body weight that the product was a drug within the meaning of the act, and that it was misbranded with false and misleading claims. The Government charged in part that the product was a new drug and since there were conflicting views among the experts as to the safety of the product, the court upheld the Government's new-drug charge.

A district court dismissed a seizure case involving a device which in its assembled form had not moved in interstate commerce, but whose component parts had been received in interstate commerce, prior to their assembly, holding that the device was not within the

jurisdictional purview of the act. This decision did not follow the reasoning of other courts in earlier cases of a similar nature.

Changes in the Law and Regulations

Public Law 86–139, signed August 7, 1959, declares nematodes, plant regulators, defoliants, and desiccants economic poisons for the purposes of the Insecticide, Fungicide, and Rodenticide Act. This makes them subject to the tolerance procedures of the Pesticides Amendment when registered for use on raw agricultural commodities. It became effective on March 6, 1960, for substances in use prior to January 1, 1958, with 1-year extensions permitted for specific products, where there is no undue risk to the public health.

Public Law 86–537, signed June 29, 1960, amended the Food, Drug, and Cosmetic Act by requiring raw agricultural commodities which are products of the soil to bear labeling on shipping containers declaring the presence of preservative chemicals added after harvest, but exempts them from such declaration after they have been removed from such containers and are on display for retail sale.

Public Law 86–546, also signed June 29, provides for the centralization of food additives appeals on a single issue in one circuit court.

Two bills under active consideration during the year were not signed until July 12, 1960, but are included in this report because they require immediate regulation-making programs.

The Color Additive Amendments to the Food, Drug, and Cosmetic Act will replace original provisions of the act regulating coal-tar colors for use in foods, drugs, and cosmetics. Before the amendment, the law called for certification of such colors where it could be shown that they were harmless, but had no provisions for limiting the amount used. This made it necessary to ban the use of certain colors even though they were found injurious only in much greater amounts than customarily employed. There had been incidents where too much color had been used and illnesses had resulted.

The new amendment deals with all colors, whether or not derived from coal-tar, provides for batch certification where necessary, and authorizes tolerances where necessary to ensure safe use of colors. It will also require the retesting of all previously permitted colors where there is any doubt as to safety. It contains a cancer clause, similar to that of the Food Additives Amendment prohibiting the establishment of any tolerance for an additive shown by suitable tests to induce cancer.

The amendment became effective on its enactment, but an interim period of 2½ years is provided, during which commercially established colors may be provisionally listed while testing is carried on with a view to securing permanent status.

The Federal Hazardous Substances Labeling Act is not an amendment of the Food, Drug, and Cosmetic Act but largely a replacement of the Caustic Poison Act of 1927, which was outdated and limited in coverage to 12 specific caustics and corrosives. The new law applies to household substances which are toxic, corrosive, irritant, strong sensitizers, flammable, radioactive (if named by regulation), or pressure generators, if such articles may cause injury or illness from customary or reasonably foreseeable use, including ingestion by children.

Labeling requirements include the signal word "DANGER" on substances which are flammable, corrosive, or highly toxic, as defined in the act, and "WARNING" or "CAUTION" on all other hazardous substances. Affirmative statements, such as "Causes Burns" or "Vapor Harmful" or similar wording descriptive of the hazard are required, as well as "POISON" if the product is highly toxic. Instructions are required for first-aid treatment when appropriate and for handling and storage of packages which need special precautions.

Penalties include fines up to $500, imprisonment up to 90 days, or where there is intent to defraud and mislead $3,000 and 1 year, respectively. The law also provides for injunctions. It is similar to the Food, Drug, and Cosmetic Act in its provisions for factory inspection, sample collection, publicity, and coverage of imports. It becomes effective immediately, but no seizure or criminal penalty may be enforced until February 1961, with provision for extension up to 1 additional year for specific products.

Early in June at a Senate hearing on drugs, the Secretary of Health, Education, and Welfare made a number of recommendations to strengthen the drug provisions of the Food, Drug, and Cosmetic Act. On July 2, 1960, the Chairman of the Labor and Welfare Committee of the Senate introduced S. 3815, entitled "A Bill to protect the public health by amending the Federal Food, Drug, and Cosmetic Act so as to clarify and strengthen existing inspection authority thereunder; require manufacturers of new drugs to keep records of, and make reports on, clinical experience and other relevant data bearing on the permissibility of such drugs; require that drugs be prepared or packed under adequate controls to insure proper identity, strength, purity, and quality, and otherwise insure their compliance with the Act; and extend to all antibiotics the certification provisions of the Act now limited to certain antibiotics." Congress did not hold hearings on this bill nor did it complete action on the following bills which had been introduced earlier: Regulation of habit-forming barbiturate and amphetamine drugs, premarketing testing of cosmetics for safety, and making assault on FDA inspectors a Federal offense.

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REGULATIONS

Drugs.—An interpretive statement was published in the Federal Register of March 25, 1960, bringing together in part 131 of the regulations warning statements on drugs and devices which had previously appeared in the act and published regulations and recommendations by FDA in trade correspondence. This is intended to help the trade in designing labeling in compliance with the requirements of the law that drugs and devices for over-the-counter sale must bear adequate warning statements for safe use.

Three drugs previously limited by their new-drug applications to prescription use were exempted from this requirement by regulation, on the basis of evidence submitted by their manufacturers that they were safe for over-the-counter sale under proposed labeling. Two were for oral use in the temporary relief of the symptoms of hay fever or other minor conditions. The third is a broncho-dilator for oral use in the temporary relief of cough due to minor conditions.

Section 130.9 of the new-drug regulations was amended to provide that a supplemental new-drug application is not required for a minor change which is not significant from the standpoint of safety. The applicant must, however, submit full details of the change and will be notified by FDA whether a supplemental application is required.

A proposal under study at the close of the fiscal year and published on July 22 would require manufacturers to make complete and reliable information for the use of prescription drugs available to physicians, and would also prevent the marketing of a new drug until the adequacy of the methods, facilities, and controls employed in its production were verified by establishment inspections when deemed necessary.

Forty-one new monographs and 1,431 amendments were added to the antibiotic regulations.

Food additives.—The 1958 Food Additives Amendment became effective on March 6, 1960, with provisions for 1-year extensions for specific substances when there was need for such extensions and no undue risk to public health would incur. More than 900 requests for such extensions were received and about 800 were granted before June 30, 1960. Most of them concerned substances for use in the manufacture of food packaging, processing, and storage materials. Publication was also made proposing or concluding that approximately 700 substances be generally recognized as safe for use in food, and therefore exempt from food additive controls.

One-hundred and seventy-six food additives petitions were received since the amendment was enacted, of which 27 did not require regulations. Eighteen regulations establishing tolerances were issued, 63 petitions were withheld from filing pending receipt of fur-

ther data from the petitioner or were voluntarily withdrawn. The remainder were in process at the end of the year.

A group specializing in the administrative handling of these petitions was established in the Office of the Commissioner to process the petitions and coordinate scientific advice from staff Bureaus. A new branch was also established in the Division of Food to review petitions and to confer with members of the industry concerning development of the required information, and with the field Districts concerning testing of proposed analytical methods. Accelerated programs of toxicity testing were put into effect in the Division of Pharmacology.

Coal-tar colors.—An October 21 proposal to withdraw FDA's outstanding certificates of harmlessness and suitability for use of seven coal-tar colors primarily used in food met industry requests for a hearing. On January 8 the hearing was denied, on the basis that the objections filed present legal questions that could not be resolved by a public hearing, and would have to be decided by the courts. One objection was not legally valid because a previous FDA action in the removal of two colors from the list of permitted colors had already been reviewed and upheld by the Court of Appeals for the Eighth Circuit. The colors involved are FD&C Orange Nos. 1, 3, and 4, and all batches of FD&C Red No. 1 that do not comply with specifications for that color established July 16, 1959. The effective date of the order was extended to April 6, 1960.

On October 6, 1959, action banning the use of 17 coal-tar colors used primarily in lipsticks was proposed and scheduled to become effective on January 6, 1960. On the filing of industry objections and a request for a public hearing, the effective date of the order was postponed. The hearing began on February 17 and lasted 11 days. The delisting of 3 of the colors (D & C Red Nos. 11, 12, and 13) was canceled after concluding that they should receive further study.

On June 15 on the basis of evidence presented at the hearing, a tentative decision was announced to remove the other 14 colors from the list for certification for unrestricted use in foods, drugs, and cosmetics, and allow their use for external drug and cosmetic use only. (This excludes use in lipsticks, wherein the article is partly ingested.) The colors involved are D & C Orange Nos. 5, 6, 7, and 17; D & C Red Nos. 8, 9, 10, 19, 20, 33, and 37; and D & C Yellow Nos. 7, 8, and 9.

The Color Additive Amendments, which were subsequently enacted before the delisting action became final, pave the way for establishment of safe tolerances for these colors whenever scientific evidence of their safety can be established.

Pesticides.—Ninety-six pesticide tolerances or exemptions were established for raw agricultural commodities, involving 15 pesticides.

In addition, tolerance levels were changed for 2 pesticides involving 43 commodities, and temporary tolerances were established for 2 pesticides involving 15 commodities. Since the enactment of the Pesticide Chemicals Amendment, 2,166 tolerances or exemptions have been established for 112 pesticide chemicals.

It was necessary to rescind the tolerance of 0.1 part per million for heptachlor when it was discovered that the pesticide undergoes a chemical change after it is sprayed on plants resulting in conversion into a new compound, heptachlor epoxide. Residues of the epoxide carry through in milk and meat from forage, on which heptachlor was widely used for controlling the alfalfa weevil. When the original tolerance was established, it was on the basis that the residues would consist of heptachlor and that such residues would not deposit in the milk of cows consuming treated grain or forage.

Exemption from the requirement of a tolerance for residues of the microbial pesticide bacillus *Thuringiensis Berliner* on certain food crops was established on the basis of evidence that the micro-organism would not be pathogenic to man or other warmblooded animals, though lethal to certain species of insects.

Food standards.—New standards were established for canned prunes, seedless grapes, berries, and plums. An order was published setting standards for orange juice and orange juice products, but objections were filed requiring a public hearing and the standards were stayed.

A number of amendments were made in existing standards. Pepsin or papain enzymes were permitted in enriched farina to facilitate quicker cooking. Butylated hydroxytoluene was permitted in par-boiled enriched rice to retard flavor deterioration. Edible oils were permitted to be rubbed on the rind of blue and Gorgonzola cheese to improve adherence of foil wrappers. Sorbic acid was permitted in consumer-size packages of spiced, club, and cold-pack cheese to retard mold development. Methylcellulose was added to the list of permitted emulsifiers of French and salad dressings. Spices, natural flavorings, and vinegar were added to permitted optional ingredients of canned pineapple. Additional vegetable seasoning ingredients were permitted in canned peas. Calcium salts were permitted for firming canned peppers. The designation of optional forms for label declaration of canned sweet potatoes was enlarged to provide for the names "halves," "halved," and "cuts." Tomato puree was permitted to be labeled as "concentrated tomato juice" when produced from whole tomatoes and concentrated to 21–25 percent solids.

Standards for artificially sweetened fruit jams and jellies for people on sugar-restricted diets were stayed on going into effect on January 28 because of objections requiring a formal hearing.

Two industry proposals—to permit flavoring fruit preserves with cherry liqueur and rum, and to permit adding citric acid to canned tomatoes—were denied without hearings.

Scientific Investigations

Constant research is necessary if FDA scientists are to keep abreast of the problems and responsibilities of food law enforcement. New problems of analysis, nutrition, toxicology, bacteriology, and pharmacology continually arise. Fortunately, new analytical tools and techniques have also become available. The seven Divisions which comprise the Bureau of Biological and Physical Sciences have made good use of many of them and have displayed considerable ingenuity in adapting them to the problems at hand. Increasing use is being made of paper and gas chromatography, polarography, mass spectrometry, spectrophotometry, bioassay, and radiochemistry. The use of many of the newer techniques requires special training and it has often been necessary to conduct special training programs and seminars.

During fiscal 1960 the Bureau was strengthened by the addition of 75 scientific personnel, technical assistants, and clerks.

Fifteen projects relating to the development of new methods or improvement of present methods for the assay of antibiotics were completed. Among them were development of tests for the new semisynthetic potassium penicillin 152, and methods for assaying dairy products (cheese, butter, ice cream, powdered milk, etc.) for antibiotic residues. Twelve clinical studies in man, relating to the testing, action, and mode of administration of antibiotics, were concluded. A new powder for oral suspension, containing penicillin G plus triple sulfonamides, was tested; also a mechanical device, "hypospray," used to inject antibiotics. Five miscellaneous antibiotic research projects were completed. Ninety-one regulatory samples of cosmetics were collected and analyzed, most of them as a result of consumer complaints. New methods of analysis were developed for certain cosmetic preparations. A manual of cosmetic analysis was prepared and awaits publication. Work continues on the chemical structure and occurrence of intermediates of certifiable coal-tar colors.

Specifications for mineral oil, proposed as a food additive for many purposes, have been devised to ensure the absence of carcinogenic hydrocarbons. Development and improvement of methods for the detection and determination of pesticides and food additives are important continuing projects. A method which allows the analysis of milk for residues of DDT within 1 day's time was developed. Paper chromatographic methods for the detection of residues of six of

the more common pesticides were perfected and are in routine field use.

For some years FDA scientists have worked to replace the slow and costly chick bioassay for vitamin D with simpler methods. Chemical methods employing infrared spectrophotometry or fluorescence have now been developed. An official method for determining vitamin A in oleomargarine has been adopted. A tissue culture laboratory has been established; this technique allows the growth and reproduction of human and animal cells in artificial media. The effect on growth of suspect chemicals (additives, etc.) can then be studied in what is essentially a test tube manner. Sometimes effects too subtle to be observed in the intact animal can be noted.

Efforts to isolate and identify the toxic agent, associated with by-product fats, which causes edema and death in poultry have been continued.

Results of bacteriological examination of some 3,000 samples of frozen precooked foods, representing 81 separate items, were compiled during the year. As reflected by bacterial content, there is no doubt that sanitary practices of many frozen precooked food plants could be improved. Surveillance of the industry will be continued with major emphasis at the plant level.

Living *staphylococci* were found in 12 percent of 314 market milk samples. The organisms are now being typed and their resistance to various antibiotics is being checked. The concern is whether or not potentially dangerous antibiotics-resistant strains of *staphylococcus* are developing in milk and dairy products as a result of treating cows for mastitis with antibiotic preparations.

Development of methods for the detection of filth and decomposition in foods continues, with emphasis on fish, cocoa, cheese, fig paste, frozen strawberries, canned tomatoes, coffee, and grape products. Application of starch gel zone electrophoresis has been used in the species identification of fish and red meats.

Revisions of the U.S. Pharmacopeia and the National Formulary have appeared and their standards for drugs will become official on October 1, 1960. The Food, Drug, and Cosmetic Act designates the methods and standards of these compendia as official. FDA chemists have assisted in these revisions and have contributed new methods.

Work continues on the stability of insulin, digitalis, thyroid, and posterior pituitary preparations. Toxicity and cumulation studies were conducted on a number of pesticides. Various materials suspected of being carcinogenic were investigated. Studies, both biological and chemical, of the persistence and distribution of stilbestrol in the tissues of treated poultry, were conducted. Various additives and coal-tar colors are being checked for toxicity by means of long-

term feeding tests with animals, and gross and microscopic pathology of affected organs is being studied.

The pilot program for reporting unusual or adverse reactions to drugs was expanded, on a contract basis, to include more, but still a limited number of, hospitals representing a cross section of medical specialties. It is an outgrowth of a 4-year voluntary pilot study designed to develop information promptly on the untoward effects of the newer drugs. The information will be used in the resolution of medical problems associated with the safety of new drugs. Although such drugs have had most careful clinical tests in controlled experimental use, wide use in general medical practice sometimes brings to light effects not anticipated from the investigational studies. Such disclosures prompt measures for better public health protection, such as label changes as to dosage, warnings to physicians, formula changes, or, in extreme cases, withdrawal of the product from the market.

Veterinary medical research studies, some conducted on contract with State universities, included investigations of antibiotics in milk, efficacy of injectable iron products for swine, efficacy of drugs used in the treatment of poultry diseases, milk-level studies of sulfonamides in dairy cattle, and residues of stilbestrol in eggs from broody hens.

The one objective criterion in the oyster standard limits the amount of drained liquid or free liquor to 5 percent when tested in a specified manner within 15 minutes after packing. This has proved unenforceable through results obtained after interstate shipment. In its search for tests to correlate packing practices with examinations of shipped lots, the Government Industry Cooperative Research Project has developed 18 methods of which 3 in combination have given promising results with oysters produced in Chesapeake Bay. They must be tested with oysters produced on the Gulf Coast and West Coast before they can be considered in the formulation of new standards.

Enforcement Statistics

FDA inspections during the year consisted of 20,513 of inventoried factory and warehouse establishments, 2,098 of pesticide practices, 3,700 of food additives being employed, 3,594 of public eating places to check on the notification of the serving of oleomargarine, and 183 involving illegal sales of drugs. Of 32,788 domestic samples collected, 22,744 represented foods, 9,697 drugs and devices, 259 cosmetics and colors, and 259 miscellaneous.

In the 237 criminal actions terminated (or terminated for some defendants) in the Federal courts during 1960, fines assessed totaled $186,004. Jail sentences ranging from 1 hour to 2 years were imposed in 48 cases involving 56 defendants. Twenty-three individuals were

required to serve imposed sentences, averaging 8 months; they were suspended for 33 on condition that violative practices be discontinued. Records of actions terminated in the courts were published in 1,755 notices of judgment.

Table 2.—*Number of samples on which criminal prosecutions and seizures were based and number of court actions instituted during the fiscal year 1960*

Item	Total		Criminal prosecutions instituted		Seizures accomplished		Injunctions requested
	Violative samples	Actions	Violative samples [1]	Actions	Violative samples	Actions	
Total	2,893	1,274	1,279	248	1,614	1,002	24
Foods	1,443	828	251	61	1,192	757	10
Drugs and Devices	1,442	443	1,028	187	414	242	14
Cosmetics & colors	5	2	----	----	5	2	----
Caustic poisons	3	1	----	----	3	1	----

[1] The number of samples on which the actions are based always exceeds the number of actions; in seizures a variety of articles may be contained in a single shipment, while in criminal actions each sample usually represents a single shipment which forms one count of action.

Table 3.—*Import samples collected, examinations made, and lots detained during the fiscal year 1960*

Item	Samples collected	Examinations made	Lots detained
Total	13,217	15,475	4,784
Foods	10,045	14,683	2,613
Drugs and devices	2,754	584	1,951
Cosmetics, colors, miscellaneous	418	208	220

Office of Vocational Rehabilitation

Advances in Research, Training, Centers, and Workshops Give Program New Incentives

In the fiscal year that ended June 30, 1960,[1] the number of disabled persons who were helped to overcome their handicaps and find employment through the State-Federal program of vocational rehabilitation reached a new high of 88,275.

In addition to removing the prospect of dependency for this number of handicapped persons, there was substantial progress during the year toward new objectives that have come with expansion of the public program of vocational rehabilitation under provisions of Public Law 565, enacted in 1954.

There was a tremendous upswing in rehabilitation research during 1960. A considerably greater number of new projects seeking new knowledge or to test the validity of an idea or method were initiated than in any previous year. And there was continuing emphasis on the rehabilitation of those with severe disabilities, which produced a substantial increase in the number of special demonstration projects, as compared with 1955, to help those handicapped by mental illness, mental retardation, deafness, hearing loss and speech defects, cardiac diseases, epilepsy, blindness and visual handicaps, and orthopedic handicaps.

The training of workers in various aspects of rehabilitation received new impetus because more funds were available to expand support for training of professional personnel in all fields related to rehabilitation,

[1] Unless otherwise indicated, all subsequent reference to 1960 will be to the fiscal year, that is to say, the period between July 1, 1959 and June 30, 1960. Data on characteristics of those rehabilitated in fiscal year 1960 are estimated.

but especially in medicine, counseling, speech pathology and audiology, and prosthetics and orthotics.

Creation and operation of rehabilitation centers, workshops, and other facilities received noteworthy attention in communities and States in response to the demand for an increasing variety of settings in which intensive or specialized services can be adminstered. There was an increasing trend toward operation of rehabilitation facilities by State rehabilitation agencies. The number of rehabilitation facilities approved for construction under provisions of Hill-Burton legislation during the year was 41—seven more than in the previous year, and more than twice the number approved in 1958. And the increased importance of centers and workshops to the program is inherent in the total of 46 research and demonstration projects that are concerned with rehabilitation in these kinds of establishments.

REHABILITATIONS IN 1960

The new record in the number of persons rehabilitated into employment was nine percent more than in the previous year. Gains were made in all of the States but six, and in the District of Columbia, Puerto Rico, Guam and the Virgin Islands.

The preponderance of disability referrals continued to be among those with orthopedic disabilities—amputations and other crippling conditions. About 41 percent (36,000) referrals arose out of these conditions, and, of these, about three-fifths resulted from accidental injuries, about one-fifth were from poliomyelitis, osteomyelitis, or arthritis, and the remainder from other orthopedic impairments.

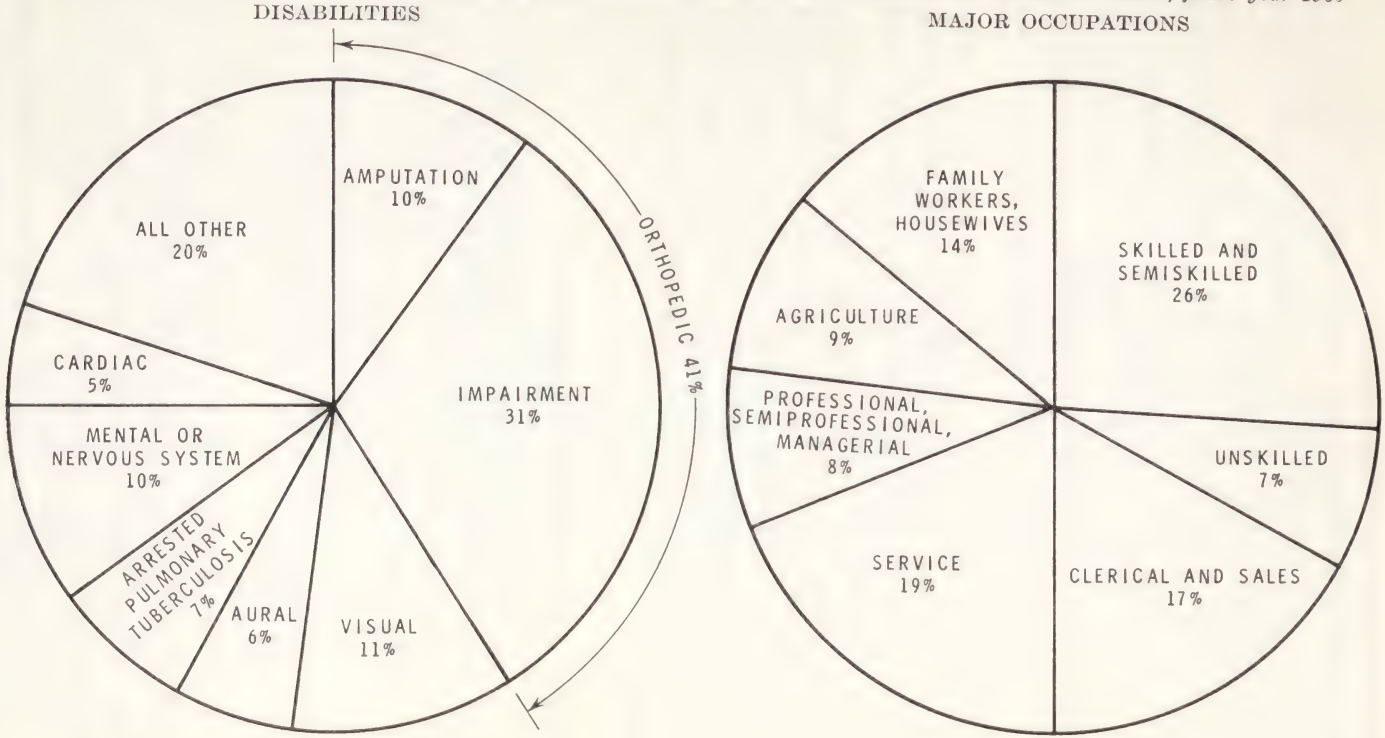
Referrals came from many sources, but the largest proportion (34 percent) came from physicians, health agencies, or hospitals. Another 14 percent was referred by public welfare agencies, and 7 percent by State employment service offices. About 12 percent applied for services on their own initiative. The remainder came from such sources as educational institutions, employers, and unions. Nearly half of the rehabilitants had dependents, and 63 percent were male.

The occupations in which rehabilitants of 1960 were placed included nearly all types of work, including more than 4 percent who went into such short supply professions as teaching, engineering, and medicine. The proportions employed in other major occupational groups remain similar to those in previous years—skilled and semi-skilled, 26 percent; clerical and sales, 17 percent; service workers, 19 percent; family workers and housewives, 14 percent; professional, semi-professional, and managerial, 8 percent; agriculture, 9 percent; and unskilled, 7 percent.

At the close of the fiscal year, 180,000 other disabled people were receiving services from State rehabilitation agencies, against a total of 171,000 in 1959.

Chart 1.—DISABILITIES AND MAJOR OCCUPATIONAL GROUPS

Percent of rehabilitants, by types of disability at acceptance and by major occupational group at closure, fiscal year 1960



ECONOMIC VALUE OF THE PROGRAM

The extent to which the public vocational rehabilitation program can improve the economic status of handicapped persons, increase the Nation's productive potential, and relieve some of the dependency upon public assistance was strikingly shown in 1960.

About 66,000 of the 88,275 handicapped persons prepared for and placed in employment during 1960 were unemployed when their rehabilitation began. The group that had been working at the time they were accepted for service were earning at a rate of about $61 million a year and generally were employed in unsafe, unsuitable, or part-time work. In the first full year of employment for the entire group after rehabilitation, it is estimated that they will have earnings at the rate of $171 million.

Nearly 18,000 of those who were rehabilitated received public assistance at some time during the process, at the estimated rate of $17 million a year. The estimated total cost of the rehabilitation of these persons was about $16 million, a one time outlay.

It is estimated further that those who were established or placed in employment through the public rehabilitation program will pay, during the remainder of their working lives, from seven to ten dollars in Federal income taxes for every Federal dollar invested in their rehabilitation, so that the conversion of so many persons from tax consumers to taxpayers is of pronounced economic benefit to the Nation.

Research Projects Set New Record

One hundred and one new projects for research and demonstration in vocational rehabilitation were approved during 1960, the largest number of awards made in any year since they were inaugurated in 1955. Eighty of the grants were for research and demonstration purposes. Twenty-one were selected demonstrations, in which knowledge and techniques emerging from research are applied in appropriate settings over wide geographical areas, to attain the widest and most rapid benefits for those persons within several categories of severe disability.

The 1960 grants amounted to $2,911,482. With $3,478,026 granted for continuance of 134 projects approved in previous years, expenditures for the year were $6,389,508. There were 344 projects completed, in operation, or approved in the first six years of the research program, and the total expenditures for all projects were just over $18 million at the end of the fiscal year.

Grants for projects are made to a wide variety of public and private nonprofit groups including universities, colleges, medical schools,

hospitals, rehabilitation centers, State vocational rehabilitation agencies, sheltered workshops and homebound programs, and many types of voluntary-private organizations. In general, these projects have as their objectives one or more of the following: a) Development of new techniques for treating, evaluating, training and vocational placement of disabled persons not previously helped because of lack of pertinent knowledge; b) Sharpening the effectiveness of existing methods by further study and testing of results derived from their application; c) Increasing the effectiveness of existing public and private programs by establishing special facilities and services to overcome inadequacies in vocational rehabilitation services which prevail on a regional basis; and d) Creating new job opportunities for demonstrating the capacity of disabled individuals to perform under competitive conditions in jobs previously closed to those with certain disabilities.

A National Advisory Council on Vocational Rehabilitation—a statutory body—reviews all project applications and makes recommendations to the Director of the Office of Vocational Rehabilitation in making grant awards. The Council is composed of twelve members appointed by the Secretary. They are leaders in the scientific, educational, or public affairs fields which contribute to the vocational rehabilitation of disabled individuals. Miss Mary E. Switzer, Director, Office of Vocational Rehabilitation, is Chairman of the Council.

Within the year there was a sharp increase in the number of selected demonstration projects. In 1959, there were 42 such projects in 29 States, but at the end of 1960 there were 64 projects in 37 States.

Selected Demonstrations in 1960

Occupational centers for mentally retarded	21
Work classification and evaluation centers for cerebral palsied	7
Work adjustment centers for disabled persons with emotional problems	6
Occupational adjustment services for epileptics	2
Services for the homebound:	
Industrial homework	3
Vocational adjustment in a community home-care program	1
Blind and visually handicapped: Optical aids clinics	15
Work evaluation of older disabled workers	4
Rehabilitation of the chronically ill	2
Services to blind farmers	1
Rehabilitation of the mentally ill	2
Total	64

To the categories existent in 1959, three new ones were added during 1960. One was "halfway houses" for persons newly discharged from mental hospitals (based on State experience in this field) to provide group living for selected patients and so ease their transition back to the community. The second was based on experience gained in a project for demonstration of methods of evaluation, training and

placement of a group of men and women whose median age was 64 years. The third type of project was one for the training of blind persons in agricultural practices to prepare them for farm ownership or tenant operation.

MENTAL RETARDATION

A new national pattern of specific services to the mentally retarded is emerging from studies of this disability. A great deal of new knowledge is coming out of research projects supported by OVR grants, and is being applied through occupational training centers for the retarded that now number 21 in 18 States, with seven new ones that were added in 1960.

These centers are highly important in the rehabilitation of those who are mentally retarded. The approximately 3,000 such persons per 100,000 of our population is a high proportion compared to other severe disabilities. No medical treatment is known that reduces the severity of intellectual deficit in a person, so that this disability is lifelong. The greatest benefit to be expected for a retarded person is within social and vocational training, followed by carefully selected placement in highly selective jobs. For these reasons the new pattern of services for the mentally retarded is highly important.

Some of the projects that are expected to fill in this pattern are studies in such peripheral areas as evaluating the effectiveness of specific training in different lines of work and the value of varying the length of stay in training to fit individual needs; development of a standardized scale to assess individual training potential, and assessment of needs of certain States and appropriate services to meet them. The total number of grants related to mental retardation reached 36 by the end of the year.

MENTAL AND PERSONALITY DISORDERS

The nationwide attack on mental illness, spurred by the knowledge that on any given day about 600,000 mentally ill persons are in hospitals, has led to increased activity in research pertaining to their vocational rehabilitation. Eleven new projects—including "halfway houses" for the adjustment of discharged mental patients to community living—were approved during the year, to research and demonstrate several aspects of rehabilitation for the mentally ill.

Some of the projects are investigating the rehabilitation of alcoholics. Others are looking into methods of employability prediction, developing new patterns of psychiatric and vocational services for emotionally disturbed young people, or for clinical treatment and home economics training for homemakers recovering from mental illness.

Most of the projects are aimed at the growing concept of organization of the mental hospital as a therapeutic community, in which all of the personnel are trained and conditioned to the special problems met in working with the mentally ill, to foster and sustain delicately balanced relationships that are created.

CHRONIC ILLNESS

Five new projects were approved in the areas of chronic illness or aging during 1960. It is difficult to estimate the number of chronically ill, aged-disabled, or long term patients in this country. Current estimates indicate that there may be more than 5 million persons in the United States between 45 and 64 years of age who have been disabled by serious illness or impairing conditions. Of these, this Office has estimated that 1.5 million are feasible for vocational rehabilitation. The remaining 3.5 million persons include many who could be returned to some degree of self-care and independence through appropriate services.

Other estimates show that there are also about 5 million persons with consequential chronic diseases in the age group over 65.

New and previously approved projects in these areas have demonstrated that with proper evaluation, training and other rehabilitation services many of the chronically ill may be returned to work or may achieve greater independence. One project serving older disabled clients during the two-year period ending in 1960 placed 224 persons with a median age of 64. Another project approved in 1960 has found a relatively high degree of rehabilitation potential among severely disabled homebound persons as compared to other groups such as those cared for in nursing homes.

The total number of projects approved in this area is now in excess of 30. The impact of these projects on reorientation of hospitals, nursing homes, and other institutions engaged in rehabilitation, and the creation of services in the community for post-institutional care and employment continues to increase throughout the Nation.

BLINDNESS

Thirteen new projects in areas relating to the rehabilitation of blind persons were approved during 1960. Seven were research projects—investigation of auditory cues used by blind persons during travel; development of methods to train blind persons as piano tuners; a pilot training project in a medical center for ophthalmologists working on rehabilitation of the blind; collection and exchange of information on technical devices and aids for blind persons; training of blind persons as language translators; identification of problems inherent in rehabilitation of the rural blind; and a grant to the American Founda-

tion for the Blind for development of a nationwide program to attract qualified persons for work in the rehabilitation of blind persons.

One of the six selected demonstration projects was concerned with correlation of public and private services for blind farmers to help them to become owners or operators of farms. The rest were for establishment of optical aids clinics for persons with low visual acuity. There are now 15 such clinics in 14 States. The disabled persons who use these optical centers not only have new occupational opportunities open to them by removal of their classification as legally blind persons, but there is also frequent removal of barriers to education and other activities that are part of a normal life.

In one clinic situated in a university medical school, 148 of the first 180 patients examined had aids or glasses prescribed. Only 18 were beyond help of the clinic, and 14 more did not need or could not adjust to optical devices.

CEREBRAL PALSY

Two additional selected demonstrations providing work classification and evaluation services for persons disabled by cerebral palsy were approved in 1960. There are now eight of these projects.

More project activity is anticipated in this area in which it is estimated that there are between one-half and three-fourths of a million disabled, with an annual increase of approximately 10,000 births.

NEW VISTAS IN RESEARCH

Advances in the medical sciences have brought new demands for research, not only to keep pace with current developments, but to meet new challenges. Notable examples are the rehabilitation prospects for persons with such widely separated disabilities as hemophilia and spinal bifida. Both of these disabilities are so susceptible to treatment that persons with these conditions may now make plans for their future vocational life. Accordingly, research grants have been made for systematic exploration of the educational, social, and medical problems associated with both disabilities. There are 40,000 persons in the country known to have hemophilia, so that this disability alone is of considerable concern in future plans for vocational rehabilitation.

Advancements in modern engineering have produced a storehouse of miniaturized electronic, pneumatic and hydraulic mechanisms that may be adaptable through research to functional and sensory needs of the severely amputated or paralyzed. Two projects concerned with the application of external power in bracing were approved during the year and grants were awarded to five additional projects in the area of orthopedics.

New job opportunities are emerging for the handicapped, through research. For example, a project conducted by Georgetown Uni-

versity will develop methods for training blind students, selected nationally, to become Russian language translators to meet a growing national need for simultaneous translation services in research and intelligence fields.

Another project is studying the interplay of deafness and emotional disturbance, to learn how each affects the other, and to find the best procedure of dealing with both problems in the same patient. Previously the needs of emotionally disturbed deaf people have often been completely ignored in terms of their mental health because of their more obvious problems in communication which often completely masked the much more destroying effects of their psychic illness. On the basis of findings from this project it is expected that additional clinical demonstrations will be established to train professional workers in better ways to serve those patients.

Training Expanded to Cover Specialists in Several Fields

The sixth year of operation of the training program reflected continued progress in alleviating the serious deficiency of personnel trained in the various aspects of vocational rehabilitation.

An increase of 22 percent in available funds, from $4,800,000 in 1959 to $6,200,000 in 1960, made possible an expansion of support for training personnel in fields to which the highest priority had been assigned—medicine, rehabilitation counseling, speech pathology and audiology, and prosthetics and orthotics. There was also continued support of training in other professions with severe manpower shortages, especially physical therapy, occupational therapy, nursing, social work, and psychology. Gains were made in new programs for the training of specialists in rehabilitation of the deaf and the blind; and, as most of the medically related professions were represented, it was possible to continue several inter-disciplinary projects.

The number of teaching grants to educational institutions for basic or advanced professional training increased from 143 in 1959 to 186 in 1960. The amount granted for teaching was slightly in excess of the amount granted for traineeships, a reversal of a previous trend. This may be attributed to new teaching grants for programs designed primarily to strengthen and improve curricula in the area of rehabilitation concepts and techniques, a necessary first step before students can be trained effectively.

Teaching grants are made to educational institutions to enlarge and strengthen these curricula with a bearing upon rehabilitation and, where necessary, to employ additional faculty for classroom teaching

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or supervision of clinical practice. Traineeships are granted to further the expressed interests of students in careers in rehabilitation.

MEDICINE

Programs for the training of undergraduate medical students in rehabilitation medicine have been established in 35 of the 86 approved schools of medicine and osteopathic medicine, as compared with 25 in 1959. Since physical restoration is frequently a prerequisite for effective vocational rehabilitation and the number of specialists in physical medicine and rehabilitation is far below that needed to meet the demands by medical schools, teaching hospitals, and rehabilitation centers, physicians are receiving traineeships for study during their residency training.

On June 30, 1960, there were 127 physicians with OVR stipends enrolled in residency training programs, an increase of 20 percent over the enrollment at the end of 1959, when 105 physicians were receiving traineeships. In order to stimulate interest in rehabilitation and to encourage their future specialization, fellowships were granted to about 60 undergraduate medical students for research or for clinical service in rehabilitation during their vacation period.

REHABILITATION COUNSELING

Rehabilitation counseling courses continued to receive a large proportion of funds allotted for training. A minimum of 600 trained counselors per year is required to meet the growing need in State vocational rehabilitation agencies and community rehabilitation programs.

The number of universities with rehabilitation counselor training programs in actual operation has grown from 11 in 1955 to 29 in 1960. Two others initiated active planning in 1960 with a view to admitting the first students in the 1960–1 school year.

Full-time enrollment in the 29 programs numbered about 535. The number of students ranged from five to 45, with 17 as the median.

Rehabilitation counselor training programs have graduated about 875 since 1955.

Intensive work has been started on curriculum content in the rehabilitation counselor training programs, the majority of which are two-year courses leading to a master's degree or to an advanced certificate in rehabilitation counseling.

SPEECH PATHOLOGY AND AUDIOLOGY

The critical shortage of speech and hearing therapists qualified to provide services to the approximately 6,000,000 persons above school age with significant speech and hearing problems, prompted grants to 22 of the approximately 70 universities with graduate training programs in speech pathology and audiology, as compared with 12 in

1959; and traineeships were granted for 90 students in 1960, more than double the amount in 1959. Although the 400 students currently enrolled is producing far less than a recognized need of 1,500 graduates a year, OVR grants are making it possible for more training programs to include specific content on rehabilitation of adults with communication disorders and for more students to secure essential graduate training.

PROSTHETICS AND ORTHOTICS

Since 1957, OVR has provided support to three university training centers, one in California, one in New York and one in the midwest, for short-term courses for physicians, therapists, prosthetists, orthotists and rehabilitation counselors in various aspects of the fabrication, fitting and training in the use of prosthetic and orthotic devices. In 1960 such courses reached over 1,300 persons, the largest number since initiation of the program.

OTHER PROFESSIONAL FIELDS

An insufficient supply of teachers for schools of occupational therapy and of physical therapy has for years delayed their expansion. Grants for traineeships for graduate study have made it possible for a small number of experienced therapists to secure advanced preparation, and so improve the quality of teaching.

In 1958–9, fifteen physical therapists did graduate work under OVR traineeships which enabled five of them to be employed in 1960 as physical therapy instructors. Three of these five are in new schools established in geographical areas which had great need for them.

The shortage of personnel, qualified by training and interest, to work with the 200,000 to 300,000 deaf persons in the United States brought establishment of an ad hoc committee of leaders of the deaf in February 1960, to plan for the training of personnel involved in rehabilitation of deaf persons. Short-term courses were held to orient personnel to the social and vocational aspects of deafness, on the development of rehabilitation facilities for the deaf, and on psychological assessment of deaf persons.

REHABILITATION OF THE BLIND

Courses for rehabilitation counselors on placement of blind persons in competitive occupations have been continued and now have reached about one-half of the 200 rehabilitation counselors in State agencies who carry responsibility for placement of blind persons. A new training program for mobility instructors of the blind, peripatology, has been established and has enrolled eight students interested in a career of teaching blind persons physical orientation and independent

travel. This is the first such course under university auspices and leads to a master's degree in peripatology.

MENTALLY ILL AND THE MENTALLY RETARDED

Ten institutes of workshops specifically related to training courses for rehabilitation counselors and others concerned with the mentally ill or retarded were in operation during the year. Emphasis is on the hospitalized patient and his return to the community, including job placements in the face of prejudicial attitudes on the part of prospective employers, and on mental retardates for whom there is a more optimistic outlook. Remunerative employment possibilities are now being discovered for the mentally retarded through sheltered workshops, properly planned training programs and increased understanding of their needs, educability and other potentials.

EPILEPSY

The first national institute on the Total Rehabilitation of Epileptics was held during the year. An OVR grant enabled 50 leaders in rehabilitation of epileptics to meet as a pilot project for regional, State, and local workshops where counselors and selective placement specialists can be trained in the unique vocational needs of epileptic persons. Surveys show that new methods of treatment and new medicines provide ways for at least 80 percent of epileptic adults, when properly placed, to become capable of productive employment in a broad category of jobs.

Specialized Facilities in Demand for Treatment of Severely Disabled

Rehabilitation facilities in increasing variety are needed as the attack on disability widens and deepens. The principal types of facilities are rehabilitation centers and rehabilitation workshops, but there is increasing demand for specialized facilities for those who are mentally retarded, deaf, blind, or emotionally disturbed. Integrated planning for the development and use of facilities is based upon the Vocational Rehabilitation Act and provisions of the Medical Facilities Survey and Construction Act of 1954 (Hill-Burton) authorizing Federal assistance in construction of rehabilitation facilities.

ESTABLISHMENT OF FACILITIES

In fiscal year 1960, 29 States spent funds for establishing rehabilitation facilities and workshops under basic support and the extension and improvement provisions of the 1954 amendments. Sixty-five State agencies now include provisions in their State plans per-

mitting them to establish either rehabilitation facilities or workshops.

In fiscal year 1960, these State rehabilitation agencies expended for rehabilitation facilities and workshops from State and Federal funds a total of $2,400,000—approximately the same amount as in 1959—with the Federal share amounting to $1,600,00.

Forty-one new facilities under the Medical Facilities Survey and Construction Act of 1954 were jointly approved in 1960 by the Surgeon General of the Public Health Service and the Director of the Office of Vocational Rehabilitation. Their total cost was $21,026,096, of which the Federal share was $7,569,971. Expenditures under this Act for rehabilitation facilities since its enactment in 1954 amount to $100,742,783, of which sum the Federal share was $28,716,686. Assistance was given to 147 different rehabilitation facilities in 46 States. Federal allotments to the other four States were transferred to adjoining States where citizens of the transferring States could be served. Most of these facilities are medically oriented but legislation is pending in the Congress to provide additional authority for Federal assistance in constructing vocationally oriented facilities as well, to permit establishment under the Hill-Burton act of less than comprehensive medical rehabilitation facilities of the physical medicine type in hospitals.

OPERATION AND USE OF FACILITIES

At the close of fiscal year 1959 1,480 disabled clients of State agencies were employed in sheltered workshops, 75.4 percent more than in 1954.

In the 1960 fiscal year, State vocational rehabilitation agencies purchased services from rehabilitation facilities for 10,700 clients, as compared with 2,400 in fiscal year 1955. The State agencies expended $4,800,000 for these services in 1960 as compared with $900,000 in fiscal year 1955.

ENCOURAGING NEW METHODS AND TECHNIQUES

The operators of rehabilitation facilities and those who purchased their services were aided extensively in 1960 through research and demonstrations and short-term intensive training programs.

A total of 46 research and demonstration projects have been approved which are immediately related to rehabilitation in a facility. In addition, 39 special demonstrations are underway, all but one in a workshop setting.

An authoritative guide for architectural design of rehabilitation centers, developed cooperatively by the Conference of Rehabilitation Centers and Facilities, the American Institute of Architects, and the Pennsylvania State University School of Architecture, has been made available, and is receiving wide acceptance.

There is ever-increasing interest in activities concerned with the evaluation phase of the work potential of the disabled. A relatively new service in rehabilitation facilities is pre-vocational evaluation to determine the potential of handicapped people receiving service in rehabilitation centers and workshops. Under sponsorship of the State University of Iowa, widespread current research and experimentation along those lines was summarized in 1960 and made available to all centers.

As the number of facilities increase and as more insurance companies, State rehabilitation agencies, and others purchase service from them for handicapped people, there is more demand for recognized standards for such facilities by which all who use them may judge the quality of the services they offer. Major efforts are underway, with financial assistance from the Office of Vocational Rehabilitation, to develop such standards.

A National Institute on Workshop Standards is the vehicle established to carry out the purposes of a grant made through the Office to the National Rehabilitation Association and the National Association of Sheltered Workshops and Homebound Programs for strengthening standards of workshop practices.

Educational Opportunities for Mentally Retarded Accelerated

A new viewpoint on mental retardation within recent years has brought accelerated action toward improving educational opportunities for this group, and new research into the causes and prevention of this disability. Activities of the National Association for Retarded Children have helped greatly to focus national attention on mental retardation, and to combat a prevalent attitude that a mentally retarded person has little hope for the future. In keeping with a public awakening to this disability, and a noted tendency of families to seek services for these handicapped persons (rather than keeping them in the background) the demands for vocational services have increased markedly.

In attempting to train retardates for industry and to place them, both the Office and State vocational rehabilitation agencies recognized the need to greatly augment the number of vocational training facilities. It was also readily apparent that greater consideration should be given to the skills which might be acquired at various levels of retardation and the extent of social adaptation which might be expected through a training experience.

The number of research and demonstration projects relating to mental retardation was increased by 14 during 1960, making a total of 36 that have inquired into this aspect of vocational rehabilitation since

the advent of rehabilitation research. Seven of the new projects were special demonstrations, supported in part by the OVR to put to practical use over a broad geographical area, the knowledge gained through research. The other seven projects were in new areas of research and demonstration.

Most of the States now assign vocational rehabilitation counselors to work with the State training schools. Many schools, in addition to their special education programs, provide opportunities for vocational training. Since only five percent of the estimated three and one-half million mentally retarded persons in this country are institutionalized, and many of them will never be able to care for themselves, a much greater problem lies in locating and providing appropriate services for those outside of institutions. Toward this end State vocational rehabilitation agencies are increasing efforts to provide special counselors to work with the public school system. In this way early counseling and guidance is available for the retarded youth who might otherwise become lost in the community upon completion of his required schooling, or for those who drop out of school.

With this increasing emphasis on work with the retarded it has become evident that counselors carrying these caseloads are in need of some special preparation. Last spring the Office of Vocational Rehabilitation called together a group of experts in this field to assist the planning of a long-range program for intensive short-term training of personnel concerned with mental retardation. Plans are now under way in several regions for workshops based in universities and utilizing faculty particularly knowledgeable in this area of disability. During the past year training grants were made to four universities for such workshops.

MENTAL ILLNESS

Opportunities for rehabilitation of the mentally ill have greatly increased in recent years, through more effective use of established facilities and the addition of new ones, in which more precise and more productive rehabilitation procedures emerge from research.

Ten research projects relating to mental illness have been completed since initiation of rehabilitation research, several of which have been incorporated in State programs. Eighteen projects are currently active. Grants have been made to three States for operation of "halfway houses," modeled after the three established earlier by one State agency. Several other State agencies are operating facilities in State mental hospitals to provide pre-vocational and vocational training.

Several States have increased staffs assigned to work with the mentally ill. Training grants were made during 1960 to two educational institutions for short term training of workers with the mentally ill.

Several regionwide workshops during the year—some with universities and the National Institute of Mental Health as co-sponsors—helped to orient community and State agency staff in new aspects of helping the mentally handicapped, and it is to be noted that out of such workshops has come inspiration for several research projects in mental health.

Services Expanded for Those With Communicative Disorders

The nationwide emphasis on improvement of vocational rehabilitation services for persons who are deaf or who are hard of hearing was marked by two significant trends in 1960, both with considerable promise for the future. There was an awakening of interest in the rehabilitation of deaf persons on the part of professional workers in disciplines other than those concerned primarily with the field of deafness. There was also greater participation in this phase of vocational rehabilitation by persons who are deaf and engaged in professional pursuits, who bring fresh viewpoints on the ways that vocational rehabilitation services can be made more effective to meet the needs of this handicapped group.

A noteworthy step was taken in April 1960 when staff from the OVR participated in the annual meeting of the Conference of Executives of American Schools for the Deaf. The OVR group brought into sharper focus some concepts and needs of deaf people which are not always appreciated, but are basic to their success in rehabilitation. After stating the prime need for effective communication leading to the full exchange of thought, the symposium concluded that there should be emphasis on the concept of persons with communicative disorders as individuals rather than a labeling of them as "the deaf," a categorical designation which often hampers their employment opportunities and social acceptance. It was also held that there should be the same standards of performance for deaf persons as for persons with normal hearing, to eradicate existing patterns of paternalism. It was also stressed that deaf people should have opportunity to receive special services, as required, in rehabilitation facilities staffed with personnel trained in work with deaf people and with programs designed to meet their special needs.

A conference of outstanding research workers at Gallaudet College in June 1960, identified some important researchable problems on vocational rehabilitation of the deaf and indicated their relative priorities, to call these needs to the attention of research workers in many disciplines.

In July 1960, a demonstration rehabilitation counseling center was established at Gallaudet College, aided by a grant from OVR. This center, staffed by psychologists interested in working with the deaf, is designed to serve as a model for others over this Nation, and to become a source for research in the counseling and guidance of the deaf.

Services to the Blind

Some of the more imperative needs of blind people and of those with impaired vision came closer to fulfillment during the year through the training of persons in key professions and specialties.

A study of the doctor-patient relationship when blindness occurs was initiated through a grant to support a seminar on blindness for ophthalmologists in the Georgetown University Medical School. This is the first course of this kind ever given by an institution of higher learning.

Another course activated for the first time in a graduate school, and made possible by a grant, is a training course for sighted instructors of the blind in mobility. This gives fourteen months training depth not merely of physical problems of blindness, but of associated motivational ones.

The placement of blind persons in industry requires special knowledge of the problems involved. A training grant to Southern Illinois University is supporting a project for development of new techniques in finding suitable employment and in placing blind people in various kinds of jobs.

Further advancement in the rehabilitation of blind persons into agricultural pursuits was made with the completion of a project by the Alabama Institute for Deaf and Blind, with respect to the needs of the blind farmer. The project was supplemented with a film and a brochure, to be used for explanation of the project's results to other State agencies and organizations.

An educational experiment for the blind was initiated with a research grant to Georgetown University to support an effort to teach aural Russian to blind persons, with the ultimate purpose of training them as Russian-English translators.

VENDING STANDS FOR THE BLIND

New records were made in the vending stand program in 1960. At the end of the fiscal year a total of 2,078 stands operated by blind persons for the full or for part-time periods had been reached. Approximately a third of them were on Federal property, and the rest on State, local, or private property. Some, operated in such places as national parks, were seasonal. The stands had a gross business of $38,219,340, or ten percent more than the year before; they returned

$7,541,304 in net profits to 2,216 operators; and the average profit for all operators—full and part time—was $3,688.

Services for Elderly Disabled Expanded

The steady growth in the number of persons of 45 years or more in the population is accompanied by a growing number of rehabilitations of the disabled among them. This is a reflection of increased attention to this group, growing research into methods and techniques for serving older persons, and the expenditure of more available State funds for their rehabilitation.

In 10 years the percentage of rehabilitations of disabled persons of 45 years or more, as a part of the total number for the year, grew from 24 percent in 1950 to an estimated 30 percent in 1960, more than 28,000 of the total of 88,275.

State expenditures have swung upward steadily for rehabilitation services to the aging. In 1955, about $9 million, or close to a quarter of total expenditures of State agencies for the year, were for disabled persons of 45 years or more. In 1959, this figure was an estimated $20 million, and rose to an estimated $24 million in 1960, or approximately 30 percent of total expenditures.

Research into problems of rehabilitation for the aging was expanded during the year to about 30 projects. One of the demonstration projects completed during the year was among aged persons confined to a county institution. One accomplishment of the project was the case of a 72-year-old woman who hadn't walked in years, and became ambulatory after appropriate services. Another was that of a man 77 years old, believed to be incurably deaf, who regained power of communication. The methods developed in this project are now being used in similar demonstrations in other parts of the country.

Medical Aspects of Program Are Expanded

There was intensification of the medical aspects of vocational rehabilitation during the year. Appointment of an Assistant Director for Health and Medical Activities and an additional medical officer, and establishment of a Medical Advisory Committee for the program were in response to indicated needs for widening of the medical phases of vocational rehabilitation.

A principal objective of these actions was the greater provision of medical consultative services for State rehabilitation counselors, so that better evaluations could be made of disabilities and work potentialities of persons referred to the State agencies, and for the planning of realistic vocational goals. Four more regions are receiving medical

consultation through services provided by Public Health Service medical officers servicing both OVR and PHS programs at the regional level. Through efforts of the Central Office, States are being stimulated to use medical consultation on a person-to-person basis between physicians and counselors for the discussion of individual cases.

The huge need for physicians trained in physical medicine and rehabilitation is urgent and continuous. An advisory panel for the medical training program was named during the year to establish training criteria and to plan the enlargement of the medical training activities.

Small Business

State agencies are intensifying efforts to find rehabilitation opportunities for the disabled through self-employment, small business, industrial subcontracting, and the manufacture of products by the handicapped, including homebound.

About 10 percent of the 88,275 disabled persons rehabilitated through the State-Federal vocational rehabilitation program in 1960 became self-employed, with the aid of their State agencies. In addition, about 1 percent of all rehabilitants were employed in a State agency-managed business enterprise.

Additional opportunities are expected from a new program entered cooperatively by the Office of Vocational Rehabilitation, several State agencies and the Office of Education to determine how educational programs in distribution services can be utilized for small business enterprises.

Expenditures for State Programs

Funds available to State rehabilitation agencies for their basic programs have more than doubled since 1954. States and the Congress both have increased available funds by more than 100 percent in that period.

The total of Federal funds that was granted to States in 1960 for support of their basic programs was $49,072,022, about eight percent more than in 1959. Nineteen States—Alabama, Arizona, Arkansas, Connecticut, Delaware, Georgia, Iowa, Kentucky, Massachusetts, Nevada, New York, North Dakota, Oklahoma, Pennsylvania, Rhode Island, South Dakota, Vermont, Washington, West Virginia, with the District of Columbia, Guam and the Virgin Islands—acquired all of the Federal allotments available to them by making available sufficient matching amounts. Five States acquired more than 95 percent but less than 100 percent; two States, 90 to 95 percent; six States, 80 to

90 percent; seven States and an island possession, 70 to 80 percent; six States, 60 to 70 percent; three States, 50 to 60 percent; and two States, less than 50 percent.

Eight States, the District of Columbia and Guam spent more of their own money on rehabilitation objectives in 1960 than was required to gain their full allotments, making an aggregate additional expenditure of more than $1 million for rehabilitation objectives.

Extension and Improvement Grants

A total of 99 projects were initiated by 57 rehabilitation agencies in 43 States during 1960, aided by Federal funds granted under extension and improvement provisions of the Vocational Rehabilitation Act. These grants were used for establishment of rehabilitation facilities or workshops, improvement of specialized services to disability groups, or improvement of program and administration.

Federal funds for these purposes totaled $987,171 in 1960.

State Plans

State rehabilitation agencies are in greater degree making use of the provisions of the Vocational Rehabilitation Act under which they may establish facilities or workshops. Each State agency—they total 54 general agencies and 36 serving only the blind—must have plans outlining their administrative and program courses. Fifty-eight of the 90 agencies—40 general and 18 for the blind—now have in their plans provisions for establishment of rehabilitation facilities. Fifty-four agencies—35 general and 19 for the blind—have provisions for workshops.

Since 1955, provisions for facilities have been added to the Plans for 31 agencies, and those for workshops have been added to 21 Plans.

The States have spent $10,500,000 for establishing facilities and workshops under these provisions.

OASI Disability Determinations

All persons applying to the Bureau of Old Age and Survivors Insurance for disability insurance benefits under 1956 amendments to the Social Security Act are, as a matter of government policy, considered for possible rehabilitation services.

During 1960, State rehabilitation agencies made approximately 300,000 initial determinations of disability among these applicants, screened about 350,000 applicants for rehabilitation potential, and accepted 35,000 of them for services.

Three research and demonstration projects have been initiated that

relate to the improvement of methods for determining disability among these applicants and for assessing their rehabilitation potential.

REHABILITATION AND LABOR HEALTH SERVICES

Increasing opportunities have arisen in recent years for collaborative effort among OVR and many groups with interests in rehabilitation. Organized labor, for instance, is represented on the National Advisory Council for Vocational Rehabilitation, and AFL–CIO community councils are active over the country in projects for improvement and extension of rehabilitation services.

In furtherance of this activity, an institute was held in December 1959, with the help of an OVR grant, in which representatives of labor, health, and rehabilitation services participated. Out of the institute came guidelines of particular usefulness to State rehabilitation agencies and counselors in developing statewide working relationships with labor and similar groups for more effective rehabilitation measures. Additional State and local meetings have been planned for the coming year.

International Activities

Research into rehabilitation is to be extended to or expanded in nine countries through the use of counterpart funds which have accumulated to the credit of the United States in those countries in recent years. During the year the Congress was requested, and acceded, to appropriate a total of $930,000 for the purchase of foreign currencies in Brazil, Burma, India, Indonesia, Israel, Pakistan, Poland, UAR-Egypt, and Yugoslavia, for rehabilitation research, with the required expenditures within these countries.

The International Unit has assembled a considerable volume of materials describing the possible areas of research in each of the nine countries, and discussed them with the State Department, along with the general policies of administration that will govern the programs.

Additional opportunities for international research will become available with activation of the principles to be initiated under the International Health Research Act passed by the Congress and signed into law during the year.

FOREIGN TRAINEES

Visitors from 39 foreign countries came to the United States during the year for study and observation of rehabilitation practices. Of the 104 who came, 31 were long-term trainees for whom detailed programs of study in universities and agencies were prepared. Seventy-three short term trainees were referred to OVR by voluntary agencies, universities, departments of the Federal government and international organizations for whom visits to installations and courses of observation were arranged.

Table 1.—*Number of referrals and cases, by agency, fiscal year 1960*

Agency [1]	Referrals				Cases				
	During fiscal year				During fiscal year				
						Closed from active load			
	Total	Accepted for services	Not accepted for services [2]	Remaining at end of year [3]	Total active load (receiving services)	Rehabilitated	*After* rehabilitation plan initiated [4]	*Before* rehabilitation plan initiated [5]	Remaining at end of year [6]
United States, total	379,650	126,839	130,637	122,174	297,950	88,275	10,396	18,791	180,488
Alabama	8,342	3,827	1,622	2,893	9,324	2,563	338	481	5,942
Alaska	526	164	290	72	417	54	57	108	198
Arizona:									
General	1,564	578	553	433	1,295	455	65	72	703
Blind	117	54	37	26	172	30	12	7	123
Arkansas	7,873	2,944	3,337	1,592	5,456	2,368	184	161	2,743
California	24,358	6,166	13,536	4,656	15,111	2,382	827	2,687	9,215
Colorado	4,201	1,740	821	1,640	3,173	908	163	114	1,988
Connecticut:									
General	2,542	1,538	407	597	4,023	1,014	209	331	2,469
Blind	199	94	57	48	207	63	14	0	130
Delaware:									
General	1,419	669	500	250	1,349	504	10	116	719
Blind	58	28	21	9	47	19	6	4	18
District of Columbia	4,269	884	2,656	729	2,081	488	92	234	1,267
Florida:									
General	14,329	4,698	6,263	3,368	9,609	3,382	452	572	5,203
Blind	3,672	404	2,059	1,209	1,053	280	56	47	670
Georgia	21,084	6,676	6,453	7,955	12,614	5,914	310	441	5,949
Guam	171	32	14	125	82	4	3	0	75
Hawaii:									
General	1,406	328	476	602	688	220	45	12	411
Blind	30	13	4	13	67	17	9	0	41
Idaho:									
General	1,958	393	868	697	958	356	33	25	544
Blind	34	14	10	10	45	10	1	3	31
Illinois	13,337	6,097	4,453	2,787	14,537	4,219	444	1,172	8,702
Indiana:									
General	2,989	1,620	720	649	4,025	1,232	83	202	2,508
Blind	188	86	57	45	230	40	16	22	152
Iowa:									
General	5,200	1,535	1,558	2,107	3,747	1,219	156	189	2,183
Blind	280	93	121	66	192	40	5	13	134
Kansas:									
General	3,788	1,413	1,017	1,358	3,051	889	91	146	1,925
Blind	331	93	76	162	251	60	6	8	177
Kentucky	6,564	1,643	2,525	2,396	3,907	1,313	157	249	2,188
Louisiana:									
General	5,034	3,015	978	1,041	7,722	1,814	307	499	5,102
Blind	849	203	213	433	659	115	17	19	508
Maine:									
General	1,936	547	517	872	1,334	375	64	123	772
Blind	167	76	54	37	151	32	9	19	91
Maryland	5,370	2,201	1,351	1,818	5,743	1,413	136	573	3,621
Massachusetts:									
General	6,608	2,250	1,663	2,695	5,115	1,656	131	279	3,049
Blind	364	150	93	121	424	81	33	37	273
Michigan:									
General	9,232	3,785	1,998	3,449	10,000	3,216	503	191	6,090
Blind	385	218	87	80	484	106	41	49	288
Minnesota:									
General	7,185	1,741	2,466	2,978	5,051	1,251	226	99	3,475
Blind	959	140	349	470	438	86	11	23	318
Mississippi:									
General	3,194	1,656	514	1,024	3,426	1,284	72	142	1,928
Blind	925	352	387	186	923	287	27	19	590
Missouri:									
General	7,634	2,263	3,110	2,261	4,776	1,544	214	221	2,797
Blind	718	175	242	301	539	174	19	23	323
Montana:									
General	1,902	474	624	804	1,371	385	32	31	923
Blind	356	19	295	42	56	18	4	3	31
Nebraska:									
General	1,588	727	255	606	2,205	536	46	78	1,545
Blind	199	48	91	60	143	61	0	3	79

See footnotes at end of table.

Table 1.—*Number of referrals and cases, by agency, fiscal year 1960*—Con.

Agency [1]	Referrals				Cases				
	During fiscal year				During fiscal year				
						Closed from active load			
	Total	Accepted for services	Not accepted for services [2]	Remaining at end of year [3]	Total active load (receiving services)	Rehabilitated	After rehabilitation plan initiated [4]	Before rehabilitation plan initiated [5]	Remaining at end of year [6]
Nevada:									
General	1,069	199	778	92	346	116	31	15	184
Blind	34	9	5	20	40	6	0	2	32
New Hampshire:									
General	878	241	632	5	769	185	89	14	481
Blind	36	19	8	9	73	13	3	8	49
New Jersey:									
General	5,665	1,972	1,972	1,721	4,488	1,362	261	404	2,461
Blind	873	228	283	362	525	177	24	9	315
New Mexico:									
General	1,574	391	822	361	636	271	24	10	331
Blind	203	40	51	112	97	26	7	2	62
New York:									
General	28,745	9,143	10,920	8,682	19,251	6,294	559	1,180	11,218
Blind	1,194	492	252	450	1,003	271	32	89	611
North Carolina:									
General	10,546	5,914	3,479	1,153	13,544	4,821	393	573	7,757
Blind	1,411	553	605	253	1,518	403	35	106	974
North Dakota	1,910	520	536	854	1,236	366	36	43	791
Ohio:									
General	7,678	2,789	1,991	2,898	5,738	1,624	151	244	3,719
Blind	1,188	274	716	198	822	160	45	43	574
Oklahoma	4,971	2,830	1,201	940	8,019	1,680	226	699	5,414
Oregon:									
General	6,072	1,022	2,875	2,175	2,722	759	112	185	1,666
Blind	234	49	82	103	158	41	5	2	110
Pennsylvania:									
General	25,669	8,538	7,499	9,632	20,297	5,764	960	1,474	12,099
Blind	1,573	332	600	641	1,052	250	66	102	634
Puerto Rico	8,317	1,756	1,370	5,191	4,932	1,023	79	224	3,606
Rhode Island:									
General	2,281	981	346	954	2,253	721	111	8	1,413
Blind	110	94	1	15	252	51	10	10	181
South Carolina:									
General	7,028	2,119	2,262	2,647	5,172	1,589	137	157	3,289
Blind	340	140	145	55	321	103	6	23	189
South Dakota:									
General	1,216	351	340	525	1,007	253	31	0	723
Blind	343	32	179	132	107	30	4	1	72
Tennessee:									
General	10,241	3,084	3,869	3,288	7,039	2,509	219	347	3,964
Blind	1,232	305	307	620	841	238	14	38	551
Texas:									
General	12,885	3,778	3,558	5,549	10,986	2,478	166	692	7,650
Blind	1,127	413	381	333	820	371	10	21	418
Utah	2,205	891	727	587	1,916	517	59	43	1,297
Vermont:									
General	1,005	260	286	459	768	182	69	41	476
Blind	58	19	30	9	62	21	5	2	34
Virginia:									
General	15,197	4,324	7,193	3,680	8,779	3,217	216	683	4,663
Blind	447	84	106	257	243	67	18	4	154
Virgin Islands	110	46	2	62	99	42	3	0	54
Washington:									
General	4,533	1,554	1,463	1,516	4,079	990	163	413	2,513
Blind	227	89	79	59	217	61	12	7	137
West Virginia	15,948	4,849	4,135	6,964	11,157	3,023	96	926	7,112
Wisconsin:									
General	7,024	1,997	2,484	2,543	5,647	1,481	138	80	3,948
Blind	129	74	23	32	216	65	11	11	129
Wyoming	690	180	246	264	432	177	24	9	222

[1] In States with 2 agencies, the State division of vocational rehabilitation is designated as "general," and the agency under the State commission or other agency for the blind is designated as "blind."

[2] Services declined, services not needed, individual not eligible, individual needing services other than vocational rehabilitation, referred to other agencies, migratory shifting of the individual, etc.

[3] Eligibility for rehabilitation not yet determined.

[4] Closed after rehabilitation plan was initiated; received rehabilitation service but never reached the point of employment because of personal factors, illness, aggravated disability, etc.

[5] Closed prior to initiation of rehabilitation plan because of indifference of individual, increase in degree of disability, loss of contact, etc.

[6] In process of rehabilitation on June 30, 1960.

Table 2.—*Vocational rehabilitation grants, 1960, State divisions of vocational rehabilitation*

State or territory	Support grants	Extension and improvement grants	Total
Total	$43,501,816	$898,760	$44,400,576
Alabama	1,982,496	188	1,982,684
Alaska	113,510	5,000	118,510
Arizona	337,288	7,643	344,931
Arkansas	1,262,873	14,805	1,277,678
California	2,774,359	120,190	2,894,549
Colorado	554,794	14,343	569,137
Connecticut	328,369	15,532	343,901
Delaware	139,486	5,000	144,486
District of Columbia	232,887		232,887
Florida	1,319,128		1,319,128
Georgia	2,264,996	32,007	2,297,003
Guam	48,575	5,000	53,575
Hawaii	184,246	3,083	187,329
Idaho	164,162		164,162
Illinois	1,973,074	49,041	2,022,115
Indiana	463,831	22,669	486,500
Iowa	671,221	19,172	690,393
Kansas	460,196	13,659	473,855
Kentucky	490,888	25,820	516,708
Louisiana	1,036,904		1,036,904
Maine	222,704	7,981	230,685
Maryland	606,650		606,650
Massachusetts	712,097	32,178	744,275
Michigan	1,268,388	65,943	1,334,331
Minnesota	895,842	23,755	919,597
Mississippi	596,358		596,358
Missouri	652,209	25,182	677,391
Montana	171,663	5,768	177,431
Nebraska	273,179	8,142	281,321
Nevada	45,653	5,000	50,653
New Hampshire	84,184		84,184
New Jersey	952,350	39,795	992,145
New Mexico	190,066	7,059	197,125
New York	2,840,544	50,408	2,890,952
North Carolina	1,636,128	10,594	1,646,722
North Dakota	307,840	5,449	313,289
Ohio	797,736	58,773	856,509
Oklahoma	1,172,382	19,156	1,191,538
Oregon	514,138	5,536	519,674
Pennsylvania	3,351,742	47,385	3,399,127
Puerto Rico	716,667		716,667
Rhode Island	252,460	7,335	259,795
South Carolina	768,856	9,000	777,856
South Dakota	218,668	4,688	223,356
Tennessee	1,265,183		1,265,183
Texas	1,422,180	32,063	1,454,243
Utah	301,373	7,251	308,624
Vermont	152,777		152,777
Virginia	1,193,475		1,193,475
Virgin Islands	19,429		19,429
Washington	804,954	23,160	828,114
West Virginia	1,126,152	16,507	1,142,659
Wisconsin	1,066,450	22,500	1,088,950
Wyoming	98,056	5,000	103,056

Table 3.—*Vocational rehabilitation grants, 1960, State commissions or agencies for the blind*

State or Territory	Support grants	Extension and improvement grants	Total
Total	$5,570,206	$88,411	$5,658,617
Arizona	84,454	1,914	86,368
Connecticut	41,950	3,840	45,790
Delaware	36,380		36,380
Florida	439,000		439,000
Hawaii	30,230	2,056	32,286
Idaho	14,724		14,724
Indiana	55,545		55,545
Iowa	294,129	4,486	298,615
Kansas	133,095	3,668	136,763
Louisiana	171,979		171,979
Maine	74,062		74,062
Massachusetts	171,060	8,508	179,568
Michigan	118,229		118,229
Minnesota	154,722		154,722
Mississippi	304,603		304,603
Missouri	239,004		239,004
Montana	47,418		47,418
Nebraska	77,289	4,071	81,360
Nevada	12,448		12,448
New Hampshire	24,215	1,250	25,465
New Jersey	204,075	8,400	212,475
New Mexico	54,547		54,547
New York	410,738	20,131	430,869
North Carolina	481,170		481,170
Ohio	327,495	6,893	334,388
Oregon	87,177		87,177
Pennsylvania	389,990	8,816	398,806
Rhode Island	52,544		52,544
South Carolina	60,511		60,511
South Dakota	56,213	1,172	57,385
Tennessee	330,546		330,546
Texas	286,792	10,206	296,998
Vermont	31,450		31,450
Virginia	86,880		86,880
Washington	87,724		87,724
Wisconsin	97,818	3,000	100,818

Saint Elizabeths Hospital

During the year just closed, problems of understaffing and overcrowding have persisted, the admission rate has increased substantially, and a number of vacancies have existed on the medical staff. Nevertheless, thanks to the devotion and industry of the entire personnel of the hospital, the care of the patients has continued to be satisfactory, and the various activities of the hospital have been carried on to the best of everyone's ability. Every attempt has been made to achieve the high standard of care to which the hospital is dedicated. The so-called tranquilizing drugs which are coming on the market in ever-increasing numbers have been utilized to a very substantial extent and have proved themselves valuable in the institutional care of mental patients. The program of open wards and patient self-government has been extended and the results have been decidedly beneficial in accomplishing the aim of resocializing and rehabilitating the patients. The load of aged and infirm patients, however, continues to increase, and raises ever-new problems as to the role of the mental hospital in caring for this particular group.

In the last annual report comment was made upon the growing competition of the States for psychiatric personnel. Many of the States offer far greater inducements to trained personnel than does the Federal Government, not only in the line of salaries but of what may be termed "fringe benefits," such as housing, food, and protection from suits for malpractice. During a large part of the year there have been as many as ten vacant medical staff positions, so it is encouraging to report that the prospects for the coming year are brightening. Nearly all of the third-year residents have elected to remain on the staff, and several other well-trained physicians have been recruited. It is our hope that this situation indicates a possible change in the tide.

One of the risks of prediction appears in the statement of last year's annual report, "It appears that some stability of discharges and admissions is being achieved." At the time that statement was made the statistics justified it. However, during the past year, although the number of discharges to the community showed a very slight increase, the number of admissions increased startlingly to 1,894. This represented an increase of 287, and was the largest number of admissions in a single year since 1945. Of these admissions, 540 or 20.8 percent had previously been patients in Saint Elizabeths Hospital or similar institutions. During the past few years an increase in the readmission rate has been noted, but it is not clear that this represents the total reason for the tremendous rise in admissions.

We have mentioned previously what appears to be an abuse of the writ of habeas corpus. In fiscal year 1959, for example, there were 133 cases in which the hospital either had to show cause why a writ should not be issued or produce the patient in court. During the year just closed this number has more than doubled. One hundred and fifty-three orders to show cause were issued and 121 writs, a total of 274. The fact that the vast bulk of these petitions was unfounded is suggested by the fact that only three patients were discharged and two conditionally released. The amount of time involved by the physicians and employees who are required to accompany the patient to court or to testify is inordinate, and constitutes a great burden on the hospital. During the month of June 1960, for example, the three physicians in the John Howard Pavilion spent 119 hours in court, that is an average of one work-week each.

It is a pleasure to report that in September 1959 the new John Howard Pavilion, the maximum security section of the hospital, was put into operation. The move of the prisoner patients from the old Howard Hall was accomplished without incident, with the great assistance of the United States Marshal's Office and the District of Columbia Department of Corrections. Eleven of the wards have been put into operation since the opening of the building, and the last one will be opened shortly after the first of July. This has relieved entirely, at least for the moment, the necessity of establishing a waiting list. The existence of this waiting list has been a source of great concern to the hospital and to the courts of the District and the latter have been most understanding and tolerant of the demands of our lack of space. One cannot predict how long the happy state of prompt admission will last, as the number of prisoner patients being sent to the hospital either for observation, found incompetent for trial, or found not guilty by reason of insanity seems to be showing a steady rise.

Various other agencies of the Government, notably the Health Department, the Public Welfare Department, and the Rehabilitation

Division of the District have been most helpful, as have the Veterans Administration and the Department of Justice. Further plans for even closer cooperation are being worked out. During the year a great deal of time and energy have been consumed by attempting to carry out the demand of the Bureau of the Budget that more patients be transferred from Saint Elizabeths Hospital to other agencies, notably D.C. Village and Glenn Dale of the District of Columbia, the Public Health Service and the Veterans Administration. The policy of the hospital for years has been to transfer to the D.C. Village those patients who are willing to go and who show a reasonable prospect of conforming to the various requirements of that institution. There have been numerous conferences and visits to the respective institutions already mentioned, but numerous obstacles have been encountered, so that in spite of the labors of the mountain hardly more than a mouse has so far been produced. The work will continue, but it should be borne in mind that human values as well as mere statistical logistics enter into consideration in a problem of this sort.

During the year visitors from no less than 24 foreign countries honored the hospital. Such visits are always a source of stimulation and gratification to the staff.

Throughout its history the hospital has been acutely aware of the fact that although the care of the patient must always come first, the institution has an obligation as well in the lines of education, both of personnel and of the community, and of research. These programs have been prosecuted vigorously during the year. In the field of psychiatry the George Washington University and Howard University Medical Schools have utilized the facilities of the hospital for the training of their medical students. The hospital is likewise approved for a three-year residency in psychiatry. In the field of general medicine the institution is the only public mental hospital in the country which is approved for rotating internship. It is likewise fully accredited by the Joint Commission on the Accreditation of Hospitals. Training proceeds in general medicine, surgery, pathology, and radiology. There are also internships, residencies, and planned field work in psychology, social work, occupational therapy, and clinical pastoral work. Instruction in nursing is carried on, on both the undergraduate (by affiliation with training schools) and graduate levels.

In the field of research the hospital is happy to report progress in the work of the Joint National Institute of Mental Health—Saint Elizabeths Hospital Clinical Neuropharmacology Center. A large exhibit of the work done in this Center was shown at the meeting of the American Psychiatric Association in Atlantic City in May. Under the auspices and advice of the Hospital Research Committee, 20 projects were commenced during the year.

Division of Clinical Services

CLINICAL BRANCHES

The general care and treatment of the patients is carried on by three clinical branches, each of them subdivided into services. In addition a Medical and Surgical Branch is charged with the acute medical and surgical treatment of all patients and emergency attention to employees. There are three admission services. Civilian patients under 64 years of age are admitted directly to the Dix Pavilion. Those over 64 are admitted directly to the Geriatric Building. Sex psychopaths and male prisoners under charges or sentence, or found not guilty by reason of insanity are admitted directly to the John Howard Pavilion. There is a steady increase in the number of elderly and infirm patients, and there seems to be no reason to expect this to diminish unless other suitable facilities of a non-psychiatric nature can be found in the community. With the transfer of the patients from the old Howard Hall to the new John Howard Pavilion, the West Side Service was abolished, at least temporarily, with the other wards being assigned between the West Lodge and Detached Services. As a result those two services are altogether too large, and as soon as possible the West Side Service will be reinstituted. The number of voluntary admissions continues without much change—191 during the year just closed. It is unfortunate that this provision of law is not used more, as the present laws relating to the commitment of mental patients are unduly cumbersome and unfair to the patient. During the year, indeed, a decision of the Court of Appeals has made the procedure even more complicated by providing that every patient whose commitment is contemplated may appear in court to contest his commitment. This is in addition to the right of jury trial and the use of habeas corpus proceedings. It is to be hoped that some time in the future the District of Columbia may have commitment laws which are at least as humane as those of most of the other States. The tranquilizing drugs have been used copiously. It is almost impossible to contemplate a reversion to the "good old days" before tranquilizers were known. In addition, some of the so-called psychic energizer drugs have been utilized, but as yet there is much to be desired in the drug treatment of the depressions. Electro-shock continues to be used sparingly. Group therapy is used widely and individual psychotherapy wherever possible in selected cases. The requirements of time obviously limit the use of this latter modality. As a result of the increased admissions the number of patients actually in the hospital showed an increase at the end of the fiscal year of 97, the total being 7,120. A large number of volunteer groups have been very faithful in visiting the wards and providing entertainment for the patients there as well as at the Red Cross House and Hitchcock Hall. There has

been increasing cooperation with the various community agencies in this regard.

MEDICAL AND SURGICAL BRANCH

The work of this Branch as in the past continues to be unusually varied and of high efficiency. The neurological service has been expanded, and it is expected that in the near future the employee health service will materialize through contract with the Public Health Service. During the year a total of 2,377 patients were treated in the Medical and Surgical Service, with a total of 85,578 hospital days. In addition over 55,000 clinic visits were recorded. A radiation officer and a sanitary engineering officer have been appointed.

NURSING BRANCH

This Branch, in spite of shortages, notably in the graduate nurse field, has rendered yeoman service to the care of patients. An active program of in-service training in all types of ward personnel is carried on, and 13 schools of nursing and the Navy Hospital Corps affiliate with the Hospital. Training on a postgraduate level is provided for graduate students from Catholic University. The general shortage of graduate nurses throughout the country is reflected in the figures of the hospital, but the number has held steady since last year, graduate nurses totaling 252. No male graduate nurses have been available for employment since 1956. It is to be hoped that this shortage may be remedied before long.

PSYCHOTHERAPY BRANCH

This Branch embraces individual and group psychotherapy, psychodrama, dance and art therapy. The Director of this Branch is also the coordinator of professional training. The various types of professional training have been expanded during the year, and the work has brought a closer relationship among the various professional groups.

PSYCHOLOGY BRANCH

Four research projects are under way. During the year one doctors' thesis was completed under the supervision of the Branch. Speech therapy has been added to the armamentarium of the Psychology Branch. There were 111 teaching sessions, and 3,777 tests were given by the Branch during the year.

RECREATIONAL THERAPY BRANCH

The program of this Branch continues to be very active, providing ward parties and entertainments, the latter being held on the wards, in the Red Cross Building, and in Hitchcock Hall. Patients have been given the courtesy of using the swimming pool at Bolling Air

Force Base. The Branch has recently been assigned the duty of undertaking coordination of ward parties in order to avoid unnecessary duplication. Community participation in the whole program has been most gratifying.

OCCUPATIONAL THERAPY BRANCH

The expansion and organization of this Branch have continued and widened. An educational program for patients carried on by volunteers is a notable activity. In addition, pre-vocational testing and pre-industrial therapy have been developed and carried out. All of these forms of therapy are conducted by the referral of physicians. Thirteen student interns were under instruction during the year.

VOLUNTEER SERVICES BRANCH

Four hundred and fifty-seven volunteers per month contributed a total of 21,687 hours of service during the fiscal year—a most astonishing record, and a gratifying testimonial to the interest which the community exhibits in the welfare of the patients at the hospital. The variety of groups and individuals is too wide to enumerate. The American Red Cross, various church groups, and community service groups have been most generous in their attendance and in their interest in the patients. The hospital is deeply appreciative of what they have done.

SOCIAL SERVICE BRANCH

Considerable expansion of the Branch has taken place during the year. One thousand four hundred and seventy-eight patients were served, and a total of over 21,000 interviews were held by the social workers. A nursing follow-up project of the D.C. Health Department is being conducted under a grant from the National Institute of Mental Health, and 47 patients have been referred. The Vocational Rehabilitation Division of the District of Columbia Government is planning to increase to six its total number of rehabilitation counsellors, who work in close cooperation with the Social Service Branch. One aspect of the work of sending patients to the District of Columbia Welfare and Health Departments has been emphasized during the year, namely, the need of the District for a larger number of available foster and nursing homes especially for older patients and for adequate support of such patients as may be placed there.

CHAPLAIN SERVICE BRANCH

This Branch, under Jewish, Protestant, and Roman Catholic chaplains, carries out religious ministry to the patients, both in chapel services and on the wards. New patients are visited, and such other patients as request the services of the chaplains of their faith. Training

is carried on both for Protestant and Roman Catholic clergy and for theological students. The community clergy have been most helpful in participating in special services. The Director of Protestant Chaplain activities during the year served as the Chairman of the Mental Health Week Committee early in May. During that week probably at least 5,000 or more persons visited the hospital, thus increasing their understanding of the aims and activities of the institution and of mental illness in general.

MEDICAL RECORDS BRANCH

No hospital is complete without adequate records. Indeed, some of the more cynical are inclined to think that the accrediting bodies are more interested in records than they are in the care of the patients. The Branch has functioned efficiently and during the year installed open-shelf filing with terminal digit numbering.

LIBRARY SERVICES

The Medical Library provides library service to the medical staff, both by making accessible volumes in the hospital library and obtaining others through inter-library loan. The library gained 1,363 accessions during the year, the total number of accessioned volumes now amounting to 21,000, besides over 18,000 pamphlets. Some comment was made last year about the amount of "red tape" involved in obtaining inter-library loans. Particular thanks, however, are due to the Veterans Administration for their very generous and continuing cooperation. It is expected that eventually the proposed wings to be added to the Administration Building will provide further space, even though that too may not be entirely adequate. The Patients' Circulating Library now has over 64,000 volumes and gained nearly 4,000 during the year, largely by donations. In addition there are numerous classes in bookbinding, typing, shorthand, and languages.

LABORATORY BRANCH

This Branch continues to grow in activity and efficiency. An isotope unit is now being installed, and much new equipment has been obtained, much of it on Government surplus. Over 180,000 tests were carried out during the year, an increase of 10,000 from 1959. Autopsies continue at a reasonable rate, the rate during 1960 being 40.8 percent, that is 201 autopsies.

Division of Administration

It would be gratifying if space permitted an enumeration of the various accomplishments of the branches and sections in this Division, such as financial, personnel, construction, engineering, grounds,

laundry, dietary, and maintenance. With the increasing number of patients and with the increasing complexity of governmental operations all of these sections have been more than busy. They have, at the same time, been highly efficient in their accomplishments. Much is involved in the day-to-day maintenance of an institution of this size, but in addition various improvements have been carried out and some reconstruction. Detailed plans have been developed for the proposed Continued Treatment Building No. 9 and a very considerable amount of preliminary work has been done for the development of the Rehabilitation Building which is contemplated.

Needs of the Hospital

Some of the buildings are old and replacements are needed. Whether eventually the increasing demands of the patient load will demand an expansion of the hospital is at the moment an open question. Even more important, however, than buildings is the need of revising the salary scale and the perquisites for professional personnel. This is essential if the Federal Government is to approach meeting the competition of the various States. The support of the Secretary has been deeply appreciated in securing further recognition of the vital Federal role of the hospital.

Table 1.—*Movement of patient population, fiscal year 1960*

	Total	Male			Female		
		White	Colored	Total	White	Colored	Total
Total number under care and treatment, fiscal year 1960	9,451	2,621	2,098	4,719	2,713	2,019	4,732
Remaining on rolls, June 30, 1959	7,557	2,114	1,599	3,713	2,205	1,639	3,844
Admitted during fiscal year 1960	1,894	507	499	1,006	508	380	888
Total discharged and died	1,605	491	337	828	477	300	777
Discharged	1,101	330	246	576	316	209	525
Conditions on discharge:							
Recovered	72	15	24	39	13	20	33
Social recovery	352	60	54	114	128	110	238
Improved	452	161	96	257	132	63	195
Unimproved	181	78	48	126	42	13	55
Worse	0	0	0	0	0	0	0
No mental disorder	42	14	24	38	1	3	4
Unknown	2	2	0	2	0	0	0
Died	504	161	91	252	161	91	252
Remaining on rolls, June 30, 1960	7,846	2,130	1,761	3,891	2,236	1,719	3,955
Change in sex and color	0	+4	−1	+3	−2	−1	−3
Adjusted on rolls, June 30, 1960	7,846	2,134	1,760	3,894	2,234	1,718	3,952
Absent on visit or elopement	726	114	132	246	263	217	480
In hospital, June 30, 1960	7,120	2,020	1,628	3,648	1,971	1,501	3,472

Table 2.—*Consolidated statement of movement of patients, by classification, fiscal year 1960*

	Reimbursable patients								Nonreimbursable patients																		
	Total	Subtotal	Bureau of Indian Affairs	D.C. residents	D.C. voluntary	U.S. Soldiers' Home	Veterans' Administration	Other	Subtotal	Army	Bureau of Employees Compensation	Immigration and Naturalization Service	Bureau of National Homes	Canadian insane	Canal Zone	Coast Guard	D.C. nonresidents	Federal reservations	Foreign Service	Interned aliens	Marine Corps	Navy	D.C. prisoners (sexual psychopaths)	D.C. prisoners	Military prisoners	U.S. prisoners	Public Health Service	Virgin Islands
On rolls, June 30, 1959	7,557	6,108	61	5,370	229	51	395	2	1,449	205	2	2	3	55	16	15	241	23	12	4	18	74	49	447	24	84	37	138
Admitted to June 30, 1960	1,894	1,460	0	1,234	191	18	10	7	434	0	----	----	0	0	----	----	1	72	10	----	0	0	16	318	0	14	2	1
Separated, fiscal year 1960	1,605	1,082	3	803	185	22	65	4	523	8	----	----	1	2	----	----	241	56	13	----	1	5	2	167	1	15	1	10
Deaths	504	458	3	405	15	6	29	0	46	8	----	----	1	1	----	----	13	3	1	----	1	4	0	6	1	3	1	3
Discharges	1,101	624	0	398	170	16	36	4	477	0	----	----	0	1	----	----	228	53	12	----	0	1	2	161	0	12	0	7
On rolls, June 30, 1960	7,846	6,486	58	5,801	235	47	340	5	1,360	197	2	2	2	53	16	15	1	39	9	4	17	69	63	598	23	83	38	129
Changes in classification	0	−266	----	−307	−7	+1	+46	+1	+266	----	----	----	----	----	----	----	+274	−1	−1	----	----	----	----	−4	----	−2	----	----
Adjusted on rolls, June 30, 1960	7,846	6,220	58	5,494	228	48	386	6	1,626	197	2	2	2	53	16	15	275	38	8	4	17	69	63	594	23	81	38	129
On visit or elopement, June 30, 1960	726	634	----	511	77	5	37	4	92	1	----	----	----	1	----	----	33	7	2	----	----	1	18	28	----	1	----	----
In hospital, June 30, 1960	7,120	5,586	58	4,983	151	43	349	2	1,534	196	2	2	2	52	16	15	242	31	6	4	17	68	45	566	23	80	38	129
Total treated, fiscal year 1960	9,451	7,568	61	6,604	420	69	405	9	1,883	205	2	2	3	55	16	15	242	95	22	4	18	74	65	765	24	98	39	139

American Printing House for the Blind

As the official schoolbook printery for the blind in the United States, one of the principal functions of the American Printing House for the Blind, in Louisville, Kentucky, is the provision of special educational books and supplies for the blind school children throughout the country through the Federal Act "To Promote the Education of the Blind." This act, originally passed in 1879, authorizes an annual appropriation to the Printing House for this purpose. Allocations of books and materials are made on a per capita basis. Only those pupils may be registered whose vision comes within the accepted definition of blindness as follows: "Central visual acuity of 20/200 or less in the better eye with correcting glasses, or a peripheral field so contracted that the widest diameter of such field subtends an angular distance no greater than 20 degrees."

The Printing House maintains large catalogs of Braille books, Talking Books, recorded tapes, Braille music publications, large-type texts, and tangible apparatus. A rich collection of educational material is thereby provided for the kindergarten through the high school grades. A total of 6,656 blind pupils was enrolled in the residential schools for the blind and 6,835 in public schools—a total of 13,491 blind pupils being served by the Printing House—for the fiscal year ending June 30, 1960.

During the 1960 fiscal year, Braille books, educational periodicals, and music made up approximately 42.5 percent of the materials required by the schools; Braille slates, Braillewriters, maps, and other mechanical devices about 22 percent; Talking Books about 3.5 percent; recorded educational tapes about 1 percent; and large-type books about 28 percent. Approximately 7 percent was used for miscellaneous items.

Gallaudet College

GALLAUDET COLLEGE is devoted to the education of deaf persons who because of their handicap would have difficulty in schools and colleges for hearing students. The college, located in Washington, D.C., is the world's only college for the deaf. It was accredited in May 1957 by the Middle States Association of Colleges and Secondary Schools. In addition to education, it conducts research into the educational problems of deafness. It consists of the Kendall School and the college proper.

KENDALL SCHOOL

Primary and secondary schooling is provided for deaf children in the Kendall School, which also serves as a laboratory school for teachers training in the college. The oral method of instruction is used for all pupils except those who make no progress under it. Enrollment last year was 90 of which 60 came from the District of Columbia.

GALLAUDET COLLEGE

The college, established in 1864 by act of Congress, offers the associate's degree after 2 years of study, and a bachelor's degree in the liberal arts and sciences. The Preparatory Department provides the senior year of high school for students who are unable to obtain it in the State schools for the deaf. The Graduate Department of Education offers a master's degree and a professional diploma in the education of the deaf to students with normal hearing, and offers a 4-week training course to vocational counselors who wish to acquire a deeper understanding of deaf persons. Total enrollment in the college last year was 385, with students from 45 States, the District of Columbia, and 6 foreign countries. In addition, there were in attendance throughout a part of the school year 73 students enrolled in (a) summer school graduate courses, and (b) courses in "orientation to the deaf" for vocational rehabilitation counselors, welfare workers, etc.

Howard University

HOWARD UNIVERSITY, located in the District of Columbia, was chartered by act of Congress on March 2, 1867. The university offers programs of higher education on the undergraduate, graduate, and professional levels. Undergraduate students are registered in the college of liberal arts; graduate students seeking the master's and doctor of philosophy degrees are registered in the graduate school; professional students are registered in the colleges of medicine, dentistry, pharmacy, and the schools of engineering and architecture, music, social work, law, and religion. (The school of religion receives no support from Federal funds.)

The educational program of Howard University is conducted in keeping with the democratic purposes of the land-grant colleges and State universities with the low tuition fees and living costs which characterize these State institutions and with an educational program resting upon and permeated by the content and spirit of a general or liberal education. The university admits students of both sexes, from every race, creed, and national origin, but it accepts and undertakes to discharge a special responsibility for the admission and training of Negro students.

In June 1960 President Mordecai W. Johnson retired after 34 years as President of the University. The Board of Trustees elected as his successor Dr. James M. Nabrit, Jr., Dean of the Law School and Secretary of the University. Dr. Nabrit had been a member of the faculty at Howard University for 24 years.

ENROLLMENT OF STUDENTS

During the school year 1959–60, the university served a total of 7,402 students as follows: 5,653 during the regular academic year and 1,749 in the summer session of 1959. The total net enrollment, excluding all duplicates, was 6,507, distributed in the 10 schools and

colleges as follows: liberal arts, 3,122; graduate school, 726; engineering and architecture, 898; music, 309; social work, 129; dentistry, 644; medicine, 355; pharmacy, 161; law, 106; and religion, 57. This enrollment included a larger body of Negro professional students than in all universities of public support in all the Southern States combined.

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

Of a total of 6,003 students seeking degrees, 5,142 or 85.6 percent came from 45 States and the District of Columbia, while 861 students or 14.4 percent came from outside the continental United States including 2 possessions of the United States, 48 foreign countries and 17 island possessions of the British, French, and Dutch West Indies.

The 5,142 students from the United States were distributed as follows: New England States, 82; Middle Atlantic States, 825; East North Central States, 294; West North Central States, 88; South Atlantic States, 3,122; East South Central States, 384; West South Central States, 291; Mountain States, 14; and Pacific States, 41.

The 861 students from outside the continental United States came from 48 foreign countries, including Canada, 2 countries in the West Indies, 3 countries in Central America, 2 countries in South America, 10 countries in Europe, 14 countries in Africa, 16 countries in Asia, and 17 island possessions of the British, French, and Dutch West Indies.

VETERANS

There were 633 veterans enrolled at the University during the 1959–60 school year. They were distributed among the 10 schools and colleges as follows: 221 in liberal arts, 50 in the graduate school, 8 in music, 123 in engineering and architecture, 25 in pharmacy, 96 in medicine, 62 in dentistry, 13 in social work, 30 in law, and 5 in religion.

ARMY AND AIR FORCE ROTC

Army ROTC—There were 440 students enrolled in Army ROTC during the school year 1959–60. Of this number, 202 were in the first year course, 142 were in the second year, 61 were in the third year, and 35 were in the fourth year. During the year, 31 students were commissioned as reserve officers in the Army.

Air Force ROTC—There were 388 students enrolled in Air Force ROTC. Of this number, 215 were in the first year course, 142 were in the second year, 12 were in the third year, and 18 were in the fourth year. During the year, 9 students received commissions as reserve officers in the Air Force. In addition, seven students who

were enrolled in five-year academic programs, completed all of their ROTC work and were scheduled to be commissioned upon graduation.

THE FACULTY

During the 1959–60 school year, a total of 653 teachers served the university. Of this number, there were 374 full-time teachers and 279 part-time teachers. The full-time equivalent of the teaching staff was 443.80. Of this number, 390.85 were teaching in the rank of instructor and above.

From its establishment in 1867, the university has had on its faculty learned and able men and women, selected on the basis of their competence and character, without regard to sex, race, creed, color, or national origin. It was a major purpose of the founders of the university, however, to employ Negro teachers, among others, on every faculty. The Negro members of these faculties constitute a larger group of professional teachers than all the Negroes so employed in all other American universities combined. Many of the outstanding Negroes in the public life of America have served in the past on faculties of the university. Such persons include the founder and operator of the first blood plasma bank, the first Negro governor of an American possession, the first Negro in the Secretariat of the United Nations, and the first Negro member of the United States Court of Appeals.

THE BUILDING PROGRAM

Construction was continued on the new auditorium-fine arts building, which was scheduled to be completed during the fall of 1960 and put into operation at the beginning of the second semester in the 1960–61 school year. This building will provide an auditorium for 1,500 persons, a laboratory little theater having a capacity of 320 persons, classrooms, and other facilities for the entire school of music, the department of art, and the department of drama.

Plans were completed for the construction of the home economics building, preparatory to beginning construction during the 1960–61 school year.

GRADUATES

During the 1959–60 school year, there were 680 graduates from the ten schools and colleges of the university. These graduates came from 31 States, the District of Columbia, the Virgin Islands, Puerto Rico, 22 foreign countries, and 12 island possessions of the British and Dutch West Indies. These 22 foreign countries included Canada, Panama, British Guiana, Cuba, 7 countries in Africa, 6 countries in Asia, and 5 countries in Europe.

The 680 graduates were distributed among the 10 schools and colleges as follows: liberal arts, 329; engineering and architecture, 61; music, 19; the graduate school, 50; social work, 48; medicine, 69; dentistry, 49; dental hygiene, 7; pharmacy, 17; law, 26; and religion, 5. Three honorary degrees were also conferred.

Since its establishment in 1867, Howard University has graduated 21,770 persons. The large majority by far of these graduates have been Negroes. Their number includes a larger body of graduates in medicine, dentistry, pharmacy, engineering, music, law, and social work than the entire output of Negro professional graduates in all the publicly supported colleges and universities in the South.

The largest number of graduates have entered the field of teaching, primarily in the Southern States. Three thousand and eighty-four have entered the practice of medicine; 2,426 have entered the practice of dentistry and dental hygiene; 2,409 have entered the field of law; 797 have entered the ministry; 875 have entered the field of pharmacy; 784 have gone into engineering and architecture; and 479 have entered the field of social work. A large but undetermined number is engaged in government activities.

SERVICE IN FOREIGN COUNTRIES

Teachers and students from Howard University continued to render distinguished service in foreign countries. The countries where they have gone include Burma, Brazil, Ceylon, Egypt, Ethiopia, West Germany, India, Indonesia, Israel, Iraq, Italy, Kenya, Liberia, British Guiana, the Sudan, Japan, and Vietnam. Fulbright scholars from Howard University have served in Egypt, Ghana, Iraq, Japan, Norway, Sweden, Denmark, Italy, France, Greece, England, and India.

Government officials both in the United States and in foreign countries have frequently indicated that they found the services of members of the faculties and students to be of great value to their country and its interests abroad.

During the 1959–60 year a number of members of the staff served in various capacities. A member of the staff of the Department of Government was engaged in a research mission on Communist infiltration for the Southeast Asia Treaty Organization. The head of the Department of Home Economics was a delegate to the United Nations Conference on Human Rights in Geneva. A member of the staff of the Department of Architecture served on the staff of the United States Operations Mission to the Sudan.

The Dean of the School of Law, for the second successive year, was a member of the United States delegation to the International Labor Organization Conference in Switzerland. With regard to Dr. Nabrit's services there, the Assistant Secretary of Labor wrote as follows: "He represented the United States on the substantive com-

mittee of the Conference concerned with the question of Consultation and Cooperation Between Public Authorities and Employers and Workers Organizations at the Industrial and National Levels. Dr. Nabrit did an outstanding job in this committee, where he was most effective in presenting and explaining the United States viewpoint. In addition, he made a very favorable impression on his colleagues, and all of this redounded to the credit of the delegation as a whole."

It is also to be noted that at the invitation of the Department of State, the Howard University Choir, in June 1960, began an 80-day tour of 18 Latin American nations, under the auspices of the International Cultural Exchange Service.

These technical and professional services not only contribute specifically to the success of programs of our Government in foreign lands, but the spiritual and good-will effects of these representatives from Howard are major assets in our relationships with Asian and African peoples. They serve the cause of democracy around the world.

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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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[1] Appointed after June 30.

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Letter of Transmittal

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,

Washington, D.C., December 1, 1961.

DEAR MR. PRESIDENT: I have the honor to submit herewith the annual report of the Department of Health, Education, and Welfare for the fiscal year ending June 30, 1961.

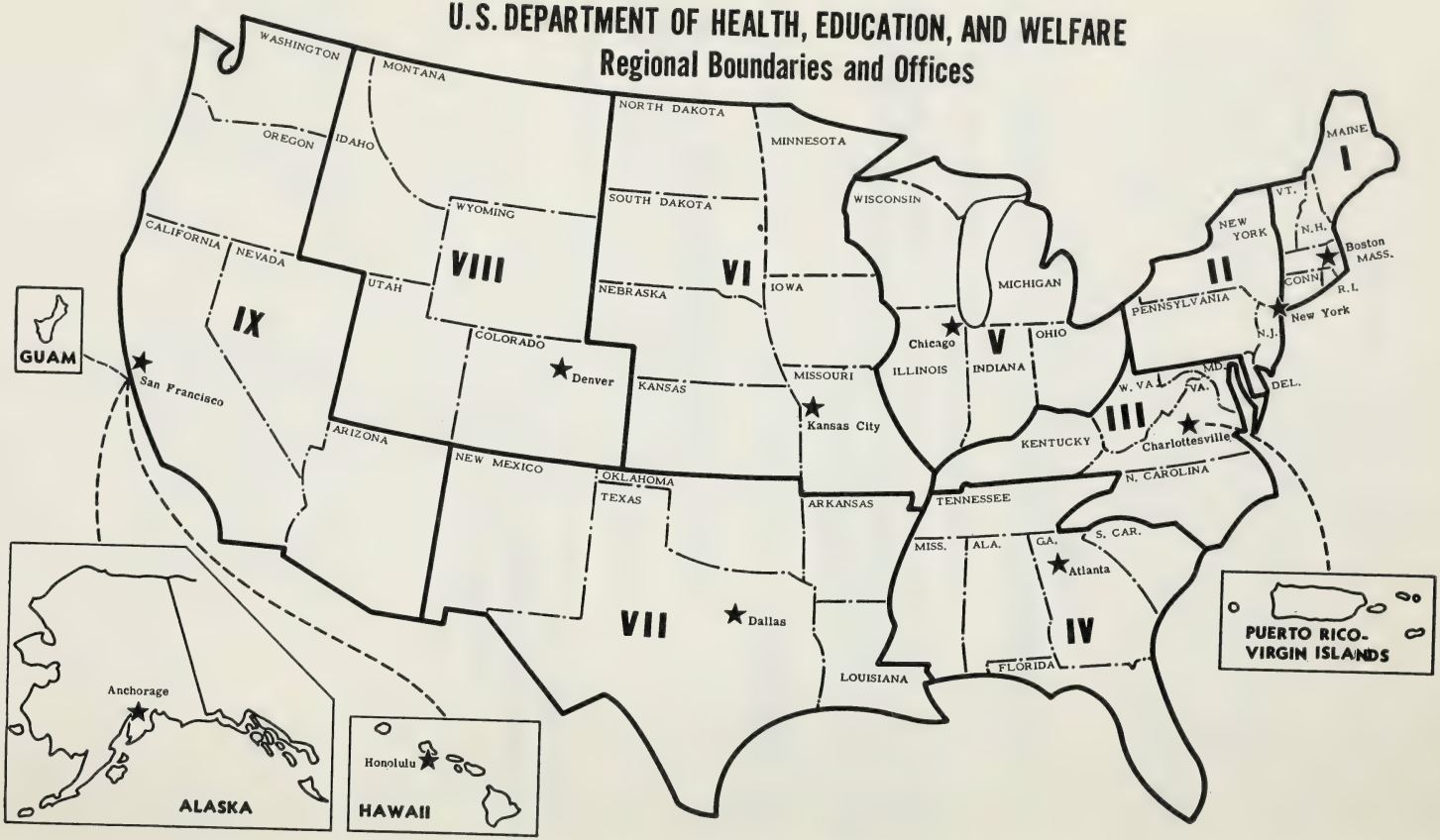
Respectfully,

Abraham Ribicoff

Secretary.

THE PRESIDENT,
THE WHITE HOUSE,
Washington, D.C.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Regional Boundaries and Offices



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A detailed listing of the contents of this report, by topic headings, will be found on pages 407–418.

In the middle of fiscal year 1961, a new administration came into office. There came to the Department a new Secretary and with him a new direction for the Department. The body of this report, in which the operating agencies of the Department present specific accounts of their work, covers the entire fiscal year (July 1, 1960, through June 30, 1961). This, the Secretary's portion of the report, however, deals principally with the second half of the fiscal year—the first months of stewardship—and beyond into the continuing plans for the Department in 1962.

The Secretary's Report

A BEGINNING is a time for clarity, for reexamination, and understanding.

When I came into the Department, I knew it was a complicated and sometimes controversial organization—a busy department with over 100 different programs—but a department of great interest to me and to the American people because its activities concern the human everyday problems of men, women, and children.

As Governor of Connecticut, I was familiar with the pattern of Federal-State cooperation by which this Department has played such a helpful role.

Now that it had become my responsibility, it was necessary to see exactly what was being done, what should continue, and in what direction. I wanted to look at the Department's past commitments, at its problems and priorities, and at its traditional solutions—to measure past answers against today's problems.

We Take Inventory

The primary interests of the Department of Health, Education, and Welfare are implicit in its name—the health, the education, and the welfare of all the people.

It is the department of everyday concerns. The programs of its five major operating agencies—the Public Health Service, the Office of Education, the Social Security Administration, the Food and Drug Administration, and the Office of Vocational Rehabilitation—are concerned with the home, the school, the hospital, the community, the air around us, the water in the tap, the food on the shelf, the drugs in the medicine chest, the lipstick in the purse, the bank account, and the hope for tomorrow. Taken together, these things add up to the happiness or unhappiness, the meaning of the future for men, women, and children.

There can be little welfare without health, and the deprivations and frustrations of unsatisfactory environment or insecure economic position can lead to physical ailments, mental illness, and delinquency. Inadequate education is often the reason for the financial problem—lack of training leading to unemployment or failure to advance.

The Department administers programs of its own and supports—with money and advice—promising projects and research of others. Nearly 90 percent of its appropriation went out as grants-in-aid to the States, non-Federal institutions, and individuals in 1961. They serve greatly to strengthen State departments of health, of education, and of public welfare. In addition to the direct aid they afford these activities, the grants have considerable impact upon the economy through the dollars channeled into many communities and the protection and restoration of productivity of the individuals kept in health, returned to self-support, or advanced in learning.

The policy of the Department in these grant programs—as laid down by the Congress and the Executive and endorsed and enforced by tradition—is not to dictate, control, or interfere but to provide means and inspiration, guidelines, and stimulation for the greatest possible range of ingenuity and enterprise in improving the conditions of the people.

Before we began our inventory, we had decided that we would not be satisfied with generalities.

We were—and are—interested in the specifics of action; not rigid, arbitrary specifics, but feasible and developing ways of moving forward on many fronts toward long-time gains. The specifics of action are always simple in the past tense—what we did, how we did it. The specifics of the future are more difficult. What do we want to accomplish? What is important for us, in this contemporary world, to accomplish? How can we accomplish it?

What We Seek

We believe the Department should be idealistic in philosophy and in program goals, practical in program operations.

Our objective remains the same—helping to improve the conditions and prospects of man. The means change because the problems change. We cannot afford to be bound by tradition that makes fine history but no current progress.

As to the meaning of our words—when we say "aid" to education, we mean exactly that—help for education, not control. Control remains with the States and localities as it always has in the long Federal-State partnership in education.

When we say "welfare," we do not mean only financial assistance. Welfare should not be just relief money spent each month and needed again the next. To us, welfare should mean a return to self-help, self-reliance—wherever possible—through training, retraining, and rehabilitation for young people, for old people, for middle-aged people, for handicapped people—in short wherever needed. Until this past session of Congress, for example, aid was not available to a family

with dependent children if the father were present in the household—even if he were unemployed. If the father deserted, however, his family could become eligible. If he stayed and tried desperately to cope with family problems, he and the rest of the family were penalized for his presence. This just does not make sense. We want to hold families together, not drive them apart.

For the truth is that the social welfare or the security of an individual depends upon many factors other than money. For almost everyone, there is little security possible without a sense of having a place in the world. For the child, that usually means a place in a family. For the elderly, it can mean a place in the familiar surroundings of the home community and the continuation of some activity or responsibility to give meaning to living. For the adolescent, both family and community relationships are important in this transition period of life. The Department seeks to help people—child, youth, or adult—find or maintain their place in the world.

Point of Vantage

The Department enjoys a perspective for viewing—beyond its own activities and programs—all interests engaged in the search for solutions to problems of health, education, and welfare. Such a point of vantage should make it possible to see things whole—the achievements and the gaps, the possibilities and the difficulties.

This could be an exciting view to have, a stimulating, prodding summary—moving citizens, professions, and government to action.

The Department has long been a collector and reporter of information on what others are doing in the fields of its interest, but too often this has seemed a mere statistical delivery service, without adequate assessment of the information and its significance to the national interest.

It seems to us that the Department of Health, Education, and Welfare, as policy adviser to the President and as a resource for the Congress and the people, should be more creative, more critical, take more initiative, and seek to stimulate a ferment of ideas. It should make available reports of progress and problems encountered in specific operating projects in certain communities to help other communities and organizations know what is being done and thought and found to work elsewhere. Citizens should know what the national situation is in health, education, and welfare. They should look at the problems and recognize the needs.

Programs of Prevention

Wherever possible we seek preventive measures—preventive medicine, preventive education, preventive welfare. The first, preventive

medicine, is a fairly familiar phrase covering quarantine activities, sanitation, safety campaigns, inoculations, annual checkups, and other medical care in health as well as in sickness. The other two are perhaps strange to the eye and ear but not to our planning.

What is preventive education? Education can obviously prevent ignorance and illiteracy. In addition, education of quality and training keyed to the needs of the individual student can help prevent the economic distress suffered by the untrained person who cannot find employment or cannot advance. Education and training can help prevent delinquency arising out of resulting frustrations and despair. They can prevent the waste of talents needed by the Nation and abandonment of hope by the retarded and handicapped, cruelly and mistakenly termed "uneducable."

Preventive welfare is a strange and—to the ear—rather contradictory phrase. Perhaps it would be better expressed as anticipatory welfare. It means social services—not necessarily money and certainly not money alone—given in time, *before* a family breaks up or a person breaks down from accumulated distresses and crises—services designed to prevent ultimate dependency. It means also services designed to prevent continuing, lifetime dependency by providing rehabilitation and training to dependent persons already on public assistance rolls to restore them to self-support, self-care, and self-esteem. Restoration services should not be limited to persons capable of returning to gainful employment; they should be available to anyone able to reach a goal of even partial self-care.

The dollar value of the prevention of anything is impossible to estimate, for it is difficult to prove just what has been prevented or the degree to which a problem has been retarded. But we have seen enough notations of school dropouts and of broken homes on the records of juvenile delinquents to know that these things can lead to delinquency and are worth trying to prevent.

The lack of education revealed by the chronically unemployed and the inability of the professions and the Nation to obtain well-trained people show us the need for preventive education. It is too costly to do without.

To prevent scarring and wasting of lives—by improving health, increasing educational opportunity, and advancing economic security—seems a noble and rewarding mission to us.

A Time of Change

It is not surprising to us that many parts of our program must change, that new things must be tried, for we live in a time of accelerating change.

The texture of society is different, the design for living so altered in the last few years that even the stages of the change have been obliterated. It is as though the patterns were destroyed and new ones were made from different materials by different beings for different beings. We have faced changes century to century before, and generation to generation, but these were usually gradual changes in which traces of the origins remained. The shadow of each day's change grew a little wider but did not suddenly blot out the past beyond remembrance. This is no longer true today. Space is wholly new as far as ordinary human understanding and "occupancy" are concerned. Automation is new beyond any previous technology. Radioactive fallout from man-made weapons is new. The dimensions of time and space have changed.

And so it is not entirely a criticism of the past operations in the Department that we seek so many new approaches in our programs today. The necessity for some could not be anticipated, and many are very difficult to achieve.

A few of our new problems are caused by evils or by failures or by neglect and callous disregard for human needs, but most are actually the products of our successes.

In the field of food and drugs we are faced with continuing change growing out of the progress of technology—new methods of growing, processing, and packaging foods for our convenience, new discoveries in drugs which save lives, but which also can have dangerous side effects. The sales of medicinal chemicals and of cosmetics more than doubled between 1948 and 1958. Chemical additives are used in processing and packaging food. Farmers use pesticides on their crops. If they didn't, we would not have our present abundance of food; but, if food were not checked and pesticides regulated for safety, abundance could well be a serious health hazard for us.

Environmental health problems change because of developments and improvements in manufacturing, which give us essential products but which also necessitate disposal of waste products, chemicals, and gases. The crowding of population into "convenient" urban centers multiplies the problems of disposal of human waste materials. Radiation hazards exist not only from weapons testing but also from our greatly increased use of nuclear energy in medicine, industry, and elsewhere. The automobile adds exhaust fumes to the "fresh air" of our cities. Stephen Vincent Benet said of the early days of this continent, "There was . . . in the air . . . a medicinal quality that brought health to those who breathed it." Even allowing for poetic license, this is no longer true.

Education faces not only pressure of numbers but necessity for constantly updating its information and adding new subject matter.

Here, too, it is man's progress—our fantastically successful conquest of time and distance—that causes problems. As the world contracts and once faraway, strange places are no longer far in time and must not be allowed to remain strange in understanding, the need for new language studies expands. The new sciences and the world of space require whole new curriculums of studies and teachers qualified and equipped to teach them.

Medical advance often brings change upon itself. The lengthening of the lifespan has brought a higher proportion of elderly persons in the population. This in turn has brought additional problems in the treatment of chronic diseases and ailments of the aging, and a consequent need for better home care, nursing homes, and methods of care outside of already crowded hospitals.

Improvements in therapy for the mentally ill make it possible for many to return to their home communities. There they and their families need access to guidance, assistance in adjustment, employment help, and frequently the services of day hospitals or outpatient mental health clinics.

Thus every time we solve a problem, we seem to pose another—and sometimes several. We never quite catch up, because, before we get where we are going, the destination changes.

The various agencies of the Department came into existence because of change and problems. They pioneered; almost everything they did was "a first." They are finding stimulation in pioneering again.

Forward Movement—1961

Our new appraisal and our new plans are bearing fruit. Within these few short months a number of concrete results are apparent.

★ A new and more comprehensive program providing greatly strengthened aid to communities in the development and improvement of health services outside the hospital got underway.

Designed to increase the availability, scope, and quality of health facilities and services—nursing homes and halfway houses, visiting nurses and homemakers—the program has particular significance for the aged and the chronically ill. All too often such "patients" must remain in a hospital or institution whose intensive services they do not need, which they cannot afford, and where they take up room needed by others, only because they have no other place or way to obtain the simple services they do require.

The new community services program cannot, of course, suddenly put an end to such problems but it can stimulate a real examination and attack, community by community and State by State. It can result in better care for more people and serve the additional purpose of freeing needed hospital beds for the acutely ill.

★ Environmental health problems—particularly the dangers of water and air pollution—came under stepped-up attack in coordinated programs covering whole regions and industries.

Under the new water pollution act signed by President Kennedy in July 1961, the most far-reaching approach in history is being made to stream pollution abatement. The new law strengthens the long existing Federal-State partnership making it possible for communities to receive greater Federal aid in building waste-treatment works and—because of an extension of Federal enforcement powers—affording them an opportunity for more effective action to control pollution reaching their community from upstream neighbors.

Regional research facilities are being established in recognition of the fact that, although water pollution is a national problem, its specifics differ greatly from one part of the country to another and require different scientific knowledge and engineering application.

The concept of air as a limited resource is vital. As air pollution threatens 90 percent of our urban communities, the Department is seeking wider application of all known methods of control and additional research into better methods and instruments for abating it. Negotiations with the automotive industry in 1961 resulted in an agreement for factory installation in all new automobiles, beginning with 1963 models, of a device to reduce the amount of motor fumes released into the atmosphere.

★ In education—although the major fight for Federal aid is still to be won—there was a new concentration on the search for excellence at all levels, elementary through college, and in vocational as well as academic instruction.

Two-year extensions of the National Defense Education Act and of aid to federally impacted areas were enacted by Congress.

In vocational education, a special panel of outstanding men and women was appointed to work with the Department in an effort to update the character and quality of this field of education. As the country moves into an age of advanced technology and increased industrialization and automation its young people must be prepared and its manpower needs must be satisfied.

★ For the first time since the depression days of the thirties, a reexamination of the policies and structure of public welfare has been made, focused upon the causes of dependency rather than on its symptoms.

Ten administrative changes were made in the Department's public welfare program in December 1961 to provide a substantial start toward a reorientation of the Federal-State public assistance program. Emphasis will be upon the rehabilitation and restoration to self-support of persons on public assistance wherever possible. For

those who will continue to need assistance, an approach more realistic and less restrictive than the present categorical division of aid will be sought. Family services will be added to money aid. Incentives will be provided for young people receiving aid as dependent children to help secure their own future through earnings without jeopardizing necessary current assistance to their families.

Indicative of this new focus, the Bureau of Public Assistance has been renamed the Bureau of Family Services. Within the Bureau a new major unit, the Division of Welfare Services, has been established to give special attention to States' activities designed to reduce dependency, provide family counseling and services, and remove any abuses of trust which may exist on assistance rolls.

★ For the first time since the public assistance program began a quarter of a century ago, the Federal Government provided aid to dependent children whose parents are the victims of unemployment.

This is a significant breakthrough in the welfare field. Proposals in one form or another to fill this gap in public assistance coverage have been before Congress for the past 10 years. The new law is effective only until July 1, 1962, but it is hoped that before that time the general revision of welfare programs will provide for continuing assistance to such families.

★ A number of strengthening social security measures filled gaps in the old-age, survivors, and disability insurance program.

Requirements for insurance benefit eligibility were relaxed, making it possible for approximately 160,000 previously ineligible persons to qualify for benefits in the first 12 months following passage of the legislation. The retirement age for men was lowered from 65 to 62. Minimum insurance benefits paid to retired workers and to aged widows were increased. Additional incentive was provided for retired workers to increase their own earnings on jobs, without losing so much of their social security payments.

★ A more comprehensive approach to juvenile delinquency has been made possible by new legislation in which the Congress gives recognition to the national nature of the problem.

The Department is seeking cooperation not only from law-enforcement agencies but also from citizens and organizations in the communities who can give employment or encourage further schooling—the real preventives in this area of waste and tragedy. Demonstration projects designed to show how communities can take coordinated and effective action to aid youth are being supported. Funds are being provided to train additional personnel in this field.

★ For the aging, the Department has moved with enterprise and dispatch, acting as spokesman and advocate of the interests of elderly persons wherever support is needed or possible—in health, in employment opportunities, in education, and in welfare.

In seeking employment opportunities, the interest of the Peace Corps has been enlisted in balancing some of its youth with the experience and maturity of older men and women, particularly in the teaching field.

In welfare, preparation of a series of "case histories" of successful community projects and social services for the aging was begun for distribution as a guide for other communities. Social services are being sought for those elderly persons able to pay for them as well as for those in financial need.

Interagency cooperation has offered unexpected opportunities and advances. For example, the Housing and Home Finance Agency, constructing and financing housing for the aged, ran into problems of management concerned with the social and welfare needs of its tenants. The Agency sought help from the Department, and the Department is now helping to train project managers for such housing developments.

★ A new concentration in vocational rehabilitation on fundamental aspects of disability and rehabilitation can be reported.

The Department's program includes psychological aspects of disability, the attitudes of communities toward disabled people and those of employers toward hiring them, the adaptation of electronics and powered devices to artificial limbs and sensory aids, special rehabilitation needs of older disabled persons, disabled mothers with dependent children, and severely disabled persons whose rehabilitation may be beyond the means or facilities of their State agencies.

★ Strengthened regulations will permit the Food and Drug Administration to provide more complete protection to the public against hazards of unsafe foods and drugs and the economic losses occasioned by quack remedies, false labeling, and deceptive packaging.

Regulations have been issued requiring that labeling and promotional literature accompanying new drugs will provide the physician with full information about the hazards as well as the potential benefits of the drugs. Preliminary work is underway to establish a badly needed national repository of drug-reaction information.

The new Hazardous Substances Labeling Act requires safety information in the labeling of chemical products used in the home.

A Special Program for Survival

The same coordination of many parts and many activities of the Department, and the same communitywide focus in planning which we seek in our programs concerned with everyday, normal events, are also valuable to us in planning to meet that most abnormal eventuality—a thermonuclear attack upon this country.

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Every discussion of both the possibility of such an attack and the advisability of having fallout shelters comes around eventually to a third point. If we survive the attack, how do we go about the daily business of living when we come out of our shelters? To a certain extent the answer to that question must come from the Department of Health, Education, and Welfare, and the Department has been moving in the past months to provide it.

The Department's Bureau of Family Services and Children's Bureau have been developing guidance materials for the States on emergency feeding, emergency lodging, emergency clothing, emergency registration and inquiry (designed to locate separated members of families), and emergency social services, including financial assistance. These services would be required in postattack situations wherever there are persons in need. At the end of the fiscal year, the first of the emergency welfare publications was being reviewed by the 50 State welfare departments. Since then, three additional volumes have been completed—as review and working drafts—and two more are now in process.

The Department's Division of Health Mobilization has stockpiled 1,930 complete emergency hospitals and $200 million worth of medical supplies and equipment, ranging from bandages to blood derivatives and surgical instruments, throughout the country. It has, within the past fiscal year, completed a publication, "Family Guide—Emergency Health Care," designed to tell all citizens clearly and simply how to care for themselves and their families in fallout shelters or in emergency situations beyond the reach of medical help. A complete course has been prepared for use in training American families in the basic principles of medical self-help.

These health and welfare publications are guidelines to survival, concerned with the basic and essential minimums—trying hard to assay realistically what it would be like and how such new problems could be met. The programs they suggest will require the cooperation of all levels of government and of private organizations and individuals.

Today: The National Situation

As we put our first months behind us, what is the national situation in health, education, and welfare? What do we see from our national vantage point?

Health

The American people are—in general—in good health, but to maintain and raise this level of health we need more doctors, nurses, hospital facilities, community health services.

We are in some difficulty at both extremes of life. The United States has slipped to 10th place among nations in prevention of infant mortality. And for all our good start in many important things necessary to the health progress of the American people, we are still sadly lacking an effective method by which older people can purchase essential health care.

We know more than we ever have about the nature of disease and how to save lives. Many of the old scourges have been defeated or controlled throughout the Nation, but new dangers, such as accidents and environmental pollution, have been spawned by our urban industrial civilization.

In medical research, we are on the brink of important discoveries in cancer, respiratory diseases, mental illness. Yet we have not been able to apply, as widely as we should, many long-known and thoroughly proved results of earlier research.

Dramatic results have been reported during the year in the use of cancer chemotherapy in the treatment of certain types of malignancies. New therapies in mental illness continue to reduce the number of patients in public mental hospitals. Demonstration projects show that the majority of stroke patients can be restored to self-care. Thirty-five to 40 percent of all known diabetics now safely substitute oral medication for the tyranny of the daily insulin injection.

Yet against these research advances we must place certain gaps in the Nation's use of its medical knowledge. In the seventh year of the effective Salk vaccine, nearly 80 million people under 40 still have not completed the recommended course of injections. Every year nearly 13,000 die of cervical cancer, a disease which can almost infallibly be detected in its curable stages by a simple test. Twenty thousand American lives are taken each year by rheumatic fever and rheumatic heart disease—a disease caused by a chain reaction which can be broken at the beginning and in the middle. Many are blind whose sight could have been saved.

It is not enough to discover and develop through research new remedies unless they can be brought within the reach of the people—all the people.

If false remedies and quack devices reach the market, the ends of research and legitimate medicine are defeated.

In rehabilitation, we are moving into a period of fulfillment. In 1962, after more than 40 years of growth, the public program of vocational rehabilitation will reach a significant milestone—the rehabilitation of more than 100,000 disabled people in a single year.

Voluntary rehabilitation agencies are growing in size and effectiveness. Dozens of new rehabilitation centers and sheltered workshops are now in operation.

New legislation will make possible help in training teachers of the deaf and in providing more funds for the work of the American Printing House for the Blind so that blind children may have the Braille books and other educational supplies they need.

Although a number of projects designed to aid the mentally retarded are in operation, we still need to do more and to know more about what can be done to help in this special field.

Education

In education, ours is a time of reckoning. We have suddenly been brought up short and made to realize that we have actually been losing a race, not just against Russia but against ourselves. It has been shocking to wake to the fact that having our hearts in the right place and meaning well will not automatically keep us champion.

A first look is perhaps deceiving. We have more boys and girls in school than ever before—and more go on to college than ever before in any country. More go beyond a first degree to graduate study. We expect to have 7 million students in our colleges in 1970. We have fine educational institutions, many dedicated educators, and at least a vocal commitment to education by the great majority of our citizenry. New classrooms have been built, new teachers have entered the profession—but not enough of either.

There is no guarantee that all our bright boys and girls will be able to get inside the doors when they come in 1970, or that, if they do, they will find the trained teachers they need waiting to receive them.

And in spite of the zooming enrollment figures, we lose many of our finest students before college because of lack of funds or motivation to continue their schooling. We are losing also the potential talents of thousands of boys and girls, some to delinquency, because we do not have the kind of vocational education to equip them to compete in the marketplace.

We have an appalling record of school dropouts in every State. Of the 10,800,000 students enrolled in high school grades 9 through 12 in the Nation's public and nonpublic schools in 1961–62, 2½ million will drop out before graduation. This is a tragic way to prevent further crowding of classrooms.

There are not enough teachers today to teach our children in the first grades, the high schools, or in the universities. But even more serious is the fact that many of those we do have are not properly qualified. It is this quality of teaching that is our basic educational problem. It has much to do with the dropouts and with the lack of motivation for going on to college. It has much to do with the deficiencies which even earnest and talented students take with them to

higher grades and into professions and careers. It is the good teacher who catches a child up in the excitement of learning, who makes the borderline case a student, who inspires the talented and creative to work against all odds to become "educated." We do not have enough good teachers.

It is not wholly a matter of inadequate salaries that has affected the quality of our teaching, though this has certainly been one cause of failure to attract outstanding students to the teaching profession or to hold them in it. We have—under pressure of need for numbers—failed to set and maintain high enough standards for teachers—both for entrance to the profession and in classroom performance. Nor have we been effective everywhere in teaching teachers how to teach.

It is easy to say we need better education. It is harder to decide what better education is—how we get it—what should be spent in dollars, in hours, in creativity, and effort to get it. It is apparently hard for even the educational community to make a commitment to education as a whole. The institutions of higher learning are not really much interested in the problems of the elementary and secondary schools, although that is where their students come from. The academic specialists do not concern themselves with the needs of vocational schools, although both are necessary for a balanced community.

Many who oppose Federal aid for *all* schools as Federal control support Federal aid for the schools of their own districts—the so-called federally impacted areas. In truth, the total Nation is impacted when it comes to education.

Welfare

In our national program of social insurance, we are doing well. Beginning its second quarter century, social security, as it is commonly known, provides a floor of economic support to 15,624,182 men, women, and children. Nine out of 10 employed persons in the Nation, and their dependents, are protected under old-age, survivors, and disability insurance. Eighty-five percent of the people now becoming 65 years of age are eligible for retirement benefits under the program, and in the future this proportion will rise to 95 percent or more. Yet a most serious gap still exists—the failure to provide health insurance for the aged under the program.

A beginning to progress against juvenile delinquency can be seen. The waste of youth, growing out of unbearable home environments and lack of community care which make crime seem a boy's or girl's best opportunity, is too expensive for the Nation to bear. The Congress has recognized it as a national problem, and forward-looking programs are getting underway.

Improvement in protection for children in adoptive situations, in the courts, in communities, and within families is enlisting, and needs, much effort.

New ideas and increasing resources are being brought to bear upon various facets of the needs of older citizens—in health, in housing, in employment, in social services. But these are only beginnings.

The speed and effectiveness with which Federal, State, and local public and voluntary welfare organizations have cooperated in aiding refugees from Cuba during the past year provide heartening proof of the ability of our welfare structure to meet serious emergency situations, yet everywhere it is undermanned and undertrained.

In the field of public assistance—"relief"—there is serious trouble. Here, the most encouraging thing to report is that a reassessment has been made, a searching look taken at the national situation and plans made for changes. It could not be otherwise. The cynicism and publicity overtones of the Newburgh "plan," the District of Columbia cutbacks in aid to large families, and other welfare "cases" all combine to endorse our belief that we have been supporting a social welfare structure in need of major revision rather than further patching.

Public assistance programs are concerned with the needs of dependent persons *not* covered under social insurance or those whose minimum needs exceed their insurance benefits. These are the needy aged, blind, and disabled, and dependent children in families broken by death, incapacity, or absence of a parent, and more recently in families hard pressed because of unemployment.

Assistance has, to date, consisted largely of pouring out money—private and public, local, State, and Federal—tremendous in total but tragically inadequate in individual cases.

The 6.2 million persons on public assistance rolls in 1961 were largely frozen there, sustained at a minimal level of decency by monthly relief payments but with little hope or opportunity for guidance or rehabilitation services which might eventually return many of them to self-support.

Social work staff—inadequate in number and training (1 caseworker with full professional training to every 23,000 public assistance recipients)—has been unable to make the home visits and provide counseling and other family services needed as much as the monthly money payments.

The new Federal-State program, proposed to the States, seeks to meet the actual needs of families—whether this means their retention on the rolls or help in getting off.

It will require a major effort in recruitment and training of professional staff. It could be greatly aided by coordination of public and private voluntary welfare agency activities within each community.

Tomorrow

This then is our national situation today, in health, in education, and in welfare. Tomorrow we must do better—each tomorrow we must do better.

The gap between acquiring knowledge and putting it into action for people must be narrowed. The Department seeks to publicize developments in medicine, in education, and in welfare. It tries to advance the use of new findings in these fields through pilot projects and demonstration programs.

It is incredible that the citizens most in need of medical care should be denied it. People 65 years of age and over have medical costs twice those of younger people, yet their annual income, on the average, is only half as large. During any year they can expect to spend between 2 and 3 times as many days in the hospital as a younger person. They need protection against the high cost of hospitalization and other health services and they want it, not as a gift but as a right earned and established during their productive years.

The program we propose is simply a means of paying for hospital costs and related health services, not a means of providing these services. It is not a program of socialized medicine but a program providing for prepayment of health costs with freedom of choice of doctor and hospital. Arrangements for paying for the services would be much the same as those now used under private hospitalization insurance plans. No other method is as feasible or as fair to everyone.

We are fully aware that virtually all responsibility for the conduct of American education rests outside the Federal Government. This is as it should be, but the Federal Government would be derelict in its duty to its citizens and to the Nation if it did not do all in its power to aid American education, which is in trouble generally. We cannot be satisfied with any educational endeavor that is not genuinely committed to the highest standards of which we are capable.

We have sought, and we will continue to seek, to strengthen our schools in facilities, curriculum, counseling, and the quality and salaries of our teachers. We will stress the arts and humanities as well as science, for both are essential.

We hope to broaden the improvement of language teaching under the National Defense Education Act by providing assistance to teachers of English as well as teachers of foreign languages. Many of our young people enter college unable to speak, write, spell, punctuate, or understand their own language properly. This failure in a single subject hampers and holds them back in all subjects.

We are interested in education of all kinds, for there must be opportunity for instruction and achievement in all fields. We hope to obtain revisions and extensions in vocational education which will

place it in proper relationship to general education and will provide the necessary flexibility to meet shifting employment patterns.

We will seek other legislation from Congress, with one of our first concerns the necessary measures to extend and complete the general reorientation of our welfare program which we have begun through administrative changes.

We are seeking congressional authority to establish a new position, that of Assistant Secretary for International Affairs, to coordinate our growing responsibilities and opportunities in the international field. The exchange of ideas, experimental methods, research findings, and personal skills between nations is beneficial to health, education, and welfare everywhere and contributes beyond its immediate results to human understanding.

The President has proposed the establishment of an Institute for Child Health and Human Development at the National Institutes of Health. The new Institute would concentrate on problems of birth defects, infant mortality, mental retardation, and maternal factors influencing child health and development. It would study the process of aging as part of the program of human development.

The Department also looks hopefully to the Congress for final passage of two bills designed to provide educational and health services to migratory workers and their children. They would make possible some lifting of the burden of neglect, ostracism, and hopelessness long suffered by these people.

We will advocate and support legislation to extend and strengthen the consumer-protection activities of the Food and Drug Administration. We will seek legislation to aid the health professions in training urgently needed manpower through construction of educational facilities and provision of scholarships and educational grants.

The expenditure of money by itself will not automatically bring progress in health research, in education, or in welfare. If it did, we could simply buy an end to cancer, to heart disease, to mental illness—indeed, to disappointments and dependency. We could purchase wisdom and security over the counter.

It is, however, the talent and quality of people, the direction, purpose, and focus of research and community projects, and the excellence of facilities that make the money count. So we will support the projects which will stimulate creativity in others, the education and training that will produce more educators and leaders, the demonstrations that will be so clear and well thought through that many can follow their paths.

We can reorient our welfare objectives, but it is the States which make the final plan and administer the program and ultimately the caseworker in the home who must find answers for the distressed.

We can sponsor educational improvements, but it is the States and the local school boards and, in the end, the teacher who make them work. We can support and prod on matters of health, but it is in the doctor's office, the research laboratory, and the home community that lives are saved and services rendered.

All citizens are needed in this new world of our time. And yet the sick man, the hopeless man is lost. The frightened or insecure man has no strength to lend his Nation. The juvenile delinquent destroys all the years of his youth which might have offered most, in time, in courage, and in daring. The neglected aged waste their bonus hours.

The Department of Health, Education, and Welfare is looking for new answers and seeking new knowledge with a particular urgency: The realization that some of the new answers and new knowledge it seeks could mean the difference between life and death for many men, women, and children; the difference between full realization of their gifts by the talented and a mere plodding existence of little interest to themselves or others; the difference between a grim waiting out of empty years by older men and women isolated in their last days and a happy, successful living of longer life in familiar and beloved surroundings.

To have value, beginnings must stretch into continuity. So, for tomorrow, we plan to continue what we have started in our search for human successes.

Table 1.—*Grants to States: Total grants under all Department of Health, Education, and Welfare programs, fiscal year 1961*

[On checks-issued basis]

States, Territories, and possessions	Total	Social Security Administration	Public Health Service [1]	Office of Education	Office of Vocational Rehabilitation	White House Conference on Aging	American Printing House for the Blind [2]
Total	$2,890,122,796	$2,218,508,079	$244,206,612	$372,075,573	$54,932,040	−$9,508	$410,000
Alabama	80,181,949	63,342,607	6,726,484	7,937,737	2,167,428		7,693
Alaska	12,461,873	2,177,115	2,800,982	7,370,278	113,498		
Arizona	27,566,565	17,649,662	2,403,688	6,995,770	513,862		3,583
Arkansas	46,631,209	36,098,243	4,950,459	3,829,659	1,747,960		4,888
California	314,532,595	244,798,381	11,502,139	55,260,093	2,935,542		36,440
Colorado	49,784,413	40,630,284	2,443,570	6,015,792	690,767		4,000
Connecticut	23,173,735	16,444,188	1,753,959	4,545,596	419,910		10,082
Delaware	4,882,258	2,665,364	884,681	1,154,775	176,133		1,305
District of Columbia	10,532,184	9,263,390	797,773	221,021	248,750		1,250
Florida	74,853,263	59,064,653	5,822,137	8,135,079	1,823,606	−3,599	11,387
Georgia	89,711,932	69,027,133	7,788,325	10,153,324	2,731,790		11,360
Hawaii	16,960,200	3,733,490	2,801,146	10,058,623	365,330		1,611
Idaho	12,229,220	8,132,615	1,424,890	2,482,959	187,978		778
Illinois	117,897,881	98,349,905	8,382,234	9,009,484	2,136,414	−14	19,858
Indiana	35,410,788	27,174,410	4,451,419	3,249,452	528,064		7,443
Iowa	40,877,599	33,541,235	3,676,317	2,676,750	978,992		4,305
Kansas	39,941,956	28,167,364	3,872,651	7,187,912	709,363		4,666
Kentucky	60,078,589	49,575,061	6,385,085	3,474,802	638,753		4,888
Louisiana	117,526,663	107,759,606	5,596,679	2,828,481	1,334,815		7,082
Maine	18,629,937	14,010,042	1,239,837	3,038,766	340,348		944
Maryland	39,437,703	19,625,134	3,806,624	15,378,851	618,179		8,915
Massachusetts	91,836,179	76,268,236	4,761,422	9,682,464	1,105,782		18,275
Michigan	84,752,224	68,133,709	6,252,611	8,822,904	1,524,586		18,414
Minnesota	50,832,699	41,574,468	4,710,334	3,399,704	1,140,166		8,027
Mississippi	53,378,331	42,451,699	5,976,238	3,695,090	1,251,383	−273	4,194
Missouri	102,421,196	90,435,603	5,710,314	5,419,460	848,432	−112	7,499
Montana	11,916,063	6,476,636	1,705,845	3,516,680	216,878	−1,504	1,528
Nebraska	21,157,719	13,312,540	3,085,972	4,402,395	354,396		2,416
Nevada	6,194,453	3,038,161	1,132,335	1,941,413	82,151	−301	694
New Hampshire	8,108,632	4,801,418	1,346,538	1,855,087	104,561		1,028
New Jersey	44,733,826	32,037,151	3,918,077	7,699,940	1,062,910		15,748
New Mexico	30,346,148	18,243,213	2,746,337	9,123,015	230,556		3,027
New York	175,305,025	143,948,724	13,694,413	13,851,347	3,769,963		40,578
North Carolina	75,798,347	54,709,152	11,668,423	6,911,656	2,496,642		12,471
North Dakota	11,548,866	8,051,763	1,401,229	1,754,510	340,581	−50	833
Ohio	111,772,798	88,955,939	9,918,069	11,511,160	1,365,994		21,636
Oklahoma	99,507,864	83,757,740	3,608,514	10,721,173	1,417,548		2,889
Oregon	24,849,175	19,469,234	2,678,261	2,139,283	557,351	−787	5,833
Pennsylvania	123,810,882	95,774,766	13,267,049	10,371,733	4,367,838		29,496
Rhode Island	14,005,143	9,867,406	1,116,622	2,694,084	325,948		1,083
South Carolina	34,854,198	23,238,987	5,114,728	5,327,170	1,169,256	−26	4,083
South Dakota	13,909,776	8,948,483	1,206,992	3,448,831	304,192		1,278
Tennessee	59,763,588	45,047,583	8,374,836	4,692,804	1,640,366		7,999
Texas	158,749,693	127,094,594	11,857,107	18,072,492	1,710,030		15,470
Utah	15,695,221	10,590,887	1,955,992	2,835,649	309,999		1,694
Vermont	7,474,725	5,821,468	1,451,330		204,352	−2,842	417
Virginia	49,182,395	21,860,199	7,315,764	18,663,639	1,334,600		8,193
Washington	60,024,859	45,260,646	3,157,675	10,576,918	1,021,982		7,638
West Virginia	39,273,878	30,634,857	5,777,242	1,503,295	1,353,485		4,999
Wisconsin	42,794,627	33,256,990	4,936,879	3,607,971	985,621		7,166
Wyoming	5,326,786	3,222,008	691,981	1,316,429	95,785		583
Canal Zone	28						28
Guam	1,316,184	231,711	48,465	973,972	62,036		
Puerto Rico	16,584,132	10,154,532	3,927,365	1,763,164	736,766		2,305
Virgin Islands	1,020,365	607,694	180,571	199,678	32,422		
Wake Island	105,401			105,401			
Undistributed	8,468,858			8,468,858			

[1] Includes permanent annual appropriation of $10,000.
[2] Excludes $248,844 paid to water pollution interstate agencies.

Social Security Administration

Social Security in 1961

THE YEAR 1961 saw a new determination to move the social security programs forward in helping to build the Nation's social and economic strength.

On June 30, President Kennedy signed into law the Social Security Amendments of 1961. On that occasion the President emphasized the part that social security plays in providing for families, children and older persons in time of stress. The amendments, he noted, represent an additional step toward eliminating many of the hardships resulting from old-age, disability, or death of the family wage-earner.

Provisions of the 1961 amendments liberalizing old-age, survivors, and disability insurance will especially help some groups in the population who have the smallest incomes and other resources aside from their benefits to fall back on. Minimum benefits were raised from $33 to $40, aged widows' benefits were increased 10 percent, old-age benefits were made payable to men at age 62 on an actuarially reduced basis, the quarters of coverage required for insured status for people at or near retirement age were reduced, and the retirement test was liberalized.

It was expected that in the first 12 months in which the amendments were effective about 4,770,000 people would receive $815 million in new or increased benefits. The changes will be financed by additional income from increased contribution rates.

The 1961 amendments also provided for an increase in Federal participation in public assistance payments by the States to recipients of old-age assistance, aid to the blind, and aid to the permanently and totally disabled for the period October 1, 1961, through June 30, 1962. A decrease in the need for public assistance in some instances, however, was expected to result from the more liberal old-age, survivors, and disability insurance benefits provided in the amendments and reduction of the insured-status requirement.

The Social Security Amendments of 1960, which became law shortly after the beginning of the fiscal year, reflected growing

national concern with economic problems associated with health and medical care. To provide improved protection against economic loss caused by disability, the age-50 requirement for eligibility to disability benefits under old-age, survivors, and disability insurance was eliminated. Further to assist the States in meeting the health-care costs of the needy aged, Federal sharing in State payments to suppliers of medical care to old-age assistance recipients was increased. Also a new Federal-State program of medical assistance for the aged was authorized for older people who can meet living expenses but cannot afford the medical care they need.

By the end of August 1961, 14 States had new medical assistance for the aged programs, 4 States had completed plans for new programs, and 15 States were in the process of developing program plans.

The medical assistance for the aged measure, President Kennedy declared in his February 9, 1961, health program message to Congress, recognized the problem of those needy aged requiring public assistance to meet their medical costs. But, the President indicated, the main problem—that of preventing dependency arising from the costs of health care in old age—must now be met by using the old-age, survivors, and disability insurance system, called by his task force on health and social security "the only sound and practical way of meeting the health needs of most older people." By providing protection against the costs of medical care through the basic national system of contributory social insurance, "it will be possible for our older people to get the vital hospital services they need without exhausting their resources or turning to public assistance," the President said.

Benefits under the health insurance program recommended by the President would be available to all persons 65 and over who are eligible for old-age, survivors, and disability insurance or railroad retirement benefits. The program would provide payment, within certain limits, for the cost of inpatient hospital care (after a deductible), skilled nursing-home care after hospitalization, hospital outpatient diagnostic services (after a deductible), and visiting-nurse and related home-health services.

Congressional hearings on the benefit, financing, and administrative features of the program worked out by the administration, which the President stressed was "a very modest proposal cut to meet absolutely essential needs," were held after the close of the fiscal year.

The recession confronting the Nation as the new administration took office focused attention on another aspect of the economic security of the worker and his family—the protection afforded by the Federal-State unemployment insurance system. The Temporary Extended Unemployment Compensation Act, one of the first antirecession meas-

ures proposed by the administration, was passed by Congress on March 24, 1961. The law provided additional benefits up to 13 weeks for workers who exhaust their regular unemployment benefits under existing State and Federal programs after June 30, 1960, and before April 1, 1962. Up to the end of June 1961, about 1,155,000 individuals had qualified for the extended benefits.

Other administration proposals advanced as recession turned to recovery stressed the need for long-range measures to improve and strengthen the unemployment insurance system. The proposals include a permanent standby Federal program of extended benefits for technologically displaced workers, benefits equal to at least one-half of an individual's average weekly wage (subject to maximums related to statewide averages) to bring benefit levels more nearly into line with those originally intended, and extension of the system's coverage in recognition of the fact that the risk of lost wages due to unemployment is common to all wage and salary workers.

Another proposal, passed by Congress in May 1961, made new Federal funds available to States that extend their child aid programs to help needy children in families in which a parent is unemployed. Inclusion of unemployment as an eligibility factor in Federal-State aid to dependent children will work toward the Nation's goal of enabling children to grow up in normal, secure homes. It will help meet need in many families, such as those for example where the breadwinner is not covered by the unemployment insurance program or has exhausted his benefits. Temporary action was taken pending completion of study by the Administration looking toward permanent changes in present laws. The measure expires June 30, 1962. Twelve States had adopted this measure at the end of August 1961.

The amendments and proposals sketched here and detailed along with others in subsequent sections of this report were designed to put the Nation in a position to deal more effectively with longstanding or emerging problems. Recognized as still urgently needed, however, was wider application of present knowledge and development of new.

A new approach toward finding better ways to help people to help themselves by searching out the causes of dependency was made in March 1961, when the first grants under a program of cooperative research and demonstration projects were announced by the Social Security Administration. The cooperative research and demonstration grant program was authorized by Congress to add to existing knowledge or devise and evaluate new methods of applying knowledge with regard to such problems as the prevention and reduction of dependency, coordination and planning between private and public

welfare agencies, or improvement in the administration and effectiveness of programs carried on in relation to the Social Security Act. Sixteen grants totaling about $350,000 were awarded, with the advice of an outstanding group of experts, to educational and nonprofit institutions.

The Social Security Administration also conducted an intensive review of its own research and statistical activities. As part of the review, Commissioner of Social Security William L. Mitchell invited a distinguished group of experts from the social science research community outside Government to advise him concerning the future scope and objectives of the research program. "After 25 years," Mr. Mitchell told the advisory group, "the social security programs have reached a degree of maturity, and new or unsolved social problems are pressing upon the Nation with a degree of urgency that makes it highly desirable for us to reassess our responsibilities for research and research planning."

The advisory group was in unanimous agreement that a continuing program of long-range research in addition to basic statistical activities and current program-related research is needed if the Social Security Administration is to make further significant contributions to the understanding and solution of persistent human problems and of new problems that lie ahead. The basic recommendation contained in the report of the group to the Commissioner was that the Social Security Administration "accept responsibility for carrying out, stimulating, and supporting long-range research in the broad field of human resources and social welfare."

Indicative of a widely shared, constructive concern of the American people with questions of income security, health security, and the social needs of older persons was the White House Conference on Aging. After 2 years of preparation, involving hundreds of groups throughout the Nation and probably more than a quarter-million individuals, the Conference was held January 9–12, 1961, in Washington, D.C. It was attended by 2,565 official delegates.

The purpose of the deliberations, as summarized by the Chairman of the National Advisory Committee for the Conference, was to reach agreements and make recommendations on four basic problems: (1) the older person's economic situation; (2) his health and medical problems; (3) his pattern of living; and (4) the mobilization of resources, public and private, to improve the three preceding situations.

The "pluralistic approach" to providing for the security of older persons and to the problem of financing medical care was strongly advocated by the interested delegates. It was the consensus that the proper approach to the medical care problem was through a combi-

nation of patient payments, private health insurance plans, and Federal and State government participation. One of the most specific conference developments was the majority recommendation of the income-maintenance section that the old-age, survivors, and disability insurance mechanism should be the basic means of financing health care for the aged.

At the end of fiscal year 1961, total payments under social security and related programs were made at an annual rate of more than $31 billion. The payments represented 7.5 percent of total personal income in June, compared with 6.4 percent a year earlier. Rising old-age, survivors, and disability insurance benefits and larger unemployment insurance payments accounted for the major part of the increase.

Under old-age, survivors, and disability insurance, the number of beneficiaries in current payment status increased by 1,362,000 from June of the previous year to 15,624,000. The number of disability insurance beneficiaries and their dependents rose 376,000, the largest annual increase since disability benefits became payable in 1956, primarily because benefits were extended to disabled workers under age 50 and their dependents beginning November 1960. The number of beneficiaries 65 and over increased by 799,000 to 11,328,000. Total benefits paid out during June 1961 amounted to more than $1 billion.

In federally aided assistance for persons 65 and over, 2.3 million were receiving old-age assistance and 46,000 received medical assistance for the aged in June 1961. Nearly 3.4 million children and their adult caretakers received aid to dependent children—including 112,000 recipients in the newly added unemployed-parent group—106,000 received aid to the blind, and 384,000 received aid to the permanently and totally disabled. In addition, more than a million persons received general assistance financed from State and local funds. Payments for all types of assistance for the month were $337 million.

Federal grants to States for maternal and child health and welfare programs under the Social Security Act for fiscal year 1961 were $18,113.9 million for maternal and child health services, $19,797.4 million for crippled children's services, and $13,613.1 million for child welfare services.

The 1960 report of Federal credit union operations noted that in 1960 Federal credit unions made 4½ million loans totaling nearly $3 billion. During fiscal year 1961, 626 new credit unions were chartered.

The Social Security Administration had 32,100 employees on duty at the end of the fiscal year. The great majority of the employees were in district offices and other offices of the Bureau of Old-Age and Survivors Insurance.

Hearings and Appeals

Old-age, survivors, and disability insurance claimants are guaranteed the right to hearing and review. The number of hearings continued to increase in 1961.

During the fiscal year, 14,105 requests for hearings were received—a 6-percent increase over the previous year. Requests for hearings on disability cases, however, climbed 29 percent in the last 4 months of the fiscal year. The increase was attributable in large part to the Social Security Amendments of 1960. The upward trend was expected to continue since the full impact of the amendments had not yet been realized.

Because of the accelerated tempo of requests for hearings, 17 percent more cases were pending on July 1, 1961, than on that date a year earlier. Thirty-four hearing examiners were added to the Office of Hearings and Appeals staff to handle the increased workload.

Requests for Appeals Council review of hearing examiners' decisions declined from 7,300 in fiscal year 1960 to 5,210 in fiscal year 1961. The number of cases pending at the end of the year was reduced 36 percent. However, the impact on the council's workload of the upward trend in hearings was anticipated for early fiscal year 1962.

The Appeals Council issued decisions on 224 cases remanded by the courts. Although 163 new cases were remanded during the year, the number of cases pending was reduced from 219 to 158.

A substantive survey of the operations of the Office of Hearings and Appeals was conducted by private legal consultants at the request of the Department. The purpose of the survey was to assure that the administrative processes of the office provide fair and impartial hearings.

International Activities

The Social Security Administration International Service planned training programs or conducted training sessions for 932 persons from 81 countries during fiscal year 1961. Requests for the training came through the International Cooperation Administration, the United Nations, the World Health Organization, the Organization of American States, numerous embassies, and a variety of voluntary agencies, foundations, and universities. Referrals of foreign leaders and specialists through the Department of State continued to increase with the growth of the cultural exchange program and its extension to newly developing countries.

Of the nations represented by the trainees, 21 were Asian or Middle Eastern countries, 15 were African, 19 were European, and 19 were

Latin American. Six—all newly developing countries—were represented for the first time: Afghanistan, Cyprus, Nepal, Nigeria, Senegal, and Somalia. The Palau Islands of the Trust Territory were also represented.

In addition to training, the Social Security Administration engaged in a broad spectrum of international cooperative activity related to its fields of interest. The Commissioner participated in the Eleventh Meeting of the Bureau Executive Committee of the International Social Security Association in Leningrad, and other officials represented the Social Security Administration at the association's working group meeting on old-age insurance and on the American Regional Committee of Social Security Actuaries and Statisticians. The Tenth Session of the International Conference of Social Work in Rome, in which Social Security Administration officials also participated, attracted social workers from 60 countries, many from the newly independent nations in Africa attending for the first time.

Cooperation with the Department of State in connection with sessions of the United Nations Economic and Social Council, the Social Commission, and UNICEF contributed to increased recognition for social development in United Nations' programs. Emphasis on social development in the new Act of Bogota program was a basis for increased cooperation with the Organization of American States. A recommendation of the Social Security Administration was influential in the creation of a separate department of social affairs within the organization.

The Social Security Administration also carried on a number of activities in connection with the International Labor Organization, including furnishing advisors to U.S. delegations to conferences in Buenos Aires and Geneva. The Division of Program Research continued to participate, on behalf of the Department, in the regular work of the Interdepartmental Committee on International Labor Policy.

Cooperation with voluntary agencies interested in international social welfare included participation in the National Social Welfare Assembly's Washington workshop on international affairs and in the session of the International Committee of the Council of Social Work Education in New York. A consultant served with the Committee on International Social Welfare of the National Association of Social Workers.

As in past years, the Social Security Administration cooperated with the International Cooperation Administration in recruiting social welfare and maternal and child health experts. Twelve experts were assigned to ICA overseas missions for some period during the year. The experts served in seven countries.

The Social Security Administration undertook to advance a cooperative research program on social welfare questions through a re-

quest for foreign currency under the activities authorized by the Agricultural Trade Development and Assistance Act of 1954, as amended. Funds were requested for fiscal year 1962 in seven countries. The studies proposed encompass such questions as urban social problems, social services and social security, medical care for the aged, juvenile delinquency, community development, and training of social welfare personnel.

Old-Age, Survivors, and Disability Insurance

The old-age, survivors, and disability insurance program provides continuing income for workers and their families as a partial replacement of earnings lost when the family earner retires in old age, becomes permanently and totally disabled, or dies. It does this in a way that enhances the dignity of the individual, fosters self-reliance, and helps to prevent dependency.

The program is supported by the contributions of covered workers and their employers and covered self-employed people. Benefits are earned through work and are related to past earnings. Payments under the program serve as a base to which the individual may add savings and income from private insurance, private pension plans, and other sources. Thus the worker is encouraged to supplement the basic protection afforded by his social insurance benefit with whatever additional protection he can afford to buy.

In the 26 years since the original Social Security Act was enacted the old-age, survivors, and disability insurance program has become firmly established as by far the largest program for assuring income to individuals and families who suffer a loss of earnings when the worker retires, becomes disabled, or dies. More than 9 out of 10 mothers and children are protected against the loss of income resulting from the death of the family breadwinner. Nearly 86 million people in the Nation have worked long enough to be insured for retirement and survivors benefits under the program; more than half of these have worked long enough to meet the requirements for disability protection and this number will increase rapidly each year. Eighty-five percent of the people now becoming 65 are eligible for retirement benefits and in the future this proportion will rise to 95 percent or more. At the end of June 1961, benefit checks were being sent out each month to over 15.6 million beneficiaries.

It is clear that the program as now constituted is playing a major role in assuring that people who have been self-supporting during

their working years will be able to remain independent when they no longer have income from work. Nevertheless there are gaps in the protection afforded by the program that need attention.

Health insurance for older people would fill the most serious of these gaps. The benefits provided under old-age, survivors, and disability insurance, even when supplemented by other income and savings, do not and cannot afford protection against the large and unpredictable costs of major illness for most people. The high health costs and low incomes of the aged as a group preclude a satisfactory solution of the problem through private insurance, and the Nation has long since decided to use social insurance as the basic approach in meeting economic problems that affect the majority of the people. The President has proposed that the social insurance method be used to help finance the health needs of the aged. Providing health insurance for the aged under old-age, survivors, and disability insurance would enable people to contribute during their working years toward protection against certain major health costs in old age, just as they now build protection against other major risks.

Another area that will need attention is how to keep the benefit structure in line with changes in the economy. Most people now coming on the benefit rolls have their benefit amounts based on recent years of work. Over the long run, though, under present law, benefit amounts will be based on a lifetime average of the person's earnings in covered work. If there is no provision for benefit change as earnings go up, the average earnings on which benefit amounts are based will more and more reflect the lower wages paid a person in his earlier years of work. Even if the benefit structure were changed so that a benefit was up-to-date when it was first awarded, there would still be a need to revise benefit levels periodically so that beneficiaries can share in the higher levels of living that active workers enjoy.

Basic to any consideration of the problem of keeping the program in line with the changing economy is the matter of adjusting the ceiling on the amount of earnings that can be taxed and credited toward benefits. Adjustments in the earnings ceiling to correspond with rises in earnings are important from the standpoint not only of keeping benefits up to date but also of keeping the financial base of the program from shrinking.

While the program now affords effective protection for workers of all ages and their families against the risk of severe, long-term disability, there is still a significant gap in this protection. Under present law, a worker who has been totally disabled throughout an extended period of time is not eligible for benefits unless his condition will be of long-continued and indefinite duration. Disabled workers and their families however have great need for benefit income during an extended period of total disability even though the worker may be

expected to recover, and they should be afforded protection under the program.

Increasing attention should be given to the vocational rehabilitation of disabled beneficiaries. The restoration of such beneficiaries to productive work is clearly in the best interest of the individual and the economy, and results in savings to the social security trust funds. To this end, legislation should be enacted to permit limited expenditures from the trust funds to reimburse the States for rehabilitation services for disabled beneficiaries. Making available a certain amount of full Federal financing for rehabilitation of social security disability beneficiaries would encourage the States to extend services to a greater number of such beneficiaries than is practicable under the financial limitations of the present matching fund programs, with consequent advantage to the beneficiaries and little if any cost to the social security trust funds.

Another gap in the protection of the program occurs because there is no provision in present law for the payment of benefits to a child who is dependent on a worker who is not the child's parent. As a result there are cases where a child who has been living with and being supported by an insured worker cannot get benefits on the worker's record when deprived of his support as a result of the worker's retirement, disability or death. Consideration will need to be given to the possibility of paying child's insurance benefits to a dependent child based on the earnings record of the worker who supported him even though the parent-child relationship now required by law does not exist.

The coverage of the old-age, survivors, and disability insurance program, broad as it is, still leaves unprotected some gainfully employed people and their families. Extension of coverage under the program to essentially everyone employed would provide assurance to all workers that the protection of the program would follow them from one job to another. Especially important is the extension of coverage to the approximately 2 million civilian employees of the Federal Government who are under staff retirement plans—the largest group still lacking social security protection. This protection can be provided without undue cost to employees or the Government, in a way that assures that every employee affected will have combined protection under social security and a staff retirement system that is at least as good as—and, in most instances, much better than—his present protection under only a staff retirement system. The independence of the staff retirement systems need in no way be impaired. The plan could also provide that present employees would have the opportunity to choose to continue their existing coverage under a staff retirement system without change, or to come under social security coverage and adjusted staff retirement provisions.

A large group of workers whose employment is covered under the program nevertheless has inadequate protection under the program because a large part of their earnings is in the form of tips, which are not counted as wages for social security purposes. Because much of their income is not counted their benefits have little relation to their true level of earnings. The Department of Health, Education, and Welfare and the Department of the Treasury have recommended to the Congress that tips received by an employee in the course of his employment for an employer be treated like wages paid directly by the employer insofar as possible and have suggested a plan for securing reports and collecting taxes on tips.

The old-age, survivors, and disability insurance program has now become firmly established as the basic program in the Nation for protecting American families against economic dependency arising from loss of income as a result of retirement in old-age, disability, or death of the family breadwinner. The past year brought unusually heavy legislative activity. Enactment of the Social Security Amendments of 1960 at the beginning of the fiscal year and the 1961 amendments at the end of the year resulted in needed improvements in the program, broadening its scope and increasing its effectiveness and flexibility.

The Bureau of Old-Age and Survivors Insurance moved ahead during the year to put into effect the new provisions of the 1960 amendments as well as changes which studies have indicated will improve its administrative effectiveness, while maintaining a high quality of service to the public. Meantime, the Bureau is continuing to study and evaluate the program and its administration.

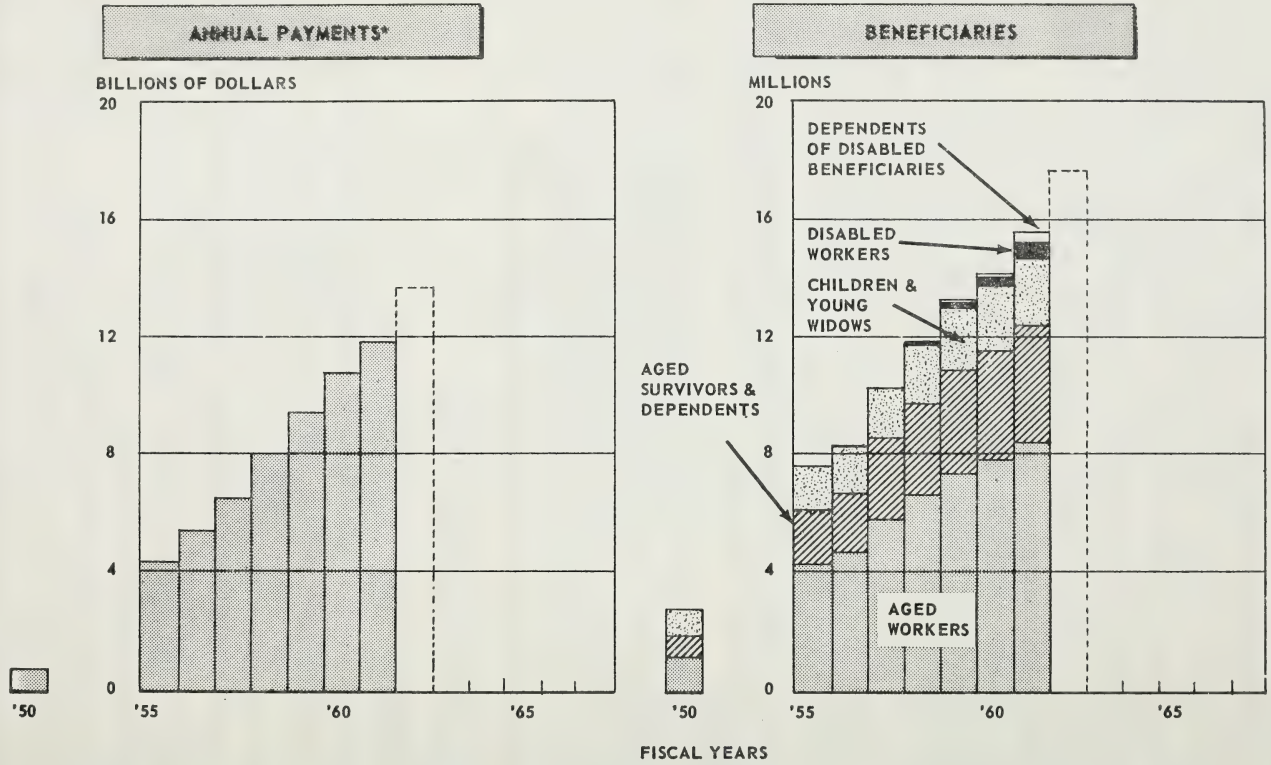
What the Program Is Doing

BENEFICIARIES AND BENEFIT AMOUNTS

Old-age, survivors, and disability insurance benefit payments in the fiscal year ended June 30, 1961, totaled $11,889 million, 10 percent more than the amount paid during the preceding fiscal year. Benefit payments under the disability insurance part of the program were one-third larger than in fiscal year 1959–60 and totaled $704 million. Old-age and survivors insurance monthly benefits rose 9 percent to $11,018 million and lump-sum death payments amounted to $167 million, about $1 million higher.

The number and amount of monthly benefits in current-payment status increased sharply. In June 1961, 15.6 million beneficiaries were receiving benefits at a monthly rate of $992.0 million—increases from June 1960 of 1.4 million in number of beneficiaries and $102.2 million in amount of monthly benefits. The increase in number was 10 per-

CHART 1.—OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE BENEFIT PAYMENTS AND BENEFICIARIES



*Includes about 3% lump sum awards.

cent, and the rise in the monthly amount almost 12 percent. The increase in the monthly rate resulted from (1) the growth in the total number of beneficiaries, (2) the rising proportion of benefits based on recent higher earnings with as many as 5 years of lowest earnings and periods of total disability omitted from the benefit calculation, and (3) the 1960 legislation increasing the benefit for each child of a deceased worker to three-fourths of the primary insurance amount.

Men aged 65 or over and women aged 62 or over made up 12.3 million (79 percent) of the beneficiaries—8.4 million of them were retired workers and 3.9 million were the wives and dependent husbands of retired or disabled workers and the widows, dependent widowers, and dependent parents of workers who had died. Of the remaining 3.3 million (21 percent), 2.1 million were children, about 616,000 were mothers, and 558,000 were disabled workers under age 65.

About 2.6 million monthly benefits were awarded in fiscal year 1961, 364,000 more than the number awarded in the preceding year. A record number of 540,000 monthly benefits were awarded to disabled workers under age 65 and their wives, husbands, and children. About 121,000 of these benefits were awarded to disabled workers under age 50 (first eligible in November 1960) and about 137,000 to their dependents. New highs were also reached for mother's benefits (96,000) and for benefits awarded to children of deceased or retired workers (331,000). About 122,000 monthly benefits attributable to the liberalized insured-status provision in the 1960 amendments were included in the year's awards. Old-age (retired-worker) benefits accounted for about three-fourths of the awards under this provision; the average monthly amount was $39.35 compared with $83.85 for awards under the earlier provision.

Lump-sum death payments during fiscal year 1961 numbered 825,000, about 5,000 more than the previous high established in fiscal year 1960; this was the 11th consecutive year in which a new record for lump-sum awards was set. About 794,000 deceased workers were represented in these awards. The average lump-sum amount per worker was $210.36, about the same as in the preceding year.

In June 1961, the average old-age insurance benefit paid to a retired worker who had no dependents also receiving benefits was $70.40 a month. When the worker and his wife both received benefits, the average family benefit was $124.90. Families consisting of a widowed mother and two children received on the average $190.70. Among beneficiaries on the rolls at the end of June 1961 whose benefits are based on earnings after 1950 the average for a retired worker with no dependents receiving benefits was about $78.90, for an aged couple about $133.90, and for a widowed mother and two children about $214.20.

DISABILITY PROVISIONS

During the fiscal year, a period of disability was established for about 220,000 workers, 30,000 more than in the preceding fiscal year and about 13,000 more than the previous record number in 1957–58. About 22,000 disabled persons aged 18 or over who had applied for child's monthly benefits were found to have a disability that began before they had reached age 18; the number was about 6,000 smaller than in 1959–60. Since the beginning of the program in 1955, about 1,185,000 workers and dependent children have been found to be severely disabled and to meet the other requirements for a period of disability.

The number of disabled workers receiving monthly benefits rose 50 percent in the fiscal year and totaled 558,000 at the end of June. About 340,000 benefits were being paid to the wives, husbands, and children of these beneficiaries—a 125 percent increase. (As mentioned earlier, benefits were first payable to disabled workers under age 50 and their dependents for November 1960.) By the end of June 1961 child's monthly benefits were being paid at a monthly rate of $5.0 million to 113,000 disabled persons aged 18 or over—dependent sons and daughters of deceased, disabled, or retired insured workers—whose disability began before age 18. About 15,000 women—who would not otherwise be eligible for benefits—were receiving wife's or mother's benefits as the mothers of disabled persons receiving child's benefits.

During the fiscal year, there has been a growing volume of litigation in connection with the disability program, with a resulting troublesome proportion of reversed decisions. The Bureau is studying the situation carefully in the hope that with improved procedures, both the volume of litigation and the number of reversals may be decreased.

By the end of 1960, the latest date for which this information is available, about 94,800 persons were receiving old-age benefits increased by an average $8.40 a month because their social security records were frozen for periods while they were disabled before reaching retirement age. About 32,800 wives, husbands, and children of retired workers and about 45,300 widows, widowers, children, and parents of workers who had their social security records frozen before death were also receiving larger monthly benefits because of the freeze. For the same reason, lump-sum death payments in 1960 based on the earnings records of 18,850 deceased workers were increased by an average of $23.36 per worker.

THE PROTECTION PROVIDED

Of the population under age 65, an estimated 77 million were insured at the beginning of the calendar year 1961. Some 38 million of these people were permanently insured—that is, whether or not they continue to work in covered jobs, they will be eligible for benefits when they reach retirement age, and their families are protected if they die. (Included in this total were about 900,000 women aged 62–64 who were already eligible for old-age benefits but on a reduced basis.) The remaining 39 million were insured but must continue in covered work for an additional period to be insured permanently. If the father should die, the mother and young children in 9 out of 10 families in the Nation can count on receiving monthly survivors insurance benefits. An estimated 48 million of the insured persons under age 65 also met the insured status requirements for protection against the risk of long-term and severe disability.

Of the 17.0 million people aged 65 or over in the United States at the beginning of 1961, 73 percent were eligible for benefits under the program. Sixty-four percent were actually receiving benefits, and 9 percent were not receiving benefits because they or their husbands were receiving substantial income from work. Taking into account the liberalization in the requirement for fully insured status provided by the 1961 amendments, the percentage of aged persons who will be eligible for benefits at the beginning of 1962 is estimated to be 76. This percentage is expected to rise to 83 by the beginning of 1966.

THE COVERAGE OF THE PROGRAM

An estimated 73 million persons worked under old-age, survivors, and disability insurance during the calendar year 1960. In addition, about 1 million persons employed in the railroad industry had, in effect, joint coverage under the railroad retirement and old-age, survivors, and disability insurance programs. Altogether, including employees of State and local governments and nonprofit organizations for whom coverage is available on a group-election basis and members of the Armed Forces, nine-tenths of all persons in paid employment in the United States were covered or eligible for coverage under the program.

Of workers not covered and not eligible for coverage during a typical week, about one-third were covered by Federal, State, or local retirement systems. The remaining two-thirds—7 percent of the Nation's paid employment—consisted generally of persons who are not regular workers and are for the most part self-employed persons and domestic and farm workers who did not meet certain requirements of the law as to the amount of their earnings or the length of time worked.

INCOME AND DISBURSEMENTS

Expenditures from the Federal Old-Age and Survivors Insurance Trust Fund during the fiscal year totaled $11,743 million, of which $11,185 million was for benefit payments, $322 million for transfers to the railroad retirement account and $236 million, including Treasury Department costs, for administrative expenses. Total receipts were $11,814 million including $11,293 million in net contributions and $522 million in interest on investments. Receipts exceeded disbursements by $72 million, the amount of the increase in the trust fund during the year. At the end of June 1961 this fund totaled $20.9 billion.

Total assets of the old-age and survivors insurance trust fund, except for $1,377 million held in cash, were invested in United States Government securities as required by law; $3.4 billion were invested in public issues (identical to Treasury securities owned by private investors), and $16.2 billion were invested in securities of varying maturities issued for purchase by the trust fund. The average interest rate, figured on the coupon rate and face amount of all investments of this fund at the end of the fiscal year, was 2.74 percent.

Expenditures from the Federal Disability Insurance Trust Fund during fiscal year 1961 totaled $745 million, of which $704 million was for benefit payments, $5 million for transfers to the railroad retirement account, and the remainder—some $36 million—for administrative expenses. Total receipts were $1,082 million, including $1,022 million in net contributions and $60 million in net interest on investments. Receipts exceeded disbursements by $337 million, the amount of increase in the fund during the year. At the end of June 1961, the fund totaled $2,504 million. (Contributions to this fund first became payable in January 1957 and benefit disbursements began in August of that year.)

Assets of the disability insurance trust fund consisted of $2,386 million in United States Government securities and a cash balance of $119 million. The invested assets consisted of $87 million in public issues and $2,299 million in securities of varying maturities issued for purchase by the trust fund. The average interest rate, figured on the coupon rate and face amount of all investments of this fund at the end of the fiscal year, was 2.85 percent.

Administering the Program

The Bureau entered fiscal year 1961 with normal workload backlogs, the amount of work pending at various work stations being generally no more than necessary to keep work flow current. With a relatively stable workload situation and more favorable workload-to-staff rela-

tionship than had existed for several years, the Bureau appeared to be in a good position to put into effect improvements in operations which had been successfully tested and would make for improved administration and a higher quality of public service. This highly favorable situation was altered, however, with enactment of amendments to the old-age, survivors, and disability insurance program in September 1960. Once again the Bureau was faced with a heavy influx of additional workloads and had to make preparations to recruit and train the necessary additional staff. At the same time, plans were being put into effect to proceed with further study and implementation of the long-range integrated data processing and electronic data processing programs to which the Bureau was committed. The 1960 amendment provisions which resulted in immediate, substantial workload increases were those which changed the retirement test, eliminated the age-50 requirement for disability insurance benefits, and liberalized insured status requirements.

The additional workloads resulting from the amendments necessitated substantial staff increases and made it imperative that the Bureau recruit and train new personnel as rapidly as feasible. Additional personnel requirements were measured against expected workload increases, recruitment potential, Bureau capacity to effectively train and absorb into regular operations the added staff, and projected requirements after fiscal year 1961.

Employees on duty at the end of the fiscal year totaled 31,391. This end-of-the-year staffing total reflects not only the increase due to 1960 amendment workloads, but also normal program growth, some scheduled advanced recruitment to secure the best college graduates available, and a stepped-up recruitment activity carried out in anticipation of the latest amendments to the program enacted on June 30, 1961. In addition to the staffing indicated above, the Bureau also used 2,129 man-years of overtime during the fiscal year.

In addition to workload impacts, the 1960 amendments also presented a number of administrative problems that had to be resolved promptly, to ensure effective implementation of the changes made in the law. Priority was given to training on the amendment provisions, essential for both experienced and newly recruited personnel. The Bureau was also faced with the task of issuing and coordinating a considerable volume of instructional material and forms essential for the implementation of the amendments. Initial emphasis was given to those areas in which the amendments had immediate effect. A comprehensive informational campaign on the amendments to inform the public of the changes in the law was conducted.

A few key workload figures best illustrate the magnitude of the operating task faced by the Bureau during the year. Approximately

2,690,000 claims for old-age and survivors insurance benefits and about 935,000 for disability insurance benefits were received. New social security accounts were established for 3,451,000 persons and duplicate account number cards were issued to 3,039,000 people. Approximately 273,800,000 earnings items were received for posting to individual accounts and more than 2,650,000 requests for changes in personal record data were processed. About 2,300,000 statements of earnings accounts were issued to individuals who inquired about the status of their earnings records.

On January 1, 1961, a new Division, designated as the Division of Management, became operative. In this new organizational entity, the management functions formerly performed by the Division of Administrative Management and the Division of Public Information and Personnel Management, with the exception of the Office of Information, were consolidated. The Office of Information now reports directly to the Office of the Director.

The new Division serves as the staff arm of the Director for management analysis and appraisal, financial management, personnel management, training, employee health and communications, procurement, and general management services. Consolidation of these functions in one Division permits greater coordination of the management activities involved, places them under the control of one Assistant Director, and makes possible a unified and more effective leadership in top-level Bureau management functions.

For the past few years, the Bureau has been exploring the use of electronic equipment to handle its rapidly increasing workloads without increasing staff at a proportionate rate. By 1955, electronic equipment had been developed to the point where installations were made in the Division of Accounting Operations for the maintenance of earnings records and making initial benefit computations. Subsequently, in 1958, computers located in the Division of Accounting Operations were used to convert old-age, survivors, and disability insurance benefits to the new rates resulting from amendments to the law and, in 1959, to facilitate the recertification of benefit payments for the Baltimore Payment Center.

Based on this earlier experience with electronic computers, the Bureau launched a long-range program of developing an integrated data processing system in its claims operations to provide better service to the public through increased speed and accuracy, plus reduced costs. The broad concept envisioned a claims operation in which information and decisions would be recorded in machine language at early points in the process, transmitted automatically with maximum speed and accuracy, and translated electronically into final products. A thorough investigation of the many types of data processing equip-

ment was conducted and notable progress was achieved in the implementation of the long-range integrated data processing system. Full development is expected by 1964. During the year, computers and related equipment were put into operation at the various payment centers.

Computers were installed in the Philadelphia, Chicago, Kansas City, and Birmingham Payment Centers. Peripheral equipment was installed in the New York and San Francisco Payment Centers. The Philadelphia Payment Center provides computer service to New York, and the Kansas City Payment Center services San Francisco. The Baltimore Payment Center is serviced by the computer in the Division of Accounting Operations. During the year, the entire accounting records for the Bureau's old-age, survivors, and disability insurance beneficiary rolls, representing some 15 million items, were converted to magnetic tape.

Electronic data processing systems and programs were placed in regular operation to create media for issuing initial benefit checks, mechanically prepare award certificates, prepare checkwriting media for recurring payments, and mechanically update beneficiary records by additions, deletions, and changes of address. These techniques now make it unnecessary for the Treasury Disbursing Offices to establish and manually maintain records on new additions to the beneficiary rolls. The creation of master record tapes will permit the recording of monthly payment history. In addition, it will permit the introduction of methods for mechanically processing beneficiaries' annual reports of earnings, suspensions and reinstatements of benefits, terminations of entitlement, and change of address items.

Testing of high-speed wire communications between Kansas City and San Francisco, designed to transmit data from magnetic tape to magnetic tape, has been completed. This was a venture into a relatively uncharted area of transmitting data over telephone lines from one tape station to another tape station over 1,800 miles away. The tests were conclusively successful and the system was put into operation.

Recording on magnetic tape of payment histories for all beneficiaries was started in January 1961, and included actions taken in December 1960. All benefit actions are now added to the tape records on a daily basis through the regular daily updating operations. This provides current benefit, payee, address, and payment history data for all included beneficiaries.

At the same time that it was investigating and planning for computer applications to the claims process, the Bureau conducted a Data Transmission Pilot test in 1960. The Pilot installation, involving 26 district offices, 2 relay centers, 3 payment centers, 2 regional offices,

and the Central Office in Baltimore was observed and thoroughly tested during fiscal year 1961. Based on the results of this study, the Bureau decided to proceed with the establishment of the entire National Data Transmission System which will include all Regional and district offices, payment centers and Bureau Headquarters in Baltimore. In June 1961, contracts were let for the special equipment needed for the Baltimore Transmission Terminal, 6 Communications Control Centers, and 48 relay centers to be established as key elements in the National System. One Communications Control Center will be located in the Social Security Building in Baltimore and the others will be located in the payment centers at Chicago, Philadelphia, Birmingham, Kansas City, and San Francisco. Schedules for the orderly linking of all the Bureau's processing points during fiscal year 1962 have been drawn up and additions to the system are being made on a regular basis. Late in the fiscal year, a Telecommunications Management Branch was established in the Division of Management to provide unified control and management of the National Data Transmission System.

In connection with studies concerning the use of electronic equipment and data transmission systems, the Bureau is also studying other aspects of the claims process. For example, a contract was made with The Johns Hopkins University in Baltimore for a 3-month exploratory Operations Research Study to determine whether operations research techniques could be profitably applied to processing and organizational problems in the long-range aspect of the Bureau's work. The study, conducted by a research team from the University, was started in November 1960 and completed in February 1961. A comprehensive report of findings and recommendations was published in April and reviewed by the top staff of the Bureau to determine whether and how operations research might be used most advantageously in decision-making processes. As a result, a decision was made to develop a Bureau operations research capability. Outside professional assistance will be utilized to augment and complement available Bureau skills in the development of this program.

The Bureau continued its activity in studying proposals to provide health insurance for beneficiaries aged 65 and over. Issues and problem areas involved in the administration of such a program are being studied to permit development of possible solutions and alternative courses of action. In January 1961, a small group of Bureau personnel was detailed to study and develop plans for the administration of a health insurance program. This staff is working in coordination with other organizations within the Department of Health, Education, and Welfare and other government agencies. Discussions were also held with representatives of other national organizations in the

health field concerning various alternatives and problems presented by the proposed legislation. The large variety of complex questions and problem areas encountered by this group during its investigations in the last 6 months indicate a need to continue these studies, so that the Bureau will be properly prepared to provide advice on the administrative feasibility of proposals and to step into actual administration if health insurance for the aged is enacted.

In the last few years, the administration of the old-age, survivors, and disability insurance program in foreign countries has been the subject of considerable review and study. Surveys have been conducted in Europe and the Far East to identify problem areas and to explore ways and means of facilitating the claims process and expediting service to claimants. In fiscal year 1959, an agreement was negotiated with the Veterans Administration, whereby Veterans Administration staff and facilities in the Philippines are utilized on a reimbursable basis for services in connection with old-age, survivors and disability insurance affairs originating in that area. Another step was taken last year to accomplish additional improvements in this area of Bureau operations. A decision was reached to bring together in one central office location as many as possible of the diverse activities related to the administration of this phase of the program. In May 1961 establishment of a new Branch in the Division of Claims Control was approved to provide overall responsibility for old-age, survivors, and disability insurance program administration in foreign countries.

During the past year, the Bureau has been engaged in the process of settling down in the new Social Security Building on the outskirts of Baltimore and working out the many necessary adjustments. As of the end of the year, one unresolved problem was that of space requirements—the new building is filled to capacity and certain segments of the Bureau are still located in downtown Baltimore. A series of amendments, with the resulting growth of staff, has made it difficult to keep pace with the demands for space. Construction of an Annex to the Social Security Building to house those segments of the Bureau still downtown has proceeded according to plan. It appears that there will be no difficulty in meeting the contract completion date of June 1962 for this addition to the building. As of the end of June 1961, work was proceeding ahead of schedule.

Increasing space needs have led to a recommendation for expansion of the Annex to provide sufficient space for all of the disability and Baltimore Payment Center functions. Accordingly, an appropriation request has been submitted to Congress to obtain funds to provide additional space in the Annex.

At the end of fiscal year 1961, 30 large employers, with about 4 million employees, were either reporting employees' earnings on magnetic tape, or had plans to report by this method in the near future. There are savings to both the employers and to the Government in this system. The employer is able to eliminate the time-consuming listing of lengthy wage reports, often running as high as 1,000 pages per employer, along with the transcription errors which are costly to correct—both for the employer and for the Government. The taped wage reports, prepared automatically from the employer's payroll records, also eliminate steps in the Government's processing of the reports, such as punching cards for each employee reported.

At present, 253 employers having 10,000 or more employees are submitting reports of their employees' earnings directly to the Social Security Administration rather than through the Internal Revenue Service. The direct submittal of these reports permits the earnings records of the nearly 7 million employees affected to be processed and updated about 15 days earlier than under conventional methods. An additional 39 employers with approximately 1 million employees are considering the adoption of this plan.

During the year, the Bureau continued to work with the Internal Revenue Service to obtain more complete and accurate earnings reporting, particularly in the areas of migrant farm laborers and domestic service workers and self-employed persons and to secure more prompt processing and forwarding of earnings reports to the Bureau. As a result of the negotiations conducted during the past year, previous agreements were firmed up and agreement was reached on a program for increased Internal Revenue Service audit and compliance activities. The details of this program will be worked out in fiscal year 1962.

A significant recent accomplishment was the inauguration of a formal accounting procedure by which certain representative payees are required to submit annual reports as to the stewardship of the funds they have received on behalf of minor children and adults found to be unable to handle such funds. This development grows out of extended Bureau experience in this area. The accountability procedure augments but does not supplant personal interviews with certain representative payees at stated intervals. The significance of the annual accounting is that it requires a representative payee, under a system of administrative guardianship, to make appropriate reportings of his use of the funds received on behalf of beneficiaries in a trust relationship.

All necessary forms, internal instructions, and formal regulations have been developed, and district office personnel are now engaged in interviewing, interpreting, and implementing this procedure with

accountable payees. Further administrative refinements are contemplated, particularly in the early years of the activity when careful policy review and control will be required.

Legislative Developments During the Year

The Social Security Amendments of 1961, P.L. 87–64, mark still another step forward in providing American workers and their families with basic protection against the hardships that can result from loss of earnings when the breadwinner retires, becomes disabled or dies. This legislation was enacted June 30, 1961.

PROVISIONS OF THE 1961 AMENDMENTS

Reduction in the minimum eligibility age for retirement benefits for men.—The age at which men are first eligible for old-age and survivors insurance benefits is lowered from 65 to 62, with benefits for those who claim them before age 65 reduced to take account of the longer period over which they will get their benefits. It is estimated that benefits amounting to $440 million will be paid during the next 12 months to about 560,000 people who would not have been eligible for insurance benefits if it were not for this change.

Under the new provision, the insurance benefits for a man worker are reduced at the same rate as now applies for a woman worker (5/9 of 1 percent for each month before age 65 for which a benefit is payable); husband's insurance benefits are reduced at the same rate as now applies to wife's insurance benefits (25/36 of a percent for each month before age 65 for which a benefit is payable); and widower's and surviving father's insurance benefits are payable in full as widow's and surviving mother's insurance benefits now are. A man who begins getting old-age insurance benefits in the month in which he reaches age 62 will get a benefit amounting to 80 percent of the amount he would get if he stopped working then but waited until his 65th birthday before applying for benefits; a man getting husband's insurance benefits at age 62 will get 75 percent of what he would have gotten at age 65.

As is now true for women, the percentage reduction in the insurance benefit payable before age 65 will continue to apply after 65, except that if the person works and earns enough before he reaches 65 to cause any of his benefits to be withheld the reduction in his benefit will be refigured at 65 to reflect the fact that benefits were not paid for as many months before 65 as was contemplated when the original computation was made.

As originally proposed, the provision to lower the minimum eligibility age for insurance benefits for men would have involved some

additional cost (estimated at 0.10 percent of payroll on a level-premium basis). This additional cost would have arisen because the computation of both fully insured status and the average monthly wage (from which benefit amounts are figured) would have been liberalized for men as they were for women when insurance benefits were made available to them at age 62. The measuring period for determining the number of quarters of coverage required to be fully insured for benefits and for determining the number of years to be included in the computation of the average monthly wage would have been based on the period ending with the beginning of the year of attainment of age 62 instead of age 65—a 3-year-shorter period than under present law. Using a smaller number of years in the computation permits the dropping of more years of low earnings and thus may have given a higher average monthly wage and a higher benefit amount even where the person works right up to age 65. In the amendments as adopted, an increase in the cost of the program is avoided by continuing to use age 65 as the ending point for determining insured status and computing the average monthly wage for a man.

Because the period for computing the average monthly wage for men extends to age 65 even though men may claim benefits before that age, in some cases where coverage was very recent as many as 3 years without earnings may have to be included in the computation. Where the man works after entitlement to reduced benefits, therefore, the new law provides for a special automatic recomputation without an application at age 65, or death before age 65, to pick up such earnings and, in death cases, to shorten the period used.

The minimum benefit increased.—The minimum insurance benefit payable to a retired insured worker who begins to get benefits at or after age 65 or to a disabled insured worker, and to the sole survivor of a deceased insured worker, is increased from $33 to $40 per month (the minimum primary insurance amount), with corresponding increases for people getting other types of insurance benefits—for example, wives and children—based on primary insurance amounts of less than $40. This provision will put an additional $170 million in the hands of 2,175,000 people in the first 12 months of its operation.

The provision for increase in minimum benefits makes an improvement in the old-age, survivors, and disability insurance program that is much needed at the present time. People coming on the benefit rolls in the future will generally get benefits above the minimum level because they will have had a chance to work in covered employment during their best working years. Right now, though, many of the people on the rolls are getting benefits at or near the minimum level not because they had a low level of lifetime earnings but because they

were already old when their jobs were covered and their earnings under the program were lower than their average earnings over their lifetime. The increase in the minimum makes the protection of the program more effective for these people.

Insured status requirements changed.—The insured status requirement—the proportion of time that a person must work under social security to be eligible for old-age, survivors, and disability insurance benefits—is changed from 1 quarter of covered work for each 3 calendar quarters elapsing after 1950 to 1 quarter for each calendar year (equivalent to 1 for each 4 calendar quarters) up to the year in which he reaches age 65 (age 62 for women). This change makes the insured status requirements for people who are now old comparable to that which will apply in the long run for people who will attain retirement age in the future. These latter will be fully insured if they are in covered work for the equivalent of 10 years out of an adult working lifetime of about 40 years.

This change will help many people who are uninsured because the work they did during their working years was not covered and by the time their jobs were covered they were already so old that they could not work regularly enough to meet the insured status requirements then in the law. About $65 million will be paid during the first 12 months to 160,000 people who would not otherwise have qualified for insurance benefits.

The aged widow's benefit increased.—The insurance benefit payable to an aged widow of a deceased insured worker is increased by 10 percent, from 75 percent of the worker's primary insurance amount (the basic amount on which all old-age, survivors, and disability insurance benefit amounts are based) to 82½ percent. (A similar increase is made in the insurance benefit payable to a widower and to a surviving dependent parent where only one parent is entitled to benefits.) This change will result in $105 million in additional benefits being paid to 1,525,000 older people during the first 12 months of operation.

Under the law in effect up to this time, when a man died his widow had to get along with one-half of the benefit income that the family had while the man was living. If the retirement benefit for a man bears a reasonable and adequate relationship to his previous earnings, as it is intended to, then ¾ of that benefit is not adequate for his widow in terms of the man's earnings. The increase provided in the legislation will produce a more reasonable relationship between the widow's benefit and her deceased husband's earnings.

The retirement test liberalized.—The provision for withholding benefits from beneficiaries whose earnings exceed $1,200 a year (generally referred to as the retirement test) is changed so that $1 in

benefits will be withheld for each $2 of earnings between $1,200 and $1,700, rather than between $1,200 and $1,500 as under previous law. (One dollar in benefits will be withheld for each $1 earned over $1,700.) Expanding the area over which the $1-for-$2 adjustment applies means that older people have a positive incentive to increase the part-time work they do up to the $1,700 point. There is thus a substantial improvement in the effect of the program on incentives for older people to contribute their skills and energy to the economy and to improve their own economic status through such current work as they are able to obtain and perform. Under the new test, about 350,000 people will start to get insurance benefits or will get more benefits for 1961 than they would get if the law had not been changed.

Extension of the time for filing fully retroactive applications for establishing disability periods.—The legislation extends for 1 year—through June 30, 1962—the time within which insured workers with long-standing disabilities may file applications for disability protection on the basis of which the beginning of a period of disability can be established as early as the actual onset of disablement (as far back as October 1941). Many of those benefited by this provision are persons who only recently—through the 1960 amendment that provided cash disability benefits for disabled workers under age 50—were afforded the opportunity to become eligible for monthly disability benefits. Some of these new eligibles only now are learning of their rights to disability benefits. In some instances these rights would have been lost if the time for filing fully retroactive applications had not been extended. As in the previous law, where an application is filed after the deadline (now June 30, 1962), a period of disability can be established no earlier than 18 months before the date of filing application even if the applicant stopped working because of his disability much earlier than that 18th month.

Employees of State and local governments.—The 1961 amendments afforded employees of the States and localities additional time to elect social security coverage under the provision permitting specified States to cover only those retirement system members who desire coverage, with all future members being covered compulsorily. The amendments also added New Mexico to the list of States to which the provision applies; it now applies to 17 States.

Giving survivors of certain ministers opportunity to elect coverage.—The 1961 amendments extended the provision of the 1960 amendments which permits ministers to elect coverage before April 16, 1962, to the survivors of certain ministers. Survivors of ministers (or Christian Science practitioners) who die on or after the date of enactment of the 1960 amendments (September 13, 1960) and before April 16, 1962, without having elected coverage, may file certificates of election before April 16, 1962.

Contribution rates increased.—The social security contribution rates payable by employers and employees are increased by ⅛ of 1 percent each, and the contribution rate for self-employed people is increased by 3/16 of 1 percent and rounded to the nearest tenth of 1 percent, beginning with 1962. In addition, the tax increase scheduled for 1969 will be moved up to 1968. Since the amendments would increase the level-premium cost of the program by 0.27 percent of payroll, and since these changes in the social security contribution rate schedule provide for additional income to the trust funds which is also estimated at 0.27 percent of payroll, the legislation does not change the actuarial balance of the insurance program and the insurance system will remain on a sound financial basis.

The changes in the contribution schedule are shown below:

Calendar years	Employers and employees, each		Self-employed	
	Old	New	Old	New
	Percent	*Percent*	*Percent*	*Percent*
1962	3	3⅛	4½	4.7
1963–65	3½	3⅝	5¼	5.4
1966–67	4	4⅛	6	6.2
1968	4	4⅝	6	6.9
1969 and after	4½	4⅝	6¾	6.9

Research Activities

A major survey research project conducted during the fiscal year 1961 was a survey of the characteristics and resources of 3,400 disability insurance beneficiaries and disabled persons in the eight largest metropolitan areas whose social security records were frozen to protect their benefit rights. The findings of this survey are now being tabulated. Other studies of disability beneficiaries were begun during the year, utilizing nonsurvey data; these studies concern the characteristics of persons who have been denied a period of disability, and the characteristics of disabled persons who were rehabilitated by State agencies in the 1957–58 period.

Reports were issued during the year on data collected in a 1957 survey of aged beneficiaries and mother-child groups. These reports analyzed the impact of hospitalization costs on the aged, as well as the sources of income, employment status, and living arrangements of retired beneficiaries. In the coming fiscal year, the Bureau plans to begin a study of a sample of aged beneficiaries who will be revisited over a period of years in order to determine how their situation changes as they grow older and the kind of adjustments they make to such changes.

The Bureau conducted a survey of State and local retirement systems, and began preparation of a report on the benefit-contribution

characteristics of such systems before and after old-age, survivors, and disability insurance coverage was obtained. Several pretests were made in a survey of reasons why persons apply for old-age benefits; the survey questionnaire was revised in the light of the pretest results, and plans were made for full-scale quarterly surveys in fiscal 1962.

A number of other socio-economic research studies were completed during the year, utilizing nonsurvey techniques. Reports were issued on the characteristics of persons separating and withdrawing contributions from the Federal Civil Service Retirement System; the rehabilitation implications of activity limitations among disabled workers; and the employment of women under the program.

Program Simplification

Progress continues to be made by the Bureau in its efforts to make the old-age, survivors, and disability insurance program easier to understand, accept, and administer. Many of the proposals for simplifying the program that were developed over the last few years were included in the Social Security Amendments of 1960. During the last year, the Bureau completed studies and developed recommendations for simplifying the insured status requirements for benefits and the provisions for paying reduced benefits before age 65. Some of these proposals, along with others of the same nature developed by the Chief Actuary of the Social Security Administration, were incorporated in the amendments of 1961. Further progress along these lines was made in the area of paying reduced benefits before age 65 as a result of a major redrafting effort by the Legislative Counsel's Office of the House of Representatives.

Late in fiscal 1961, the Bureau got underway a long-term simplification project to reorganize and rewrite title II of the Social Security Act. The objectives of this project are to: (1) improve the organization and format of the statute; (2) eliminate unnecessary verbiage; and (3) eliminate minor inequities and inconsistencies. Although the Bureau took the initiative in setting up this project, the new title will be prepared in cooperation with the staffs of the Legislative Counsel's Office and the Committee on Ways and Means of the House of Representatives.

Financing the Program

The old-age, survivors, and disability insurance system, as modified by P.L. 87–64, has an estimated benefit cost that is very closely in balance with contribution income. In enacting the 1961 amendments Congress again made clear its intent that the program be self-support-

ing from contributions of covered workers and employers. Careful review was given to intermediate-range and long-range actuarial cost estimates prepared for use of the congressional committees in their legislative considerations. The program as amended continues to be financed on an actuarially sound basis, both for the next 15 to 20 years and for the distant future.

The difficulties involved in making exact predictions of the actuarial status of a program that reaches into the distant future are widely recognized. If different assumptions as to, say, interest, mortality, retirement, disability, or earnings had been used, different results would have been obtained. Accordingly, no one set of estimates should be looked upon as final, in view of the fact that future experience may vary from the actuarial cost estimates. Nonetheless, the intent that the system be actuarially sound can be expressed in law by a contribution schedule that, according to the intermediate-cost schedule, results in the system being substantially in balance.

OLD-AGE AND SURVIVORS INSURANCE BENEFITS

The level-premium cost of old-age and survivors insurance benefits after 1961, on an intermediate basis, assuming interest of 3.02 percent and earnings at about the levels that prevailed during 1959, is estimated at 8.79 percent of payroll (after adjustments to allow for administrative expenses and interest earnings on the existing trust fund). The level contribution rate, equivalent to the graduated rates in the law, is estimated at 8.55 percent of payroll, leaving a small actuarial insufficiency of 0.24 percent of payroll. In view of the very long range over which these projections are made, and the many variable factors included, the insufficiency is so small that the system may be considered in actuarial balance.

DISABILITY INSURANCE BENEFITS

The Social Security Amendments of 1956 established a system for financing disability benefits which is entirely separate from the financing of old-age and survivors insurance benefits. The estimated level-premium cost of the disability benefits (adjusted to allow for administrative expenses and interest) on an intermediate basis is 0.56 percent of payroll. Contribution income has been specifically allocated to finance these benefits; this income is equivalent to 0.50 percent of payroll, leaving a small actuarial insufficiency of 0.06 percent of payroll. Future experience with this program will be studied carefully to determine whether the actuarial cost factors used are appropriate or if the financing basis needs to be modified. The use of slightly less conservative cost factors would result in cost estimates showing the disability insurance system in complete actuarial balance.

Summary and Conclusion

In the years since the adoption of the Social Security Act the American people have moved a long way toward attainment of the goal of freedom from want. Establishment of the old-age and survivors insurance program and improvements that have been made in it throughout the years have contributed in large measure to the progress that has been made. Because under this social insurance system the right to benefits is earned through work and paid for in part by contributions from the worker's earnings, the system goes hand-in-hand with our American traditions. The social insurance program that has proved so successful thus far can and should be improved so as to meet the challenge of changing conditions and applied to emerging problems, so that in the future it will continue to make a major contribution to the welfare of the American people.

Public Assistance

Public assistance, complementary to social insurance, attempts to meet minimum essential needs of individuals and families when, for various reasons, they are unable to do so themselves. It is the basic underpinning program in the social security system of the Nation, dealing with unmet individual needs that generally are not insurable because of their unpredictability, or are beyond the scope or level of benefits considered actuarially sound under social insurance.

This dual attack on unmet basic human needs—social insurance and public assistance—was born out of the stark realization that the process of industrialization and urbanization which, within less than a century, had transformed a major part of our farms and countryside into factories and cities, had also created social problems with which individuals could no longer deal within the family or local community.

Industrialization brought greater productivity, higher standards of living, better nutrition, improved medical care, and many other comforts and luxuries for those who had the money to buy them. But economic progress also brought social changes in addition to increases in population. There were disproportionate increases in the dependent age groups—the aged and children—and a shrinking proportion of wage earners to support them. Family responsibility, of necessity, also lessened as the large farm family was replaced by the smaller parent-children unit in the cities dependent largely on income from wages.

Mass unemployment in the early 1930's left millions without the means of buying the basic necessities of life. Federal governmental

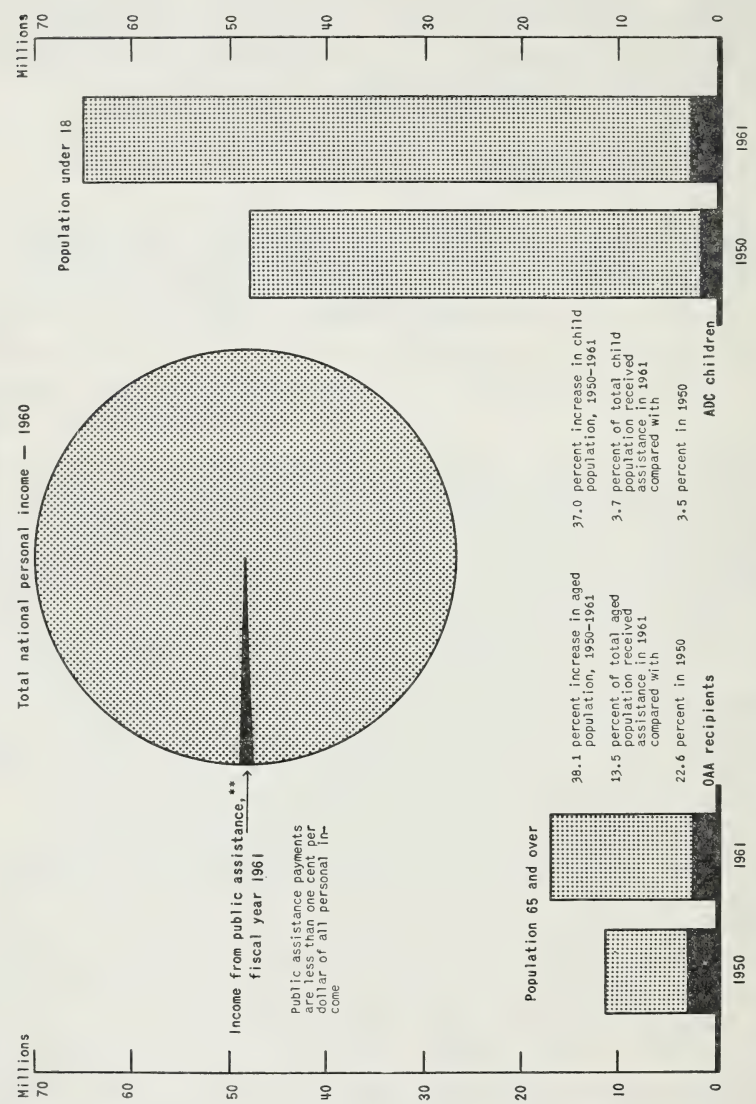
aid, first designed to meet immediate emergency financial need due to unemployment, was later channeled into long-range preventive measures—social insurance against the risks of unemployment, old age, dependency of children because of the death of the wage earner, and disability. Legislative changes in the Federal old-age, survivors, and disability insurance program have extended its coverage until today 9 out of 10 persons in the working population come within this broad umbrella of economic protection.

Role of PA Programs

It is with the needs of dependent persons *not* covered under social insurance or whose minimum needs exceed insurance benefits that public assistance programs are concerned. Less than 4 percent of the population received public assistance in June 1961, and despite the increased dollar cost of public assistance over the years, expenditures for this purpose in fiscal 1961 represented less than a cent per dollar of total personal income in the Nation during 1960. (See chart 2.)

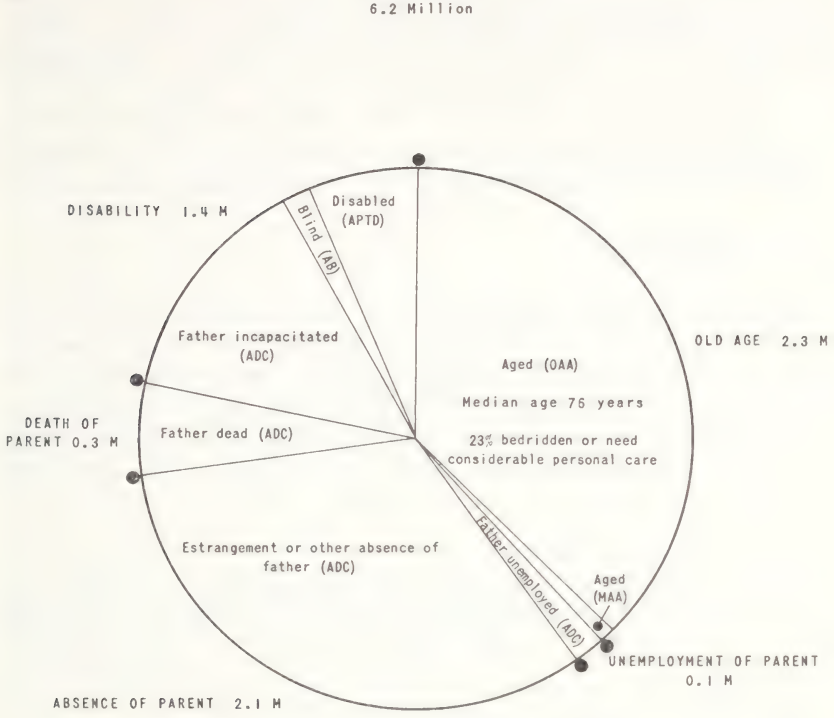
Assistance to sustain and strengthen individual and family life are vital to those who need it. The provision for financial assistance, medical care, and other social services under federally aided public assistance programs available in most of the local communities of the United States has assured the minimum essentials of living to the needy aged, blind, disabled, and children in families broken by death, incapacity, or absence of a parent, and more recently, in families hard-pressed because of unemployment. (See chart 3.) It has also contributed much to strengthening family ties that might otherwise have been irreparably scarred by anxiety and poverty or broken by separation of children from their home and parents.

The basis on which Federal-State public assistance programs are administered is also significant in sustaining principles fundamental to our democracy. Initial provisions of the public assistance titles of the Social Security Act reflect respect for the dignity of the individual and recognition of his rights as well as of his responsibilities. The definition of assistance as a money payment leaves with the needy person responsibility, like that of others in the community, for deciding how best to use his income. Provision for a hearing before the State agency protects individual rights when a needy person has been denied aid or is dissatisfied with the amount of his assistance payment, or when his application has not been acted upon with reasonable promptness. His privacy is safeguarded by preventing disclosure by the agency of personal information that would subject him to indignity or embarrassment.



* 51 jurisdictions with programs in both 1950 and 1961.
** Includes general assistance under State and local programs.

CHART 3.—MAJOR CAUSES OF DEPENDENCY OF PUBLIC ASSISTANCE RECIPIENTS,* JUNE 1961



* Excludes general assistance recipients under State and local programs.

The availability of Federal funds to the States and the placement of responsibility for the program with a single State agency has served as an impetus in establishing or strengthening State departments of public welfare throughout the country. The flexibility inherent in the public assistance program has also permitted its adaptation to meet some of the changing needs of the American people.

Through subsequent legislative changes, the scope and coverage of the public assistance programs were broadened to include the permanently and totally disabled; the aged, the blind or disabled recipients who are patients in public medical institutions; the costs of medical care or other remedial care paid directly to doctors, hospitals, and other suppliers of such services; needy adults responsible for the care of dependent children; children aged 16 and 17, without regard to school attendance; and children living with first cousins, nieces, and nephews (in addition to previously specified relatives).

The amount of Federal financial aid to States has been increased on several occasions through various devices to make it possible for assistance payments to keep pace with rising costs of living. Measures were added to improve medical care provisions for the needy. Clarification was also made of the availability of Federal financial participation in the costs of providing staff services to help needy persons find and use their own strengths and available resources to develop their potential for more satisfying and independent living.

New Legislation

Although the public assistance titles of the Social Security Act were amended by almost every Congress since 1935, an unprecedented amount of legislation was passed during the closing days of the 86th Congress and the first session of the 87th Congress. The legislation passed in fiscal 1961, outlined below, continued to strengthen existing provisions, but also charted paths new to the public assistance program.

Public Law 86–571, July 1960

The Department of Health, Education, and Welfare was authorized for the first time to provide reception service and hospitalization at Saint Elizabeths Hospital, or elsewhere, for certain repatriated mentally ill nationals of the United States.

Public Law 86–778, September 1960

A new program of medical assistance for the aged was established. Federal funds were made available to enable the States to help those older persons not receiving old-age assistance who are able to meet normal expenses but do not have sufficient income or resources to meet the costs of necessary medical services.

Increased Federal financial participation was made available to States that made payments to suppliers of medical care in behalf of recipients of old-age assistance. In addition to the usual share in assistance payments up to a monthly maximum of $65 per aged recipient, additional Federal sharing was provided based on expenditures for payments to suppliers of medical care up to a monthly maximum of $12 per recipient.

Federal financial participation was permitted for the first time in State vendor medical care payments (under both the new medical care program and the old-age assistance program) in behalf of patients in a medical institution as a result of a diagnosis of tuberculosis or psychosis for 42 days after such diagnosis.

Dollar limitations on the total annual amount of Federal funds for Puerto Rico, the Virgin Islands, and Guam were increased for medical care payments made in behalf of recipients of old-age assistance.

Effective July 1, 1962, a State agency, in determining need for blind assistance, must disregard the first $85 of earned income per month plus one-half of earned income in excess of $85. Until then, beginning October 1, 1960, a State is per-

mitted to disregard the first $85 per month and one-half of the excess or to continue to apply the $50 per month exemption as under the old law.

Special legislation providing for the approval of the Missouri and Pennsylvania blind assistance plans, due to expire June 30, 1961, was extended to June 30, 1964.

Public Law 87–31, May 1961

The aid to dependent children program was temporarily broadened to provide assistance to needy children in families where the breadwinning parent is unemployed. (From May 1, 1961, through June 30, 1962.)

Federal financial participation was permitted in the State's expenditures for foster care for a child receiving aid to dependent children who, as a result of a judicial determination is removed from his own home because he lacked proper care and protection, and placed in an approved family home; and for whose placement and care the agency administering the State plan for aid to dependent children is responsible. (From May 1, 1961, through June 30, 1962.)

September 1, 1962, was set as the date after which Federal funds will be withheld from a State whose plan, as required by State legislation, provides for denying assistance to a needy child living in a home considered by the State to be detrimental to his well-being. (Date postponed from June 30, 1961.)

Training grants for public welfare personnel authorized by amendments in 1956, effective July 1, 1957, for 5 years, were extended through June 30, 1963; and the Federal share of State expenditures for training purposes was raised from 80 percent, as authorized in 1956, to 100 percent, effective for allotments through June 30, 1963. (No appropriation was made for this purpose for fiscal 1962.)

The average amount of vendor medical payments in which there is additional Federal participation for old-age assistance was raised from an average monthly expenditure per recipient of $12, as provided under the 1960 amendments, to $15.

Public Law 87–64, June 1961

The Federal share of assistance payments under programs of old-age assistance, aid to the blind, and aid to the permanently and totally disabled was temporarily increased. The first $30 per recipient per month, in which Federal participation is 80 percent, was raised to $31, and the maximum average payment in which the Federal Government will participate (exclusive of the special provision for additional Federal participation in vendor medical payments in old-age assistance) was raised from $65 to $66. (From October 1, 1961, through June 30, 1962.)

Dollar limitations on the total annual amount of Federal funds for Puerto Rico, the Virgin Islands, and Guam were increased to facilitate their implementing liberalizations authorized by the new legislation.

Assistance was provided for United States citizens and their dependents repatriated from a foreign country because of personal misfortune or international crisis, who are in need of temporary assistance after reaching a port of entry in the United States.

Trends in Caseloads and Expenditures

In June 1961 assistance was available in all 54 jurisdictions of the country (including the District of Columbia, Guam, Puerto Rico, and

the Virgin Islands) under the federally aided programs of old-age assistance, aid to the blind, and aid to dependent children (6 jurisdictions administering aid to dependent children also made payments to unemployed-parent families, and 1 jurisdiction made payments for the foster care of children). Federally aided programs for the permanently and totally disabled were administered by 50 jurisdictions, and 9 States made payments under the new program of medical assistance for the aged. General assistance (wholly State and/or locally financed), in some form for some persons, was available in all 54 jurisdictions.

A total of 7.2 million persons received aid in June 1961 under the six public assistance programs (including general assistance). The increase of 442,000 persons over the number aided in June 1960 largely reflects the impact of the 1960–61 recession. The year's greatest changes in number of recipients were increases of 360,000 in the Federal-State aid to dependent children program and 80,000 in State-local general assistance—the two programs most sensitive to changes in economic conditions. The size of the aid to dependent children program is undoubtedly also affected by the continuing rise in child population; by July 1961, there were 67,063,000 children—more than a third of the total population in the 54 jurisdictions of the country—under 18 years of age.

In aid to dependent children, the 3,383,000 recipients, including 2,613,000 children in 878,000 families, assisted in June 1961 represented an increase from June 1960 of 11.9 percent. Part of this increase was due to the addition of 112,000 recipients in unemployed-parent families, the majority of whom had been transferred from general assistance programs.

The 1,049,000 persons, in 406,000 cases, receiving State and/or locally financed general assistance in June 1961 represented an 8.2-percent increase, over June 1960. Beginning in April, however, there was a sharp decline in the number receiving general assistance, which continued steadily through the end of the fiscal year (from 1,607,000 persons in 525,000 cases in March to 1,049,000 persons in 406,000 cases in June). The number in unemployed-parent families transferred from general assistance to the extended aid to dependent children program accounted for less than a fifth of this decline.

The number of recipients of aid to the permanently and totally disabled also rose, from 363,000 in June 1960 to 384,000 in June 1961, an increase of 5.8 percent. By June the new program of medical assistance for the aged was aiding 46,000 persons, most of whom had formerly received care in medical institutions or nursing homes under old-age assistance programs. The other federally aided programs showed decreases; old-age assistance, from 2,359,000 to 2,296,000 per-

sons—a drop of 2.6 percent; and aid to the blind, from 108,000 to 106,000 persons—a drop of 2.2 percent.

Total assistance expenditures, including vendor payments for medical care, for all six programs for the fiscal year 1961 were $3,944 million—a 5.7-percent increase over expenditures in 1960. Total payments rose $97 million or 9.5 percent in aid to dependent children; $29 million or 10.7 percent in aid to the permanently and totally disabled; $12 million or 0.6 percent in old-age assistance; and $2 million or 1.7 percent in aid to the blind. In the State and/or locally financed programs of general assistance, total payments (excluding vendor payments for medical care) increased $28 million or 8.3 percent. Payments under the new program of medical assistance for the aged totaled $40 million in fiscal 1961.

Although the national average assistance payment did not increase in all programs, higher total expenditures reflect in part other efforts to offset the continuing rise in living costs, with the medical care component showing the greatest relative increase. For example, cost standards were raised in one or more programs in about a third of the States; in old-age assistance, 7 States raised their maximum on individual monthly payments, and a smaller number liberalized maximums in each of the other programs; several States broadened the scope of medical care provided through vendor payments; and a few States made their first medical care vendor payments in behalf of old-age assistance recipients.

In aid to dependent children, the national average payment was $30.30 per recipient in June 1961, compared with $29.11 a year earlier. Average payments ranged from $9.32 in Alabama (except for $3.82 in Puerto Rico) to $51.61 in Connecticut.

In old-age assistance, the average payment was $67.85 per recipient in June 1961, compared with $68.01 in June 1960. Average payments ranged from $35.40 in Mississippi (except for $8.30 in Puerto Rico) to $96.51 in Colorado. In medical assistance for the aged, the average medical cost paid per recipient in the 9 States making payments in June 1961 was $200.59. For all States, the median medical care vendor payment under old-age assistance increased from $7.54 per recipient in June 1960 to $11.32 in June 1961.

In aid to the permanently and totally disabled, the average payment per recipient was $68.19 in June 1961, compared with $65.96 a year earlier. Average payments ranged from $34.85 in Mississippi (except for $8.70 in Puerto Rico) to $132.90 in Massachusetts.

In aid to the blind, the average payment per recipient was $73.36 in June 1961, compared with $72.85 a year earlier. Average payments ranged from $38.43 in Mississippi (except for $8.27 in Puerto Rico) to $126.45 in Massachusetts.

For the 53 jurisdictions reporting on State and/or locally financed general assistance programs, excluding medical care vendor payments, the average payment per case was $65.13 in June 1961, compared with $67.44 in June 1960 (46 percent of all cases were family cases, including an average of 4.4 persons per family). Average payments ranged from $12.89 per case in Alabama (except for $7.27 in Puerto Rico) to $110.76 per case in New Jersey.

The number of persons receiving both old-age, survivors, and disability insurance benefits and old-age assistance payments continued to increase. In February 1961, about 715,400 old-age assistance recipients, or 31 percent (compared with 28.5 percent in 1960 and 19.2 percent in 1955) were receiving assistance because their insurance benefits and other resources were insufficient to meet their basic and/or special needs, such as medical care. The percentage of recipients of other types of public assistance who also received old-age, survivors, and disability insurance benefits was considerably smaller—18.1 percent of those receiving aid to the blind, 8.6 percent of those receiving aid to the permanently and totally disabled, and 5.4 percent of the families receiving aid to dependent children.

SOURCE OF FUNDS FOR PUBLIC ASSISTANCE PAYMENTS

Of $3,939 million expended for the six public assistance programs in fiscal 1961, about 52 percent, or a little over $2,049 million, came from Federal funds; 35.9 percent, or $1,413 million, from the States; and 12.1 percent, or $477 million, from the localities (of which $209 million was spent for general assistance).

For the five special types of public assistance, the Federal share of total costs was 59 percent; the State share, 33.3 percent; and the local share, 7.7 percent. Assistance payments during 1961 represented about 0.9 of a cent per dollar of total personal income in the Nation during 1960.

Program Developments

Major program changes resulted from legislation passed during fiscal 1961. Significant developments also occurred in other areas.

INCREASED PROVISIONS FOR MEDICAL CARE

Federal funds were made available for the first time to help States meet the cost of medical care needs unrelated to the need for maintenance through the establishment of a new program of medical assistance for the aged. Additional Federal funds (beyond the usual share in assistance payments) were also made available to States that make vendor medical payments in behalf of old-age assistance recipients.

PROVISIONS OF THE NEW MAA PROGRAM

The new program of medical assistance for the aged authorized by legislation passed in September 1960 provided Federal funds to enable the States to help pay for medical care for the older persons not receiving old-age assistance who are able to meet regular living expenses but cannot meet the costs of unusual medical services. Federal participation under the new program, limited to expenditures paid in behalf of eligible recipients to suppliers of medical or remedial care, ranges from 50 to 80 percent, depending upon the relationship between the per capita income in the State and the national per capita income.

No maximum is set on the amount of the payment made by a State with Federal participation. The States are given considerable latitude in determining the scope of the program, including both the conditions of eligibility and the kinds and extent of services for which costs will be assumed. However, among conditions imposed by the Federal act were the *inclusion* of both institutional and noninstitutional care and services; and several *prohibitions* including: a durational residence requirement; the placing of a lien against the property of any individual prior to his death on account of medical assistance properly paid in his behalf or recovery of such assistance from his estate until after the death of the surviving spouse, if any; and any charge, such as an enrollment fee or premium, as a condition of eligibility.

Congress also directed the Department of Health, Education, and Welfare to develop guides and standards on the level, content, and quality of medical care and services for States to use in evaluating and improving their medical care programs; and to evaluate the effectiveness of the new legislation and make recommendations for improving State medical care programs.

ADDITIONAL PROVISION FOR OAA RECIPIENTS

In September 1960 increased Federal funds also were made available to States that make vendor medical payments in behalf of old-age assistance recipients to provide an additional amount (beyond the usual share in assistance payments) based on expenditures for these payments up to a monthly maximum of $12 per recipient. In May 1961 this maximum was increased to $15.

The establishment of a medical care program for the aged not receiving assistance, plus the provision of additional money specifically for medical care for old-age assistance recipients, greatly augmented the amount of medical care available previously under federally aided public assistance programs. Although most of the Nation's jurisdictions (44 out of 54 in June 1960) had some provision in their

public assistance programs for costs of medical care through the vendor payment, and some of the jurisdictions provided for some items of medical care in the money payment to the recipient (including 6 of the 10 that did not use the vendor payment), the majority of the States provided for only limited medical care, financing one or more services, but not the broad scope of services needed by most sick people.

IMPLEMENTING THE MEDICAL CARE LEGISLATION

The early effective date of the medical care legislation (passed in September 1960 and effective October 1, 1960) spurred action by Federal and State agencies.

The day the President signed the 1960 amendments, a group of State representatives met with Bureau staff to advise on the medical care provisions. Representatives of the American Medical Association, the American Hospital Association, and the Bureau also held special meetings in Washington on the new program. The American Medical Association, which gave full support to the 1960 legislation, encouraged their State organizations to urge action in their respective States, and the American Hospital Association appointed a committee to work with the Bureau in relation to the new program. Many inquiries came from State welfare agencies and medical societies asking for consultation on various aspects of medical care under consideration in State planning, and for interpretation of the clause in the amendment requiring "reasonable standards" of financial need.

A new Division of Medical Care Standards was established in the Bureau, and a group of 16 physicians and specialists in paramedical areas was appointed to advise on medical matters. Consideration of major policy issues, development of instructional material for State use, and issuance of interpretive materials on the new provisions were given high priority. Policy and administrative questions were discussed with departmental, regional, and State agency staff and with other interested agencies and groups. Broad national policies were developed against which States could prepare their plans, and procedures were shortcut wherever feasible.

Consultation was provided to State agencies on the development of necessary State legislation and plans to put the new medical care provisions into effect. State officials met with Bureau staff in Washington to consider specific State situations, and special legislative sessions were held in several States to obtain a legal base and appropriations for initiating new, or modifying existing, programs.

Within a month after the effective date of the legislation, 12 States started action to put the new program into effect. In March 1961, when close to 50 State legislatures were in session, some 20 States

considered measures to establish programs of medical assistance for the aged. By the end of August 1961 legislation establishing such programs had been passed or was in process in 33 States—14 States had new programs in operation, 4 States had completed plans for new programs, 8 States had enacted legislation but had not yet completed their plans, 4 States were still working on legislation to provide a legal base or appropriation for the program, and 3 States had obtained legal authority but no appropriation.

Data obtained by the Bureau from the 14 States with programs of medical assistance for the aged on August 31, 1961, revealed that all but 4 began on a conservative basis; 10 set a maximum on the amount of income recipients may receive, ranging from a low of $1,140 for a single recipient with no dependents, to a high of $3,000, with varying allowances for dependents; and 11 States placed major limitations on the care for which they would pay. All 14 States exempt real property used as a home but take into account the resource value of other real estate in determining the value of assets, although most do not require its liquidation. Most exempt a life insurance policy with a small cash surrender value, but consider as assets medical insurance policies and similar resources designed to meet medical costs. A reserve of cash or "resources convertible to cash," ranging from $300 to $5,000, is permitted in 9 States. The hospital stay to be paid for ranges from 10 days per year in 1 State to as many as are necessary in others. Hospital care is limited by 7 States to acute, life-endangering, or traumatic conditions requiring hospital care; and 7 others provide hospital care as recommended by the physician. The cost of nursing home care is included by 8 States, but 4 of these restrict it to post-hospital or convalescent care.

In 11 States, the noninstitutional-care provisions include physicians' services in the home and office; some of these States limit the services to acute conditions or to treatment necessary to prevent hospitalization. The most frequently covered services, in addition to those of the physician, are dental services to relieve pain or treat acute infections, and prescribed drugs, which in some States are limited to drugs needed for acute or life-endangering conditions. In five States costs are assumed for the four basic medical care needs (hospital care, nursing home care, physicians' services, and prescribed drugs); in nine States, one or more of these services is not included.

The additional Federal funds made available for medical care costs of old-age assistance recipients was used by 23 States to improve the content or coverage of medical care provisions in their old-age assistance programs, and 1 planned to do so by January 1962. Of the 11 States with no previous provision for medical care vendor payments, 8 either added such provision, or planned to do so by January 1962.

In some of the 18 States that did not add or improve vendor medical care provisions in their old-age assistance programs, the additional Federal funds made it possible to avoid cuts in provision for medical services by preventing or eliminating deficits in State funds, or enabled an increase in grants to recipients of other public assistance by the release of State funds.

The content of medical care service for which costs are assumed for recipients of old-age assistance is considered comprehensive or relatively so in 26 States. These States provide for hospitalization, nursing home care, and physicians' services without significant limitations as to the nature of the patient's illness, unit cost of care, number of days of care, or number of visits to or from a doctor. While several of these States have some limitations, most of them meet the cost of practically any needed and available care. The 21 States with more limited provisions most frequently pay only for hospitalization and nursing home care. In some of these States, responsibility for the cost of hospitalization is further restricted to cases of acute illness and emergencies.

PROVISIONS FOR NEEDY CHILDREN EXTENDED

The number of children dependent on public aid is at an all-time high. However, even with a 37-percent increase in total child population, and with extensions in the aid to dependent children program that include additional needy children, there was only a slight increase—from 3.5 to 3.7 percent—in the proportion of children receiving aid in June 1961 compared with a decade ago.[1] In the 50th anniversary year of the initiation of the first State mother's aid program, legislation passed in 1961 contributed several major, although limited, extensions in the Nation's provisions for these needy children.

Extension of ADC to Unemployed-Parent Families

As part of national planning to stimulate recovery from recession, the aid to dependent children program was temporarily extended to children in families where the breadwinning parent was unemployed. This was the first time since 1935 that Federal funds were made available through public assistance to help children in families hard-pressed because of unemployment. Provision was also made for cooperative arrangements with State employment and vocational education agencies to help the unemployed parent secure employment and to have more training if he needs it, as well as for denial of aid when a bona fide job offer is declined without good cause.

The ADC legislation enacted in May and effective May 1, 1961, (through June 30, 1962) required early administrative action to help

[1] Percentages are related to the 51 jurisdictions for which comparable data are available for 1961 and 1950.

States implement its provisions, as well as development of national policy and establishment of new program relationships. Bills had been prepared by some States to permit temporary extension of ADC to needy children of unemployed parents in anticipation of passage of this proposal while it was still before Congress, and a few States passed such extension bills contingent upon Federal action. By the end of August 1961, 12 States had made provision for aid to children of unemployed parents in their ADC programs, 3 States planned to do so in the near future, and legislation was still in process in 1 State.

The implementation of this provision in several States raised questions about the use of Federal funds for work relief projects. In response to expressions of public concern about providing assistance to employable persons, a departmental policy was publicized in June 1961 stating that, if a local community wants to require the unemployed parent to work on a public project for assistance given him, it may do so. However, Federal funds *may not* be used to pay any part of the individual's wages, since the Social Security Act does not authorize the use of Federal funds to match amounts paid by States as work relief; but Federal funds *may* be used to pay a share of the payment that covers the difference between the parent's earnings on the project and the family's need as determined under the State's assistance standard. (This is similar to the provision for Federal participation in assistance payments which supplements wages from private employment insufficient to meet a family's need.)

Provision for Foster-Family Care

The ADC program was also extended in May 1961 to provide foster-family care for a child receiving aid to dependent children who, as a result of a judicial determination, is removed from his own home because he lacks proper care and protection and is placed in a State-approved or licensed family home, and for whose placement and care the agency administering the State plan for aid to dependent children is responsible.

Under the new foster-family care legislation, the State must provide for developing a plan for each child to assure proper care while he remains with a foster family (including periodic review of the necessity for continuing in foster care); the provision of services to improve the conditions in the home from which he has been removed, or to arrange for his placement in the home of another close relative; and the use of public child welfare services staff to the maximum extent practicable in the placement of the child.

To help States implement this temporary extension of ADC (from May 1, 1961, through June 30, 1962) a joint Bureau of Public Assistance and Children's Bureau committee immediately began work on

developing national policies and procedures, and exploring ways in which the two Bureaus could work cooperatively with the States.

Draft materials were reviewed in joint meetings of regional and central office staff. By the end of August 1961, the foster-family care provision was incorporated by 10 States in their aid to dependent children programs, 7 States planned to do so in the next few months, 12 States that did not expect to need legislation to implement the provision were still considering it, and in 6 States, legislatures considered but did not adopt the provision.

Relation of foster-family care legislation to State action around "unsuitable homes."—The foster-family care legislation was precipitated by the denial of aid by several States to needy children living in so-called "unsuitable homes." Although 24 State ADC plans carry some reference to "suitable homes," most of them include provisions to enable public welfare agencies to help make plans for the child's best interests, and continue assistance until the plan has been carried out. Eight State plans, however, denied assistance without assurance that an arrangement suitable for the child's upbringing is worked out. In these States, if the child's home was found to be "unsuitable" the child could be left in the home, deprived of needed support. The plan provisions in these States raised grave question as to whether they were consistent with the intent of the aid to dependent children and child welfare provisions of the Social Security Act.

The issue was brought to a head in July 1960 when one State (Louisiana) enacted legislation under which the State terminated aid to about 23,000 needy children—ostensibly because they lived in "unsuitable homes." In this instance, State legislation denied assistance to children if the adult caretaker was living with, but not legally married to, a mate; or if the mother had had an illegitimate child at any time since first receiving assistance, unless she could prove to a parish welfare board that she had ceased illicit relationships and was maintaining a suitable home for her children.

Public reaction to the withdrawal of assistance from such a large group of needy children resulted in widespread public protest. A large number of national welfare agencies and citizens' groups urged the Department to take appropriate action to protect needy children against such hardships. Many individuals and agencies expressed indignation over the injustice of denying children aid because of the conduct of their parents, and concern about the effect of deprivation on the children as well as its long-run harmful effect on the Nation.

The Commissioner of Social Security held a hearing on the State's action in the fall of 1960 in order to determine whether the State's ADC plan was being administered substantially in accordance with the requirements of the Social Security Act. A large number of na-

tional welfare and church organizations united in expressing their concern; many adopted resolutions or prepared statements expressing their opinions and philosophy in relation to the issue; and several presented briefs as "amicus curiae" in connection with the hearing. Some also expressed concern about other needy children in the State in the event of withdrawal of Federal funds.

Following the hearing, the State revised its plan, eliminating its more serious program defects and providing for skilled protective services to be available to the children affected by the suitability provision. In the absence of any Federal requirement prohibiting States' use of "suitable home" as an eligibility factor, and with acceptable revisions in the State plan, the Commissioner in January 1961 ruled that the State plan for aid to dependent children provided a basis for continued receipt of Federal payments.

Subsequently, the Secretary of the Department concluded that ". . . when a needy child who otherwise fits within the ADC program of the State is denied the funds that are admittedly needed to provide the basic essentials of life itself because of the behavior of his parent or other relative, the State plan imposes a condition of eligibility that bears no just relationship to the ADC program . . . [and] that eligibility conditions with the effect described above are not compatible with entitlement for continued Federal grants." The Commissioner of Social Security subsequently approved the following requirement issued by the Bureau effective July 1, 1961:

> A State plan for aid to dependent children may not impose an eligibility condition that would deny assistance with respect to a needy child on the basis that the home conditions in which the child lives are unsuitable, while the child continues to reside in the home. Assistance will therefore be continued during the time efforts are being made either to improve the home conditions or to make arrangements for the child elsewhere.

The foster-family care legislation passed in May 1961 confirmed and supported this departmental policy, but postponed its effective date from July 1, 1961, to September 1, 1962, to allow additional time for any State that required legislative action to make necessary plan changes. Five of the 8 States were able to amend their plans to continue assistance until children in homes found "unsuitable" were removed from their homes. Three States (Louisiana, Michigan, and Mississippi) were unable to meet the requirement under their existing legislation, and qualified for the extension of time.

Other Developments in ADC

During the year, the school attendance requirement for children 16 and 17 years old was eliminated in Illinois and South Dakota; and Nevada raised the eligibility age limit from 16 to 18, with the provi-

sion that the child between 16 and 18 be regularly attending school and receiving passing grades. There are now only 2 States in which assistance is not continued to age 18, at least for children attending school—Georgia has an age limit of 16 years, regardless of school attendance, and Texas limits assistance to children under 14. However, all but 10 States still have a durational residence requirement; 11 States still do not include children living with first cousins, nephews, or nieces; and 1 State (Texas) excludes a child who is not a United States citizen.

WELFARE SERVICES STRENGTHENED

Consultation to States and preparation of informational, interpretive, and in-service training materials continued on various ways of providing services to persons dependent on public assistance. Cooperative relationships were maintained with various national public and voluntary agencies concerned with families and children, the aging, homemaker services, or community planning, with participation on various committees of these organizations in joint effort to develop new methods of providing help to those in need. Primary emphasis was given to strengthening welfare services appropriate to social and economic problems of families and older persons.

In relation to families, activities centered around services to strengthen family life, and to deal with special problems such as illegitimacy, neglect of children, inadequate home management, and care of children. A pamphlet, *Unmarried Parents—A Guide for the Development of Services in Public Welfare*, was prepared jointly by the Children's Bureau and the Bureau of Public Assistance to provide guidelines for public welfare agencies in developing or improving services to unmarried parents. Similarly, an addendum to the 1958 Directory of Homemakers published in the Homemaker Service *Newsletter* was prepared jointly with the Children's Bureau and the Public Health Service. Work also was initiated on a project to teach ADC mothers housekeeping skills.

States generally are concerned about the need for earlier recognition of conditions detrimental to children or disruptive of family life. Some States are instituting experimental or demonstration projects to help families improve their situation and increase their capacity for self-care, more independent living, or self-support. To assist States in these developments, consultation was provided on family-centered services, with emphasis on preventive measures such as adequate care and guidance of children, and planning with parents to assure the health and education of their children. Materials were also developed illustrative of the role of the public welfare worker in providing specific, concrete services to improve the home and strengthen family life. States were also given help in evaluating their efforts.

Attention to the problems and needs of the aging was accentuated by the White House Conference on Aging. Bureau staff participated in the Conference held in January 1961 by serving as technical directors for the sections on Social Services, and Family Life, and in taking active roles in sections on Medical Care, Income Maintenance, Community Planning, and the Role and Training of Personnel. They also assisted in the preparation and distribution of *Background Papers on Family Life and Social Services;* in providing statistical and other background material used by the delegates; and in drafting some of the Conference reports. Pertinent Conference recommendations were summarized and made available to the States; their implications were also considered in Bureau work planning.

Technical assistance was provided to the American Public Welfare Association's Project on Aging, including the planning and conducting of institutes on public welfare program planning and staff development in behalf of older persons. The Bureau joined with the APWA, National Committee on Aging, and Family Service Association of America in sponsoring a Seminar on Casework Services for Older People at Arden House in the fall of 1960 for selected staff from public and voluntary agencies. The summary of the Conference has had wide distribution. Bureau staff also continued to serve on committees of the APWA's Committee on Aging, and the National Council on Aging (formerly the National Committee on Aging).

Other efforts in strengthening welfare services included participation in planning for a national structure to promote homemaker services, working with a State in preparing a publication on its homemaker services in small or rural areas; drafting a document on the public assistance caseworker's role in services to the ill and disabled; and developing guides for use in the administrative review of State welfare services. Also a listing was made of the location of special studies and numerous experimentations on improving case services and their results, and assistance was provided to several States on administrative considerations in establishing specialized casework units and other organizational arrangements for staff providing direct services to individuals.

EFFORTS TO IMPROVE STANDARDS OF ASSISTANCE

Pamphlets were issued on *Establishing Money Amounts for Fuel for Heating*, discussing factors to be considered in applying the fuel formula developed by the U.S. Weather Bureau; and *State Methods for Determining Need in the Aid to Dependent Children Program*, describing how States' standards and income policies govern need determination in the eligibility process. Both reports were prepared as part of Bureau follow-up on recommendations made in 1960 by

the Advisory Council on Public Assistance. Technical assistance was also provided on request to the Department of Agriculture in their planning for the food stamp plan.

Administrative Developments

Legislation passed in fiscal 1961 added broad responsibilities to Bureau activities and substantially increased its workload. In addition to providing assistance to States in administrative and fiscal changes involved in implementing the new legislation, statistical, financial, and other reporting systems were initiated for operational purposes and for keeping the Secretary, the Commissioner, Congress, and the public informed as to program developments. Federal review of State practice under the new provisions was undertaken to assure that it was in keeping with congressional intent and used methods required for proper and efficient administration.

The Bureau's limited resources were stretched to prepare interpretive materials and correspondence in response to public interest heightened by the controversial nature of some of the social issues emerging in the implementation of the new legislation, and to cooperate with other groups, as requested, on special projects. For example, the Department was asked by the Senate Special Committee on Aging to cooperate in a special inquiry addressed to all State agencies on plans and accomplishments to date in their programs of medical care for the aged and provisions for medical care under old-age assistance.[2]

Effort was also made to obtain data about the effectiveness of the new legislation. For example, *Selected Characteristics*, covering financial eligibility and the scope of medical services provided, initially developed for the States with such plans in operation, was kept current as additional States revised or added new programs; and information is being obtained for a more comprehensive publication on the characteristics of medical and remedial care provisions of State public assistance plans. Planning was also initiated for evaluating the experience gained in administering the new provisions as a basis for recommending future improvements.

Other assistance was provided to the States on methods of issuing and accounting for payments to suppliers of medical care in behalf of assistance recipients, administration of urban agencies, manual and records management systems, field services, and methods of supervision. To meet increasing interest of States, efforts were intensified in developing caseload standards, including evaluation of work done

[2] The Staff Report to the Senate Committee on Aging, *State Action To Implement Medical Programs for the Aged,* based on their inquiry in March, was issued in June 1961.

in other fields and its applicability to public assistance operations, and preparation of guides for use of States. A management conference was held in San Francisco in November 1960 focused both on improving services to urban agencies and on methods of organization and administration.

PUBLIC ASSISTANCE STAFF TRAINING

The preliminary report, *1960 Survey of Salaries and Working Conditions of Social Welfare Manpower*, based on a study made by the Bureau of Labor Statistics, in cooperation with the National Social Welfare Assembly and the Department of Health, Education, and Welfare, reveals the following pertinent data about State and local public assistance personnel:

34,500 persons in executive and social work positions in State and local public welfare agencies primarily on public assistance (a 15-percent increase from 1950 to 1960);

13 percent of the supervisory group (an increase from 10 percent in 1950), and slightly more than 1 percent of the casework group (a decrease from 2 percent in 1950), had *full professional social work training*;

nearly two-fifths of the supervisory group had *some graduate social work training*, as did 10 percent of the casework group (a decrease from 17 percent in 1950);

65 percent of the casework group had an *undergraduate degree* (an increase from 60 percent in 1950); and

the 1960 median supervisor's salary was $5,797 a year, and the median caseworkers' salary was $4,338. Salary increases ranged from 60 to 75 percent over the 10-year period with 23 percent reflecting rising living costs.

The situation in 1960 represents a slight gain since the first welfare manpower survey was made in 1950, but it also reveals the inadequate preparation of the majority working in social work positions in the public assistance programs:

Slightly more than a third have not completed college;

89 percent of the caseworkers have had no study in any graduate school of social work;

19 out of 20 have not completed graduate professional training (99 percent of the caseworkers and 87 percent of the supervisory staff); and

there is only 1 caseworker with full professional training for every 23,000 assistance recipients.

The limited number of professionally qualified staff administering the public assistance programs is considered by many groups a major obstacle in the provision of more effective services that could help lessen dependency, prevent further deterioration, and mitigate the effect of need on individuals, families, and communities.

With Federal funds paying half the cost, some in-service training is provided by most State agencies, and during the past year about 550 public assistance workers in 39 jurisdictions were on educational leave (4 out of 5 were receiving some Federal or State money to help pay for their training).

An Educational Standards Project was established by the Bureau to determine more clearly the scope and level of performance which can reasonably be expected of the worker with a bachelor's degree. Work undertaken toward this objective has included (1) identifying specifically the variety of functions which make up the public assistance caseworker's job, and (2) determining which of these functions a worker with a bachelor's degree can perform acceptably. Professional judgment is being utilized in making tentative decisions, and research designs are being developed to test these judgments. While concentrating first on the job of the caseworker, such determinations will be made subsequently for other jobs.

The preparation of a textbook to serve as a guide for in-service training of new public assistance workers was initiated, and plans made for developing appropriate teaching materials on casework concepts for staff without professional education. Work continued on developing and testing of in-service training materials to help staff improve services provided to the aging.

As part of its plan initiated in 1960 to provide short-term training seminars for State agency staff, the second session for State welfare field representatives was held in October and November 1960. In collaboration with the Children's Bureau, a *Handbook of Staff Development* is being prepared containing suggested standards and guides for State welfare agencies. Wyoming's training plan for potential county directors was published in the Bureau's "How They Do It" series and distributed to State agencies.

States were encouraged to extend opportunities for academic training under the 50–50 Federal matching provisions for the costs of administration, to develop other methods of improving staff competence, and to make more effective utilization of professionally trained staff. Consultation and other resources were also provided to schools of social work and others, as requested, including participation on various committees of the Council on Social Work Education, and on the American Public Welfare Association's Committee on Social Work Education and Personnel. Cooperative activity was also undertaken with other units within the Department on training aspects of areas of mutual concern.

The Bureau's training plans for its Federal employees were both long-range, in relation to program needs; and short-term, in relation to training opportunities appropriate to job duties provided under the Government Employees Training Act. Long-range planning in-

volved full-time outside training of selected staff members to achieve objectives in knowledge essential to program development; short-term planning brought special seminars to Bureau staff, and provided training opportunities for 8 employees in government-sponsored training activities, and for 34 employees in non-government facilities.

Related Program Activities

INCREASED RESPONSIBILITY FOR CIVIL DEFENSE EMERGENCY WELFARE SERVICE PROGRAMS

The Emergency Preparedness Order No. 5 signed by the Director of the Office of Civil and Defense Mobilization on January 10, 1961, assigned certain civil defense mobilization functions concerning education and welfare to the Secretary of Health, Education, and Welfare.[3] These functions were delegated by the Secretary to the Commissioner of Social Security, and are carried out by the Bureau of Public Assistance, working with the Children's Bureau.

Emphasis during the past year was focused on organization, recruitment, orientation to emergency welfare services responsibilities, and preparation of national guidance materials to help State welfare departments in developing State-local emergency welfare service programs, including training activities. Progress was made in establishing working relationships with constitutent units in the Department of Health, Education, and Welfare, the Office of Civil and Defense Mobilization, and other Federal departments and agencies having competencies related to emergency welfare services.

Arrangements were made for participation of national voluntary welfare and related agencies to facilitate participation by local voluntary agencies in Emergency Welfare Service activities. "Memoranda of Understanding" were completed with 12 national voluntary and related agencies[4] incorporating their role in support of the Government in pre-attack planning and post-attack operations. Negotiations continue with other such agencies. Copies of the completed "Memoranda of Understanding" have been distributed through voluntary and public channels.

Work was also initiated on a nationwide inventory of welfare manpower and other basic welfare resources. Information about these resources will be stored on punchcards or magnetic tape for use by

[3] The Order was not rescinded by Executive Order 10952 (dated July 20, 1961) assigning certain civil defense responsibility to the Secretary of the Department of Defense.

[4] American National Red Cross, Child Welfare League of America, Council of Jewish Federations and Welfare Funds, Council on Social Work Education, Family Service Association of America, National Association of Social Workers, National Catholic Welfare Conference, National Conference of Catholic Charities, National Council of the Churches of Christ in the United States of America, National Travelers Aid Association, The Salvation Army, and United Community Funds and Councils of America.

the Office of Emergency Planning's National Resource Evaluation Center in identifying and locating resources still existing after an attack, and in developing estimates of casualties. Identification of the location and number of State and local public assistance offices and personnel has already been completed. The Bureau was also assigned responsibility for developing information about requirements for items relating to body protection and household operations needed for survival. This information also will be used to determine where shortages or surpluses now exist.

Progress was made on the development of guidance materials. A document, *Emergency Welfare Service—Guidelines and Structure*, was released in draft form in March for review and preliminary testing to State and local public welfare agencies, national voluntary agencies, and to State civil defense directors. *Fiscal Policies and Federal-State Agreements*, which was issued in April, includes model forms by which States could amend or supersede their 1956 agreements to accept responsibilities under the expanded emergency welfare service program assigned to D/HEW. (Several States have signed these new agreements to strengthen and support the Emergency Welfare Service programs.)

States were encouraged to undertake Emergency Welfare Service training of State and local welfare staff as part of their regular staff development activities. *Outline Plan for Development of Emergency Welfare Service Training Materials*, a syllabus of source material for training persons who will carry emergency social service responsibility in local welfare centers, was drafted to facilitate such training. Federal civil defense informational materials also were made available to States, and a bibliography of materials pertinent to training in emergency welfare services was initiated.

Plans were developed with OCDM [5] for a coordinated and comprehensive training plan with their Office of Training and Education under which EWS was given responsibility for providing the emergency welfare services content for courses given at OCD–DOD college and instructor training centers. An orientation document for key individuals in civil defense was developed for use in conjunction with regular and specialized courses.

Work is underway on "how-to-do-it" materials on emergency lodging, emergency feeding, emergency clothing, emergency social services, and emergency welfare registration and inquiry. A handbook, *Civil Defense Emergency Planning in Welfare Institutions*, is being prepared for the guidance of superintendents of welfare institutions. Those aspects of emergency social services which deal with the

[5] On August 1, 1961, the training and education function was transferred to the new Office of Civil Defense, Department of Defense (OCD–DOD).

care of children, especially those separated from their parents, are being prepared by the Children's Bureau representative and the emergency welfare services staff.

Staff was assigned to five D/HEW regional offices to facilitate communication between the central office and the States, with plans to staff the remaining regions in 1962. Two regional and three bi-regional meetings were held during the year with representatives of State public welfare agencies; highlights of the guidance materials were presented and discussion was held on the responsibility of public welfare in providing technical leadership in developing and carrying out essential welfare service functions in time of emergency.

Policy material was prepared on the use of Federal matching funds by State and local welfare departments for civil defense purposes, and merit system examinations were prepared for State emergency welfare services personnel. An exhibit on emergency welfare services was prepared for use at the National Conference on Social Welfare held in Minneapolis in May. A pilot project on natural disaster training was conducted by the American National Red Cross Disaster Services for emergency welfare services staff to assist in evaluating the adaptability of the course content and its method for training purposes for a war emergency. EWS staff also participated in the first phase of the 1961 "Operations Alert" exercise.

ASSISTANCE PROVIDED TO CUBAN REFUGEES

The break in diplomatic relations between Cuba and the United States led to a heavy influx of Cuban refugees in the United States. Although many of the refugees were professionally or technically trained, a large proportion needed assistance of one kind or another—financial aid, employment counseling, retraining, or help in resettlement and adjustment to American customs.

Until February, a large part of the burden of providing care, maintenance, and shelter in the greater Miami area was borne by voluntary agencies and individuals. Recognizing that the problem was one affecting not only Florida but the entire Nation, President Kennedy, in January 1961, assigned responsibility to the Department of Health, Education, and Welfare for coordinating, intensifying, and expediting governmental and private aid to Cuban refugees. Federal funds from the Mutual Security Program were authorized for this activity.

With responsibility for developing and administering the program assigned to the Secretary, a 9-point program of assistance was formulated within 3 weeks, setting a precedent in speed. Working closely with the office of the Commissioner of Social Security, Bureau staff served on the survey team which made the initial reconnaissance visit

to Miami in late January. They also were members of the Department's task force which developed the basic data for a comprehensive Federal program of health, education, employment, welfare, and resettlement services for needy Cuban refugees. Assistance standards similar to those established for local residents by the Florida State Department of Public Welfare were used in the provision of the basic necessities of life, hospital care, and child welfare services. Surplus food commodities also were made available. To help relieve the Miami area of the impact of its refugee concentration, contracts were made with voluntary agencies for resettlement of refugees in other parts of the country, including help in obtaining jobs and in adjusting to new locations.

In February, the Bureau was assigned operating responsibility for temporary financial assistance, hospital care, and related social and welfare services to Cuban refugees. Policies and procedures were developed for use of State welfare agencies in administering this phase of the program as representatives of the Federal Government. Regional and central office staff worked closely in its implementation, and in making plans for the distribution of surplus commodities. Agreements were initiated with the Florida State Department of Public Welfare. In less than a week of intensive planning and recruiting of a bilingual staff, the State agency was prepared to accept immediate transfer of cases of needy refugees from voluntary agencies in Miami and from the long list of applicants registered at the Cuban Refugee Emergency Center.

First payments were made on February 27. A week later some 2,800 adults and 840 children were receiving financial aid. By the end of March, about 3,800 cases in the Miami area had received financial aid; about 42 percent of them were single-person cases. The average family payment was around $85 a month.

Resettlement of refugees through voluntary agencies under contract with the Federal Government averaged about 250 families a month; from November through June, 4,672 refugees were resettled. The cooperation of other States was enlisted to provide help for relocated families who, for various reasons, were unable to maintain themselves. By the end of June approximately 8,700 cases had received assistance under the program in the Miami area. Of the $2,275,000 allotted the Bureau between February 27 and June 30 for assisting Cuban refugees, all but $5,000 was used in Florida.[6]

The speed and effectiveness of the cooperative effort of Federal, State, and local public and voluntary welfare agencies in aiding needy

[6] The total amount allotted to the Bureau of Public Assistance included $440,000 for the care of unaccompanied children but, except for fiscal aspects, responsibility for this segment of the program was assigned to the Children's Bureau.

Cuban refugees is both a tribute and a true test of the strength of the American social welfare structure and its ability to adapt its resources to meet serious emergency problems affecting the well-being of people.

ASSISTANCE TO U.S. NATIONALS REPATRIATED FROM OTHER COUNTRIES

The Bureau has continued to assist the Department of State in arranging for the reception and care of those American nationals and their dependents repatriated from other countries who need special help upon arrival in this country. During the past year, assistance was requested by the Department of State in behalf of 120 cases including 231 individuals from 32 countries. Thirty-nine of these cases involved mental illness. Through the cooperation and help given by public and private welfare agencies, primarily in New York, arrangements were made for emergency reception service, transportation, hospitalization, and other needed services.

Assistance was also provided to needy United States citizens and their dependents who fled to this country from Cuba. Many were without cash resources because they were prevented from taking money out of Cuba. Some had resided there for many years and had lost contact with relatives or friends in this country. With a special authorization of $30,000 from the President's Emergency Fund, assistance was provided to help these repatriates return to the place where they formerly lived, or to join relatives who could assist them in reestablishing themselves in the United States. In July 1961 about 140 American families repatriated from Cuba were helped; about $29,000 of the $30,000 authorized for this purpose was used by Florida, and most of the remaining $1,000 by other States.

During the year, the Bureau also developed plans for implementing legislation passed in July 1960, when funds are appropriated, to provide for reception and hospitalization at Saint Elizabeths Hospital, or elsewhere, of certain repatriated mentally ill United States citizens. The legislation, passed in June 1961, amended title XI of the Social Security Act to provide temporary assistance (through June 30, 1962) to other repatriated U.S. citizens who need help upon arrival in this country. This amendment is an outgrowth of a long period of program development and interdepartmental consideration.

INTERNATIONAL ACTIVITIES

Cooperative work with the SSA Office of International Activities during the past year included central office planning for and consultation to foreign visitors, and interpretation of U.S. social welfare programs to individuals and international groups referred by various Government agencies. Bureau regional staff also provided consulta-

tion and planned or arranged observation programs in cooperation with State and local public and voluntary welfare agencies for visitors from other countries. Comments were prepared on United Nations' documents, and suggestions made for social welfare projects to be included in the program financed through the purchase of foreign currencies excess to the normal requirements of the United States in accordance with Public Law 83–480, the Agricultural Trade Development and Assistance Act of 1954, as amended. Bureau staff also participated in the annual Seminar for Foreign Service Officers of the Department of State, and in the 10th International Conference of Social Work held in Rome.

A Look Ahead

Public assistance has played an important role in the social security system in assuring needy people the right to live at a level of minimal decency. To the extent the need for this kind of assurance is considered a consequence of a healthy, growing industrial society will the full potential of public welfare measures be utilized in achieving the balanced social and economic development essential to a strong democracy.

Although significant gains have been made in the relatively short history of the Federal-State public assistance programs, tremendous forward strides could be made under a fuller utilization of existing legislative provisions. Other gaps in program provisions require legislative change.

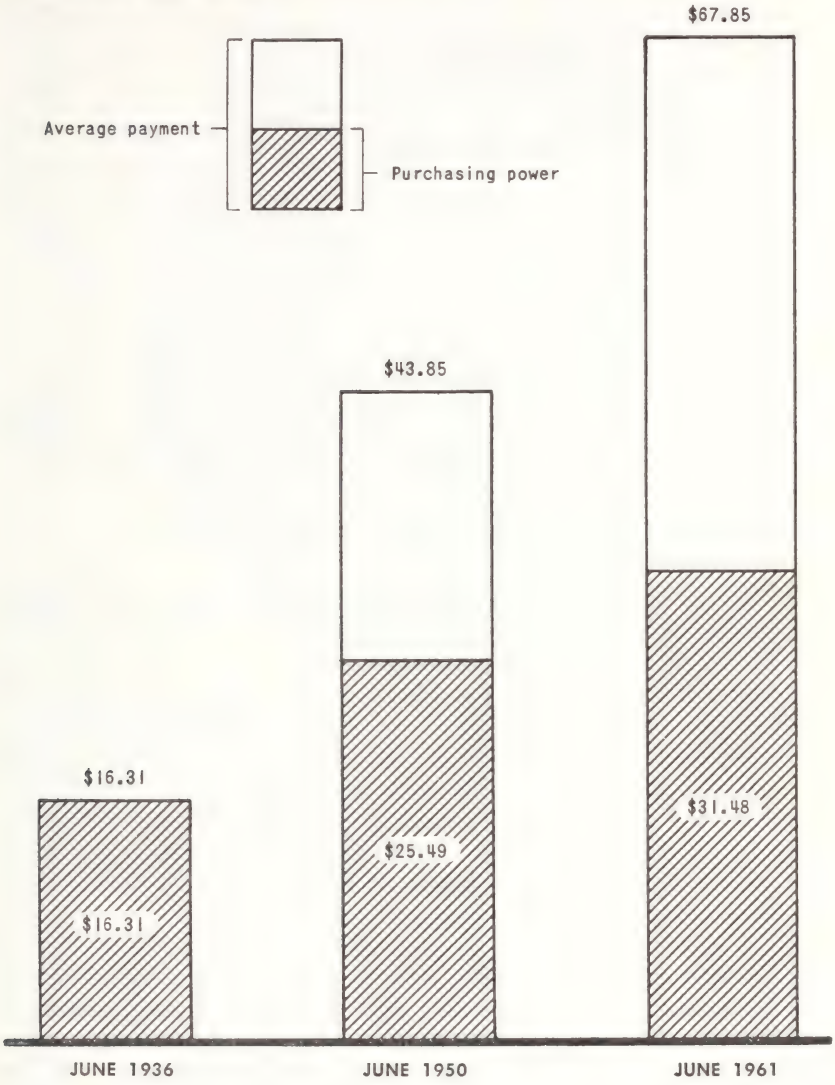
ASSISTANCE PAYMENTS NOT MEETING "NEED"

Although Federal, State, and local governments have substantially increased their expenditures, with rising costs and the shrinking value of the dollar, public assistance payments are not meeting "need" in many instances.

Fewer than half the States are fully meeting "need," judged by standards they themselves have set. (Need is defined here as the gap in income between the total cost of living essentials set by the State and the individual's resources to meet that cost.) The other States either impose maximums on the monthly amount of assistance any individual or family may receive or meet only a specified proportion of need. In some States, the standards themselves are inadequate.

As indicated in chart 4, although the average assistance payment has increased in dollar terms, the increased cost of public assistance in the past 25 years has been due more to monetary inflation than to expansion in the purchasing power of the assistance payment.

CHART 4.—PURCHASING POWER OF AVERAGE OLD-AGE ASSISTANCE PAYMENT. DOLLAR AMOUNTS ARE ADJUSTED FOR CHANGES IN THE BUREAU OF LABOR STATISTICS CONSUMER PRICE INDEX.



INADEQUATE PROVISION TO MEET MEDICAL CARE COSTS

Although recent Federal legislation increased provisions for costs of medical care, and significant gains have already been made in some States, the majority still provide for only limited medical care, and not the broad scope of services needed by most sick people.

NEEDY CHILDREN ARE BEING "SHORT-CHANGED"

Provisions for needy children are not keeping pace with the increased child population. As indicated in Chart 2, about the same proportion of the child population received assistance in 1961 as in 1950; program changes during this period have not resulted in a significant relative increase in the proportion of children receiving aid to dependent children. Inequities between provisions for the needy aged and those for dependent children also highlight the restrictive effect of the attitudes of many toward certain causes of dependency of children such as the socially unacceptable behavior of parents. These inequities also compound the damaging effects on children of serious social problems—dependency, family breakdown, illegitimacy, ill health, and disability.

Chart 5 highlights facts concerning widespread fallacies as to the impact of illegitimacy on the aid to dependent children program. Only *about ½ of 1 percent of the total child population are illegitimate and receiving aid to dependent children*, even though about 4½ percent of the Nation's child population are illegitimate.

NEED FOR PREVENTIVE AND REHABILITATIVE SERVICES BY QUALIFIED STAFF

Although the importance of providing other social services by qualified staff is recognized through legislative provisions, many factors hinder their effective implementation.

Because of staff limitations and heavy workloads (e.g., 1 caseworker with full professional training to every 23,000 assistance recipients—see other detailed information in chart 6), the States' services plans, in general, realistically define their responsibility by limiting the problems for which services would be provided, limiting services to those required in the determination of eligibility for money payments, or limiting services to those that could be provided only during regular contacts for eligibility determination.

High caseloads and lack of staff skills also limit the quality of services that can be provided by most agencies, since this kind of help usually needs the knowledge and skill that comes from professional social work training. Provision is also needed for skilled staff services before eligibility for assistance is established, as well as for aiding those who can be helped to utilize their own resources and resources available elsewhere in the community, to prevent their ultimate need for public assistance.

These are but some of the areas that could be strengthened if public assistance measures are to be used as a constructive force in dealing with the many social problems facing our productive and growing

CHART 5.—ILLEGITIMATE CHILDREN RECEIVING AID TO DEPENDENT CHILDREN EQUAL ½ OF 1 PERCENT OF ALL CHIDREN

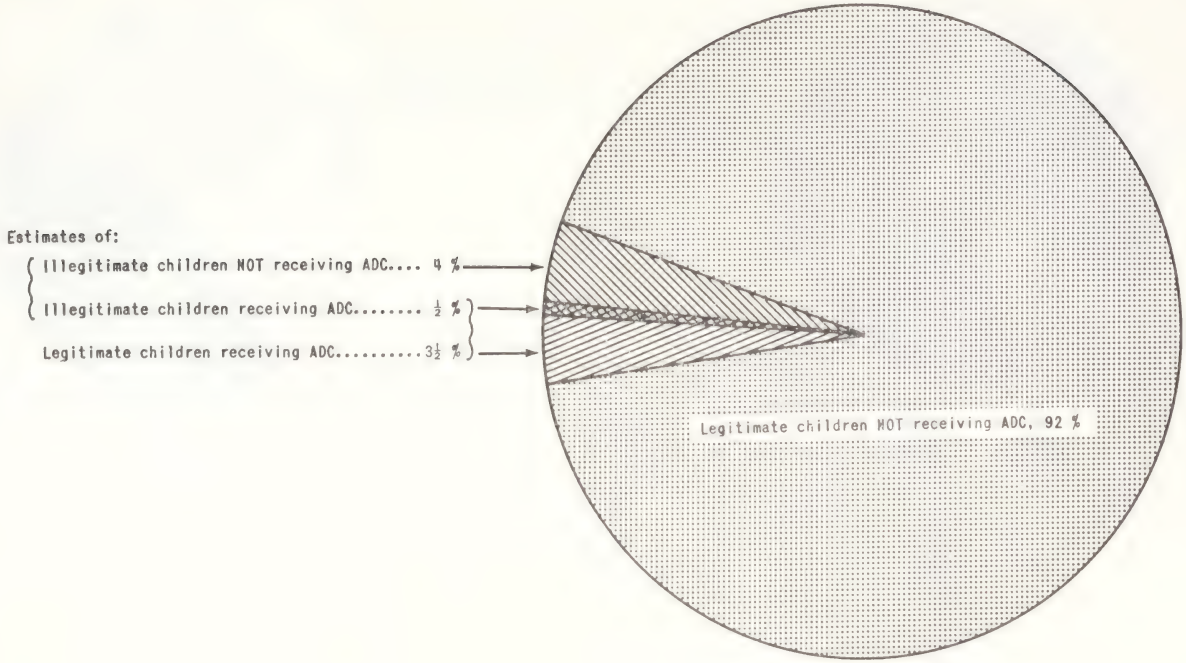
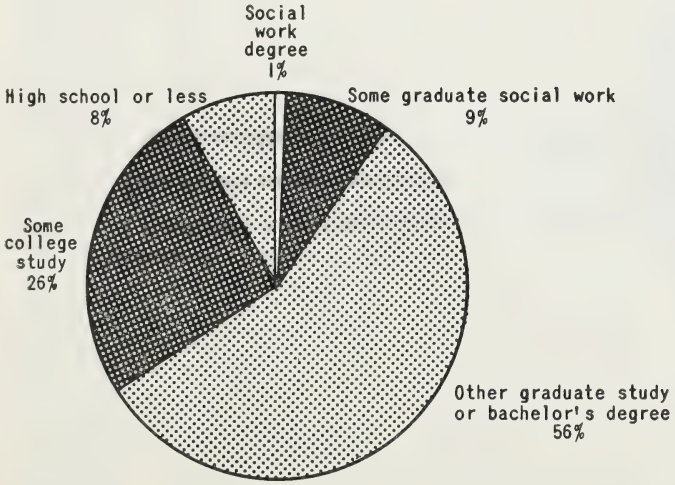


CHART 6.—PUBLIC ASSISTANCE CASEWORKERS,* EARLY 1960

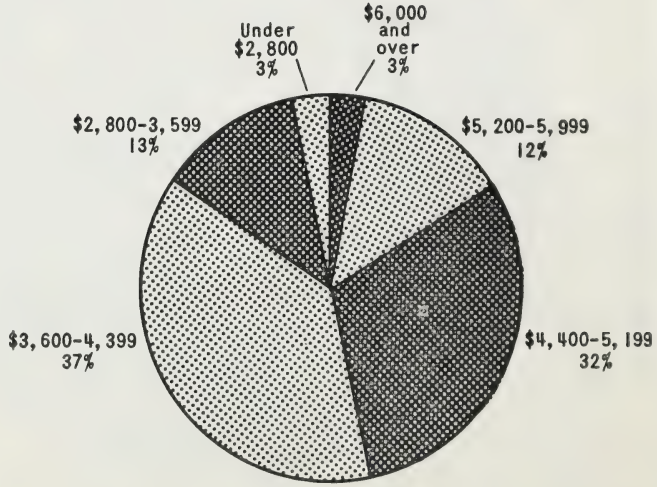
EDUCATION

1 caseworker with full professional training for every 23,000 recipients



SALARY

Median $4,338



SOURCE: *1960 Survey of Salaries and Working Conditions of Social Welfare Manpower;* U.S. Department of Health, Education, And Welfare; Social Security Administration; Bureau of Public Assistance - Children's Bureau, 1961

* Includes caseworkers working on general assistance under State and local programs.

economy. The extent they are used for prevention and rehabilitation, as well as for sustaining life at a level of minimal decency, will determine the degree to which the human resources of the present and future will be conserved. Measures to strengthen the individual and the family are sorely needed today, as never before, to add strength to a nation carrying grave responsibilities of leadership in a world seething with rapid economic and social change.

Children's Bureau

By law and tradition, the Children's Bureau serves the children of the United States and its current program reflects its concern for the well-being of all children.

The legal base for its service is contained in two acts, and in delegations of responsibilities to the Bureau by the Secretary of Health, Education, and Welfare, and by the Commissioner of Social Security.

Under its basic act of 1912, as amended, the Bureau is charged to investigate and report "upon all matters pertaining to the welfare of children and child life among all classes of our people."

Under title V of the Social Security Act, 1935, as amended, the Bureau, by delegation, assists the States through technical and financial aid, in enhancing and protecting the well-being of many children through child health and welfare services.

All of the Bureau's activities are related and interwoven at many points. They reach out beyond the strict borders of social services and health services into many phases of child life that make for or interfere with the development and well-being and normal growth of children in their families, neighborhoods, and communities.

Stemming from these two acts but interwoven into one program are the purposes of the Children's Bureau today:

- to assemble facts that will keep the country informed about children and matters adversely affecting their well-being;
- to recommend measures that will be effective in advancing the wholesome development of children, and in preventing and treating the ill effects of adverse conditions;
- to give technical assistance to citizens and to voluntary and public agencies in improving the conditions of childhood; and
- to administer the financial aid that the Federal Government appropriates each year to aid in building the child health and welfare services for children.

Overall goals for the Nation's children and youth were projected by the 1960 White House Conference on Children and Youth as the basis for national action, public and voluntary, Federal, State, and local for the next 10 years.

The overall goal of the Children's Bureau, reflecting society's concern for its children, is that every child in our Nation have an opportunity for healthy growth, for maximum development of his potentials, and for a productive and satisfying living experience.

The Bureau's focus on the whole child and the health and welfare services he requires for his well-being includes seeing him in his family and community setting and encourages the development of a whole gamut of essential services. The problems of children and youth with which our society is dealing make a multiprofessional approach essential, as for example, in juvenile delinquency, mental retardation, adoption, illegitimacy, foster care, day care, homemaker service, and guides to parents on child rearing.

Though directed to investigate all matters relating to child life, obviously a small agency such as the Children's Bureau (at present its staff numbers less than 250) has to be selective. Over the years, children with disadvantages of many kinds have claimed the major attention of the Bureau. The social, environmental, and health hazards which affect the lives of children and prevent children from reaching their maximum potentials are constantly under review in the Bureau.

Goals then must provide for meeting the needs of increased numbers of children, for continuing the present trends toward better coverage of their needs, dealing effectively with new needs as they arise, and for bringing to services for mothers and children the benefits from new developments in research. Changes taking place in patterns of family and community life are affecting lives of children profoundly.

Among the most significant of these changes is the trend toward urbanization. Two-thirds of our population now live in metropolitan areas. At the same time, financially adequate families, especially those with children, are moving out of the central cities into the suburbs. In many instances, our sprawling metropolitan areas override State and local governmental boundaries and essential services needed by children and families living in these outlying areas have not been developed. The core city, though having authority and structure, is left with reduced resources to deal with a population which has a high proportion of families presenting health and welfare problems.

Family life may be expected to continue to be affected by mobility of our population, by employment changes resulting from automation and mechanization, by rising standards of living, and by a continuing trend toward employment of women outside the home.

Admittedly there are still many gaps in the health and welfare services for children and many aspects of these programs require strengthening and improving.

There are large geographic areas without special types of health and medical care that many mothers and children need and without child welfare workers to help children with family and other social problems.

Great shortages exist in personnel especially trained for work with children. Too few young people are choosing careers in health and welfare services for children. To conserve children's abilities and potentialities, the pool of skilled workers must be expanded substantially.

Needs are pressing for more research into causes and treatment of children's physical, emotional, and social problems. Research and demonstration programs are needed to advance the development of sound programs of service to children and their families.

New patterns of community services for children are an urgent need in order to serve families and children more expeditiously without debasing quality of service.

Many States lack adequate legal protections for children or fail to enforce what protections exist.

During fiscal 1961, the attention of the Department, the Bureau, and State and local agencies was focused on the need to take stock and evaluate health and welfare programs for children.

Much of the impetus for this reevaluation in State and local agencies comes from the 1960 White House Conference on Children and Youth. Present programs are being critically examined and plans are being made to expand the services to meet the needs of our increasing population of children who represent the wealth of our human resources. The Children's Bureau in common with these many agencies and organizations was analyzing its own functions and activities against the backdrop of the Conference. Another event leading to reevaluation was the advent of the new administration which stimulated Government agencies and the country at large to reexamine health and welfare programs generally.

Some Facts and Figures About Parents and Children

Births continue to be more than 4 million a year, but the crude birth rate and the rate per thousand women of child bearing age have dropped slightly since the peak of the 1950's.

The estimated number of children under 18 in the resident population of the United States—50 States and the District of Columbia—in 1960 was 64.2 million, 35.8 percent of the total population.

Provisional statistics indicate that the infant mortality rate for 1960, and the early months of 1961 (25.7 per 1,000 live births), has decreased appreciably from the high point of 27.1 per thousand live

births in 1958. Death rates for babies less than 3 days old have changed very little in the past two decades. Nonwhite infants still have a higher mortality rate than white infants, and the excess is now greater than in 1950.

Numbers, rates, and ratios of births out of wedlock continue to increase. The estimated number for 1959 was 221,000. The ratio per 1,000 live births increased over 1958 from 49.6 to 52 and the rate per 1,000 unmarried women age 15–44 years from 21.0 to 22.1. Forty percent of births out of wedlock in 1959 were to mothers under 20 years of age.

In March 1960, there were 52.4 million married, divorced, and widowed women in the United States, of which almost one-third, or 17.1 million were in the labor force. Of those in the labor force, 5.1 million, or 42.5 percent, had children between the ages of 6 and 17; 2.9 million, or 20.2 percent, had children under 6. The number of working mothers with children under 18 years increased by about 500,000 since March 1958.

In 1960, for the twelfth consecutive year, juvenile court delinquency cases increased over the previous year. The increase for 1960 was 6 percent when traffic cases are excluded. The rise exceeded the 2 percent estimated increase in the child population. Arrest data for 1960 reported by the Federal Bureau of Investigation for 1,614 cities show that the arrests of children under 18 years increased by 9 percent over 1959. Juvenile arrests in rural areas, tabulated by the Federal Bureau of Investigation for the first time in 1960, increased by 8 percent over 1959.

Report to the Congress on Children in Migrant Families

A report entitled *Children in Migrant Families*, prepared by the Children's Bureau at the request of the Senate Appropriations Committee, was transmitted to the Committee by Secretary Flemming on January 19, 1961.

The report summarized information about the conditions, problems, and unmet needs of children in migrant families. It gave particular attention to their needs for health services and for child welfare services, including day care. In preparing this report, the Bureau drew upon material and studies developed by a wide variety of groups. New information, elicited through a schedule submitted to national voluntary organizations and State public health and welfare agencies, was correlated with the Bureau's own experience in working with public, voluntary, and civic agencies and organizations to promote the well-being of children in migrant families.

Although admittedly a wide variety of provisions impinging on or affecting migrant children, such as education, child labor, housing, and sanitation are urgently needed, the recommendations in this report were focused on specific child welfare and child health measures that would contribute to alleviating the adverse conditions of children of migrant workers, especially children of working mothers. The Bureau recommended a program of immediate action, including: (1) Expansion of child welfare services and maternal and child health services so as to make these services readily available and accessible to migrant children and their families; (2) increased technical assistance to agencies and organizations engaged in helping migrant children; (3) increased encouragement of and assistance in research and demonstrations relating to new or improved measures for helping migrant children, in the fields of child welfare and child health; (4) increased investigating and reporting activities relating to the development of effective measures for improving the welfare and health of migrant children; and (5) a nationwide information-education campaign, to acquaint the public with the findings that result from these various activities.

President's Committee on Juvenile Delinquency and Youth Crime

On May 11, 1961, President John F. Kennedy established by Executive Order the President's Committee on Juvenile Delinquency and Youth Crime. This Committee is composed of the Attorney General, the Secretary of Labor, and the Secretary of Health, Education, and Welfare.

The Executive Order states, "The Committee (1) shall review, evaluate and promote the coordination of the activities of the several departments and agencies of the Federal Government relating to juvenile delinquency and youth crime; (2) shall stimulate experimentation, innovation and improvement in Federal programs; (3) shall encourage cooperation and the sharing of information between Federal agencies and State, local and private organizations having similar responsibilities and interests; (4) shall make recommendations to the Federal departments and agencies on measures to make more effective the prevention, treatment, and control of juvenile delinquency and youth crime."

Also on the same date, the President announced the appointment of the Attorney General as chairman of the Committee, and the appointment of David L. Hackett, a special assistant to the Attorney General, as Executive Director of the Committee. The Bureau cooperated with the Committee and provided a substantial amount of staff service to the Committee during the balance of the fiscal year.

Juvenile Delinquency Legislation

On May 11, 1961, President Kennedy transmitted to the Congress an administration proposal for a 5-year program of grants for demonstration and evaluation projects and for training, and of technical assistance services, relating to the prevention and control of juvenile delinquency or youth offenses. As finally passed by both Houses, legislation—which was substantially in accord with the President's recommendations—authorized appropriations for 3 years, beginning with the fiscal year 1962 for grants and technical assistance services. This legislation was approved by President Kennedy on September 22, 1961, and became P.L. 87–273. A supplemental appropriation bill was enacted which provided an appropriation of $8,200,000, thereby enabling immediate implementation of this new legislation.

Appropriations

The 1962 appropriation request of the Department provided for funds enabling the Bureau to implement two new programs which were authorized by 1960 legislation enacted in the early part of the 1961 fiscal year. The first piece of this legislation was the International Health Research Act. The second piece was contained in the 1960 amendments to the Social Security Act and was an authorization for a new program of grants for research or demonstration projects in the field of child welfare.

As finally approved by the President on September 22, 1961, the 1961 Appropriation Act for the Department not only contained funds for these two new programs, but also contained increases of roughly $5 million apiece in each of the three programs of grants to the States which are administered by the Bureau. For maternal and child health services and for crippled children's services, respectively, the amount appropriated for the fiscal year 1962 was $25 million as compared with appropriations of $18,167,000 and $20,000,000, respectively, for the fiscal year 1961. These two appropriations for 1962 thereby reached the full amount authorized under the increased ceilings contained in the 1960 Amendments to the Social Security Act. With respect to child welfare services, the amount appropriated for grants to the States for 1962 was $18,750,000 as compared with $13,666,000 for 1961.

Federal Interdepartmental Committee on Children and Youth

The work of the Interdepartmental Committee on Children and Youth during fiscal 1961, its 13th year, featured followup on the 1960 White House Conference on Children and Youth. Member agencies

of the Committee analyzed White House Conference recommendations related to their programs to determine those on which they could take action within the framework of their present authority, obligations, policies, and resources. They found that many of the recommendations parallel their ongoing agency activities, and have expanded their services toward achievement of White House Conference objectives in a number of specific instances. These have included conferences and workshops sponsored by member agencies or participated in by such agencies, material developed, published, and disseminated, consultation service given, speeches made, and participation in a variety of activities related to White House Conference goals.

In carrying forward the purposes of the White House Conference, the Interdepartmental Committee on Children and Youth worked closely with the Special Unit for White House Conference Follow Up established in the Office of the Chief of the Children's Bureau on November 1, 1960.

With the assistance of staff of the Special Unit, the Interdepartmental Committee on Children and Youth completed the revision of its publication, *Programs of the Federal Government Affecting Children and Youth*, originally published in 1951.

Four subcommittees of the Interdepartmental Committee were active along the lines of White House Conference recommendations. The Subcommittee on Transition from School to Work developed a report, *Outline for a Work and Service Program for Young Persons 16–21 Years of Age.* This report has been widely used by various groups concerned with the development of programs to provide for youth opportunity for work, training and service. Many of the features of this report were incorporated in the Administration's Youth Employment Opportunities Bill.

The Subcommittee on Juvenile Delinquency stressed the need for more material in popular form to explain the multiple causes of delinquency, for concrete action on preventive programs and for support of appropriations at all levels for basic programs for children.

The Subcommittee on Families and Children of Agricultural Migrants devoted its attention to studying the proposals for legislation affecting migrant workers and their children under consideration in the Congress.

A special subcommittee considered the White House Conference recommendation that a study be made of the effects of the draft law in peacetime on the youth of the Nation and on the Nation. This subcommittee recommended that although such a study was beyond the scope of the Interdepartmental Committee, the Committee might well consider ways of following up on youth rejected for physical and educational reasons. A subcommittee is now at work on proposals along this line.

The Special Unit for White House Conference Follow Up

The Special Unit, financed by a special Congressional appropriation for White House Conference follow up, operated until the end of the fiscal year, June 30.

The purpose of the Special Unit was two-fold: (1) to stimulate and reinforce activities by other agencies, organizations, and groups to achieve White House Conference objectives, and (2) to interweave White House Conference philosophy, materials, and forward viewpoint into ongoing substantive programs of the Federal agencies both at Washington headquarters and in regional offices. To carry forward this purpose, the Special Unit worked along five major lines: (1) regional workshops; (2) consultation service to regional representatives of Federal agencies, and, upon request, to State Committees for Children and Youth and others; (3) preparation and dissemination of new material; (4) acquisition and distribution of material prepared by others; (5) cooperative activities with the Interdepartmental Committee on Children and Youth and the National Committee for Children and Youth.

Five special consultants, a principal consultant from the Washington office, and four consultants assigned to regional offices in Boston, Dallas, New York, and San Francisco, devoted their major attention to developing methods of assisting State committees for children and youth and to open and broaden channels through which information and services can flow from various Federal agencies and national organizations in the regions to State committees.

Partly as a result of this consultation service, several regional interdepartmental committees on children and youth may be established; a meeting of the first one, in San Francisco, is scheduled for September.

The National Workshop on Consultation to State Committees, sponsored by the Children's Bureau in October 1960, was followed in the spring of 1961 by four regional workshops in San Francisco, Chicago, Oklahoma City, and Boston.

In cooperation with the Division of Reports, six new publications were projected—*Youth Today—Tomorrow's Adults*, *The Lebanon Story*, and four pamphlets comprising the Headliner Series by Margaret Mead, Walt Kelly, Margaret Hickey, and Edgar Friedenburg. Three of these were in the process of being printed at the close of the fiscal year.

The Special Unit enabled the Interdepartmental Committee on Children and Youth to expand greatly its continuing service in mailing selected publications to State Committees for Children and Youth.

Some 450 pieces of material from Federal agencies, national organizations, and State and local agencies and organizations were supplied to State committees.

The Special Unit and the Interdepartmental Committee on Children and Youth also maintained close working relationships with the National Committee for Children and Youth. This included sharing of information, reports, and materials of mutual interest; participation by the Executive Director of the National Committee for Children and Youth in the Interdepartmental Committee on Children and Youth meetings; and joint participation in various special conferences.

The addition of a consultant for fiscal year 1962 for community planning will enable the Bureau with the assistance of its regional staff to give limited consultation services to State committees and to regional representatives of other Federal agencies in furthering objectives of the States for children and youth.

Programs of the Bureau

RESEARCH IN CHILD LIFE

The Bureau's research staff has a major responsibility for carrying out the legislative mandate "to investigate and report upon all matters pertaining to the welfare of children." In addition to its own studies and cooperating in joint studies, the Bureau stimulates other agencies to undertake research in child life by formulating questions needing study, developing research methods, and providing technical assistance.

Technical Research

Some of the technical research studies conducted by the Bureau follow:

1. Cultural Studies of Youth

The pilot anthropological study of American youth culture has completed its first data-gathering stage in St. Louis. Material from interviews, observation, and questionnaires has been brought back to Washington for analysis. Meanwhile plans are underway for drawing on the experience of the pilot study to design a number of larger studies in other centers.

2. Study of Cystic Fibrosis

Studies directed toward determining the incidence and prevalence of cystic fibrosis, conducted in collaboration with the National Office of Vital Statistics and under contract with the Institute of Allergy and Infectious Diseases, continue.

The first of these studies, initiated at the end of the calendar year 1958, provided national estimates of the number of hospitalized cases

of cystic fibrosis, the number of discharges, and the number of deaths in hospitals resulting from the disease for each year, 1952 through 1957. A report of findings was published in the September 1, 1959, issue of *Public Health Reports.* A supplementary final report on demographic characteristics of patients hospitalized because of the disease in 1957 was published in the July 1961 issue of *Pediatrics.*

In order to develop and test procedures for making a national study of the incidence and prevalence of the disease, a pilot survey of cases in Massachusetts, New Hampshire, and Vermont was made.

A preliminary analysis of findings revealed that during the period 1952–58, inclusive, approximately 650 children residing in the pilot area were known to have cystic fibrosis. Based on cohorts of children born during each of those years, the incidence rate for the disease was estimated to be about 42 per 100,000 live births or 1 in 2,300.

3. Outcome of Independent Adoptions in Florida

This study was conducted jointly by the Florida Department of Welfare and the Children's Bureau and was financed by the Russell Sage Foundation. Findings concern the kind of homes found for the children, the way the children seem to be getting along, and the characteristics or conditions that seem to be associated with favorable or unfavorable adoption outcomes. The report will be published in book form by the Russell Sage Foundation in 1962.

4. Trends in Infant Mortality

Studies on infant mortality trends in the United States since 1950 were carried forward. Three articles were published: "Recent Trends in Infant Mortality in the United States (1950–1957)" in the February 1961 issue of the *American Journal of Public Health;* an account of current trends in the November–December 1960 issue of *Children;* and a study of current problems in perinatal and maternal mortality reported in the *Bulletin of the National Association of Maternal and Infant Health.*

Infant mortality in 1960 and in the first quarter of 1961 continued to be elevated about 5 percent above the level expected on the basis of trends established during 1950–57. Currently the postneonatal mortality rate (1–11 months) is showing greater departure from expected levels in 1960 and 1961 than the neonatal rate (under 28 days).

5. Children Who Receive Services from Public Child Welfare Agencies

Published under the above title, this report (Children's Bureau Publication No. 387) deals with the first study of the characteristics of these children made by the Children's Bureau since 1945. This was a study of 220,812 children in 45 States. In addition to data on age, sex, color, marital status, and living arrangements, the study

yielded some facts about agency practices and length of service to children.

6. National Survey of Social Welfare Manpower in 1960

A preliminary report has been issued jointly by the Children's Bureau and the Bureau of Public Assistance on the National Survey of Social Welfare Manpower which the Department conducted in 1960 in cooperation with the National Social Welfare Assembly and the Bureau of Labor Statistics. The Department's part of this survey was planned by a working group set up by the Office of the Secretary, composed of representatives of the Children's Bureau, Bureau of Public Assistance, the Office of Vocational Rehabilitation, and the Public Health Service. The Department's survey covered all social welfare personnel in the Department and in State and local public welfare agencies administering programs for which the Department carries Federal responsibility, except those engaged in vocational rehabilitation.

Statistical Reports

During the year, the Bureau compiled and published current statistical data received from State agencies administering the maternal and child health, crippled children's and child welfare programs. It also published statistical data on children who receive services from public child welfare agencies, adoptions, the Cuban refugee program, licensed day-care facilities, juvenile court statistics, statistics from public institutions for delinquent children, staff losses in child welfare and family service agencies, recent trends in public child welfare personnel, distribution of personnel and expenditures, and organization for public child welfare services. A number of revisions of the Bureau's statistical reporting were underway.

Research Interpretation

As part of its research interpretation, the Bureau completely rewrote and had in press at the end of the fiscal year two of its major publications—*Your Child from One to Six* and *Prenatal Care*. Bulletins were printed and distributed by the Clearinghouse for Research in Child Life.

Consultation and Conferences

The research staff worked with or gave consultation requested by State health and welfare departments, national organizations, and universities on such subjects as evaluation of programs, delinquency statistics and studies, statistics and studies in child welfare, planning

health surveys, shortages of research manpower and what to do about it, parent education and family life.

A number of conferences on various aspects of research was planned by or participated in by the Children's Bureau research staff. Notable among these were the following:

1. Conference on Research in Child Welfare

At the invitation of the Chief of the Children's Bureau, 21 experts in research and practice in the field of child welfare met in Washington on December 15 and 16, 1960, to discuss various aspects of the recent amendment to Title V of the Social Security Act authorizing grants for research or demonstration projects in child welfare. The discussion included the role of the Children's Bureau, methods of regional participation, definitions of research and demonstration, grants for research planning and exploratory research, consultation on design, continuity of research, research in an operating agency, research personnel, and priorities in subject matter of research.

A report of this conference has been published (Children's Bureau Publication No. 389, *Research in Child Welfare*).

2. Conference on State Research and Statistical Personnel

The biennial conference of research and statistical personnel of State departments of public welfare sponsored jointly by the Bureau of Public Assistance and the Children's Bureau was held in Denver, Colo., September 26–30, 1960. Representatives of 38 States attended.

3. Conference on Juvenile Delinquency Research

The Division called a 1-day conference on delinquency research at which Professor D. H. Stott, Department of Psychology, University of Glasgow, presented findings from his research on the prediction of children's social adjustment in general and of delinquency in particular.

MATERNAL AND CHILD HEALTH SERVICES

All States, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam received Federal funds to improve services for promoting the health of mothers and children.

For the fiscal year 1961, the appropriation for maternal and child health increased to $18,167,000 with $1,000,000 earmarked for services to mentally retarded children.

Because the great bulk of infant deaths now occur very early in the first year of life, more than one-third on the first day, approximately half in the first 3 days, 9 out of 10 in the first 5 months, and because nearly 3 times as many deaths are due to prenatal and natal causes as to postnatal causes, major efforts are being directed toward services to the mother *before* the birth of her child. Prenatal services

are being extended especially to population groups where great need for public services exists in both urban and rural communities.

The problems of urban mothers and children receiving maternal and child health services are becoming analogous to those living in rural areas: the ratio of services to population is a decreasing one; services are not always acceptable for cultural, financial, educational, geographic, and, no doubt, other reasons.

The increasing need for public prenatal services, the lack of progress in preventing prematurity and congenital anomalies, the question of why patients do not seek or accept prenatal care are being explored. Examples of such activities are: the medical-social project for unwed mothers and their babies in Hartford, Conn.; the studies of deterrents to prenatal care particularly in the young unmarried mother in New York City; the Philadelphia Health Department study of deterrents to utilization of prenatal care services.

Cooperative ventures in providing services locally involving health, welfare, and other agencies such as county hospitals are increasing in number. Striking examples are noted in Imperial, Madera, and San Mateo Counties in California, and Thurston County, Wash.

Interestingly, in contrast to the prominence of large metropolitan area health problems but probably also part of the changing composition of the population in our large cities, as well as the continuing rural and semirural health needs, is the interest in decentralization of services. For example, in Connecticut, plans are underway for small residential institutions for the mentally retarded to be located in various communities throughout the State. In California, local health department clinics for mentally retarded children are being established with consultation from a central clinic in a university center. In Pennsylvania, the first regional maternal and child health director has been appointed to carry out program administration and planning for the State health department's regional office.

The interest in the evaluation of program activities continues. For example, in Washington and California, studies are being designed to determine the effectiveness of children's services. Oregon is exploring methods of evaluating local health services in general. Arizona has a small study of maternal and child health services underway in one county concerned primarily with efficiency.

The rapid increase in the school-age population in both elementary and secondary schools is causing educators and health personnel to review critically their current health programs. Service demands have multiplied not only in amount but in scope and in depth.

Problems of emotionally disturbed children are receiving considerable attention in State maternal and child health programs. In Florida and South Carolina, maternal and child health directors are

participating on committees whose objectives include development of services for these children. In connection with two medical schools, Emory and Vanderbilt Universities, new psychiatric facilities for children have recently been opened. In both, the primary objective is training of professional staff.

Agencies are reporting increasing demands for maternal and child health and crippled children's services in midwestern States because of greater unemployment, which is partly due to the shift of unskilled laborers from rural to urban areas, and also due to continued drought and crop failure. Several States as a result are receiving requests for additional well child conferences and prenatal clinics.

Complete maternity care for medically indigent maternity patients in depressed areas of West Virginia has increased from two to seven areas. Two hundred and sixty patients were delivered without a fatality though the majority were considered a high-risk group. Public health nursing service, referrals of infants for well child supervision, consultation by a district nutritionist and by a maternity nursing consultant have been part of the demonstration.

The first national meeting on adolescent medicine was held in Denver in April. The 75 participants included pediatricians, internists, psychiatrists, nurses, nutritionists, social workers, and psychologists, who discussed the needs of the adolescent and how these can be met. The principal concern was the large proportion of youngsters who came to the clinics because of school failure, reading problems, psychosomatic complaints, and other indications of emotional maladaptation.

During fiscal 1961 the special services rendered to mentally retarded children and their families by State health departments continued to increase. A summary of the report of services provided by 38 States is as follows:

Item	*Number*	*Average per State*
Applications:		
Total handled this year	6,485	171
New	8,054	212
Carried over to next year	1,646	43
Cases:		
Total admitted this year	5,747	151
Total served	10,644	280
Carried over to next year	6,404	169

Age Distribution of New Cases

Item Age Group.	*Number*	*Percent*
Total[1]	5,646	100.0
Under 1 year	138	2.4
1–4 years	1,787	31.7
5–9 years	2,432	43.1
10–14 years	981	17.4
15–20 years	308	5.4

[1] Excluded cases for which age was not stated.

This is a 32-percent increase in new applications and approximately a 20-percent increase in the total number of cases served. The number of children requiring continuing services showed an 80-percent increase over 1958.

Efforts to reach more new cases and to spread the services and consultation available through these services are evident through such new developments as:

1. *New mental retardation clinics have been established.*—A new consultation and evaluation clinic in the Children's Hospital of Louisville, Ky., despite rapid expansion, had 50 children on the waiting list by June. In April, a new mental retardation clinic opened for service in Columbia, S.C.

2. *Greater geographic coverage has been achieved.*—For example, in Georgia, the special project area had been expanded from three to six counties; in Alabama, the special project is offering consultation and some clinic services statewide.

3. *New approaches are underway.*—The California special project clinical team at Children's Hospital, Los Angeles, is successfully training local health department staffs to carry out services independently. The Connecticut Community Program for Retarded Children has developed activities of diagnostic and counseling services for young children, community planning and education of professional and lay groups.

4. *Critical evaluation of the program is underway in a number of States.*—For example, the Maine mental retardation clinic has reported on its first 3 years of experience. Since the percentage of severely retarded declined each year, the possibility of habilitation is greater.

5. *Training activities have been undertaken in many States.*—For example, the Florida State Board of Health, through the Dade County Developmental Evaluation Clinic, was host to the first National Workshop for Social Workers in Mental Retardation Projects held at Miami Beach, Fla., April 4–7, 1961.

Some 26 States have set up programs to detect and treat phenylketonuria—an inherited metabolic disorder associated with mental retardation. More than 25 infants with this condition were detected the past year and placed under treatment for prevention of mental retardation. For example, Michigan has had a program of casefinding, diagnosis, and treatment of PKU. In Indiana, legislation has been passed which requires the State Board of Health to carry out an educational program for physicians, nurses, hospitals, and the public on phenylketonuria. To implement this legislation, 10,000 copies of the Children's Bureau pamphlet *Phenylketonuria* have been purchased for distribution to all physicians and hospitals. In Region

III, all States except North Carolina have adopted a test for the detection of phenylketonuria in the well-child and pediatric services.

CRIPPLED CHILDREN'S SERVICES

All the States (excepting Arizona), the District of Columbia, Puerto Rico, the Virgin Islands, and Guam are participating in the crippled children's programs. Although the State agency auspices vary, the objective is uniform; namely, to locate children who require care and to provide restoration through diagnosis, medical and surgical treatment, and alleviation of unfavorable social and psychological influences which adversely affect the degree and duration of the disability. The appropriation for crippled children's services in fiscal 1961 was $20 million.

State crippled children's programs throughout the country provided care to 339,000 children in 1959 with many different impairments. For every 1,000 children under 21 years of age in the general population, 4.9 children were under care in crippled children's programs.

Children with other than orthopedic defects now constitute the largest group in the crippled children's programs. Although the actual number of children with orthopedic defects has not declined, each year the States broaden their programs to include other handicapping conditions such as cystic fibrosis, nephrosis, epilepsy, hearing, and certain neurological defects.

A new pilot program designed to reduce the high mortality of infants born with congenital defects incompatible with life has been established at the Children's Hospital in Philadelphia with special Children's Bureau funds. The unit has highly trained staff and is patterned after a similar facility in Liverpool, England, which has proved the life-saving value of prompt, experienced surgical correction and intensive pre- and post-surgical nursing and medical care.

Among the nonorthopedic diagnoses reported by State agencies to the Children's Bureau, congenital malformations of the circulatory system have shown a striking increase, attributable in large measure to the significant advances in heart surgery in recent years. From a little more than 2,200 children with congenital heart disease served in 1950, the number has grown to 14,450 by the close of the decade.

Each year additional States develop their own facilities with specially trained personnel for the care of their own children with congenital heart defects. For example, Hawaii engaged a team from the University of Minnesota to review the diagnostic and treatment services available for children with congenital heart disease. The team advised that the diagnostic services needed strengthening but that treatment, including open heart surgery, appeared to be satisfactory. Washington has further developed its program. The Cali-

fornia Regional Congenital Heart Project was adjusted during the year to permit acceptance of children from American Samoa.

The trend toward developing services for the multiply handicapped and for children with various handicaps continues. The increasing acceptance of treatment of the child rather than his disorder, the large number of children in mental retardation clinics with additional handicaps, the shortage of trained personnel and funds to staff specialized clinics, and the increasing knowledge about neurological disorders contribute to the consolidation of services and the application of multidisciplinary services. The trend is particularly evident in Pennsylvania, Kansas, New York, Maryland, Maine, and Connecticut.

While States continue to expand their services in hearing conservation for the school-age population, there is an especially marked increase in interest in screening procedures for the infant and preschool child. Institutes are being planned to instruct health personnel in nonaudiometric screening techniques. Tape recorded tests have been devised to conduct screening at the ages of 3 and 4.

For example, the Alaska study of prevention of hearing loss by control of chronic otitis media has been completed. The Alaska speech and hearing consultant has drafted a manual on hearing testing to be used primarily with nurses and will conduct training workshops for them. This is part of the effort to extend service to areas in the State beyond southeast where most of the program activity has been concentrated to date.

Colorado and Oregon have produced films for both lay and professional viewers on their hearing conservation work. As part of a hearing conservation project in Hawaii, a study of etiology is underway in Oahu.

A statewide clinic for children who have a marked hearing impairment has been established in Atlanta, Ga., for children referred from the regular crippled children's clinics; a team of otologist, speech therapist, audiologist, psychologist, and public health nurse participate. The clinic is held at the Atlanta Speech School where various services are available on a fee basis. The program plans to develop similar diagnostic clinics in two centers as funds and clinical resources become available. Hearing aids are now being provided on a limited basis.

Maryland has initiated a program of dental treatment for physically handicapped and mentally retarded children at the Children's Hospital in Baltimore. Diagnostic treatment, and follow-up services for children on an out-patient as well as in-patient basis are provided.

Federal and State staff continue to participate in conferences, workshops, and other forms of training. The following are examples:

A biregional institute on Neurologically Handicapping Conditions in Children was sponsored by the University of California, School

of Public Health and the California Department of Public Health, and financed by a special grant from the Children's Bureau.

The Children's Bureau Division of Health Services, in cooperation with the Georgia Department of Public Health, sponsored a regional meeting of personnel working in crippled children's programs. A variety of diagnostic and administrative problems was discussed in both general and group sessions.

A regional conference on hearing conservation was held in Elizabethtown, Ky., to provide inservice training for public health nurses and health officers.

A biregional conference of maternal and child health and crippled children's staffs of the 10 States in Regions I and II was held to promote professional communication among these geographically selected States. Four service areas were of particular interest: cystic fibrosis, phenylketonuria, multiple handicaps, and hospital consultation.

CHILD WELFARE SERVICES

Fiscal year 1961 brought new opportunities—and new challenges—to the Bureau in the field of child welfare. The authorization for these services was raised to a new high and in addition, new research and demonstration grants in child welfare were authorized by the 1960 amendments to Title V, Part 3.

RESEARCH AND DEMONSTRATION PROJECTS IN CHILD WELFARE

General plans for the administration of this program have been set up. The 1962 Departmental appropriation bill provides $350,000 for research and demonstration projects in child welfare.

As a first step in implementing this program, 21 nationally known research and program consultants met with Children's Bureau staff in December 1960 to consider areas of child welfare needing research and demonstration, methods of developing worthwhile projects, and priorities to be considered.

Priorities were urged in such broad subject matter fields as removal of children from their homes, juvenile delinquency, administration and organization of child welfare services, information to strengthen direct services to children at the local level, and criteria for decision making in services for children. Participants indicated that great weight should be given to studies of the whole process of the "child removed from home." The group stated its conviction that the Children's Bureau has a strong role of leadership, stimulation, and coordination in this new program.

FINANCING CHILD WELFARE PROGRAMS

Major developments in the Federal grant-in-aid program for child welfare services during fiscal 1961 included:

1. An increase in the appropriation to $13,666,000—$666,000 over the amount appropriated for the fiscal year 1960.

2. Only a minimum amount left as balance in the Federal Treasury (0.4 percent), with a record set in the amount paid out to the States of the total appropriation. This balance represents an all-time low.

3. The amount of $64,467 released by two States (Guam $52,467 and Idaho $12,000) and reallotted to 23 States on February 6, 1961. The amounts so reallotted ranged from $413.00 (Vermont) to $9,864 (New York).

4. Participation of Guam in the program the last quarter of fiscal 1961. Even though the beginning child welfare program is limited, a start has been made, with promise of future expansion.

State legislatures in most areas of the country have provided some increases in appropriations for operating the child welfare program this past year. Most of these State funds continue to be absorbed in meeting the costs of the regular, on-going programs however.

PERSONNEL

The 1960 study on *Salaries and Working Conditions of Social Welfare Manpower* provides current information on the 116,000 workers in welfare, health, rehabilitation and recreation settings in governmental and voluntary agencies. Personnel in child welfare programs, in which large employment increases over 1950 were recorded, accounted for 21 percent of these workers. Over the 10-year period, child welfare employees in professional social work positions increased 74 percent. This represented a rise in numbers from 4,163 in 1950 to 7,264 in 1960.

The number of employees with full professional education working primarily in public child welfare programs more than doubled in the decade—from 820 in 1950 to 1,881 in 1960. In 1960, 26 percent of all employees had full professional social work education as compared with 19.7 percent in 1950. But this increase by no means kept abreast of the increase in need for services with the result that the proportion of employees with *no* graduate education in social work rose to 46.2 percent as contrasted with 39.9 percent in 1950.

Salaries rose 68 percent in the decade. In 1960, one caseworker in four received an annual salary of $5,200 or more. Professional social workers are still at a competitive disadvantage with other professional groups in the public services.

The need for qualified personnel continues to be acute. Gains have been made in the proportion of trained staff in administrative, con-

sultative, and supervisory positions; a smaller proportion of trained child welfare workers are found at the local level.

Stipends for educational leave have been the chief means used by the States of increasing the proportion of supervisors with full professional training. Many States have not been able to provide enough stipends for educational leave to maintain a total staff of trained workers. Expansion of services and coverage in most areas of the country has only been possible through the addition of workers without training. States are taking steps to face this situation realistically through expanded educational leave and in-service training opportunities and efforts to improve the existing bases for staff assignments.

LEGISLATION

The Children's Bureau's new legislative guides on termination of parental rights and responsibilities and the adoption of children were completed during this fiscal year. In preliminary form, copies were distributed to all State welfare departments and to a limited number of voluntary agencies. These guides are now at the Government Printing Office and printed copies will be available shortly.

In addition to the September national ad hoc meeting on the new guide material, two legislative workshops were held. One in Atlanta with the six States participating together with representatives of the Office of General Counsel and the Children's Bureau, the other in San Francisco and participants included representatives from eight States. State representatives included staff members from State attorney general offices.

Many of the States and certain voluntary groups are already using these guides in studying, developing, and drafting proposals for improving present adoption laws; for consultation and advisory service to State and local officials, commissions and agency boards; and in developing and improving official State and local manuals in this important area.

PROGRAM REVIEW AND ASSESSMENT

A number of separate developments seem to forecast a critical "new look" at child welfare and welfare programs in general.

These developments have many dimensions and stem from numerous sources. Some of them include:

1. The increasing costs of programs and the inadequacies of State and local public and voluntary financing.

2. No appreciable gain in closing the gap between mounting needs and resources.

3. Critical reappraisal of practices in certain areas which in turn affect the structure for administering services.

4. A resurgence of interest on the part of citizens in the needs of children, and how they are being met, attributable to the 1960 White House Conference on Children and Youth.

5. Increasing availability of research funds from foundation and governmental sources.

6. Steps to develop, refine, and adapt cost analysis and work measurement techniques to the social service field.

7. Continuous stimulation given by Bureau specialists and regional staff to attain more positive direction and leadership at the State level. The role of the national voluntary agencies should be recognized here also.

Review of current practice this fiscal year has been directed primarily to foster care. State agencies are trying to improve administrative policies and practices, after having some type of review of their children in foster care.

CHILD WELFARE SERVICES IN SPECIAL AREAS

The continued pressure for providing services to children in foster care and adoption, along with limited staff resources has continued to deter any marked development of basic services for children in their own homes.

In those States which have initiated a "suitable home" provision in their ADC programs, child welfare staff have worked closely with the public assistance personnel to encourage policy which will reflect adequate protections for families and children.

The relationship between the two programs has been thrown into sharp focus with passage of Federal legislation authorizing a limited program of foster care (effective May 1, 1961–June 30, 1962) for children receiving ADC who are removed from their own homes by a court of competent jurisdiction because they lacked proper care and protection. The amendment also provides that States choosing to come under this program shall use to the maximum extent practicable staff in the child welfare program.

A joint Children's Bureau-Public Assistance committee was appointed to work on policies and procedures to implement the new amendment. The draft material was reviewed and discussed by a selected group of State administrators, public assistance and child welfare directors. Regional and central office staff of both Bureaus met together in Washington on June 27–28 to consider the draft material developed by the work group. The protection of children and their families was the paramount concern and interest of everyone participating in these two days of meetings.

The plight of young children in families seeking divorce and a growing realization of the importance of strengthening and preserving

family life have spurred greater interest in court counseling services. Both Colorado and Maine have expanded such services after successful demonstration project phases.

Establishment of new homemaker programs under public aegis this year has also been primarily on a pilot basis. It is encouraging that where such services have been established, agencies have been successful in demonstrating their value. For example 25 homemakers are now employed under the public program in nine counties in Colorado. The Knox County, Tenn., homemaker service is looking forward to expansion and the Tennessee department plans to establish a similar service in Memphis.

On the national level, the Advisory Committee to the National Committee on Homemaker Service on which the Children's Bureau has a representative, has developed a detailed plan for an ongoing national mechanism for promoting homemaker service. The National Health Council and the National Social Welfare Assembly are the agencies responsible for seeking foundation funds to support a new independent national homemaker organization. Three hundred and ninety thousand dollars is being requested for a 5-year experimentation period. It is expected that after two years, the amount needed from foundations will decrease as provision for member agency fees, individual fees, and the like is made.

The report of the National Conference on Day Care for Children (November 17–18, 1960) is completed and will be distributed in the early fall of 1961. The report is a compilation of the speeches, discussion groups, content, and recommendations made by the Conference.

All the regions report that much interest was generated "back home" by the Conference. A genuine awakening seems to be occurring in many communities as to the seriousness of the needs in this area. Lack of public financing to underpin the service remains one of the major blocks to any real establishment of day-care programs.

"Children of Change," the film on day care produced jointly by the Pennsylvania State Department of Public Welfare and the Children's Bureau for the national conference, has been used effectively for community group discussions.

With few exceptions a regional roundup shows that major State activity this year was devoted to improving licensing functions rather than initiation of new day-care programs by way of facilities.

The publication of *Deterrents to Early Prenatal Care and Social Services Among Women Pregnant Out of Wedlock*, a New York State Department of Social Welfare Study made with the use of Federal child welfare services funds in cooperation with the Community Council of Greater New York, was an important development in the area of services to unmarried mothers. This survey is a first

phase of a larger research demonstration project, with the second phase to deal with the development of "reaching out" techniques to overcome the obstacles to obtaining social services and early prenatal care.

The major reason for failure for the unmarried mother to use available social agencies for guidance and aid is that they see no need to do so. Only one-fifth seek help from a social agency in making plans for the baby. The majority of white mothers expect to place the babies for adoption, but 87 percent of Negro unmarried mothers and 94 percent of unmarried Puerto Rican mothers plan to keep their babies.

This and other studies show that social, medical and legal resources for services to unmarried mothers remain inadequate. Although voluntary and public welfare agencies indicate that services are available, they are often limited to community residents and to adoptive services for the baby. Funds are generally lacking for maternity home care, making it possible for individuals to arrange for hospital and medical care in return for adoptive placement of the child.

An interesting trend seems to be developing with respect to the "demand" for children for adoption. For the last decade, the trend in the number of adoptions has been steadily upward. The estimated number of adoptions reached 102,000 in 1959. From opposite ends of the country, and from both public and voluntary agencies, information comes of a considerable decrease in the number of adoptive applicants.

This decrease in adoptive applicants is being attributed variously to economic trends, world tensions, increased medical knowledge regarding fertility, and public impatience with long waiting lists. One of the natural results of the decrease in applications and an increase in the number of children available for placement has been a shortening of the waiting period.

The improvement of specific adoption services, including adequate legislation, is seen as an important goal by States. Many States seem to be unaware of the interrelatedness of one service area with other program areas, however, nor do they appear to recognize the importance of this element in planning for improved services. Very little work has been done, for example, in exploring the situations of children with families, who are given up for adoption.

In the field of unprotected adoptions, the California State Department of Social Welfare study of black market operations with particular emphasis on interstate rings, has driven home how far we are from correcting the root causes for this situation. Practices harmful to the welfare of children and against sound public policy were revealed, such as traffic in babies; attorneys and doctors placing children in violation of State laws; fees ranging from $3,000–$7,500; and

advertising for mothers who would release their babies for adoption. Strengthened adoption legislation in at least one State is attributed to the California investigation which was partially financed through Federal child welfare services funds.

Greater public awareness of the extent of the need for facilities for mentally retarded children (sparked by parental demands for improved services) has resulted in expanded residential facilities. Information available within the past year indicates that the number of State institutions in the United States has increased in the past three years from 99 to 111. The number of known private institutions has more than doubled—from 182 to nearly 400.[6]

Studies in various States indicate, however, that the addition of new facilities has not served to reduce the size of waiting lists, and that in many instances States have outstripped their fiscal capacity to build more institutions. These developments have focused attention on the need for more selective criteria in admissions, stepped up placement programs and expanded community services in foster family care, group day care, and other social services.

A number of States are reexamining their standards and licensing procedures relative to residential and day-care facilities for retarded children. In the main, these resources are sponsored by commercial interests or parent associations. Many facilities are substandard or in some instances exempt from licensing. This has led to the formulation of new standards, in which the Bureau's specialist in this area and some of the regional child welfare representatives have participated.

The Bureau has continued to work with national organizations, State agencies, and schools of social work in regard to training and education in mental retardation.

In line with the objective of enriching the curriculum of schools of social work with content on mental retardation, emphasis has been given to the development of case records and other teaching material.

Immigration of Cuban citizens and unattached children has become a problem of huge proportions in Miami, Florida. At the end of June, there were 657 unaccompanied Cuban children in foster care; 198 in the Miami area and 459 in 33 communities in 19 States. The vast majority of the children were under care of Catholic agencies. The Florida State Department of Public Welfare agreed to be the agent for the Department of Health, Education, and Welfare in planning for these children and in the use of Federal funds for their care. The administrative task is a very heavy one and the Florida State Department of Public Welfare has contributed an outstanding serv-

[6] Based on statistics collected by the National Institute of Mental Health (1959), and the 1960 American Association on Mental Deficiency Directory.

ice to the Nation in arranging care for these Cuban children. The Children's Bureau staff from both its central office and regional office has spent considerable time in consultation, both in the early planning for the program and now with the States where the children are being placed.

The Bureau has participated in the development of the Emergency Welfare Service Program by preparing guides and material on *Care and Protection of Children* as a part of the Emergency Social Services document. The report by Dunlap and Associates on *Protection of Institutionalized Population Against Fall Out*, which included five institutions for children, has been reviewed and changes recommended. Staff is also assisting in the development of a handbook for superintendents of welfare institutions, *Civil Defense Emergency Planning in Welfare Institutions*, related to the findings of the Dunlap Study.

Five Emergency Welfare Services regional or biregional meetings were held; one purpose of the meetings was to introduce to the States the basic document *Emergency Welfare Services—Guidelines and Structure* and its *Supplement A: Fiscal Policies and Federal-State Agreements.*

JUVENILE DELINQUENCY SERVICE

During the last half of the fiscal year, the Bureau's staff spent a great deal of time meeting with officials of the President's Committee on Juvenile Delinquency and Youth Crime, in securing and developing information for use by this Committee, and in developing the Administration's legislative program in the field of juvenile delinquency.

Juvenile delinquency continues to be a subject of great public interest and concern. Both Congress and State Legislatures were active.

State Legislation

The trend to the "get tough" attitude continued. In at least three States, bills were introduced to lower the juvenile court age. In one, a bill was introduced to raise it from 16 years to 18 years. Apparently none of these bills were passed.

In at least five States, bills were introduced which would have opened delinquency hearings to the public and permitted publications of names; in two of these jurisdictions, the bills were voted down, in three no action was taken.

Legislation imposing a financial liability on parents for the delinquent acts of children was introduced in at least six States; one law was passed but vetoed by the Governor, two laws were not passed,

and as far as it is known, no action was taken on the rest. About one-third of the States have now passed such laws. As far as is known, none of them have been tested as to constitutionality even though serious questions have been raised as to their legality and social desirability.

At least five States introduced legislation which would permit the establishment of camp programs; in four the legislation passed, and in one it was defeated.

In at least seven States, considerable activity has taken place with respect to the establishment of a family court. In at least nine jurisdictions, legislation was introduced amending the existing juvenile court statutes, some related to the strengthening of probation service and at least three to the improvement of detention facilities and procedures. Probably the most important State legislation in this area was that passed in California, which brings about major improvements in the juvenile court law. This was the result of a long, careful, well-documented study by the Governor's Committee on Criminal Justice. The legislation incorporated many of the newer standards advocated by the Children's Bureau in *Standards for Specialized Courts Dealing with Children* and the new revision of the *Standard Juvenile Court Act.*

The Interstate Compact on Juveniles was passed in four more States. This brings the number of States that joined the Compact to 34.

Consultation

The volume of consultation was greater this fiscal year than in previous years. Consultation in the field, by correspondence, or office interviews was provided in response to 815 requests. All but 12 of the States received some type of consultation service during the year. Over 80 foreign visitors were provided program information and technical assistance through office interviews.

Program Trends

Increased emphasis was evident on the community organization approach to achieve better planned and coordinated programs to reduce juvenile delinquency and to strengthen these programs. The urgent need for coordination and the spread of community organization concepts to achieve this were given impetus by the 1960 White House Conference on Children and Youth.

Interest and activity in planning and operating services and programs designed wholly or in part to prevent delinquency is very much on the increase. The conviction seems to be growing around the country that dollars and human resources channeled into sound preventive work are likely to yield more visible returns in checking the rise of juvenile delinquency.

The problem posed by the mounting number of unemployed out-of-school youth was of widespread concern during the past year, particularly in terms of the impact on the total delinquency problem. (The present unemployment rate is roughly 5 percent for all age brackets while unemployment among youth under 20 years of age is 20 percent or four times greater.)

As the population of sprawling metropolitan areas continues to grow, communities are intensifying their effort to develop an effective planning and coordinating mechanism. Hopefully, this will bring about more interagency teamwork and clarify functions among the many public and private programs concerned with juvenile delinquency.

The role of girl gang auxiliaries to hostile, aggressive boy gangs received attention in a number of urban areas. Recent newspaper stories calling attention to the existence of girl gangs have reminded the public that juvenile delinquency is not exclusively a male youth problem.

The contribution of citizen leaders to the overall national effort to reduce delinquency is growing. The effectiveness of strong lay committees having sound professional guidance in generating legislative and other action in behalf of children continues to be demonstrated in a large number of States and communities.

The battle against juvenile delinquency continues to be fought with inadequate weapons. Too few personnel, most of whom are inadequately prepared, have failed to stem the tide. Training courses on the local and State level, short courses at universities and colleges, stipends for students, graduate fellowships, curriculums for various kinds of police training—all represent major needs.

Professional staff of juvenile institutions are eager to learn how to introduce group services and apply principles of group living to strengthen institutional treatment programs. There seems to be a tendency among institutional workers to regard group programs as treatment shortcuts to what individual counseling and casework seek to accomplish. Another tendency is to lump group counseling, group therapy, leisure time activities, and group living concepts together without understanding wherein each is different.

Several States without a permanent statutory agency responsible for actively coordinating efforts in the youth field moved closer to this. These States are aware of the need for strengthened coordination and communication among all agencies and groups working on behalf of children and youth.

Significant progress was made toward consolidating the interest in delinquency prevention of official city, metropolitan (city-county) and State youth commissions throughout the country. Sustained consultation was given by the Bureau's delinquency staff during the year

to the Planning Committee established by these Commissions at their initial joint meeting in Washington in March 1960. This Committee was instructed to draft a statement of purpose together with recommendations for organization.

The name "Conference of Public Youth Agencies" was adopted by the organization to enable youth commissions such as those in Chicago and Detroit with a concern for youth welfare generally as well as delinquency prevention to be active members.

The publication *Police Contacts with Juveniles: Perspectives and Guidelines* is in draft form for reviewing purposes. It is being developed in cooperation with the International Association of Chiefs of Police, International Juvenile Officers' Association, International Association of Women Police, and the National Council on Crime and Delinquency.

The trend to building camps continues as a means of providing group care for delinquent boys. Reducing the average length of stay in a training school is a technique employed by many States to cope with the increased size of their institutional populations. Research continues to be a growing enterprise in the institutional field. Group counseling and group psychotherapy command considerable attention in the field in spite of the lack of personnel to carry it out. Increasing concern is reflected by the States about the institutional treatment of the older more aggressive youth. Other areas of interest in institutional problems include the function of halfway houses, adequate staff patterns for various kinds of institutions, how to effect necessary changes in a traditional program without disrupting the complete program, the development of an adequate intake and orientation program, etc.

A great number of courts, including judges and probation staff, continue to be concerned about the degree to which they are meeting their responsibilities. Difficulties are encountered in applying theoretical concepts to daily practices because many of the intervening steps—between the theory and daily practice—have not been spelled out; poorly trained court staff; inadequate budget and, in some instances, a lack of court leadership.

Although the clear statements of the definition of detention, the criteria of admission to detention, and the standards of good detention care (contained in the National Council on Crime and Delinquency's *Standards and Guides for Detention Care of Children and Youth*) are "accepted" on the surface, practice continues to reflect a wide divergence of thought with respect to the nature of detention care, which children should be detained, and what detention should accomplish. The number of detention homes continues to grow; unfortunately, the number of children held in jail does not seem to decrease.

International Activities

UNITED NATIONS INTERNATIONAL CHILDREN'S FUND

This was the first year for the new cycle of meetings—a program session in December and a major policy and program session in June.

At the mid-winter session (postponed from December to January because of the prolongation of the General Assembly) allocations were approved for $16 million to 122 projects bringing the total allocation for 1960 to $25,800,000. Increasing aid to Africa was emphasized. An emergency allocation of $286,000 was made to the Congo.

The Chief of the Bureau headed the U.S. Delegation to this meeting and the Deputy Chief served as Special Adviser.

The main Board session was held in June. From the standpoint of program orientation this meeting was one of the most important in UNICEF's history. Major changes in policy were before the Board and were accepted in toto with strong support from the U.S. Delegation.

Stated simply, instead of having a limited "line" of kinds of aid which countries may have, UNICEF will encourage countries to survey their own needs, come up with their priorities for children, and request aid in these terms. The Board had before it surveys of children's needs produced by the Specialized Agencies of the United Nations and some countries, which pointed up the wide range of problems and the different priorities assigned to these in different parts of the world. This survey of needs was the basis for a policy change toward greater flexibility in programs with a wider spectrum from which a country might choose.

On the basis of another survey—that of training in UNICEF-assisted projects—the policy of greater assistance to training, especially for training facilities *within* countries was adopted. The kinds of aid UNICEF may extend to training projects have been expanded to include payment of salaries of instructors, stipends, and fellowships for trainees, as well as equipment and supplies.

Continuing aid to malaria eradication with the current ceiling of $10 million per year was accepted, after considerable debate as to its appropriateness, as well as concern for the failures of some campaigns.

At this session about $10 million was allocated to 83 projects in 51 countries and territories.

The only unusual project was a program for the Congo (Leopoldville) to initiate training for unemployed youth and to stimulate self-help at the village level.

The Deputy Chief of the Bureau served as Special Adviser on the Delegation; Mr. Fred DelliQuadri, as U.S. Representative.

On the invitation of the Mexican Government, the Program Committee of UNICEF spent a week in Mexico preceding the Board meeting, to visit health programs. Seventeen representatives from as many countries spent a very profitable as well as pleasurable time seeing the "grass roots" of UNICEF aid. The Deputy Chief of the Bureau represented the United States. The group saw urban and rural health centers, visited training centers, village sanitation projects, malaria eradication programs, hospitals, nurseries, and even homes.

The malaria eradication program, assisted by UNICEF, provided opportunity for observation of house spraying in remote rural areas. Land once uninhabitable because of malaria is now free of the disease, and people are now living there. The group visited several of these projects—small communities of about 100 families.

The group visited a number of health centers, which are being opened at the rate of one a day in Mexico. UNICEF provides equipment and assists with training of staff for these centers.

MATERNAL AND CHILD CARE AND RELATED RESEARCH MISSION TO THE U.S.S.R.

In mid-October the mission went to the Soviet Union for a 30-day study of research relating to the perinatal and early infancy periods of life. Sponsored by the National Institute of Neurological Diseases and Blindness, this mission was the first of five in the field of Public Health and the Medical Sciences for the 1960–61 period.

The mission was composed of the Deputy Chief of the Bureau, Dr. Stewart Clifford, Chairman, of Children's Hospital, Boston; Dr. Allan C. Barnes, Professor and Chairman of the Department of Obstetrics and Gynecology, Johns-Hopkins Hospital; Dr. Bernard G. Greenberg, of the University of North Carolina School of Public Health; Dr. Edith L. Potter, Professor of Pathology, University of Chicago; and Dr. Fred S. Rosen, Research Fellow in Medicine at Children's Hospital in Boston.

During their 4-week stay the mission visited about 30 institutions in the four cities of Moscow, Leningrad, Kiev, and Tbilisi. Hospitals, clinics, research institutes, creches, kindergartens, and a collective farm were seen and many research workers interviewed.

INTERNATIONAL RESEARCH (FOREIGN CURRENCY PROGRAM)

Under authority of sec. 104(k) of P.L. 480 delegated to the Department of Health, Education, and Welfare and redelegated by the Secretary to the Commissioner of Social Security, the Children's Bureau developed a program and budget proposals for 1962 for projects in its sphere of responsibility. Eight are in maternal and child health in six countries, two are for child welfare in four countries, and one

project is for juvenile delinquency. The program is implemented through the use of excess foreign currencies.

The International Health Research Act of 1960 (P.L. 610) which would have provided a somewhat broader program in child health research was not activated.

CONSULTANT SERVICES

Six professional people recruited by the Children's Bureau worked abroad under the International Cooperation Administration during the year: three social workers, one physician, and two nurses. One of these nurses, in Guatemala, has participated in the planning of a nationwide maternal and child health program, for which the Children's Bureau is at present training a doctor and a nurse from Guatemala.

TRAINING

During the year the Children's Bureau planned and arranged training programs for 64 specialists from 28 countries. Thirty-one of these were physicians, 1 was a dentist; there were 12 nurses, 10 social workers, 5 police officials, 1 judge, 2 lawyers, and a minister and his wife.

The large majority of the physicians pursued a clinical specialty, 12 in obstetrics and gynecology and 9 in pediatrics. The others studied in the field of maternal and child health.

Ten of the 12 nurses attended a college of nursing and followed a program which emphasized either pediatric or maternity nursing. Four of these are candidates for a degree—two for the B.S. and two for the M.S.

Of the 11 trainees who had a primary interest in welfare services for children, 10 were social workers and 1, a lawyer, was an administrative official in the French Ministry of Labor and Social Security.

Five police officials, a judge, and one lawyer all came to the Bureau for program planning because their major interest was juvenile delinquency.

The largest group of trainees (48) was sponsored by ICA and physicians accounted for the majority of these trainees.

Both the number of professions represented by the students for whom programs are planned and implemented, and the type of subspecialty training requested, demonstrate the need for continuing exploration of academic and observation training resources. For example, two pediatricians wished further specialization—one in the study of tuberculosis in children and one in neurology. Several of the social workers requested that a major part of their observation experience be devoted to the organized use of volunteers and programs for training volunteers. The administration of recreation programs not

only in neighborhood houses, but those organized on a city- or county-wide basis was an important item for several of the child welfare students.

Vietnam sent the largest number of students from a single country—eight, of whom six were physicians—followed by India and Thailand with seven each. Vietnam, Thailand, and India sent 14 of the 31 physicians. The concentration in these countries is probably a reflection of their plan to upgrade the quality of medical schools and medical care. The fact that all three of the Iraqi physicians received degrees in public health in the maternal and child health sequence is indicative of Iraq's interest in extending maternal and child health services throughout the country.

Twenty-eight of the 64 students had programs which lasted 12 months, the most frequent time period, and the programs for 8 were from 6 to 12 months' duration. Fifteen of the students, all of them sponsored by ICA, either completed or are still following programs of 18 months or longer. Of these, 10 are physicians, all in clinical specialties, 4 are nurses and 1 is a social worker.

At the end of the fiscal year, 38 students were continuing their programs into the new year. A number of these will return to their homelands in the early fall to be replaced by new students beginning training in the United States.

International visitors come to the Bureau from a number of sources, governmental and private, and many come on their own. They are interested in learning about the function and programs of the Bureau or have a specific interest in one or more of the Bureau's areas of responsibility. During the year, 170 different visitors came from 70 countries.

Appointments programmed for visitors ranged from conferences of an hour or two to programs extending several days to nearly two weeks. They sometimes included observation in and around Washington or in and around the locale of a regional office. The Bureau's visitors represent a wide variety of professions, backgrounds and interests.

Agencies such as the American Council on Education, the Governmental Affairs Institute and the National Social Welfare Assembly, which have contracts with the International Educational Exchange Service of the Department of State for training of foreign specialists, sometimes ask for guidance in selecting appropriate resources to which to send their visitors.

CONSULTATION TO AMERICAN SPECIALISTS EN ROUTE TO FOREIGN ASSIGNMENTS

While the number of American specialists who came to the Bureau for briefing before undertaking foreign assignments is small, it

represents an interesting recognition of the Bureau's international interests. For example, among these specialists was a social worker going to India to work in a child guidance clinic; another was a psychiatric social worker going to Afghanistan, Pakistan and Iran under the auspices of the State Department; another, a USIA Women's Activities Adviser who came to the Bureau for orientation.

TRANSLATIONS

Last year a social worker in El Salvador made a Spanish translation of the Children's Bureau pamphlet, *Child Caring Institutions*, by Martin Gula, but was unable to make arrangements to have it published. The Inter-American Children's Institute took over the task of editing and publishing the translation titled *Internados de Bienestar Infantil* and has distributed it through the Spanish-speaking countries.

The Instituto San Gabriel Arcangel, a school for mentally retarded children in Lima, Peru, is in the process of translating the Children's Bureau pamphlet, *The Mentally Retarded Child at Home.*

OTHER ACTIVITIES

Work was done on the development of material for the Peace Corps in relation to services in the fields of child welfare and maternal and child health that might be given abroad by members of the Corps.

A publication, *The International Activities of the Children's Bureau*, was written in cooperation with the Division of Reports.

Summary

Fiscal 1961 brought many new and challenging opportunities to the Children's Bureau. These were expressed in amendments to title V of the Social Security Act that raised the authorization of the three grant programs to a new high, authorized new research and demonstration project grants in child welfare, and provided that special project grants in the maternal and child health and crippled children's programs could be made directly to institutions of higher learning.

The recommendations of the 1960 White House Conference on Children and Youth were furnishing the impetus for many State and local agencies to reevaluate what they were doing to meet the needs of children and youth. In concert with these agencies the Children's Bureau was analyzing its own functions in terms of 10-year goals. The advent of the new administration also was a potent force leading to the general reexamination of health and welfare programs.

Fiscal 1961 was a year of steady progress and development for the Children's Bureau and its programs.

Federal Credit Unions

The need for a Federal credit union program that existed in 1934 when the program was established still exists today. Established to provide a source of credit for persons of small means and to stimulate systematic savings, the program continues to promote sound credit and thrift practices among credit union members.

The extent to which the program has strengthened family life, raised the standard of living of the members, and increased their self-reliance measures its effectiveness, but these are intangibles that are difficult, if not impossible, to measure. People were faced with financial problems in 1934, and they are faced with similar worries in 1961. An effective credit union program has helped to ameliorate these difficulties for its members in depression times and in times of economic prosperity. During 1960 alone, more than 4½ million loans amounting to nearly $3 billion were made to members of Federal credit unions, and the 6.1 million members had savings in their credit unions in excess of $2.3 billion as the year ended.

Loans have been made for a vast variety of provident and productive purposes. Members have financed a better education for themselves or their children, paid for needed medical, hospital, or dental care, bought livestock and equipment to operate their farms, and used the proceeds of a loan for numerous other necessary or desirable purposes.

Other members have used their savings to accomplish these purposes, making a loan unnecessary. Savings have been encouraged in amounts as small as 25 cents, and the bulk of the savings accumulated in credit unions has come from small amounts set aside regularly. Average savings in Federal credit unions amounted to nearly $400 per member at the end of 1960, and since these savings were accumulated in small amounts at a time, much of it would have been frittered away had it not been for the existence of a convenient place to save in the credit union.

There are at the present time two major gaps in the program. While there are now more than 6 million families participating in the Federal credit union program, potential membership exceeds 11 million. Thus, only slightly more than half—54 percent at the end of 1960—of the potential members actually belong to their credit unions. Continuing educational programs are needed to accomplish wider participation in the program, although slow but steady improvement has been noted. Where only 39 percent of the potential members were actually participating in the program at the end of 1950, the proportion grew to 46 percent by the end of 1955, and continued up to 54 percent on December 31, 1960.

Credit union service to low income groups is the other area that can and should be expanded. Chartering has been predominantly in factories and other industrial establishments, among workers who

have shifted out of the low income category since the depression days of the 1930's. Federal credit unions today serve the middle-income group, for the most part. Means to accomplish successful operation of credit unions among low income groups are being explored, and an early solution is anticipated that will make possible the chartering of Federal credit unions for these groups.

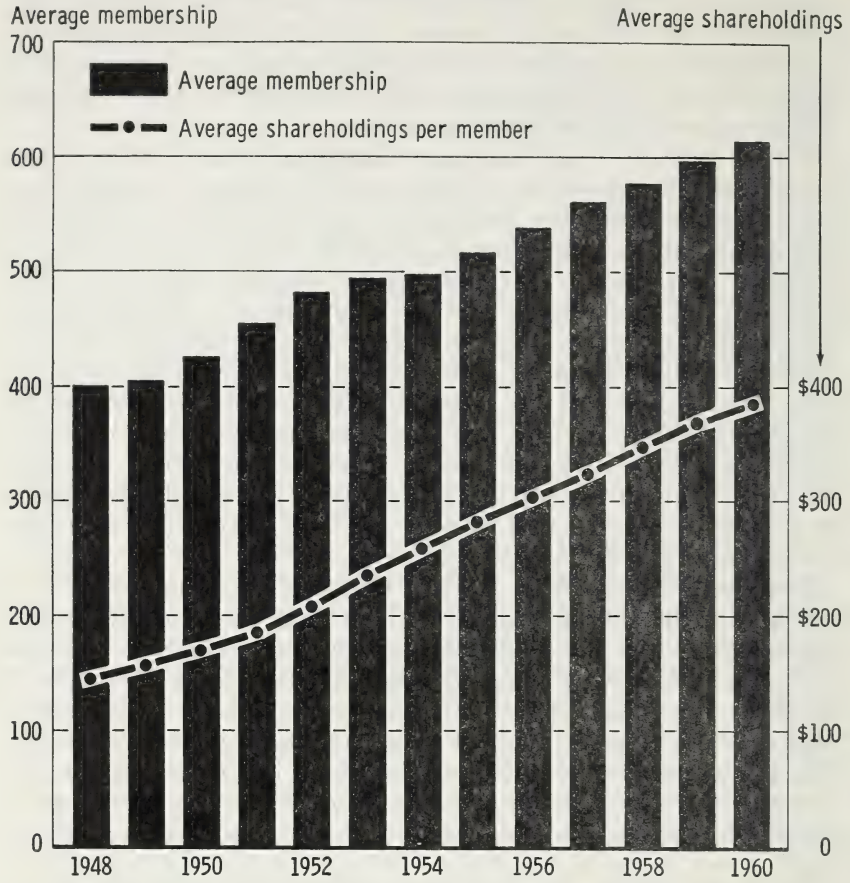
Moving forward to fill in the gaps already noted and further extension of credit union service to millions of our citizens are challenges that will remain with the Bureau far into the future. Growth has been encouraging up to now—it behooves us to do all we can to accelerate that growth. Usurious money lenders continue to take a heavy toll of the worker's income, and with the continually mounting pressure on consumers to go into debt, the need for consumer education in the wise use of credit becomes increasingly more important. The expansion in consumer credit has not lessened the need for savings, and continuing stimulation of systematic savings by the members will go far to allay their fears of financial insecurity. Realization of these objectives will aid in stabilizing the credit structure of the United States, and will provide a further market for securities of the United States.

Issuance of the 10,000th active Federal credit union charter in March 1961 marked an important milestone in credit union history. In presenting the charter to employees of the Inter-American Development Bank, Secretary Ribicoff said, "This charter has special significance since your credit union now becomes the 10,000th active Federal credit union and a part of a program which since June 26, 1934, has effectively demonstrated that these free enterprise institutions owned, controlled and managed by their members do render a genuine thrift service to the people of America and other lands as well."

Some 6,300,000 members had accumulated $2½ billion in savings (shares) in their Federal credit unions as fiscal year 1961 ended. Although savings in Federal credit unions represent only a small fraction—less than 1 percent—of the total investments of individuals in savings accounts, U.S. Government bonds, and life insurance reserves, an accumulation of this magnitude represents a significant achievement in thrift among the members. These savings have been amassed slowly, often in amounts of a dollar or so at a time, and because of this, it is quite likely that very little of this amount would have been saved had credit union facilities not been available.

Savings not only benefit the savers, but the borrowers as well, since these savings represent the bulk of the funds available to the credit unions for lending purposes. Stimulated by the 1959 amendments to the Federal Credit Union Act, borrowings are now at an all-time high. In 1960, Federal credit union lending approached the $3-billion level, and on December 31, 1960, loans outstanding topped the $2-billion mark for the first time. A stepped-up demand for loans, which has outpaced the growth in savings in the past 2 years,

CHART 7.—AVERAGE MEMBERSHIP PER FEDERAL CREDIT UNION AND AVERAGE SHARE HOLDINGS PER MEMBER, DECEMBER 31, 1948–60



has resulted in increased borrowing by credit unions, liquidation of some of their investments, or both, in order to raise cash for lending purposes. Moving up 22 percent over the 1959 level, notes payable in Federal credit unions in 1960 represented 2.7 percent of their total liabilities, the largest proportion in 10 years. Total investments of Federal credit unions fell sharply in 1960, dropping not only below the 1959 level, but below the 1958 amount as well. This was the first year-to-year decline in investments since 1948.

In the past 10 years, Federal credit unions have doubled in number, and resources have increased sixfold. Membership has tripled, and shareholdings are now some seven times the amount a decade ago.

Communication between the Bureau and the Federal credit unions has been improved during the past year with publication of a new *Bulletin.* The first issue was sent to all Federal credit unions in March 1961, and numerous credit union officials have sent in favorable comments and many worthwhile suggestions for future issues. The *Bulletin* keeps officials currently informed on program developments.

Two other major strides in improving communications with Federal credit unions were taken during the fiscal year with completion of a new *Handbook for Federal Credit Unions* and with the drafting of a new *Supervisory Committee Manual.* Both of these manuals are scheduled for distribution before the end of 1961.

Recognition by the President of the value of self-help cooperatives and credit unions in helping to solve the social and economic problems of other countries gave impetus toward greater participation by the Bureau in international activities. The Bureau is working closely with the ICA Cooperative Review Committee, which is developing plans and policies to assist these self-help cooperatives in other countries of the free world.

By continuously streamlining and improving procedures, the Bureau continues to meet its expenses of operation through fees paid by the Federal credit unions, and without appropriation of general funds. Increasing costs of operations, primarily resulting from periodic pay increases and other benefits for Bureau employees, have been absorbed without a corresponding increase in fees, and the fee schedule established in August 1958 remains unchanged as fiscal year 1961 ended. There were no amendments to the Federal Credit Union Act during the year.

Table 1.—*Social Security Administration: Funds available and obligations incurred, fiscal years 1961 and 1960* [1]

[In thousands, data as of June 30, 1961]

	Funds available [2]		Obligations incurred	
	1961	1960	1961	1960
Total	$2,471,014	$2,274,364	$2,470,676	$2,268,911
Grants to States	2,228,833	2,084,000	2,231,990	2,079,979
Public assistance [3]	2,177,000	2,037,500	2,180,466	2,033,761
Old-age assistance			1,211,709	1,157,523
Aid to the blind			48,517	48,824
Aid to dependent children			704,108	660,232
Aid to the permanently and totally disabled			182,625	167,182
Medical assistance for the aged			33,507	
Maternal and child health and welfare services	51,833	46,500	51,524	46,218
Maternal and child health services	18,167	17,500	18,114	17,443
Services for crippled children	20,000	16,000	19,797	15,873
Child welfare services	13,666	13,000	13,613	12,902
Cooperative Research and Demonstration Projects	350		347	
Administrative expenses [4]	241,831	190,364	238,339	188,932
Office of the Commissioner [5]	669	613	659	602
Bureau of Old-Age and Survivors Insurance [6]	232,200	181,600	228,909	180,476
Bureau of Public Assistance	2,727	2,345	2,677	2,280
Children's Bureau [7]	2,494	2,300	2,486	2,278
White House Conference on Children and Youth	150	200	146	198
Bureau of Federal Credit Unions	3,591	3,306	3,462	3,098

[1] Funds available and obligations reported by administrative agencies.

[2] Funds made available by regular and supplemental appropriations, authorizations, transfers, allotments, recoveries, and fee collections for services rendered.

[3] Includes $3,465,750 used from 1962 appropriation to complete 1961 requirements.

[4] Funds made available and obligations incurred for salaries, printing and binding, communications, traveling expenses, and all other objects of expenditure.

[5] Appropriations by Congress from general revenues accounted for approximately 50 percent of the administrative expenses of the Office of the Commissioner in 1960 and 1961; balance from old-age and survivors insurance trust fund.

[6] Administrative costs of the old-age, survivors, and disability insurance program which involved benefit payments of $10,798,000,000 in 1960 and $11,884,000,000 in 1961. Does not include construction costs of new buildings as follows: *Funds available:* 1960, $7,633,744; 1961, $5,179,585. *Obligations incurred:* 1960, $2,454,189 1961, $4,212,692.

[7] Includes expenses for investigating and reporting on matters pertaining to the welfare of children authorized by the act of 1912, as well as expenses for administration of grants to States.

Table 2.—*Financing social insurance under the Social Security Act: Contributions collected and trust fund operations, fiscal years 1959–61*

[In millions; independently rounded]

Item	1961	1960	1959
Contributions collected under—			
Federal Insurance Contributions Act [1] [2]	$12,315	$10,830	$8,460
Federal Unemployment Tax Act [3]	345	341	324
State unemployment insurance laws [4] [5]	2,361	2,165	1,675
Old-age and survivors insurance trust fund:			
Receipts, total	11,815	10,342	8,105
Net appropriations and deposits	11,293	9,843	7,565
Net interest and profits on investments	522	500	540
Expenditures, total	11,743	11,055	9,377
Monthly benefits and lump-sum payments	11,185	10,270	9,049
Transfers under financial interchange with railroad retirement account [2]	322	583	121
Administration	236	202	206
Assets, end of year	20,900	20,829	21,541
Disability insurance trust fund:			
Receipts, total	1,082	1,061	928
Net appropriations and deposits	1,022	987	895
Transfers from railroad retirement account [6]		26	
Net interest and profit	60	48	33
Expenditures, total	746	560	360
Monthly benefits	704	528	339
Transfers to railroad retirement account [6]	5		
Administration	36	32	21
Assets, end of year	2,504	2,167	1,667
State accounts in unemployment trust fund:			
Receipts, total	2,614	2,351	2,126
Deposits [5]	2,417	2,169	1,946
Interest	196	182	179
Withdrawals for benefit payments	3,558	2,366	2,797
Assets, end of year	5,729	6,673	6,688

[1] Contributions on earnings up to and including $4,200 a year in 1958 and $4,800 a year beginning Jan. 1, 1959. Contribution rate paid by employers and employees: 2¼ percent each beginning Jan. 1, 1957; 2½ percent each beginning Jan. 1, 1959; 3 percent each beginning Jan. 1, 1960. Contribution rate paid by self-employed: 3⅜ percent beginning Jan. 1, 1957; 3¾ percent beginning Jan. 1, 1959; 4½ percent beginning Jan. 1, 1960. Includes deposits by States under voluntary agreements for coverage of State and local employees. Includes deductions to adjust for reimbursements to general funds of the Treasury of the estimated amount of employee taxes subject to refund on wages in excess of wage base.

[2] Includes old-age and survivors insurance and, beginning Jan. 1, 1957, disability insurance contributions.

[3] Prior to 1957 tax could be paid in quarterly installments by employers of 8 or more; beginning Jan. 31, 1957, tax payable annually on preceding year's wages by employers of 4 or more. Rate is 3 percent (beginning Jan. 1, 1961, 3.1 percent) on first $3,000 a year of wages paid to each employee by subject employer. Because of credit offset, permitted for contributions paid under State unemployment insurance laws (or for full contribution if reduced by State experience rating provisions), effective rate of 0.3 percent (beginning Jan. 1, 1961, 0.4 percent) of such wages.

[4] Contributions plus penalties and interest collected from employers and contributions from employees, reported by State agencies.

[5] Contributions and deposits by States usually differ slightly, because of time lag in making deposits. Deposits in the State accounts also include loans from the Federal unemployment account of the unemployment trust fund and the distribution of Federal tax collections among the States under the Employment Security Administrative Financing Act of 1954.

[6] Under the financial interchange with the railroad retirement account the two social security trust funds are to be placed in the financial position in which they would have been had railroad employment always been covered under the Social Security Act.

Source: Compiled from *Final Statement of Receipts and Expenditures of the United States Government*, other Treasury reports, and State agency reports.

Table 3.—*Old-age, survivors, and disability insurance: Number of families and beneficiaries receiving benefits and average monthly benefit in current-payment status, by family group, end of December 1960 and December 1959*

[In thousands, except for average benefit]

Family classification of beneficiaries	Dec. 31, 1960			Dec. 31, 1959		
	Number of families	Number of beneficiaries	Average monthly amount per family	Number of families	Number of beneficiaries	Average monthly amount per family
Total	10,959.6	14,844.6		10,112.8	13,703.9	
Retired-worker families	8,061.5	10,599.0		7,525.6	9,931.6	
Worker only	5,741.8	5,741.8	$69.90	5,320.7	5,320.7	$68.70
Male	2,921.7	2,921.7	79.90	2,755.3	2,755.3	78.00
Female	2,820.2	2,820.2	59.60	2,565.4	2,565.4	58.70
Worker and aged wife	2,122.0	4,243.9	123.90	2,029.4	4,058.8	121.60
Worker and young wife [1]	1.0	2.0	111.00	.8	1.6	118.60
Worker and aged dependent husband	14.3	28.6	105.50	14.7	29.3	103.60
Worker and 1 or more children	50.2	113.4	119.40	44.8	102.5	118.90
Worker, wife aged 65 or over, and 1 or more children	22.0	67.4	157.60	13.0	39.9	157.30
Worker, young wife, and 1 or more children	109.9	401.2	152.30	102.1	378.3	151.70
Worker, husband, and 1 or more children	.2	.6	115.70	.2	.5	123.70
Survivor families	2,442.8	3,558.1		2,252.8	3,312.0	
Aged widow	1,527.3	1,527.3	57.70	1,380.1	1,380.1	56.70
Aged widow and 1 or more children	14.2	29.2	112.90	11.4	23.6	111.20
Aged widow and 1 or 2 aged dependent parents	.3	.6	131.00	.1	.3	130.50
Aged dependent widower	2.0	2.0	54.10	1.9	1.9	53.40
Widower and 1 or more children	[2]	.1	84.40	[2]	[2]	92.60
Widowed mother only [1]	1.4	1.4	64.20	1.1	1.1	55.40
Widowed mother [1] and 1 aged dependent parent	[2]	[2]	173.70	0	0	0
Widowed mother and 1 child	171.9	343.9	131.70	159.7	319.4	129.70
Widowed mother and 2 children	113.4	340.1	188.00	106.4	319.2	170.70
Widowed mother and 3 or more children	113.8	547.6	181.70	108.2	520.1	178.60
Widowed mother, 1 or more children, and 1 or 2 aged dependent parents	.5	1.8	214.70	.4	1.6	219.40
Divorced wife and 1 or more children	.4	1.0	163.40	.3	.9	166.80
1 child only	296.4	296.4	58.50	282.6	282.6	56.90
2 children	106.6	213.2	122.50	110.4	220.8	101.30
3 children	38.3	115.0	155.00	36.1	108.4	129.50
4 or more children	22.6	102.5	157.20	21.6	97.1	148.00
1 or more children and 1 or 2 aged dependent parents	.7	1.5	137.60	.8	1.8	136.80
1 aged dependent parent	31.6	31.6	60.90	29.8	29.8	59.60
2 aged dependent parents	1.5	3.0	107.90	1.7	3.3	104.80
Disabled-worker families	455.4	687.5		334.4	460.4	
Worker only	356.8	356.8	87.90	275.3	275.3	87.90
Male	261.3	261.3	91.90	206.3	206.3	91.90
Female	95.5	95.5	76.90	69.0	69.0	76.10
Worker and aged wife	21.7	43.5	135.60	17.4	34.8	135.90
Worker and young wife [1]	.2	.4	143.20	.2	.5	133.20
Worker and aged dependent husband	.2	.4	120.70	.2	.3	116.60
Worker and 1 or more children	22.0	55.8	154.40	11.2	28.2	153.90
Worker, wife aged 65 or over, and 1 or more children	.1	.3	186.20	[2]	.1	204.00
Worker, young wife and 1 or more children	54.4	230.3	189.10	30.1	121.1	185.60

[1] Benefits to children were being withheld.
[2] Less than 50.

Table 4.—*Old-age, survivors, and disability insurance: Number and amount of monthly benefits in current-payment status at end of June 1961 and amount of benefit payments in fiscal year 1961, by State*

[In thousands]

Beneficiary's State of residence	Monthly benefits in current-payment status, June 30, 1961						Benefit payments in fiscal year 1961 [2]			
	Total		OASI [1]		DI [1]		Total	OASI [1]		DI [1]
	Number	Monthly amount	Number	Monthly amount	Number	Monthly amount		Monthly benefits	Lump-sum death payments	
Total	15,624.2	$992,032	14,726.5	$931,705	897.7	$60,327	$11,888,527	$11,017,539	$166,993	$703,995
Alabama	253.3	12,996	229.0	11,602	24.3	1,395	154,608	136,487	2,190	15,931
Alaska	6.4	374	6.1	357	.3	17	4,543	4,218	107	218
American Samoa	[3]	1	[3]	1	0	0	11	11	[4]	0
Arizona	91.3	5,824	83.9	5,298	7.4	525	68,758	61,596	861	6,301
Arkansas	170.6	8,537	159.4	7,896	11.2	642	101,805	92,873	1,331	7,601
California	1,218.8	81,299	1,158.0	76,643	60.8	4,656	968,400	901,303	13,633	53,464
Colorado	130.3	8,140	124.1	7,717	6.3	423	97,047	91,028	1,370	4,649
Connecticut	232.8	16,858	222.7	16,082	10.1	776	203,529	191,417	2,807	9,305
Delaware	34.5	2,281	32.6	2,139	2.0	141	27,276	25,251	387	1,638
District of Columbia	52.1	3,191	49.0	2,977	3.1	214	38,441	35,297	759	2,385
Florida	513.0	33,395	482.7	31,318	30.3	2,077	397,142	368,125	4,402	24,615
Georgia	270.1	13,939	243.2	12,436	26.8	1,503	165,636	145,965	2,510	17,161
Guam	.1	5	.1	5	[3]	[4]	62	61	1	[4]
Hawaii	32.3	1,902	30.2	1,764	2.1	138	22,542	20,738	282	1,522
Idaho	56.7	3,493	54.2	3,328	2.5	165	41,641	39,268	508	1,865
Illinois	882.2	60,539	839.6	57,357	42.6	3,182	728,589	681,333	10,289	36,967
Indiana	435.6	28,418	413.8	26,887	21.8	1,531	341,968	319,740	4,587	17,641
Iowa	279.8	17,501	270.1	16,850	9.7	650	208,518	198,342	2,591	7,585
Kansas	203.1	12,338	194.4	11,755	8.7	583	147,066	138,330	2,076	6,660
Kentucky	291.4	15,565	264.0	14,107	27.5	1,458	186,390	167,071	2,514	16,805
Louisiana	201.9	10,894	182.6	9,802	19.3	1,092	129,083	114,514	2,102	12,467
Maine	104.7	6,325	99.3	5,988	5.4	336	76,764	71,673	1,043	4,048
Maryland	205.1	13,058	193.4	12,233	11.7	825	157,029	144,841	2,520	9,668
Massachusetts	519.4	35,536	495.1	33,783	24.3	1,753	431,567	403,905	6,366	21,296
Michigan	663.0	46,399	626.7	43,716	36.3	2,683	554,673	516,709	7,170	30,794
Minnesota	309.5	19,474	298.8	18,750	10.7	724	231,915	220,959	2,617	8,339
Mississippi	171.2	7,783	158.0	7,094	13.2	689	92,231	83,195	1,265	7,771
Missouri	423.9	26,146	401.3	24,651	22.6	1,495	312,931	291,490	4,192	17,249
Montana	61.0	3,924	58.3	3,739	2.7	185	47,085	44,290	657	2,138

Nebraska	138.0	8,366	133.7	8,078	4.3	288	99,783	95,129	1,280	3,374
Nevada	17.1	1,145	16.2	1,074	.9	71	13,633	12,530	274	829
New Hampshire	64.8	4,201	62.1	4,013	2.7	189	50,764	47,719	768	2,277
New Jersey	546.1	38,758	520.1	36,774	26.0	1,984	468,016	437,482	6,959	23,575
New Mexico	50.6	2,718	47.2	2,521	3.5	196	31,964	29,283	457	2,224
New York	1,579.0	109,823	1,502.0	104,065	76.9	5,758	1,319,116	1,231,115	19,925	68,076
North Carolina	343.1	17,626	313.7	15,971	29.3	1,655	210,334	187,499	3,323	19,512
North Dakota	53.3	3,181	51.6	3,084	1.7	97	37,653	36,205	417	1,031
Ohio	834.2	56,376	788.1	53,079	46.1	3,296	678,834	630,688	9,517	38,629
Oklahoma	195.0	11,245	183.6	10,500	11.4	745	133,402	122,921	1,812	8,669
Oregon	179.7	11,849	171.3	11,244	8.4	605	141,961	133,195	1,857	6,909
Pennsylvania	1,085.2	73,504	1,021.0	68,825	64.2	4,679	892,148	822,839	12,859	56,450
Puerto Rico	113.2	3,731	108.5	3,582	4.8	149	42,857	40,866	453	1,538
Rhode Island	89.2	6,021	84.6	5,691	4.6	330	73,183	68,107	1,034	4,042
South Carolina	163.8	8,230	147.3	7,309	16.5	921	98,113	85,954	1,632	10,527
South Dakota	63.5	3,770	61.5	3,642	2.1	128	44,650	42,648	574	1,428
Tennessee	288.1	14,803	265.1	13,499	23.0	1,305	176,144	158,550	2,530	15,064
Texas	644.2	36,162	602.9	33,593	41.3	2,569	425,803	390,206	6,539	29,058
Utah	58.0	3,708	55.6	3,545	2.4	163	44,549	42,046	646	1,857
Vermont	40.9	2,488	38.5	2,339	2.4	148	29,893	27,776	414	1,703
Virgin Islands	1.3	55	1.2	54	[3]	1	604	586	5	13
Virginia	288.6	15,913	264.0	14,458	24.6	1,455	191,326	171,061	3,173	17,092
Washington	257.1	17,144	245.2	16,270	11.9	873	206,792	193,696	2,867	10,229
West Virginia	198.5	11,532	173.3	10,078	25.2	1,454	139,178	120,430	1,696	17,052
Wisconsin	388.4	25,364	372.0	24,224	16.3	1,139	303,413	286,082	3,860	13,471
Wyoming	24.0	1,518	22.9	1,440	1.2	79	18,002	16,835	295	872
Foreign	105.1	6,669	102.7	6,480	2.4	189	79,162	76,061	690	2,411

[1] Benefits under the old-age and survivors insurance (OASI) parts of the old-age, survivors, and disability insurance program are payable from the OASI trust fund to old-age (retired-worker) beneficiaries and their dependents and to survivors of deceased workers. Benefits under the disability insurance (DI) part of the program are payable from the DI trust fund to disability (disabled-worker) beneficiaries and their dependents.

[2] Distribution by State estimated.

[3] Less than 50.

[4] Less than $500.

Table 5.—*Old-age, survivors, and disability insurance: Selected data on employers, workers, taxable earnings, and contributions, by State for specified periods*

[*In thousands, except for average taxable earnings. Preliminary, corrected to October 24, 1961*]

State	Employers reporting taxable wages July–September 1960 [1]	Calendar year 1958 [2]			
		Workers reported with taxable earnings	Reported taxable earnings [3]		Contributions [4]
			Total	Average per worker	
Total	4,230	70,000	$180,892,000	$2,580	$7,942,900
Alabama	62	1,060	2,195,000	2,070	96,600
Alaska	4	70	172,000	2,460	7,600
Arizona	28	440	1,015,000	2,310	44,700
Arkansas	39	570	976,000	1,710	42,000
California	371	5,950	15,745,000	2,650	691,400
Colorado	42	700	1,489,000	2,130	64,800
Connecticut	65	1,120	3,159,000	2,820	139,600
Delaware	13	230	601,000	2,610	26,600
District of Columbia	29	460	1,002,000	2,180	44,600
Florida	130	1,790	3,490,000	1,950	152,600
Georgia	89	1,430	2,789,000	1,950	122,500
Hawaii	12	210	526,000	2,500	23,200
Idaho	15	280	606,000	2,160	25,900
Illinois	235	4,340	11,872,000	2,740	521,500
Indiana	93	1,880	5,050,000	2,690	221,600
Iowa	68	1,110	2,576,000	2,320	108,100
Kansas	53	890	2,031,000	2,280	87,500
Kentucky	60	950	1,961,000	2,060	85,000
Louisiana	64	1,010	2,178,000	2,160	95,800
Maine	25	400	761,000	1,900	33,300
Maryland	76	1,170	2,894,000	2,470	127,800
Massachusetts	121	2,170	5,536,000	2,550	244,900
Michigan	160	2,960	8,369,000	2,830	369,800
Minnesota	75	1,280	3,094,000	2,420	133,400
Mississippi	40	630	1,043,000	1,660	45,500
Missouri	107	1,830	4,336,000	2,370	189,200
Montana	17	290	635,000	2,190	27,200
Nebraska	38	640	1,292,000	2,020	54,300
Nevada	8	140	302,000	2,160	13,300
New Hampshire	17	260	570,000	2,190	25,100
New Jersey	157	2,600	7,017,000	2,700	309,700
New Mexico	19	300	603,000	2,010	26,300
New York	496	7,880	22,255,000	2,820	983,300
North Carolina	100	1,690	3,408,000	2,020	149,200
North Dakota	14	240	483,000	2,010	19,600
Ohio	202	3,700	10,133,000	2,740	447,200
Oklahoma	50	820	1,738,000	2,120	75,100
Oregon	44	730	1,778,000	2,440	77,700
Pennsylvania	255	4,650	12,686,000	2,730	559,800
Puerto Rico	18	590	479,000	810	21,100
Rhode Island	21	360	867,000	2,410	38,200
South Carolina	48	790	1,530,000	1,940	67,300
South Dakota	18	260	524,000	2,020	21,300
Tennessee	78	1,260	2,589,000	2,050	113,400
Texas	229	3,560	7,766,000	2,180	339,100
Utah	17	340	760,000	2,240	33,300
Vermont	11	150	311,000	2,070	13,500
Virginia	88	1,370	2,834,000	2,070	124,700
Virgin Islands	1	10	11,000	1,100	400
Washington	65	1,150	2,871,000	2,500	125,700
West Virginia	37	650	1,562,000	2,400	69,200
Wisconsin	94	1,470	3,841,000	2,610	167,000
Wyoming	9	140	295,000	2,110	12,700
Foreign [5]	----------	80	213,000	2,660	9,400
Ocean-borne vessels	----------	130	395,000	3,040	17,800
Uniformed services (on basic pay)	----------	3,400	5,682,000	1,670	255,700

[1] Data represent number of employers reporting taxable wages by the State of their reporting headquarters. An employer is a legal entity such as a corporation, partnership, or single ownership for which a single tax return is filed. Excludes agricultural employers.

[2] Data relate to State in which employed; workers employed in more than one State are shown in each State of employment. Includes self-employment.

[3] Comprised of wages up to the taxable limit from each employer and self-employment income. The annual limit with respect to wages from a given employer or with respect to self-employment income was $4,200 in 1958. Averages rounded to nearest $10.

[4] Contribution rate was 2¼ percent, each, for employees and employers; and 3⅜ percent for self-employed persons in 1958.

[5] Refers to employment of United States citizens outside listed States and other areas by American employers and their foreign subsidiaries.

Table 6.—*Old-age, survivors, and disability insurance: Selected data on benefits, employers, workers, and taxable earnings for specified periods, 1959–61*

[In thousands, except for average monthly benefit and average taxable earnings; corrected to October 24, 1961]

Item	1961	1960	1959
	Fiscal year		
Benefits in current-payment status (end of period):			
Number (OASI and DI) [1]	15,624.2	14,261.8	13,181.4
Number (OASI)	14,726.5	13,740.3	12,820.2
Number (DI)	897.7	521.6	361.2
Old-age (retired-worker)	8,414.0	7,813.0	7,295.6
Disability (disabled-worker)	558.1	370.8	275.2
Wife's or husband's (OASI and DI)	2,432.5	2,279.9	2,141.8
Wife's or husband's (OASI)	2,329.9	2,223.5	2,108.5
Wife's or husband's (DI)	102.6	56.4	33.2
Child's (OASI and DI) [2]	2,141.3	1,903.5	1,747.7
Child's (OASI) [2]	1,904.3	1,809.1	1,694.8
Child's (DI) [2]	237.0	94.4	52.8
Widow's or widower's	1,621.9	1,471.3	1,322.0
Mother's	419.9	387.9	366.5
Parent's	36.4	35.5	32.7
Total monthly amount (OASI and DI)	$992,032	$889,863	$805,545
Total monthly amount (OASI)	$931,705	$851,791	$778,404
Total monthly amount (DI)	$60,327	$38,071	$27,141
Old-age (retired-worker)	$627,400	$575,295	$526,701
Disability (disabled-worker)	$49,895	$33,123	$24,324
Wife's or husband's (OASI and DI)	$94,195	$87,701	$81,295
Wife's or husband's (OASI)	$90,759	$85,676	$80,096
Wife's or husband's (DI)	$3,437	$2,025	$1,199
Child's (OASI and DI) [2]	$99,233	$84,789	$76,209
Child's (OASI) [2]	$92,238	$81,865	$74,591
Child's (DI) [2]	$6,995	$2,924	$1,618
Widow's or widower's	$94,270	$84,229	$74,359
Mother's	$24,823	$22,609	$20,760
Parent's	$2,215	2,117	$1,896
Average monthly amount:			
Old-age (retired-worker)	$74.57	$73.63	$72.19
Disability (disabled-worker)	$89.41	$89.33	$88.40
Wife's or husband's (OASI and DI)	$38.72	$38.47	$37.96
Wife's or husband's (OASI)	$38.95	$38.53	$37.99
Wife's or husband's (DI)	$33.50	$35.92	$36.09
Child's (OASI and DI) [2]	$46.34	$44.54	$43.61
Child's (OASI) [2]	$48.44	$45.25	$44.01
Child's (DI) [2]	$29.51	$30.98	$30.62
Widow's or widower's	$58.12	$57.25	$56.25
Mother's	$59.11	$58.29	$56.65
Parent's	$60.85	$59.67	$58.02
Benefit payments during period:			
Monthly benefits (OASI and DI)	$11,721,534	$10,632,223	$9,238,753
Monthly benefits (OASI)	$11,017,539	$10,103,937	$8,899,522
Monthly benefits (DI)	$703,995	$528,304	$339,231
Old-age (retired-worker)	$7,371,205	$6,803,478	$6,041,417
Disability (disabled-worker)	$589,497	$450,114	$311,105
Supplementary (OASI and DI)	$1,300,137	$1,183,515	$1,007,142
Supplementary (OASI)	$1,185,639	$1,105,327	$979,016
Supplementary (DI)	$114,498	$78,190	$28,126
Survivor	$2,460,695	$2,195,132	$1,879,089
Lump-sum death payments	$166,993	$165,772	$149,625
Workers insured for OASI benefits (midpoint of period—Jan. 1): [3]			
Fully insured	85,800	79,700	78,800
Currently but not fully insured	84,500	76,600	76,300
Workers insured for disability (midpoint of period—Jan. 1): [3]	1,300	3,000	2,400
	48,400	45,700	43,300
Estimated number of employers reporting taxable wages, 1st quarter of fiscal year	[4] 4,190	[4] 4,170	[4] 4,110
	Calendar year		
Estimated number of workers with taxable earnings	74,000	73,000	71,500
Estimated amount of taxable earnings	$214,000,000	$210,000,000	$203,000,000
Average taxable earnings [5]	$2,890	$2,880	$2,840

[1] Benefits under the old-age and survivors insurance (OASI) parts of the old-age, survivors, and disability insurance program are payable from the OASI trust fund to old-age insurance (retired-worker) beneficiaries and their dependents and to survivors of deceased workers. Benefits under the disability insurance (DI) part of the program are payable from the DI trust fund to disability insurance (disabled-worker) beneficiaries and their dependents.

[2] Includes benefits payable to disabled persons aged 18 or over—dependent children of disabled, deceased, or retired workers—whose disability began before age 18.

[3] Estimates of insured workers have not been adjusted to reflect changes in insurance status arising from: (1) provisions that coordinate the old-age, survivors, and disability insurance and railroad retirement programs and (2) wage credits for military service. Estimates are only partially adjusted to eliminate duplicate count of persons with taxable earnings reported on more than 1 account number.

[4] Excludes agricultural employers.

[5] Rounded to nearest $10.

Table 7.—*Special types of public assistance under plans approved by the June 1961, and total payments to*

[Includes vendor payments for medical care and cases

State	Old-age assistance			Medical assistance for the aged			Aid to dependent children		
	Number of recipients, June	Payments to recipients		Number of recipients, June	Payments to recipients		Number of recipients, June		
		Average payment, June	Total, fiscal year (in thousands)		Average payment, June	Total, fiscal year (in thousands)	Families	Total [1]	Children
Fiscal year:									
1959	2,419,885	$64.76	$1,858,004	-------	-------	-------	777,632	2,929,986	2,246,965
1960	2,358,539	68.01	1,894,639	-------	-------	-------	794,396	3,023,311	2,330,108
1961	2,296,190	67.85	1,914,946	46,428	$200.59	$42,899	878,332	3,382,865	2,613,273
Alabama	99,881	53.92	63,077	-------	-------	-------	21,494	86,829	68,096
Alaska	1,420	66.89	1,105	-------	-------	-------	1,174	4,055	3,044
Arizona	14,136	60.82	10,319	-------	-------	-------	8,791	35,617	27,421
Arkansas	56,414	52.46	35,105	-------	-------	-------	7,093	27,091	20,917
California	253,937	91.50	274,070	-------	-------	-------	87,545	310,936	244,977
Colorado	51,270	96.51	60,754	-------	-------	-------	8,154	31,519	24,734
Connecticut	13,871	64.95	20,544	-------	-------	-------	8,410	29,096	21,820
Delaware	1,205	49.72	749	-------	-------	-------	1,842	7,102	5,535
Dist. of Columbia	3,045	66.07	2,522	-------	-------	-------	5,482	24,624	19,485
Florida	70,100	60.36	48,363	-------	-------	-------	23,882	87,391	69,517
Georgia	95,325	47.07	54,080	-------	-------	-------	16,210	60,218	46,577
Guam	99	25.65	29	-------	-------	-------	160	900	748
Hawaii	1,439	70.59	1,198	-------	-------	-------	2,473	9,577	7,596
Idaho	7,253	82.65	6,577	-------	-------	-------	2,418	9,092	6,731
Illinois	70,259	78.13	66,495	-------	-------	-------	43,897	187,584	146,245
Indiana	26,157	66.10	20,666	-------	-------	-------	12,113	45,100	34,172
Iowa	33,480	88.46	34,202	-------	-------	-------	10,196	37,649	28,458
Kansas	27,531	83.06	27,270	-------	-------	-------	6,558	25,219	19,916
Kentucky	55,727	50.18	33,490	41	[2]	4	21,402	76,539	57,506
Louisiana	126,040	71.43	107,087	-------	-------	-------	22,188	91,126	70,788
Maine	11,072	67.64	9,160	-------	-------	-------	5,841	20,737	15,361
Maryland	9,615	63.80	7,217	1,603	16.63	27	10,062	42,381	33,363
Massachusetts	62,766	81.14	76,017	15,895	198.42	23,209	16,178	55,415	41,240
Michigan	56,494	79.83	54,666	4,149	310.37	7,438	29,900	107,360	79,093
Minnesota	45,627	94.50	50,981	-------	-------	-------	10,803	37,514	29,317
Mississippi	81,132	35.40	33,328	-------	-------	-------	20,803	81,199	63,711
Missouri	113,361	61.73	83,373	-------	-------	-------	26,545	102,155	77,772
Montana	6,484	64.22	5,100	-------	-------	-------	1,973	7,329	5,799
Nebraska	14,377	76.44	13,094	-------	-------	-------	3,156	12,305	9,479
Nevada	2,535	78.35	2,362	-------	-------	-------	1,271	4,405	3,468
New Hampshire	4,834	85.33	4,768	-------	-------	-------	1,138	4,407	3,343
New Jersey	18,952	92.44	20,105	-------	-------	-------	18,700	66,645	50,611
New Mexico	11,061	67.42	9,101	-------	-------	-------	7,697	30,083	23,214
New York	61,297	81.58	96,426	17,680	242.72	9,627	79,686	325,554	248,502
North Carolina	47,593	45.08	25,449	-------	-------	-------	28,758	114,702	88,787
North Dakota	7,075	94.23	7,796	-------	-------	-------	1,877	7,031	5,497
Ohio	89,814	77.50	80,579	-------	-------	-------	31,322	124,868	95,217
Oklahoma	88,161	81.34	88,532	251	195.02	210	18,894	68,007	51,771
Oregon	16,469	84.08	16,699	-------	-------	-------	7,050	25,036	18,903
Pennsylvania	49,977	66.95	40,580	-------	-------	-------	66,919	273,054	209,325
Puerto Rico	37,926	8.30	3,860	-------	-------	-------	58,182	226,195	181,278
Rhode Island	6,615	80.89	6,496	-------	-------	-------	5,318	19,821	15,019
South Carolina	30,928	45.84	15,474	-------	-------	-------	9,479	37,810	29,998
South Dakota	8,479	64.03	6,506	-------	-------	-------	3,236	11,241	8,467
Tennessee	53,995	44.03	27,974	-------	-------	-------	22,501	84,272	64,021
Texas	220,594	52.78	140,283	-------	-------	-------	19,192	79,714	60,863
Utah	7,516	70.67	6,831	-------	-------	-------	4,007	14,951	11,260
Vermont	5,611	71.44	4,532	-------	-------	-------	1,343	4,824	3,620
Virgin Islands	527	30.77	184	[3] 204	[3] 9.67	2	267	859	718
Virginia	14,459	55.05	8,816	-------	-------	-------	10,357	42,017	32,960
Washington	[3] 46,930	[3]94.96	54,222	[3] 545	[3]199.84	939	[3]12,955	[3] 44,375	[3] 34,660
West Virginia	18,678	40.98	8,857	6,060	64.66	1,444	20,439	79,003	61,582
Wisconsin	33,542	89.12	35,028	-------	-------	-------	10,203	37,389	28,506
Wyoming	3,105	75.44	2,846	-------	-------	-------	798	2,943	2,265

[1] Includes as recipients the children and 1 parent or other adult relative in families in which the requirements of at least 1 such adult were considered in determining the amount of assistance.

Social Security Administration: Number of recipients and average payment, recipients, by program and State, fiscal year 1961

receiving only such payments; data corrected to October 15, 1961]

Aid to dependent children—Continued			Aid to the blind			Aid to the permanently and totally disabled		
Payments to recipients			Number of recipients, June	Payments to recipients		Number of recipients, June	Payments to recipients	
Average payment per family, June	Average payment per recipient, June	Total fiscal year (in thousands)		Average payment, June	Total, fiscal year (in thousands)		Average payment, June	Total, fiscal year (in thousands)
$106.94	$28.38	$956,380	109,445	$69.04	$89,066	339,214	$63.37	$244,664
110.78	29.11	1,021,097	107,978	72.85	92,309	362,815	65.96	271,208
116.68	30.30	1,118,991	105,608	73.36	93,991	383,952	68.19	301,361
41.05	10.16	10,176	1,577	42.01	775	12,215	37.55	5,389
111.35	32.24	1,590	99	72.98	90	----	----	----
121.66	30.03	11,560	877	72.54	743	----	----	----
61.66	16.14	5,108	1,998	58.18	1,369	7,477	41.86	3,538
167.56	47.18	162,623	13,589	106.92	17,486	13,202	99.90	12,335
129.95	33.62	11,962	270	80.41	275	5,665	71.17	4,717
178.57	51.61	15,822	300	79.14	371	2,287	93.47	3,347
87.71	22.75	1,754	264	70.79	214	418	66.70	291
150.45	33.50	9,189	208	68.76	178	2,762	75.55	2,540
61.37	16.77	17,222	2,465	62.84	1,852	10,223	65.45	7,490
86.95	23.41	16,363	3,583	52.67	2,253	23,206	51.52	13,784
80.48	14.31	110	6	(2)	1	72	22.79	16
135.08	34.88	3,951	80	78.41	75	979	81.89	977
153.31	40.77	4,107	148	72.38	134	1,186	75.62	990
171.67	40.17	75,915	2,941	86.23	2,989	19,750	87.78	19,431
106.07	28.49	14,706	1,862	76.36	1,661	----	----	----
126.31	34.21	15,656	1,410	98.53	1,664	714	75.52	563
140.59	36.56	10,688	591	85.79	600	4,200	87.47	4,331
86.78	24.26	21,303	2,407	53.07	1,512	8,006	54.92	5,049
96.17	23.42	24,284	2,773	80.79	2,687	16,526	56.40	11,010
92.59	26.08	6,651	415	65.27	333	2,143	69.19	1,761
126.35	30.00	13,793	433	65.00	350	6,435	65.00	4,943
152.39	44.49	28,537	2,172	126.45	3,080	9,941	132.90	15,997
131.59	36.65	42,654	1,733	80.62	1,710	5,248	102.41	5,952
160.61	46.25	19,323	1,050	106.65	1,310	2,574	61.51	1,819
36.38	9.32	8,762	5,421	38.43	2,815	12,799	34.85	5,144
93.48	24.29	28,271	4,929	65.00	3,919	15,434	64.04	11,691
125.99	33.92	2,816	315	72.76	282	1,246	72.41	1,085
118.89	30.49	4,175	775	92.59	878	2,151	73.94	1,761
95.24	27.48	1,380	179	100.87	216	----	----	----
160.58	41.47	2,000	246	86.50	249	441	100.63	508
167.98	47.13	31,912	925	88.35	980	7,406	95.32	7,951
126.50	32.37	11,933	359	59.88	267	2,686	70.67	2,142
172.67	42.26	146,047	3,481	96.39	4,905	36,419	107.40	46,148
79.93	20.04	25,631	5,179	55.49	3,361	20,166	50.90	11,662
151.25	40.38	3,360	92	70.96	83	1,138	100.23	1,319
122.75	30.79	40,549	3,509	77.67	3,135	13,771	75.41	11,259
122.76	34.11	25,707	1,810	89.15	2,222	10,033	80.13	10,830
146.15	41.16	11,516	261	93.16	281	5,049	93.69	5,463
120.62	29.56	80,162	17,884	73.33	15,780	17,825	58.64	12,644
14.85	3.82	10,217	1,830	8.27	185	22,587	8.70	2,298
143.79	38.58	8,051	116	79.94	117	2,971	86.88	3,034
61.25	15.36	6,395	1,701	49.75	950	7,975	50.38	4,231
114.12	32.85	4,139	163	62.55	120	1,140	65.22	883
70.13	18.73	18,463	2,644	47.45	1,540	10,482	46.07	5,415
76.99	18.54	17,044	6,326	58.41	4,470	7,351	54.37	4,488
135.89	36.42	6,063	193	78.01	182	2,683	79.71	2,441
110.15	30.66	1,640	112	62.67	93	842	65.17	665
59.81	18.59	170	19	(2)	6	98	35.17	38
98.15	24.19	11,092	1,230	59.78	850	6,641	61.94	4,494
[3] 167.21	[3] 48.82	24,620	[3] 700	[3] 103.95	853	[3] 7,440	[3] 100.08	8,665
97.92	25.33	22,887	985	44.21	508	7,319	43.81	3,664
162.91	44.46	17,679	918	94.35	978	4,047	110.84	4,662
141.01	38.24	1,261	55	84.69	54	583	76.66	506

[2] Average payment not computed on base of fewer than 50 recipients.
[3] Estimated.

Table 8.—*Special types of public assistance under plans approved by the tures and percent from Federal funds, by*

[Includes vendor payments for medical care; amounts

State	Federal grants to States [1]						Expenditures for assistance and administration	
	Total	Old-age assistance	Medical assistance for the aged	Aid to dependent children	Aid to the blind	Aid to the permanently and totally disabled	Old-age assistance	
							Amount	Percent from Federal funds
Fiscal year:								
1959	$1,957,098	$1,132,194	----------	$626,546	$47,619	$150,739	$1,973,089	58.3
1960	2,033,761	1,157,523	----------	660,232	48,824	167,182	2,014,736	58.1
1961	2,180,466	1,211,709	$33,507	704,108	48,517	182,625	2,035,554	59.9
Alabama	61,200	47,511	----------	8,763	606	4,320	65,839	74.6
Alaska	1,845	734	----------	1,054	57	----------	1,201	62.3
Arizona	17,227	7,686	----------	9,032	509	----------	10,533	72.6
Arkansas	35,064	26,864	----------	4,353	1,036	2,811	36,322	74.3
California	239,515	142,926	----------	82,570	7,302	6,717	294,785	48.2
Colorado	39,246	27,830	----------	8,053	166	3,197	63,062	43.0
Connecticut	17,317	8,549	----------	7,347	162	1,259	21,870	39.3
Delaware	2,332	544	----------	1,431	139	218	830	66.1
District of Columbia	9,469	1,716	----------	6,092	121	1,540	2,779	57.3
Florida	57,229	35,641	----------	14,677	1,349	5,562	50,930	70.9
Georgia	67,393	41,759	----------	13,174	1,720	10,740	56,939	73.3
Guam	84	18	----------	55	1	10	34	50.0
Hawaii	3,951	794	----------	2,545	43	569	1,300	62.2
Idaho	7,672	4,461	----------	2,470	90	651	6,867	67.4
Illinois	95,638	41,585	----------	41,752	1,684	10,617	73,330	58.1
Indiana	25,854	13,960	----------	10,852	1,042	----------	22,673	63.7
Iowa	32,144	21,081	----------	9,907	848	308	36,551	59.6
Kansas	27,239	17,648	----------	6,837	343	2,411	29,101	61.4
Kentucky	48,247	25,909	175	17,131	1,098	3,934	34,961	73.1
Louisiana	106,597	75,161	----------	20,801	1,645	8,990	111,786	66.9
Maine	13,551	6,811	----------	5,230	239	1,271	9,612	71.3
Maryland	18,364	4,979	25	9,655	240	3,465	7,697	64.6
Massachusetts	75,695	42,110	12,341	14,107	1,138	5,999	82,239	49.7
Michigan	65,708	33,813	2,823	25,457	922	2,693	58,654	58.2
Minnesota	39,887	27,750	----------	10,203	586	1,348	53,734	53.7
Mississippi	41,029	26,697	----------	7,764	2,240	4,328	35,247	76.5
Missouri	89,342	57,089	----------	21,949	2,280	8,024	87,144	66.2
Montana	5,991	3,218	----------	1,909	187	677	5,511	65.1
Nebraska	14,005	9,184	----------	3,145	469	1,207	14,064	67.4
Nevada	2,678	1,493	----------	1,077	108	----------	2,535	56.9
New Hampshire	4,442	2,888	----------	1,148	139	267	5,109	59.4
New Jersey	30,847	10,504	----------	15,917	535	3,891	21,668	50.9
New Mexico	17,607	6,944	----------	8,913	209	1,541	9,714	70.8
New York	165,371	49,231	15,979	77,374	2,248	20,539	108,735	44.2
North Carolina	52,407	19,721	----------	21,000	2,673	9,013	26,751	74.5
North Dakota	7,670	4,772	----------	2,113	60	725	8,450	57.8
Ohio	86,107	48,241	----------	28,910	1,927	7,029	85,824	58.4
Oklahoma	81,393	56,949	264	17,312	1,069	5,799	91,109	63.1
Oregon	18,586	9,760	----------	5,957	134	2,735	18,176	55.9
Pennsylvania	92,545	26,505	----------	53,892	3,458	8,690	43,680	61.4
Puerto Rico	9,004	2,198	219	5,199	100	1,288	4,300	47.2
Rhode Island	10,215	3,956	----------	4,539	69	1,651	7,073	56.3
South Carolina	21,950	12,310	----------	5,564	751	3,325	16,421	75.3
South Dakota	8,667	4,733	----------	3,154	95	685	6,970	70.7
Tennessee	43,438	22,313	----------	15,598	1,187	4,340	29,709	74.6
Texas	124,331	103,228	----------	14,314	3,288	3,501	144,846	71.3
Utah	10,049	4,807	----------	3,674	116	1,452	7,210	68.1
Vermont	5,060	3,239	----------	1,251	69	501	4,770	71.1
Virgin Islands	275	109	16	124	3	23	223	49.9
Virginia	20,437	7,039	----------	9,100	673	3,625	9,576	74.3
Washington	44,074	27,838	467	11,552	387	3,830	57,005	48.7
West Virginia	29,543	7,092	1,196	17,923	392	2,940	9,291	76.6
Wisconsin	32,030	19,950	----------	9,468	534	2,078	37,736	54.9
Wyoming	2,899	1,859	----------	719	33	288	3,076	60.8

[1] Based on cash advanced for the year; may differ slightly from fiscal-year expenditures from Federa funds reported by States.

Social Security Administration: Federal grants to States and total expenditures, by program and State, fiscal year 1961

in thousands; data corrected to October 15, 1961]

Expenditures for assistance and administration—Continued							
Medical assistance for the aged		Aid to dependent children		Aid to the blind		Aid to the permanently and totally disabled	
Amount	Percent from Federal funds	Amount	Percent from Federal funds	Amount	Percent from Federal funds	Amount	Percent from Federal funds
		$1,056,620	59.1	$96,806	49.6	$273,288	55.3
		1,130,515	58.9	100,203	48.9	302,925	55.8
$45,899	49.8	1,240,092	57.8	102,212	47.6	335,615	54.7
		11,077	79.6	814	74.8	5,811	75.1
		1,680	61.8	100	56.3		
		11,939	75.4	772	65.8		
		5,476	79.9	1,419	72.0	3,880	73.4
		187,381	44.1	19,380	38.1	14,608	45.2
		13,549	61.3	309	53.0	5,341	59.8
		17,094	43.4	400	41.2	3,683	35.5
		1,972	72.5	246	57.8	360	60.9
		10,068	59.9	192	59.7	2,723	54.4
		19,303	78.9	1,967	68.4	8,364	67.0
		17,586	75.6	2,373	72.4	14,816	72.1
		120	50.0	2	49.9	21	50.0
		4,507	58.1	84	52.7	1,113	50.4
		4,424	54.6	143	63.4	1,097	61.7
		83,507	51.7	3,459	49.3	21,841	48.8
		16,365	67.2	1,928	54.5		
		17,044	58.6	1,827	46.5	675	53.2
		11,603	58.7	647	53.4	4,685	52.3
37	53.1	22,624	75.9	1,622	72.2	5,496	71.6
		27,656	74.0	2,853	57.4	12,625	69.9
		7,089	74.3	348	71.0	1,942	67.1
43	50.0	15,304	66.6	372	63.0	5,393	62.7
24,325	48.2	31,720	44.4	3,264	35.5	17,501	33.6
7,665	50.0	45,595	55.9	1,784	51.2	6,291	42.2
		21,195	48.3	1,402	43.2	2,001	67.3
		10,077	78.1	2,964	75.3	5,845	74.6
		30,523	72.6	4,283	52.9	12,445	65.1
		3,126	61.7	330	57.8	1,232	58.0
		4,559	71.1	941	50.4	1,980	61.5
		1,621	67.3	252	42.8		
		2,204	52.4	270	52.2	592	46.1
		35,202	44.7	1,117	53.9	9,139	44.1
		12,891	68.3	290	72.4	2,373	65.3
10,724	50.0	168,325	47.7	5,766	39.6	53,414	40.9
		27,623	77.7	3,801	70.5	12,510	72.3
		3,694	55.5	96	62.2	1,479	48.6
		44,324	65.9	3,524	54.8	12,526	55.8
228	66.0	26,972	69.2	2,301	46.4	11,513	50.8
		12,948	49.6	300	46.5	6,015	46.2
		88,084	64.5	16,645	19.9	14,315	59.2
		11,248	46.1	219	47.1	2,692	47.1
		8,799	53.1	135	52.1	3,382	48.6
		7,021	79.5	1,021	72.9	4,622	72.8
		4,544	69.4	135	70.0	977	69.8
		20,042	78.3	1,630	73.1	5,940	72.6
		18,560	78.8	4,667	70.0	5,053	69.2
		6,637	58.4	190	61.2	2,581	56.8
		1,796	71.0	100	70.4	720	70.1
11	50.0	214	49.8	8	49.9	47	49.9
		12,339	74.2	949	70.5	5,081	70.1
975	48.6	26,440	43.3	908	42.1	9,246	41.2
1,891	67.3	23,636	76.0	534	73.9	3,948	73.6
		19,338	48.0	1,074	49.5	5,132	41.7
		1,423	53.4	59	54.2	548	53.5

Table 9.—*Maternal and child health and welfare services: Grants to States for maternal and child health services, services for crippled children, and child welfare services under the Social Security Act, by program and State, fiscal year 1961* [1]

[In thousands]

State	Maternal and child health services	Crippled children's services	Child welfare services
United States	$18,113.9	$19,797.4	$13,613.1
Alabama	568.4	589.9	345.1
Alaska	142.1	161.6	63.6
Arizona	166.6		135.2
Arkansas	304.7	327.9	231.2
California	941.7	948.9	646.3
Colorado	325.7	243.0	156.7
Connecticut	282.8	257.1	129.1
Delaware	115.1	122.1	64.3
District of Columbia	227.5	232.2	78.9
Florida	564.6	414.8	319.9
Georgia	518.5	610.2	391.1
Hawaii	157.0	172.4	91.5
Idaho	159.2	132.5	88.4
Illinois	480.1	616.7	480.2
Indiana	363.6	432.6	322.8
Iowa	257.6	419.8	256.3
Kansas	213.9	286.1	191.3
Kentucky	378.1	462.9	354.3
Louisiana	379.2	472.5	312.8
Maine	150.1	142.5	115.4
Maryland	429.5	383.0	212.4
Massachusetts	384.9	376.6	220.5
Michigan	670.3	699.6	484.3
Minnesota	378.2	553.2	284.3
Mississippi	406.2	474.1	310.3
Missouri	381.3	392.3	297.1
Montana	123.2	179.7	100.6
Nebraska	139.8	60.2	148.9
Nevada	170.3	104.0	61.2
New Hampshire	79.0	128.4	84.6
New Jersey	254.7	287.2	283.0
New Mexico	216.4	192.8	121.6
New York	842.7	729.9	696.1
North Carolina	711.0	818.8	524.2
North Dakota	121.9	132.5	114.8
Ohio	689.5	671.6	537.0
Oklahoma	253.9	303.9	212.9
Oregon	185.5	220.6	164.3
Pennsylvania	795.1	856.0	651.2
Rhode Island	178.0	168.1	93.7
South Carolina	378.3	460.0	308.7
South Dakota	63.5	133.2	111.4
Tennessee	543.1	599.7	351.7
Texas	787.2	1,154.4	715.4
Utah	108.2	141.4	121.1
Vermont	120.2	118.2	75.8
Virginia	515.9	538.3	365.5
Washington	247.7	271.3	202.9
West Virginia	233.8	330.4	246.7
Wisconsin	349.7	430.0	298.4
Wyoming	111.2	104.3	69.5
Guam	68.3	97.6	.9
Puerto Rico	376.5	532.5	316.3
Virgin Islands	102.4	107.9	51.4

[1] Based on checks issued.

Table 10.—*Federal credit unions: Assets and liabilities, Dec. 31, 1959, and Dec. 31, 1960*

Assets and liabilities	Amount			Percentage distribution	
	Dec. 31, 1960	Dec. 31, 1959	Change during year	Dec. 31, 1960	Dec. 31, 1959
Number of operating Federal credit unions	9,905	9,447	458		
Total assets	$2,669,734,298	$2,352,813,400	$316,920,898	100.0	100.0
Loans to members	2,021,463,195	1,666,525,512	354,937,683	75.7	70.9
Cash	157,615,757	137,677,971	19,937,786	5.9	5.8
U.S. Government obligations	93,577,264	110,328,752	−16,751,488	3.5	4.7
Savings and loan shares	306,249,764	363,003,574	−56,753,810	11.5	15.5
Loans to other credit unions	61,701,066	50,217,364	11,483,702	2.3	2.1
Land and buildings	9,699,908	7,778,138	1,921,770	.4	.3
Other assets	19,427,344	17,282,089	2,145,255	.7	.7
Total liabilities	2,669,734,298	2,352,813,400	316,920,898	100.0	100.0
Notes payable	71,275,679	58,427,188	12,848,491	2.7	2.5
Shares	2,344,337,197	2,075,055,019	269,282,178	87.8	88.2
Regular reserve	111,703,332	91,773,369	19,929,963	4.2	3.9
Special reserve for delinquent loans	4,456,218	4,674,782	−218,564	.2	.2
Other reserves [1]	5,899,292	4,629,088	1,270,204	.2	.2
Undivided earnings [2]	119,689,894	106,259,883	13,430,011	4.5	4.5
Other liabilities	12,372,686	11,994,071	378,615	.4	.5

[1] Reserve for contingencies and special reserve for losses.
[2] Before payment of yearend dividends.

Table 11.—*Federal credit unions: Number of members, amount of assets, amount of shares, and amount of loans outstanding, Dec. 31, 1934–60* [1]

Year	Number of operating Federal credit unions	Number of members	Assets	Shares	Loans outstanding
1934 [2]	39	3,240	$23,300	$23,100	$15,400
1935	772	119,420	2,372,100	2,228,400	1,834,200
1936	1,751	309,700	9,158,100	8,510,900	7,343,800
1937	2,313	483,920	19,264,700	17,649,700	15,695,300
1938	2,760	632,050	29,629,000	26,876,100	23,830,100
1939	3,182	850,770	47,810,600	43,326,900	37,673,000
1940	3,756	1,127,940	72,530,200	65,805,800	55,818,300
1941	4,228	1,408,880	106,052,400	97,208,900	69,484,700
1942	4,145	1,356,940	119,591,400	109,822,200	43,052,500
1943	3,938	1,311,620	127,329,200	117,339,100	35,376,200
1944	3,815	1,306,000	144,365,400	133,677,400	34,438,400
1945	3,757	1,216,625	153,103,120	140,613,962	35,155,414
1946	3,761	1,302,132	173,166,459	159,718,040	56,800,937
1947	3,845	1,445,915	210,375,571	192,410,043	91,372,197
1948	4,058	1,628,339	258,411,736	235,008,368	137,642,327
1949	4,495	1,819,606	316,362,504	285,000,934	186,218,022
1950	4,984	2,126,823	405,834,976	361,924,778	263,735,838
1951	5,398	2,463,898	504,714,580	457,402,124	299,755,775
1952	5,925	2,853,241	662,408,869	597,374,117	415,062,315
1953	6,578	3,255,422	854,232,007	767,571,092	573,973,529
1954	7,227	3,598,790	1,033,179,042	931,407,456	681,970,336
1955	7,806	4,032,220	1,267,427,045	1,135,164,876	863,042,049
1956	8,350	4,502,210	1,529,201,927	1,366,258,073	1,049,188,549
1957	8,735	4,897,689	1,788,768,332	1,589,190,585	1,257,319,328
1958	9,030	5,209,912	2,034,865,575	1,812,017,273	1,379,723,727
1959	9,447	5,643,248	2,352,813,400	2,075,055,019	1,666,525,512
1960	9,905	6,087,378	2,669,734,298	2,344,337,197	2,021,463,195

[1] Data for 1934–44 on membership, assets, shares, and loans outstanding are partly estimated.
[2] First charter approved October 1, 1934.

Table 12.—*Federal credit unions: Selected data on operations, by asset size and State, 1960*

Asset size and State	Number of credit unions	Number of members	Total assets	Amount of members' shares		Amount of loans to members		
				Total	Average per member	Made during 1960		Outstanding as of Dec. 31, 1960
						Total	Average	
All credit unions	9,905	6,087,378	$2,669,734,298	$2,344,337,197	$385	$2,975,478,339	$653	$2,021,463,195
Credit unions with assets of:								
Less than $5,000	667	47,729	1,713,912	1,604,012	34	1,861,108	130	1,160,647
$5,000–$9,999	559	60,518	4,194,748	3,742,937	62	5,641,774	171	3,133,762
$10,000–$24,999	1,250	185,352	20,993,286	18,495,989	99	28,462,423	245	16,173,243
$25,000–$49,999	1,320	257,551	48,592,228	42,438,769	165	62,896,564	343	38,119,297
$50,000–$99,999	1,559	430,184	112,464,860	97,792,789	227	137,417,038	443	88,467,795
$100,000–$249,999	2,069	949,402	333,761,414	291,680,900	307	370,737,409	548	255,725,056
$250,000–$499,999	1,167	971,414	412,577,052	362,366,707	373	458,309,892	632	316,286,601
$500,000–$999,999	752	1,104,305	519,144,400	453,450,816	411	595,369,064	693	399,209,265
$1,000,000–$1,999,999	380	989,108	526,363,850	461,388,778	466	587,825,984	750	399,680,761
$2,000,000–$4,999,999	151	691,347	433,548,983	383,134,100	554	468,319,442	844	321,021,612
$5,000,000 and over	31	400,468	256,379,565	228,241,400	570	258,637,641	859	182,485,156
Credit unions located in:								
Alabama	154	78,137	30,788,166	26,880,245	344	40,716,184	538	25,519,069
Alaska	27	20,354	7,507,577	6,629,688	326	9,496,912	583	6,079,320
Arizona	77	66,604	31,217,909	27,309,095	410	40,748,215	750	28,451,683
Arkansas	59	22,419	7,123,484	6,376,714	284	11,275,382	527	6,001,275
California	1,014	787,450	383,722,926	340,165,288	432	440,079,088	726	313,244,591
Canal Zone	7	9,767	2,585,430	2,361,782	242	2,903,398	218	1,282,009
Colorado	142	83,875	37,709,973	32,832,508	391	46,204,238	818	32,231,202
Connecticut	298	210,142	113,582,449	102,064,238	486	98,834,248	608	66,154,035
Delaware	39	18,262	5,938,789	5,223,762	286	6,928,191	586	5,079,748
District of Columbia	141	216,261	90,734,509	78,803,086	364	102,875,205	690	75,524,796
Florida	231	185,509	74,203,248	64,698,488	349	92,160,644	556	62,047,063
Georgia	167	94,050	31,981,594	27,818,811	296	44,030,574	461	24,931,333
Hawaii	162	107,153	73,967,059	65,307,576	609	79,889,216	974	51,538,745
Idaho	55	26,573	11,705,887	10,307,772	388	12,482,200	711	10,210,180
Illinois	193	106,532	52,352,457	46,734,185	439	52,286,479	707	35,271,435
Indiana	327	186,587	94,208,433	83,978,903	450	90,340,620	636	55,942,411
Iowa	6	3,616	1,935,433	1,782,917	493	2,072,291	817	1,486,398
Kansas	80	54,684	25,453,328	22,397,549	410	26,571,716	811	21,379,538
Kentucky	73	26,171	9,051,573	8,083,297	309	11,336,859	525	6,639,161
Louisiana	281	135,825	55,662,764	48,623,252	358	67,829,408	625	43,170,457
Maine	100	54,873	22,387,155	19,349,593	353	24,275,665	588	17,007,288

Maryland	134	87,302	25,582,358	22,711,137	260	32,307,168	459	21,427,772
Massachusetts	277	133,734	46,755,473	41,881,218	313	48,753,191	511	32,514,441
Michigan	417	419,964	222,642,833	193,572,952	461	229,613,965	881	175,434,554
Minnesota	43	22,142	7,952,899	7,107,044	321	7,795,313	683	6,404,974
Mississippi	79	42,302	15,305,665	13,184,527	312	20,868,052	515	13,446,594
Missouri	43	26,989	11,808,899	10,686,644	396	11,682,997	663	7,590,526
Montana	108	37,049	14,184,139	12,484,954	337	14,503,129	709	11,527,887
Nebraska	80	46,289	21,234,978	19,081,188	412	22,207,898	787	15,782,408
Nevada	57	25,142	11,968,845	10,080,756	401	14,982,859	762	10,318,254
New Hampshire	21	15,942	5,509,564	5,006,014	314	4,717,591	586	4,066,934
New Jersey	454	249,892	101,095,080	88,711,555	355	93,284,992	555	64,724,401
New Mexico	49	43,027	19,661,536	17,054,576	396	27,298,114	704	16,577,500
New York	886	496,979	199,311,019	176,283,602	355	206,656,058	641	142,124,235
North Carolina	43	29,427	7,459,316	6,469,293	220	9,434,791	401	6,037,299
North Dakota	32	10,053	3,990,172	3,538,471	352	3,486,286	683	3,369,548
Ohio	533	315,327	134,163,033	118,245,188	375	142,175,301	683	96,773,563
Oklahoma	111	57,548	27,305,459	23,968,586	416	32,029,501	761	22,598,018
Oregon	167	69,254	29,616,247	25,709,598	371	35,223,176	747	25,465,559
Pennsylvania	1,022	534,083	203,902,390	176,410,340	330	222,338,532	589	138,845,510
Puerto Rico	34	14,866	4,230,496	3,485,404	234	5,388,147	363	3,630,296
Rhode Island	18	6,352	2,697,648	2,430,330	383	1,997,588	532	1,344,529
South Carolina	74	44,950	10,837,350	9,458,449	210	15,371,327	334	9,296,479
South Dakota	87	29,163	12,522,759	10,947,170	375	15,514,388	800	9,773,501
Tennessee	176	99,444	46,750,734	41,313,371	415	63,419,763	593	36,050,542
Texas	770	451,853	201,495,085	173,906,318	385	251,018,405	639	161,195,501
Utah	78	33,694	15,203,754	13,328,931	396	19,839,610	766	13,758,640
Vermont	3	1,313	492,010	405,000	308	423,331	346	235,793
Virginia	156	89,456	28,674,064	24,627,208	275	34,948,749	499	22,393,959
Virgin Islands	4	1,434	150,021	132,360	92	131,755	359	134,965
Washington	162	103,069	51,020,039	44,672,164	433	58,470,319	765	42,187,069
West Virginia	101	36,262	14,263,473	12,481,139	344	17,574,745	549	10,460,467
Wisconsin	3	814	317,995	287,760	354	233,554	548	268,676
Wyoming	50	17,419	7,808,822	6,945,201	399	8,451,011	874	6,511,064

Public Health Service

Health of the Nation

THE GREAT PROBLEMS of providing the best possible health services for all of America's citizens continue to occupy the attention of the Public Health Service. As new knowledge is developed, its benefits must be made available to the people who need them. While the people of the United States have a high level of health, the higher levels which can be achieved as medical knowledge increases remain as a challenge and a hope for the Nation's future.

The Public Health Service is the Federal agency principally concerned with protecting and advancing the Nation's health. In working toward this goal, it cooperates with many other health interests, including private medicine and its allied disciplines, local and State public health authorities, voluntary agencies, colleges and universities, and research organizations.

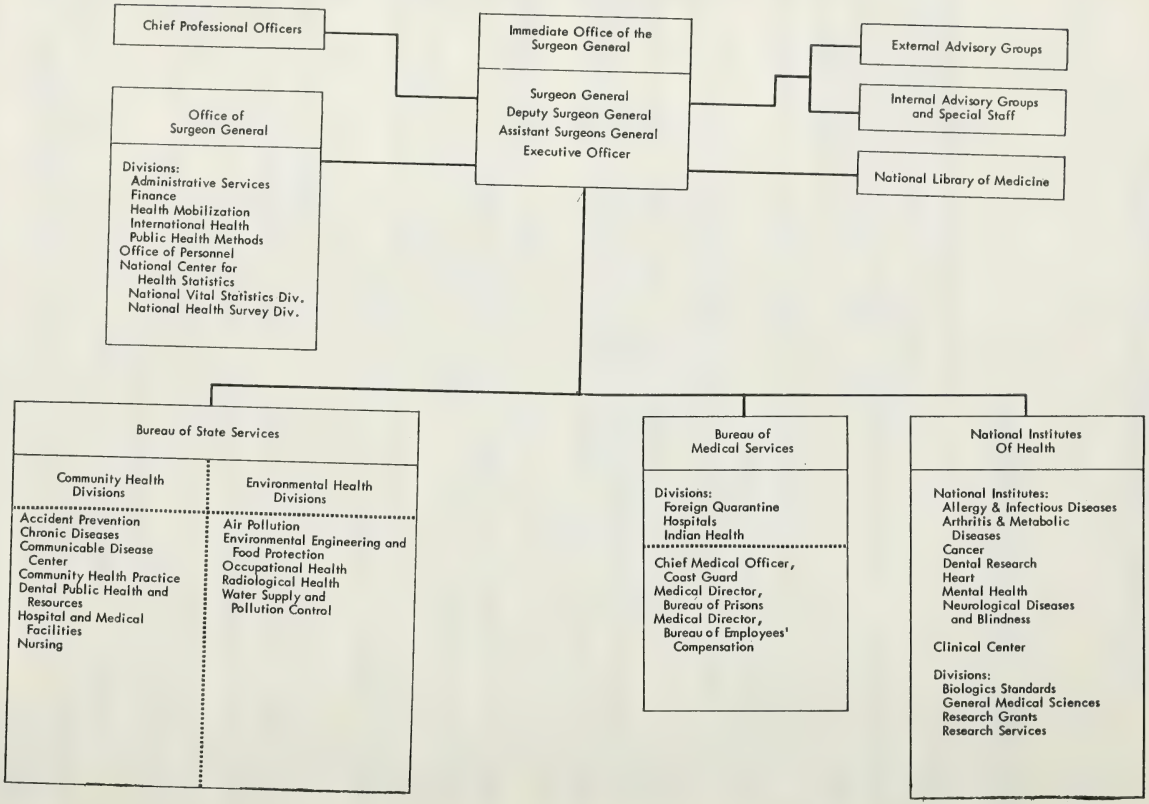
Great changes in the health needs of the Nation, since the establishment of the Public Health Service in 1798, have resulted chiefly from brilliant advances of medical science. These advances have taken place at an accelerating rate. Today, as we begin the decade of the 1960's, health care of the highest possible quality for all the people of this Nation is no longer an unrealistic dream.

From its earliest responsibility of providing medical care for merchant seamen, the Service has added responsibilities for foreign quarantine, the care of a number of groups including American Indians and Alaskan Natives, and the administration of Federal hospitals for victims of narcotics addiction and leprosy. These programs comprise the Bureau of Medical Services, one of the three major subdivisions of the Public Health Service.

Assistance to State and local health departments began with the infectious disease epidemics of the nineteenth and early twentieth centuries. These services have increased and diversified greatly over the years.

Through its Bureau of State Services, the Service now administers extensive programs of grants-in-aid to States and communities for many purposes, including the construction of hospitals and other

CHART 1.—PUBLIC HEALTH SERVICE ORGANIZATION, 1961



health facilities, construction of municipal sewage treatment works, and direct support of State programs in the control of many diseases. Technical assistance, loans of personnel or training of professionals and technicians employed at the State and local level, and research and guidance in public health practices are other means used to aid in public health protection.

The National Institutes of Health is the third component of the Public Health Service. Maintaining a wide variety of medical research projects in its own laboratories, the Institutes also support an extensive research effort in universities and other medical research institutions in this country and abroad. Federal and non-Federal scientists, in partnership, administer this massive attack on the remaining problems of health and disease. The 1960's hold great promise for the elimination or control of some of the great remaining health problems of man.

The next great nationwide health efforts may be expected in two broad areas: the physical environment and comprehensive health care. During the present decade, 1960–70, major national efforts, comparable with the great expansions of medical research and hospitals in the 1950's, will be required in each of these areas. The former will involve the development and application of new, more efficient techniques to measure, evaluate and control natural and artificial factors in the environment which affect health and safety. The latter will involve the development of adequate supplies of well-qualified personnel, appropriate facilities, new and more efficient methods to render comprehensive health services to the American people.

To meet these challenges of the immediate future, the Public Health Service has been carrying out a substantial reorganization during the past year, based on the recommendations of a Task Force appointed in 1960 to study the mission and organization of the Service. The most fundamental changes proposed are designed to make the Service's programs more effective in the development of comprehensive health services, giving special attention to the chronic diseases, and the protection of the public against environmental threats such as water pollution, air pollution and radiation. Details of the organizational changes are contained in the reports of the units and programs concerned.

The Public Health Service had a change of leadership during 1961 when, on January 30, Dr. Luther L. Terry was appointed by President Kennedy to succeed Dr. Leroy E. Burney as Surgeon General. Dr. Terry is the ninth Surgeon General since that office was created in 1871.

HEALTH RECORD

According to National Health Survey studies, the American people experience about 368 million acute health conditions—conditions lasting less than 3 months which involve either medical attention or at least 1 day of restricted activity—in a year, or a little over 2 per person per year. About 47 million persons are injured in a year, or 280 per 1,000 population.

In addition, about 72 million Americans (or 41 percent of the population) suffer from one or more chronic conditions. About 1 person in 14, or 13,500,000 in all, has a chronic limitation affecting his major activity; and about 1 in 200 is confined to the house.

The average person has about 16 days of restricted activity per year due to illness or injury, of which about 6 days involve bed disability. Persons 17 years of age and over show 5.6 days of work loss per year for these reasons, while school-loss days among children 6–16 years of age average 5.3.

In the first half of the past decade, 1951–55,[1] the downward trends of mortality which had generally characterized the preceding 50 years continued. Since 1956, however, death rates have not changed very much, except at ages 15–24 years, where the decline has continued, and at 65 years and over, where the death rate has increased.

The infant death rate dropped 9 percent from 28.4 per 1,000 live births in 1951 to 26.0 in 1956, rose in the next two years, and was lower in 1959. The rate in 1960, 25.7 per 1,000 live births, was 1 percent below the 1956 rate. The maternal mortality rate has declined steadily throughout this period, from 7.5 per 10,000 live births in 1951 to 3.2 in 1960, a drop of 57 percent.

The infectious diseases were once the chief causes of death among children. The principal communicable diseases of childhood—scarlet fever, diphtheria, whooping cough, and measles—for which the combined death rate had declined from about 243 per 100,000 population under 15 years of age in 1900 to 5 in 1950, accounted for 1 death per 100,000 population in this age group in 1960.

The death rates for a number of infectious diseases which once affected mortality significantly at all ages have also dropped since 1951. Thus, the death rate for tuberculosis, which was 20.1 per 100,000 population in 1951, was 5.9 in 1960; and the death rate for syphilis, which began its rapid decline in 1939, at 15.0 per 100,000 population, dropped to 4.1 in 1951 and to 1.7 in 1960.

The death rate for influenza and pneumonia in 1960 was 36.6 per

[1] All vital data are for calendar years. Figures and rates for 1960 are provisional.

CHART 2.—DEATH RATES, 1930–60

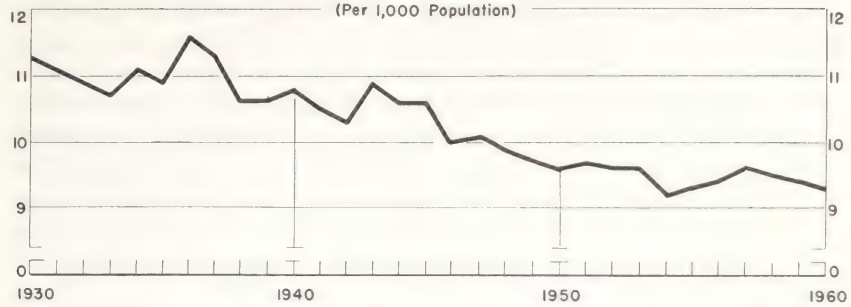


CHART 3.—DEATH RATES FOR THE 10 LEADING CAUSES OF DEATH, 1900 AND 1960

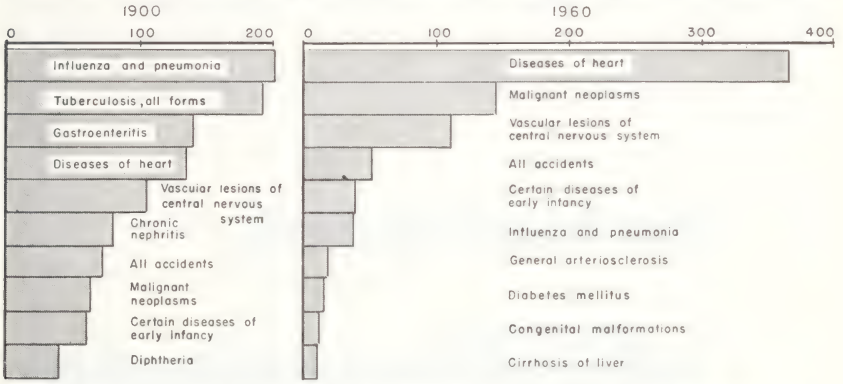
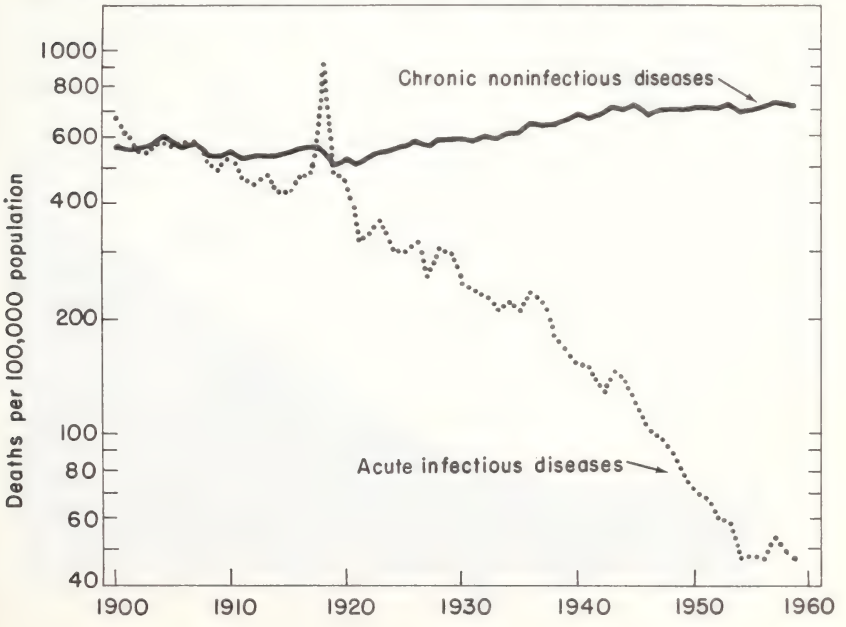


CHART 4.—DEATH RATES FROM CHRONIC DISEASES AND ACUTE INFECTIONS



100,000 population, higher than in any of the previous 11 years. For the first quarter of the year, severe localized outbreaks of respiratory illness were reported throughout most of the country. As a result, the death rate for the first 3 months of 1960 was almost the same as for the first 3 months of 1958, when Asian influenza was prevalent.

Mortality from the major chronic diseases has generally remained stable during the past 4 years, with death rates higher than those reported for the previous 5 years. The death rate for cardiovascular-renal diseases was 518.9 in 1960, compared with 513.0 in 1951. The 1960 cancer death rate was 147.4, about the same as the rate in 1956, but substantially higher than the 140.5 rate in 1951.

Death rates for suicide have fluctuated within a narrow range since 1951, and rates for homicide have remained practically unchanged since 1955, slightly below the rates reported for 1951–54. The rate

CHART 5.—POPULATION GROWTH BY AGE GROUPS, 1900 AND 1960

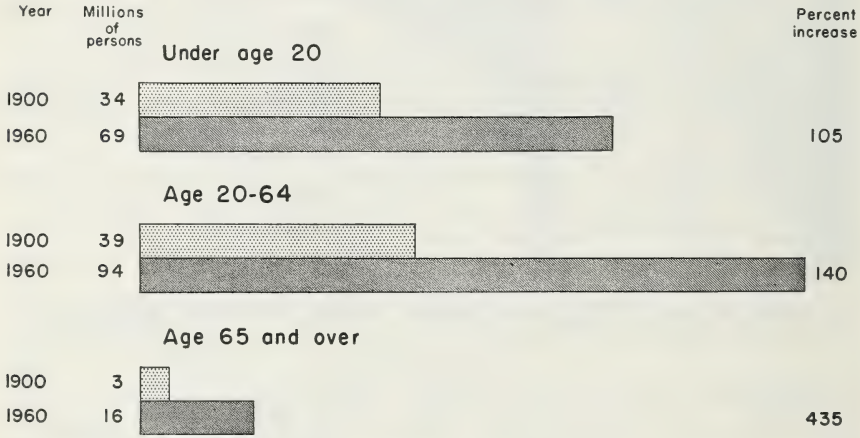
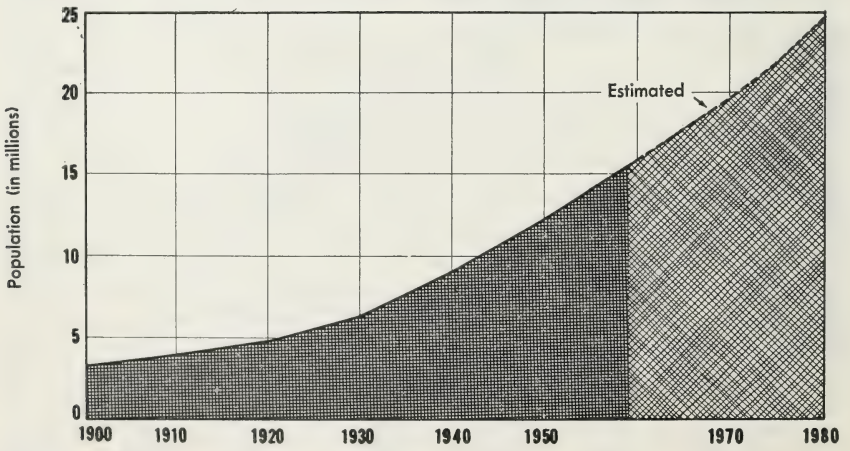


CHART 6.—POPULATION OF THE UNITED STATES 65 YEARS OF AGE AND OVER



for suicide rises to ages 75–84 years, while the rate for homicide reaches its peak at 25–34 years. Mortality from accidents has declined since 1951. Death rates for this cause fall to a low in early childhood, and then rise with increasing age. The death rate for motor vehicle accidents was 24.1 per 100,000 population in 1951, and 20.6 in 1960. No clear trend is apparent, but the level of death rates for this cause has been lower in the past 5 years than from 1951 to 1955. The death rate for nonmotor vehicle accidents declined from 38.4 per 100,000 in 1951 to 31.2 in 1960.

As the mortality data suggest, life expectancy increased more in the first half than in the last half of the decade 1950–60. The average length of life for the entire population was 68.4 years in 1951, 69.6 years in 1956, and 69.7 years in 1960—a net gain of about 1.2 percent for the entire period.

In 1959, life expectancy by color and sex was as follows: white females, 73.9 years (a 1.2 percent gain over 1951); white males, 67.3 years (a 1.0 percent gain); nonwhite males 60.9 years (a 1.3 percent gain); and nonwhite females, 66.2 years (a 1.5 percent gain). Thus, average length of life increased at a faster rate for women than for men, and for the nonwhite than for the white population.

BIRTHS, MARRIAGES, AND DIVORCES

In 1960, about 4,247,000 live births were registered, virtually the same number as in 1959.

Although the number of births in recent years has remained fairly constant, the crude birth rate—the number of births per 1,000 population—has declined somewhat. The 1960 rate of 23.6 represents a drop of 2.1 percent from the 24.1 rate for 1959, and of 3.7 percent from the 24.5 rate for 1951. All these rates, however, are above any that prevailed from the late 1920's through 1945, even when the earlier figures are adjusted for underregistration.

In 1960, about 1,527,000 marriages were performed, an increase of 2.2 percent over the 1959 figure of 1,494,000. The marriage rate, however, remained constant for the 2 years at 8.5 per 1,000 population. The 1951 rate was 10.4.

Divorces totaled 395,000 in 1959, as compared with 368,000 in 1958, for an increase of 7.3 percent. The divorce rate was 2.2 per 1,000 population in 1959, 2.1 in 1958, and 2.5 in 1951.

Funds and Personnel

The total funds available to the Public Health Service in fiscal year 1961 amounted to $1,233.5 million (see table 1, page 233). Appropriations and authorizations accounted for about $1,039.6 million of this

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amount. The balance was made up of repayments for services given to other agencies and of unobligated balances from previous years.

Over 70 percent of the total funds available was allocated to others, in the form of grants to State and local agencies, private institutions, universities, hospitals, and individuals outside the Federal Government. The remainder was used to support the direct responsibilities of the Public Health Service, such as hospital and medical care for legally designated beneficiaries, foreign and interstate quarantine, and Indian health services.

At the close of fiscal year 1961, the Public Health Service had a full-time staff of 28,630 (see table 2, page 235). This number included 1,803 members of the Regular Commissioned Corps, 2,025 members of the Reserve Corps on active duty, 151 of the Commissioned Reserve on temporary training duty, and 24,651 full-time Civil Service personnel. Part-time personnel totaled 1,364.

National Center for Health Statistics

The National Center for Health Statistics was established in August 1960 following the recommendations of the Task Force which studied the mission and organization of the Public Health Service. Objectives in setting up the Center were to bring together the major components of Public Health Service competence in the measurement of the Nation's health status; to identify significant associations between characteristics of the populations and health-related problems; to stimulate optimal use of technical and methodologic innovations in the collection, processing and analysis of health statistics; to create a resource for technical assistance in statistical data processing; to associate closely the functions of collection, analysis, interpretation and dissemination; to permit expansion of health intelligence programs to correlate and interpret data from various sources; and to give better visibility to the national and international leadership of the Public Health Service in vital and health statistics.

The Centers contains two divisions: the National Health Survey Division, formerly located in the Division of Public Health Methods; and the National Vital Statistics Division, formerly entitled the National Office of Vital Statistics, and located in the Bureau of State Services. In addition, the Center includes an Office of Electronic Systems and an Office of Health Statistics Analysis.

NATIONAL HEALTH SURVEY

The National Health Survey is a continuing program which makes studies to determine the extent of illness and disability in the population of the United States and to gather related information.

During the year the National Health Survey began the development of its third major data-collection mechanism, the Health Records Survey. Much of the information gathered through this undertaking will come from the records of institutions which provide medical, nursing, or personal care. The first project is a survey of nursing homes and similar places to obtain an estimate of the older persons in these institutions, their demographic characteristics, and their health status.

The Health Examination Survey—the first cycle of which consists of a special, standarized health examination given to a representative sample of the adult population—had conducted 15 of the 42 "stands" in its national sample of localities, as of the end of fiscal year 1961. With the acquisition of a second mobile examination center, this Survey is moving through the sample localities at the rate of about 20 stands per year. The second cycle of the Survey, in which a sample of the population aged 6 through 17 years will be examined, is now being planned.

The Health Interview Survey, now in its fifth year of data collection, provided information for eight publications on topics not previously reported on by the National Health Survey: arthritis and rheumatism; diabetes; hernias; acute conditions by geographic distribution; seasonal variations of acute conditions; edentulous persons; health insurance; and distribution and use of hearing aids, wheel chairs, braces, and artificial limbs. Health interview data also became the basis for reports on selected health characteristics of older persons, and selected health characteristics of the population by geographic regions and urban-rural residence and by geographic divisions and large metropolitan areas.

In line with its obligation to develop and test new or improved methods, the National Health Survey Division continued a number of methodological studies already underway and initiated several new projects. The latter included a study to develop a method of gathering information on personal health expenditures, and another to evaluate and refine the household interview collection of data on health insurance coverage in the general population.

NATIONAL VITAL STATISTICS DIVISION

On July 1, 1961, the National Office of Vital Statistics became the National Vital Statistics Division. It collects, tabulates, analyzes, and publishes the official U.S. vital statistics of births, deaths (including fetal deaths), marriages, and divorces on the basis of transcripts of certificates that are filed with non-Federal registration officials acting under State laws. This Division also constructs the official U.S. life tables and related actuarial tables; conducts health and social-research

studies based on vital records and on sampling surveys linked to records; conducts research and methodological studies in vital-statistics methods including the technical, administrative, and legal aspects of vital-records registration and administration; and maintains a continuing program to improve the quality and usefulness of vital statistics through technical assistance and professional training at the Federal, State, local and international levels.

National vital data are used in medical, demographic and educational research, in social welfare, business and government, and in planning programs in public health and other areas.

During the year, the Division and the Bureau of the Census, in cooperation with the University of Chicago, began a study of socioeconomic factors in mortality for 1960. With the approval of State vital statistics offices, the Division selected copies of certificates for deaths occurring from May to August 1960. These records will be matched to the Census of Population data taken as of April 1960 to analyze mortality by the characteristics enumerated for the decedents in the Census when they were still alive.

Among surveys that were completed or started during the year were 2 phases of a study of the incidence of cystic fibrosis, a study of radiological exposures of mothers during pregnancy, and a cardiovascular-renal mortality study. Technical help was given for a national polio inoculation study.

Plans were worked out and initiated so that national marriage and divorce statistics for 1960 will be based for the first time on nationwide samples of marriage and divorce records collected from State and local vital statistics offices. These samples will yield detailed marriage and divorce figures for the United States as a whole, the four regions of the United States, the Marriage Registration Area, and the Divorce Registration Area, as well as for States that participate in the two registration areas. In previous years, detailed marriage and divorce data were available only for reporting registration area States.

At the close of the fiscal year, the Marriage Registration Area (established in 1957) contained 35 States and 4 other areas; the Divorce Registration Area (established in 1958) contained 20 States and 1 other area.

The Model State Vital Statistics Act (1959 Revision) was enacted in six areas during the fiscal year, and has been adopted in part or is receiving consideration in a number of other areas.

The Division cooperated with agencies of the Departments of State, Defense, and Justice, and representatives of State health officers and State vital registrars in arriving at a common ground for improving the birth registration of citizens born abroad and of alien-adopted children. A committee of the Council of State Governments con-

sidered and endorsed the actions that were taken by the cooperating group, and recommended repeal of conflicting State laws.

OFFICE OF ELECTRONIC SYSTEMS

Established toward the close of the fiscal year, the Office of Electronic Systems has been engaged in the planning, site preparation, staffing, training, and programming activities incident to installation of computer facilities.

OFFICE OF HEALTH STATISTICS ANALYSIS

This Office was also constituted during the latter part of the fiscal year. The Office will: study and interpret health and vital statistics to assess the health status of the population; develop measures and indexes of health; study problems in disease classification and coordinate national proposals for revision of the International Classification of Diseases; and act as secretariat for the U.S. National Committee on Vital and Health Statistics in its program to promote technical developments in the field of vital and health statistics.

National Library of Medicine

The National Library of Medicine continues to provide service to the world medical community through published bibliographical guides, an extensive interlibrary loan program, reader services, and reference research assistance. Its conventional systems for the organization, storage, retrieval, and dissemination of information are becoming severely taxed with the acceleration of medical research and the resulting increasing amount of scientific publications. As a consequence, the Library has responded by developing two new programs for the improvement of medical communication services.

Work started in 1961 on a 2-year program for the design and testing of an electronic data processing system to improve the Library's capacity to store, retrieve, and disseminate information useful to workers in medicine and public health. Termed MEDLARS (Medical Literature Analysis and Retrieval System), the new system should improve the Library's responsiveness to the current and continuing needs of multiple research groups, reduce the duplicative effort now involved in literature screening, offer more prompt and more efficient literature reference services, and enlarge, improve, and speed publication of the *Index Medicus*.

In addition, plans were made for an extramural program utilizing grant and contract mechanisms. This program is designed to support traditional publication media, strengthen services and resources of medical libraries, and encourage research and development in new and improved medical communication systems.

BOARD OF REGENTS

The Board of Regents met on November 5, 1960, and April 7, 1961. At the November meeting the Board received the Director's report on the status of the Library, and discussed the development of extramural programs. At the April meeting the Medical Literature Analysis and Retrieval System project and Library program and budget plans for fiscal year 1963 were presented and approved.

NEW BUILDING

The new building was 80 percent complete at the end of the year, and planning was underway for dedication ceremonies on December 14–15, 1961. In anticipation of increasingly heavy work loads in the reference and interlibrary loan area, plans were completed for rearrangement of the collections and the application of mobile microphotographic equipment in the photoduplication process to facilitate user services when the new building is occupied.

PROGRAM STATISTICS

In fiscal year 1961 the Library acquired 16,951 books, 69,968 serial pieces, and added 1,336 new serial titles, increasing its collections to 1,066,068 items. The History of Medicine collection was increased by 288 old and rare volumes. The staff cataloged 27,186 titles, and 813 pictures were added to the art collection. There were 152,768 volumes circulated, and 10,090 reference questions were answered. Main entries published in the *National Library of Medicine Catalog* totaled 18,219. The *Index Medicus* published 130,000 items from 1,775 journal titles. Interlibrary loan requests increased to 109,258 from the prior year experience of 95,595. Microfilm production amounted to 2,775,552 pages of which 689,954 pages were for preservation purposes and 2,085,598 pages for interlibrary loan.

PUBLIC HEALTH METHODS

The Division of Public Health Methods provides staff services to the Surgeon General, develops and conducts research studies of health and related problems in the population, and participates in planning public health activities to meet current and foreseeable needs. The Division edits and publishes *Public Health Reports*, the official journal of the Public Health Service in public health practice and administration.

MANPOWER AND MEDICAL EDUCATION

Guides for the planning and construction of new medical schools were developed in cooperation with the Division of Hospital and Medical Facilities and the Ad Hoc Committee on Medical School

Architecture of the Association of American Medical Colleges and the American Medical Association. One volume, "Medical School Facilities: Planning Considerations," examines the role and responsibilities of the medical school and the composition of its faculty and curriculum, summarizes general architectural requirements, and presents cost estimates and elements in planning. The companion volume, "Medical School Facilities: Planning Considerations and Architectural Guide," presents the same background material, but deals technically in architectural and engineering terms with the amount and type of space needed for the various medical school activities.

The eleventh in the series of health manpower source books, published during the year, presents basic data on medical school alumni as of mid-1959. The data include State of practice, type of practice, and full-time specialization for all graduates (living in 1959) of each of the 78 active 4-year medical schools in the United States, by year of graduation. Relationship between State of practice and State where medical school was attended is also shown.

The baccalaureate origins of 1950–59 medical graduates were studied to find out which and what kinds of colleges have been important in preparing medical students. The study, to appear shortly as *Public Health Monograph No. 66*, shows the relationship between the proportion of graduates who became physicians and such characteristics of the undergraduate college as type of program, administrative control, tuition, and location.

A survey of 1950 medical school graduates, conducted in cooperation with the Council on Medical Education and Hospitals of the American Medical Association, relates current data to earlier data to show trends in medical practice. Type and method of practice, location of practice, place of residence before medical school, and graduate training for this group of physicians are reported.

A nationwide survey of social welfare manpower as of 1960 was conducted jointly with the Bureau of Labor Statistics of the Department of Labor, the National Social Welfare Assembly, and the Social Security Administration. Detailed analysis of employment characteristics, levels of education, and annual salaries for the 11,700 medical and psychiatric social workers included in the survey is underway.

WORK IN OTHER FIELDS

The editing of a comprehensive textbook on administration of community health services, sponsored by the International City Managers' Association and prepared in consultation with a special advisory committee of the American Public Health Association, was completed for publication. The book consists of 26 chapters by

authorities in various phases of community health services. It is intended to serve chief administrators and health officers in cities and counties as a guide to public health policies, problems, and administrative methods.

Additional reports and studies published or scheduled for publication during the year include the eighth listing of the Clearinghouse on Morbidity Projects; an article analyzing health needs of the aged and current proposals for meeting these needs; a chapter on current methods of financing hospital care for a book on hospital administration; the first study for the United States on a national basis of work loss due to illness in selected occupations and industries; a study of the causes of death responsible for recent increases in sex mortality differentials in the United States; an epidemiological diet study in North Dakota; an article on illness in the United States as estimated from the Monthly Report on the Labor Force; and a paper on death rates for coronary heart disease in metropolitan and other areas.

In connection with a study of medical group practice in the United States, three preliminary papers and a directory of medical groups practicing in 1959 have been published. A comprehensive report on the study is in preparation.

Other projects underway include a survey of medical and health resources in the Cleveland metropolitan area; analysis of factors affecting the use and effectiveness of medical care in the absence of major financial barriers to care; a study of the undergraduates origins of 1950–59 medical graduates of individual medical schools; and preparation of a revised directory of homemaker services.

The Division provided staff services for a committee on medical care of the National Advisory Health Council and other technical assistance and consultation to congressional committees and to State, regional, and professional organizations.

Division of International Health

The Division of International Health arranges for Public Health Service participation and official United States representation in international health organizations, particularly the World Health Organization (WHO) and the Pan American Health Organization (PAHO); provides program and policy guidance to the Department of State on international health matters; gives technical advice to the International Cooperation Administration (ICA) and assigns technical personnel to its overseas missions. It is the responsibility of the Division to negotiate with the Soviet Ministry of Health for exchanges of scientists under the U.S.-U.S.S.R. exchange agreement and, in cooperation with the National Institutes of Health and research

facilities outside the government, to plan itineraries of visiting Soviet delegations or individual scientists. The Division develops studies of health conditions and resources in various countries of the world and arranges for widespread circulation of technical publications of international health organizations to interested groups in the United States.

During the year, the Division arranged for the official United States Delegations to the 14th World Health Assembly in New Delhi in February 1961, the 12th Meeting of the Directing Council of the Pan American Health Organization, Washington, October 1960, and the 43d Meeting of that Organization's Executive Committee in Washington in May 1961. The Division, in consultation with the Department of State, developed official United States policy on topics discussed at these meetings, including the global malaria eradication campaign, intensified international medical research program, public health aspects of ionizing radiation, and worldwide community water supply program.

The Chief of the Division was appointed by the President of the United States to be the U.S. Member on the WHO Executive Board and the Assistant Chief was appointed U.S. Member on the PAHO Executive Committee. In addition, an officer of the Division served as Alternate United States Commissioner on the South Pacific Commission, a consultative body composed of representatives of the six metropolitan governments administering territories in the South Pacific area. The Commission's purpose is to encourage and strengthen international cooperation in promoting the economic and social welfare and advancement of the South Pacific peoples.

The Division also acted in an advisory capacity with respect to health-related matters which came before meetings of other international organizations, such as the Food and Agriculture Organization, United Nations Children's Fund, and the International Labor Organization.

Public Health Service officers also served international organizations as members of WHO expert panels or as short-term consultants to WHO or PAHO. For example, approximately 80 service officers are members of WHO panels in 38 health specialties.

The Division assisted the Office of Public Health, ICA, in preparing a series of 10-year health plans for Africa, including plans for the eradication of smallpox and malaria and for control of trachoma, yaws, and treponematosis. More than 100 Public Health Service officers served with ICA overseas missions during the year.

The Division also worked with the U.S. Peace Corps in arranging for assignment of medical officers to serve either as medical advisors in the Peace Corps headquarters or to provide medical care for volun-

teers at project sites. In this connection, four medical officers and three civil service employees from the Service were on duty at the Peace Corps in Washington during the latter half of the year and one of the medical officers made a trip to Tanganyika to survey health and medical care facilities in preparation for a Peace Corps project in that country.

Negotiations under the U.S.-U.S.S.R agreement resulted in the exchange of 3 delegations from each country for a period of 30 days. The U.S. delegations, comprising 17 scientists, were in the fields of metabolic diseases, maternal and child care, and infectious diseases. The three Soviet delegations, with a total of 15 scientists, were in industrial medicine and hygiene, cardiovascular diseases, and oncology. In addition to the exchange of missions, the program brought five Soviet cancer specialists to the United States for a cancer meeting; sent six U.S. heart specialists to a joint heart meeting in Moscow; and assigned a National Cancer Institute scientist to spend 6 months in research at the Institute of Experimental Pathology and Therapy of Cancer at the Academy of Science in Moscow.

The Division assisted in preparation and staffing of an exhibit on health and medicine in the United States at the First International Health Exhibition, sponsored by the Government of Italy and held in Rome from November 10, 1960 to January 8, 1961. Studies of health conditions and resources in the Philippines, Venezuela, Egypt, Guatemala, and El Salvador were compiled from published material during the year, bringing to 26 the number of such studies completed by the Division.

One function which has increased in scope in recent years is the extensive distribution of a variety of technical publications of the World Health Organization, Pan American Health Organization, and South Pacific Commission. During fiscal year 1961, the Division distributed more than 7,500 such publications on a complimentary basis throughout this country.

Division of Health Mobilization

The health mobilization program of the Public Health Service is intended to carry out Federal responsibilities for health services under the national plan for civil defense and defense mobilization. The objective is to meet the health needs of the civilian population in the event of a national emergency. In July 1960, the Division of Health Mobilization, which is responsible for administering this program, was transferred from the Bureau of State Services to the Office of the Surgeon General.

During the year, work was continued on plans for an emergency health service which would serve as the health arm of the Federal

emergency civilian government in a national disaster. This service combines personnel of the Public Health Service, Food and Drug Administration, Office of Vocational Rehabilitation, medical personnel from the Children's Bureau, and personnel from the Veterans Administration and other Federal agencies with health responsibilities. Delineation of organization and functions neared completion and key positions were staffed.

Processes were continued to develop data on calculating potential bomb damage; providing maximum facility protection; computing requirements for community medical supplies and equipment; analyzing the available resources; inventorying holdings of survival items.

Effective October 1, 1960, management of the national emergency medical stockpile was tranferred to the Public Health Service from the Office of Civil and Defense Mobilization. The stockpile includes some $169 million in equipment and supplies, including 1,930 civil defense emergency hospitals. Most of these hospitals are in strategic non-target locations throughout the country and the other inventories are stored at 34 different warehouse facilities.

Four national training courses were prepared and presented on the health mobilization aspects of civil defense. Assistance was given to the presentation of 4 similar courses sponsored by the health departments in 4 States. The division also aided the States in conducting training exercises in the setup and operation of civil defense emergency hospitals. Staff assigned to Public Health Service Regional Offices worked closely with State health organizations to aid in developing community health capabilities for emergencies.

A research project was completed under contract from the Office of Civil and Defense Mobilization on what a person needs to know to survive a national disaster and meet his own health needs if deprived of a physician's services. Working in cooperation with the American Medical Association, a medical self-help training course including an instruction kit, was developed and tested; and a reference manual for use by householders, *Family Guide—Emergency Health Care*, was completed.

Other research completed includes development of (1) scale models of civil defense emergency hospitals; (2) plans for a prototype mutual aid water supply; (3) methods of mobilizing and managing health manpower in a national emergency; and surveys of (1) water utilities and sewage utilities; (2) medical supplies on drug racks in grocery stores and warehouses.

Projects in progress but not completed during the fiscal year were (1) creation of an austere medical care procedures manual to be used as a guide in training all health personnel; (2) survey of current availability of medical survival items in private physicians' offices.

Bureau of State Services

This Bureau was vitally affected by the decision to reorganize the Public Health Service so that greater emphasis could be put upon the two major health problems of today: how to build comprehensive health care programs and how to safeguard the environment against hazardous pollutants.

Because the solution to both problems depends primarily upon State and local actions, the challenge to this Bureau was how to improve its services to States and community health agencies.

As a first step in meeting this challenge, the Bureau has strengthened its own administrative and program staffs in both the environmental and the community health fields and has regrouped its Divisions to assure a tighter coordination of all activities in each of these two major areas.

The Robert A. Taft Sanitary Engineering Center, formerly a unit of one of the divisions, was brought directly under Bureau administration. This center conducts research, gives technical training and assists States and communities with problems of water and air pollution, radiological health and milk and food sanitation. Its activities are reported under the divisions it services.

The reorganization of the Bureau program is described in the following division reports.

Division of Community Health Practice

Established February 1, 1961, this new Division supersedes the former Division of General Health Services. The year's activities included the coordination and management of $274 million appropriated for grants-in-aid and $2 million for training professional public health personnel. Technical assistance and consultation were provided throughout the country on State and community health programs and field research, health programs for schools and migrant workers, health education, and planning for professional training, including the education programs scheduled in the United States for foreign students and visitors from 89 nations. The Arctic Health Research Center, which does basic research on health problems in low-temperature areas, was transferred at year's end from this Division to the Bureau's environmental health administration.

A new activity was added: the administration of a special grant of $86,320, transferred from the President's contingency fund, to enable Florida and Dade County to set up comprehensive health services for 25,000 to 50,000 Cuban refugees. Included were diagnostic screening, dental and medical care, hospitalization, and other needed services and clinics in which Cuban medical personnel assisted county health personnel.

GRANTS MANAGEMENT

For fiscal year 1961, a total of $274,100,000 was available for grants-in-aid to States and territories to conduct public health programs and to build hospitals and other health facilities. This reflected an increase over the preceding year of $4,625,000 which was shared among four programs: $2 million for general health programs; $1,250,000 for cancer control; $1 million for mental health activities; and $375,000 for heart disease control.

Actual payments from total available funds were distributed as follows:

General health services	$16, 755, 443
Venereal disease special projects	[1] 2, 379, 805
Tuberculosis control	3, 982, 055
Mental health activities	5, 941, 888
Cancer control	3, 313, 568
Heart disease control	3, 300, 482
Hospital and medical facilities construction	157, 004, 031
Waste treatment works construction	44, 085, 200
Water pollution control	[2] 2, 891, 860

[1] Includes $847,754 in supplies and services furnished in lieu of cash.
[2] Includes $248,844 paid to interstate agencies.

Other payments helped to strengthen public health training and build up the supply of qualified personnel needed in modern health programs. A total of $1,991,819 was distributed for traineeships for professional public health workers, and $6,099,858 for professional nurses preparing for administration, supervision, and teaching. For training and demonstration projects in air pollution control, payments totaled $122,287; grants for radiological health training, $134,559; grants to accredited schools of public health, $951,210; and project grants for expanding graduate and specialized curricula, $446,892.

In addition, community cancer demonstration projects received $1,257,164 in funds and $48,970 in personal services furnished in lieu of cash. From the appropriation for construction of mental health facilities in Alaska, a total of $2,801,482 had been paid through June 30, 1961.

PUBLIC HEALTH ADMINISTRATION

The Public Health Administration Branch gave technical assistance and consultation to State and local health agencies on several major concerns assigned to the Division, such as metropolitan health problems, programs related to general health grants, the development of comprehensive community health services, and training and demonstration activities. Staff assistance was also provided for a number of interdepartmental committees.

The Branch conducts intramural studies on community health needs and resources, health attitudes, and survey techniques. One such

study was published: *The Impact of Asian Influenza on Community Life.* Another was prepared for publication: *A Health Study in Kit Carson County, Colorado.*

A study of physicians' attitudes and practices with respect to smoking was started. The findings will be used to develop an educational program for patients affected by heavy smoking. An investigation of the psychological effects of fear-arousing information was begun to help formulate better educational materials on diseases such as cancer. Other studies were underway on public acceptance of immunization programs; penicillin prophylaxis among college students with rheumatic fever; health problems in economically depressed areas; and medical care costs and administration.

School health staff members participated in many working conferences with representatives of State and regional agencies and voluntary groups. Two regional institutes, cosponsored with the American Association for Health, Physical Education, and Recreation, were held in Los Angeles and Seattle, with about 100 participants from 8 western States. The institutes were designed to bring together professors of health education in teacher-training institutions and key education and health officials; and to provide discussions on new developments in the health sciences. Additional regional institutes are being planned to meet requests from other areas.

National attention to problems of agricultural migrant workers and families has accelerated State and regional interests in health programs for migrants. At the request of the Association of State and Territorial Health Officers, a personal health form was designed for uniform recording of data important to physicians and agencies providing medical services for migrant family members as they travel from place to place. Thirty-four States requested a supply of the forms shortly after they became available. Current studies deal with the health aspects of a social service program, the crew-leader's role in migrant health, and a project linking community health services for migrants along one migratory route between Texas and Michigan.

EXTRAMURAL RESEARCH DEVELOPMENT

Community-based research to find more effective patterns for the delivery of modern health services continued to gain support among public and private agencies and schools of public health. More than a dozen State health departments now have a director or coordinator specifically responsible for developing such research projects throughout their departments.

To help meet increasing requests for consultative and liaison services, the Division recently established a separate Research Grants Branch. Its staff provides consultation for individual investigators,

and works closely with other research staffs and committees, both within and outside the Department, on matters of promotion, policy, and training related to research in public health practice.

The Branch collects and disseminates nationwide data on community-based research projects, resources, and needs. In one regional office a research development staff has been set up on an experimental basis to determine if consultation services to State and local health departments can be provided more effectively from a decentralized location. Other regional offices have been cosponsors for several conferences held for State and local health officials interested in research programs.

PUBLIC HEALTH EDUCATION

The Health Education and Information Branch completed comprehensive reviews of health education programs in several State health departments; leadership training projects were organized; staff services to international organizations concerned with health education research were provided, as well as speakers and consultants for meetings of public health workers; and health educators were recruited for Public Health Service programs.

To exchange ideas and coordinate efforts, joint planning conferences were conducted with State directors of health education, professors of health education from schools of public health, and staffs of voluntary health agencies.

Three Branch health educators were loaned to States: one to develop the educational phases of a state medical care program, another to obtain experience in a local health department, and the third to serve as State director of health education.

TRAINING

Traineeships were awarded to support the graduate and specialized public health training of 607 physicians, dentists, nurses, sanitary engineers, health educators, veterinarians, and many other categories of professional personnel essential to modern public health practice.

In August 1960 the Congress authorized a new program of project grants designed to help eligible schools enlarge their capacity and improve curricula for training professional health workers. More than half of 138 eligible schools responded with 164 proposals that included stronger programs in sanitary chemistry and biology; improved field training; preparation of teachers in public health nursing; and curriculum expansion in medical care administration, rehabilitation, metropolitan planning, radiological health, and air hygiene and pollution. Out of the total proposals, 92 projects were approved and 63 could be supported from the $1,430,000 appropriated for the first year.

INTERNATIONAL EDUCATION AND EXCHANGE

A total of 605 international health students and visitors from 89 countries received program assistance for 3,109 months of study and observation in the United States. The program involved 136 training centers, of which 86 were academic institutions. Major support for these activities comes from the International Cooperation Administration, which sponsors the largest single group of students and visitors. Those sponsored by the United Nations and other agencies are also given advisory and technical assistance.

Comparison of 1961 with 1960 showed that the number of foreign students training in our medical schools increased 50 percent, while those sent to schools of public health declined about 50 percent. By countries of origin, 199 came from 15 Far East countries; and 181 came from 26 Latin American countries, representing a sharp increase over 1960 as well as broader sponsorship. Twenty-nine countries in the Near East, Africa, and South Asia sent 146 students and visitors; 18 European countries sent 78; and Canada, 1.

ARCTIC HEALTH RESEARCH CENTER

The only research unit of its kind in the United States, the Arctic Health Research Center is concerned with health problems related to life in low-temperature areas. Study fields include environmental sanitation, biochemistry and nutrition, entomology, epidemiology, physiology, and zoonotic disease.

During the year several investigations dealt with epidemic outbreaks—principally hepatitis, trichinosis, and respiratory infections. A study was completed on an outbreak at Fort Yukon, where more than 40 percent of the populace was affected; and influenza Type B was established as the cause.

Requests increased for consultation on small institutional-type waste disposal methods in remote areas, where central water distribution is not available. Water supply studies included testing for reservoir liner materials that will withstand ice and frost action; well jetting; experiments in air lock installations, and low-cost hypochlorite feeder systems.

Other studies of the Center involved aquatic biology, entomologic identifications, nutrition surveys, social and educational observations, tuberculosis chemotherapy, brucellosis, tularemia, hydatid disease, and rabies. Studies on adaptation to cold were extended, with observations of human subjects for determination of indiviual adaptation by age, sex, and occupation.

Division of Hospital and Medical Facilities

Planning activities of the Hill-Burton Program were highlighted during fiscal 1961 by the completion of two significant reports: "Planning of Facilities for Mental Health Services," which presented findings of a special committee selected by the Surgeon General; and "Areawide Planning of Hospitals and Related Health Facilities," which presents the conclusions of a joint committee of the American Hospital Association and the Public Health Service.

A third report, "Medical School Facilities—Planning Considerations and Architectural Guide," was nearing completion as the fiscal year ended. This publication was prepared in cooperation with the Division of Public Health Methods and the Ad Hoc Committee on Planning Medical School Architecture of the Association of American Medical Colleges and of the American Medical Association.

Other problem areas were also explored by special committees, with assistance provided by the Division staff. These committees, which are continuing their work into next year, are concerned with such problems as long-term care, rehabilitation, and tuberculosis.

The Division continued its program of providing construction and research grants, participating in surveys and studies, preparing and disseminating guide materials for hospitals and related health facilities, and providing consultation to those involved in health facility planning, construction and administration.

CONSTRUCTION PROGRAM

Since the first allocation was made in 1947, some 5,688 Hill-Burton health facility projects have been approved for Federal assistance. This represents a total cost of $4.9 billion of which the Federal contribution was $1.6 billion. A total of 238,946 beds for inpatient care and 1,596 health units for outpatient care will be available as a result of these projects. Thus, earlier shortages, particularly in the area of general hospital beds, have been substantially reduced by the program. In addition to general hospitals, which represent 61.3 percent of all Hill-Burton projects to date, other types of facilities provided aid include: mental hospitals, 2.4 percent of the total projects; tuberculosis facilities, 1.3 percent; chronic disease hospitals, 3.3 percent; nursing homes, 5.5 percent; public health centers and State health laboratories, 15.6 percent; diagnostic centers, 7.2 percent; and rehabilitation centers, 3.4 percent.

Although sizable gains have been made in general hospital construction (79 percent of the need has been met compared with 59 percent in 1948), a number of health facility problems continue to confront many communities. New needs have been created by

scientific advances, new patterns of care, shifts in population, lengthening life span, and obsolescence of existing facilities, particularly in metropolitan areas. To meet these needs requires continued sound State planning with strong community support.

The Nation's greatest gap in health facilities is in the area of long-term care. There are great differences in the present level of availability of long-term care facilities among the States. The five States which currently have the highest ratio of nursing home beds per 1,000 elderly, proportionately have seven times more long-term beds than the five States with the lowest ratio. If the country as a whole were to be brought to the level of the five highest ranking States we would need a half-million more long-term beds.

Another great need is the development of small community or regional facilities for the mentally ill which would eventually replace the large State-owned institutions which now primarily serve a custodial function.

RESEARCH GRANTS

Hospital research is a growing activity in the Hill-Burton program. During the past fiscal year funds were provided for 34 extramural research projects, 22 of which were begun prior to June 1960. The grants, totaling $1,015,690, were made to universities, associations, and other nonprofit organizations interested in investigating means for providing effective patient care by the most efficient means at the lowest possible cost. The grants were made in five general areas: (1) the development of more effective organizational patterns for providing services; (2) better community planning and coordination of hospital facilities and operations; (3) studies of hospital admissions and utilization of hospital services; (4) architectural and equipment design; and (5) methods for improving and simplifying working procedures.

In the area of intramural research, the primary focus continued on Progressive Patient Care. Preliminary reports were completed on three studies—"Estimating Bed Needs in a Progressive Patient Care Hospital," "Progressive Patient Care Cost Methodology," and "Personnel Evaluation, Training and Procedures in Progressive Patient Care." In addition, several new studies were begun during the year.

The Division has found through its surveys that a growing percentage of hospitals throughout the Nation are incorporating one or more of the elements of progressive patient care into their organizational and operational structure. The staff has, through orientation, guide material, exhibits, speeches and consultation, given widespread distribution to this concept of care which emphasizes "the tailoring of services to meet the patient's needs."

COOPERATIVE STUDIES

Many studies have been undertaken by the Division—some in collaboration with other agencies and organizations concerned with the same problems. For example, the Division has joined forces with the American Hospital Association and the State of Georgia Department of Health in a pilot study to develop a methodology for uniform joint reporting of basic hospital statistics. Such uniform reporting will be an aid in State licensure and planning, in the gathering and compilation of National statistics, and in Civil Defense planning. Another example is the assistance provided to John Hopkins University in its examination of physical plant and operating needs of 10 Pennsylvania general hospitals which were built in former coal mining communities. Still another cooperative effort was the joint development with the American Nursing Home Association of a manual for expense accounting in nursing homes, based on experience gained in a study of nursing home costs conducted jointly at the invitation of the Pennsylvania Department of Public Welfare.

Approximately 200 publications have been prepared by the Division over the past several years. During the past year alone, approximately 200,000 requests for these publications were answered.

A growing number of visitors from the U.S. and abroad come to the Division for advice and consultation. Foreign visitors during the past year included representatives from England, Scotland, Pakistan, Paraguay, Yugoslavia, Poland, Costa Rica, Japan, the Philippines, Australia, and Viet Nam.

Division of Chronic Diseases

Established February 1, 1961, the Division of Chronic Diseases has as its overall mission the prevention of the occurrence and progression of chronic disability and dependency. The Cancer Control and Heart Disease Control Programs were transferred from the former Division of Special Health Services into the new Division without organizational change. The Chronic Disease Program of the Division of Special Health Services was expanded into three separate program branches within the new Division. These branches are: Arthritis and Diabetes, Vision and Hearing Conservation, and Health Services for Long Term Illness (including problems of the aged).

HEART DISEASE CONTROL

The Heart Disease Control Program supports and promotes the use of research products and new techniques to reduce the effects of cardiovascular disease. One hundred twelve medical and other professional personnel—a 50-percent increase over last year—are assigned to States to further heart disease control programs.

Heart Disease in Children

Laboratory technicians from all 50 States, 4 territories, and 5 cities were trained at the Communicable Disease Center in the fluorescent antibody technique for the rapid identification of the organism associated with the onset of rheumatic fever and rheumatic heart disease. Nine States conducted 12 in-State training courses for 210 technicians, and equipment and training personnel are scheduled solidly through December 1962.

A test utilizing tape-recorded heart sounds to screen 33,000 school children for heart disease was completed in Chicago, and is stimulating other areas to initiate screening projects. Plans are under way to test inexpensive, portable equipment, and to develop electronic methods for initial screening of the tapes.

Heart Disease in Adults

To identify and measure the role of various factors in coronary artery disease, epidemiologic, clinical and laboratory studies are in progress in 12 States. As background data, coronary death rates by counties and other geographic areas are being computed for the 10-year period 1950–59 for several States.

Through a series of projects in several States, it has been demonstrated that most stroke patients can be restored to self-care; restorative services for stroke patients are being improved and extended.

A long-term community study in Mercer County, W. Va., is endeavoring to provide a scientific basis for deciding whether treatment reduces morbidity and mortality of moderate hypertensives. Elsewhere, the effect of sodium in drinking water on the management of patients with congestive heart failure is being investigated.

Institutes and workshops were held in many places to teach heart disease control to health and related personnel. For example, the Program was instrumental in stimulating a series of cooperative training workshops for health and welfare workers in New Jersey, Colorado, Massachusetts, Kentucky, and Puerto Rico.

A laboratory unit to standardize procedures and tests used in heart disease studies has been established at the Communicable Disease Center in Atlanta.

A computer program for automated electrocardiographic analysis has successfully classified electrocardiograms by statistical techniques. A test on a larger scale is planned. Preliminary studies in electrocardiographic telemetry and in computer analysis of phonocardiograms are in process.

CANCER CONTROL

For the first time in more than a decade, Federal assistance to State health departments for cancer control was increased this fiscal

year. Federal funds rose from $2.25 million to $3.5 million, with a $25,000 minimum per State. In those States able to budget the increase immediately, most of the additional funds were put to use for clinic and casefinding activities and for program development.

Demonstration Projects

Seventy-nine Community Cancer Demonstration Project Grants were awarded, totaling $1,781,153. These projects are hastening the application locally of current knowledge for controlling cancer. Sixteen projects planned to examine some 50,000 women for uterine cancer. To bolster programs such as these, the education of nearly 200 cytotechnicians was aided through grants to approved schools of cytotechnology. Other grants supported projects in professional and public education, collection and analysis of data to improve care, in rehabilitation, and in other activities.

Both the Cancer Control Program and the Association of State and Territorial Health Officers encouraged and emphasized cancer examinations among the comparatively high risk group of women receiving medical care from public agencies. Cytologic smears are being processed by the Washington Cytology Unit, the Cancer Control Program's laboratory, to help other Federal agencies to increase the number of beneficiaries being examined for uterine cancer.

"Shoptalk," a technique to aid professional education, passed from an experimetal to an operation stage. Perfected with the cooperation of the American Academy of General Practice, this technique uses filmstrips and tape-recordings of family physicians and specialists discussing practical problems of cancer control. The Academy is using these films and tapes to promote further discussion among other groups of physicians on the problems and opportunities in their daily practice in applying cancer detection and diagnostic techniques.

The Public Health Service position on smoking and lung cancer was presented to medical and public health groups, in national, regional, and local meetings, including the annual meeting of the American Medical Association.

HEALTH SERVICES FOR LONG-TERM ILLNESS

Some 25 contracts and agreements related to health services for the chronically ill had been approved as of June 30, 1961 with State and local health and welfare agencies and nonprofit organizations. They were mainly training, survey, and research projects planned to prepare the way for broad service programs.

Major areas of interest are:

Nursing Care of the Sick at Home.—Professional nurses and assistants from both official and voluntary health agencies render services

to that major proportion of the chronically ill and aged not residing in institutions.

Homemaker Services.—Home help is supplied when illness or disability creates a family need for such service.

Coordinated Home Care.—Selected patients at home receive physician-directed medical, nursing, social, and related services through a plan based on coordination, evaluation, and follow-up.

Information and Referral.—Information concerning community health and medical care resources is made available from a central source, and consultation and guidance are offered to patients, families, and professional personnel.

Periodic Health Appraisal.—The detection of disease in apparently well persons, the determination of the individual's health status, and the early prevention of disability are furthered by periodic appraisals that include health history, physical examination, and clinical and laboratory tests and procedures.

Nursing Home Services.—Many chronically ill and aged persons not in need of hospital care are accommodated in facilities that are designed, staffed, and equipped to provide nursing care and related medical services under State license.

Technical assistance was supplied in the formulation of State Plans regarding grant expenditures for community health activities and services.

More than 10,000 nursing aides in nursing homes have been trained through coordinated training activities developed in cooperation with the American Red Cross.

Projects supported in eight communities have provided hospital guidance and consultation services to nursing homes, and a documentary film on this operation has been produced.

Over 10,000 copies of the "Nursing Home Standards Guide" have been distributed to State and local public and private agencies.

Staff assistance was contributed for planning and conducting the White House Conference on Aging. National and Regional Institutes and Seminars were sponsored for the study of home care, nursing homes, and coordinated home care. Nursing home personnel will be trained in accounting techniques at Regional Seminars organized by the Program.

DIABETES AND ARTHRITIS

The Diabetes and Arthritis Branch cooperates with the National Institute of Arthritis and Metabolic Diseases by applying new research developments in community programs as soon as feasible.

Diabetes Blood Testing

Diabetes detection and field research activities have been advanced. A preliminary report of blood test screening projects shows that 59 health agencies in 16 States and one territory screened over 74,000 persons during the fiscal year 1961.

Employees of 27 federal agencies were included in a diabetes detection program conducted by the Federal Employee Health Program and the Diabetes and Arthritis Branch. Results of 20,000 tests made in the Washington, D.C., area are under study, and screening is continuing.

A continuing study of abnormal carbohydrate metabolism in pregnancy conducted by a field research staff in Boston has disclosed that there is a reduction in the frequency of births of large weight babies among women treated with insulin during pregnancy. Followup examinations of 307 pregnant women treated with insulin, 307 positive controls, and 319 negative controls have resulted in the diagnosis of diabetes in 36 insulin treated women, 45 positive controls, and one negative control patient.

Automated Diabetes Instruction

Time consumed by busy physicians instructing diabetes patients in self-care may be reduced significantly by an automated instructional course in diabetes being developed in cooperation with manufacturers of a self-instruction machine. The machine has been successfully used in industrial and armed forces training. The automatic teaching device will be tested in several health department clinics during the next fiscal year.

Arthritis Control

Though early detection of arthritis has not yet progressed to the same degree as diabetes control activities, attention and study have been given to possible utilization of several promising uric acid screening methods. A number of communities are being explored as possible sites for field research in screening for gout—a disease that can be controlled with the prophylactic use of certain drugs.

VISION AND HEARING CONSERVATION

The Vision and Hearing Conservation Branch works closely with official State and local health agencies, national voluntary agencies, and the National Institute of Neurological Diseases and Blindness to develop a nationwide program for the early detection and management of vision and hearing impairments.

Increasing awareness of the effectiveness of early detection of glaucoma in preventing blindness or serious sight impairment has resulted

in widespread adoption of glaucoma screening programs by State and local health departments. Nearly half of all the State and territorial health departments have glaucoma detection programs. Approximately 100,000 persons were screened during the fiscal year.

National Reporting System

In cooperation with the National Society for the Prevention of Blindness, the Branch has developed a national reporting system to obtain definitive information on glaucoma screening methods being used in local programs. The reports will supply valuable data on prevalence of the disease nationally, the types of population most susceptible to glaucoma, and the most effective screening methods.

Validation of various screening tests in predicting the development of definite simple glaucoma was continued in a Glaucoma Collaborative Study involving five university ophthalmologic centers. This 5-year study is supported by grants from the National Institute of Neurological Diseases and Blindness. About 600 patients already have been evaluated.

The specificity and sensitivity of the Schiøtz type tonometer is being studied at the University of Tennessee School of Medicine.

Tonometer Sheath Developed

A disposable, latex-rubber sheath called a "tonofilm" that keeps the footplate of a tonometer sterile during glaucoma screening tests has been developed. The device shows promise of reducing the hazards of eye contamination in large-scale screening operations where instruments have to be used repeatedly and kept sterile. Conventional methods of sterilizing tonometers are not very effective. The "tonofilm" is being evaluated at two clinics before production is permitted for general use.

Hearing Conservation

A committee of expert consultants in audiometry and audiology was formed to develop criteria for hearing measurements that can be used in programs. Studies are being planned to develop information on the extent to which hearing loss is preventable or remediable, the effect of the aging process on hearing loss, and the types of hearing tests and standards that can be applied to community screening programs.

Communicable Disease Center

The Communicable Disease Center, Atlanta, Ga., carries out Public Health Service programs in the control of infectious diseases. It

conducts epidemiological, field, and laboratory studies and provides various types of technical assistance to State health departments. Because of the global nature of infectious diseases, CDC also participates in health efforts around the world. It provides technical support and personnel for the health programs spearheaded by the International Cooperation Administration. It also cooperates with the World Health Organization through representation on expert advisory panels and committees and as a laboratory diagnostic and study center.

This year, CDC brought all its central activities together in new headquarters buildings adjacent to Emory University, which were dedicated on September 8, 1960. The Southeastern Rabies Field Station was moved from Montgomery, Ala., to Chamblee, Ga., and established as a National Rabies Laboratory. In April, a new laboratory building adjoining the University of Kansas Medical Center was dedicated to house the Kansas City Field Station. This installation conducts investigations of the systemic mycoses and respiratory and enteric viral infections.

With the transfer of the tuberculosis program to CDC this year, control activities for all infectious diseases became centralized. In addition, responsibility for collecting and publishing morbidity and mortality reports of communicable diseases was transferred from the National Office of Vital Statistics to CDC on January 1, 1961.

EPIDEMIC AND DISASTER AID

Epidemic aid was extended in 38 instances to 23 States, and additionally to West Berlin and American Samoa. Several other States, the District of Columbia, and Puerto Rico sought consultations in connection with epidemics.

Infectious and serum hepatitis epidemics accounted for 11 calls for aid, poliomyelitis for 5. Other diseases included infantile diarrhea, diphtheria, encephalitis, staphylococcal infections, streptococcal infections, rabies, trichinosis, erythema infectiosum, anthrax, and typhoid fever. A localized concentration of leukemia in Cook Co., Ill., was studied in conjunction with the National Cancer Institute.

Disaster aid was furnished to eight States in nine instances, primarily in connection with emergency vector control.

REPRESENTATIVE DISEASE STUDIES

Quota Sample Surveys

The "quota sample survey" developed at CDC in 1959 was improved and modified, and its use was extended to a number of com-

municable diseases. Originally designed to assess polio immunization levels of different population groups within a community, it was used this year to study epidemiological patterns of polio and several other diseases and to investigate factors possibly related to a concentration of cases of leukemia. When broadly applied, this technique promises to be a useful adjunct to guiding and evaluating many types of local health programs.

Venereal Diseases

Infectious syphilis morbidity climbed to 18,781 reported cases during fiscal year 1961—the greatest number recorded in any year since 1950. Increased incidence involved both sexes and all age and racial groups. Thirty-seven States reported an upswing in cases, both among clinic and private patient groups, with 10 large cities contributing 42.3 percent of the total number of infectious cases.

In an effort to reverse the tide, the Venereal Disease Control Program supported epidemiologic and casefinding services in 45 States and Territories through 82 project grants and through assignment of 226 doctors, nurses, health program representatives, and public health advisors to health departments. In addition, 123 public health workers were hired under cooperative agreements between the Public Health Service and other agencies.

In the States, programs to visit private physicians and stimulate them to report all syphilis cases and permit epidemiological follow-up were vigorously pursued. Nearly 75 percent of infectious cases reported by physicians last year were subjected to the same rapid and intensive investigation in regard to contacts that is applied to most clinic cases. Every infectious case is regarded as an emergency. Since one out of four patients reports out-of-State contacts, epidemiologic information is transmitted by long-distance telephone. In some instances, outbreaks stemming from a single source have been found to span the continent and even cross oceans. Re-interviewing and cluster testing are used to locate, examine, and bring to treatment as many contacts as possible.

A revealing study of the sexual and social behavior of 600 teenagers who came to New York City's venereal disease clinics during a 2-year period was completed during 1961. This study was conducted by the American Social Health Association in cooperation with the New York City Department of Health and financed by the Public Health Service. A limited edition of "Teenagers and Venereal Disease: A Sociological Study," the detailed report of these findings, has been published by CDC.

Inability to diagnose gonorrhea in the female has been an obstacle to the development of effective gonorrhea control programs. The

fluorescent antibody test has been adapted to the identification of the organism and is now being evaluated in field trials. Nine State health departments are using the Fluorescent Treponemal Antibody test to differentiate between biologic false positive reactions and those genuinely indicative of syphilis.

Evaluation of therapeutic agents indicates that penicillin is still effective in the treatment of syphilis. Some decrease in the susceptibility of the gonorrhea organism has been noted; however, a number of alternate antibiotics have been evaluated and are available.

Influenza

Acting upon recommendations of the Public Health Service Advisory Committee on Influenza, CDC mounted a campaign to stimulate the annual vaccination of high-risk groups against this disease. The elderly, the chronically ill, and pregnant women consistently account for a major portion of the excess influenza-associated mortality during epidemic periods.

The campaign was aimed at the medical profession and others responsible for the care of high-risk individuals. Its success was evident in the increased demand for vaccine.

CDC prepared and distributed nearly 40,000 copies of an Influenza Fact Sheet to Regional Medical Directors, medical specialty groups, medical journals, State health officers, pharmaceutical houses, and other interested groups.

Poliomyelitis

The changing trend in poliomyelitis incidence in the United States was brought more clearly into focus during 1960. Only two major epidemics occurred, one in metropolitan Providence, R.I., and the other in Puerto Rico. However, there were numerous moderate urban and rural outbreaks and several localized concentrations of cases throughout the country.

After the severity of the 1959 polio season, the dramatic drop in number of cases was particularly gratifying. Out of 2,218 paralytic cases reported to CDC's Poliomyelitis Surveillance Unit,[2] 57.6 percent were concentrated in totally unvaccinated individuals and only 7.4 percent occurred in fully vaccinated persons. The effectiveness of the Salk vaccine was thus reaffirmed.

A reversion to the infantile form of polio was seen, with 43 percent of the cases occurring in preschool children, peaking among one- and two-year olds. Also notable was the increased incidence in the 20- to 35-year age group.

[2] Best available count.

The Surgeon General's Polio Advisory Committee took these findings into consideration when it met at CDC in October and January. Prominent among the Committee's comprehensive recommendations for polio control were the intensified use of Salk vaccine as an immediate goal and of oral vaccine for use in curbing epidemics as soon as it should become available. The Committee endorsed the Public Health Service plan to encourage local community drives to reach lower socioeconomic and younger age groups through "Babies and Breadwinners" campaigns.

The first demonstration of an all-out community immunization effort was staged in Columbus, Ga., in cooperation with the State and county health departments. Although a preliminary Quota Sample Survey showed that this city of 120,000 population had a better than average immunization level, approximately 80,000 doses of Salk vaccine were given in three 1-week periods. As the program proceeded, it was documented step-by-step.

The Columbus campaign served as a prototype for others throughout the country. Community groups, the Advertising Council, and other organizations on the local and national level contributed talent, publicity, and manpower to the Columbus campaign and to others that followed it.

At the end of the fiscal year, when licensing of oral polio vaccine Type I appeared imminent, the President of the United States requested and Congress appropriated $1 million to purchase oral vaccine as it was licensed. The supply is to be used to study the effectiveness of the vaccine in controlling epidemics.

Encephalitis (Arthropod-Borne)

Studies in Colorado have uncovered a link between warm spring temperatures and the transmission rate of St. Louis encephalitis (SLE) and between cool springs and western encephalitis. If these findings hold true elsewhere, a means may have been found for predicting outbreaks of encephalitis and the probable type. An unsuspected enzootic vector of western encephalitis may be spreading the virus in high altitudes. Chicken flocks, placed strategically to serve as sentinels of viral activity, have demonstrated a high rate of transmission of this virus even when the mosquito *Culex tarsalis*, the presumed vector, was essentially absent.

Tuberculosis

Many communities are hard pressed to provide clinic and outpatient services to tuberculosis patients, the majority of whom receive part, and sometimes all, of their treatment at home. The Tuberculosis Program made a special effort this year to help States with high case

rates and inadequate funds. By assigning professional workers, it enabled a number of areas to expand and intensify their services.

In demonstration projects, nurses' aids and specially trained investigators relieved public health nurses of routine tasks, freeing them for more professional functions. In another project, homemakers were employed to see if this would encourage patients to continue treatment.

A major research activity dealt with the identification of unclassified mycobacteria, which cause clinical disease similar to tuberculosis but do not respond to present drugs. More than 500 strains have been collected; 64 of these were subjected to tests in guinea pigs. Eleven new mycobacterial antigens were prepared and used for studies of human population groups, and others are now being developed. New findings from studies of tuberculin sensitivity and chemotherapy evaluation were reported and the large-scale study to determine whether isoniazid is effective in preventing tuberculosis was continued.

Plague

A new technique, involving fluorescein labeling, was developed for use in the field to permit immediate checks of dead rodents for plague infection.

Schistosomiasis

Field studies in Puerto Rico demonstrated the effectiveness of the predator snail *Marisa cornuarietis* as a biological control agent against the snail intermediate host of schistosomiasis, *Australorbis glabratus*. A chemical, acrolein, was found to be a good combined herbicide and molluscacide in Puerto Rico field tests.

VECTOR CONTROL

Aedes aegypti, the urban vector of yellow fever, is being eliminated initially in a 5-square-mile area of Pensacola, Florida, in a CDC project to determine the cost and feasibility of eradicating this species. Studies on the release of sexually-sterile adult male *Ae. aegypti* as an aid to eradication have been initiated.

Improved formulations of solid spontaneous vaporizers for DDVP have been developed for use in the residual fumigation method of vector control. Field tests of this method of controlling malaria mosquitoes, together with studies on the toxicity of DDVP vapor to humans, have been initiated in Upper Volta, Africa. The use of DDVP vapor for disinfecting aircraft while in flight has been found to be biologically feasible in tests on commercial planes. Studies have been started to determine if the vapor, as used in the tests, has any adverse effect on human volunteers.

LABORATORY SERVICES AND NEW TECHNIQUES

Nearly 56,000 disease specimens were referred for identification to the CDC laboratories by State and local health departments, by various Branches of the Center, and by Federal agencies other than CDC, research groups and foreign countries.

In addition to the amounts required in its own programs, the Center produced and distributed more than 155,000 ml. of diagnostic reagents, and over 12,000 shipment lots of tissue culture media to health departments here and abroad, to other Federal agencies, universities, hospitals, and research groups. These materials are not available commercially.

Conjugates for the nine important serotypes of enteropathogenic *Escherichia coli* found in the United States have been prepared and fully evaluated. Sensitivity and specificity were so encouraging that a field study was undertaken in San Juan, Puerto Rico, where incidence of infantile diarrhea is high. Additional work indicated by the study has been completed and the method now shows great promise for rapid diagnosis needed in the control of this disease.

Under an agreement with the Division of Chronic Diseases, a laboratory has been established to work out procedures for standardization of tests used in heart disease research and control. The first program of the new laboratory is a cholesterol program to support lipid epidemiologic research in public health laboratories. Fifty-two laboratories in the United States and Canada are participating in this continuing program which is designed so that others may join the program.

INTERNATIONAL COOPERATION

In collaboration with the World Health Organization, a reference skin test antigen for the diagnosis of schistosomiasis was prepared and distributed to workers in Japan, Philippine Republic, Africa, Lebanon, and India for evaluation. A protocol for the standardization of the skin test and methods for analyzing the results of these trials was prepared for use by WHO.

Under a cooperative agreement between the governments of Colombia, South America, and the Republic of Lebanon, with the Public Health Service, members of the Audiovisual Section of CDC surveyed and secured film footage on nutritional standards of the civilian and military population in those countries.

TRAINING

Nearly 6,000 persons from State and local health departments, Federal agencies, academic institutions, industry, and organizations attended 373 CDC courses in communicable disease control presented throughout the United States and at CDC headquarters. Over 26,000

audiovisual aids were loaned in response to requests, and more than 100,000 pieces of training literature were distributed. Two venereal disease control seminars were held which attracted an additional 1,300 persons. Thirty-seven training publications were prepared and 69 audiovisual productions were completed during the year.

Division of Accident Prevention

Accidents are the first cause of death from age 1 to 36 and fourth for all ages. The Division of Accident Prevention, established February 1, 1961, supports a broad program of research to identify human factors in accident causation which can be modified or compensated for. Its recent and ongoing activities include:

Cooperation with the Greater Cleveland Safety Council on a public action program over a full year beginning September 8, 1961, the first attempt of its kind in any metropolitan center.

Participation in a national seat-belt campaign launched by the Advertising Council of America.

Provision of seat-belt anchor points for at least two seat belts in all American 1962 cars, partly as a result of PHS activity.

A study in five rural Virginia counties to try to reduce accident rates through community organization and strong publicity. The results are being published as a valuable guide for other rural areas.

Participation in a program on fire deaths and injuries in Mississippi County, Ark. Injuries from fires dropped dramatically in 1 year. The State health department is extending the work on a statewide, permanent basis.

Other activities included sponsorship of a Conference of State Motor Vehicle and Health Officers which led to permanent committees to foster close cooperation of their departments on driver licensing, driver examinations for intoxication or drug addiction, and related medico-legal problems.

A conference on driver simulation projects brought together all interested disciplines and opened a campaign for a wide range of devices.

A successful Conference on Alcohol and Traffic Safety was held to compile all known facts on this subject.

The first textbook on accident prevention for physicians and health workers was published, with PHS cooperation, by the American Public Health Association.

The National Clearinghouse for Poison Control Centers, with 460 centers affiliated as of July 1, started pilot studies on preventing childhood poisoning.

A "safe medicine chest," developed in the Division, is being considered for production by several manufacturers.

Other interests include mouth-to-mouth resuscitation, emergency care of accident victims, accidents of aged persons, safety standards for home appliances, epidemiology of traffic deaths, and effective home inspection for fire prevention.

Division of Nursing

The Division of Nursing was established in September 1960 by combining the Division of Public Health Nursing with the Division of Nursing Resources. All major program goals and objectives of the two former divisions are being continued and expanded and new objectives will be added as new health programs develop. The Division is responsible for the continuing appraisal of nursing needs and available resources to meet these needs. It also stimulates the development of new resources and assists health agencies, hospitals and other institutions to make the most effective use of nursing services. This work is carried out through: (1) systematic collection and analysis of data on nursing needs and resources; (2) consultation to State health departments, and through them to local health agencies, on all aspects of nursing programs for which they are responsible; (3) consultation on the application of study methods, as requested, to health agencies, nursing organizations, hospitals, both voluntary and tax-supported, and others; (4) intramural studies to develop new methods of improving nursing practice; and (5) grant operations, both for advanced training and for research.

The Surgeon General's Consultant Group on Nursing, appointed this year and comprising 24 leaders from health professions, industry, and civic groups, is considering the Nation's nursing needs in order to make recommendations on the appropriate role of Federal and local governments and private agencies in the provision of adequate nursing care. The Division has primary responsibility for the preparation of materials and other staff services for this Group.

The Division also gave leadership in nursing and health through the Division Chief's service as an official adviser for the U.S. delegation to the 1961 World Health Assembly; loan of one nursing consultant to the World Health Organization for 3 months to prepare a nurse staffing guide for public health agencies; and loan of two consultants to universities to teach courses in nursing research.

SYSTEMATIC ANALYSIS OF NEEDS

In addition to the recurring biennial estimates of total nurse supply and the census of public health nurses, the Division has underway a series of related surveys and analyses to obtain information needed to guide program development. For example, the latest estimates re-

ported employment of 80,000 part-time nurses, but there was no information on the amount of time these nurses work annually. The Division is conducting a study to provide information on the work patterns of this important group. More than 6,000 questionnaires from a sample of these nurses were received and coded; data analysis will be completed in 1962 and a report published.

An estimated 200,000 professional nurses maintain a current license to practice although they are not actually nursing. These nurses could form an important corps to augment the national supply.

To determine the availability—readiness and willingness—of inactive registered nurses to return to nursing posts full- or part-time, the Division is undertaking an extensive survey of a sample of these nurses.

To provide data for the 1963 evaluation of the Professional Nurse Traineeship Program and other training activities, work was begun on the development of a questionnaire for use in obtaining detailed information on the present educational level of professional nurses and their potential for and interest in further preparation.

NURSING CARE OF THE SICK AT HOME

The Division continued to promote and encourage local health agencies in the development of programs to provide nursing care to sick and disabled persons in their homes. Vast expansion of home nursing services can be predicted as demands grow due to the increasing numbers of chronically ill who are best cared for in their own homes.

Technical assistance from both regional nursing consultants and headquarters staff has been accelerated because of the urgent need to develop these services in States which passed legislation including home nursing care for the aged as permitted under the 1960 Social Security Act Amendments. Assistance was requested on a variety of problems, such as the conditions necessary for the initiation of such a program, ways and means of recruiting and training personnel, organizational patterns for the new service, and ideas for publicizing this additional community resource.

One major administrative problem raised was the determination of costs of providing nursing care in the home as a basis for fee schedules. The Division assisted two States to develop workable cost procedures.

With the assistance of the regional nursing consultants, the Division of Public Health Methods, and the Bureau of Public Assistance, a statement, "Medical Assistance for the Aged and Nursing Services in the Home," was developed and distributed to both health and welfare agencies nationwide. It has proved to be helpful to health and welfare departments in the development of cooperative programs.

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A countywide nursing care of the sick program including a hospital-health department referral system was launched by the Rockland County Health Department in New York. Funds to make this program possible were transferred to the Division by the Heart Program. Consultation for this program has been provided by personnel from the State Health Department and the regional nursing consultant, with overall direction by the Division.

Ten additional agencies were assisted with instituting work measurement procedures. In one State, procedures were adapted for application on a statewide basis.

NURSING SERVICES IN OUTPATIENT DEPARTMENTS

The hospital outpatient department has a significant position in total medical care programs. It plays a key role in early discharge from the hospital, in the expanding programs of home care, and in care of the ambulatory patient, often preventing hospitalization.

The Division has developed a method for improving nursing in an outpatient department through several interlocking studies designed to give a comprehensive picture of nursing services. These studies also afford a means of analyzing some aspects of patient experience, for example, patient "waiting" time, continuity of care between clinic and home, and patient teaching, which are influenced by the nursing administration of the outpatient department.

This year, arrangements were made to assist in making such studies at three university hospitals in the South which recognize the urgency of their own problems relating to outpatient care.

STATEWIDE STUDIES OF HOSPITAL NURSING

Studies of inpatient nursing units continue to be an effective tool for self-evaluation by demonstrating how hospital nurses can better spend their time in patient care. Approximately 200 hospitals have now studied nursing activities with consultation from the Division. Workshops to teach the study method were conducted in Indiana, California, and Pennsylvania, and consultation was given in Kansas and New Jersey. These last three States are planning studies on a statewide basis in cooperation with local hospital associations and other health organizations.

NURSING RESOURCES SURVEYS

Consultation was given six States during various stages of initial or reappraisal studies of their nursing resources. These were West Virginia, Montana, South Dakota, Louisiana, Kansas, and Mississippi.

Mississippi's reappraisal in 1959–60 pointed out that a contributing cause of their meager professional nurse supply might be the high

percentage of nursing students (more than 50 percent) who either withdrew or failed to pass the State licensing examination. The Division cooperated with representatives of the schools of nursing in conducting a study of over 1,000 students to determine the relationship between results on various pre-admission tests and the eventual success of students, both in school and in obtaining licenses. Findings were studied thoroughly by school representatives and the reappraisal committee in a three-day workshop and plans were made for better selection of students and other program improvements.

This study underscored the value of using high school grades and performance on admission tests as predictors of a student's success in a school of nursing. It also demonstrated the high cost of training poorly qualified students.

INTRAMURAL RESEARCH

Reports of two completed studies by staff members were published. These were A Study of Student Nurse Perception of Patient Attitudes and Behavior Patterns of Premature Infants.

In cooperation with the Boston Public Health Service Hospital, an experimental study of the comparative costs, durability, and acceptability of reusable and disposable surgical gloves showed that use of disposable gloves saved personnel time which could then be reassigned to activities more closely related to patient care.

A patient progress study was undertaken, designed to develop a technique by which public health nurses might define the health needs of patients and then measure response to each service given in terms of the ultimate goal the patient is expected to attain. This year, data were obtained from four agencies in Ohio, Wisconsin, and New York. Where the methodology has been tested, agencies have been enthusiastic about its usefulness in helping them focus on the patient's progress in relation to his problems. It is also considered to be an effective supervisory and self-evaluation tool.

An evaluation of the Children's Bureau demonstration of health services for migrant laborers in Florida is to be based on this study method, as are several other evaluation projects.

GRANTS FOR TRAINING AND RESEARCH

The Professional Nurse Traineeship Program, between September and March, awarded grants to 1,421 trainees through 94 schools, for long-term preparation in teaching, administration, and supervision. In the short-term training program, started last year, 117 short courses were approved and grants awarded to course sponsors in the amount of $792,000. Over 4,200 trainees participated in these courses.

The Division is also responsible for consultative services to the Division of Community Health Services on nursing applications for public health traineeships and on project grants for graduate training in public health. Thirty project grant applications were approved for training nurses in public health; about 250 nursing applications for public health traineeships were reviewed and acted upon.

Through the Research Grants and Fellowships Program, a total of $1,700,000 was awarded for 19 studies of importance to nursing and for 26 full-time predoctoral fellowships to as many nurses to prepare for independent research.

Project applications reveal a significant trend toward studies in clinical nursing as exemplified by a grant to study the relationship of nursing care to pain patterns following heart surgery. Approved projects deal with both hospital and public health nursing; nursing education and student health; nursing in other nations; patient teaching and activity patterns; maternal and child health; and assessment of nursing home care.

Division of Dental Public Health and Resources

The Division of Dental Public Health and Resources was established on September 1, 1960. Previously, responsibility for dental health activities had been divided between the Division of Dental Public Health and the Division of Dental Resources.

Dental diseases are the most prevalent of all disorders, but only 4 people in 10 receive dental care annually. Accumulated treatment needs alone are great enough to employ the dental force full-time for five years. To provide the needed care and direct programs of disease prevention, the nation must rely upon a dental force which has diminished in proportion to population for a generation.

RESEARCH AND TRAINING CENTER

In a major effort to reduce the time lag between the discovery and utilization of knowledge of dental diseases and their control, the Division obtained facilities in San Francisco for a Dental Health Center. The Center will be the first national facility to conduct applied research programs in the prevention and control of dental diseases and to train public health workers in the use of research findings.

CONTROLLING DENTAL DISEASES

The incidence of dental caries can be substantially reduced by the increased utilization of available and already proven methods of prevention. Through informational services and technical assistance to health departments, the Division encouraged the adoption

of water fluoridation, the most effective caries preventive. As of June 30, 1961, some 38,864,000 people in 2,008 communities were served by controlled fluoridation. An additional 7,000,000 lived in the 1,903 communities where the water is naturally fluoridated.

Preventive programs initiated included a study of the effectiveness of stannous fluoride dentifrices in preventing decay among school children and the field testing of fluoridators for use in homes utilizing individual wells. Continuing activities included projects for testing different concentrations of topical stannous fluoride solutions and studies of the practicality of fluoridating school water supplies in rural areas where central water systems are not used.

REMOVING BARRIERS TO DENTAL CARE

In any year 60 percent of the population do not receive dental care. The cost of dental services, physical conditions such as chronic, disabling illnesses which make it impossible for people to go for care, and psychological and sociological influences which make people fear or ignore the need for care are among the factors which bar people from needed services. Activities originated or supported by the Division are designed to eliminate these barriers.

Financing Dental Services

Privately sponsored prepaid dental care plans are effectively lowering the cost barrier and increasing the utilization of dental services. The Division encouraged the growth of prepayment by serving as an informational and consultative center for consumer groups and dental societies establishing prepayment programs. This year the revised "Digest of Prepaid Dental Care Plans 1960," summarizing the benefits, eligibility requirements, and other pertinent information on programs already in operation, was published. A collection of fee schedules used in various prepayment plans was prepared for publication.

An outgrowth of interest in prepayment has been the development of dental service corporations, nonprofit agencies through which State dental societies administer prepaid care plans. Under a cooperative agreement with the Michigan State Dental Association, the Division participated in the organization and administration of the society's service corporation, gaining practical experience which will be useful in assisting other dental societies.

Services for Special Groups

In most communities, facilities and programs to provide dental care for the chronically ill and aged, the mentally and the physically handicapped are nonexistent.

Three pioneering projects completed on June 30 produced basic data on dental care needed by the mentally and chronically ill and the aged and developed techniques and equipment for use in providing care for them. Two of the projects, at the West Virginia State Hospital in Huntington, W. Va., and at the Beth Abraham nursing home in New York City, will continue the treatment phases of those programs.

The third project, a 4-year study of dental care for the chronically ill and aged in Kansas City, brought dental services to both the homebound and nursing home patients. The prototype program demonstrated how community service programs can meet the dental treatment needs of a neglected group. One phase of the project, the training of dental students at the University of Kansas City School of Dentistry in the use of portable dental equipment and the special techniques of care for the aged and ill, will be continued by the dental school.

In cooperation with the State health departments of Idaho and Illinois, the Division initiated projects designed to assess the dental care needed by handicapped children. These projects will provide needed care and collect data necessary to the establishment of State and local service programs.

Indifference to the need for dental care and fear of treatment are reflected not only in the failure of individuals to utilize dental services but also in public apathy toward dental public health programs. Studies underway in the Division continued the attempt to ascertain why certain population groups make, or do not make, dental visits and why people join various financing programs.

DEVELOPING DENTAL RESOURCES

Activities aimed at increasing the utilization of dental services must be accompanied by the building of a dental force adequate to meet the greater demand for care. Within 30 years the national dentist-population ratio has declined from a high of 58 dentists per 100,000 persons to 46. Just to maintain the current ratio, the nation must double, within 15 years, its capacity to educate dentists. Greater numbers of dental auxiliary personnel must be recruited and trained, and ways to increase the productivity of the dentist developed and utilized.

Division studies in the space requirements and space relationships of dental schools were designed to learn how these facilities can be planned and constructed more efficiently and economically. The preparation of dental school planning guides undertaken this year should assure that new schools are built not only in accordance with

the most modern teaching concepts but with enough flexibility to be adapted to future innovations in curriculum and technology.

Educational Programs

The use of chairside assistants is an effective method of stretching available dental services, for it enables the dentist to treat more patients. An experimental program to teach dental students to work with chairside assistants, originally initiated under cooperative agreements with six dental schools, culminated this year in a grants program available to all schools. Already 40 schools have indicated that they will participate in the grants programs, administered by the Division for the National Institute of Dental Research, in the coming academic year. Seven technicial and vocational high schools, junior colleges, and dental schools will participate in a continuing cooperative program, started in 1956, to establish standards for training chairside assistants.

ASSISTING OTHER HEALTH AGENCIES

Assistance to State and local health agencies in the planning of dental programs is a continuing activity. This year a comprehensive study of State dental health programs, covering administration, resources, and program content, was initiated. The survey will serve as a basis for formulating recommendations and establishing standards to be used in guiding the future growth of these programs.

Division of Water Supply and Pollution Control

Fiscal year 1961 was the 5th year of administration of the water supply and pollution control program under Public Law 660. At the end of the year Congress enacted major revisions to the Water Pollution Control Act, strengthening the Federal role and providing additional aid to State and local governments. Two events during the year also focused attention on the gravity of the water situation: the first National Conference on Water Pollution (December 1960) and the release in January 1961 of a report by the Senate Select Committee on National Water Resources based on a comprehensive two-year study.

The legislation amending Public Law 660 was signed by the President on July 20, 1961. It provides for: (1) intensified research and establishment of field laboratories; (2) inclusion of storage for water quality control in new Federal reservoirs; (3) extended and increased grants to States for their control programs; (4) liberalized and increased grants to further stimulate construction of municipal waste treatment facilities; and (5) broadened Federal enforcement pro-

cedures to abate pollution. The Act declares it to be the policy of Congress to "recognize, preserve and protect the primary responsibilities and rights of the States in preventing and controlling water pollution," pointing out that the Federal role is one of leadership and providing "technical services and financial aid to State and interstate agencies and to municipalities."

CONSTRUCTION GRANTS

During fiscal 1961 grants totaling $45 million were approved for 590 municipal sewage treatment construction projects. During the entire 5-year period ending June 30, 1961, grants totaling $225 million were made in support of construction totaling $1.3 billion. Of the 2,746 projects approved, 1,580 were completed and 710 under construction. These will serve a population of 27 million and abate municipal pollution in over 33,000 miles of streams.

PROGRAM GRANTS

Grants to State and interstate agencies to assist them in establishing and maintaining adequate water pollution control programs have encouraged the States to increase their appropriations from $4.2 million in 1956 to $6.7 million in 1960.

BASIC DATA

To determine pollution trends, the National Water Quality Network of stream sampling stations was enlarged from 79 to 91, with 300 as the ultimate goal. Continuing data are collected, analyzed, and published on water and waste treatment facilities and needs. A reporting system on pollution-caused fish kills was initiated. An inventory of Federal establishments to determine the extent of, and remedial measures for, pollution coming from these installations is in progress and due for completion in July 1962.

ENFORCEMENT

The enforcement procedure has been invoked in 15 interstate water pollution situations under the 5-year program of the Federal Water Pollution Control Act. One new enforcement action during the 1961 fiscal year was initiated on the North Fork of the Holston River (Virginia, Tennessee). Additional steps in the enforcement procedure were taken in the following pending cases: the Bear River (Idaho, Utah, Wyoming); the Colorado and all its tributaries (Colorado, Utah, Arizona, Nevada, California, New Mexico, Wyoming); and the Missouri River, St. Joseph, Missouri. Also, as the fiscal year ended, preparations were near completion to hold a conference involving the

Raritan Bay (New York, New Jersey). Continuing files are maintained on some 2,000 additional pollution areas. Enforcement actions to date are effecting pollution abatement in more than 4,000 miles of streams. The resulting remedial measures agreed upon include waste treatment facilites to cost in excess of $500 million.

RESEARCH AND RESEARCH GRANTS

Research continued at the Sanitary Engineering Center in problems of wastes origin, characterization, treatment and disposal, and in stream monitoring, water treatment, and the supplementation and conservation of water supplies. A major project in advanced waste treatment was undertaken to develop entirely new processes which will approach 100-percent purification of wastes. Direct responsibility was assumed for the support and administering of water supply and pollution control research grants formerly funded by the National Institutes of Health, and to support the training of urgently needed personnel through research fellowships and training and project grants.

COMPREHENSIVE PROGRAMS

The technical staff continued work in comprehensive river basin programming. New projects were initiated in the Columbia and Colorado River Basins and the Great Lakes-Illinois Waterway Basins. An earlier project continued in the Arkansas-Red Basin.

INTERAGENCY COORDINATION

Coordination of programs with water resources plans and projects of other agencies continued. Technical services under such interagency agreements represent a major and expanding activity. Thirty-eight evaluations of water supply requirements have been completed under the Water Supply Act of 1958 in conjunction with impoundments planned by the U.S. Army Corps of Engineers, and 48 others are in progress or scheduled. The Division has also provided staff technical services in support of the Department's membership in the Southeast River Basin Study Commission and the Texas River Basin Study Commission.

ADVISORY BOARD

Six meetings of the Presidentially appointed Water Pollution Control Advisory Board were held in fiscal 1961. In response to a request from the Surgeon General, the Board conducted a detailed study of existing program resources and projected future requirements in water pollution control.

Division of Air Pollution

On September 1, 1960, in recognition of increasing public concern about air pollution, the existing air pollution medical and engineering programs were combined in a single Division of Air Pollution. Following the approval, late in fiscal year 1960, of Public Law 86–493—which directs the Public Health Service to make a thorough study and report to Congress by June, 1962 on the health effects of motor vehicle exhausts—the Division has sharply accelerated its research in this area.

AUTO EXHAUST RESEARCH

The research projects set up to implement P.L. 86–493 involved complex procedures and required painstaking advance planning. By close of fiscal year 1961, however, many major studies were underway.

In one group of studies, colonies of experimental animals are being exposed in the laboratory to irradiated and nonirradiated motor vehicle exhaust and to concentrations of auto exhaust pollutants as they occur in the ambient air on city streets.

In six large cities, arrangements were completed for continuous measurement of exhaust-related gaseous pollutants to determine their ranges of concentration. In three cities, lead in the ambient air, and lead levels in the blood and urine of selected population groups, are being measured for correlation with traffic density and other parameters.

To help determine the pollutant contributions of gasoline- and diesel-powered trucks and buses, their operating modes are being surveyed in several cities. The particulate fraction of gasoline and diesel engine exhaust is also being analyzed for a variety of polynuclear hydrocarbons and oxygenates for correlation with analyses of potential carcinogens in emissions from other combustion sources. A cooperative survey is underway in Los Angeles to determine exhaust concentrations of hydrocarbons, carbon monoxide, carbon dioxide, and nitrogen oxides in a representative sample of registered motor vehicles under prescribed operating conditions.

The Division is also supporting, through its intramural research program and its research grants program, a number of other projects which should further help to determine the effects of motor vehicle emissions on human health.

OTHER RESEARCH ACTIVITIES

In 50 stations of the National Air Sampling Network, gaseous pollutants such as sulfur dioxide and oxides of nitrogen are now being sampled. Formerly, only particulates were sampled.

Further advances were made in designing and improving instruments for sampling pollutants or assessing their effects, for example, a portable transistorized particle counter and size analyzer. For industrial-type installations, improved filter devices were developed. Chemical research was oriented toward analytic methods for aromatic and aliphatic hydrocarbons and inorganic gases.

Special sampling for assay of potential cancer agents was conducted in six cities. The previously developed analytic technique for measuring certain potential carcinogens, particularly 3,4-benzpyrene, was applied to air samples of 103 cities and 28 nonurban sites; city levels averaged 16 times those found in nonurban areas. To further gauge the potential carcinogenicity of polluted atmosphere, the geographic distribution of lung cancer according to the histological type of tumor is being studied to test the theory that the different cell types may result from different causative agents.

The following are typical of many field studies of air pollution's health effects. Tests in a large industrial firm indicated a relationship between absenteeism due to certain respiratory diseases and total sulfate pollution in the air. Further study of results of a survey previously done in Nashville, Tenn., disclosed a similar association between asthmatic attacks and airborne sulfates. In studies of two small towns, which differed only in the degree of air pollution prevalent, preliminary analysis of data suggests corresponding differences in the residents' lung function and breathing capacity.

Laboratory studies on health effects were also expanded. In further animal studies, conjugated nitro-olefins were found to be potent irritants, with not only eyes and respiratory tracts affected but also circulatory and nervous systems. An especially significant study revealed that the resistance of mice to respiratory infection was markedly decreased after exposure to ozone, as demonstrated by increased mortality rate and lowered survival time. Pulmonary function tests revealed that human beings exposed under laboratory conditions to certain inhaled substances experienced reactions similar to those described in animals.

TECHNICAL ASSISTANCE AND TRAINING

Statewide air pollution surveys were completed, in cooperation with the State health agency, in Florida, Pennsylvania, and Georgia. Detailed reports were published on earlier surveys in Minnesota and North Carolina. Substantial assistance was also given in surveys conducted by State or local health departments in Hamilton, Ohio; Charleston, S.C.; Lynchburg, Va.; Washington, D.C.; and Berlin, N.H. Equipment loans or consulting services were provided to many other areas.

Intensive technical courses in air pollution were given at the Sanitary Engineering Center to 180 trainees from 32 States and 3 foreign countries. Two field courses were presented 6 times to 289 trainees. Support was also continued for the graduate-level air pollution curricula being developed at 10 universities.

NATIONAL GOALS

Late in calendar 1960, an important report was published: National Goals in Air Pollution Research. This report was prepared by a highly competent group of consultants outside the Federal Government, who were invited by the Surgeon General to identify goals for air pollution research over the next decade and to recommend a fair apportionment among the Federal Government, State, and local governments, and industry of the efforts necessary to reach these goals. The Division has set its sights accordingly.

Division of Radiological Health

The Division of Radiological Health is responsible for development and implementation of ways and means of controlling and, wherever possible, reducing radiation exposure. With the rapid multiplication of sources, applications, and users of radiation, it is imperative that the States assume increasing responsibilities for radiation protection and control. Therefore, particular attention is placed on providing technical assistance to bolster the radiological health competency of the States. Technical personnel from the Division are currently assigned as radiological health consultants to the Regional Offices and additional personnel have been assigned directly to State health departments.

A new mail survey technique (Sur-pak) has been developed for evaluating dental X-ray units used in private offices and clinics. The Division furnishes the State health departments with survey packets, which are then distributed to each individual dentist or organization in the survey area. After exposure of the film packets to the X-ray units, they are returned through the State Health Department to the newly developed Radiological Health Laboratory at Rockville, Md., for interpretation and report of findings back to cooperating offices.

The new Rockville Laboratory was established for the primary purpose of developing methods for the effective control of radiation hazards from medical, dental and industrial X-ray units as well as providing training in radiological health.

At the request of the Navy Department, the Division established a radiation monitoring station at the site of a proposed Navy Reactor

at McMurdo Sound, Antarctica. Public Health Service personnel assigned there are collecting background data from air, water, and algae samples in order to assure other nations that treaty requirements and safety regulations against contamination of the environment in that area are being rigidly observed.

RESEARCH

Fundamental and developmental research is being augmented in an effort to close the gaps of knowledge on the effects of radiation on man. An example of this effort is the "San Juan Research Project," where continuing studies are being made of selected families in that area, evaluating food and water relationships to ingestion and retention of radionuclides. Radon breath trailers have been obtained and construction of a radon air removal system is almost completed. Another project vital to a large segment of our population is the "Late Effects of Radioiodine Therapy Follow-up Study." The purpose of this study is to investigate the late effects of treatment with radioactive iodine among patients with thyroid diseases. Contracts have been signed with 16 hospitals to help conduct this work.

The extension of research activities through the medium of extramural grants by the Division was made possible for the first time during the 1961 fiscal year with a $918,000 budget. Requested appropriations were $1,198,000 for the 1962 fiscal year. These grants make possible use of laboratory and research facilities of universities, industrial organizations, and official and nonofficial agencies throughout the country.

TRAINING

Training grants were also made available for the first time in fiscal year 1961 by Congressional approval of an initial disbursement of $500,000 to colleges, universities, and other institutions of higher learning, to improve, expand, or establish radiation health specialist curricula. Fifteen universities were selected, from applicants requesting almost $2 million, to receive grants for staff, equipment, and student assistance.

During fiscal year 1961, short training courses in the health aspects of radiation exposure were attended by over 1,000 Federal, State, and local governmental officials, foreign students and representatives of industry and private agencies.

A Symposium on "University Curricula in Radiological Health," with more than 100 educators and public health officials in attendance, was held at Princeton, N.J., during the year under sponsorship of the Division. The symposium proceedings underscored the acute shortage of trained radiological health personnel at all levels of professional

competence. Nationwide radiation specialist training activities were revealed and clarified by this opportunity for an exchange of ideas on future planning.

SURVEILLANCE

The environmental radiation surveillance programs of the Division have expanded with the support of the Sanitary Engineering Center at Cincinnati, Ohio, and the regional laboratories at Las Vegas, Nev., and Montgomery, Ala. These regional facilities analyze environmental and biological samples collected by Federal, State, and local health authorities. Comprehensive data on radiation levels present in the surrounding environment, including air, water, milk and other foods are then published each month in the Division's "Radiological Health Data" periodical.

A Radiation Intelligence Network has been established with the purpose of assessing all sources of ionizing radiation in the environment. A computational group has been organized as part of this network. A pilot study of environmental radiation sources in Montgomery County, Md., is being conducted in cooperation with the county health department. Air sampling stations were installed in nine locations in the county. Samples of drinking water from public and private wells were obtained, and information about food intake and X-ray exposure was secured through household interviews. The primary purpose of the survey is to develop methodology and check the validity of methods for obtaining accurate records of total radiation exposure of a population group.

Division of Occupational Health

An increase of over 100 percent in direct operating funds for the Division of Occupational Health in fiscal year 1961 gave new thrust to research, consultation, and training activities to help meet more adequately the pressing needs in this complex field.

In the research area, this increase permitted expanded effort in the development of better techniques, materials, and equipment for use in the prevention, diagnosis, and treatment of occupational disease. Impetus was given to activity in toxicology and in related fields of clinical medicine, engineering, chemistry, and physics. Physiologic and psychologic factors in the work environment were also brought under study.

The Division also assumed responsibility for the administration of research grants in occupational health. To stimulate needed research, a conference was held to consider epidemiologic investigations that might profitably be developed in industry.

Field investigations conducted during the year ranged from silicosis among metal miners to the possible health effect of handling animal feeds containing a wide variety of additives.

The findings of a recently completed study will aid in establishing standards for conditions under which men can be employed for their entire working lifetime without developing hearing impairment due to excessive noise.

In the study of uranium miners, now in its 12th year, more conclusive evidence points to a lung cancer hazard. Among miners with more than 3 year's underground experience, deaths are occurring in excessive numbers due to this disease. As part of the triennial examination of 1,700 uranium miners, cytologic analyses of the sputum were made to determine their value in the early detection of lung cancer. Contracts were also negotiated with the States of New Mexico and Colorado and with private research facilities to complement the clinical studies and control efforts.

Further attention to the problem and the need for effective control measures have been directed by special meetings and training courses. Among these, a meeting called by the Secretary of Health, Education, and Welfare brought together the governors and other officials of the seven uranium-mining States. Heads of State mining associations and governmental agencies concerned also met to consider action. In addition, 3 courses for 200 uranium mine and mill operators and monitors were conducted by the Division, and over 10,000 copies of an educational pamphlet were distributed to mine personnel.

Studies of the mechanism of toxic stress included a continuing evaluation of the long-term effects of toluene diisocyanate (TDI), a chemical responsible for strong immunologic reactions.

Dermatitis studies of epoxy, polyester, and polyurethane resins have led to the development of nonirritating patch testing concentrations and diluents as a diagnostic aid in distinguishing between allergic and primary irritant dermatitis.

As part of an intensified training program 15 separate courses were presented with a combined attendance of 435 persons. Basic 2-week training courses for industrial hygiene engineers and chemists, for many years offered once anually, were presented four times. In addition, four advanced courses in lead analysis, analysis and control of noise, analysis of free silica, and dust evaluation techniques were offered. Special courses were held for various groups, including governmental occupational health directors and local health officers.

During the year, field consultations and technical services were provided on over 100 different occasions in 30 States.

Division of Environmental Engineering and Food Protection

This newly organized division takes over most of the functions performed by the former Division of Engineering Services. These include the milk, food, and shellfish sanitation programs; the water supply, food service, waste disposal and general sanitation problems of interstate carriers; metropolitan planning and development, solid waste (refuse) disposal; and a variety of general sanitary engineering activities. The division carries out and supports research, training, technical assistance, standards development, equipment review, program planning and promotion and regulatory functions under the Interstate Quarantine Regulations.

ENGINEERING RESOURCES AND TRAINING

The Public Health Service, because of its expansion of environmental health programs, has been acutely affected by the manpower shortage in these fields. Consequently, major activities of this unit have involved the recruitment of qualified personnel for all divisions that are working on environmental health programs and the development of current staff through on-the-job training and through assignments for specialized studies in colleges and universities.

To advance research on environmental health problems, assistance was given to the National Institutes of Health in evaluating and awarding grants for the construction of research facilities, particularly in schools of engineering.

GENERAL ENGINEERING

In carrying out PHS regulatory functions under the Interstate Quarantine Regulations, Special Citations and Letters of Commendation for excellence in sanitation were awarded to 13 railroads and 43 vessel companies. Certificates of Sanitary Construction were issued to newly built aircraft, vessels, and railroad dining cars. The "List of Accepted Equipment" for Interstate Carrier use was increased by 503 new items. Modification prior to acceptance was required on 32.

Studies of water pollution by vessels operating on the Great Lakes were intensified and areas were designated where vessels now are prohibited from discharging wastes.

Technical assistance in metropolitan planning was given to Fort Wayne, Ind.; Omaha, Nebr.; and Lake County, Ill. A new technical manual dealing with metropolitan planning for environmental health was published as were other manuals dealing with individual water supply systems, refuse sanitation, sewage disposal, school sanitation and mobile home parks. The PHS-sponsored Committee on

Plumbing Standards completed proposed changes in the National Plumbing Code.

Organic chemical analyses by PHS established for the first time the occurrence patterns of these chemicals in finished water with a view toward relating it to chronic disease incidence. Work was intensified on the role played by water supply in the spread of infectious hepatitis.

MILK AND FOOD PROGRAM

Participation by States in the Cooperative State-PHS Program for the Certification of Interstate Milk Shippers increased for the ninth consecutive year. The July 1961 list of milk shippers who were complying with PHS sanitation compliance ratings contained the names of 752 firms in 37 States and the District of Columbia. Over 1,400 shippers were certified by producing States as meeting the sanitary requirements for the interstate shipment of shellfish.

During the year, some of the cases in two outbreaks of infectious hepatitis were associated with the consumption of raw oysters and clams harvested from sewage-polluted waters. The Service is assisting States to strengthen their shellfish sanitation control programs to prevent recurrences.

Research at the Sanitary Engineering Center shows that the levels of strontium-90 and cesium-137 in raw milk continued to decline during fiscal 1961. A method has been devised for removing strontium-90 from milk by ion-exchange resins. A pilot project, cosponsored by the Public Health Service, the Department of Agriculture and the Atomic Energy Commission has been established at Beltsville, Md.

Substantial progress has been made in the development, evaluation, and standardization of microbiological and biochemical methods for the examination of shellfish, milk, and other foods.

Technical assistance was given to all States and to industry on interpretation and application of PHS ordinances and codes, planning and administration of milk and food programs, sanitary design of milk and food equipment, and training of State and local health officials. More than 120 seminars and training courses on milk, food and shellfish sanitation attended by over 6,000 individuals were sponsored or participated in by PHS engineers.

Bureau of Medical Services

The hospitals, clinics, health centers, and other health services operated by the Bureau of Medical Services are in 250 locations on land and on the sea—in the Arctic and Antarctic, in the United

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States and in foreign countries, on the Atlantic and the Pacific. Almost 13,000 personnel are engaged in the operation of the activities of the Service that provide direct health services to a wide variety of Federal beneficiaries.

The purpose in building marine hospitals many years ago was to care for merchant seamen who became ill or suffered injuries on their long voyages and could not go back to their homes and families on reaching port. Today, medical and hospital care for American seamen, and other direct health services to safeguard the Nation's strength, are provided by the Bureau of Medical Services.

Millions of travelers—U.S. citizens and people from other countries—arrive here each year from foreign points; through the foreign quarantine program, they are checked against any doubt of contagious disease. American Indians and natives of Alaska are given comprehensive health care through the Indian health program because they are not yet ready to provide it for themselves. Protection of the health of the men of the Coast Guard and the Coast and Geodetic Survey, and the cadets at the Coast Guard Academy, has long been a responsibility of the Bureau.

Members and retired members of the armed forces and their families receive care at hospitals and clinics of the Bureau where more convenient than military hospitals; in turn, commissioned officers of the Public Health Service may receive care in military facilities.

Medical and hospital care for civilian employees of the Government who are injured on duty or become ill from causes related to their jobs is administered by the Bureau. In another program, it operates health units for a number of Federal departments and agencies that have requested this help in protecting the health of their employees.

A special hospital is devoted to treatment of leprosy. Treatment for narcotic addiction is offered in two neuropsychiatric hospitals. The Bureau is responsible for medical and hospital care in all the Federal prisons and correctional institutions throughout the country.

The Bureau conducts clinical research and carries on training programs for medical and health personnel.

Public Health Service Hospitals and Clinics

The Division of Hospitals provides medical care for American seamen and other groups designated by Congress as beneficiaries of the Public Health Service. This nationwide program which now encompasses treatment of patients, professional training, and clinical investigations, was begun in 1798 with legislation establishing the old Marine Hospital Service, forerunner of today's Public Health Service.

About 375,000 persons qualify for health care benefits offered by the hospitals and outpatient facilities of the Division. Besides merchant seamen, the patients include officers and enlisted men of the U.S. Coast Guard, officers and crew members of the U.S. Coast and Geodetic Survey, commissioned officers of the Public Health Service, civilian employees of the Federal Government injured in the line of duty, active and retired members of the Federal uniformed services and their dependents, and several other groups. Persons with leprosy and narcotic drug addicts as defined by Federal law receive care in special hospitals.

In 1961, the Division operated 15 hospitals and 25 outpatient clinics; also 113 outpatient offices operated on a part-time basis by community physicians under contract with the Public Health Service.

VOLUME OF SERVICES

Inpatient admissions to the 15 hospitals in 1961 totaled 49,571—a decrease of 1.8 percent under 1960. There were 803 babies born in the two hospitals that have obstetric services. The average daily inpatient census declined 5.2 percent to 4,735. Outpatient visits rose slightly to a total of 1,194,486.

GENERAL HOSPITALS

Admissions to the 12 general hospitals totaled 45,147—male and female patients of all ages with a variety of health problems. These hospitals offer general medical and surgical services, and each has an active outpatient section. They are located in major port cities: Boston, New York, Baltimore, Norfolk, Savannah, New Orleans, Galveston, Memphis, Chicago, Detroit, San Francisco, and Seattle.

Among merchant seamen and coastguardsmen, who make up the larger part of the patient census, the five leading causes of admission are diseases of the digestive system, accidents, diseases of the genito-urinary system, respiratory conditions, and diseases of the bones and organs of movement.

The hospitals participate in mercy missions following local disasters. In October 1960, the Service Hospital in New Orleans in answer to a distress call mobilized its emergency resources and detailed a physician to the scene of the collision of the ALCOA CORSAIR and the LORENZO MARCELLUS in the Gulf of Mexico; nine persons were admitted in the hospital. The hospital on Staten Island, N.Y., ministered to victims of the airplane collision over lower New York City December 16, 1960.

In December 1960, the Staten Island PHS Hospital demonstrated the installation and operation of the Civil Defense Emergency Hospital for 80 leading hospital administrators from all parts of the

United States. This exercise took place in an essentially unoccupied building 15 miles away by road and ferry. The Civil Defense Emergency Hospital, one of 2,000 stockpiled throughout the country for use in emergencies, was uncrated and ready to admit cases in 35 minutes. Treatment was under way for "stand in" patients within 1 hour. Popularly called "Operation Life," the demonstration was conducted in cooperation with the Division of Health Mobilization of PHS, the Office of Civil and Defense Mobilization, and the American Hospital Association.

NARCOTIC ADDICTION

The U.S. Public Health Service hospitals in Lexington, Ky., and Fort Worth, Tex., are neuropsychiatric hospitals devoted primarily to the treatment of narcotic addiction as defined by Federal law. They also admit patients with mental illnesses who are entitled to care as beneficiaries of the Federal Government.

In 1961, these hospitals admitted 4,424 patients—a 4 percent decrease from the previous year. The number of narcotic addict patients admitted was 3,939—a decline of 5.4 percent. Admissions of other patients increased 9.2 percent. The average daily census of 1,907 was about the same as in 1960.

Narcotic drug addicts are admitted for treatment as Federal prisoners, as Federal probationers, or as voluntary patients. In 1961 the 3,364 voluntary patients accounted for 74 percent of the total admissions but for only 28 percent of the average daily census. This comparison illustrates the inclination of addicts to stop treatment before they derive sufficient benefit from it.

Staff members of both hospitals participated in conferences, workshops, seminars, and meetings called by agencies in several States. The hospitals received several hundred visitors from the United States and foreign countries; of these, about 50 physicians and public officials were given orientation and training for extended periods.

LEPROSY

The U.S. Public Health Service Hospital in Carville, La., an internationally recognized center for treatment, training, and study concerned with leprosy and its many allied problems, admitted 103 patients in 1961 compared with 85 the year before. The average daily inpatient census rose from 281 to 285.

The benefits of modern therapy, notably the sulfone drugs, for leprosy are most marked in patients in whom the disease is diagnosed early. To gain these advantages for the patient, the hospital recognizes the need to intensify epidemiological studies in various States.

A full-time physician has been assigned to established and coordinate this service.

Since the discovery and trials of the sulfone drugs for the treatment of leprosy at the Carville hospital, the prognosis is more optimistic in cases treated with them in the early stages. However, the sulfones are not 100-percent effective. Better drugs are needed, and large gaps exist in the scientific knowledge of leprosy. Research activities at Carville include clinical appraisal, biochemistry, bacteriology, therapeutics, and histopathology studies.

During the year nearly 10,000 persons visited Carville, 1,065 of whom were medical personnel. Twenty-three States were represented by 554 physicians and 404 nurses, and 107 professional visitors came from 19 foreign countries. Also, about 50 organizations and schools sent groups to the hospital for orientation, tours, and demonstrations. A hospital volunteer program was activated, and 17 persons from Baton Rouge and other nearby communities offered their services.

Dr. Robert G. Cochran of London, Advisor in Leprosy to the Ministry of Health of England and one of the world's outstanding leprologists, spent 2 months in Carville as consultant to the staff. During his stay, about 60 leading scientists and public health officials from the United States and other countries gathered at the hospital for a conference on research in leprosy.

MEDICARE

The Dependents' Medical Care Act of 1956 authorized U.S. Public Health Service hospitals and outpatient clinics to admit active-duty and retired members of the Federal uniformed services and their dependents and the dependents of deceased members of these services. Admissions of these patients to Public Health Service hospitals totaled 15,771 in 1961—an increase of 524 over 1960. The average daily census of these patients was 636, the same as the year before. They made 426,573 outpatient visits, a 3.2 percent increase.

The daily census of PHS patients in hospitals of the Department of Defense averaged 143, while the number of Defense Department beneficiaries in PHS hospitals averaged 275.

TRAINING OF PERSONNEL

Nearly 300 physicians, dentists, pharmacists, and dietitians received internship or residency training in the hospitals in 1961.

Ten hospitals are approved for graduate medical training by the American Medical Association, Council on Medical Education and Hospitals. Residency training is offered in 13 medical specialities—anesthesiology, dermatology and syphilology, general practice, general surgery, internal medicine, obstetrics and gynecology, ophthal-

mology, orthopedic surgery, otolaryngology, pathology, psychiatry, radiology, and urology.

Nine hospitals have American Dental Association approval for internships in dentistry. Residencies in prosthodontia and oral surgery are conducted at the Service hospitals in Seattle and on Staten Island, respectively. The outpatient clinic in New York City has an approved rotating dental residency.

The chief of the medical service in the hospital in San Francisco was appointed assistant clinical professor of medicine at the University of California Medical Center. Six staff members of the hospital in Lexington were appointed to the voluntary faculty of the new medical center at the University of Kentucky. About 50 medical and dental officers on Public Health Service hospital staffs also were teachers at nearby medical and dental schools.

The approved 1-year course in medical record library science conducted at the Service hospital in Baltimore graduated 8 students, bringing to 66 the number trained in this course during 10 years of operation.

Affiliations with colleges and technical schools afforded practical experience and clinical instruction to more than 100 graduates in physical therapy, occupational therapy, vocational therapy, social service, medical technology, and dental hygiene. The hospital on Staten Island provided the clinical nursing portion of the hospital corpsmen training given by the Coast Guard.

CLINICAL INVESTIGATIONS

Research in U.S. Public Health Service hospitals is predominantly clinical, closely linked to the total hospital program and the primary responsibility of providing good patient care. A number of investigations conducted at the hospitals are associated with research activities of outstanding scientific institutions such as the medical schools of Tulane University, New Orleans, and the University of Washington, Seattle.

Studies in the special hospitals chiefly concern the various health and social aspects of narcotic addiction and leprosy. The Addiction Research Center of the National Institute of Mental Health, located at the Lexington hospital, is recognized as one of the best in the world and is visited by many scientists from many countries each year.

Established research programs were under way in 1961 at seven general hospitals. More than 60 projects were in progress. Full-time directors of research were on duty at Staten Island, New Orleans, and San Francisco.

Support for research comes from the operating funds of the Division of Hospitals, from NIH research grants, or through a cooperative

arrangement between a Service hospital and a medical school. An instance of the latter is the research on the dilated heart which is being conducted by the hospital in New Orleans and the Tulane medical school. The May 1961 Bulletin of Tulane University Medical Faculty was devoted almost entirely to the working relationship between research activities of the Public Health Service New Orleans Hospital and Tulane University Medical School.

Research on essential hypertension, conducted in seven of the hospitals, is financed by an NIH grant.

Plans were under way as the year ended for research in the San Francisco hospital by the hospital staff and the heart disease control program of the PHS Division of Chronic Diseases.

FEDERAL EMPLOYEE HEALTH PROGRAM

Health protection for Federal employees was first seen as a responsibility of management in 1914 when the Treasury Department established a "relief room" in the main Treasury building. Today, after passing through stages of "emergency rooms" and "first-aid stations," an employee health service has been developed which includes preventive health programs with professional responsibility vested in a physician in charge. The Federal Employee Health Program, a part of the Division of Hospitals, operates health units for Federal agencies that request this service; the work is done on a reimbursable basis.

In 1961 the program continued the growth and development which started 2 years before. Five new units were added, bringing the total to 37. These units serve more than 57,000 employees and are contracted for by 167 agencies. Medical officers, full-time or part-time, were on the staffs of 31 units.

Health maintenance examinations for personnel age 40 and older were given to 3,832 employees, compared with 1,753 in 1960 and 348 in 1959.

Nearly 61,000 immunizations were given, including 41,798 for influenza and 13,857 for poliomyelitis. There were 16,971 tests made for diabetes, 3,818 tests for visual acuity, and 1,505 tonometric tests for glaucoma.

There were 243,356 visits to the health units. More than two-thirds of the 57,000 employees covered visited the units, and their average number of visits was 6.6.

One of every 12 visits to health units resulted in a referral to a private physician or dentist. More than 300,000 treatments were given employees at the units; about 1 of every 5 treatments was prescribed by a private physician.

FREEDMEN'S HOSPITAL

During 1961, Freedmen's Hospital provided care for 15,163 inpatients, a record high for its 96 years. A total of 3,379 live births also set a new record for the hospital, topping 1960 by 10 percent.

The 14,809 inpatient admissions represent a 6 percent increase over 1960. Average daily patient census at 375 was up 22. Outpatient visits declined 626 to 94,788 due to severe local winter weather conditions which prevented many patients from coming to the clinics for their appointments.

Inadequacies of the hospital's physical facilities caused numerous operating problems in ministering to the increased volume of patients. Excessive crowding frequently occurred in the medical, obstetrical and newborn services.

The attending and consulting staff of physicians and dentists totaled 213, an increase of 24. The courtesy staff consisted of 115, 8 more than the 1960 roster.

All training accreditations of the hospital were maintained during the year. Freedmen's Hospital serves as the clinical teaching resource for junior and senior students of Howard University, College of Medicine. It also offers approved medical, dental, pharmaceutical, and dietetic internships and residency training in 14 medical specialties and in hospital administration. There are also a school of nursing and a school of X-ray technology.

The 50 available residency appointments at Freedmen's Hospital were filled during the year and involved participation by 18 graduates of foreign medical schools. There were also 22 medical interns, 2 dental interns, 2 pharmaceutical interns, 10 dietetic interns and 12 research fellows.

The School of Nursing graduated two classes as a result of its curriculum being changed from 36 to 33 months. The combined number of nurses completing training was 44, raising the grand total of the school's graduates to 1,445.

The School of X-ray Technology continued its efforts toward refining its curriculum, clinical practice and other component activities. The 10 1961 graduates of this 2-year course bring the school's total to 50.

Over 35 clinical research projects were in progress at Freedmen's Hospital during the year. More than 40 scientific articles by staff members had either been published or were in process of being published.

Legislation authorizing the transfer of Freedmen's Hospital to Howard University was pending in the 87th Congress at the end of the year. (This legislation was approved on September 21, 1961.)

Freedmen's Hospital again benefited greatly from the many voluntary organizations that have given long and faithful hours of service to the institution and also from the organizations and individuals who made tangible donations for the benefit of the patients. The hospital for the second consecutive year participated in the Junior Red Cross Volunteer Program for the summer months. Sixty young ladies and one young man gave a total of 4,495 hours.

Division of Foreign Quarantine

The United States experienced its 14th year of freedom from outbreaks of quarantinable disease known to have been introduced from abroad.

QUARANTINABLE DISEASES

In Europe, however, quarantinable disease was introduced into countries by international travelers. Smallpox infection was imported by airplane passengers into Moscow, into Ansbach in West Germany, and into Madrid. Only in Moscow was the infection advanced far enough on arrival to permit prompt detection of the disease and application of control measures. Fifty-two passengers were isolated in Moscow for 2 weeks; no secondary cases occurred. In Ansbach, a young man who had been in Calcutta came home and worked in a photography shop for a week before becoming ill. Another week passed before he was hospitalized. The illness was correctly diagnosed as smallpox after further study. The man recovered. His mother, father, and a physician contracted smallpox and the mother died. The father and the father's physician recovered. In Madrid, there were 16 cases of smallpox with 3 deaths, including the infected young girl who had returned by plane from Bombay.

These events stress the importance of a careful check on the health and immunity of persons arriving at U.S. ports. World travel by jet plane increases the chances that a person without adequate immunity may contract smallpox and enter the country before symptoms develop. There is need to strengthen secondary defenses against spread of infection by improving and maintaining the immunity status of the population to the greatest extent feasible, particularly among port and transportation personnel and medical personnel who are in the most danger of exposure. Also, the possibility of smallpox infection should be considered if symptoms that may indicate the disease appear in a person who has recently been in a foreign country.

Worldwide, the total number of smallpox cases in the calendar year 1960 was about 62,115, which was fewer than in the previous year,

but the disease continued to be endemic in countries of Asia and Africa and in a few countries of South America.

For the first time in 2 years plague was reported in an international port—Rangoon, Burma—where two human cases and two infected rats were reported. This provided warning that rodent control on ships and in ports must not be neglected. Additional warning was furnished when two cargo ships operating between the Gulf coast and Puerto Rico were voluntarily fumigated; more than 800 rats were killed in one ship, and more than 400 in the other. Epidemics of human plague continued to occur in areas where infection was present in rodents; the countries included Bolivia, Brazil, Ecuador, Peru, the Congo, and the Union of South Africa.

One death from plague occurred as a result of infection from wild rodents in an isolated mountainous area of New Mexico. Epidemiological investigation and control measures were instituted.

Until the past year cholera had been confined to India, East Pakistan, and Burma. In July 1960 it became explosive in West Pakistan, where it had not occurred since 1958. In August it spread to Afghanistan, which had not had a cholera outbreak in more than a decade. Several months elapsed before the outbreaks were brought under control. India experienced a major cholera epidemic in several states and in the ports of Calcutta and Lucknow. An epidemic occurred in Burma. The disease was reported in Nepal.

Yellow fever, which had been quiescent for a few years in former endemic areas, was believed to have become explosive in a southwest province of Ethiopia; 3,000 deaths from a disease believed to be yellow fever were reported there in April 1961. Peru had a yellow fever epidemic early in 1961. Sporadic cases were reported by Bolivia, Brazil, Colombia, Venezuela, and the Congo.

OTHER COMMUNICABLE DISEASES

There was a recrudescence of meningitis (cerebrospinal) in Nigeria. It spread to Niger, Chad, and the Sudan. Several thousand cases were reported. Pilgrimage traffic in temperatures as high as 117° F. contributed to spread of infection.

Influenza epidemics occurred in England, Wales, Ireland, Japan, American Samoa, and the Philippines. The A–2 virus was isolated in England and Wales, and the B virus in Japan.

Psittacosis was found in a parrot from a shipment of 12 psittacine birds imported by a zoo in New Orleans. Several persons who had contact with the birds after they arrived in this country were notified. The other birds in the shipment were destroyed.

INTERNATIONAL TRAFFIC

Inspections of aircraft for quarantine or immigration-medical purposes decreased from 70,383 in 1960 to 65,661 in 1961. The increased use of larger aircraft was shown by an 11.6-percent increase in quarantine inspections of persons arriving by air, from 2,165,664 to 2,417,238. Inspections of ships decreased from 33,180 to 32,105. Quarantine inspections of persons arriving by ship decreased from 1,967,997 to 1,966,580.

Persons subject to quarantine inspection arriving in the United States by all modes of travel, including land entry from the interior of Mexico, increased from 5,186,789 in 1960 to 5,607,218 in 1961. It was necessary to detain only 11 persons in isolation, compared with 37 in 1960. The number of persons who were allowed to continue to their destinations in the United States, but were subject to medical surveillance for a time, was 91,985 compared with 54,459 in 1960.

MEDICAL EXAMINATIONS

General program.—The number of alien applicants for visas who were examined by medical officers abroad increased 6.8 percent, from 173,402 in 1960 to 185,142 in 1961. They were mostly immigrants. There were 1,850 who were found to have diseases or conditions excludable under immigration law. Aliens examined on arrival at United States ports increased 6.4 percent, from 2,945,264 to 3,132,313. There were 2,193 found to have excludable diseases or defects; 30 percent of these had been so diagnosed abroad, but they were admitted under special provisions of immigration law.

Staff in Europe examined 7,056 refugee-escapees under Public Law 86–648, and 243 were found to have excludable conditions. Some with excludable conditions were admitted to the United States by the Immigration Service subject to necessary controls.

Twenty-seven aliens arrived in New York with negative reports of serologic tests for syphilis but had positive tests upon reexamination. Investigation in the country they came from revealed that visa applicants obtained negative reports from friends who were laboratory technicians. In another country, tuberculous applicants substituted negative X-ray films for positive films. Corrective steps were taken in both countries.

Immigration of aliens with tuberculosis.—Immigration of certain aliens with tuberculosis continued for the fourth year under Public Law 86–253. The U.S. quarantine service placed 929 aliens under health controls after arrival in this country, compared with 794 in 1960.

Migratory farm labor.—In the program of recruiting farm workers from Mexico, 305,574 laborers were examined, with 5,634 rejections,

at 3 centers in Mexico; and 338,751 examinations were made, with 4,170 rejections, at 5 border reception centers in the United States. At the reception centers 300,736 serologic tests for syphilis were made, with 15,646 positive reactors. The rate of positive reactors increased from 49.7 per 1,000 men tested in 1960 to 52 per 1,000 in 1961.

Facilities at reception centers were improved and expanded to speed up X-ray and serologic tests. New type X-ray equipment permits the processing of films in about one-third of the former time.

ENTOMOLOGY AND SANITATION PROGRAMS

Action was completed to remove the following States from the yellow fever receptive area: Arizona, New Mexico, Oklahoma, North Carolina, and the part of Texas west of a line from Del Rio to Wichita Falls. The change was possible because of elimination of *Aedes aegypti* mosquitoes in these areas.

Aedes aegypti control was pursued with vigor and continued success at international traffic points in the yellow fever receptive area in the South, in Puerto Rico, and in the Virgin Islands.

A report was published reviewing the insect control problem on aircraft arriving in this country during the past 13 years, with particular reference to mosquitoes. Nearly a quarter of a million insects were intercepted during that time, with a yearly average of 19,175. More than 20,000 were mosquitoes, comprising 11 genera and 92 species, including many medically significant and nonindigenous forms. These findings point up the importance of continuing insect control in international traffic.

Entomological contributions to human welfare through the Public Health Service were reviewed in another published report, which points out the important role played in the Service's development by medical entomology and by arthropod-borne diseases such as yellow fever, malaria, typhus, plague, and Rocky Mountain spotted fever. Foreign quarantine is closely concerned with entomology, since the quarantinable diseases except smallpox and cholera are transmitted solely or chiefly by insects, and cholera is sometimes so transmitted.

Studies were made on control of insects on aircraft leaving the United States, a procedure of special interest to other countries that have been freed of mosquitoes at great expense.

A landmark in United States quarantine operations was reached in 1961 when ship fumigations by quarantine personnel were discontinued. Commercial facilities are now used for any necessary fumigation. The procedure is seldom required because of general improvement in the world plague situation. This resulted from more extensive ratproofing of ships (an important development in which the United States took the lead), the use of rodent poisons less dan-

gerous than fumigation with deadly hydrocyanic acid gas, and more extensive use of rat-trapping practices at sea and in ports.

Food sanitation on foreign-flag passenger liners, a program for which the Division of Foreign Quarantine has particular responsibility, has shown steady improvement.

The International Sanitary Regulations, issued by the World Health Organization, require every port and airport to be provided with a supply of pure drinking water. At the request of the Division of Foreign Quarantine, the World Health Organization is asking each country how the water quality is determined. Samples are taken from ships arriving at United States ports. Contamination is occasionally found, requiring correction.

OTHER QUARANTINE ACTIVITIES

The Surgeon General removed Cuba from the list of quarantine-exempt areas in January 1961 because the Public Health Service no longer had direct access to health information in Cuba.

The Miami area staff faced the problem of inspecting Cuban refugees landing at numerous points. Many arrived in small boats, which often failed to reach shore under their own power; persons were picked up by other vessels, or the boats were towed in by the Coast Guard. Immigration officers helped arrange for refugees to receive inspection and vaccination by quarantine officers. One person being treated for sunburn was X-rayed by the Refugee Center and found to have far advanced tuberculosis. A small boat carrying several starving refugees came to the Miami quarantine station dock; they were given food and water by a quarantine inspector living on the station.

A survey was made among sample groups of travelers arriving in the United States by plane to find out the countries they had visited, in addition to the country of emplaning, during the 14 days before arrival. It was found that many passengers had embarked for the United States on planes in uninfected countries but had been traveling in countries where quarantinable diseases were present. If unvaccinated, these persons can introduce dangerous diseases into the United States.

To expedite international travel and help ensure personal and public health protection, the Public Health Service published a series of popular leaflets giving immunization information for international travel and containing general health hints.

Health Services for Indians and Alaska Natives

A 12-year-old Navajo boy with acute rheumatic fever has a good chance to grow up and lead a normal life because of the services

available at the PHS Indian hospital opened in Gallup, N. Mex., in March 1961.

The pediatric-cardiac clinic at Gallup, where the pediatrician in Shiprock Indian Hospital 93 miles away sent the boy, is one of numerous medical specialties at the new 200-bed, $4 million hospital. The Gallup hospital is a "first" in the Indian health program: the first hospital specifically planned to be a referral and consultative center for difficult medical cases emanating from Indian health facilities in a surrounding area. The territory served is the 25,000-square-mile Navajo Reservation and the Hopi and Zuni Reservations in Arizona and New Mexico.

About 380,000 Indians and Alaska Natives look to the Indian health program for preventive and curative medical services: 337,000 Indians living on or near some 250 Federal reservations in 24 States, mostly west of the Mississippi; and 43,000 Alaska Natives (Aleuts, Indians, and Eskimos) in hundreds of villages in Alaska.

Living for the most part in cultural isolation, these peoples for generations have not been exposed to modern medicine, or have resisted it. Social and economic conditions are depressed. The lack of adequate and safe water supply, overcrowded, substandard housing and dietary deficiencies, and the lack of opportunity to learn or practice rudimentary personal hygiene and community health protection have contributed to their poor health and high death rate.

Preventable diseases generally under control in the rest of the population still account for most of their illnesses and about a sixth of the deaths. Their mortality from these diseases—gastroenteritis, tuberculosis, respiratory infections (especially among babies), and the like—is from two to six times greater than for the rest of the Nation. In spite of an improving picture, the infant death rate remains high—almost twice that of other Americans. This is the major factor in the early average age at time of death—41 compared with 62 for the general population.

MEDICAL FACILITIES

Medical facilities are located as close as practicable to the widely scattered communities. In 1961, the Division of Indian Health had in operation 52 hospitals, 22 health centers, 18 school health centers, and several hundred field stations.

Where the Division does not have facilities, it provides medical and dental care through contract arrangements. Contracts were in effect in 1961 with 183 hospitals, 115 dentists, 281 physicians and clinics including local and State health and welfare departments, and 22 other specialists. In addition, to provide public health services where the Division has no facilities, 18 contracts were in effect between the

Division and state health departments and county boards of supervisors in 14 States including Alaska.

An additional means of providing hospitalization under contract is by participating financially in the construction of community hospitals serving both Indians and the general population, under Public Law 85–151. Since the law was enacted in 1957, PHS has participated in 13 community hospital projects for a total of 100 beds for Indians and Alaska Natives. Eight projects have been completed in five States; four projects in four States are under construction; and one project will be started as soon as the contract is awarded.

Because of the leadership of tribal governing groups and the educational efforts of the Public Health Service, greater use is being made of available medical care facilities. Since 1956, admissions to PHS Indian hospitals and contract hospitals have increased 30 percent. In 1961 there were nearly 76,000 admissions. Some 11,000 Indian babies were born in PHS and contract hospitals. Outpatient visits to the Indian hospitals and their related clinics rose to 686,000 in 1961—an increase of nearly 27,000 visits over 1960. Visits to PHS health centers and to school health centers totaled 250,000 in 1961. This was a 60-percent increase in 5 years.

The village clinic program in Alaska completed its first full year of operation in 1961. Physicians, accompanied by public health nurses or other health workers, conducted regular 1-to-3-day clinics in 25 villages and visited 78 other villages en route. Altogether, 194 village clinics were held with 15,696 outpatient visits reported. Some isolated areas utterly lacking in any preventive health services or treatment for acute medical problems were reached for the first time.

HEALTH EDUCATION

Health education activities of the Division are designed to meet the unique needs of the Indian health program. By 1961 there were 33 members of the health education staff, most of them Indians with college training in education, anthropology, or sociology. Their goal is to create within the Indian people an understanding of the fundamentals of good health and a desire to assume responsibility for improving their own health. Staff members of the health education branch serve as educational consultants to the other branches in the Division. Educational techniques, including use of audiovisual aids, are adapted to the specific goal.

THERAPEUTIC SERVICES

There was a 7 percent increase in the size of the nursing staff, which reached a total of 1,669. Public health nursing caseloads continued to increase. Plans were made for the advanced training

of Indian practical nurses to qualify them to provide additional assistance to the public health nurses.

Pharmacy services continued to improve. Pharmacists were assigned to four additional hospitals so that 84 percent of the patients and 76 percent of those who came for outpatient care were served by hospitals with pharmacies. The number of prescriptions dispensed increased by 39 percent.

Social workers of the Division devoted their major efforts to problems of children, the aged, the handicapped, the chronically ill. They participated in community planning for care and rehabilitation of the infirm aged. A continuing task is to interpret the changing social needs of the Indians and Alaska Natives to communities and public and private social agencies which share in the responsibility of providing to them the health and welfare services available to other citizens.

Growing recognition of the role of nutrition in the promotion of health and prevention of certain diseases resulted in increased emphasis on nutrition education in clinics and in community education programs for adults. Since it takes a long time to change dietary patterns, these efforts were directed toward utilizing the known cultural food practices and available food resources of the group concerned. In some locations, education was provided for Indians in the use of commodity foods supplied by the Department of Agriculture. Cooperative planning was carried on with the Alaska area office of the Bureau of Indian Affairs for improvement of lunches served in Alaska Native day schools. Plans were made to conduct studies in 1962 to obtain information about the level of nutritional health of the Indians.

The Medical Records Branch successfully undertook active recruitment for additional staff and held its first seminar for medical librarians. The seminar stimulated workshops and on-the-job training in the field.

IMPROVED HEALTH OF CHILDREN

The rate of infant deaths is declining. In 1959, latest year for which figures are available, the mortality rate was 46.8, compared to 56.7 in 1958. Of all Indian deaths reported in 1959, 21 percent were infant deaths, compared with 24 percent in 1958. Although the loss of babies aged 28 days through 11 months is still about 3½ times that for all babies in the general population (excluding Alaska), the decline in infant mortality rate between 1958 and 1959 was about 23 percent. Among Alaska Natives, infant death rates are almost twice the death rates of Indian babies in the continental United States. In an effort to save more babies from illness and death, various studies

on causes of infant morbidity and mortality and means of preventing them were begun in 1961, and ten additional physicians and nurses on the maternal and child health staff were assigned to health facilities.

In the school health program, the Division continued to maintain close relations with the Bureau of Indian Affairs, especially in the treatment of mental and emotional problems of children and youth. A joint mental health demonstration project at the Flandreau Indian Vocational High School in South Dakota (in which the National Institute of Mental Health also participates) was continued, and there was evidence that its influence was reaching into the home communities of the students. Indian communities and other Indian schools requested assistance with mental health problems.

A school health study made in the Oklahoma City area was completed, and implementation of the study was begun in July 1961. A major health problem among school children is otitis media. Also needing emphasis are preventive services in the field of mental health and early diagnosis of tuberculosis.

TUBERCULOSIS CONTROL

Tuberculosis morbidity and mortality rates continued their downward trend. The rate of new cases reported among Indians has declined 48 percent in the 6 years since 1955, while the decline among Alaska Natives was about 76 percent in the same period. The death rates in 1959 were 31.1 per 100,000 Indians and 55.4 per 100,000 Alaska Natives—a reduction of 37 percent and 65 percent, respectively, since 1955. Despite improvement, the rate of death (excluding Alaska) was still 4½ times higher than found in the general population.

Accidents have replaced tuberculosis as the leading cause of death among Indians, with a rate from three to 3½ times greater than for the rest of the Nation. Tuberculosis now ranks seventh as a cause of death.

In 1961 the daily hospital census of tuberculosis patients was 720, which accounted for approximately 24 percent of the total daily census. In 1955 the number of tuberculosis patients in the hospitals was about 58 percent of the total. The decrease has been due to many factors: shorter length of hospital stays, outpatient treatment of tuberculosis, the chemotherapy program, and the drop in new cases of the disease.

DENTAL HEALTH

The goal of the dental program is to bring the Indians and Alaska Natives to a maintenance level of dental care. Visits to dentists in

1961 numbered 170,045, an increase of nearly 7 percent over 1960. Major emphasis was placed on services to preschool and school children, with close attention to preventive measures. Emergency treatment was given patients of all ages. Topical fluoride treatments were given to 15,861 children, an increase of 32 percent over the previous year. Dental health education was strongly stressed. The unmet needs in dentistry are vast: with available resources the Division was able to meet only half the dental requirements of the 22.1 percent of the beneficiary population examined in 1961.

In an attempt to increase the amount of dental services given, the Intermountain School in Brigham City, Utah, began evaluation of a new type of dental equipment. A training program in efficient clinic management was started for dental officers and their assistants. Eighteen young Indian and Alaska native women were trained as dental assistants for assignment in the program.

ENVIRONMENTAL SANITATION

Better environmental sanitation is basic to improved health among the people served. Their water supplies are often polluted and usually inadequate for domestic use, and frequently must be hauled for great distances. Waste disposal is often primitive. Public Law 86–121, passed by Congress in 1959, authorized PHS to aid Indians and Alaska natives in building domestic and community sanitation facilities. In 1961 the appropriation of some $2½ million made possible the construction of 58 water supply and waste disposal projects to benefit about 5,000 families. These sanitation facilities are located on 34 reservations in 15 States and on nonreservation areas in Alaska and Oklahoma. The Indian people participated in the projects through contributions of funds, labor, equipment, and material totaling more than $1½ million, and they will operate and maintain the facilities when finished. Seven engineering investigations were started on future projects.

Environmental sanitation personnel have a prominent role in preventive health education. Through their efforts, families and groups were motivated to improve or install 1,919 drinking water sources, 913 water storage facilities, and 2,799 waste disposal facilities. Tribal governing bodies have shown increased interest in adopting sanitary codes for Indian reservations.

The Division continued support of special studies at the PHS Arctic Health Research Center in Anchorage, Alaska, on practicable facilities for water supply and waste disposal in native villages, and on improving methods of curing fish and protecting food.

TRAINING FOR INDIANS AND ALASKA NATIVES

Formal courses and inservice training were provided for Indians and Alaska natives who are employed in the Indian health program. Some 83 young women were trained as practical nurses in the schools conducted by the PHS at Albuquerque, N. Mex., and Mount Edgecumbe, Alaska, during 1961. The Mount Edgecumbe program ended in the spring of 1961 because similar training was to become available in the fall through the Anchorage public school system. Courses for sanitarian aides, dental assistants, and community health workers were given at various locations. More than half the employees of the Division are of Indian heritage.

CONSTRUCTION

New Indian hospitals were opened in Sells, Ariz., on January 17, 1961, and in Gallup, N. Mex., on March 24, 1961. The Sells hospital, a general medical and surgical hospital of 50 beds, replaces a hospital destroyed by fire in 1947. The Gallup hospital is a 200-bed regional referral and medical center.

A new 50-bed hospital in Kotzebue, Alaska, and a hospital of 38 beds in Keams Canyon, Ariz., were nearing completion at the end of the fiscal year. Also under way were five health clinics in Ponemah, Minn.; in Pryor, Mont.; and in La Plant, Wakpala, and Norris, S. Dak.

Major modernizations of four hospitals were completed at Rosebud and Pine Ridge, S. Dak.; Browning, Mont.; and Whiteriver, Ariz.

Contracts were awarded for a new 36-bed hospital at San Carlos, Ariz., and for new extensions to the Indian hospitals in Cass Lake, Minn., and Fort Defiance, Ariz.

On the drawing board were plans for a new 12-bed field hospital, storage and living quarters in Barrow, Alaska; a new 25-bed wing for the Red Lake, Minn., hospital; and a new outpatient wing and alterations at the hospital in Bethel, Alaska.

New housing for health personnel of the Division included completion of 47 units in connection with the Gallup and Sells hospitals, procurement of 14 mobile trailer quarters units for nine locations, and progress in construction of 118 other housing units at various locations.

Medical Services for Federal Agencies

The medical services of the U.S. Coast Guard and the Federal Bureau of Prisons are legal responsibilities of the Public Health Service and are operated by Bureau of Medical Services personnel assigned to these agencies. The medical programs of the Bureau of Employees' Compensation of the Department of Labor and the Maritime Admin-

istration of the Department of Commerce are conducted by personnel detailed to these agencies.

UNITED STATES COAST GUARD, TREASURY DEPARTMENT

Physicians were assigned to Coast Guard vessels on ocean weather duty in the Atlantic and Pacific; medical and dental officers were assigned to the Bering Sea Patrol and to icebreakers engaged in special operations in the Arctic and Antarctic; and various professional officers were on duty at U.S. shore stations. In all, 101 PHS officers served the Coast Guard—33 physicians, 52 dentists, 12 nurses, a pharmacist, a dietitian, a scientist, and a sanitary engineer.

At sea, medical officers often were called on to diagnose and prescribe treatment by radio for illnesses aboard merchant ships and fishing boats that had no physicians. Sometimes it was necessary to rendezvous at sea and bring the patient to the Coast Guard ship by small boat.

An emergency of this kind arose in the North Atlantic during stormy weather in March 1961. A seaman aboard the Norwegian vessel APPIAN sustained severe burns covering 35 percent of his body. In spite of rough weather and seasickness, he was brought aboard the cutter OWASCO and given medical treatment, then was taken to the naval hospital in Argentia, Newfoundland. The man was considered in remarkably good condition when he reached the hospital. The medical officer was credited with saving his life.

BUREAU OF PRISONS, DEPARTMENT OF JUSTICE

The Public Health Service provided medical, psychological, dental, nursing, and related health services for 24,000 prisoners in the Federal institutions. The Medical Service operated 22 hospitals and 8 infirmaries in the institutions. Fifteen of the hospitals are fully accredited by the Joint Commission on Accreditation of Hospitals.

The 275 full-time PHS staff members assigned to the health program were augmented by 250 consultants in various medical specialties. About 900 prisoners assigned to the medical services received training and assisted with hospital care.

The average daily population of the Federal prisons was 949 greater in 1961 than in the previous year. The hospitals provided a total of 416,149 hospital relief days in 1961. Medical staffs performed 865 major operations and 5,594 minor operations and gave 30,387 physical examinations. Outpatient departments gave 957,730 treatments. The two institutions for women reported 24 births. Deaths in all institutions totaled 49.

Increasing demands for psychiatric diagnostic and treatment services, which are required under the provisions of the Youth Corrections Act, the New Sentencing Act, and the act providing for the care and

custody of insane persons charged with or convicted of offenses against the United States, were met by assigning additional psychiatrists and psychologists to operating programs, and by appointing additional consultants in these specialities. By giving special training to other staff members, these specialists are making important contributions to the treatment programs.

Planning for a new 600-bed psychiatric facility for mentally ill Federal offenders was continued. A new dispensary building was opened at the prison camp in Safford, Ariz. The dispensary at the prison camp in Florence, Ariz., was modernized and redecorated. Modernization of the operating room at the Federal Correctional Institution, Terminal Island, Calif., was completed. A new anesthesia machine and two electrosurgical units were obtained for the Medical Center for Federal Prisoners in Springfield, Mo.

Program Highlights

Clinical psychiatry.—At the Medical Center and at several other institutions, the medical staffs continued their efforts to extend diagnostic and treatment services to prisoners with mental illnesses. The staffs at the reformatory for women in Alderson, W. Va.; the correctional institution on Terminal Island, and the reformatory in Chillicothe, Ohio, were augmented by the addition of psychiatric consultants. At the prison camp in Tucson, Ariz., which houses youthful offenders, the psychiatric consultant continued to develop a mental hygiene program. At all these institutions, the psychiatrists continued to use the newer psychopharmacologic agents as well as group and milieu therapy.

Clinical psychology.—A training program for psychologists who are interested in the correctional field was begun at Chillicothe under auspices of the Bureau of Prisons, the Veterans Administration, and Ohio State University. The addition of a consultant psychologist to the Alderson staff made it possible to start a program of treating prisoners and training personnel. The psychologists at several institutions played a leading role in efforts to train personnel in understanding and handling behavior problems.

Group work.—A number of staffs made continued use of group techniques both in treatment and training. At the correctional institution in La Tuna, Tex., a group treatment program was implemented for certain narcotic addicts. At Lompoc, Calif., the group approach was used with addicts and homosexuals. The Medical Center continued to use a team approach with meetings of ward personnel to consider most effective ways of handling patient problems.

Medical, dental, and technical services.—Several units including the correctional institution in Tallahassee, Fla., endeavored to increase

the effectiveness of their outpatient departments in the face of personnel and space shortages. Medical staffs continued to make special efforts to help prisoners with such problems as obesity, hypertension, diabetes, tuberculosis, and acne and other disfiguring conditions. At the Detention Headquarters in New York, the program for denarcoticization of addicts continued to operate successfully. Dental services at all institutions were continued at a high level. The central dental laboratory at the Medical Center in Springfield completed 2,617 dental prosthetic appliances.

Many of the medical staffs have developed training programs to give prisoners skills in the medical technical fields, which will facilitate their future adjustment in the community. For example, a prisoner trained at the correctional institution in Seagoville, Texas, successfully qualified for registration as a radiologic technologist. Upon release he was employed as chief laboratory and X-ray technician in a large State hospital.

Research.—Medical staffs of six institutions helped to select prisoner volunteers for participation in a cold virus study which is being conducted at the Clinical Center, National Institutes of Health. The Alderson staff took part in an evaluation of a vaccine against infant diarrhea. The staff of the penitentiary on McNeil Island, Wash., assisted in a study of muscle tone, the findings of which will be applicable in space travel. Malaria studies were continued at Atlanta. At Leavenworth the staff continued a follow-up study of narcotic addicts. At the correctional institution in Milan, Mich., the staff participated in a study to devise an improved test for glucose tolerance.

Participation in community affairs.—Several staffs cooperated with state tuberculosis case-finding programs. Many formed excellent cooperative relationships with other nearby government activities. The medical department of the camp in Tucson gave assistance to persons injured in highway accidents. Prisoners donated 14,765 pints of blood to the American Red Cross and local blood banks during the year.

BUREAU OF EMPLOYEES' COMPENSATION, DEPARTMENT OF LABOR

A Government employee was severely injured by electrical burns in May 1960 when a crane came in contact with a high-tension wire while he was helping to unload a 20-ton transformer. He lost his legs and his right arm. His left arm was disabled.

Through closely coordinated physical and vocational rehabilitation services brought to the aid of the injured worker by the Bureau of Employees' Compensation and cooperating agencies, he learned to walk again with artificial legs, to write, and to do other things, and he was trained for a new job as a radio dispatcher.

The case illustrates the increasing emphasis the Bureau of Employees' Compensation gave in 1961 to the rehabilitation of Federal employees who were injured or became ill in line of duty.

Medical officers of the Public Health Service assigned to the Bureau are responsible for the medical program under the Federal Employees' Compensation Act and related acts. About half of this work is carried on in Washington headquarters, the rest in district offices in New York, Boston, Chicago, and San Francisco.

Increased utilization was made of Federal medical establishments, notably those of the U.S. Air Force. Outpatient and hospital facilities of the Public Health Service provided direct medical care and assistance in evaluation of patients' work capabilities. In physical and vocational rehabilitation, the services of many facilities throughout the United States were used. Particular attention was given to rehabilitation of employees disabled because of a mental or psychoneurotic condition.

MARITIME ADMINISTRATION, DEPARTMENT OF COMMERCE

The physician and two dental officers on duty at the U.S. Merchant Marine Academy, Kings Point, N.Y., provided health care for the 700 cadet midshipmen and 216 staff members, and the medical officer in charge of the Public Health Service hospital on Staten Island acted as professional consultant for the academy's health program.

There were 570 admissions to the academy's Patten Hospital. Outpatient medical treatments and services numbered 2,660; dental visits, 4,060. The North Shore Hospital, a community hospital in Manhasset, N.Y., provided emergency medical care for cadets when necessary.

In Washington, the Service physician detailed as Chief Medical Officer of the Maritime Administration revised the standardized list of medical supplies and equipment for sickbays and emergency rooms of the Reserve Fleet; advised on overcoming an occupational hazard the Reserve Fleet encountered at Olympia, Wash., in the form of exposure to chlorine dioxide gas resulting from measures against incrustation on hulls of ships; advised on use of resuscitubes in first aid; and helped with preparation of clinical abstracts.

National Institutes of Health

The scope of the various programs of the National Institutes of Health continued to expand during fiscal year 1961. This growth took place principally in the extramural programs and was accompanied by necessary increases in NIH staff, and by reorganization and

expansion at top management levels. Expenditures on medical research (including research training) increased by more than a third, reaching a level over five times greater than it was only 5 years ago and representing 40 percent of the total national effort in medical research.

A proposal submitted to Congress by President Kennedy during this period would establish a new National Institute for Child Health and Human Development in which would be centered research into perinatal and childhood diseases, on the one hand, and the problems of aging on the other. An Institute of this kind would concentrate on such problems as congenital malformations, infant mortality, mental retardation, and maternal factors influencing child health and development. The process of aging, under this program, would be considered as a part of the dynamics of human development.

NIH physical expansion has been rapid. For the first time in its history, the Division of Biologics Standards is consolidated under one roof. Dedication of the new building for the National Institute of Dental Research occurred in May 1961, and considerable progress was achieved in the construction of the new surgical wing of the Clinical Center and in the new Administration Building, which will house the several Institute grants programs and the six Institute Directors and their immediate staffs.

In the construction planning stage are (1) a new building to house both the Mental Health and the Neurological Diseases and Blindness Institutes, (2) a new Cancer Institute building, (3) adequate housing facilities to provide for proper control, rigid caretaker practices, and testing procedures in the breeding of specific germ-free animals, (4) research and animal facilities at the newly acquired animal farm.

The long-existing problem of recruiting and retaining high-calibre staff for NIH laboratories was intensified during this period. In one respect, this was a measure of the success of the NIH grant system, for the facilities, research environment, and superior pay which were attracting NIH researchers and research administrators to other institutions often could be ascribed at least in part to NIH grants. Several proposals have been formulated which, if they can be effected, will make it possible to maintain a professional staff of the highest competence in spite of the competitive situation.

Criteria for grants and training awards are designed to assure high quality in results. The past year has seen a continuing emphasis on grant support to the basic medical sciences such as biology, genetics, biochemistry, biophysics, and pharmacology, all of which are crucial to medical progress.

Biomedical research expenditures, from all sources, would constitute about 5 percent of the Nation's total research and development

costs. The increased funds made available to NIH makes this agency responsible for 40 percent of the total medical research expenditure in the country.

The impact of NIH grants on medical schools, university departments, hospitals, and other biomedical research institutions has revealed a need for major program planning that anticipates and measures the cumulative effects on these institutions.

For most of the medical schools, university departments, hospitals, and other institutions whose research is supported by NIH grants, these funds now represent a substantial part of their entire income. Time and effort devoted to research at these institutions have greatly increased with increased involvement of faculty and staff. For this reason, planning must henceforth relate not only to the needs of the individual investigator, but also to the cumulative effect on his institution.

This new approach will not diminish the importance of the individual research project system. The new concern will be directed, however, to the overall needs of the institutions where the bulk of U.S. biomedical research is conducted. The new planning approach will seek fulfillment of the objectives of medical research without adversely affecting the grant-receiving institutions.

Several plans have been proposed for attaining this new objective. All are designed to increase local, non-Federal control over medical research. These plans include the following:

(1) Consolidation by universities of many of their smaller existing research projects into larger projects with coherent program objectives.

(2) Support of Clinical Research Centers. Such centers, for which special support was begun in 1960, are intended to stimulate growth of additional local resources for complex investigations involving many diseases and the broad spectrum of medical specialties.

(3) General Research Support. Such grants to schools of medicine, osteopathy, dentistry, and public health would be in proportion to contributions from the institution's non-Federal research funds, and would permit a degree of initiative not possible under project grants.

(4) Research Career Awards. These would provide support for highly qualified individuals who wish to pursue a research career under stable tenure conditions. Final mechanisms had not yet been worked out at the end of the period covered by this report.

An important advance in the NIH program of support for research in other countries was the establishment of five International Centers for Medical Research and Training, under the provisions of the International Health Research Act of 1960. These Centers will permit scientists from American universities to work overseas, while retain-

ing an integral relationship with their institutions. Under the program, an American university, in collaboration with a foreign institution, establishes a research and training facility in the foreign country, primarily to study health problems common to both the United States and that country. This arrangement provides an opportunity to study such problems under environmental, ethnic and medical conditions not found in the United States, and also provides a basis for improved international relationships in the health sciences.

During this period, Centers have been established by five American universities and their cooperating overseas institutions: University of California, and the Institute for Medical Research, Kuala Lumpur, and University of Malaya, at Singapore; Tulane University and the Universidad del Valle, Cali, Colombia; Johns Hopkins University and the All-India Institute of Hygiene, Calcutta School of Tropical Medicine, Calcutta; the University of Maryland, and Field Unit, Rawalpindi, West Pakistan; and the Louisiana State University School of Medicine, and the University of Costa Rica School of Medicine.

Benefits of international medical activities derive not only from the obvious fact that problems of disease control are world-wide, but also because they make it possible to work effectively with the research talent, resources, and unique investigative settings in other countries. These benefits are being fostered through appropriate international organizations such as World Health Organization, Pan American Health Organization, World Federation of Mental Health, and World Federation of Neurology.

Recognizing the importance of such planning, NIH has established the Office of International Research as a staff office of the Office of the Director. This office is responsible for coordinating all international activities of the National Institutes of Health. The office advises the Director and Surgeon General on matters relating to the international aspects of medical research and research training, and assists the Institutes in the development of international programs. It is specifically responsible for the central administration of all NIH activities utilizing U.S.-owned foreign currencies, and constitutes the central point of research relationships with the World Health Organization, Pan American Health Organization and other international research and scientific organizations.

During this reporting period, the total obligations for NIH international activities exceeded $13 million (exclusive of the Foreign Currency Program). There were about 500 international awards for research and training, accounting for approximately $8 million of this. The global distribution of the awards is seen in the countries involved: Australia, Austria, Belgium, Brazil, Canada, Denmark, Eire, England, France, India, Italy, Japan, Mexico, Nigeria, Norway,

Scotland, Sweden, Switzerland, and West Germany. The remainder of the total figure included amounts awarded to American institutions for international centers for research and training, for U.S. Fellows studying abroad, for foreign Fellows studying in the United States, and for foreign visiting scientists brought to NIH.

The reports that follow on the seven Institutes, the four Divisions, and the Clinical Center provide a closer view of NIH performance during the past year.

Institute of Allergy and Infectious Diseases

Institute studies during the year added substantially to the understanding of a number of serious childhood illnesses. Results from a wide range of investigations included promising clinical tests of an antistaphylococcal drug and development of a new laboratory study model for a little understood allergic disorder. Respiratory syncytial virus (RS) was associated for the first time with infant pneumonia and other childhood respiratory diseases in a series of studies conducted at the Institute and Children's Hospital, D.C. These findings, together with the results of previous Institute studies and findings by other scientists, may explain as much as 60 percent of children's severe respiratory illnesses and suggest the need of vaccine development.

A cooperative epidemiologic investigation by Institute and Navy scientists associated Eaton agent with 68 percent of atypical pneumonia cases at Parris Island Marine Training Center. Their serologic findings, made during a 6-month period, constitute the most complete evidence presented in 20 years on the association of Eaton agent and atypical (non-bacterial) pneumonia.

In a related study, the same group reported successful treatment of Eaton agent pneumonia with a tetracycline drug, thus resolving a decade of controversy regarding the efficacy of such drugs against this type of pneumonia.

Institute clinical tests indicate that an antibiotic (still unnamed) developed by Hoffman-LaRoche Chemotherapy Laboratory is effective against certain systemic fungal infections. Several of these constitute extremely destructive diseases which hitherto have proved unresponsive to drug treatment.

A new synthetic penicillin, called Staphcillin, developed jointly by Bristol Laboratories and a British firm, was tested at the Institute and found effective against severe staphylococcal and streptococcal infections. Difficulty in treatment of the former is usually the result of the emergence of resistant forms of bacteria.

In the area of diagnosis, Institute scientists described a test which may make it possible for a single laboratory worker to screen many

more suspects for malaria in a single day than hitherto possible. The new test, based on the fluorescent antibody technique, represents the first recorded instance in which a malaria parasite infecting humans has been viewed by this method.

Resistance of human malaria to chloroquine has been definitely demonstrated for the first time by an Institute scientist and an investigator from the University of Texas. Chloroquine has been an important adjunct to insecticides in global malaria eradication programs since World War II.

Allergic thyroiditis has been produced experimentally in a strain of inbred guinea pigs for the first time by Institute scientists. The successful experiment provides a model for study of this form of human thyroid disease which apparently is an autoimmune disorder.

GRANT-SUPPORTED RESEARCH

Studies leading to the first vaccine of demonstrated effectiveness against measles were supported in part by Institute grant funds. The vaccine, still in the experimental stage, probably will be submitted for Federal licensing in the near future. Studies have shown the vaccine to be easily administered and to cause only mild systemic reaction. A preparation conferring immunity comparable to natural measles is desirable, because of the disease's significant mortality, frequency of bacterial complications, occasional involvement of the central nervous system, widespread morbidity of the uncomplicated disease, heightened virulence of outbreaks in isolated populations, and unfavorable effects on certain other pre-existing illnesses.

Grantees at the University of Utah have developed a practical method of quantitative urine culture—utilizing equipment commonly employed in dairy bacteriology—that helps diagnose urinary tract infection more quickly and less expensively than do classical methods. Early detection is essential for effective treatment of urinary tract infections.

Institute of Arthritis and Metabolic Diseases

ARTHRITIS RESEARCH

Studies by Institute scientists and grantees on the possibility of an immunologic basis for rheumatoid arthritis have pointed to a relationship, in some way, of a number of rheumatic diseases to a hypersensitivity ("allergy") to certain compounds in the body of patients, possibly to some of their own altered proteins.

This concept of hypersensitivity derives from the discovery, several years ago, of the so-called rheumatoid factor(s) in the blood of many

arthritics and their relatives. These factors, whose presence in the blood helps confirm the diagnosis of rheumatoid arthritis, have many antibody characteristics, suggesting that immunologic reactions are involved in their formation.

Institute grantees at the Hospital for Special Surgery in New York have reported finding in the blood of these patients still another substance, which they have named the "inhibitor of complement fixation," or ICF. Different from the rheumatoid factor, this substance inhibits processes that normally aid the removal of potentially deleterious items from the body. ICF together with the rheumatoid factor may comprise a unique immunologic system characteristic of arthritis and closely related diseases.

Follow-up medical and serological examination studies of former Clinical Center patients who have returned to their homes after treatment at the Institute have been made possible by a specially equipped mobile clinic operated by the Institute across most of the country. The rolling laboratory is making possible a careful study of the familial incidence of Sjögren's syndrome, a disorder related to rheumatoid arthritis.

A collaborative study by NIAID and NCI scientists has provided the first definite experimental proof that osteoarthritis, a common joint disorder affecting older people, may be under hereditary control. The study used 1,700 mice and showed that a single gene may have accounted for much of the arthritis in these animals, although other genes and environmental factors also contributed to the condition.

Clinical trials at the Institute have demonstrated the usefulness of two new drugs—sulfinpyrazone and zoxazolamine—in problem cases of gout which do not respond to older drugs. The new drugs remove the excess uric acid characteristic of gout. Institute scientists have also found that low doses of aspirin may interfere with the laboratory diagnosis of gout, since aspirin causes an increase in uric-acid blood levels.

DIABETES AND OTHER METABOLIC DISEASES

The new oral drugs continue to demonstrate their value in the treatment of diabetes. It now appears much less likely than once feared that these drugs will damage the pancreas. Their value has been enhanced by the work of Institute grantees at Harvard Medical School, Boston, and the Southwestern Medical School, Dallas, demonstrating that combinations of the oral drugs can benefit some who are not helped by a single drug alone. This combination therapy has permitted an estimated 35 to 40 percent of all known diabetics to substitute the oral drugs for hypodermic syringes.

To determine how the drugs will affect the complications of diabetes that appear only after many years, Institute scientists are collaborating with a group of medical centers throughout the country in a long-term study to compare the effects on such complications of different forms of diabetes therapy, including insulin, diet, the oral drugs, and various combinations of these.

New findings were reported on the unusually high resistance to insulin of some patients, who, consequently, require many times the normal amount of insulin. In the blood of some of such diabetics, Institute studies have shown insulin antagonists even before they receive insulin injections. This supports the long-held view that insulin resistance, or interference with effective insulin concentration to peripheral tissues, rather than the body's inability to produce insulin, may be a factor in many cases of diabetes.

In several other serious yet less-known metabolic diseases, Institute-supported investigators reported encouraging advances. For Wilson's disease, a grave disorder with abnormal accumulations of copper in the body, grantees have developed a basic regimen (copper-poor diet and administration of a metal-binding agent) that has brought definite improvement and may prevent the disease. For phenylketonuria, an inborn error of metabolism whose most disastrous consequence is severe mental retardation, a special low phenylalanine diet has been developed, which, if started soon after birth, appears to prevent the characteristic mental damage.

BASIC RESEARCH

Two research findings made this year may lead to a better understanding of the basic functioning of hormones and enzymes. Grantees at the University of Pittsburgh, culminating 17 years of research, have achieved the first successful laboratory synthesis of pituitary ACTH (adrenocorticotropic hormone). The synthesis may clarify the functions of the pituitary gland and lead to new laboratory techniques for producing other important hormones—those "chemical messengers" whose influence is well-known, but not their mode of operation. Institute scientists have recently discovered that certain adrenal hormones can directly affect the action of a key enzyme within many cells by splitting its molecules into four parts. This is the first time a hormone has been found to influence an enzyme's vital chemical activities by a direct effect on its physical structure.

Other developments in basic research include the finding by the Institute's Program on Geographic Medicine and Genetics that inherited serum proteins called haptoglobins may be linked with various diseases. Studies have been planned in an attempt to iso-

late the different haptoglobin types and to confirm previous findings that haptoglobin concentration rises in different diseases.

Cancer Institute

Mounting emphasis was placed on research in the relationship between viruses and human cancer. A critical stumbling block was the acutely limited supply of research materials and equipment for virus-cancer investigators. To remedy these deficiencies, The Institute has awarded a number of grants and contracts to nongovernmental institutions for development of (1) pure virus strains and their diagnostic agents; (2) laboratory animals whose normal complement of viruses has been characterized; (3) certified lines of mammalian cells for use in tissue-culture studies of viruses suspected of causing cancer; and (4) laboratory equipment, such as a small-scale liquid nitrogen refrigerator for handling viral materials.

The Cancer Chemotherapy National Service Center is concerned with discovery, development, and clinical application of effective, perhaps curative, anticancer drugs. Program adjustments resulted in a slight reduction in the number of new materials accepted for evaluation and a corresponding increase in the volume of research on agents already proved active by laboratory tests. The number of drugs evaluated against human cancer under the chemotherapy program rose within the year from about 110 to more than 160, and the total number of participating patients reached 18,500.

INSTITUTE RESEARCH

Most dramatic, perhaps, was the achievement of 5-year survivals with no evidence of disease in a small number of patients with uterine choriocarcinoma, a rare and highly fatal tumor that develops during pregnancy. Sixty-three patients have been treated with the anticancer drug, methotrexate, widely employed in the management of acute leukemia. Fourteen of the women also received a newer drug, vinblastine, administered when methotrexate-resistance developed. In 30 patients, all trace of the disease disappeared, including metastatic lesions in the lungs and brain. A few of the women have now remained in apparent perfect health for 5 years or longer, the first report of such survivals produced by chemotherapy alone.

Beneficial results were reported from the use of a new agent—o,p'–DDD—in patients with advanced adrenal cancer. The drug is of special interest because it seemingly is specific for adrenal cortex tissue and for malignancies that arise there. In 7 of 18 treated patients, tumor metastases were measurably reduced, and in 7 others

lowered amounts of hormone excretion indicated an antitumor effect. These results could be attributed entirely to the action of the drug, since spontaneous remission is unknown in adrenal cancer.

Collaborating scientists of the Institute and the Division of Biologics Standards described a method for obtaining relatively large quantities of platelet-rich plasma from a single blood donor. Platelets are essential for blood clotting and therefore often urgently needed to control hemorrhage, one of the chief causes of death in leukemia patients. The new technique permits separation of plasma from the red blood cells, which are then immediately returned to the donor. In this way a single donor may contribute all the plasma needed by one leukemia patient. Furthermore, by reducing the number of donors, the risk of communicating infectious hepatitis is lowered.

An Institute scientist reported the results of further studies of a virus that induces leukemia in several strains of laboratory mice. The virus may be passed from one generation to the next through the placenta, an observation that may shed some light on the possible transmission of other leukemia viruses, theoretically including a human leukemia virus.

Staff scientists working with investigators at the National Naval Medical Center adapted human epidermal cells to growth in a medium free of blood serum. Since serum may contain substances that inhibit the growth of viruses, the new medium may prove valuable in tissue-culture studies designed to detect or grow viruses suspected of causing human cancer.

The Cancer Chemotherapy National Service Center reported new findings on survival rates of cancer patients by sex. Among patients treated surgically for localized lung cancer, women have a 5-year survival rate double that of men. Differences in favor of women were also reported for cancer of the thyroid gland, tongue, and salivary gland, for skin melanoma and for Hodgkin's Disease. The precise reasons for the superior performance of women are not known.

GRANT-SUPPORTED RESEARCH

Scientists working under an Institute grant reported results of a study of combination surgery and chemotherapy in the treatment of breast cancer, the leading cause of death from malignant disease in women. One hundred and seven patients were selected for radical mastectomy. Of these, 57 also received thio-TEPA on the day of operation and on the 2 following days. The remainder received no drug treatment. While half of the latter group showed tumor recurrence within 2 years, about 80 percent of the drug-treated patients remained free of recurrent disease during the same period. These results suggested a possible method of treatment for breast cancer

that may afford better control of this disease than is now ordinarily possible.

An Institute grantee observed that 54 percent of rats surviving an acute hemolytic anemia acquired immunity to six different transplantable tumors. In others that did not completely resist tumor transplants, the neoplasm was found to be slow-growing and encapsulated. Further efforts are in progress to determine the nature of the immunization process, since research of this kind may lead eventually to the discovery of similar phenomena in man.

Testosterone, a male sex hormone, has been used for many years for the temporary control of certain types of advanced breast cancer. This agent, however, produces undesirable masculinizing effects. In grant-supported clinical trials of a related compound, scientists found that delta-one-testololactone was about as effective as the older agent but entirely devoid of virilizing properties. Studies of this and other related agents are continuing under auspices of the Chemotherapy Center.

Grantees using a specially designed chamber to study the effects of cigarette smoke on bits of lung tissue reported the observation of a three-phase response. First, there was an immediate increase in the flow of mucus that normally covers this tissue. Next, they observed a sharp decrease of about 16 minutes' duration. Finally, a 30-minute recovery period was seen. These findings led to speculation that lung cancer may result from the physical irritation caused by smoke products as well as other environmental irritants, and not specifically from cancer-producing chemicals in the smoke.

Institute of Dental Research

Dental research expanded in such areas as calcification, growth of development of teeth and their supporting structures, experimental dental caries, enzymatic changes in oral connective tissue, and epidemiology of oral diseases as related particularly to nutrition and genetic factors.

In explaining the wide variations in the pattern of experimental tooth decay in rodents, many investigators have traditionally classified animals into resistant and susceptible strains. Recent studies by Institute scientists have shown that experimental dental decay is primarily a bacterial disease, and that many of the differences in type of decay previously attributed to hereditary factors, now may be related to the presence of specific microorganisms which can be transmitted from animal to animal. The pathogenicity of these microorganisms, however, depends upon the type of diet available and the animal's heredity.

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With information available on the origin of dental decay in certain animals, investigators undertook a systematic search for chemical agents that inhibit specific microorganisms. Three clinical compounds, already tested, have noticeably reduced animal caries by altering the normal growth process of various oral bacteria. In other biochemical studies dental decay in animals has been substantially reduced by adding certain mineral phosphates to the diet. Although the precise action of the phosphate compounds is still obscure, it is believed that some local inhibitory reaction may occur on the exposed surfaces of the teeth.

Better understanding of the causal role of prenatal factors in various oral diseases was achieved during the year. In one investigation, pregnant rats, rendered acidotic by exposure to relatively high concentrations of carbon dioxide during the earlier stages of pregnancy, delivered offspring that developed a marked degree of dental caries. On the other hand, acidosis induced during the last trimester of pregnancy did not alter the caries susceptibility of the mother's young. Other similar studies were directed toward a better understanding of the mechanism of cleft palate formation; causal relationships were established with maternal-fetal anoxia, and amniotic-sac compression.

GRANTS AND AWARDS

New research project grants were awarded in support of fundamental studies in the various clinical and basic sciences of primary importance to dentistry. For example, invertebrate organisms, used as material for the investigation of the calcification mechanism, are being studied by grantees at Duke University. These materials offer a variety of experimental approaches not afforded by mammalian calcification systems. Grantees at Harvard University have completed detailed histologic studies that identify the stages of progression of periodontal disease in the rice rat, and relate the high susceptibility of these animals to this disease to genetic factors.

Additional grants were awarded to non-Federal institutions to train clinical and basic science personnel for research work. Also, a new program was established to train under-graduate dental students to work with chairside assistants.

Heart Institute

Cardiovascular disease, the Nation's leading cause of death, now takes 900,000 lives a year. The National Heart Institute strengthened its programs for the conduct and support of research on this major disease problem.

Atherosclerosis, the form of hardening of the arteries that leads to heart attacks and strokes, is characterized by deposits of fatty materials in the vessel walls which progressively reduce the channels through which blood flows to vital organs. Much evidence has accumulated linking these artery-clogging lesions with high levels of fatty substances, particularly cholesterol, in the blood. The amount and kinds of fat in the diet can influence the blood cholesterol level and may retard or accelerate formation of these lesions. Their underlying causes, however, appear to lie somewhere in the complex process by which fats are transported, synthesized, stored, and broken down by the body—an area of major research emphasis in the Heart Institute.

One approach to the control of high blood-cholesterol levels has been based on the body's ready manufacture of cholesterol, and an intensive search has been underway in recent years for nontoxic drugs that interfere with this production. Study of one such compound by Heart Institute scientists has shown that it lowers blood-cholesterol levels by blocking the last step in the chemical sequence by which the body synthesizes cholesterol. It was found, however, that the fall in cholesterol in patients treated with the drug was accompanied by a rise in desmosterol (whose long-term biological effects are as yet unknown), the precursor of cholesterol, so that the total of sterols in the blood was not greatly changed. Another investigation seeks blockade of an earlier step in the synthesis of cholesterol—one far enough down so as not to interfere with other metabolic needs for the same intermediate compounds, but early enough to avoid sterol accumulations. Preliminary studies have shown that several compounds can block this step, but their effects have not yet been evaluated.

Significant knowledge was gained from other studies of fat transport and metabolism. Findings of one study indicated that the interplay of the rates of deposit and removal of cholesterol from the artery wall may be a major factor in development of atherosclerosis. Another study showed that the liver is the source of the protein as well as the lipid fraction of lipoprotein molecules, the form in which fats are transported in the blood.

In the field of hypertension, because many drugs which alter the metabolism of amines also effectively lower blood pressure, much research was directed at obtaining more complete knowledge of the processes of amine metabolism. One promising family of compounds given clinical trials at the Heart Institute, known as decarboxylase inhibitors, inhibit the synthesis of several amines, including norepinephrine and serotonin. The compounds appear promising both as research tools in hypertension and as therapeutic drugs for treating the condition.

Another family of enzyme inhibitors studied were compounds that block the action of monoamine oxidase, an enzyme that plays an important role not only in hypertension but also in mental disorders. Several of these compounds were found to be powerful blood-pressure lowering agents but were too toxic for therapeutic use. A new compound with a markedly different chemical structure appeared, from limited clinical trials, effective in lowering blood pressure and, thus far, to be largely free of toxic effects.

Findings from epidemiological studies, such as those reported from 6 years of follow-up in the Heart Institute's Framingham (Mass.) study, are helping to describe the "coronary prone" individual. It was found that the risk of developing coronary heart disease for men 40 to 60 years of age is almost three times as great for those who have either a high blood-cholesterol level, high blood pressure, or an enlarged left ventricle as it is for those who are normal in these respects. Combinations of any two or all three of the abnormalities further increased the risk.

Excessive quantities of aldosterone, a hormone from the adrenal glands, are secreted in congestive heart failure and other diseases, contributing to the excessive water retention or edema that frequently accompanies them. Heart Institute studies have shown that aldosterone production and secretion are controlled by another hormone, a mysterious substance called the aldosterone-stimulating hormone. Strong evidence was also provided that the hormone is produced by the kidney.

The discovery was made in physiological studies that there are reflexes, originating in the carotid sinus—the dilated portion of the carotid artery in the neck—which control the force with which the receiving chambers of the heart pump blood into the ventricles, thus importantly affecting the heart's performance and output. Further studies showed that the carotid sinus also affects the circulation by constricting or dilating the veins and by modifying bloodflow through the kidneys.

Advances were made in developing and refining techniques and procedures for more precise diagnosis of congenital and acquired heart defects. Several procedures have now been shown by clinical studies to be highly reliable means for detecting, localizing, and estimating the size of abnormal openings in the partition separating the left and right sides of the heart. These include techniques utilizing radioactive krypton, ascorbic acid, and cold saline solution as indicators.

Among the year's productive efforts were those directed toward development of improved artificial heart valves and synthetic replacements for severely diseased artery segments and surgical procedures for installing them. One important aspect of these studies has been

the evaluation of synthetic materials, particularly those properties of a specific material which might either promote or inhibit the formation of blood clots. Institute studies showed that the relative tendency with respect to clot formation was determined more by the chemical nature of the surface of the material than by its wettability or electrical charge.

GRANT-SUPPORTED RESEARCH

A new method of closed-chest cardiac massage to restore blood flow in patients whose hearts have stopped beating was reported by scientists of Johns Hopkins University. The operator places both hands, one above the other, on the patient's breastbone and presses vertically downward once a second. The method is an important advance in emergency treatment since, unlike direct cardiac massage, it does not require surgical exposure of the heart and can be used anywhere the need arises.

Various aspects of the interrelationship of dietary factors and atherosclerosis were studied. Experiments with nibbling and meal-eating chickens at Michael Reese Hospital and Medical Center, Chicago, led to the conclusion that consuming food at periodic mealtimes may play a significant role in atherosclerosis. Chickens fed regular meals had much higher cholesterol levels and developed much more severe coronary atherosclerosis than chickens allowed free access to the same kind of food, even though the meal-eaters consumed less.

Findings reported by scientists of the Veterans' Administration Center, Martinsburg, W. Va., and George Washington University suggest that arachidonic acid—a highly unsaturated fatty acid found in certain fish oils, dairy products, and fowl—may be a significant factor in the relative immunity to atherosclerosis enjoyed by animals of certain species. Cholesterol fractions of serum from eight species were analyzed and compared. The arachidonic acid content was found to be highest in those species most resistant to atherosclerosis and lowest in the most susceptible species.

A technique using a cardiac catheter to inject the clot-dissolving enzyme fibrinolysin into the coronary arteries of heart-attack patients was reported by investigators at the University of Miami. The procedure, which was well-tolerated by the patients, assures high concentrations of enzyme at the site of the obstructing blood clot. It also allows intermittent injections which appear to be more effective in dissolving clots than is continuous flow.

Encouraging progress was made toward overcoming the problem of rejection of foreign tissues by the body. The first successful kidney transplant between nonidentical twins was reported by scientists of Peter Bent Brigham Hospital and Harvard Medical School in Boston.

Irradiation of the whole body was used to modify the recipient's immune response which would otherwise have caused rejection of the grafted kidney.

Institute of Mental Health

All aspects of mental-health activity—from basic and clinical research and training to the application of research findings in behalf of prevention, patient care, and rehabilitation—were covered by the Institute program. Special emphasis was placed on demonstration projects employing new and improved therapies, including an ever-expanding list of psychopharmacological agents. These, plus new techniques both in and out of the mental hospital, and the development of new mental-health programs and treatment facilities, are gradually reducing the number who must be institutionalized in public mental hospitals. This steady advance in treatment and control of mental illness was reflected in the decline, for the fifth consecutive year, of the resident mental hospital population.

GRANT-SUPPORTED RESEARCH

The complexities of mental-health research demand a diversified approach. Thus, the more than 1,200 grants that were made to qualified researchers during this period spanned the medical, biological, psychological, and social sciences. Seeking clues to the etiology, prevention, and treatment of mental illness, these researchers examined the body's chemistry as well as the quality of a mother-child relationship; the mechanisms of the brain as well as the social structure of the community; the effects of psychoactive drugs as well as those of the hospital environment and the patient-physician relationship.

More than a third of the research-grant program was concerned with schizophrenia, a major medical and social problem accounting for more than half of all patients hospitalized for mental disorders in the United States. Strong emphasis in recent years has centered on possible biochemical origins of mental disease, particularly schizophrenia, and significant findings have pointed to a factor in schizophrenia that alters the carbohydrate metabolism of red cells. During the past year, by applying pertinent tests to schizophrenic patients and normal volunteers, it was found possible to predict accurately in a highly significant number of cases the presence or absence of schizophrenia.

Approximately one-fourth of grant funds went for studies with children—problems of normal growth and development as well as those of mental retardation, schizophrenia, juvenile delinquency. A large number of grants covered various aspects of aging—normal and

pathologic—including those assets of aging which might be more fully employed in attaining and holding on to mental health.

A major event in the research-grant program was the initiation of two new types of grants—program project and center grants—for the support of broad-based, long-term research activities.

Grants from the Psychopharmacology Research Center made it possible to accelerate studies of drugs used in mental illness. In February 1961, a 2-year collaborative study of phenothiazine treatment of acute schizophrenic psychoses was launched. Additional developments included a program of special grants for early clinical investigation of psychiatric drugs and an abstracting service, Psychopharmacology Abstracts.

BASIC AND CLINICAL RESEARCH

Research conducted in the Institute's own laboratories included basic metabolic studies, investigation of brain areas that control important aspects of behavior, and fundamental studies of body chemistry, utilizing psychopharmacological substances as research tools.

The intramural program also included a wide variety of studies on child development, patterns of family living, and social interaction.

Major research was done on the metabolism of the biogenic amines—neurological substances which appear important in brain activity and transmission of nerve impulses. Increased knowledge of the synthesis, degradation, and distribution of these basic elements prepares the way for comparative studies that may expose to light the hidden sources of mental illness.

NIMH scientists investigating the response of free fatty acids to insulin found a reproducible alteration from the norm in a significant number of schizophrenic patients. This investigation is intended to determine to what extent either of these characteristics is basic to a subgroup of schizophrenia.

Another investigation underway involves study of the intermediate metabolism of tryptophane. A related study has shown the existence of enzyme systems capable of giving rise to another psychotomimetic agent (dimethyltryptamine), thus raising the possibility that this substance may occur in man, and that variations in its metabolism may be related to certain mental disorders.

New biochemical methods were developed to assess emotional aspects of behavior. A series of psychoendocrinological studies was conducted with normal volunteers to trace the relation between endocrine function, normal variation in emotional states, and a variety of psychological stresses, both induced and spontaneous. The findings have helped identify psychological conditions under which adrenal

hormone levels may be diminished, as well as the more familiar distress conditions under which they are elevated. They are significant in terms of future attempts to modify detrimental effects of stress.

A major 2-year study completed during this period dealt with the behavior of competent adolescents in making the transition from high school to college, with the aim of delineating factors contributing to successful adjustment. Findings from this study are being compared with those from a related study of severely disturbed college freshmen, in an attempt to discover crucial factors that impair the effectiveness of disturbed students.

At the Institute's Addiction Research Center, Lexington, Ky., research centered not only on addiction liabilities of new drugs but also on the physiological and psychological characteristics of the addict and post-addict. Special efforts have been devoted to stimulating effective follow-up programs on discharged addicts; to this end, consultation and information services have been provided for communities, and for professional and lay persons. In an effort to trace the influence of specific drugs, neurophysiological studies were initiated. Because addiction has its roots in neurological character disorders, its investigation contributes substantially to our understanding of many aspects of human behavior.

TRAINING

The Institute seeks to produce qualified manpower needed for a comprehensive mental health program. The training program has been directed at overcoming the shortage of qualified personnel in all areas of professional activities, including clinical services, teaching, research, consultation and administration.

Support for the Institute's psychiatric training program for general practitioners was extended; grants were made to encourage interdisciplinary training of biological and social scientists; and a new program of research career awards was launched.

COMMUNITY SERVICES AND PROGRAM DEVELOPMENT

Revolutionary changes in mental hospitals have made possible the return of many more patients to the community, thus increasing the community's responsibility for care and rehabilitation. The Institute's Community Services Branch, which aids in mobilizing the resources of state and local mental health programs through consultation and regional representation, encouraged dissemination of research information to states and communities.

An expanded program of Mental Health Project Grants, awarded for the development of new and improved methods of care, treatment

and rehabilitation, has stimulated demonstrations and field projects, focusing on preventive and after-care services. The critical areas of juvenile delinquency, alcoholism, suicide, mental retardation, schizophrenia, aging and school mental health received special emphasis.

Institute of Neurological Diseases and Blindness

Faced with a staggering total of 20 million persons, in the United States alone, afflicted with neurological and sensory disorders, the Institute, in the past year, has vigorously conducted and supported research on these handicapping and crippling diseases. A number of significant advances have been made.

COLLABORATIVE PERINATAL RESEARCH

Continuing emphasis has been centered on the serious disorders of infancy and childhood, which include cerebral palsy, mental retardation, congenital malformations of the nervous system, and congenital blindness and deafness. For the past 4½ years, including 2½ years of preparation, the Institute has directed a long-term collaborative research project to demonstrate possible relationships between conditions existing during pregnancy, delivery, and early life and the later occurrence of neurological or sensory disorders. As of the end of 1960, the 15 collaborating institutions had collected data on some 13,500 expectant mothers and 8,000 babies. It was expected to take several more years to enroll and collect data on the 50,000 expectant mothers and their children who are to be used in this research. Preliminary analysis of the facts obtained is already providing research leads and new knowledge which may be important in prevention of these tragic disorders.

In addition, the collaborating institutions are carrying out numerous studies in areas which relate to the overall project. In one of these, a rapid test to diagnose infections of the newborn baby, through the microscopic examination of the umbilical cord, has been devised and is permitting prompt life-saving therapy.

NEUROLOGICAL RESEARCH

Grant-supported studies have yielded additional insight into diseases and conditions which cause mental retardation in infants. This year, new forms of inborn chemical disorders have been demonstrated, and for one (maple sugar urine disease) a promising dietary therapy has been developed.

Surgical research on temporal lobe epilepsy, conducted at the Institute, has altogether freed a large number of patients from seizures, and in others has greatly reduced the number and severity of seizures.

Complex chemical changes occurring in the brain during epileptic seizures have been further explored by both Institute and grantee investigators, who have demonstrated that certain chemical reactions influence the patient's susceptibility to seizures.

Seeking ways to conquer the demyelinating diseases such as multiple sclerosis, grantees have devised an ingenious method to induce the actual process of nerve demyelination in tissue culture, where it can be carefully and directly observed and studied. Of extreme importance has been the discovery of a "vaccine" that suppresses the myelin-destroying effects of a disease of animals which is similar to human multiple sclerosis.

Through Institute research, advances have been made in our knowledge of the debilitating neuromuscular disorders. The chemical basis of one form of muscle disease—familial periodic paralysis—has been established. In treating myasthenia gravis, a new drug (galanthamine) may prove a useful addition to the means of controlling disability.

RESEARCH ON SENSORY DISORDERS

During the year, research has scored considerable gains against the varied and insidious diseases which cause blindness. Techniques for cataract surgery have been refined, and Institute scientists have completed evaluations of alpha-chymotrypsin, a compound which simplifies surgery in some cases. Studies of glaucoma have produced more effective drugs for treatment, and mass screening methods are providing early diagnosis before irreparable loss of vision begins. Through supported studies, a new method of healing retinal detachment has been perfected—an intense light focussed on the eye's surface seals the retina in place and prevents further detachment.

Grant-supported investigations of hearing disorders have also resulted in noteworthy advances. New surgical techniques are providing more effective relief of otosclerosis—a common cause of deafness in middle age—and of certain forms of vertigo. In some cases, highly specialized techniques can now show whether impairment is caused by disease or by defects in the brain or nerve pathways; each requires its own treatment. Improved diagnostic methods now make possible accurate testing and treatment of infants and young children before speech development is hampered.

COOPERATIVE AND INTERNATIONAL RESEARCH

Two cooperative studies supported by the Institute have yielded new information regarding prevention and treatment of cerebrovascular diseases. In a study of intracranial aneurysms, careful analysis of case histories is showing what types of patients are best suited for specific medical and surgical therapies. An evaluating study

of anticoagulant drugs has pointed out both the benefits and risks of such treatments.

An Institute-supported cooperative study on glaucoma continues to seek better methods of screening and diagnosing this blinding eye disorder. A glaucoma family study, undertaken by grantees at one of the participating institutions, is confirming the heavier incidence of glaucoma among relatives of persons with the disease.

In view of unique opportunities for international epidemiological and cooperative investigations, the Institute is continuing to evaluate research potentials and contributions of a number of foreign countries. Limited support is now being provided for specially selected foreign investigations. Under the Institute's regular research-grant program, 36 independent projects are being supported in 19 different countries. Also among our international research activities is a grant to the World Federation of Neurology to support the planning of a worldwide study of the epidemiology and neuropathology of strokes.

During the year, the second Institute-sponsored mission of American scientists to the U.S.S.R. surveyed Soviet progress in the field of maternal and child care. A report, prepared by the first medical exchange mission, presented observations on Soviet research activities in the physiology and pharmacology of the nervous system.

Division of Biologics Standards

This Division administers those provisions of the Public Health Service Act which establish standards for the safety, purity, and potency of biological products in interstate and foreign commerce. The Division issues licenses for the production and sale of such products, which include the vaccines, antitoxins, therapeutic serums, and human blood and its derivatives, and which are developed, for the most part, from pathogenic or potentially pathogenic microorganisms, under carefully controlled conditions, to minimize hazards and ensure satisfactory potency. Additional safeguards are provided by the preparation and distribution of physical reference standards to manufacturers and laboratories engaged in biological standardization throughout the world. Approximately 4,000 vials of such standard preparations are distributed annually by the Division.

At the close of the fiscal year, 190 establishment licenses and 277 product licenses were in effect, the latter covering 1,220 specific products. Tests of approximately 8,000 individual lots of various biological products were made, ranging from relatively simple sterility tests to potency determinations involving both animal and tissue-culture tests.

The Division's research seeks improved standards for production and testing of biologics. The development of standards for the pro-

duction of live, oral poliomyelitis vaccine dominated the year's activities. This was a complex and difficult task, conducted in an atmosphere of intense public interest. The standards were adopted on March 22 and it is anticipated that the vaccine will be available before the 1962 polio season begins.

The rise in potency of the inactivated poliomyelitis vaccine continued during the year and a change was proposed in the regulations to raise by 50 percent the minimum acceptable level of potency.

Viral hepatitis—the contamination of blood products by the virus associated with homologous serum jaundice—is a serious problem and of interest to several groups in this Division. Under investigation is an agent—recovered in tissue culture by a Division investigator—which may have some relation to viral hepatitis in man.

Potentially important is the discovery of the variable sensitivity of different types of virus to photodynamic inactivation with toluidine blue dye. Poliovirus is highly resistant to this technique, whereas many of the adventitious agents of simian origin are sensitive to it. Differential inactivation of contaminating viruses in preparations of live poliovirus grown in monkey kidney tissue appears to be feasible and may be useful in manufacturing live attenuated poliovirus vaccines.

A safe procedure for separating platelets from red blood cells and plasma, using simple plastic equipment, has been developed by a Division scientist working with Cancer Institute investigators in studies of the use of platelets in leukemia. As part of this work, the effects on donors of repeated large platelet donations by plasmapheresis are being investigated to establish needs for specific control procedures.

Measles immunization, which appears feasible within the immediate future, has emphasized the need for reliable detection and measurement of measles antibodies. To establish a basis for standardization, a study of variables in test procedures was made, and a standard antiserum was prepared to serve as an internal control.

Division of General Medical Sciences

This Division administers the NIH grant and fellowship programs for research and training in the sciences basic to medicine and biology, public health, and certain clinical areas not covered by Institute programs, and directs the new Center for Research in Child Health, the Center for Aging Research, and the General Clinical Research Center Program.

To meet current medical needs for basic knowledge—in addition to research into specific disease categories—DGMS programs are stress-

ing fundamental studies of organic life. This trend is effecting a convergence of previously separate approaches, with resultant increases in control of both normal and abnormal biological events.

Consistent with the above development is the Division's aim to systematize still incomplete fields of biomedical knowledge. With this in mind, the Division's research programs have been organized into five main areas: (1) Chemistry of Life Processes, (2) Developmental Biology, (3) Clinical Sciences, (4) Public Health, Medical Care, and Nursing, and (5) Methods and Tools of Science. The first two—covering the physiological events of reproduction, genes, growth and development, disease, aging, and death—receive about half of the Division's research funds.

Out of these efforts have come new insights. A clearer definition of the gene in its effect on the total organism is emerging, and work in progress with deoxyribonucleic acid (DNA) and ribonucleic acid (RNA) no longer seems remote from practical application. A grantee in Israel has provided evidence suggesting that the RNA complex makes and stores the antibodies which form during immunologic reactions. The greatest obstacle at present to organ transplantation is immunologic in nature, and the solution of the difficulties of replacing vital organs will be found in such basic research. There have been revelations on the response to drugs of the microsomes of liver cells. A new method for direct biochemical studies of components in the living intact cell is under development. New discoveries suggest that unsaturated fatty acids play important metabolic roles in tissues and cells. Experimental evidence indicates that congenital defects are associated with vitamin E deficiency.

Although contributions from the fundamental biological sciences have been numerous, research continues to outstrip training, and critical personnel shortages persist. The Division's training programs seek increased output of qualified researchers and teachers in these basic sciences. Grant funds are available to public and private nonprofit institutions (such as medical schools) for initiating or improving graduate research training. Since July 1958, when DGMS was providing support for training only in epidemiology and biometry, regular programs have been established in 11 additional fields: Anatomical sciences, biochemistry, biomedical engineering, biophysical sciences, developmental biology, genetics, microbiology, nutrition, pathology, pharmacology, and physiology. At the end of this period, the Division was furnishing aid in 20 fields for 440 separate research training programs across the country.

The research fellowship program provides outstanding students and scientists at various academic levels with opportunities for intensive training in the shortage areas. Support, in this period, was granted to 2,307 fellows.

The medical student research training program has continued the successful experiment, begun in 1957, under which carefully chosen applicants are specially instructed to develop latent abilities and stimulate interest in research and teaching careers.

The general clinical research center program was established in the fall of 1959 at the direction of the Senate Committee on Appropriations to help meet national needs for improvement and intensification of clinical research. The program awards grants to medical schools and other research institutions to provide an adequate means for precise observations and control of research, and to extend laboratory investigations in animals into valid correlative studies in human beings. During fiscal year 1961, DGMS awarded 24 more grants for general clinical research centers, bringing to 32 the number of such centers established since the program's beginning in 1960.

CENTER FOR RESEARCH IN CHILD HEALTH

In February 1961, the Surgeon General, at the President's direction, established a Center for Research in Child Health. Placed in the Division of General Medical Sciences, the Center seeks to stimulate research in health problems of childhood and adolescence.

CENTER FOR AGING RESEARCH

The Center for Aging Research has continued to grow, with grants for research in aging increasing from approximately $12.5 million on January 31, 1960, to more than $16 million on January 31, 1961. A fifth large interdisciplinary program in aging research has been established at Brown University. Other like programs, with NIH support, are located at Western Reserve University, University of Miami School of Medicine, Duke University, and the Albert Einstein College of Medicine.

During fiscal year 1961, Center personnel assisted in the White House Conference on Aging and helped the Federal Aviation Agency determine the functional age of pilots.

Division of Research Grants

The Division of Research Grants continued to administer and coordinate the grant and award program—$453 million, in this period—of the National Institutes of Health, and to provide both technical assistance and review and appraisal services for the other grant-awarding units of the Public Health Service. Functions included processing and scientific or technical review of grant applications; providing fiscal, statistical, and information services; and direct management of the $30-million-a-year Health Research Facilities Construction Program.

Reorganization of the Division was necessitated by growth of the whole Public Health Service grant program. A Career Development Review Branch was formed to consolidate all the Division's responsibilities in fellowships, traineeships, and training grants. A Special Program Review Branch, with responsibility for program-project grants and center grants, was established within the Division. Program-project grants, as contrasted with the traditional research-project grants, are for support of broad-based and usually long-term research programs, while center grants are solely for support of physical resources, excluding new construction, and are usually clinically oriented.

To handle the mounting volume of applications for grants, the number of study sections comprising the Research Grants Review Branch was increased from 36 to 40. These study sections, whose primary function is technical review of applications, have continued to stimulate meetings and seminars for exchange and publication of information on specific health problems.

Division of Research Services

NIH took a major step in expanding its use of electronic processing of medical research data by arranging for installation of a new high-speed computer. This will be paralleled by an increase in the variety of data-processing and programming services available centrally through this Division. In anticipation of this development, DRS accelerated its recruitment and on-the-job training of mathematicians, engineers, and other technical personnel required in the data-processing program.

This Division provides a wide range of other central technical and professional services and skills in support of Institute programs, such as the design and construction of unique environmental chambers. During this period, the Division completed a plant-growth chamber for the Mental Health Institute, blood-serum cold-storage rooms for the Neurological Institute, a low-level radiation counting facility for the Cancer Institute, and a hydrogenation laboratory for use by all Institutes.

As part of a new central service, DRS veterinary scientists made plans for the production of specific pathogen-free animals under controlled environmental conditions. Allied planning called for transfer of the overflow in standard animal-production and -holding services to the new animal farm on completion of the needed facilities. As a first step, the existing buildings on the new farm were remodeled and all farm animals moved to the new location.

Highly successful performance tests with gaseous ethylene oxide, in the Division's environmental health service, now permit routine sterilization of surgical rubber gloves, plastic catheters, patients'

telephones, and other heat-sensitive items used in patient care. In other environmental studies, the search for a satisfactory means of detecting staphylococcal organisms was rewarded with a quite reliable test employing a modified commercial medium in which fresh egg yolk is the essential added ingredient. The modified medium also makes possible direct indentification of coagulase-positive staphylococci found in areas that tend to be heavily contaminated with other types of bacteria.

Reorganization of the Division's visual arts program was aimed at integration of central medical arts and photographic services, and a new focus on scientific film production. A study designed to increase the medical library's usefulness had its initial effects in the stepped-up purchasing of scientific books and journals, and the inauguration of a new automatic photocopying service was expected to increase the circulation life of individual volumes.

Clinical Center

The Clinical Center's mission is to provide the specialized forms of hospital care necessary for contrasting studies of normal and abnormal physical and emotional conditions in man. In fulfilling its aim, the Center encourages interdisciplinary exchange of ideas and maintains an environment conducive to research and training.

For the third year, optimal utilization of hospital beds was maintained, with a satisfactory number of research patients being referred by physicians from all sections of the United States and from many foreign countries.

Gratifying success has attended the recruitment of Normal Volunteer control patients. Howard University has been added to the list of sponsoring agencies and arrangements with the Federal Bureau of Prisons have been expanded to include volunteers from midwestern penitentiaries so that three studies of infections may now be carried out where only one was possible previously.

Further automation in the Clinical Pathology Department has made possible a greater number and variety of tests, with more exacting quality control—a development of prime importance, since the Clinical Center's research mission requires such tests on a far greater scale than do general hospitals.

Conclusion

From the foregoing pages it can be seen that fiscal year 1961 was a year of great activity for the Public Health Service—and for the other forces in our society which contribute to better health for the American people. Medical and related research continued at a high level, and many productive results were achieved. Many new hospi-

tals, research centers, and other health facilities were built or planned. Health services of various kinds—particularly for the chronically ill and aged—were launched or strengthened. Increased attention was focused on the health problems associated with the complex modern environment.

The Public Health Service played a central role in many of these developments. Following a penetrating self-study and evaluation, it began a process of reorganization to prepare for its expanding responsibilities in the decade ahead. This process is still under way. With the strength that comes from partnership effort, the Public Health Service hopes to continue to advance human health in this country and throughout the world in the years to come.

Table 1.—*Statement of appropriations, authorizations, and obligations, fiscal year 1961*

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Total	$1,039,606	0	$42,565	$142,630	$1,233,584	$1,058,324
Appropriations, PHS	1,039,065	0	42,565	142,546	1,224,176	1,050,176
Control of tuberculosis	6,493		35		6,528	6,494
Assistance to States, general	27,277	−142	259		27,394	27,057
Communicable disease activities (1961–62)	1,000				1,000	108
Communicable disease activities (1961)	14,393		898		15,291	15,256
Environmental health activities	27,768		1,355		29,123	28,895
Foreign quarantine activities	5,110		335		5,445	5,372
Hospitals and medical care	55,823		5,960		61,783	61,707
Salaries and expenses, hospital construction services	1,736				1,736	1,719
Indian health activities	[1] 50,177		797		50,974	50,545
Construction of Indian health facilities	9,714			3,790	13,504	9,005
Grants for hospital construction (1961–62)	186,200				186,200	61,680
Grants for hospital construction (1960–61)				127,050	127,050	126,272
General research and services, National Institutes of Health	83,900				83,900	83,572
National Cancer Institute (1961–62)	700				700	8
National Cancer Institute (1961)	110,300		10		110,310	106,264
Mental health activities	100,900	−5,139	68		95,829	92,120
National Heart Institute	86,900		28		86,928	86,267
Dental health activities	15,500				15,500	14,617
Arthritis and metabolic disease activities	61,200		437		61,637	59,046
Allergy and infectious disease activities	44,000		1		44,001	43,780
Neurology and blindness activities	56,600	−7,000			49,600	48,348
Operations, National Library of Medicine	1,738		35		1,773	1,758
Grants for waste treatment works construction (1961–62)	45,000				45,000	38,493
Grants for waste treatment works construction (1960–61)				5,277	5,277	5,277
Grants for waste treatment works construction (1959–61)				1,816	1,816	1,811
Retired pay of commissioned officers	[2] 1,927				1,927	1,927
Salaries and expenses	7,226	142	189		7,557	7,477
Grants for construction of health research facilities	30,000		1		30,001	29,985
Bureau of State Services management fund			4,262		4,262	4,234
National Institutes of Health management fund			27,678		27,678	27,580
Scientific activities overseas (special foreign currency program)	3,707				3,707	28
Buildings and facilities	3,776			4,548	8,324	3,298
Construction of mental health, neurology research facility		12,139			12,139	11
Consolidated working fund, HEW, grants for research			217	65	282	165

See footnotes at end of table.

Table 1.—*Statement of appropriations, authorizations, and obligations, fiscal year 1961*—Continued

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Appropriations, special project funds made available by other agencies					8,782	7,804
Salaries and expenses, Bureau of Prisons, (transfer to HEW, PHS)					2,338	2,337
American Sections, International Commissions, State (transfer to HEW, PHS)					78	73
Salaries and expenses, Office of Civil and Defense Mobilization, (transfer to HEW, PHS)					364	360
Research and development, Office of Civil and Defense Mobilization, (transfer to HEW, PHS)					88	85
Emergency supplies and equipment, Office of Civil and Defense Mobilization, (transfer to HEW, PHS)					1,009	1,006
Farm labor supply revolving fund, Bureau of Employment Security, (transfer to HEW, PHS)					499	463
Civil defense and defense mobilization, functions of federal agencies, (transfer to HEW)					1,054	1,042
Administrative expenses, Section 411 Mutual Security Act, (transfer to HEW)					38	37
Technical cooperation, general, executive (transfer to HEW)					2,818	1,965
Defense support, general, executive, (transfer to HEW)					105	63
Special assistance, general executive, (transfer to HEW)					270	257
Grants, Cuban refugee health program, (transfer to HEW)					91	86
Military assistance, executive, (transfer to HEW)					30	30
Gift funds donated for general and specific purposes	541.1			84.4	625.9	344.1
Contributions, Indian health facilities	308.7				308.7	130.1
Public Health Service unconditional gift fund	24.7			11.9	36.7	5.9
Public Health Service conditional gift fund	29.1			38.8	67.9	57.0
Patients' benefit fund, Public Health Service hospitals	43.7			24.2	68.2	48.9
Special statistical work, vital statistics	134.9			9.5	144.4	102.2

[1] Includes $435,000 contract authorizations, and excludes $529,000 liquidation of prior contract authorization.

[2] Does not include $8,000 to be deappropriated.

Table 2.—*Commissioned officers and civil service personnel as of June 30, 1961*

	Full-time						Part-time			
			Civil Service							
	Grand total full time	Commissioned officers	Total	Washington metropolitan area	States	Outside United States	Total part time	When actually employed [1]	Without compensation	Other
Public Health Service	28,630	[2] 3,979	24,651	10,894	12,458	1,299	1,364	723	215	426
Office of the Surgeon General	1,130	191	939	894	45		83	33	44	6
Immediate Office of the Surgeon General	34	8	26	26			1		1	
Division of Finance	141		141	139	2					
Division of Administrative Services	139	9	130	94	36					
Office of Personnel	163	18	145	145			5	1		4
Division of Public Health Methods	80	5	75	71	4					
Division of International Health	33	8	25	25			1			1
Division of Health Mobilization	83	11	72	69	3		8	5	3	
National Center for Health Statistics	283	5	278	278			67	27	39	1
Offices other than Immediate Office of the Surgeon General (Information, Executive)	47		47	47			1		1	
Details to other agencies	127	127								
Bureau of Medical Services	13,368	1,734	11,634	1,262	9,220	1,152	635	388	49	198
Office of the Chief	30	4	26	26						
Division of Foreign Quarantine	619	40	579	36	462	81	45	34	6	5
Division of Hospitals	6,505	1,059	5,446	232	5,192	22	348	220	20	108
Freedmen's Hospital	846		846	846			33		9	24
Division of Indian Health	4,983	421	4,562	111	3,402	1,049	207	133	14	60
Details to other agencies	385	210	175	11	164		2	1		1
Bureau of State Services	5,328	1,157	4,171	1,321	2,780	70	282	152	95	35

Table 2.—*Commissioned officers and civil service personnel as of June 30, 1961*—Continued

	Full-time						Part-time			
	Grand total full time	Commissioned officers	Civil Service				Total part time	When actually employed [1]	Without compensation	Other
			Total	Washington metropolitan area	States	Outside United States				
Office of the Chief	149	10	139	139			13	2	10	1
Division of Dental Public Health & Resources	126	31	95	92	3		32	27	1	4
Division of Chronic Diseases	378	138	240	191	49		13	2	7	4
Division of Radiological Health	460	173	287	166	121		11	6		5
Division of Nursing	67	20	47	47			2		2	
Division of Engineering Services	337	44	293	53	240		11	2	3	6
Division of Water Supply and Pollution Control	375	87	288	133	155		24	23		1
Division of Community Health Practice	210	37	173	118	1	54	61	13	48	
Division of Air Pollution	268	56	212	76	136		6	5	1	
Division of Hospital and Medical Facilities	116	6	110	107	3		2	1	1	
Division of Occupational Health	144	35	109	23	86		7	4	2	1
Division of Accident Prevention	96	9	87	63	24					
Communicable Disease Center	1,447	244	1,203	99	1,092	12	90	58	20	12
Regional Offices	1,143	255	888	14	870	4	10	9		1
Details to other agencies	12	12								
National Institutes of Health	8,587	896	7,691	7,209	405	77	359	146	27	186
Office of the Director	974	4	970	970			10	1	1	8
National Cancer Institute	1,154	157	997	881	115	1	47	18	2	27
National Heart Institute	551	117	434	341	92	1	33	12	2	19
National Institute of Allergy and Infectious Disease	587	100	487	297	155	35	11	6	1	4
National Institute of Arthritis and Metabolic Diseases	520	109	411	410		1	27	14	5	8
National Institute of Dental Research	174	47	127	127			15	11		4
National Institute of Mental Health	757	99	658	617	39	2	79	32	7	40
National Institute of Neurological Diseases and Blindness	485	43	442	402	3	37	29	22	2	5
Clinical Center	1,553	135	1,418	1,418			44	1	6	37
Division of Biologics Standards	221	23	198	198			5	4	1	
Division of Research Grants	459	15	444	444			35	14		21
Division of Research Services	1,039	36	1,003	1,002	1		14	3		11
Division of General Medical Sciences	111	9	102	102			10	8		2
Details to other agencies	2	2								
National Library of Medicine	217	1	216	208	8		5	4		1

[1] Excludes those part-time employees not in pay status during the month of June 1961.

[2] Includes 1,803 Regular Corps Officers, 2,025 Active Reserve Officers, and 151 Commissioned Reserve Officers on Temporary Training Duty.

Table 3.—*Research grants and awards, fiscal year 1961*

Program	Research projects		Research facilities		Fellowships				Training projects		Traineeships		Total	
					Full-time		Part-time							
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Total	13, 534	$273, 941, 050	149	$37, 989, 582	3, 049	$19, 051, 193	1, 154	$747, 792	3, 587	$108, 392, 861	275	$2, 248, 770	21, 748	$442, 371, 248
Allergy and infectious diseases	1, 945	29, 144, 397			166	1, 198, 856			148	4, 751, 611			2, 259	35, 094, 864
Arthritis and metabolic diseases	2, 399	39, 988, 629			61	569, 846			307	7, 720, 297	94	624, 558	2, 861	48, 903, 330
Cancer	1, 806	43, 158, 486	7	5, 000, 000	247	1, 701, 132			351	7, 164, 908			2, 411	57, 024, 526
Dental research	426	5, 534, 771			74	558, 527	370	239, 760	126	2, 971, 561			996	9, 304, 619
General medical sciences	1, 825	42, 659, 124			1, 523	9, 337, 900	784	508, 032	636	26, 930, 448			4, 768	79, 435, 504
Heart	2, 339	52, 490, 633			380	2, 799, 605			450	12, 216, 881			3, 169	67, 507, 119
Mental health	1, 426	30, 491, 144			504	2, 216, 723			1, 355	39, 865, 530			3, 285	72, 573, 397
Neurological diseases and blindness	1, 368	30, 473, 866			94	668, 604			214	6, 771, 625	181	1, 624, 212	1, 857	39, 538, 307
Health research facilities, Division of Research Grants			142	32, 989, 582									142	32, 989, 582

Table 4.—*Payments to States, fiscal year 1961* [1]

[In thousands]

State	Venereal disease special projects	Tuberculosis control	General health	Mental health	Cancer control	Heart disease control	Water pollution control	Hospital and medical facilities construction	Waste treatment works construction
Total	[2] $2,380	$3,982	$16,755	$5,941	$3,314	$3,300	[3] $2,643	$157,004	$44,079
Alabama	43	93	440	118	75	86	57	4,575	1,239
Alaska	7	23	63	38	1	8	14	202	
Arizona	22	45	141	37	19		24	1,564	559
Arkansas	81	61	268	67	47	61	39	3,410	948
California	59	288	1,015	397	224	174	138	6,751	2,215
Colorado	8	33	178	52	35	47	29	1,490	572
Connecticut	8	37	143	68	30	25	43	875	525
Delaware	12	16	31	41	20	23	30	256	457
District of Columbia	79	37	56	36	25	32	25	171	374
Florida	80	94	466	153	88	93	63	3,992	765
Georgia	205	86	454	135	82	93	60	5,757	962
Hawaii		21	69	41	18	32	26	1,169	273
Idaho	6	15	101	41	26	35	20	762	418
Illinois	179	211	688	302	110	119	95	4,673	2,106
Indiana		79	328	120	81	80	67	2,657	1,040
Iowa	9	36	264	92	27	33	45	2,421	754
Kansas	14	32	229	69	45	51	35	2,891	508
Kentucky	44	102	404	112	72	83	56	4,620	907
Louisiana	64	79	344	109	67	71	52	3,762	1,049
Maine		22	114	41	19	8	25	806	204
Maryland	47	84	245	93	51	61	52	2,610	600
Massachusetts		99	374	142	90	79	76	3,215	682
Michigan	66	152	620	243	129	111	99	3,714	1,159
Minnesota	5	47	332	105	61	62	50	3,166	858
Mississippi	37	60	392	90	64	79	51	4,583	621
Missouri	64	94	387	134	84	80	58	3,985	858
Montana	7	20	94	41	16	19	19	699	791
Nebraska	13	13	171	47	30	14	24	2,236	510
Nevada	10	13	51	38	9	11	10	575	416
New Hampshire		14	52	39	15	18	24	728	458
New Jersey	35	112	407	175	99	82	81	2,186	760
New Mexico	30	33	123	41	26	39	21	2,036	408
New York	397	391	1,122	487	274	193	170	7,055	2,758
North Carolina	120	86	586	164	97	110	77	9,304	1,196
North Dakota	12	16	107	41	26	36	20	771	385

Ohio	19	177	761	284	166	137	116	6,308	1,673
Oklahoma	19	51	260	76	50	58	37	1,764	1,035
Oregon	9	34	185	55		27	31	1,642	697
Pennsylvania	124	248	929	352	210	157	134	8,556	2,601
Rhode Island		22	74	41	26	36	35	810	73
South Carolina	97	59	354	92	58	76	52	3,550	791
South Dakota	8	6	109	40	9	3	20	593	419
Tennessee	100	104	435	125	71	86	61	6,130	1,311
Texas	148	181	948	299	173	162	107	7,744	2,020
Utah		7	106	15	18	17	22	1,276	495
Vermont		15	53	39	26	28	20	615	678
Virginia	37	94	421	133	76	81	60	5,193	1,197
Washington	7	51	248	87	52	52	40	1,991	640
West Virginia	15	54	223	60	43	57	38	4,375	912
Wisconsin		60	341	118	73	67	62	3,333	886
Wyoming	2	11	59	29	9	22	15	398	147
Guam		9	8	23	6	3		10	
Puerto Rico	27	147	373	85	60	77	14	2,945	169
Virgin Islands	5	8	9	39	6	6	4	104	

[1] Additional amounts as follows were paid during fiscal year 1961: $1,992,000 under title I for the Public Health Service traineeship program, $6,100,000 under title II for the professional nurse traineeship program, $951,000 to schools of public health for the provision of public health training, $447,000 for project grants for graduate training in public health, $122,000 for the Public Health Service air pollution training and demonstration program, $135,000 for project grants for training in radiological health, $86,000 for the Cuban refugee health program, $1,306,000 for community cancer demonstration and training projects, including $49,000 personal services in lieu of cash, $2,446,000 for the Alaska grant for hospital construction.

[2] Includes $848,000 in services and supplies furnished in lieu of cash.

[3] Excludes $249,000 paid to water pollution interstate agencies as follows: $13,000 to New England Interstate Water Pollution Control Commission, $108,000 to Ohio River Valley Water Sanitation Commission, $41,000 to interstate Commission on the Delaware River Basin, $58,000 to Interstate Sanitation Commission, $26,000 to Interstate Commission on the Potomac River Basin, $3,000 to Klamath River Compact Commission.

Office of Education

Section I

Introduction: Quality Education

We cannot now be satisfied with any educational endeavor that is not genuinely committed to the highest standards of which we are capable. Whatever may be the disposition of some individuals, the Nation cannot afford anything less than excellence in every aspect of education. At every step of the educational ladder we must make those demands for achievement that will call forth the full capabilities of every student.

We have frequently been guilty of following a path of inordinate ease and comfort in our educational policy and practice. All too often we have sacrificed excellence to a large measure of mediocrity, because we have been unwilling to pay the price that excellence demands—rigor, discipline, and genuinely hard work.

Mastery of Fundamentals Necessary

We are in some difficulty at every level, because in our effort to relate education effectively to the lives of the students we have too often divided and splintered until far too much of our energy is dissipated on unrewarding peripheral detail or trivial matters that deserve no place in the economy of a serious formal education. An intensive mastery of fundamental principles and techniques that will have general theoretical application or practical usefulness should replace the not infrequent expansiveness that has made the curriculum attractive and interesting, but sometimes somewhat superficial. We have done well to encourage broad general education. But it is wise to remember that one cannot know anything in general without knowing something in particular. It is education in the most basic sense, whether it be in the humanities, the social or natural sciences, in technology or the professions that will be most rewarding to the individual and at the same time will best satisfy the needs of our

society in providing adequate manpower for our trades and professions and in guaranteeing the expansion of knowledge and the disciplined habits of mind that are so crucial to the well-being of our people.

Students' Capabilities Must Be Challenged

To the extent that we have failed to challenge the full capabilities of our students, from kindergarten through graduate school, we have betrayed the domocratic ideal that is so precious to us. The meaning of democracy in education is not found in a dead-leveling process that attempts to conform all men to a simple equality. We believe not that all men are of equal capacity, but that all are entitled to the opportunity to develop fully such capacities as they have. We combine this with a belief in the inherent dignity of the individual person. These are powerful ideas with tremendous implications. They mean, certainly, that the creative artist, the professional person, and the artisan alike deserve the full esteem of their fellow men and that every man is entitled to his measure of self-respect who is doing his best in a vocation that contributes to the total life of our society.

When we demand in our schools and elsewhere something less than the individual is capable of doing, we rob him of his self-respect and we corrupt our most basic ideals. We have been too often guilty on this count, and our schools must bear a large measure of responsibility for that guilt.

A Twofold Task

The task facing the leaders of American education is so to organize and administer our educational institutions that the best interests of every individual will be served and that this process will at the same time contribute to the fundamental quality of our culture and add genuine strength to our national character. We must make sure that the maximum cultivation of the individual's intellectual, moral, artistic, and spiritual capacities that makes of him a genuinely free person yields also the protection and perpetuation of those institutions that are essential to a free society.

Here two things should be kept foremost in our thinking. First, that the total education of an individual is a task in which all of our social institutions participate. The schools should not be expected to do everything. Their primary task is the achievement and dissemination of knowledge and the cultivation of the intellect. It is only when this task is firmly established as the central purpose of

a school that it will produce effectively those results in personal and civic character that we rightly expect of it.

Secondly, we must guard against the tendency to suppose that our national well-being is served primarily by advances in technology, however important and timely these may be. Knowledge is of value for its own sake as well as for its uses, and unless the sciences are supported in their own right the capital of knowledge on which our technology is nourished will surely diminish. The social sciences and the humanities and fine arts are as important to the quality of our culture and eventually to the strength of our Nation as are engineering and the physical sciences. The study of politics, history, and philosophy is fundamental to our cultural life, and no nation can achieve a lasting strength unless its character is expressed in great literature, art, and music.

We should not fear that a more effective accommodation of education to social needs and national goals must destroy the freedom and individual initiative and creativity of our people. On the contrary, countless persons would thereby find a new freedom: through institutions designed for their peculiar abilities on the one hand and the needs of our social and economic order on the other, they would be brought into the educational process on a higher level.

Teaching, the Basic Problem

The quality of teaching is our basic educational problem. It will not be solved until all our teachers have the competence that is now enjoyed by those whom we all recognize for their great and inspiring work in our classrooms, seminars, and laboratories.

The identification and education of teachers for our schools is now a matter of major concern for the Nation. It is a national tragedy that the generality of our teachers are not fully qualified to assume the burden of responsibility that we must place upon them in the future. Many are lacking the native talent demanded by the art of teaching. Others in large numbers are inadequately prepared by general education or education in their teaching specialities. The responsibility for this rests partially upon our society as a whole, for it has failed to raise the teaching profession to that level of stature and esteem that would make it attractive to highly talented people in numbers adequate to fully satisfy the demand for qualified teaching personnel, and our public leaders have not insisted that our colleges and universities devote their best efforts to the education of teachers.

It would be unwise to suppose that this predicament of the teaching profession is due simply to inadequate salaries for teachers, even

though the problem will never be solved until the average salary level of the profession is made competitive with that of other employed professions. It is due in part at least to the fact that the education of prospective teachers in our society has quite commonly failed to fully challenge the intellectual abilities and creative talents of the more capable segment of our students. Persons of high ability look to a profession that demands rigorous preparation and high competence. The range of students entering our professional education schools is far too wide for the good of our Nation. It encompasses many who enjoy the highest capabilities, but also many who are near failures in any scholastic endeavor.

In the future every effort must be made to identify persons of high intellectual competence and talent in the art of teaching and to attract them to the teaching profession. And the standards of our colleges of education must be raised to exclude those who do not have real promise. The finest education must be made available to those who qualify: first, a genuine and rigorous liberal education in the full sense of that word, an education in the arts and the sciences of the kind that frees the mind, that acquaints it with at least the rudiments of the world's basic knowledge, and cultivates critical and creative intelligence. To insure this kind of education, the education school must become a part of the mainstream of the intellectual life of our universities. The education of teachers is properly the task of the entire faculty, not simply of those who specialize in the teaching art and its related sciences.

It is a national scandal that large numbers of our teachers are inadequately prepared in the subject matter that they teach. We should not be satisfied until this situation is entirely corrected, as its perpetuation is the surest guarantee of mediocrity in the classroom. There will never be a substitute for a teacher's full mastery of his subject.

Finally, education in the art of teaching has too commonly been narrowly conceived in terms of psychological studies descriptive of the learning process. Teaching is an art that must be rooted in the entire gamut of the behavioral sciences as well as in psychology, involving such disciplines as sociology, descriptive ethics, and cultural anthropology. But far more than this, even a simple comprehension of the proper aims of education involves necessarily an intimate knowledge of the value structure of the culture and entails some acquaintance with the essentials of its intellectual and moral tradition. For the meaning of education is found in part in the great task of

understanding, appreciating, criticizing, and perpetuating the culture of which we are a part and in which are lodged our value traditions and commitments. To put it briefly, there is no easy road in the preparation of teachers of the kind that we must now guarantee our schools. Our society will make heavy demands upon them in the future.

Educational excellence, as a goal, is never realized. It is neither visible nor tangible. Perhaps it is not, strictly speaking, a goal at all, but an attitude that informs the total process of education. In any event, we can approach excellence in education only by demanding of all—administrators, teachers, students, and the general public—all that they are capable of achieving. If ever in the past there were reason for asking less, there is none now, for our times are perilous and will accept no less.—*Adapted from a statement by Sterling M. McMurrin, U.S. Commissioner of Education, before the Subcommittee of the Committee on Appropriations, House of Representatives, Eighty-Seventh Congress, First Session, May 8, 1961.*

The Role of the Office of Education

The Office of Education operates in a society in which virtually all responsibility for the conduct of American education rests outside the Federal Government. States and communities have the right to organize and manage their schools and the chief responsibility for financially supporting them. The function of the Office of Education is to "aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country."

Cooperation and assistance by the Office are carried on principally through publishing its research findings, studies, and survey reports; through consultation and field work; through participating in contracting with colleges, universities, State departments of education, other public or private agencies, organizations, groups, and individuals to conduct research; and through administering financial assistance programs as directed by the Congress.

From 1867, the year of its founding, to near the middle of the present century, the Office of Education was regarded principally as an agency for the collection and dissemination of information describing the state of American education. But as the educational system became increasingly complex, the Office began analyzing and interpreting this descriptive information. During the past decade, new responsibilities have come to the Office, supplementing but not re-

placing its historic duties. These responsibilities reflect a change in public conviction of the role of the Federal Government in education.

While the American people have never swerved from the belief or the practice of the belief that responsibility for the conduct of American education should remain outside the Federal Government, they have come to use the one Government they have in common to augment and strengthen the activities of the several governments they have separately. Thus the Office is responsible for the execution of public policy as expressed in over 20 separate pieces of legislation, with grant and contract responsibilities amounting to approximately half a billion dollars a year.

Included among the other responsibilities of the National Defense Education Act of 1958, was that given under title X for advising and consulting "with the heads of departments and agencies of the Federal Government responsible for" various "educational programs with a view to securing full information concerning" such programs and "to developing policies and procedures which will strengthen the educational programs and objectives of the institutions of higher education utilized for such purposes. . . ." Thus, out of the expanded role of the Federal Government in our society, a new function and responsibility of the Office of Education has emerged.

Still another new dimension of Office responsibility has come to focus during the last decade. The character of world developments affects educational practices and educational organization. The modern foreign language development program authorized by the NDEA reflects but one area of those practices. The deeper involvement of the United States in international affairs will inevitably lead to identification of other educational needs.

Concurrently and continuously, the Office must be in a position to stimulate, encourage, develop, and strengthen professional leadership in education throughout the Nation. It must help to provide to educational leaders the informational resources essential to the identification and solution of educational problems, in the constant improvement of educational programs, and in securing understanding, cooperation, and support of professional groups and lay citizens of the Nation.

Whatever may be the problems facing the American people in defining the substance of education or in the administration of its educational system, it is the responsibility of educational leaders at all levels to work together to secure that degree of excellence and productivity which the good of society and of our Nation demands.

Section II

Examples of Office of Education Leadership in Fiscal Year 1961

The activities cited in this section do not constitute a complete description of Office programs; but rather, they represent the manner in which the Office performed its assignments. The report of principal continuing or recurring Office activities and their part of the general American educational scene will be found in section III. The projects of programs of section II originated, were completed, or were unusually active during 1961.

Identification of Needs of American Education

The traditional task of the Office has been the collection and dissemination of information vital to "promoting the cause" of American education. This past year saw two major studies completed which placed before the people a measure of the next decade's educational problems.

Two Critical Needs of Our Schools and Colleges: People and Buildings.—The professional staffing and physical facilities of our public schools and our colleges were deemed to be goal areas of prime importance in achieving a higher base of educational development. In 1960 the Office undertook staff studies designed to determine the magnitude of the Nation's requirements in terms of teachers and other professional personnel to be recruited and trained, and in terms of public school and higher education physical facilities to be constructed or restored. These requirements were translated into dollars of national need, without specific reference to the respective shares that would have to be met by Federal, State, local, and private sources.

The studies were completed during fiscal 1961 and were released to the public as the discussion documents (1) *Ten-Year Aims in Education, Staffing and Constructing Public Elementary and Secondary Schools*, and (2) *Ten-Year Objectives in Education, Higher Education Staffing and Physical Facilities.* Each of the papers was developed with the assistance of outside technical experts and received critical review by leaders outside of government, representing the educational community. There was considerable authority, therefore, behind the goal figures they proposed with respect to the number of school teachers, professors, and university researchers needed over the next decade, the average salary levels they would require, and the resultant aggregate national expenditures indicated for educational

manpower and for bricks-and-mortar support of the educational establishment.

Educational Needs in Relation to the Employment Economy: Vocational Education.—Recognizing that changes in occupational patterns and in the demands of the economy were occurring faster than were the educational adaptations needed to meet them, the Office undertook to identify the kind of education required to eliminate the shortages and imbalances. The resulting document, *Vocational Education in the Next Decade*, was released to the public and will be a major source paper for a panel of consultants on vocational education, to be convened in 1962.

Organization and Dissemination of Educational Statistics and Research Results

Through the years statistical and research programs have been at the core of Office programs. The following examples indicate developments in fiscal year 1961 to improve and accelerate the process by which new educational knowledge is applied to educational practice:

Dissemination of Results of Educational Research.—For a number of years, the Office of Education has maintained a clearinghouse of studies in higher education which compiles, analyzes, and interprets data on educational research and experiments by colleges and universities with respect to their own programs. During the past year the clearinghouse released its first monographs. Included were titles on college admission with advanced standing and independent study programs.

College and University Inventory of Physical Facilities.—During 1961 the editing and coding of this Inventory was completed. The data provide details of all building facilities for institutions enrolling almost 96 percent of the students in higher education. Analysis of these data can yield information including type of control, estimated value, condition, function of assigned areas, and total cost of physical plant. Periodic reports of new construction will be added to this basic inventory. The Office thus will be able to maintain a current file of almost all higher education facilities in the Nation.

Dissemination of Results From Office Sponsored Research Programs.—The Office's extramural research support programs, particularly projects under Cooperative Research and title VII of the NDEA (Educational Media), occupy critically important positions with respect to the responsibility for extending the frontiers of basic and applied educational knowledge. The final results of all projects completed by 1961 were circulated through the Library of Congress

Documents Expediting Project. Some results were published in the following 1961 Office monographs: *The Gifted Student*, *Motor Characteristics of the Mentally Retarded*, *Social Climate in High School*, *Influence of Voter Turnout on School Board and Tax Elections*, and *Research Problems in Mathematics Education.*

A National Cooperative System of Educational Data.—An intelligent facing of educational problems requires, on the part of all authorities concerned—Federal, State, local, and private—adequate information on a national scale. These data are not available at the present time; serious obstacles stand in the way of making them available. During 1961 the Office studied this problem and developed the main conceptual features of a program proposal which would establish, under the leadership of the Federal Government, a national cooperative system of educational information which would employ the resources of electronic technology for storage, retrieval, and analysis of data.

Both the internal technical problems and the field relationships and processes involved were carefully thought through. Appreciable progress was also achieved in establishing rapport with the principal field agencies—school administrators and university registrars—through which raw data would be channeled and upon which national cooperation must ultimately be based. Progress was made in cooperation with the States to standardize educational information through development of publications designed to establish standard terminology for use in reporting pupil and school staff information.

Mobilization of Leadership for Solving Educational Problems

A third activity of the Office traditionally has been the encouragement and coordination of efforts to handle difficult educational issues which are increasing both in scope and number. In the following examples, it may be seen that the Office has strengthened the effectiveness of a variety of organizations by providing the vehicle for them to meet common problems with mutual support and understanding.

Cooperative Planning for the Educational Media.—An Educational Media Study Panel of prominent citizens appointed by the Commissioner has collected evidence on educational uses of television during the past 15 months. The findings will assist the Office in formulating a national policy for this medium.

A series of Office media conferences led to the establishment of the Educational Media Council, the first national organization encompassing all major professional and industrial groups directly concerned with educational media.

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The Media Program sponsored a conference among educators and equipment manufacturers on new and emerging equipment requirements of the schools.

A conference supported under contract with the National Association of Educational Broadcasters identified the feasibility and role of State and regional networks in educational broadcasting.

Adult Literacy Education.—The Office recognized adult education for literacy as a major educational problem. In cooperation with the National Commission for Adult Literacy, it sponsored a conference to seek methods of strengthening and expanding educational provisions for the Nation's functional illiterates. The conference dealt with the responsibility and role of the public school, private and voluntary agencies and the Federal Government in fundamental and literacy education and with community approaches to the problem.

Regional Conference on Cooperation in Educational Research.—The stimulation of interstate cooperation and communication has been a key objective of the Office in promoting research programs. An example of such action was a conference of chief State school officials, their staff members and university representatives from Michigan, Illinois, Wisconsin, and Indiana. The conference, planned by the regional representative of the Commissioner of Education and attended by members of the Office staff, explored ways and means by which greater coordination of educational research programs within and between States could be realized and by which the findings of educational research could be more effectively translated into educational practice.

Encouraging developments since the conference include: organization of a Wisconsin Educational Research Council, organization of a Michigan Educational Research Council, creation of full-time positions of Research Coordinator and assistant in the Illinois State Department of Education, establishment of a Division of Research in the Indiana State Department of Education, and formulation of plans for a cooperative relationship between State departments of education and the Inter-Institutional Research Council of the Big Ten Universities (plus the University of Chicago).

Conference of State Supervisors of Mathematics.—An Office-sponsored National Conference of State Supervisors of Mathematics was held for exploration of the theme, "Strengthening the Leadership of the State Supervisor of Mathematics." The purpose of this conference was to find ways to improve the State supervisor's work in developing mathematics curriculums, strengthening inservice and preservice training, supporting research in teaching of mathematics, and in evaluating State programs in mathematics.

Consultative Service

In addition to the thousands of inquiries directed to Office specialists by organizations, institutions, Governmental agencies, and individuals, major consulting services are sought from time to time by the States.

Higher Education in South Dakota.—In 1961, the results of a survey of South Dakota's entire system of higher education were published. The survey was requested and supported by the South Dakota Legislative Research Council and public and private institutions. Each of the State institutions was visited and evaluations of facilities, students, faculties, and curriculums completed. Reports of the survey recommended not only a statewide program in higher education, but also a program for each institution.

Programs for Special Educational Problems

With increasing frequency the American people have turned to the Federal Government for assistance on issues that are beyond the scope of their other governing bodies. Some examples of assistance by the Office of Education in fiscal year 1961 follow.

Activities Relating to the Cuban Situation.—In support of the decision to provide direct assistance to the thousands of Cuban refugees who have fled the Castro regime and who are residing in this country, the Office of Education has administered a number of programs designed to facilitate adjustment of Cuban refugees in this country.

Funds have been provided to the Dade County (Florida) School System to make possible the employment of additional teachers to accommodate some 5,000 children and to engage special personnel for their instruction. Assistance has been provided to the Dade County School System in establishing adult education programs to aid Cubans in acquiring English language training and orientation in American principles.

A special program of loans to needy students has enabled 300 Cubans studying in American universities to continue their education. Additional funds already made available have enabled many students to continue or begin their college education in this country during the summer months.

Funds granted to the University of Miami have been instrumental in training Cuban lawyers and doctors in United States practices.

A project involving the study of economic problems of Cuban refugees has been supported with Federal funds.

Instruction in English.—The Office planned and gained budget support for a major attack on the deficiencies in the teaching of English. Taking guidance from the National Science Foundation

efforts in science teaching and the NDEA programs in foreign language, mathematics, and science instruction, the Office has begun planning for the support of research, conferences, and the preparation and demonstration of curriculum materials and instructional practices.

Developments Affecting Latin America.—Using the authority of title VI of the National Defense Education Act, the Commissioner declared Latin-American Spanish to be a critical language, thus making possible a program of language and area study centers, teacher training institutions in Latin-American countries, fellowships, and research, all dealing with Latin-American language and area studies.

The Organization of American States, by contract with the Commissioner of Education, has completed a study entitled *Latin-American Higher Education and Inter-American Cooperation* and made recommendations to the Commissioner. The report, made in June 1961, is now under study in the Office.

Review of Federal Programs in Education

As the Federal Government has increased the number and size of programs in education, the necessity for analysis of the effect of such programs has grown.

International Educational Activities of the Federal Government.—The Office has been seriously concerned for some time with the extent to which education is being used as an instrument of foreign policy without adequate concern for the substance of the education involved. Inasmuch as our relationships with other peoples are vitally affected by our Nation's international assistance programs, it is important that the education undergirding these programs be of the highest order. This end will be achieved only as we use the full resources of our domestic educational establishment. For this purpose, the Office has made careful analyses of various problems in this area.

Review of the National Defense Education Act of 1958.—A panel of distinguished consultants was convened to assess the effectiveness of the National Defense Education Act in accomplishing its purposes. One major conclusion reached was that the Government will have a continuing role to play in helping students to finance college study. It was recommended, therefore, that the Student Loan and Graduate Fellowship Programs be extended indefinitely, with the latter substantially enlarged, and that a program of undergraduate scholarships be started to help talented but needy students attend college.

Survey of Federal Programs in Higher Education.—During fiscal year 1961, the Office was engaged in a major study of the effect of Federal activities on institutions of higher education. This will provide for the Office an opportunity to be a genuinely constructive force

in the programing of Federal activities of concern to institutions of higher education.

Because of the scope and size of Federal programs affecting all areas of education, it has been proposed that the Office be given continuing authority to conduct studies and make recommendations concerning all activities of the Federal Government affecting education at any level.

New Responsibility and Change in the Office of Education

An administrative agency must change to be current in its execution of responsibility. As the requirements of the American people have increased in range and size, so has the Office responsibility shifted to meet them. Examples of increase in authority and facilities are cited below:

Improvement of Office Administration Through New Authority.—Considerable thought was given to new authority which might improve the administration of the Office and needed changes were formulated. These include the authority to interchange personnel with States so that persons with special competencies can be used to their best advantage on both the Federal and State levels, to accept gifts for the Office that in no way conflict with the expressed will of Congress, to enable delegation of authority by the Commissioner, and to broaden the authority of the Office of Education to make contracts and grants for the conduct of research and demonstrations.

New Facilities for the Office of Education.—During the summer of 1961 the Office of Education moved into Federal Office Building No. 6, a new building located at 400 Maryland Avenue SW. This new building will provide not only for additional space needed by the Office, but also facilities for demonstrating the use of television as an educational medium. During the 1930's the Office of Education was actively engaged in the utilization of radio for educational purposes. The educational television operation will be an extension of that early concern for educational media, and of the operations under title VII of the National Defense Education Act.

* * * * *

As an agency's function is enlarged, it must, from time to time, reexamine its structure and mission and report to its constituents the understanding of deficiencies and suggestion for change that would provide maximum performance of current and predicted demands.

Analysis of the Role and Organization of the Office of Education.—In October of 1960, the Commissioner of Education appointed a committee to study the role proper to the Office of Education as well as the organizational structure of the Office. After completing its de-

liberations in April 1961, the Committee issued recommendations which are being carefully studied and evaluated as a part of a general review of the effectiveness of the Office of Education in meeting its responsibilities to the Government, the educational institutions, and the general public.

Section III
Major Activities of the Office of Education

In the preceding section examples of the kinds of service which the Office rendered in fiscal year 1961 were presented. In this section the impact of the Office on various aspects of American education and its relationship with other agencies will be indicated.

Elementary, Secondary, and Adult Education

ADMINISTRATION

State educational agencies are the administration centers of public education in the United States. While the schools are actually operated by local agencies, the States retain supervisory responsibility. In recent years, State administrative agencies have expanded their directive, supervisory, and advisory functions. The Office of Education, at the request of State agencies, has frequently given its leadership and cooperation to assist States in the formulation of policies and programs for the strengthening of these functions.

State Departments of Education

Consultants to Local School Systems.—Most local school systems in the United States are not large enough to employ on a full-time basis all the highly trained professional specialists that are needed to provide quality education programs. Since no school should be denied the services of these skilled consultants, it is imperative that each State make some provision to fill this need. States have found that the most economical as well as the most efficient means of making such services available to local school systems is to provide them through the State department of education. The average State department has, since 1955, more than doubled its staff of consultants. A substantial part of the gain has resulted from the expansion of State programs that receive no financial support from the Federal Government. In all but a few States, specialists in science, mathematics, modern foreign languages, and guidance, have been added to department staffs through provisions of the National Defense Education Act.

Fiscal year 1961 was the third year of substantial Federal aid to State educational agencies. During the year under title III of the NDEA, the Office of Education paid $1.7 million to the States for supervisory, adminstrative, and other services related to the strengthening of instruction in science, mathematics, and modern foreign languages. With these funds, which the States matched dollar for dollar, State educational agencies continued to increase their leadership to the local school districts. Approximately 200 specialists in science, mathematics, and modern foreign languages accelerated their programs to improve the quality of instruction through support for higher teacher certification standards, demonstrations of effective uses of new instructional equipment and methods, production and distribution of curriculum guides, and the organization of inservice training of teachers.

Approximately 265 State guidance supervisors, about 200 of whom have been added since title V(A) of the NDEA became operative, continued to work for improved counselor-pupil ratios and for higher standards for counselor certification.

Statistical Reports and Services.—With the operational responsibility for public education vested in the States, the State education agency has taken the key role in establishing and maintaining systems for recording and assembling the statistical data needed for solving educational problems. The Office, working with State and local leaders, has long been making efforts to provide the resource materials, consultative and technical assistance, and leadership toward strengthening State and local data systems so that they might provide accurate, complete, comparable, and timely information at local, State, and national levels.

Standardization of educational terminology throughout the Nation received major attention during this year. Forty-three States and Territories were taking steps toward initial implementation or expanded use of the standard terms, items, and definitions which have been cooperatively developed.

Excellent progress was made toward production of two additional handbooks of standard terms and definitions—one in pupil accounting and one in staff accounting. While the implementation, evaluation, and ultimate revision of these basic handbooks will require continuing staff effort, some attention in the next few years can be devoted to handbooks in program and service areas.

Under title X of the National Defense Education Act, the office assisted the States in establishing record and report systems embracing standard terminology and in developing appropriate manuals and guides. Concerted efforts were devoted to encouraging the utilization of modern automatic data processing.

Title X provides that States, on the basis of approved State plans may receive up to $50,000 in Federal funds to be matched equally with State funds. In fiscal year 1961, there were 53 approved plans under section 1009, title X. Fund requests totaling $1,278,658.97 were received from 46 States. Thirteen States requested the full $50,000 of Federal matching funds and several of these will overmatch the Federal funds. For the fiscal year 1962, it is estimated that at least 50 States will request Federal funds in an estimated total amount of $1,550,000.

The grants available, along with the Office of Education staff efforts, have provided during this fiscal year a sorely needed stimulus toward the development of modern programs of educational information.

Local School Board Effectiveness

Increase of citizen interest in improving the schools has placed responsibilities on local boards of education, unparalleled in the history of public education. Plans and programs to assist boards of education in functioning more effectively received widespread attention in 1961. State school board associations expanded their program to include inservice training specially designed for new board members. They published handbooks, manuals, and periodicals; maintained close relationships with State legislatures; and organized workshops.

During the fiscal year the Office virtually completed a nationwide survey of local school board organization, operating procedures, and characteristics of board members. This study, the first of its kind in more than a decade, is presented by size of district enrollment and geographical region, and will provide information to school board members and other citizens seeking information about board organization and practices. Variations in practices and trends will be analyzed and described.

School Problems in Metropolitan Areas

The trend toward concentration of the Nation's population in a relatively few centers has continued over the past 10 years. The 1960 census reported that over one-half of the population resides in some 209 metropolitan areas. The bulk of the increase has been in the areas surrounding the central cities, with suburban school districts frequently reporting five-fold enrollment increases in the last 10 years. In large city school districts school enrollments have also continued to mount, often while the population of the city itself was declining. Growth of the population in the suburbs, coupled with heavy popu-

lation shifts within the city proper, has created severe problems for long-range planning.

The problems facing cities are numerous and critical. The limited funds available for the construction and operation of the schools, the competition with more attractive suburbs for staff, and the constant mobility and shift of population within the city present deterrents to educational progress. But perhaps the problem of first importance is the general change in characteristics of the student population within our larger cities. The migration to metropolitan areas of large numbers of low-income families has created large student population segments whose members are severely handicapped in their ability to adjust to an urban community. Of particular concern are those students who lack proper background in basic skills and the motivation necessary to profit from a comprehensive school program.

Some of the metropolitan areas continue to provide leadership to educational progress throughout the Nation. The Higher Horizons Project of the New York City School Board and its Case Study Units in the Bureau of Attendance exemplify the use of curriculum adjustment, professional noninstructional services, and school-agency coordination efforts to improve education for the low-income, culturally disadvantaged student.

Looking toward a coordinated effort to benefit such students with programs of real significance, representatives from all national social agencies and from 38 States convened May 24–26, 1961, in Washington for the Conference on Unemployed Out-of-School Youth in Urban Areas. Dr. James B. Conant, chairman of the conference, referred to the thousands of out-of-school and unemployed youth in the large cities as "social dynamite." Others who addressed or supported the conference were Vice President Lyndon B. Johnson, Secretary of Labor Arthur J. Goldberg, Attorney General Robert F. Kennedy, and Secretary of Health, Education, and Welfare Abraham Ribicoff.

In an endeavor to find solutions to this problem, the Office of Education has encouraged the collaboration of specialists from various fields to formulate out-of-school programs of guidance and counseling for these youth. The Office has also sponsored informal meetings of representatives of national organizations of pupil personnel service professions and educational administration organizations. A national commission to conduct studies of the functions, organization, and practices of inschool pupil personnel services and to carry on experimental research in these areas is being considered.

Not least of the problems facing large city schools is that of maintaining a close relationship between patrons and schools. The relatively high mobility rate of our present society has had adverse implications for the traditional "neighborhood school." The sheer

increase in the size of our school districts, both urban and suburban, is acting to increase the distance between the school and its community. Many citizens to whom the schools have historically looked for support and leadership have moved to the suburbs. The need to identify, attract, and develop new sources of community support and leadership among citizens who have superseded the schools' former patrons is well recognized. The Office of Education is initiating a study of methods by which schools in depressed areas of large cities are organizing activities which will encourage lay participation in the growth of the school program.

STAFFING

The growth of school enrollments has continued to pose a problem of staffing the public schools with sufficient numbers of well-qualified teachers. In the fall of 1960 there were 1,410,000 full- and part-time classroom teachers in the public schools: 861,000 in elementary schools and 549,000 in secondary schools. The public schools have been able for several years to meet their current needs for increased staff without an increase in the number of emergency teachers, but a chronic backlog of between 90,000 and 100,000 teachers with substandard State teaching certificates has existed for a number of years. Other "hidden shortages" are to be found in the continued existence of schools on double shifts and schools with curtailed programs and services.

The postwar increase in birthrates is now being felt in the secondary schools, and the greatest needs for increased staff are now found at that level. At the same time there is a lack of balance between the number of secondary school teachers being trained in various subjects and specialties and the number needed in each field.

These and other problems in connection with staffing the public schools were reviewed in the report, *Ten-year Aims in Education: Staffing and Constructing Public Elementary and Secondary Schools.* This report, which had the benefit of review by technical and substantive experts of national prominence, outlines a program for the improvement of public school teaching staffs through increases in teachers' salaries and through improvement of selection for teacher education and preservice and inservice education.

The report suggests a staffing program over the next decade, with a goal for providing a professionally qualified and competent teacher in each classroom of the Nation's public elementary and secondary schools. To achieve this goal, the reports recommends (a) staff salaries that are competitive with those in other occupations requiring equivalent training and experience, and (b) an improvement of procedures for the selection of teachers. The report further recom-

mends that programs of preservice and inservice education for teachers be increased.

In order to attain the levels of teachers' salaries recommended for the next 10 years, average salaries by 1963–64 will have to increase 50 percent in purchasing power over average salaries of 1958–59, and those salaries must then be further increased approximately 2 percent yearly over the next 5 years in order to maintain the established salary status.

The challenge of the second part of this goal—improvement of teacher selection procedures—is not chiefly a financial one (although the report assumes it will require an average of $100 million a year over the 10-year period), but it is rather a challenge directed toward the educational profession for mobilizing resources and for expanding cooperative action at the occupational level. Public concern must also be developed if this part of the goal is to be achieved.

During the year, the Office issued a detailed study, entitled *The Beginning Teacher: Status and Career Orientations.* This study showed some of the professional, social, and economic characteristics of beginning teachers, and related these factors to differences in career plans, job satisfactions and occupational values. Viewpoints and goals of men and women beginning teachers were often found to be different, but neither group tended to look upon classroom teaching as a lifelong career. Many women, of course, expected to leave teaching either temporarily or permanently because of family responsibilities, but large numbers of men also expected to leave, either for nonteaching positions in education or for noneducational positions.

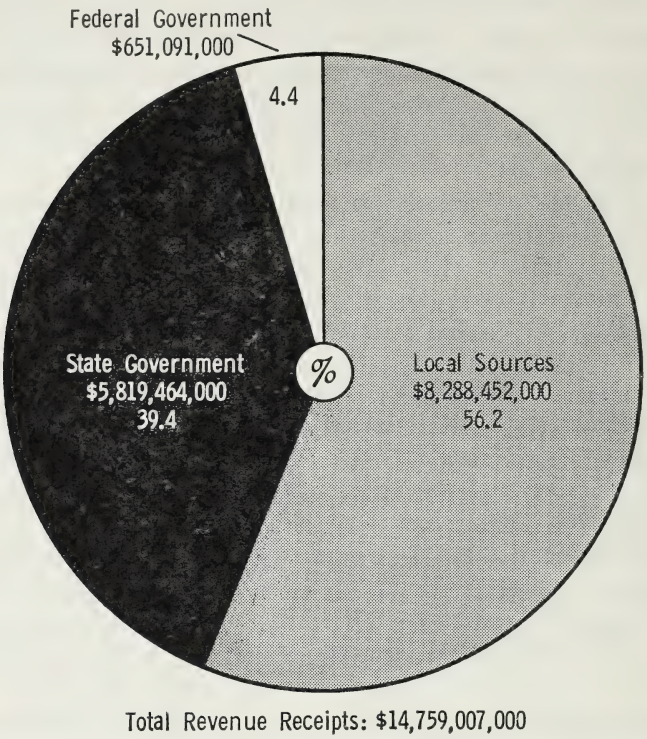
A follow-up study of this same group showed that only 68 percent were still teaching in the same school district the following year, and that 14 percent had left educational positions altogether. This latter group included 12 percent of the men and 15 percent of the women.

The conditions revealed by this study emphasize the need to achieve the goals stated above.

FINANCING PUBLIC EDUCATION

Revenues for public school purposes have increased 20.6 percent in the past 2 years, but this must not be construed to mean that the increase has been available for improvement of school services. General price levels rose an average of about 2 percent and consumed a portion of the increase in school revenue. Enrollment in the public schools increased more than 7 percent in the 2-year period and this accounted for absorption of an additional portion of the increased funds. Over and above these two factors, however, it appears that a

Chart I.—REVENUE RECEIPTS FOR PUBLIC ELEMENTARY AND SECONDARY SCHOOLS, BY SOURCES: 50 STATES AND THE DISTRICT OF COLUMBIA, 1959–60



The proportions of revenue receipts from these sources have remained relatively constant in recent years.

net gain has been made in revenues for improving public school services. This gain was approximately 5 percent per year for the period.

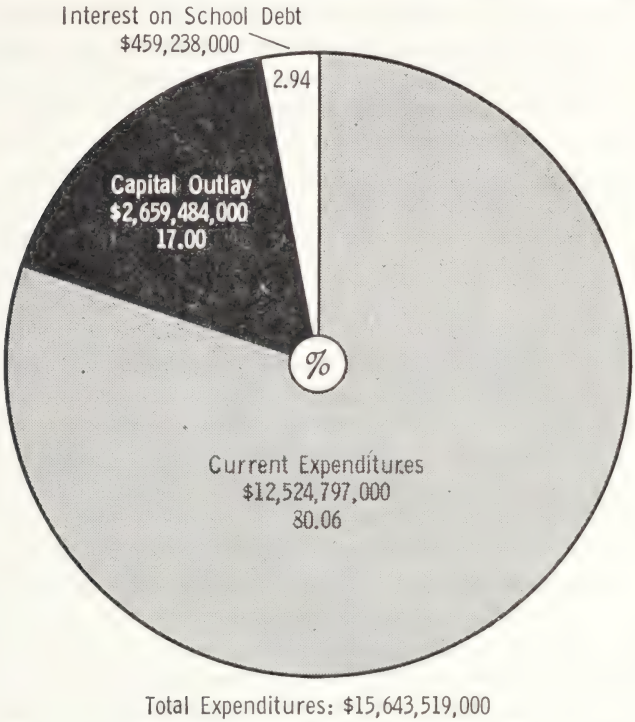
For the 1959–60 school year 56.2 percent of the school revenue was derived from local and intermediate district taxation, 39.4 percent from State sources, and 4.4 percent from Federal appropriations. These proportions which have remained relatively constant in recent years are shown on chart I. Chart II indicates portions of expenditures for the current school program, for capital outlay, and for interest on school debt which was incurred in the provision of school facilities.

Sources and problems of school revenue and school expenditures are discussed in the following paragraphs, beginning with the source of greatest revenue—local jurisdictions.

Local School Revenue

Somewhat more than half the school funds are provided from local taxes levied usually by the local boards of education. These are often

Chart II.—SUMMARY OF EXPENDITURES FOR PUBLIC ELEMENTARY AND SECONDARY SCHOOLS: 50 STATES AND THE DISTRICT OF COLUMBIA, 1959–60



Total expenditures for public school education increased in 1959–60 approximately 15 percent over those of 1957–58. Current expenditures were up approximately 20 percent over the same 2-year period; interest on school debt rose nearly 34 percent during the 2-year period; but, for the first time during the postwar period, capital outlay declined. Despite a continuing need for additional instruction rooms and school plants, this expenditure decreased nearly 7 percent in the 2 years ending in 1959–60.

discussed in terms of property taxes and nonproperty taxes for schools.

Property Taxes.—Public funds obtained within the school district or received from county or intermediate district taxes are derived chiefly from the property tax. Effective tax rates on property have been rising during the 1950's, and the school property tax rate increase has been two and one half times as great as that for other local government services. The importance of the property tax as a revenue producer has been maintained, and property taxes have more than doubled from 1950 to 1960, despite acknowledged inequalities and other weaknesses of this tax in our present complex economy.

A study by the Office of Education indicated that revenue requirements of the public elementary and secondary schools in the decade

ahead will rise faster than revenue can be expected from property taxes. Property tax revenue generally increases more slowly than gross national product. With the property tax as the main revenue source for schools, general price level increases—and particularly rises in the teacher salary level required to maintain the competitive position of schools in a growing economy—are likely to lead to continued fiscal crises for the schools.

Nonproperty Taxes.—Proceeds of nonproperty taxes for schools such as local taxes on amusements, deed transfers, hotel occupancy, motor vehicles, sales, wages, and various business transactions, have increased only slightly in recent years. Pennsylvania remains the only State in which local school districts derive significant amounts from these sources. They now produce about 20 percent of local taxes for schools in that State. A number of other States have authorized the use of some limited types of nonproperty taxes for schools but these have produced relatively small amounts of school revenue.

In school districts for which the local legislative authority, other than a school board, allots funds for school operation from general revenue, some broadening of the local tax base is evident through the additional nonproperty tax sources available to these governments.

School Debt.—School facilities are financed very largely through the issuance of bonds. For assistance to local boards of education in the issuance of school bonds and the management of debt service, the Office of Education is reporting monthly and annually in *School Life* the average net interest costs on new school bond sales for each State and for the Nation. These reports supply boards of education with information of great significance on problems of offering bonds for sale, accepting or rejecting bids, and levying taxes required for debt service. According to the Moody ratings, the average net interest cost declined steadily from 3.94 to 3.42 percent during the 21-month period ending in June 1961.

Nevertheless the total expenditure for debt service is a rapidly expanding item in school budgets. It includes amounts required for repayment of loans as well as for the payment of interest. Receipts from the sale of bonds are designated as nonrevenue receipts. School bond sales reached a peak of $2.420 billion in 1957–58, declined 20 percent in 1958–59, but came within 2.5 percent of the peak in 1960–61 when sales totaled $2.360 billion.

Bonded debt for public school purposes has risen from less than $5 billion in 1950 to more than $15 billion in 1961. The annual sale of school bonds has increased from $1.87 billion to $2.36 billion over the 5-year period ending in 1960–61. The total amount of school bond sales for that period was $10.8 billion.

Debt service expenditures have risen from less than $.5 billion in 1949–50 to nearly $2 billion in 1960–61. While bonded debt was increasing about 200 percent, debt service expenditures were increasing about 300 percent. This is due partly to the fact that interest rates have increased from under 2.50 percent to approximately 3.50 percent. Another reason for this disproportionate increase in debt service may be the substantial increase in the sale of shorter term bonds in recent years. In 1954–55 the average net interest cost on school bonds was 2.32 compared to 3.91 in 1959–60. The average rate in 1960–61 has declined to 3.52 percent.

State Funds for Schools

Since 1947–48, school revenue from State sources has amounted to approximately 40 percent of total revenue collections for schools. Between 1957–58 and 1959–60 State funds increased 20.4 percent. This increase was very similar to the 20.6 percent increase in total revenue for public schools during the same period. It indicates that the States have kept the same pace of increase that has occurred overall.

Increased appropriations of State money have been provided not only for general improvements in education, but also for improvements for special school purposes. A current example of this latter use of State funds relates to the improvement of mathematics, science, and modern foreign language instruction, promoted under the National Defense Education Act, which provides that Federal funds be matched by State funds for the same purpose.

Sources of tax income for the programs of State support generally include individual and corporate income taxes, sales taxes, death and gift taxes, taxes on natural resources, and motor vehicle licenses. However, these taxes are usually adopted by the States for the general support of all governmental services rather than the support of specific areas of service such as education. As much as 75 percent of the State funds for schools are from State taxes collected for this kind of general support. The remaining 25 percent of the funds are from taxes earmarked for schools by constitutional or legislative mandate.

Federal Funds for Schools

Federal support of education in State and local school systems increased 31.3 percent from the 1957–58 to the 1959–60 school year. Although the proportion of total school funds provided by Federal appropriations has remained relatively constant (approximately 4 percent), the scope and variety of Federal programs have been greatly expanded in the last decade. In addition to support of education through State and local school systems, Federal agencies

provide funds through fellowship, traineeship, training grant, and research grant and contract programs. These programs recognize the Nation's school system as the basic institution for the development of manpower resources to meet national defense and other needs.

Programs of the National Science Foundation and the U.S. Office of Education provide significant support for teacher training, facilities for improved instruction, and studies in improving the content of courses. The National Defense Education Act of 1958 is providing assistance to State and local school systems, institutions of higher education, and to individuals to achieve its purposes. Other Federal programs provide support for school lunches, for agricultural research and extension services, for instruction in land-grant colleges, for the education and training of veterans, and for many other purposes.

Expenditure Patterns

Raising the standards of educational services wanted by the general public can be achieved through increases in expenditures, but modifications in expenditure patterns also offer opportunities for improvement. School superintendents and boards of education are constantly making decisions on apportioning funds among items of the school budget, decisions on reductions or eliminations when revenue is reduced, and decisions on adjustments to be made when additional funds are available. Those having responsibilities for making these decisions are aware that more effective budgeting is extremely important in raising the standards of school services.

Studies are being made of the relationship of the cost of instruction per pupil and the teacher-pupil ratio; also average daily attendance and the teacher-pupil ratio. These studies may help in the determination of relationships between expenditure patterns and the quality of educational services.

FACILITIES FOR PUBLIC EDUCATION

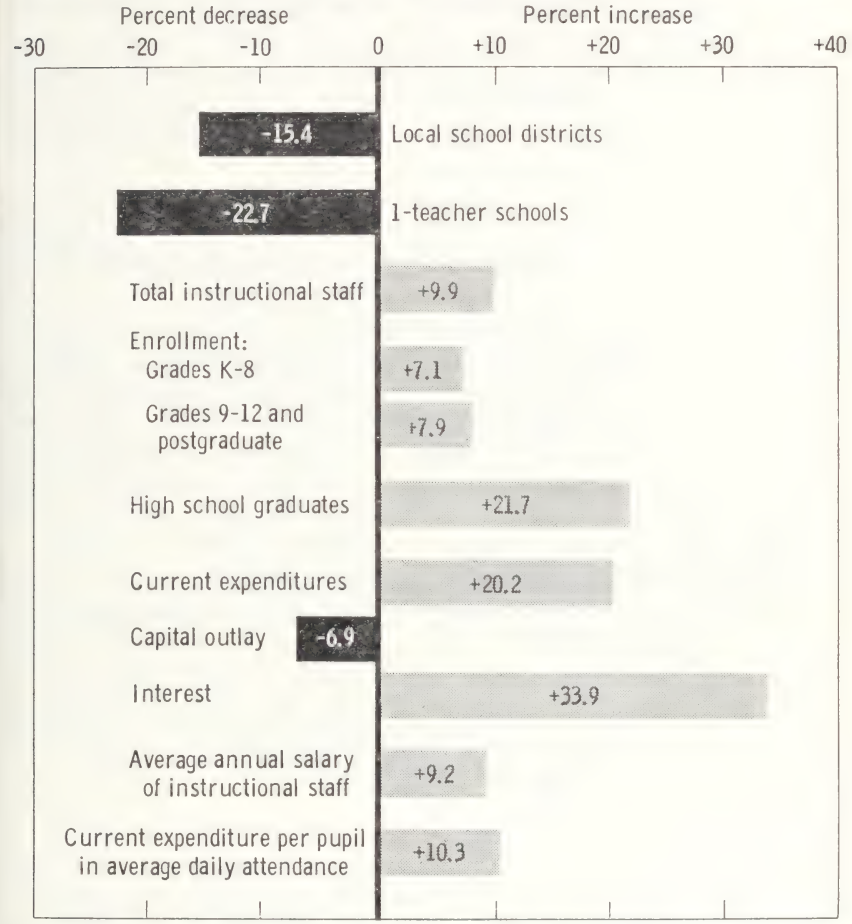
Needs

In the fall of 1960, there were 36,305,000 pupils enrolled in the Nation's public elementary and secondary schools in the 50 States and the District of Columbia. Of this number, 1,868,000, or 5.1 percent of the total enrollment, were in excess of the normal capacity of the accessible publicly owned school plants in use. This number represented an increase of 122,000 pupils over 1959 figures.

Not only were the pupils in excess of normal capacity affected by the shortage of classrooms, but also their classmates. The Office of Education estimated that approximately 8 million pupils were affected by overcrowding, by half-day sessions, and by the use of improvised

or makeshift facilities. An estimated 2 million others were housed in obsolete or otherwise inadequate buildings. The total number of pupils, therefore, whose education was impaired in varying degrees by the classroom shortage is estimated to be at least 10 million.

Chart III.—CHANGES WITHIN THE PUBLIC ELEMENTARY AND SECONDARY SCHOOL SYSTEM: 1957–58 TO 1959–60



Source: U.S. Department of Health, Education, and Welfare, Office of Education. *School Life*, September 1961.

Most of the increases represented below are either desirable or expected. The high percentage increase in interest payments reflects the large amounts borrowed in recent years for school construction. The decreases in the number of local school districts and 1-teacher schools are the result of reorganization and consolidation of small and nonoperating districts. Although the number of 1-teacher schools decreased 6,000 during the 2-year period ending in 1959–60, there were still 20,000 such schools in operation, or about 22 percent of all elementary schools. The decline in capital outlay (money used for sites, buildings, and new equipment) was the first in the postwar period, and developed in spite of the well-known lag in construction of school facilities.

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The accumulated shortage of instruction rooms (classrooms, laboratories, and shops) for the 5 years ending in 1959–60 remains high despite the fact that 343,000 were completed during that period. Although 69,600 rooms were scheduled for completion in 1960–61, only a small part of this total can be applied against the reduction of the backlog of 142,200 additional instruction rooms (reported by the States in the fall of 1960) needed to house adequately the pupils who were located in overcrowded or otherwise unsatisfactory facilities. This is due to the fact that thousands of rooms were needed in the fall of 1961 merely to provide for population shifts, the estimated annual enrollment increase of more than a million pupils, and for replacements of rooms abandoned during the year.

Enrollments in public elementary and secondary schools will increase from 36 to 44 million during the decade 1959–60 to 1969–70. New facilities will be needed to accommodate these new students. In addition, hundreds of existing school plants will need to be remodeled and expanded. Current developments in new processes of teaching and learning—teaching machines, educational television, language laboratories, and new concepts of individual, small group, and large group instruction—make it imperative that these new and remodeled facilities be planned, constructed, and equipped to accommodate anticipated educational programs. In order to meet these needs, careful attention will have to be given to designing facilities that are adaptable to a variety of uses.

The magnitude of the task of planning, designing, and providing instructional facilities for educational programs is compounded by steadily increasing costs of construction and equipment. To compensate for these rising costs, school plant planners will need to keep abreast of economical developments. The Office of Education will share information on technical advances with State departments of education, and through them, with local systems.

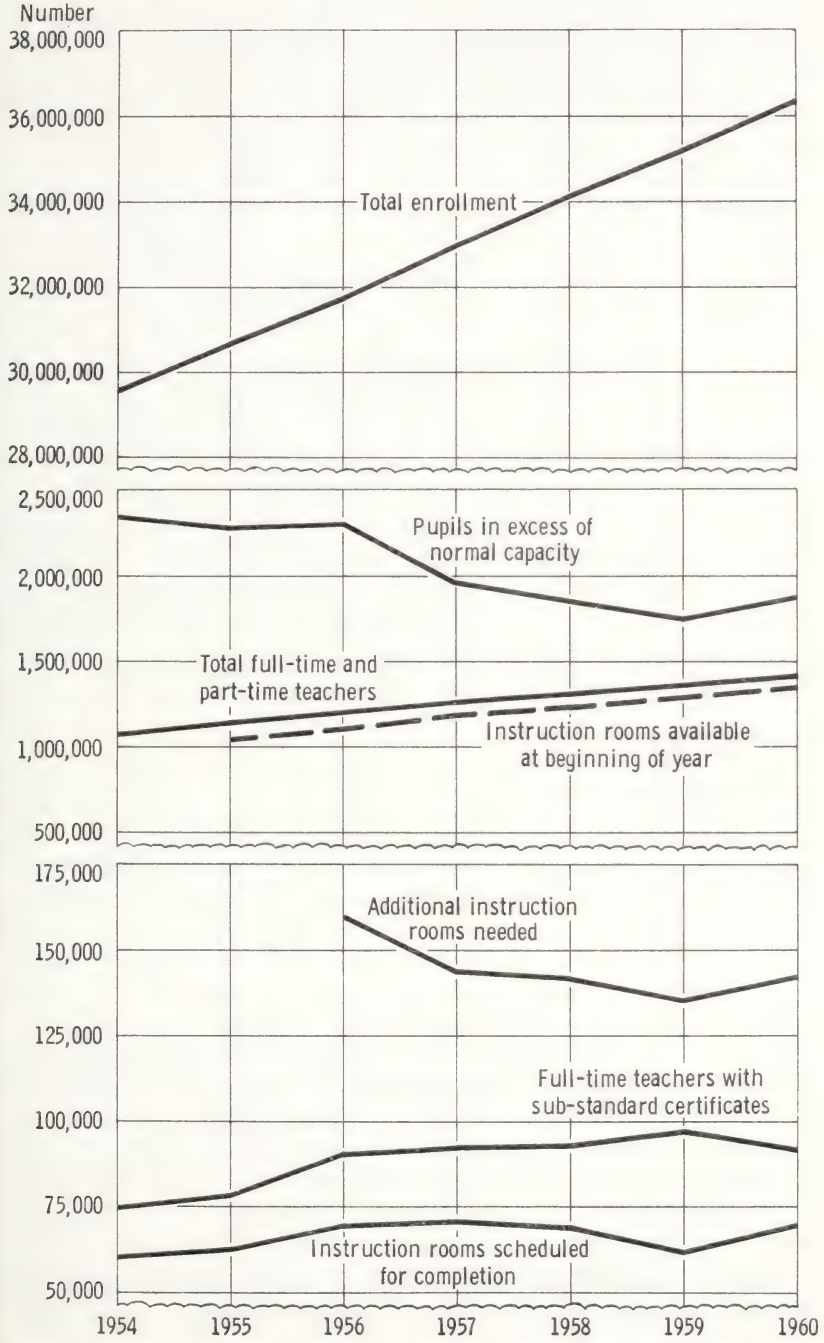
Federal Funds for Facilities

Under Public Law 815.—From the end of World War II to the beginning of fiscal year 1961, the American people spent approximately

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This chart shows the trends in a number of key areas of elementary and secondary education. A steady increase of more than 1 million students per year is evident. Until 1959 there was a slight decline in the "number of pupils in excess of normal capacity" roughly paralleling the general decline in "number of additional instruction rooms needed"; figures for 1960 show an increase over 1959. As would be expected, "total full- and part-time teachers" parallels and is only slightly more than the "number of instruction rooms available at beginning of year." The "number of instruction rooms scheduled for completion" has not varied from year to year more than about 8,000—the approximate 1960 increase over the previous year. The "number of teachers with substandard certificates" steadily increased from 1954 to 1959; but in 1960 the number decreased.

Chart IV.—TRENDS IN ENROLLMENT, TEACHERS, AND SCHOOLHOUSING IN FULL-TIME ELEMENTARY AND SECONDARY DAY SCHOOLS, 50 STATES AND THE DISTRICT OF COLUMBIA: FALL 1954 TO FALL 1960



Source: U.S. Department of Health, Education, and Welfare, Office of Education. *Fall 1960 Statistics on Enrollment, Teachers, and Schoolhousing.*

$28 billion for public elementary and secondary school buildings. Of this amount, the Federal Government, under provisions of Public Law 815, contributed more than $948 million.

Under the NDEA.—The Office of Education, through its authorization to administer funds appropriated by Congress under the National Defense Education Act, has assisted many school systems in improving facilities and purchasing equipment that should improve the quality of education in instructional areas designated by the Act. For example, from 1959 to 1961, NDEA funds under title III were used to remodel 7,000 classrooms to accommodate laboratory and other equipment essential for quality instruction in science, mathematics, and modern foreign languages. During 1960, approximately 56,000 projects for the purchase of materials and equipment costing $105 million were approved. Fiscal year 1961 ended with evidence that projects were approved in even more impressive numbers and at greater costs than those approved in 1960. The tendency among the States participating in title III funds of the NDEA is to spend approximately 75 percent of these funds on science facilities and equipment, about 8 percent on equipment and facilities for improved instruction in mathematics, and about 17 percent on foreign language laboratory facilities. School authorities have increased the number of foreign language laboratory systems from 64 in 1958 to more than 2,500 at the beginning of fiscal year 1961. In addition to these laboratory systems, many schools have acquired audiovisual equipment such as tape recorders and projectors for their language programs.

CURRICULUM

Experimental Programs

The curriculum of the public schools is being increasingly influenced by technological developments which involve the use of new communications media within the classroom. Where these media are used as supplementary aids by a teacher, they offer much promise. Only in instances where the course would not be otherwise available is it considered advisable to use the filmed course, the TV course, or the teaching machine as a substitute for a teacher.

Many educators feel that great care must be exercised in developing the content of and in programing filmed courses, TV courses, and courses for use in teaching machines, lest they lead to an undesirable uniformity of the curriculum or to an undesirable type of curriculum control by nonschool and commercial sources.

English

During the past year individuals and groups called attention to the need for improvement in the teaching of English. In a signifi-

cant report, titled *The National Interest and the Teaching of English*, a committee of the National Council of Teachers of English stated that the teaching of English is not as effective as it should be and that the task of the English teacher is becoming increasingly difficult. The committee also called attention to the inadequate preparation of at least half of the persons now teaching English. To improve the teaching of English, the committee declared that, with the help of the Federal Government, "bold and immediate action must be undertaken on a national scale."

Instruction in reading is a major concern of teachers of English. As the first step in a long-range project to improve the teaching of reading, the Office of Education began collecting data on research in reading completed between 1955 and 1960. From these data professional bulletins on various aspects of reading will be published to illustrate how sound research findings may be used to improve classroom instruction.

In conjunction with selected high school and college teachers, the Commission on English of the College Entrance Examination Board is developing and trying out sample curriculums and instructional materials, grades 9–12, for college-bound students. Through summer institutes at colleges and universities, the Commission on English plans to upgrade the qualifications of English teachers.

One of the primary concerns of English teachers is composition instruction. More writing assignments, especially during class time, were made possible in some places by a lighter teaching load and the hiring of lay readers to correct and evaluate themes. Articulation of high school and college composition programs was improved through State and regional conferences of high school and college English instructors. Office of Education concern with the teaching of English has been reported in an earlier section of this report.

Youth Fitness

On February 21, 1961, the Secretary of Health, Education, and Welfare, serving as Chairman of the President's Council on Youth Fitness, called a meeting of national leaders in various fields related to youth fitness for the purpose of studying recommendations for using Federal resources more effectively on fitness programs throughout the Nation. This meeting was addressed by the President, the Attorney General, and other Cabinet officers. A Consultant to the President on Youth Fitness was appointed at this meeting.

During the year a guide, *Youth Physical Fitness, Suggested Elements of a School-Centered Program*, was prepared. This pub-

lication emphasizes the importance of health appraisals and the identification of the physically underdeveloped pupil and gives many practical suggestions for tests and activities. Conferences also were held with the State, city, and county directors of health and physical education.

Science

One of the most significant developments in science education during the past year was the expansion of the efforts of various national curriculum study groups. Two separate groups, supported financially by the National Science Foundation, have developed new courses in chemistry. The Chemical Bond Approach project, introduced experimentaly in certain schools in 1959, has continued to furnish revised materials; and curriculum materials developed by the Chemical Education Materials Study was introduced into some schools in 1960. Experimental work in revising high school biology has been directed by the Biological Science Curriculum Study. The National Science Foundation has given financial assistance to hundreds of summer and inservice institutes for science and mathematics teachers.

Three conferences, sponsored by the American Association for the Advancement of Science and supported financially by the National Science Foundation, were held to determine the feasibility of upgrading science instruction in grades K–9. These conferences sought ways of measuring the achievements of senior high school students who had studied various science courses, recent developments in the psychology of learning, and the problem of introducing major improvements in science teaching into the elementary and junior high school.

The Office of Education science staff has launched a program through which local school personnel, State supervisors, and Office of Education specialists work cooperatively to improve teaching in local schools. This program referred to as STEPS (Science Teaching-Exploration for Excellence—Program Steps) includes suggestions for evaluating and strengthening the school science program. The program emphasizes the formation of advisory committees of local persons with science backgrounds, the use of facilities provided through the National Defense Education Act, enlisting the cooperation of teachers in sharing with other teachers the new information they have gained while attending institutes, and the use of physical resources of the community. Pilot projects are underway in half a dozen States, and approximately 20 additional State supervisors of science are interested in the program.

Mathematics

Mathematics received major emphasis in elementary schools during the past year. Experimental centers throughout the country, sponsored by the Federal Government and by private foundations or grants, reflected this increased attention to the structure and meaning of mathematics. Institutes held throughout the country for elementary teachers and educational leaders in mathematics provided training in a variety of new developments in the teaching of mathematics.

In the area of secondary education, there was increased emphasis on the structure and meaning of school mathematics. Recent activities in improving secondary school mathematics include the work of the School Mathematics Study Group (SMSG). The SMSG, which is financed by the National Science Foundation, had previously made textbooks and teachers manuals available for use in the experimental programs in mathematics, grades 7–12. During the past year, SMSG prepared instructional materials for grades 4–6 which have been tried in selected experimental centers, as were instructional materials designed for slow achievers in grade 9.

The mathematics programs of SMSG and other groups are currently being evaluated by the Minnesota National Laboratory at the University of Minnesota. Educational Testing Service is also working with SMSG in evaluating the new mathematics materials. Although SMSG is the largest experimental program ever undertaken in mathematics, there are many other significant experimental programs being carried on at a number of institutions of higher education. A number of eminent psychologists are engaged in studying patterns of concept formations.

The Office of Education, in cooperation with the National Council of Teachers of Mathematics, sponsored a national conference on inservice education programs, held March 17–19, 1960, in Washington, D.C. The conference report, *Inservice Education of High School Mathematics Teachers*, was published by the Office during the year.

State departments of education have been active in improving inservice education at the local level. To assist in this effort, the Office of Education sponsored the National Conference of State Supervisors of Mathematics held in Washington, D.C., June 19–23, 1961.

Foreign Languages

As of July 1961, 53 State supervisors or consultants in foreign languages were functioning in 38 States and the District of Columbia. All but six of these posts were created between 1958 and 1960. In August 1960, a 2-week Research-Study Conference, attended by rep-

resentatives from the States, was sponsored by the Office of Education to discuss problems of State-level supervision of instruction in modern foreign languages. One significant outcome of the conference was the establishment of the National Council of State Supervisors of Foreign Languages. Stimulated by the experiences and recommendations of the Research-Study Conference, the supervisors have played a strong leadership role for the improvement of foreign language instruction in their individual States.

The NDEA Summer Language Institutes for elementary and secondary school teachers have retrained an increasing number of language teachers, as have inservice training courses in local areas. Many colleges and universities have also offered special summer programs and a few have already revised their regular teacher-training programs to meet the changing pattern of foreign language study. All of this, in turn, has begun to stimulate research in the foreign language field.

Vocational Education

Area Vocational Education Programs.—Vocational education programs for the training of highly skilled technicians under title VIII of the National Defense Education Act are making a significant impact. In fiscal year 1961 all of the 50 States, the District of Columbia, and Puerto Rico conducted programs designed to alleviate the technical manpower shortage. An increased number of State legislatures provided needed funds to accelerate this type of training. State technical institutes and area schools were constructed in a number of States to make training available to more students.

Under title VIII approximately 300,000 students have benefited from technical training programs during the past 3 years. Preparatory curriculums, generally 2 years in length, in broad fields of technology included: electronics, mechanics, electricity, chemistry, aeronautics, production, instrumentation, and data processing. Electronic technology programs accounted for approximately 40 percent of the total enrollment. About two-thirds of all preparatory enrollments were at the post high school level.

Extension courses provided training for adults already engaged in technical occupations to improve their technical knowledge and skills for advancement in their occupations or for upgrading into new or more difficult jobs.

Curriculum guides in mechanical, chemical, and data processing technologies are being prepared by the Office of Education. These follow the pattern of the curriculum guides in electronic and electrical technologies previously published by the Office and distributed to the States.

Seven regional conferences, attended by over 400 State and local personnel from 48 States and the District of Columbia, were conducted to develop ways and means of achieving quality in the basic elements of technical education programs.

Advisory committees and consultants assisted State and local vocational educators with curriculum design and many other phases of program development. The Bureau of Employment Security cooperated with the States in screening prospective students for technician training programs. States gave attention to the development of graduate follow-up procedures and some schools reported 100-percent placement of their first graduates.

Trade and Industrial Education.—Trade and industrial education continued to contribute through preparatory and extension programs in over 200 occupational fields to the needs of youth, as well as to the skilled manpower requirements of the Nation. States reported an expansion of trade and industrial education especially for out-of-school youth and for adults, and particularly in new area vocational schools. Enrollment gains occurred in cooperative work training programs and other occupational fields, especially the service trades and health occupations. A majority of all vocational education enrollments occurred in the fields of trade and industrial education.

Enrollments in practical nurse training continued to grow. Progress was made in curriculum development, several States reporting workshops in this area. Research in nursing education was carried on through cooperative action with other Federal agencies and national associations concerned with the health occupations.

Several Office programs have contributed to the manpower needs of industry. Emphasis on training of the unemployed as well as the underemployed resulted in a readiness to expand facilities to meet these growing problems. Enrollments in supervisory training virtually doubled in the past 5 years. Enrollment of apprentices, reflecting results of the joint efforts of education, labor, and management, gained substantially.

Expanded course offerings and technological change have placed heavy demands on curriculum development. Several States established curriculum laboratories, indicating an awareness for expanding and updating their instructional materials.

Needs for improving skills in vocational education were studied. Differences in the requisites of full- and part-time instructors have brought about changes in teacher training programs in many sections. A number of State-initiated leadership development conferences, as part of long-range plans to meet State and local needs for administrators and supervisors, were held during the year.

Distributive Education.—The Office of Education distributive education program provides instruction in marketing and distribution. It emphasizes economic concepts and judgment skills that apply not only to occupations but also to functions in marketing. Its instructional materials encourage career development from beginning jobs to management and business ownership.

All the trainees in distributive education are employed or have definite promise of employment in the field. At the high school level, entry jobs assist the trainee in learning how to become a productive employee, in studying marketing functions within a business and a community, and provide opportunity for the instructor to analyse individual potentials and career objectives of trainees.

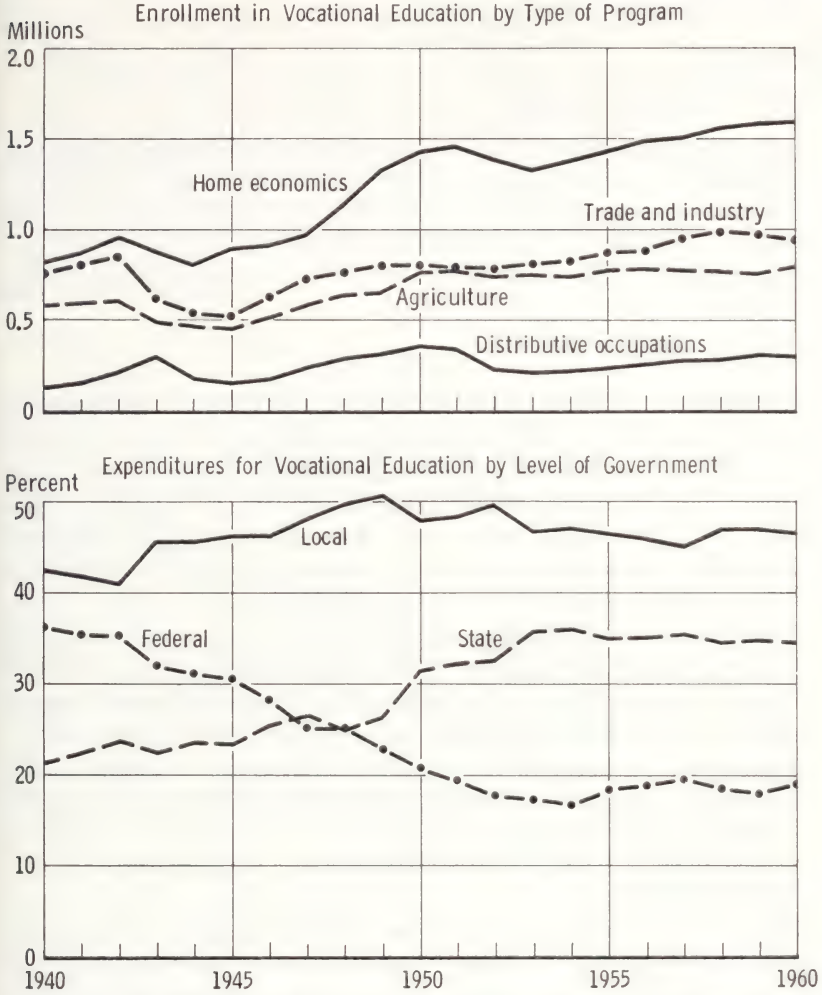
In their endeavor to assist individuals who plan careers in distribution, States and communities used evaluative criteria to establish quality standards of instruction and program operation, emphasized research to recognize economic developments significant in curriculum and learning activities, and strengthened curriculums and expanded opportunities for preparatory inservice teacher education.

Most of the enrollments in distributive education are in adult extension courses which stress small business management and the marketing of locally important products. Distributive education has gained recognition with management and labor groups and trade and business organizations as a vehicle through which training and retraining programs may be offered successfully.

Office Education.—The office-education program continued its efforts to encourage and promote education for office careers. This program services the second largest employment classification in the Nation (clerical and kindred workers), representing about 15 percent of the total number in all types of employment. Material of interest to office educators was widely distributed through Office of Education releases, professional journals and speeches.

Home Economics.—The Office of Education is concerned with the extension and improvement of public school programs of home economics for young people and adults, of research in home economics education, and of home economics teacher education programs. In carrying out these activities during 1960–61, extensive use was made of the findings from a study of home economics in public secondary schools made by the Office in the spring of 1959. Data from the study have given direction on evaluation and revision of curriculums at State and national levels. Reports of the findings were given and implications for action considered at (a) three regional home economics education conferences organized by the Office of Education,

Chart V.—VOCATIONAL EDUCATION ENROLLMENTS AND EXPENDITURES: 1940–60



Source: U.S. Department of Health, Education, and Welfare. *Health, Education, and Welfare Trends*, 1961.

In 1960 there were 3.8 million students enrolled in vocational education courses. Of these students, approximately 42 percent took courses in home economics, 21 percent in agriculture, 25 percent in trade and industry, and 8 percent in marketing. The remaining 4 percent were some 101,000 students who took courses in science, mathematics, and other related courses under Area Vocational Education Programs, and 40,000 who took courses in practical nursing. In 1960, of the approximate $239 million expended for vocational education programs, State and local funds furnished 81 percent.

(b) State meetings of teachers and administrators, and (c) meetings of professional organizations.

STUDENTS

Public High School Graduates

In 1959–60, there were 1,764,237 pupils enrolled in the last year of high school of whom 92.2 percent were graduated. These 1,627,060 graduates represented 68.7 percent of the class which had entered grade 9 in 1956–57—an increase of 8.3 percentage points over the rate of graduation in 1949–50 as compared with enrollments in grade 9 four years earlier.

Identifying Talent

The National Defense Education Act under title V(A) grants funds to States to improve and extend their guidance, counseling, and testing services. Reports from the States indicate that the NDEA program has been effective in helping many students who were planning to drop out of high school or not planning to go to college, set their goals, plan their careers, and take advantage of educational opportunities.

Most States have adopted a counselor-pupil ratio of 1 to 300 as their goal. In 1958, the national ratio for all high schools was 1 to 750; at the present it has dropped to below 1 to 600. Over 7,000 new counselors have been added since the beginning of the NDEA. Current statistics indicate that there is a shortage of approximately 20,000 guidance and counseling personnel at the secondary school level, and 2,200 at the undergraduate college level.

Exceptional Children

Exceptional children include those who are blind or partially seeing, deaf or hard of hearing, those who have impaired speech, who are crippled, who have special health problems, who are socially maladjusted, emotionally disturbed, mentally retarded, or who have above-average talent. These children now number approximately 6 million, only about one-fourth of whom are receiving the specialized education they need.

One index of the increasing public understanding and acceptance of special means of education for exceptional children and youth is shown in data from a forthcoming statistical report of the Office of Education. Percentage gains in enrollments for the decade 1948–1958 are shown below:

Area of exceptionality	*Percentage gain in enrollment*
LOCAL PUBLIC SCHOOLS:	
Blind	441
Partially seeing	11
Deaf	81
Hard of hearing	25
Speech impaired	167
Crippled and special health problems	14
Socially and emotionally maladjusted	84
Mentally retarded	152
Gifted	153
RESIDENTIAL SCHOOLS:	
Blind	32
Deaf	22
Socially and emotionally maladjusted	63
Mentally retarded	31

Likewise, the number of localities or operating units in which programs were carried on grew from about 1,500 in 1948 to nearly 3,700 in 1958. The increase was more than the total number of localities in 1948.

Adequate preparation of teachers is probably the major key to quality education. In 1953 only about 120 colleges offered a minimum sequence of preparation in one or more areas of exceptionality. A study is now underway to ascertain the current status of teacher preparation programs in these areas.

There is much interest in curriculum development at the graduate and undergraduate college levels. This interest was accelerated by a nationwide series of studies conducted by the Office of Education on teacher competencies in the various areas of special education.

When the Congress passed Public Law 85–926, a large forward step was taken toward the expanding of opportunities and programs, particularly at the graduate level, for the preparation of teachers of the mentally retarded. This law provides for the establishment of a fellowship program for preparation of (1) instructors and directors of college or university programs for the training of teachers of the mentally retarded, or (2) supervisors and directors of educational programs for mentally retarded children in State and local school systems. About 170 fellowships have been available each year.

During fiscal 1961 the Office of Education issued three publications in the area of the gifted student: a bulletin entitled *Teachers of Children Who are Gifted*, a report on a Cooperative Research Program project, entitled *The Gifted Student*, and a study entitled *Educating the More Able Children in Grades Four, Five and Six.*

Dropouts

The average age for graduation from high school is about 18 years. The average age of the high school dropout is 16+ years. High school graduates, based on enrollments 4 years before their graduation, have been increasing steadily since 1948 (from 62 percent in that year to approximately 67 percent in 1960). But larger enrollments have actually increased the number of dropouts. Employment problems for these dropouts are further complicated by the growing number of aging workers who frequently compete with young workers for the same marginal jobs.

Although some talented students and many with average ability are among dropouts, the majority are slow learners and pupils from homes of low-level education and culture. Pupils from these groups lack motivation to continue in school, but through the encouragement which is being provided by expanded guidance and counseling programs under title V(A) of the National Defense Education Act, many of the talented and those with average ability complete their high school education and enter college, and a great number of those with below-average ability are led to continue their training in courses adapted to their capabilities.

Three general approches to a solution of the drop-out problem are currently being tried out in school systems:

1. Attempts to raise the cultural level of children who are culturally deprived.

2. Better teaching with emphasis on acquiring basic skills in the elementary grades and junior high school with remedial instruction provided for slow learners.

3. School-work program where pupils spend one-half day in school and one-half day on a school supervised job.

ADULT EDUCATION

The concerns of adult education relate to some of the major problems of our time. These problems involve the training and retraining of adults to meet the challenge of scientific and technological developments; the growing educational needs of older people; and the provision of educational opportunities for undereducated and uneducated American adults.

During fiscal 1961 emphasis was on the development of more qualified adult education leadership in the States. Office of Education staff members provided assistance in strengthening adult education programs and services of State departments of education, universities and colleges, public schools, libraries, and voluntary citizen organizations. The National Conference on Aging held in 1950 and the one

held in 1961 included sections on education. From these conferences has come a clear delineation of the role of education for the aging.

The Office of Education, in cooperation with committee members, prepared the supporting document, "Background Paper on Education for Aging," used by the education section of the 1961 White House Conference on Aging. Office staff members also contributed the education section of a final conference report entitled "The Nation and Its Older People," as well as a final conference report on "Education for Aging."

In cooperation with the National Commission for Adult Literacy, the Office called a national conference on June 1–2, 1961, for the purpose of studying ways and means of increasing and expanding educational opportunities for foreign-born and native adult citizens.

An Office of Education bulletin released in 1961 entitled *Education of the Adult Migrant* analyzed the difficulty of absorbing migrants from farms and small villages in urban areas. This study will assist urban communities interested in providing special educational opportunities for new residents.

Civil Defense Education

The Civil Defense Adult Education Program was designed to teach the techniques of individual, family, and community survival in disasters, both manmade and natural. This educational program is conducted by instructors who have completed 15 hours of technical studies, and is offered to adults in a 12-hour course, through the public school systems. The course includes the study of defensive measures against radiological, chemical, and biological warfare, community planning for such emergencies, and protective measures against natural disasters.

Instruction in Civil Defense.—Under contract with the Office, the States of California, Florida, Kentucky, Louisiana, Minnesota, Nebraska, and Texas prepared instructors to teach these courses. Eight more States have contracted to participate in the program during 1962.

Higher Education

INSTITUTIONAL NEEDS

General Needs of All Institutions

Of the 2,028 institutions of higher education listed in the Office's *Education Directory, Part III, Higher Education, 1960–61*, 1,325 operate under private or denominational control, and 703 under public control. A substantial share of the Office's effort during fiscal 1961

was devoted to providing services to these institutions, their officials, their boards of control, and to governmental agencies, denominations, and other organizations. A survey of the colleges and universities of South Dakota (7 public, 9 private), conducted at the request of a committee of the State legislature with the full cooperation of the private colleges, was the largest single effort of this kind. In addition to providing consultive and professional services to scores of institutions, and to their duly constituted officials, the Office conducted comprehensive surveys of approximately a dozen individual colleges and universities in as many States.

During fiscal year 1961, the problems of these institutions continued to relate primarily to the steady rise of enrollment and the prospect of a sharp upturn of the rate of rise between 1964 and 1969. The Office completed, and on January 19, 1961 the Secretary of Health, Education, and Welfare released a staff paper entitled *Ten-Year Objectives in Education: Higher Education Staffing and Physical Facilities*, which sketched in detail the requirements of the Nation's colleges and universities for professional staff and physical facilities.

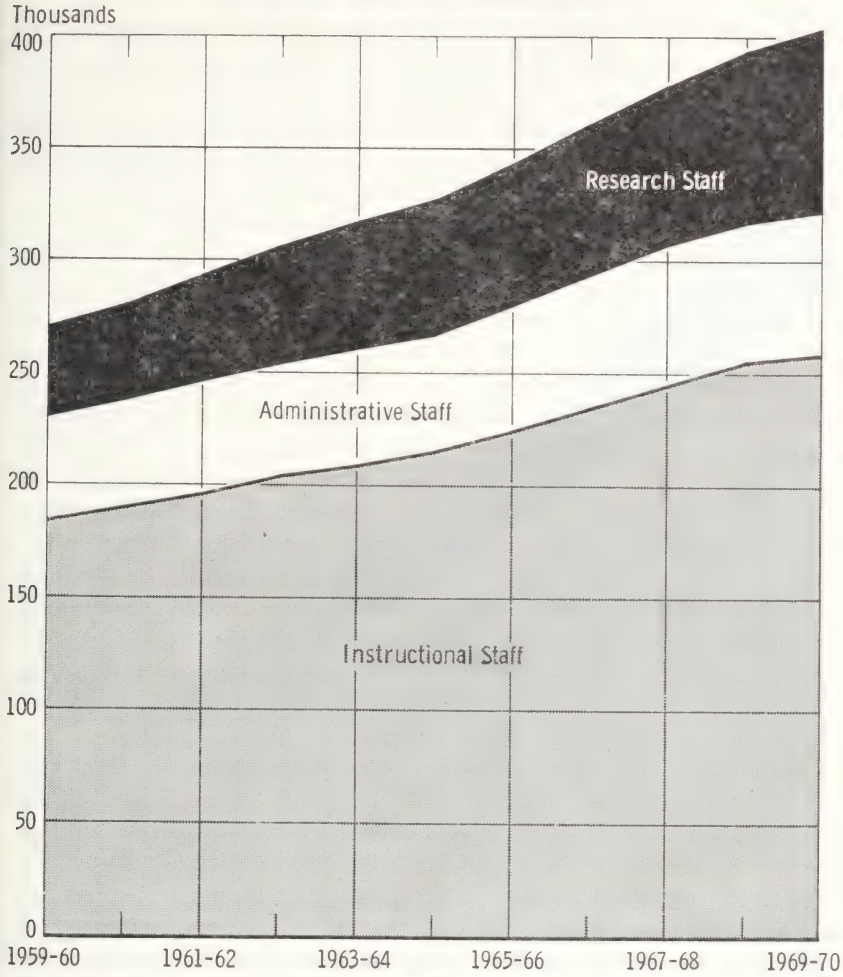
The Office gave increasing attention to the needs of and trends in graduate education, completing the following studies: *Graduate Education in Business Administration*, *Graduate Degrees Awarded by Members of the Association of Graduate Schools*, *Bibliography on Graduate Education*, and *Graduate Fellowships and Capacities of Graduate Schools.*

Several special studies designed to assist those responsible for higher education administration and planning were in progress or completed during fiscal 1961. Among them were *Advance Planning for Higher Education*, *Internal Organization and Administration of Colleges and Universities*, and *Cooperative Projects Among Colleges and Universities.* The Office also compiled and published a comprehensive bibliography on *The Administration of Higher Education.*

Higher Education Staffing Needs.—The prospective shortage of professional staff is one of the two most serious problems facing higher education. Today about 383,000 professional persons (about 298,000 full-time equivalent) are engaged in providing the teaching, research, management, and administrative services in higher education.

During the next 10 years about 336,000 new, trained professional staff members must be recruited by the Nation's colleges and universities (at the master's and doctor's degree levels) to replace those lost by death, retirement, and resignation and to accommodate increases in enrollment (see chart VI). The Nation's graduate schools must train not only these persons but similarly the far larger numbers of people required for business, industry, Government, and other areas. In order to keep pace with mounting enrollments, these schools must

Chart VI.—PROJECTED HIGHER EDUCATION PROFESSIONAL STAFF TOTALS (FULL-TIME EQUIVALENT): 1959–60 TO 1969–70



Source: U.S. Department of Health, Education, and Welfare, Office of Education. *Ten-Year Objectives in Education: Higher Education Staffing and Physical Facilities, 1960–61 Through 1969–70.*

The chart indicates the number of full-time persons required to meet the projected demands for instructional and administrative services and for the growing program of organized research. Of the total staff of 402,000 required in 1970, approximately 64 percent will be engaged in teaching; 16 percent in administrative services; and about 20 percent in organized research.

produce persons on the doctorate level at a greatly increased rate in order to avert serious deterioration in the level of academic training.

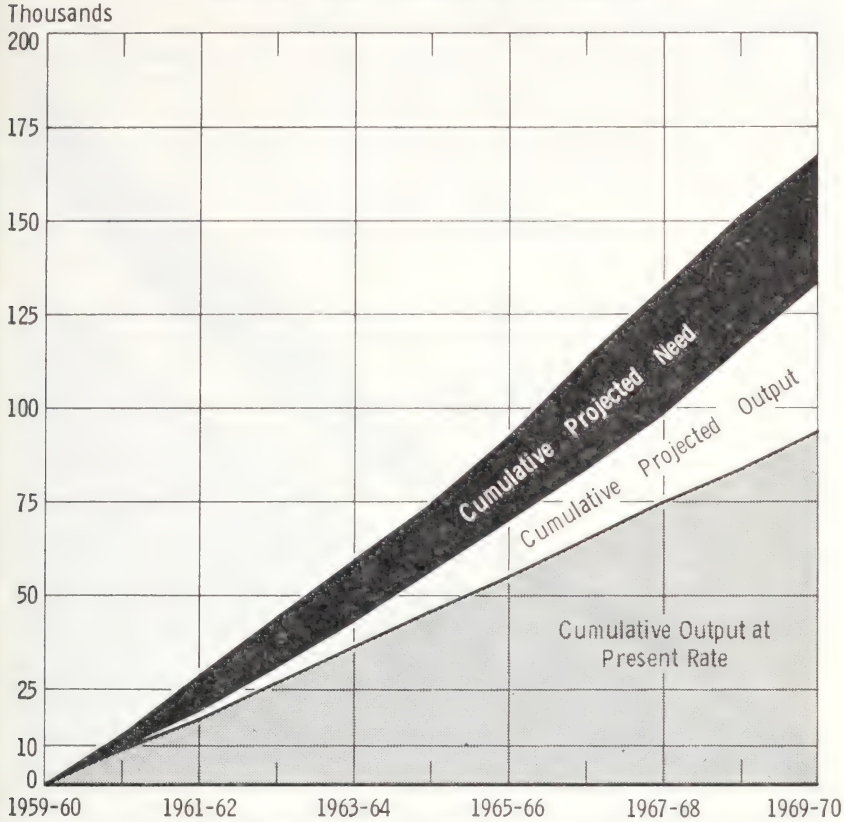
The Office led in developing during fiscal 1961 a pilot project for encouraging competent youth to prepare for careers in college teaching. Fifty colleges in Wisconsin are cooperating with the University of Wisconsin and Marquette University in the project, in which 150 top sophomore students participated in a workshop on college teaching as a career, and in which plans for university-supervised paid internships coordinated with graduate study are planned.

The percentage of doctor's degree holders among entering staff members in institutions of higher education declined from 31.4 percent in 1953–54 to 23.8 percent in 1958–59. It was estimated that to establish the proportion at 30 percent for the decade 1960 to 1970, the Nation's graduate schools would have to award an average of 16,800 doctor's degrees annually during that period. When this number is compared with the current rate of about 9,800, and a projected 10-year average of 13,300 based on present increasing graduate enrollments (see chart VII), the staffing crisis is clear. Even the goal of 16,800 new doctor's degree holders per year will be insufficient unless improved balance between supply and need by fields is achieved, and unless at least 60 percent of those receiving the doctor's degree accept positions in higher education. During the year the Office investigated staffiing problems of colleges and universities in surveys of faculty turnover, faculty load, staffing in selected subject fields, and studies of career characteristics and motivation.

Higher Education Salary Problems.—The problem of recruitment of staff for higher education will become increasingly serious, at both master's and doctor's degree levels, unless salaries in colleges and universities are increased during the next decade at an unprecedented rate. The increases in salary of professional staff in higher education during the last 5 years fall far short of restoring the economic ground lost by the profession since 1940. The Office's report, *Higher Education Planning and Management Data, 1959–60*, completed and published during fiscal 1961, provides data for use in evaluating the status of instructional and administrative salaries in the Nation's colleges and universities.

Higher Education Facilities Needs.—The Secretary's staff paper, *Ten-Year Objectives in Education*, previously referred to, indicates that the colleges and universities need to spend $9 billion for facilities by 1965 and an additional $10 billion by 1970 to accommodate the anticipated rise in enrollment and to replace outmoded or obsolescent facilities. Projections of presently anticipated income indicate that even with full utilization of the Federal Government's College Housing Program funds at the rate of $250 million a year, the funds

Chart VII.—CUMULATIVE OUTPUT OF AND NEED FOR DOCTOR'S DEGREES FOR HIGHER EDUCATION STAFFING: 1959–60 TO 1969–70



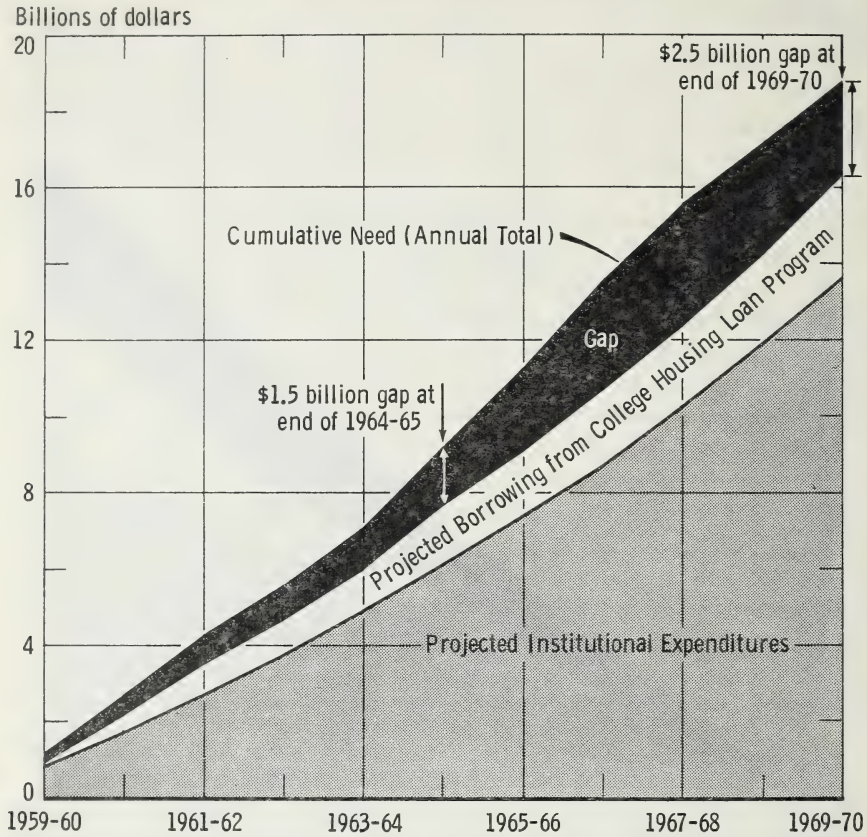
Source: U.S. Department of Health, Education, and Welfare, Office of Education. *Ten-year Objectives in Education: Higher Education Staffing and Physical Facilities, 1960–61 Through 1969–70.*

Projection of cumulative need is based on two assumptions: (1) that 30 percent of new staff members should hold the doctorate in order to insure quality, and (2) that 60 percent of all doctor's degree recipients can be counted upon to fill such positions. The comparisons of projected *need* with estimated cumulative *output* during the decade ending in 1970 identifies the "quality gap" (a shortage of approximately 35,000) threatening higher education if the output of doctorates is not both accelerated and increased.

for facilities will fall short of needed expenditures by $1.5 billion by 1965 and $2.5 billion by 1970 (see chart VIII). During fiscal 1961 the Office completed and published part 3 of its College and University Facilities Survey: *Inventory of College and University Physical Facilities, December 31, 1957: A Preliminary Report.*

In continuing the effort to provide information on the support of higher education, the Office planned or initiated surveys in college and university endowment investment and facilities needs.

Chart VIII.—CUMULATIVE NEED IN HIGHER EDUCATION FOR PHYSICAL PLANT: 1959–60 TO 1969–70



Source: U.S. Department of Health, Education, and Welfare, Office of Education. *Ten-year Objectives in Education: Higher Education Staffing and Physical Facilities, 1960–61 Through 1969–70.*

These projections take into account the following factors: (1) enrollment increases, (2) condition of plant—obsolescence and substandard conditions, (3) instructional facilities, (4) residential facilities, (5) construction costs, (6) cost of additional, special needs. Note that the size of the gaps projected for 1965 and 1970 would be approximately doubled if College Housing Loan Program funds were not available.

Trends in 2-Year Institutions

The importance of 2-year colleges (community or junior colleges and technical institutes) to higher education is seen by the steady increase in the number of such institutions over the last 10 years as well as by the fact that an increasing number of these institutions are being operated under public control.

Several important developments on the 2-year college scene occurred during fiscal 1961. In many States new laws affecting 2-year colleges were passed in the 1960–61 sessions: Missouri and Kansas provided

State financial aid for 2-year colleges for the first time; Michigan, Colorado, and Maryland passed laws strengthening and clarifying the legal structure of 2-year colleges; and Ohio passed laws enabling different types of public 2-year colleges to be established. These and other legislative developments affecting 2-year and other colleges are cited in the Office's annual summary: *State Legislation Relating to Higher Education.* In addition, the Office published during fiscal 1961, a definitive report bearing on the 2-year college movement: *Criteria for the Establishment of 2-year Colleges.*

Trends in Professional Education

The Office gave attention during fiscal 1961 to trends in engineering, and in technical, agricultural, and professional education. Among the related studies completed during the year were: *Trends in Engineering Education*, *Organized Occupational Curriculums, 1958 and 1959*, *The 3–2 Plan of Engineering Education*, *Transfer Students in Engineering*, and *College Enrollments and Degrees in Agriculture.* Several titles were added to the series, "New Dimensions in Higher Education": No. 8, *Advanced Standing;* No. 9, *Reappraisal of the Credit System;* and No. 10, *Quality in the Undergraduate College.* The Office also identified for priority treatment and drew plans to attack the problem of improving the quality of teacher education.

STUDENT FINANCIAL NEEDS

Non-Federal Assistance

During fiscal 1961, the Office completed and prepared for final reporting a comprehensive study of institutional undergraduate student financial assistance for the academic year 1959–60.

Scholarships from non-Federal sources constitute the largest single block of student assistance, estimated by leaders in the field at between two-thirds to three-fourths of the total volume of scholarship assistance. In the following tabulation the total value of institutional scholarships for 1959–60 and other related statistics are compared with the data of 4 and 10 years earlier:

	1949–50	*1955–56*	*1959–60*
Number of higher institutions that awarded scholarships	1, 198	1, 341	1, 559
Total value of institutional scholarships	$27, 000, 963	$65, 736, 950	$98, 157, 498
Number of students awarded scholarships	124, 223	237, 370	288, 521
Average institutional scholarship grant	$217	$277	$340

Another student financial assistance project of the Office of Education, nearing completion at the close of fiscal 1961, was a study of State administered and financed scholarship programs. This study deals with: (a) scholarships authorized by State legislation and supported by specific appropriations, which are not a part of institutional scholarship assistance; and (b) programs of State administrative agencies (such as education, health, highways, and welfare), which enable students to attend a college or university with an option of repaying the agency either in money or in service.

Based upon data for the fiscal year 1958–59, the study reveals that 33 States, the District of Columbia, and Puerto Rico operated 104 scholarship grant programs which assisted 55,178 students with a total volume of scholarship awards of $19.5 million at an average grant of $355 per student. The programs of the States of California, Florida, Illinois, Maryland, New York, and Virginia account for the scholarship assistance to approximately four-fifths of all State-aided scholars and a corresponding portion of State scholarship expenditures.

In recent years several States, including Georgia, New Jersey, Rhode Island, and Virginia, have adopted general (noncategorical) scholarship programs. Moreover, California has amended its legislation to enlarge its general competitive scholarship program and has authorized a new scholarship program for agricultural students.

Another substantial volume of scholarship assistance is awarded by a variety of business firms, corporations, labor unions, churches, civic organizations, parent-teacher associations, women's clubs, and other voluntary organizations. It is estimated that for the year 1959–60, approximately 37,000 scholarship grants with a total stipend value of about $22.5 million were awarded.

The largest segment of these scholarships is administered by the National Merit Scholarship Corporation. During 1959–60 this program provided scholarship aid to 830 first-year college students, who were awarded an average grant of $827, for a total of $686,150. The total scholarship payments to these students and to those of 3 previous years was almost $2.2 million and was in support of 3,937 students.

Increases in Tuition and Required Fees.—An important consideration of student financial assistance is the adequacy of stipends to meet college costs, which have been sharply increasing since 1954. During fiscal year 1961 the Office continued its study of this trend. A comparison of the average annual institutional charges for tuition and required fees in 196 representative colleges and universities between academic years 1949–50 and 1960–61 is given below:[1]

[1] Figures are for 196 representative institutions for which continuous data for the period indicated were available. These colleges and universities, each of which enrolled more than 1,000 full-time undergraduate students, accounted for approximately 55 percent of the Nation's undergraduate students and for a larger proportion of graduate students. These data apply, therefore, to the majority of college students.

Academic Year	Tuition and Fees	Increase since 1949–50	
		Amount	*Percent*
PUBLIC INSTITUTIONS			
1960–61	$207	$95	85
1959–60	194	82	75
1958–59	179	67	60
1957–58	168	56	50
1956–57	155	43	38
1955–56	147	35	31
1954–55	135	23	21
1949–50	112		
PRIVATE INSTITUTIONS			
1960–61	$938	$473	102
1959–60	890	425	91
1958–59	820	365	76
1957–58	741	276	59
1956–57	690	225	48
1955–56	638	173	37
1954–55	590	125	27
1949–50	465		

During the 11-year period, public colleges and universities increased their tuition fees by $95, or 85 percent, while private institutions increased theirs $473, or 102 percent. While the average scholarship grant during the last 4 years increased by $63 (from $277 to $340), during the same period the average increase in tuition fees increased $242, or almost four times as much.

A conservative estimate of the total volume of non-federal undergraduate scholarship assistance from all sources for the next academic year (1961–62) would be $150 million. In view of recent increases in tuition charges and other college costs and the number of high school graduates who have the requisite ability for higher education, it is doubtful that this sum is adequate to overcome the economic barriers to higher education.

Federal Assistance

During 1961, the Office's higher education programs under titles II, IV, V(B), and VI of the National Defense Education Act reached peak operation.

Title II.—During fiscal 1961, 156,000 students borrowed $73.3 million. Loans totaling $108,360 were made to 390 Cuban students in 51 institutions in the United States.

Title IV.—1,500 fellowships were awarded and 476 new and expanded graduate programs were supported during fiscal year 1961. Support of these projects, together with the continuing support of approximately 2,500 fellowships awarded in the previous 2 years, amounted to $6 million during the year. A total of $12.6 million

was appropriated for the graduate fellowship program for fiscal year 1961, approximately 50 percent of which was paid in grants to fellows and 50 percent in stipends to institutions conducting the graduate programs.

Title V(B).—A total of 2,744 counselors and teachers preparing to become counselors attended 83 summer institutes, and 612 attended 20 regular-session institutes. The experience of 2 years of NDEA guidance counselor training institutes led in 1961 to the following new approaches. To meet the demand of providing well-trained guidance counselors and better guidance programs, the Office improved the institutes by (a) placing greater emphasis on year-long training for regular enrollees, and (b) setting up short-term special-purpose institutes to provide an opportunity for persons who needed refresher training in new techniques, and for those who have not yet met certification requirements.

At the suggestion of the Office of Education, the Association of Secondary School and College Administration Officers secured a grant that enabled the Association to send representatives from college admissions offices to the institutes conducted during the summer of 1960. These representatives were able to present the most current information on problems of college selection and admission.

Special purpose institutes of 2 to 8 weeks' duration will be established in 1962 to train counselors in handling new guidance problems. Concentration will be on problems associated with the increased number of students aspiring to attend college—the wide ability range of these persons, the student's choice of college and admission to college. These institutes will also stress the role of the counselor in developing and changing the school curriculum.

Recognizing the necessity that the school administrator must understand and support the guidance program of a school, provision will be made at some of the special institutes in the summer of 1962 for a 1- or 2-day visitation by school administrators.

Finally, a new program of full-year traineeships was proposed so that advanced training could be provided promising counselors and counselor supervisors.

Title VI.—2,003 elementary and secondary school language teachers attended 37 summer institutes, and 117 attended 5 regular-session language institutes. Language fellowship awards were made to 472 graduate students studying 31 neglected languages. This included 112 renewals of fellowships awarded the previous year.

A total of 46 language centers at 30 colleges and universities received support amounting to $1,575,000 for improving and strengthening instruction in 44 neglected languages.

A total of 46 new language research projects were initiated at a total cost of $811,416, and another $1,118,205 was obligated to continue the 115 projects begun in the 2 preceding years.

Improvement of Auditing Procedure for NDEA Funds.—The Office of Education has continued to improve its recently established program of auditing the expenditure of funds received under the National Defense Education Act by colleges and universities. This auditing program provides professional assistance and advice to institutions which have received NDEA funds, in the establishment of adequate financial systems to assure accountability for Federal funds.

International Education

INTERNATIONAL EDUCATION AND THE NATIONAL CHALLENGE

In earlier days the resources of an undeveloped country lay in the vast uncultivated land. These resources, in turn, demanded and produced capital wealth. But today, the need is for trained manpower, which can be produced only through education. Indeed, there is a growing belief that man himself is the only permanent form of wealth, that societies become technically advanced, politically secure, and economically developed through the education and training of individuals.

This idea of education as the foundation of economic, social, political, and cultural development, is a logical outgrowth of American tradition. But what was once regarded as an abstract right of the individual is now understood to be the foundation of national power, essential for national survival.

Perverting this great concept to the uses of communism, Russia is using education as a political tool on the one hand, for creating "the new communist man," and on the other, for building the power needed to support communism at home and abroad.

Today this concept of education is of vital concern to mankind. Whether education is fostered by a nation as a means of teaching broad freedom of thought and action, thereby insuring self-government for its citizens, or is promulgated as an agency for suppressing those freedoms, thereby supporting totalitarian control over its subjects, is the choice many peoples of the world are now making or will make in the years immediately ahead. Since 1946 more than 800 million people have begun to govern themselves. In many new nations, only a small proportion of the children are in school. Their parents are generally convinced that only through education can they achieve a decent way of life. In some countries more than 40 percent of the government's income is devoted to education.

The Office has served as a bridge between educational developments at home and overseas since it was established in 1867. In 1896 this role was formalized by legislation which gave the Commissioner of Education basically the same reporting responsibilities toward both foreign and domestic education. As education has increased in importance as an instrument of both national and international policy, the responsibilities of the Office in international education have grown rapidly. Likewise, it has become apparent that the Office should take the leadership in convening representatives from Government, industry, and education to discuss the adequacy of present programs of education at all levels to meet the manpower needs for the Nation's international activities, and to educate our people for the international responsibilities of the future.

INTERNATIONAL EDUCATIONAL RELATIONS

During 1960–61 the Office performed a variety of services for governmental and nongovernmental agencies, professional organizations, and institutions and individuals both here and abroad.

Services Relating to International Organizations

The Office provided information on education in the United States to international organizations, ministries of education, and institutions and professional educators abroad.

Among many projects undertaken were the evaluation of UNESCO's proposed education program for 1961–62 and the development of project plans for inclusion in the organization's program for 1963–64. An adviser from the Office of Education was appointed to the United States delegation to UNESCO's General Conference in Paris. The Under Secretary of the Department of Health, Education, and Welfare was official spokesman for education on the delegation.

Work with the International Bureau of Education included, in addition to the usual multilingual progress report on education in the United States, the development of official replies to questionnaires on the one-teacher school and on preprimary education. These questionnaires were the basis of discussions at the Twenty-fourth International Conference on Public Education in July 1961. The Office reprinted and distributed the recommendations adopted by the conference, and in various publications described its proceedings and significance.

Upon request, the Office furnished the names of specialists in various branches of education and nominated persons for membership on international boards or committees of experts to such organizations as UNESCO, the United Nations, and ILO. The Office was

also asked to recommend persons for awards of international fellowships in education.

Major reports prepared by Office specialists for inclusion in UNESCO publications included material on correspondence education and the teaching of geography, and a report on the accessibility of the teaching profession to women.

Credentials Evaluation

During 1961 comparative education specialists of the Office evaluated 5,355 credentials for university admissions offices, boards of certification and licensure, State Departments of Education, and other institutions and agencies. This was an increase of 918 cases over 1960. Staff members continued to work closely with the American Association of Collegiate Registrars and Admissions Officers, the Council on Evaluation of Foreign Student Credentials, the National Association of Foreign Student Advisers, and the Institute of International Education on matters relating to credentials. The Office participated in conferences and meetings of these associations, in the development of materials, and in the dissemination of current information helpful in interpreting education programs of institutions abroad. These activities are essential in improving and expanding American support of education in the new nations.

Conferences and Studies on Comparative Education

In the summer of 1960 a conference was held on education in Communist China, at which several papers prepared by specialists in the field were presented and discussed, and later published. Government specialists with particular knowledge of Soviet education were recently invited by the Office to present papers on themes related to their common field of interest. These papers will be published during the coming year.

A brief study, *Education in England*, developed for an earlier conference, and an account of a 1960 conference, *Foreign Understanding and Interpretation of United States Education*, were published during 1961.

Among comparative education studies published in 1961 for the use of United States educators and specialists were *Education for Africans in Tanganyika*, *Soviet Education Programs*, and *Educational Trends in the Caribbean*. Other publications appearing during the year deal with aspects of education in Afghanistan, Libya, the United Arab Republic, Czechoslovakia, Rumania, the U.S.S.R., Switzerland, Communist China, Indonesia, Hong Kong, and the United Kingdom.

These publications will promote understanding and comparison of programs and enable government and professional agencies to develop more effective educational aid to other countries. The studies have a special significance to American institutions accepting foreign students, and others whose widely divergent educational backgrounds and professional competencies need careful appraisal in order to place them in circumstances that will yield maximum value from their American experience.

Clearinghouse of Educational Studies

During the year the Educational Clearinghouse completed 122 statistical reports of the activities of approximately 8,000 exchange students, teachers, and other scholars on Government-sponsored programs who were engaged in more than 200 fields of specialization. The following fields of study attracted the largest number of foreign grantees in the order indicated: medicine, elementary education, economics, government, law, journalism, American literature and civilization, English as a second language, physics, and chemistry. American grantees, who went abroad to study during the same period, came from all States and Territories and pursued their studies in more than 60 different countries. These grantees engaged in some 150 specialized fields of study, among which the following, in order, attracted the greatest numbers: Romance languages and literature, music, English as a second language, English language and literature, Germanic language and literature, political science, elementary education, art, physics, and physical education.

Specialists for International Assignments

Education is an important area in the programs of technical assistance to the underdeveloped areas of the world. The Mutual Security Program and a somewhat similar program operated by UNESCO, together require a continuing overseas staff of approximately 900 educational technicians. The Office of Education is responsible for recruiting education specialists for both programs.

The Office also selects an increasing number of technical assistants for educational specialists overseas and, periodically, sends packets of professional educational materials to them. The Office increased its activity to provide training for Americans serving abroad in Government or private enterprises. This function of the Office of Education is illustrated by a major effort in 1961 to develop resources in the African languages through centers, advanced language fellowships, and research under title VI of the National Defense Education Act.

Language study in the land in which the language is spoken was given new emphasis in Office planning in 1961. The lack of authority

to provide such opportunities was recognized as a gap in the existing National Defense Education Act language training program, and it was proposed that this authority be added in order to improve further the preparation of language teachers.

International Educational Exchange

The Office continued to conduct three major programs under agreements with the Bureau of Educational and Cultural Affairs and the International Cooperation Administration of the Department of State: the Teacher Exchange Program, the International Teacher Development Program, and the Technical Assistance Training Program in Education. It has worked with the Conference of Governors to develop State participation in international teacher exchanges. It has also provided nonscheduled advisory services to hundreds of individuals and institutions in this country and elsewhere. In addition, it provided extensive services for visitors who were not recipients of grants administered by the Office. The total number of participants in the four categories was 2,539.

Teacher Exchange Program.—The Teacher Exchange Program expanded slightly from a total of 619 in 1960 to 624 in 1961. The participants were distributed as follows: teacher interchanges, 155 pairs (310 teachers); other United States teachers assigned abroad, 130; other foreign teachers assigned in the United States, 45; summer seminars abroad for United States teachers, 139. Eight seminars were conducted as follows: teachers of Spanish in Spain and Colombia; teachers of history in France, in Brazil, and in India; teachers of the classics in Italy; teachers of German in Germany; teachers of French in France.

International Teacher Development Program.—The International Teacher Development Program increased from 486 visiting educators in 1960 to 529 in 1961. The number of participating countries increased from 65 to 67. Programs arranged at 16 colleges and universities included four groups in the teaching of English as a second language; two groups each in elementary and secondary education; three groups in American civilization; an Irish teacher group; a Tunisian teacher group; and one group each in administration and supervision, science education, and vocational education. Individual itineraries were prepared for 12 participants at an advanced, specialized level.

Two teacher-development workshops in elementary, secondary, and vocational education were held at the University of Puerto Rico—one in October and one in February 1961—for 113 educators from South and Central America.

Technical Assistance Training Program.—The number of participants supervised during the year 1960–61 totaled 768. The trend toward emphasis on degree programs, first noted in the previous year, was again reflected in the Near East-African training projects. There was a slight decrease in the number of participants from the Far East, from 338 to 302. Countries with the largest number of representatives were Indonesia, the Philippines, Thailand, Vietnam, the United Arab Republic, Iraq, Turkey, and the Sudan. Training was arranged for educators in approximately 60 different fields of education involving 150 training centers located in almost every State, the District of Columbia, and Puerto Rico.

Secondary and Non-Grant Visitor Programs.—Secondary visitors are recipients of United States Government grants administered by agencies other than the United States Office of Education, but who are referred to the Office to pursue their interests in education. Non-grant visitors do not hold United States Government grants. They may be sponsored by their own governments, private foundations, or educational institutions, or may be traveling entirely at their own expense. The Office provides services for these visitors, ranging from single appointments to complete itineraries, including travel and hotel reservations and appointments with local sponsors in many communities. In 1961, the number of secondary and non-grant visitors reached 618, an increase of 170 over 1960 and almost double the figure for 1959.

EDUCATIONAL MATERIALS LABORATORY

The Educational Materials Laboratory is a collection of educational materials of some 11,000 items—textbooks, supplementary reading materials, curriculums, professional literature, records, films, and filmstrips—published in the United States and abroad. These resource materials are used by United States and foreign educators as well as by specialists in the Office of Education and in other Government agencies. More than 1,700 visits to the Laboratory were recorded during 1961.

The Office arranged for consultation periods, seminars, and workshops for members of the Community Development Education Section of the Philippines, representatives of the Ministry of Education of Cambodia, several administrators from Costa Rica, and more than 500 participants in programs for foreign educators.

For United States educators the Laboratory developed a program on educational materials for suburban librarians from Maryland and Virginia. A 5-day workshop was also arranged for a group of New York State teachers engaged in a project to improve teaching

in world affairs. Such activities are increasing as more States require teaching about world affairs.

Annotated listings of educational materials are published in *Educational Materials Laboratory Report.* The *Report* is issued about 10 times annually and provides current information on Laboratory holdings and recently published materials.

Library Services

LIBRARY NEEDS

The problems facing the Nation's library services fall into two groups: those related to securing recognition of the increasing needs for materials, facilities, and staff to serve our growing population and those related to the financing necessary for obtaining these services. Various aspects of these two needs, together with accomplishments in the field of library services during the past year, will be presented in the following discussion.

PUBLIC LIBRARIES

Although considerable progress has been made in the past 4 years in overall public library development, many serious deficiencies still remain. For example, there are still some 25 million Americans without direct access to local public library service. Many additional millions receive only token service. The basic components of factors necessary for adequate public library service are: trained and experienced leadership; an adequate number of professional and other library personnel; good physical facilities; book and nonbook resources in all fields and at all reading levels; and continuing and adequate financial support. The absence of any one factor affects the impact and strength of the total program. The lack of adequately trained staff is now critical.

The concentration of population in our urban areas has resulted in an increased use of the services and facilities of public libraries--particularly by the growing number of students and by research workers in specialized fields. Because of the demands for public library service to children and youth, adult library services in support of self-education beyond school years are frequently underdeveloped and understaffed. Increased library use has rarely been matched by increased financial support.

How the public library serves as an educational agency is described in a new U.S. Office of Education publication titled *The Public Library—For Lifelong Learning.* This 36-page illustrated brochure describes many specific ways in which the public libraries serve as vital community agencies of informal education and makes recom-

mendations for improving library services in this area. However, not until recent years has the profession at large begun to accept and implement these recommendations. In order to assist the States in preparing or revising library standards including recommendations for larger units of service and interlibrary cooperation, the Office of Education published *State Standards for Public Libraries*, a compilation of State standards for public libraries together with the American Library Association standards of public library service.

The Library Services Act (Public Law 597, 84th Congress), passed in 1956 and now extended until 1966, authorizes an appropriation of $7.5 million annually for the period of the legislation for grants to the States for the extension of public library services to rural areas without any service or with inadequate service. *State Library Extension Services: A Survey of Resources and Activities of State Library Administrative Agencies, 1955–56*, containing basic information on State library extension activities for the year prior to the passage of the Library Services Act, was published during the past year. This bulletin provides a bench mark for evaluating the effectiveness of this grant-in-aid program.

A progress report of the participating States and Territories for the first 3 years of the act was issued under the title, *State Plans Under the Library Services Act: Supplement 2.* The basic statistics of the first 4 years are impressive: more than 34 million rural people now have new or improved services; State funds for development of rural library services have increased 75 percent since 1956, and local appropriations for such services have increased 50 percent since that date: more than 6 million books and other materials have been added to the resources of rural communities; and approximately 250 new bookmobiles are now operating. In the wake of county and regional developments over 1½ million rural people have library service for the first time. State library agencies have added over 100 field consultants to their staffs. Scholarship programs under the act are now in effect in 17 States.

There is still much to be done. Fourth-year reports from the States indicate that the number-one concern is adequate State and local support; the number-one problem, the shortage of trained staff; and the number-one goal, the achievement of library service which maintains high standards in staffing and resources to meet the needs of the users. It is expected that the extension of the Library Services Act to 1966, will permit some 24¼ million people living in rural areas (as yet unserved) to participate in the benefits of this program.

SCHOOL LIBRARIES

Two significant developments in the school library field occurred in 1961. The first was the establishment of the School Library

Development Project, with a grant of $100,000 from the Council on Library Resources to the American Library Association for a project of the American Association of School Librarians. The purpose of the study is to assist in the promotion of higher standards for school libraries through the implementation of *Standards for School Library Programs* published in 1960 by the American Library Association. The project provides financial assistance to programs for implementing the standards and consultative service and materials to organizations and groups planning programs. As of June 1961, 21 grants had been awarded to State groups for conferences, studies, and special activities for the improvement of school library service. All States have been provided with newly developed materials designed to improve leadership in school library development.

The Office of Education staff served as consultants in the development of a project which resulted in publication by the Council of Chief State School Officers of a policy statement, *Responsibilities of State Departments of Education for School Library Services*, prepared by the Study Commission of the Council. This statement supports the principle that school libraries are basic to instruction, recognizes the concept of the school library as part of an integrated center for storing and disseminating all types of instructional materials, and states principles of relationships between school and public libraries.

At the request of the American Library Association, the Office of Education is conducting a comprehensive survey of school libraries in the United States for 1960–61. This survey is collecting data on county, city, and town school library supervisory services; on centralized processing services; on school library quarters; and on methods of use of the school library—areas which are valuable in planning for school library development but which have not been previously studied.

In the past year, four State departments of education have for the first time included the position of State school library supervisor in their budgets. Twenty-four State departments of education now employ one or more school library supervisors.

COLLEGE AND UNIVERSITY LIBRARIES

In 1959–60, academic libraries spent approximately $136 million to serve students and faculty in 1,951 institutions of higher education. This expenditure represented an average of approximately 3 percent of the estimated total expenditures for educational and general purposes in these institutions. Most academic libraries, however, were hard-pressed to furnish library materials and staff services for adequate instructional and research programs.

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A comparison of present conditions with the proposed standards promulgated by the American Library Association reveals the following facts. While minimum standards for libraries in 4-year institutions specify 50,000 well-selected volumes, a staff of three full-time professional librarians with adequate clerical help, and a budget amounting to 5 percent of total institutional expenditures for educational and general purposes. The libraries in 55 percent of the 4-year institutions have fewer than 50,000 volumes; 52 percent have fewer than the recommended three full-time professional librarians; and only 3 percent of total institutional expenditures were spent for library purposes.

The minimum standards for libraries in 2-year institutions specify a collection of 20,000 well-selected volumes, a staff of two full-time professional librarians, and the same 5-percent budget specified for 4-year institutions. The libraries of 87 percent of the 2-year colleges have fewer than 20,000 volumes, and 78 percent fall short of the number of librarians recommended.

Academic libraries as a group would have to receive an additional $90 million for materials and professional staffing to reach the recommended level of 5 percent of total institutional expenditures for educational and general purposes.

Only 3 percent of total institutional expenditures were spent for library purposes.

While academic libraries currently receive inadequate support, their problems will be magnified during the next 10 years when enrollments in institutions of higher education are expected to rise from 3.4 million to over 6 million students.

At present, far too many institutions house their libraries in facilities that are inadequate or unsuitable. In the next 10 years, libraries will require upwards of 6 percent of the estimated $12 billion required for instructional physical facilities in higher education institutions. According to a recent Office of Education study, the cost of library buildings planned for 1956–70 was only about $300 million, which represents less than half the actual need.

Research and Statistics

COOPERATIVE RESEARCH PROGRAMS

The Cooperative Research Program continued through 1961 to be a prime source for support of educational research in the United States. As the results from studies commenced earlier under the Program have begun to be available, the direct educational implications of these studies are becoming apparent in such fields as the

teaching of the mentally retarded, the detection and encouragement of students with special abilities, and improved instructional methods in mathematics and science.

The objectives of the Cooperative Research Program are to stimulate and support high quality educational research. To enhance these objectives three new types of activity have been undertaken:

1. Three programs for research development have been initiated: (a) Contracts are being made for surveying the status of research in selected fields; (b) a series of conferences of prominent researchers has been commenced for identifying major needs in areas where research is lacking; and (c) seminars for the purpose of analyzing the status of the research and devising new approaches to troublesome problems have been planned. Leading experts in areas where considerable research has been done are expected to participate in these conferences.

2. For the first time, the Program requested and reviewed proposals for field testing of research findings. Forty proposals were received, and seven of them were recommended and contracted. These field tests are based on the results of laboratory and classroom research and experimentation and are designed to translate these results into educational programs which are then tested in natural situations.

3. In view of the growing requirements of researchers and of the education community for information on the latest developments in educational research, the Program is expanding its dissemination activities. A series of monographs drawing together recent studies in areas of particular interest has been initiated. Among those published in fiscal 1961 were the following: *The Gifted Student*, *Motor Characteristics of the Mentally Retarded*, *Social Climates in High School*, *Influence of Voter Turnout on School Board and Tax Elections*, and *Research Problems in Mathematics Education*. Summaries of the final reports of all the research projects completed under the Cooperative Research Program are also being written. Copies of the complete final reports are available in over 59 key libraries throughout the country serviced by the Documents Expediting Project of the Library of Congress.

Clearinghouse of Studies in Higher Education

Since 1958 the Office of Education has compiled, analyzed, and interpreted data on educational research and experiments related to programs of the colleges and universities which furnished the data. During fiscal year 1961 the Office published a number of monographs based on these data. Among these were titles on college admission with advanced standing and independent study programs.

NEW EDUCATIONAL MEDIA

Grants Approved

The Advisory Committee on New Educational Media considered 221 separate applications for research grants during fiscal year 1961. Of these, 36 were approved by the committee and have been supported by grants of varying size. These 36 grants bring the total of National Defense Education Act, title VII research projects supported to 150. Final reports on 20 approved projects were submitted during this year.

Approximately $3.41 million was expended during fiscal year 1961 for the support of new grants and continued support of grants approved in previous years. Grants from preceding years required slightly over $2.4 million of 1961 funds, and the 36 projects approved in 1961 were supported with a little more than $1 million from 1961 funds. An estimated $360,000 was required in 1962 to bring these new projects to completion. These 36 grants were awarded to 25 separate institutions and nonprofit agencies in 15 States.

Areas of major interest to researchers concerned with the newer educational media are television, teaching machines, conventional audiovisual materials used singly and in combination, and the development of systems of instruction which would utilize the various educational media and teaching techniques. It is evident at this time that the research conducted under title VII will lead to more definitive statements concerning the production and use of educational television, and the instructional role of teaching machines and other newer media. This research is focused on programed self-instructional media, including teaching machines and specially programed printed materials, on investigations of learner-teacher variables involved in the most effective use of instructional materials, and on application of the principles of autoinstructional programing to such other media as motion pictures, television programs, and filmstrips.

Dissemination of Media Information

Slightly more than $1.3 million was obligated for the support, under contract, of dissemination activities during fiscal year 1961. Approximately $131,000 was required for continuation costs of projects contracted for in previous years. During the past fiscal year, 44 contracts were negotiated with 31 institutions, agencies, and individuals in 11 States and territories and 2 foreign nations. These 44 projects required the expenditure of almost $1.19 million during 1961 and are estimated to require $275,000 in additional support during fiscal year 1962. Thus, it is estimated that these 44 contracts will require approximately $1.46 million to bring them to completion.

A major emphasis during fiscal year 1961 was the dissemination of research information, both on title VII activities and on nonfederally supported research completed or in progress. Final reports on title VII research are deposited in each State department of public instruction and in libraries throughout the country which participate in the Documents Expediting Project of the Library of Congress. In addition, these reports may be purchased on microfilm or Xerox print from the University Micro-Films, Inc., Ann Arbor, Mich. Under contract with the Department of Audio-Visual Instruction of the National Education Association, each title VII project is also being abstracted, and quarterly accumulations of these abstracts are published in cooperation with the Office of Education.

A second emphasis in the dissemination program during fiscal year 1961 focused on making instructional materials more available and accessible. The Educational Media Council investigated means for providing a comprehensive catalog of new issues of films, filmstrips, tapes, recordings, and slide sets. A contract has been made with the Council to develop a comprehensive media research cross-index. A pilot study was initiated at Western Reserve University by the Office of Education to determine the feasibility of electronic storage and retrieval of research in education.

A number of high priority dissemination projects were completed in 1961. Some of these were solutions to immediate problems. Others were part of a long-range information program aimed at providing the means for modifying and improving educational practices. Still others provided the basis for resolving fundamental problems regarding the role of communications media in the schools.

A special bibliography project, undertaken by Syracuse University, is valuable primarily to teacher-educators. This project produced a catalog of instructional materials, coded for quick and accurate reference, for teaching audiovisual courses. The American Library Association issued *Guides to Newer Educational Media*, which likewise includes annotated references to catalogs or lists in the new media field, issued between 1950 and February 1961.

The capstone of fiscal 1961 activities may well be the report of a major study contracted with and begun during the year by the National Education Association. This project on the impact of technology on education will culminate in memorandums, monographs, and a major study report which deal intensively with implications for the use of new media and technology in education. Surveys of media used throughout the United States and other countries which will aid in establishing national goals, standards, and guidelines, have moved forward. Information is being collected through surveys which are being made by the National Council on Visual Aids in London and

by the International Christian University in Tokyo. These surveys of media research in Europe and the Far East, coupled with the Purdue University International Seminar on Instructional Television, will assist in assessing American programs and practices.

CAPTIONED FILMS FOR THE DEAF

The first full year of actual captioned film service to groups of deaf persons ended June 30, 1961. The program by that date had 572 registered users in all States except Nevada and Alaska. Approximately 100 prints of feature-length captioned films became available as the year progressed and provided 948 bookings for a total audience of 92,550 viewers. Many registered users were unable to secure films because of the heavy demand upon the limited supply. At present, there are approximately 472 more groups registered than there are prints available, and more groups are being added to the list weekly. These groups are served on a first-come-first-served basis, and many requests must be turned down.

Operating under a contract budget of $150,000, the Office of Education negotiated 5-year leases with motion picture companies to cover 44 new feature titles. When completed, this will add 176 new prints.

EDUCATIONAL STATISTICS

During fiscal 1961 the Office conducted 40 basic, general-purpose surveys of American education, and reported data from them. It also conducted a total of 20 recurring surveys in the field of higher education, relating to enrollment, faculty and other professional staff, earned degrees, receipts and expenditures, property, research and development activities, and organized occupational curriculums. Two surveys of State school systems were made, dealing with problems of organization, enrollment, teachers, schoolhousing, and finances of public elementary and secondary education. Studies of local school systems provided data for reports on current expenditures per pupil, secondary school programs, teacher turnover, adult education programs, and the beginning public classroom teacher. The Office also developed projections of elementary and secondary instructional staff requirements and salaries, school construction, and college enrollment.

The first scientific national study of programs of adult education conducted in local school districts was completed during the year.

The Office also began the first definitive survey of the status of college faculty members and how they regard and accept their careers. The study was based on a scientific sample of full-time instructional

staff. This study should provide important insight into reasons for entry into and causes for separation from college teaching. Such information will enable higher education institutions to meet more readily their requirements for increased numbers of faculty members in the 1960's.

The Office initiated two important surveys of nonpublic education below the level of higher education. Assisted by funds provided by the National Science Foundation, and utilizing mailing lists growing out of National Defense Education Act programs, basic surveys of organization, support, kinds of curriculums offered, number of graduates, teaching staff, and accreditation were begun for 5,000 secondary and 12,000 elementary schools. During 1962 a study will be made of the course offerings of the secondary schools. The information obtained will provide the first national data on offerings and enrollments of nonpublic schools conducted on a comparable basis and at a comparable period with a survey of the public secondary schools, in progress during 1961.

Under an agreement with the National Science Foundation, the Office began a complete survey of financial assistance received by graduate students attending American universities. When the amounts contributed from various sources are evaluated and compared with costs of graduate education, more complete data will then be available to assist in evaluating the financial resources for graduate education.

During 1961 a special Office task force completed a proposal for a new cooperative record and reporting system involving educational institutions and organizations of all States and using modern high-speed computing and tabulating equipment for the production of educational statistics, which would provide with a minimum of delay the information needed on the condition and progress of education.

Reorganization of the Statistical Operations Staff

Reorganization of the statistical operations staff of the Office of Education was initiated and progressed satisfactorily during the year. The new arrangement reflects a clear definition of the role of the central statistical operation in the Office. This role will essentially have two parts: (a) the rendering of professional statistical service to those conducting surveys, and (b) the conduct of the bench mark, basic type recurring statistical surveys.

When this reorganization is complete, it will strengthen, particularly, the capacity of the Office to plan and schedule its operations and to utilize efficiently electronic and electro-mechanical data-editing and processing equipment.

Section IV

Summary and Selected Goals

This report has set forth first a statement of the Nation's most urgent educational need: excellence—not expressed altogether in terms of buildings, equipment, and the necessary number of adequately paid teachers, but as an attitude which affects "the total process of education." A new focus is thus given to quality as it relates primarily to the curriculum and the teacher. Excellence, though never fully reached, demands of all—"administrators, teachers, students, and the general public—all that they are capable of achieving."

In fulfilling its obligation "to promote the cause of education in the United States," the Office of Education offers its leadership through assistance to all and cooperation with all in their commitment and dedication to this purpose.

Summary of Achievements

Among achievements of the Office of Education in five selected areas of activity during fiscal year 1961, the following are summarized:

1. The completion and release to the public of staff studies identifying the needs of American education on all levels.

2. The organization and dissemination of educational statistics and research results including (a) continued progress toward establishing a national cooperative system of educational data, (b) publishing of monographs on the results of educational research, and (c) continuation of the compilation and analysis of a nationwide inventory of physical facilities of colleges and universities.

3. The mobilization of professional leadership (and in some instances, lay leadership) to help solve educational problems in the areas of (a) educational media, (b) adult literacy, (c) coordination of educational research programs within and between States, and (d) the improvement and supervision of State programs in mathematics.

4. The administration of special educational programs such as (a) assistance to Cuban refugees, (b) Latin American language and area studies under title VI of the National Defense Education Act, and (c) the planning of corrective measures in the teaching of English, involving research, conferences, and the preparation and demonstration of curriculum materials and instructional practices.

5. The review of Federal programs in education involving (a) international educational activities, (b) higher education in the United

States, and (c) the effectiveness of the National Defense Education Act of 1958.

Summary of Shortages

The focus on quality in education, which was perhaps the outstanding characteristic of the educational year, revealed many inadequacies in American education. Educators, it would seem, are now more ready than formerly to entertain and to evaluate objectively, criticism of educational policies and programs, teaching and administration. They are coming to realize that such criticism is one of the bases of sound reevaluation and that healthy criticism of the status quo is necessary for progress toward excellence.

1. This report has pointed out in its introduction what must be considered a "major concern of the Nation"—the identification of individuals who have the native talent for teaching and the education of these individuals in a manner that fully qualifies them to assume the responsibility of teaching.

Supplying the necessary *number* of certificated teachers to take care of present and projected shortages will not in itself fill the need for qualified teachers. There are requirements for talent, personality, culture, and educational background which go far beyond the course requirements necessary for certification. Our society as a whole must place such a high regard on the teaching profession and must accord it such status and salaries that proper individuals will be attracted and committed to teaching, and the institutions that train teachers must revise their selection procedures to exclude those who have neither the talent nor the capacity to become teachers.

2. The need for adequate facilities for our elementary and secondary schools—instruction rooms and instructional materials—is a second area of shortage. The number of construction projects completed in fiscal 1961 and the number scheduled for the next few years will barely reduce the present backlog of approximately 142,000 instruction rooms reported by the States in the fall of 1960. The Federal Government, by present legislation, must restrict its aid in school building and classroom construction to areas where school attendance is increased because of Federal activities within those areas.

Funds approved under title III of the National Defense Education Act for improving facilities and purchasing equipment to improve the quality of instruction in science, mathematics, and modern foreign languages have contributed to improvements in thousands of schools since 1958–59, and students in these schools have benefited from the higher quality of instruction thus provided. But this kind

of improvement needs extension to certain other areas of instruction as well.

3. Allied to the needs for teachers and facilities in our schools are needs for providing opportunity for every student to develop his abilities to the highest degree of which he is capable. These needs are revealed in the unequal opportunities resulting from failure to identify students' potentials (from the talented to the slow learner); and in those caused by cultural and economic disadvantage, physical handicap, and mental retardation. The needs are further reflected in problems related to juvenile delinquency, unemployment conditions, and adult literacy.

4. The shortages in higher education institutions are in areas similar to those in elementary and secondary schools—an insufficient number of adequately prepared staff members and a lack of adequate facilities for housing and instructing the increasing numbers of students. The Federal Government has provided loans and scholarships to students (particularly those planning to teach), loans for housing construction, and grants and loans to institutions for numerous other purposes. However, unless additional funds are available to meet the demands of the decade ahead, there will be critical shortages of teachers and facilities.

5. In the general area of research and statistics, there is great need for a more comprehensive program covering all aspects of the educational process—administration, teaching, and learning—including plans for more effective dissemination of results. Research throughout the Nation must be coordinated to avoid dissipation of effort and to achieve direction toward essential objectives. Research must be coupled with rapid application of results of established value. Through demonstration and other means of dissemination of these results teachers should continuously be made aware of the best current methods of instruction.

These needs are closely related to need for improvement of teaching services in specific curriculum areas—notably English and modern foreign languages.

6. With a recognition by the principal foreign policy makers that education is a key aspect of foreign policy, it is now evident that to formulate successful programs of international education there must be closer cooperation among the various Federal agencies in the development of policies and programs for more effective use of the resources of our own educational system.

7. Furthermore there is great need that in our educational planning we consider certain broad social issues which affect the lives of all

citizens. Problems in this area are suggested by the need for a balanced education-manpower program which, while assuring the right of individual choice, would at the same time insure the Nation's strength. These problems are seen in the growth of urban populations and in the need for education in civil defense.

Selected Goals

Some of the major activities of the Office of Education for fiscal year 1961 have been summarized and certain shortages in the schools and higher education institutions of the Nation have been reviewed. The Office has formulated goals which it believes are necessary to meet the needs of the future. A selected list of goals covering some of the crucial areas and problems of American education follows.

GOAL AREA I: GENERAL SUPPORT FOR PUBLIC SCHOOLS AND ASSISTANCE TO COLLEGES FOR CONSTRUCTION

General School Aid.—The establishment of general Federal aid for public schools through the enactment of a school aid bill, or equivalent legislation for equalization of educational opportunity, and raising of the level of educational support.

Higher Education Physical Facilities.—Enactment of proposals for loans to construct academic facilities. This goal recognizes the fact that funds necessary for the construction of these facilities cannot be supplied wholly from present sources of income.

GOAL AREA II: ADVANCEMENT OF KNOWLEDGE AND DISSEMINATION OF INFORMATION RELATING TO EDUCATION

Educational Research: Organization and Program Scope.—Broadening of the Office's extramural research program, and of its working relationships with the total enterprise of educational inquiry, so that it will stimulate far more research and development than it directly supports, and so that every area of major educational concern will experience a ferment of reexamination resulting from the interaction of research, planning, analysis, and appraisal engendered by the program. Greater enlistment of top-quality research effort in developing ways to identify and nurture talent; to find corrections for developmental deficiencies arising from deprived economic and social background; and to eliminate barriers which mental and physical handicaps impose against social and economic productivity and personal self-realization. Establishment and maintenance of an effective program of basic and applied research, field testing, and demonstration of educational media.

Acceleration of national dissemination of research results and educational practice.

Progress Toward a Nationwide System of Educational Data.—Adoption of the proposal for a national cooperative system of educational information, based on scientifically precise reporting and machine processing of basic items of raw data; and the development of a calendar of Administration-approved steps to carry out this proposal.

Substantial and tangible progress, in cooperation with the States and private institutions, in developing common definitions of educational terms and other prerequisites to common reporting practices.

Goal Area III: Action Programs for Conservation of Human Resources

The National Logistics of Manpower in Relation to Education.—The planning and initiation of studies in cooperation with other agencies calculated to yield concrete policy propositions for achieving a balanced education-manpower program for long-range national strength.

Talent Development in Regular School and College Programs.—Confirmation of the favorable trends now tentatively indicated in the identification and guidance of able secondary students.

General acceptance of the principle that nurture of talent must begin systematically in the elementary grades and that it must be a continuous process throughout formal schooling; application of this principle also to the first two post-secondary years, by extension of the NDEA title V provisions to those years.

Enactment of provisions for a higher education Federal Scholarship Program.

Prevention and Correction of Underachievement Related to Cultural and Economic Disadvantage.—Provision of educational assistance to children and adults of migrant labor families.

Salvage and Rehabilitation of Persons Disabled by Mental or Physical Handicaps.—Expansion of existing laws to include additional categories of exceptional children. (It is estimated that only one-fourth of the children who need such services are now receiving them.) Lack of adequately prepared personnel is a major obstacle to the development of proper programs for these children.

Occupational Training and Retraining to Meet Problems of (a) Persistent Local Unemployment Conditions and (b) Obsolescence of Skills Through Automation and Other Technological Developments.—Development of close working relationships with Department of

Labor under the Area Redevelopment Act and under proposed acts which would assist in the adjustment of occupational skills to employment opportunities.

Youth Programs Related to Problems of Unemployment and Juvenile Delinquency.—Establishment of interagency cooperation for the Office's role in implementation of the pilot projects and training programs of the Juvenile Delinquency Act of 1961.

The Nation's Adult Education.—Instigation of action, in an appreciable number of States, to provide trained leadership for adult education as an integral part of public education. Adoption by a sizeable number of States of new or expanded programs for adult literacy. The planning and initiation of national clearinghouse service for information on action programs in education for aging.

Selection of urgent research problems, from the recommendations of the White House Conference on Aging, which fall in the area of adult education; and promotion of research on these problems through the Office's extramural research programs and through stimulation of institutions and other sponsors of research in education.

Goal Area IV: Improvement of Provisions for International Education

Federal Cooperative Planning.—Our position among the nations and the increasing role played by education in relation to foreign policy and international affairs requires a new dimension in our thinking about the problems of education. We must cultivate a knowledge and an appreciation of our relation to other countries and other cultures, while at the same time we maintain a loyal though critical understanding of our own.

The responsibility of the Federal Government for providing leadership to insure these achievements rests heavily upon the Department of Health, Education, and Welfare and the Office of Education. These agencies should lead out in cooperative planning and the formulation of policies and programs among Federal agencies concerned, whereby these goals may be realized.

Education in International Understanding.—Early in 1962 the Commissioner of Education will convene a conference of outstanding persons from a number of areas of American life, who are vitally interested in American education, to discuss the impact of our international relations on American education. This conference will do much to clarify issues and to suggest approaches toward updating the curriculum of American schools and colleges and otherwise orienting it to changes throughout the world and to the position of the

United States in international affairs. The conference will also consider the basic differences between American and totalitarian institutions.

Goal Area V: Action Programs for Improvement of Instruction

Coordinated Attacks upon Instructional Deficiencies in Particular Fields, English and Foreign Languages Being Major Examples.—Strengthening the NDEA Language Development Program by adding opportunities for foreign study to the existing resources of the program, and by introducing a special focus upon Latin-American studies.

The infusing into the curriculum of our schools and colleges of an overall recognition of our relation to other nations and cultures.

Successful initiation of "Project English," a closely articulated program of providing appropriate Federal stimulation and assistance to the national effort for improvement of English instruction.

Extension to the field of English, by amendment to NDEA title VI, of the program of teacher training institutes. Extension of the benefits of the NDEA teacher institutes to teachers of English as a foreign language, in order to help American pupils whose native language is not English to receive proper language instruction in English.

Reappraisal of Vocational Education Field and of Related Legislation.—The rendering of advice and/or staff assistance to the President's proposed national advisory body on vocational education, to enable it to advance practical proposals to accomplish the following objectives: (a) provide vocational education with a flexibility to meet shifting employment patterns, (b) define the proper place of vocational in relation to nonvocational or general education, (c) estimate expenditure needed for the total vocational education effort.

Study of Teacher Recruitment and Retention.—Develop the knowledge to recommend teacher personnel policies offering promise of improvement in staff quality and performance. As one example, the compilation of the most significant developments throughout the Nation relating to the recognition of individual merit in the compensation of teachers.

School and Academic Libraries.—The enactment of legislation to eliminate the lack of school libraries in many of the Nation's public elementary and secondary schools; eliminate the critical shortage of trained librarians; and improve the poor quality of a large percentage of the libraries in junior colleges, 4-year colleges, and universities.

Goal Area VI: Educational Adaptations Based Upon Other Broad Social Issues

The Urbanization of American Life.—Substantial progress in analyzing the educational implications of urban growth, in identifying solutions to urban educational problems, and in delineating the desirable Federal role in these solutions.

Educational Problems Attendant to School Desegregation.—Development of a program of research and analysis on the educational problems a school system faces when desegregation begins, and dissemination of the results in a timely and appropriate manner.

Civil Defense Education.—Strengthening of the Office's civil defense educational activities by (a) increasing its capacity to provide educational materials to elementary and secondary schools, and (b) extending its coverage of adult education in civil defense from the present 15 States to every State in the Union.

Table 1.—*Enrollment in 50 States and District of Columbia, 1959–60 and 1960–61*

[Office of Education estimates]

Grade level and type of school	1959–60	1960–61
Kindergarten through grade 8:		
Public school system (regular full-time)	27,800,000	28,400,000
Nonpublic schools (regular full-time)	5,400,000	5,200,000
Other schools [1]	180,000	200,000
Total, kindergarten through grade 8	33,380,000	33,800,000
Grades 9 through 12:		
Public school system (regular full-time)	8,400,000	8,900,000
Nonpublic schools (regular full-time)	1,100,000	1,100,000
Other schools [1]	90,000	100,000
Total, grades 9 through 12	9,590,000	10,100,000
Kindergarten through grade 12:		
Public school system (regular full-time)	36,200,000	37,300,000
Nonpublic schools (regular full-time)	6,500,000	6,300,000
Other schools [1]	270,000	300,000
Total, kindergarten through grade 12	42,970,000	43,900,000
Higher education: Universities, colleges, professional schools, junior colleges, normal schools, and teachers colleges (degree-credit enrollment)	3,750,000	4,000,000
Total, elementary, secondary, and higher education	46,720,000	47,900,000

[1] Includes Federal schools for Indians, federally operated elementary-secondary schools on posts, model and practice schools in teacher training institutions, subcollegiate departments of colleges, and residential schools for exceptional children.

Table 2.—*Grants and other financial assistance to States, administered by the Office of Education, for fiscal year 1961* [1]

States and outlying parts of the United States	Colleges for agriculture and the mechanic arts	Cooperative vocational education	Maintenance and operation of schools (Public Law 874)	School construction (Public Law 815)	Library services	Defense educational activities	Mentally retarded	Total
Total[2]	5,051,500	39,797,724	[3] 207,639,466	59,248,636	7,414,221	[4] 50,189,647	813,682	372,822,569
Alabama	100,541	1,060,159	4,271,452	553,142	207,576	1,734,665	10,200	7,937,737
Alaska	71,283	105,652	6,027,884	1,009,446	49,191	97,954	8,867	7,370,278
Arizona	77,477	206,968	4,467,295	2,017,414	72,485	154,130	----	6,995,770
Arkansas	89,047	781,731	941,269	1,089,905	164,544	756,661	6,500	3,829,659
California	175,599	2,220,802	38,421,578	10,840,539	239,322	3,342,851	53,601	55,294,293
Colorado	83,218	352,907	4,109,053	557,201	88,084	808,258	52,337	6,051,061
Connecticut	90,022	361,691	2,080,633	880,920	74,755	1,046,073	11,500	4,545,596
Delaware	73,172	179,888	668,678	----	51,585	181,449	----	1,154,775
District of Columbia	----	33,252	----	----	----	187,768	----	221,021
Florida	97,644	686,591	5,158,191	1,302,700	133,235	740,415	16,300	8,135,079
Georgia	104,360	1,127,357	4,896,258	1,320,036	221,848	2,471,262	23,200	10,164,324
Hawaii	[5] 2,299,985	178,475	4,502,517	2,844,890	55,087	158,316	----	10,039,273
Idaho	75,871	234,186	1,434,198	246,120	75,211	405,704	11,667	2,482,959
Illinois	156,905	1,677,681	3,236,587	923,064	230,178	2,769,566	39,100	9,033,084
Indiana	109,244	970,816	1,058,263	664,119	60,341	386,667	----	3,249,452
Iowa	96,145	839,274	613,681	105,606	173,427	835,214	13,400	2,676,750
Kansas	89,005	568,505	4,571,963	1,036,504	75,902	826,332	19,700	7,187,912
Kentucky	99,374	1,041,638	1,128,988	3,200	221,203	975,497	----	3,469,902
Louisiana	96,768	914,629	752,209	228,409	158,010	662,605	15,850	2,828,481
Maine	79,115	231,863	1,912,536	429,420	83,021	297,710	5,100	3,038,766
Maryland	93,371	437,681	9,675,877	4,133,342	170,000	868,576	----	15,378,851
Massachusetts	116,788	724,412	6,374,189	812,195	86,000	1,558,276	10,600	9,682,464
Michigan	133,559	1,402,973	1,506,463	1,977,564	214,885	3,574,758	36,350	8,846,554
Minnesota	99,750	914,682	404,564	205,198	165,888	1,596,483	30,235	3,416,804
Mississippi	91,735	908,749	1,245,006	945,015	191,340	313,243	----	3,695,090
Missouri	109,448	1,120,191	2,528,242	498,417	185,931	431,165	----	4,873,397
Montana	75,895	208,601	1,503,335	1,358,726	72,427	285,493	12,200	3,516,680
Nebraska	83,222	442,032	2,172,308	914,137	108,519	676,476	5,700	4,402,395
Nevada	71,596	181,990	1,097,452	406,353	50,395	123,823	9,800	1,941,413
New Hampshire	75,319	177,220	1,178,898	189,228	62,087	172,333	----	1,855,087
New Jersey	118,233	843,663	3,746,583	1,247,677	103,153	1,633,281	17,550	7,710,140
New Mexico	76,794	230,955	4,835,049	3,394,298	73,042	497,407	15,468	9,123,015
New York	217,933	2,558,404	6,312,333	1,017,762	249,152	3,482,012	106,500	13,944,097
North Carolina	110,518	1,428,296	2,191,066	894,605	302,331	1,970,039	14,799	6,911,656
North Dakota	76,180	292,423	459,215	743,801	126,436	51,552	4,900	1,754,510
Ohio	149,269	1,747,073	4,745,438	1,089,004	270,635	3,501,571	27,035	11,530,026
Oklahoma	92,278	659,456	6,706,965	1,878,772	134,239	1,249,461	----	10,721,173
Oregon	85,175	405,819	911,525	370,018	127,216	225,959	13,567	2,139,283
Pennsylvania	174,719	2,186,230	5,331,567	12,880	341,396	2,303,339	53,486	10,403,620
Rhode Island	77,899	158,947	1,751,448	169,625	59,769	455,594	20,800	2,694,084
South Carolina	91,117	748,626	3,194,899	708,280	196,082	388,161	----	5,327,170
South Dakota	76,511	297,069	1,841,529	833,962	82,462	311,196	6,100	3,448,831
Tennessee	102,835	1,126,372	2,177,206	192,930	219,097	858,625	42,069	4,719,138
Texas	146,920	1,966,395	11,169,323	3,244,827	285,264	1,240,862	34,000	18,087,592
Utah	76,871	192,098	1,686,798	602,040	63,275	204,963	10,600	2,836,649
Vermont	73,768	187,028	73,482	----	63,385	137,399	----	535,063
Virginia	103,104	1,017,822	13,413,010	4,120,655	211,253	211,604	----	18,654,239
Washington	93,730	589,354	8,497,217	543,555	125,287	714,370	----	10,563,518
West Virginia	90,005	644,329	107,701	13,884	167,674	469,499	10,200	1,503,295
Wisconsin	104,260	989,755	725,150	198,110	180,736	1,398,357	34,000	3,630,371
Wyoming	72,898	168,333	668,243	274,986	54,209	67,358	10,400	1,316,429
Guam	----	72,342	602,140	204,139	15,495	79,856	----	973,972
Puerto Rico	50,000	839,621	----	----	209,077	664,465	----	1,763,164
Virgin Islands	----	49,291	83,130	----	11,079	56,175	----	199,678
Wake Island	----	105,401	----	----	----	----	----	105,401
Undistributed	----	----	8,468,858	----	----	----	----	8,468,858

[1] On a checks-issued basis. Does not necessarily agree with allotments or expenditures for a given year.

[2] Inasmuch as the cents have been dropped from this table, a totaling of any column may or may not equal the total given for that column.

[3] Does not include payments made to Army, $5,174,772.85; Navy, $1,772,784.92; Air Force, $1,520,300.79; and Veterans Administration, $999.50.

[4] Does not include amounts paid for loans and repayable advances or amounts paid to institutions under the National Defense Education Act for $93,057,049.15; or to jurisdictions other than States to assist Cuban refugees in educational pursuits for $442,690.

[5] Includes $2,225,000 special land-grant college aid paid under Public Law 86-624.

Food and Drug Administration

Introduction

The Food and Drug Administration is a unique agency. There is nothing quite like it in any other nation of the world. It is a scientific institution devoted to law enforcement to protect the consumer of foods, medicines, cosmetics, and common household chemical aids.

Its charter was first established in the Federal Food and Drugs Act of 1906. This pioneering consumer protection law was the product of a budding industrial revolution, which saw the processing of food moving out of the home kitchen into the commercial cannery and which found the charlatan far ahead of medical science in his blatant claims for the "wonder drugs" of the day.

But the original charter has been expanded many times by modernization and extension of the law to keep pace with industrial and scientific progress in the production of new products. The courts have interpreted the law in full recognition of its original high purpose. The keynote of the philosophy of the Food and Drug Administration in carrying out its mission was sounded in the language of a Supreme Court decision interpreting the law as modernized in 1938:

"The purposes of this legislation . . . touch phases of the lives and health of people which, in the circumstances of modern industrialism, are largely beyond self-protection. Regard for these purposes should infuse construction of this legislation if it is to be treated as a working instrument of Government and not merely as a collection of English words." [1]

The Food and Drug Administration's philosophy for the accomplishment of its mission, consistent with this interpretation by the Supreme Court, is simply: To enforce the laws entrusted to it firmly but evenhandedly and without partiality; to seek prevention of violations to the fullest extent possible; and to inform consumers of

[1] *U.S.* vs. *Dotterweich*, 1943, 320 U.S. 277.

Chart 1.—RETAIL SALES OF FOOD IN THE UNITED STATES, 1951–60

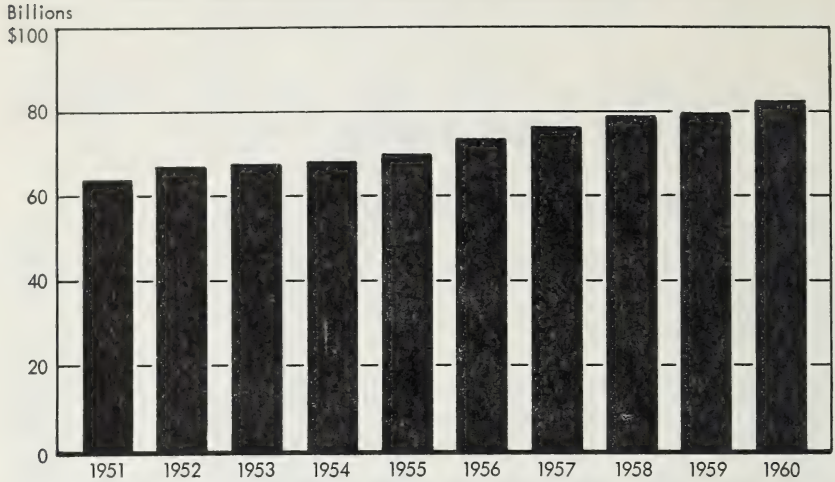
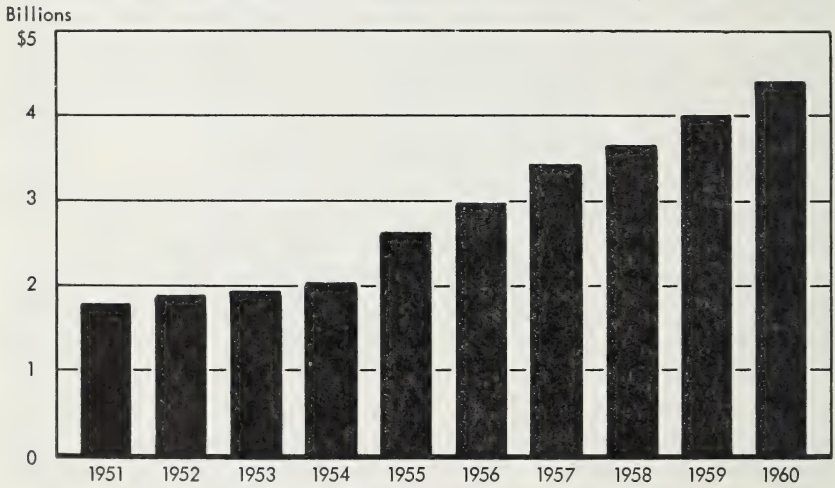


Chart 2.—RETAIL SALES OF DRUGS IN THE UNITED STATES, 1951–60



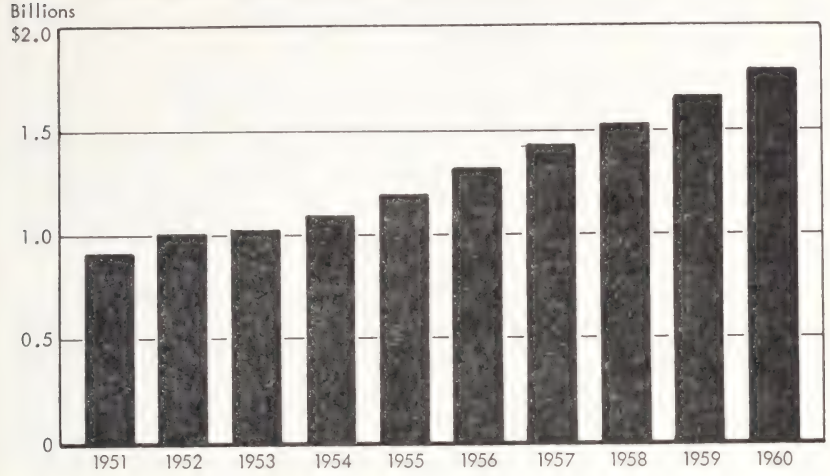
means by which they can help themselves to get the most protection with the least help from the Government.

But if the Food and Drug Administration's mission and philosophy can be so simplified, the accomplishment of the mission is tremendously complex. It requires the meshing together of law, science, and administrative judgment to assure a maximum of consumer protection, a minimum of interference with legitimate business, and a fostering of the progress which has made our Nation great.

This is the task which confronts the Food and Drug Administration.

The Food and Drug Administration has in the past decade seen fundamental changes in the laws it enforces and in the industries subject to these laws. During this period there has also been a

Chart 3.—RETAIL SALES OF COSMETICS IN THE UNITED STATES, 1951–60



growing awareness of the agency's responsibilities by the Congress and by the consuming public.

The regulated industries are growing at an amazing rate. Sales of foods in the decade from 1951 to 1960 increased from $63.4 billion to $82.1 billion (see Chart 1). Expenditures for drugs showed an even more dramatic increase, rising from $1.8 billion in 1951 to $4.4 billion in 1960 (see Chart 2). During the same decade cosmetic sales nearly doubled, increasing from $913 million to $1.8 billion (see Chart 3). During this period, American consumer expenditures as a whole increased about 57 percent. It is estimated that about 30¢ out of every dollar now spent by consumers is for products falling under the jurisdiction of FDA, and it is expected that this rate of increase for sales of foods, drugs, cosmetics, and household chemicals will be at least as great during the decade of the sixties.

Some new developments are related only to the increasing volume of production required to supply a rapidly expanding population which is changing its patterns of living. But the putting to work of the discoveries of modern science itself is making these changes in living patterns possible. Producers and handlers of foods use more than 3,000 chemical additives. These additives are used in the processing and packaging of food so that it can be transported for thousands of miles and remain in good condition for long periods—a wonder of modern civilization. They are used in the commercial preparation of convenience foods which have brought a revolution in the domestic kitchen and freed homemakers of several hours a day to devote to other occupations. They have also eliminated seasonal restrictions on the widest variety of nutritional foods ever available to consumers.

Manufacturers of 40 million tons of "special formula" commercial feeds each year add a variety of chemicals to promote growth, increase feed utilization, and control diseases of farm animals. Some are safe vitamins, others toxic chemicals, such as arsenicals and hormone-like substances that must be properly mixed at the plant and properly used by the farmers so that the meat, milk, and eggs these animals produce will be free of harmful chemicals. Farmers must also avoid illegal residues in crops on which they use 600 million pounds of pesticides a year to produce the abundant variety of fruits and vegetables found in every supermarket.

The pharmaceutical industry has provided new drugs that have brought startling advances in medicine since 1938 when safety clearance before marketing was first provided by law. New drugs cleared by FDA after reviewing the manufacturers' scientific studies during the 23-year span account for more than 90 percent of the prescriptions written today. Many dreaded and often fatal diseases are now readily and successfully treated.

The hundreds of millions of dollars industry spends on research every year will continue to produce new technological developments that will bring new foods, drugs, and cosmetics. But every new development brings the need to know whether hazards are involved, and if so, how to solve the problems presented. There are and will be new hazards as well as benefits. Dangerous side effects often develop after the use of potent drugs. As more new chemicals are added to food the probability of misuse increases. Careful safety testing is required of cosmetics containing many new synthetic materials.

Errors have occurred, recalls of dangerous drugs and cosmetics have been necessary, patients have had serious drug reactions. Fortunately, there have been no cases of spectacularly poisonous foods in the United States that have injured large numbers of people. Some other countries have not been so fortunate. In 1959 the deliberate addition of motor oil to cooking oil in one country caused paralysis of 10,000 consumers. In 1957 the use of an untested new emulsifier in margarine resulted in 50,000 illnesses in another country.

However, in this country nitrite was used to "revitalize" stale fish fillets and caused a little boy to die and several others to become ill. And, in 1957, poisonous fat added to feed killed millions of chickens. Studies are still in progress to learn the nature and origin of the toxic factor or factors, and whether there are any implications for fats used in human foods.

In the early days of food-law enforcement, chemists were dealing with crude and flagrant adulterations that did not require elaborate analytical techniques. Now, FDA scientists must contend with

radioactive contamination and organic pesticide residues in food crops, the possibility of the addition to food of cancer-producing substances, the bacteriological contamination of frozen precooked foods, and many other problems that are discussed in this report. Fortunately, the technological advances which have revolutionized the food and drug industries have also given the food and drug scientist new laboratory and inspection tools which can be applied to new enforcement problems.

The major legislative changes in the past 7 years have centered around chemicals in foods, drugs, cosmetics, and household items—new products, new uses, and the urgent need for safety controls. The trend has been to establish the basis for preventive safeguards, so that the Government does not have to carry the full burden of proof of safety, as it did when the Food, Drug, and Cosmetic Act became the basic law in 1938.

Those petitioning for regulations to establish safe use of chemicals under the Pesticides Chemicals Amendment of 1954, the Food Additives Amendment of 1958, and the Color Additive Amendments of 1960, must present their own scientific evidence that such uses will not endanger consumers—provisions similar to the new-drug safety clearance provided by the 1938 law.

After these regulations are established by administrative procedures—based on FDA's evaluation of the safety studies reported, and consultation with outside scientific experts when necessary—the limits of use established become the yardstick for all to follow. This includes the manufacturers who label the chemicals with directions for use, the agricultural experts who advise the growers, the growers themselves, the control chemists in processing plants, FDA in its enforcement activities, and the courts in judging compliance with the law.

Where deep conflicts develop between economic interests and the health of the American people, Federal, State, and local food and drug agencies must give health considerations top priority. They must make the best use of present knowledge and facilities but take a bold, enlightened approach—a look ahead to meet the problems that new developments will bring.

Additional personnel, more and better scientific law enforcement facilities, and amendments to the basic laws where experience shows they are not strong enough are going to be necessary if adequate consumer protection is to be provided. Public support—the support of an aroused and intelligent public opinion—is essential to achieving these goals. People demand continuing improvements in their foods, drugs, and cosmetics, but when they know the hazards that may be

associated with some commercial applications of new scientific discoveries, they also demand protection from these hazards.

Progress in Enforcement Operations

To carry out FDA's enforcement responsibilities—and this is the hub of all its activities—the coordinated efforts of all of its Bureaus and Divisions are required.

The Bureau of Program Planning and Appraisal acquires basic data on the areas of FDA responsibility, such as size and location of various industries subject to the Federal laws, number and types of violations being encountered in each industry, and the comparative seriousness of violations in the whole spectrum of consumer protection. These data, along with the pulse-taking of consumers' needs through the Consumer-Consultant Program, are used in formulating enforcement policy; in determining the best use of available manpower for attention to various types of violations; and in locating areas needing more attention when additional inspectors, analysts, administrative staff, and facilities will permit.

The Consumer-Consultant Program was expanded through a series of FDA-Consumer conferences arranged by Consumer Consultants in 16 of the FDA Districts, with programming assistance by the District staffs. At these conferences the FDA's enforcement programs were explained to consumers, and participants were given an opportunity to express the viewpoints of their organizations about additional areas of protection needed by consumers of foods, drugs, and cosmetics.

The Bureau of Enforcement consults with industry representatives to assist in compliance and reviews cases forwarded by the Districts to determine whether or not they should be recommended to the Department of Justice for prosecution. It also establishes guidelines for the Districts to provide uniform enforcement criteria throughout the country. Food and Drug specialists in the Department's Office of the General Counsel participate in these decisions, and also act in liaison capacity with the Department of Justice on court cases recommended for prosecution.

The Bureaus of Medicine and Biological and Physical Sciences furnish scientific facts on which policies are based, both in regulation-making and in enforcement. Their scientists must keep abreast of the ever-changing developments and plan research that will serve as a sound basis for FDA activities. Never before in the history of food and drug enforcement have these Bureaus played such a crucial role. The later sections "Scientific Investigations" and "New Drugs" outline some of their scientific work in this area.

The Bureau of Medicine and the Division of Nutrition also have the responsibility of separating the true from the false—a fact-finding process on which the FDA programs against quackery are based. Medical and nutritional quackery, now estimated to result in a billion dollar-plus annual "take" on the American pocketbook and, even more important, an untold burden on the public health, are deemed by public health experts to constitute a major problem in consumer protection.

The Office of the Commissioner, which furnishes overall leadership in establishing and announcing policies after the Bureaus present and translate the facts and their long-range implications, has a number of staff divisions to assist in carrying out its functions.

The Division of Public Information serves both consumers and industry in its information and education activities. All of the recent independent studies of the overall needs and deficiencies of the Food and Drug Administration have pointed to the public benefits to be derived from industry and consumer education programs.

Often an inquiry from a consumer reflects the questions or views of a whole group. Prompt and helpful replies to such inquiries assist FDA regulatory work, because well-informed consumers can help protect themselves by intelligent reading of the material the law requires in labeling, and by refusing to become victims of quackery and fraudulent schemes. Consumers also need background and knowledge to benefit from new protective laws, such as the Federal Hazardous Substances Labeling Act which was designed to provide warning labeling and directions needed for the safety of the family.

Industry education is aimed at explaining the law, regulations, and new programs to achieve better compliance. Informational services include news releases for the trade press, distribution of regulations and official notices published in the Federal Register, preparation of special publications and reports, and cooperation with trade associations that are seeking to stimulate voluntary self-policing. In the fiscal year 1961, new food-additives regulations, changes in effective dates of food-additives regulations, and new color-additives regulations required many interpretive releases. In addition, the regulations under the Federal Hazardous Substances Labeling Act brought new educational responsibilities, because many industries never before subject to FDA enforcement were concerned.

Increased emphasis has been placed on coordinated work with the States by expansion of the Division of Federal–State Relations. At the annual conference of the Association of Food and Drug Officials of the United States, held in Washington in June, emphasis again was placed on the benefits to the public of continued integration of Federal and State resources, the need for uniform food and drug

legislation in the States that have not yet adopted the provisions the Association recommends, and the strengthening of State facilities.

The Division of Administrative Management—among its other responsibilities, such as budget, fiscal operations, procurement, and housekeeping work—has in its personnel activities a key task in the FDA expansion program. The increase in the staff in the past 6 years has required a program of recruitment designed to attract the best of the graduating scientists, who are often offered better financial returns from industry, and of training the recruits so that their skills may be used in this specialized field without undue delay.

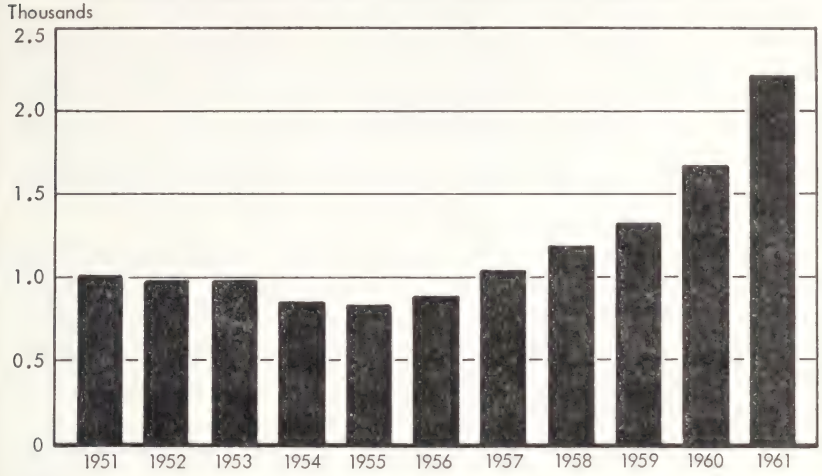
Personnel training is not limited to recruits, since the older members of the staff require continuous training in new techniques that must be employed, as for example, the use of new analytical techniques, such as spectrophotometry, chromatography, and radiological detection and measurement. Inspectors are given advanced courses in such areas as drug inspections, sanitation, and use of the senses of taste and smell to detect spoilage, all to increase their abilities to detect trouble spots during factory inspections. The clerical staff, too, requires training courses to keep records, travel, inventory, and other supporting activities operating efficiently with a growing staff. These basic training programs will be expanded in the next fiscal year.

FDA has had a long tradition of vigorous enforcement of the laws assigned to it, but has long been aware of the fact that its stewardship must be reviewed from time to time by representatives of various interested groups of the public as a whole, in addition to the annual review by their representatives in Congress.

Progress has continued during the fiscal year—in size of staff (see Chart 4), building construction for Washington and the field offices, in educational activities, and in streamlining administrative work for better efficiency as recommended by the 1955 Citizens Advisory Committee. However, basic changes in the laws administered have brought new obligations not contemplated in the recommendations of that Committee. A new overall study is underway by a new Citizens Advisory Committee appointed by the Secretary in October 1961 so that total current responsibilities may be taken into account, and a new evaluation made of the amount and kind of protection consumers need and how the desired objectives may be attained.

A committee appointed by the President of the National Academy of Sciences and its National Research Council was requested to review the policies and procedures used by FDA in reaching decisions concerning the approval of new drugs and the certification of antibiotics. This Committee concluded that FDA decisions in these areas have been in the interest of public health. The Committee pointed to weaknesses in the current law and deficiencies in staff and funds and

Chart 4.—BUDGETED POSITIONS FOR FOOD AND DRUG ADMINISTRATION ENFORCEMENT OPERATIONS (EXCLUDING FEE-SUPPORTED CERTIFICATION SERVICES), 1951–61



recommended that FDA be given statutory authority to improve its protective controls over the production and distribution of drugs, including antibiotics, that pretesting procedures be extended to other important drugs in addition to antibiotics, and that more funds and staff be given to FDA to strengthen its overall drug program and related research projects.

Another group, appointed by the Secretary to investigate certain charges involving FDA employees and operations, reported to him that the inquiry did not develop evidence that any present employee of FDA has personal financial interests conflicting with the objectives of his employment. Among the conclusions reported were:

"We conclude that the essential functions of the Food and Drug Administration have been and are being performed.

"We conclude that FDA personnel are more than ordinarily dedicated to the purposes of the agency.

"We conclude that decisions have not been made in defiance of the public interest or to conform with considerations of personal gain or aggrandizement."

The total budget for fiscal year 1962 is $21,854,000, compared with $18,848,000 for fiscal year 1961—a net increase of $3,006,000. This budget provides for an increase in personnel of 213 positions so that the total staff authorized for 1962 is 2,412. The 1962 budget reflects increases occasioned by two major factors: (1) the rapidly growing demand placed on existing services of the FDA resulting from large increases in our population and corresponding increases in the number and volume of consumer products falling within the authority of

the FDA, and (2) new programs and responsibilities of the FDA resulting from advancing technology and new legislation.

About two-thirds of these new positions will go into areas particularly needing strengthening, the pesticides and drug programs. By an increase in sampling the estimated annual 2,500,000 interstate shipments of food crops, approximately 8,500 shipments can be sampled to test for toxic residues in 1962 in contrast to about 5,000 in 1961. Recommendations for staff increases for the drug program were discussed earlier in this report.

Other staff increases will be made in field supervision, administrative activities, enforcement review of cases, consumer and industry information and education services, and program planning activities.

Provisions for special research include work on frozen foods, bacteriological training for inspectors, sanitation techniques, food sample analysis, cosmetics, fats, and fatty acids.

The 1962 appropriation provides $1,397,000 for continued improvement of FDA field facilities. Renovation of the offices in Boston, Cincinnati, Minneapolis, and Kansas City (begun in 1961) will be completed in 1962. Partial first year costs to renovate New York facilities were supplemented. The appropriation also provides funds to begin construction in Baltimore, Chicago, New Orleans, and Seattle. The new Dallas District facility was dedicated in January 1961. (This new District brought FDA's total to 18.) Completion of new buildings for Detroit and Atlanta were mentioned in previous reports.

Construction was started in midwinter on the new FDA headquarters-laboratory building in Washington. The target date for occupancy of this badly needed structure is the fall of 1963. Meanwhile the staff is handicapped by dispersal into widely scattered locations with antiquated facilities. Some Bureaus have units in as many as three locations.

An 195-acre site for the construction of a new animal research facility at Beltsville, Md., has been made available through the cooperation of the Department of Agriculture. The building is expected to be completed in 1963. The facility will furnish housing for experimental animals and a laboratory building for conducting animal research work.

Food, Drug, and Cosmetic Act

ON THE FOOD FRONT

Hurricane "Donna" caused commercial food losses along the Atlantic Coast in September 1960, from the Florida Keys to Rhode Island. Inspectors from FDA Districts assisted State and local officials in

protecting the public from contaminated products through segregation of stocks and supervision of cleaning and destruction operations. In most affected areas the major damage was to retail and wholesale stocks that were inundated or spoiled because of power failure.

Polluted harbor water from Donna's force damaged large quantities of food awaiting import entry or export loading on piers in lower Manhattan and Brooklyn. Local embargoes were placed on domestic products and FDA detentions on imported merchandise to permit an orderly handling of affected lots. Fifty-four domestic lots, aggregating 189 tons, were seized, and some 337 import lots—including more than 1,300 tons of coffee and cocoa beans and large quantities of tea and spices—were denied entry into the country.

Torrential rains in February and March 1961 brought several Alabama and Mississippi rivers to their highest levels in 30 or 40 years. Close cooperation with State officials resulted in the sorting and destruction of damaged foods, drugs, and cosmetics valued at $100,000.

Heavy losses of bulk wheat resulted from three large fires. At Portland, Oreg., State officials supervised salvage operations on 6,700 and 9,000 tons, respectively. A fire in a Colorado elevator resulted in seizure of 1,269 tons so that salvage could be monitored and proper disposition made of damaged wheat.

Radioactivity in Foods

In order to carry out the responsibilities assigned to the Department by the President and delegated to the Food and Drug Administration by the Secretary, FDA increased its radiological program staff to 116, a boost of 90 positions over fiscal year 1960. This staff is assigned to determining, establishing, and enforcing permissible levels of radioactivity in foods, drugs, and cosmetics, and monitoring these products by collection and examination of samples to determine current levels; conducting research for indentification, evaluation, and decontamination of radioactivity in such products; and regulatory and information work related to radioactivity.

Equipment to test food for individual radioisotopes was installed in the Washington and 10 field District laboratories. Samples of 200 domestic and imported foods collected by all 18 field Districts were analyzed for strontium 90 and cesium 137. The highest values for strontium 90 and cesium 137 found in foods were well within the safe limits as suggested by the Federal Radiation Council. With the resumption of large-scale nuclear weapons-testing in the summer of 1961 the sampling and testing of foods for radioactive fallout is being increased several fold.

Chemicals in Foods

Food Additives.—FDA announced on December 1 that a scientific committee appointed by the Secretary had found that safrole is a "weak hepatic carcinogen." Immediate action was taken to stop the use of safrole and oil of sassafras in root beer, sarsaparilla, and other beverages and foods, since the Food Additives Amendment prohibits use in foods of any substance which has been found by feeding or any other appropriate tests to produce cancer in man or animals.

A year earlier upon hearing that the safety of these flavors was being questioned many manufacturers of soft drinks began to switch to other flavors. Also, the American Bottlers of Carbonated Beverages called for voluntary industry steps to eliminate these flavors from soft drinks. Thus when the harmful character of the flavors was definitely established, their use had already been discontinued. An extensive survey by FDA inspectors completed late in November, covering 3,200 bottlers and suppliers, disclosed that the industry had withdrawn safrole and oil of sassafras from use before the requirement that they do so was published. Seizure was required of only one small lot of oil of sassafras located in a beverage plant several months later.

Fifteen seizures were made between March and June of vitamin preparations and food supplements containing more than 0.4 milligram of folic acid per daily dose and not labeled for sale upon prescription only. The statement of policy announcing the application of the Food Additives Amendment to vitamins containing folic acid is discussed under "Regulation Making Activities."

One other seizure for violation of the food additives provisions involved mineralized cookies containing iodine and boron from kelp, for which no tolerance or exemption had been prescribed.

As the number of tolerances established increases, the inspection load will grow proportionately, since checking on the proper use of food additives is now one of the essential elements of food establishment inspections.

Pesticides.—In 1938, farmers commonly used less than a dozen primary chemicals to control insects and other farm pests. Today, they use over 200 primary chemicals in more than 45,000 formulations, at the rate of 600 million pounds a year. To assure use of these pesticides so that they will not leave illegal residues in or on agricultural commodities, FDA surveys practices of growers, collects and examines samples for regulatory action if required, assists other groups in teaching farmers the importance of proper application of pesticides, and develops and improves analytical methods for their detection and measurement.

Sixteen seizures totaling 385 tons were made during the year of raw agricultural commodities containing unpermitted pesticide chemicals or residues in excess of established tolerances. Eight of the seizures involved carload lots of grain contaminated with seed grain that had been treated with poisonous mercurial fungicides. Seven seizures were made of leafy vegetables with illegal residues of parathion, toxaphene, and DDT. Peanuts with excess DDT were also seized.

The vegetable seizures all resulted from failure to follow recommended practices on the amount or timing of the insecticide application, or both. A West Coast artichoke grower, for example, entrusted spraying of the crop to an individual who was uninformed as to the U.S. Department of Agriculture recommendations. The applicator used whatever pesticide he wished, whenever he wished, and in whatever amount he wished. The grower entrusted another individual to harvest the crop, which he did without attempting to correlate picking times with spraying times. As a result, until two shipments of his high-residue artichokes were seized in Massachusetts, the grower had no knowledge that he was distributing violative products.

In many cases growers withheld shipments when they learned that FDA had found that the produce contained excess residues. An innovation, operated on a trial basis at the urging of several grower groups, was notification to the grower of the results of FDA examination of samples of his crop for the presence of pesticides. These results are also reported to appropriate State officials to help prevent intrastate shipments of lots bearing illegal residues.

Many States have intensified educational and enforcement activities; this has increased awareness of hazards involved in poor spray practices and in the feeding of field wastes to food-producing animals. In contrast to the previous year, no seizures were required of dairy products containing pesticides or antibiotics residues. Continued pressure is a "must," however, if these gains are to be maintained.

Color Additives.—FD&C Red No. 1 was removed from the provisional list of color additives on November 22 after new experiments had shown that it produced liver damage in test animals. This color was used in a variety of foods, including maraschino cherries, hot dog casings, and ice cream. Previously issued certificates for this color were cancelled on the same date to prevent any further use in foods, drugs, or cosmetics for internal consumption.

Food color pastes were voluntarily recalled in June by a manufacturer who had mixed certified color with vegetable fat without having the mixture recertified.

Other Harmful Contaminants

Soybeans contaminated with poisonous crotalaria seeds were seized in 34 Federal court actions involving 47 carloads containing 2,322

tons. Twenty-three of the carlots originated in South Carolina, 18 in North Carolina, and 6 in Arkansas. In addition, Virginia State officials embargoed 49 carloads.

Since the 1920's, State and Federal agronomists have recommended planting crotalaria, a legume, as a soil-improving crop for sandy soil. This soil, originally used primarily for cotton, was later used more extensively for soybeans, particularly in the Southeastern States. Following reports that mortalities in poultry flocks were due to crotalaria remaining in feed, FDA investigated the extent to which the seed remained in grains and soybeans during harvest and its toxicity to experimental rats.

When it was found injurious to rats, it was generally recognized by State and Federal agencies that the planting of crotalaria must be discouraged, since its presence in soybeans makes it a deleterious ingredient under the Federal law. The problem will be a continuing one since the plant is self-seeding and many fields are contaminated with it. The six Arkansas lots seized, for example, were grown on fields that had not been seeded since 1956.

Food Poisoning.—Forty-four outbreaks of food poisoning involving 937 persons were investigated. Bakery items produced under insanitary conditions and held without refrigeration were responsible for four outbreaks involving over 200 persons, and crabmeat from an insanitary plant was responsible for the illness of over 50 persons. The crabmeat plant discontinued operations and the case has been filed in Federal court.

Canned seafood was suspected in five outbreaks of food poisoning; canned foods from abnormal cans were implicated in two outbreaks; and canned chicken, subsequently recalled by the Department of Agriculture, was responsible for one outbreak.

Six outbreaks of botulism resulted in the illness of 17 persons and 8 deaths. Home prepared foods were involved in most cases. One outbreak was caused by smoked fresh-water fish prepared commercially in vacuum-packed plastic bags.

After many consumer complaints about red-hot candy jawbreakers, an investigation showed that the mislabeling of oil of capsicum for oil of cinnamon had resulted in the use of 450 times the amount of oil of capsicum intended per batch of jawbreakers. Outstanding stocks were promptly recalled.

Just after the close of the fiscal year, FDA put out a warning on hollandaise sauce contaminated with salmonella organism when a food poisoning outbreak was traced by California State officials to this product.

To Keep Food Clean

Approximately 77 percent of the food seizures and 90 percent of the criminal actions against violative shippers and storers of food were filed on charges of filth and decomposition. Although seizures dropped from 571 in 1960 to 516 in 1961, the number of tons of unfit food seized increased from 6,898 tons to 8,109 tons, respectively. More than half of the filth seizures involved food that became unfit after interstate shipment.

In addition, owners voluntarily destroyed 20,726 tons of unfit food in 1,519 operations or converted it to suitable non-food use. These actions, which resulted from FDA inspections disclosing merchandise that would be subject to seizure if distributed, were conducted under the observation of Federal or local inspectors.

Twenty-seven criminal actions were filed against 53 warehouses, wholesale groceries, and their owners and operators for storage of food under insanitary conditions that resulted in filth contamination. Penalties in 17 cases terminated during the year ranged from nominal fines, with probationary periods, to $4,000 assessed against a wholesale grocery and one of its partners. The defendants had received small fines and a severe lecture from the court in a case tried on similar charges in 1958; since the second action they have spent more than $7,000 in an effort to eliminate objectionable conditions. Many of the other concerns prosecuted for insanitary storage of food have also been taking corrective measures to provide protection to the food stored in their establishments.

Sixty-four other criminal actions were filed against manufacturers or shippers of unfit food and 25 cases terminated during the year were based on preparation of food under insanitary conditions or use of unfit ingredients. With these notable exceptions, continued sanitary improvement was found in most plants. A major exception was a bakery which a judge, in sentencing operating partners to fines and short jail terms, pronounced was operated under the dirtiest conditions he had had before him in 10 years.

Bacteriological standards have been used in enforcement activities on nut meats and crabmeat for many years. A regulatory program was adopted in fiscal year 1961 for frozen precooked foods. It is designed to improve the overall sanitation of manufacturing plants preparing the growing number of frozen foods that are consumed with little or no heating.

Two court actions were taken against operators of frozen food plants found during inspections to be operating under grossly insanitary conditions. One firm and its owners were permanently enjoined from shipping precooked frozen seafood until the plant is cleaned, rodent- and insect-proofed, all foods on the premises are

destroyed or denatured, and a sanitary program—including the hiring of expert personnel—is established. The second case was based on violation of a 5-year probation ordered in 1957 by the owner of a precooked frozen food plant. When inspections in September 1960 showed that the plant was currently being operated under filthy conditions and was shipping filthy frozen foods, the judge ordered the defendant to get out of the food business within 30 days or serve a jail sentence.

Table 1.—*Actions on foods during the fiscal year 1961*

Projects	Seizures	Criminal prosecutions instituted	Injunction petitions
Total	707	106	11
Beverages and beverage materials	8	3	
Bakery, ready to eat cereal, and macaroni products	14	22	1
Cereals and grain products:			
Human use	139	14	6
Animal use	9	3	
Chocolates, sugars, and related products	25	4	1
Dairy products:			
Butter and churning cream	17	10	
Cheese and other dairy products	9	0	1
Eggs and egg products	27	6	
Flavors, spices, and condiments	16	1	
Fruits and fruit products	61	1	1
Meat products and poultry	11	0	
Nuts and nut products	59	0	
Oils, fats, and oleomargarine	6	1	
Seafood	62	4	1
Vegetables and vegetable products	106	9	
Miscellaneous foods (mixed lots)	4	1	
Warehouse foods	112	27	
Foods for special dietary uses [1]	9	0	
Food adjuncts	13	0	

[1] Includes vitamin products intended as food supplements.

Increased surveillance during cold weather months resulted in the seizure or voluntary destruction of a larger quantity of decomposed fish in New England than in previous years. This is attributed to longer periods the vessels are at sea in winter and the cutting of costs by using less ice. Detentions of whitefish at Great Lakes ports because of cyst infections were also higher than in any recent year. The self-policing plan of the canned salmon industry in the Pacific Northwest generally affords the public protection from unfit canned salmon, but FDA surveillance over these voluntary operations needs to be maintained. A series of inspections of one cannery turned up grossly insanitary conditions and practices. Shipments of its canned and frozen salmon were seized.

The racket of diversion of incubator reject eggs to food channels has been discussed in previous reports. The last of the organized ring of rotten egg dealers which operated seven frozen-egg packing firms was sentenced in January. Also in January, an undercover egg-break-

ing and freezing operation using incubator-reject eggs was uncovered in New Jersey by State health and police officers and Federal Justice Department and FDA men who were cooperating in investigation of the counterfeit drug racket. All eggs on hand were placed under supervision of State sanitarians and the building was padlocked. In April, Delaware police and U.S. marshals apprehended a truckload of incubator rejects enroute from Maryland to New York City food plants. Six new criminal prosecution cases were filed during the year charging traffic in decomposed eggs in various parts of the country.

Sampling of rail and truck shipments of bulk wheat was expanded during the fiscal year to obtain more uniform coverage of wheat moving from the largest producing States. Seizures of rodent contaminated bulk wheat increased from 27 actions against 1,395 tons in 1960 to 53 actions against 2,249 tons in 1961. An additional 150 tons of insect-infested wheat were seized in 2 actions. While these increases reflect increased regulatory attention they also attest to the need for a continuance of the Clean Grain Program.

Inspection of country elevators and terminal grain storage facilities is continuing. Six injunctions were requested; two were granted and four were held without court order being filed pending correction of insanitary conditions and elimination of contaminated grain.

This regulatory pressure, coupled with educational programs in cooperation with the U.S. Departments of Agriculture and Interior, State officials and agricultural colleges, county agents, and industry groups, has raised the general level of grain quality and helped provide the consumer cleaner wheat products.

Four seizures, involving 988 tons of malting barley were made because of insect or rodent filth, or both, and storage under insanitary conditions. Another seized shipment consigned to breweries consisted of 55 tons of brewers rice contaminated by rodents and insects and prepared under insanitary conditions.

A major survey of the sanitary quality of cocoa beans offered for importation was made by the examination of 6,000 samples from 32 producing countries. Based upon the facts obtained, importation requirements that had been in effect since 1933 were raised to permit not more than a 6 percent total of moldy or insect-infested beans, but not more than 3 percent of either. Under the previous requirement, shipments containing up to 10 percent moldy and wormy beans, but not more than 5 percent moldy, have been allowed to enter the country. The new tolerance will go into effect February 22, 1963. This will allow producing countries time to make necessary adjustments in their grading systems.

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Pocketbook Protection

Continued reports of short-weight packages, or packages on which the required label information was "hidden" by small print or other device, led to an extensive survey beginning late in June. Each of the 18 field districts collected and examined samples and the results were reported weekly to be compiled later into a 5-week report to serve as the basis for regulatory actions.

During the year, 18 products were seized on short-weight charges. These included coffee, bakery products, confectionery, seafood, condiments, and peas. A prosecution case, started in 1960 against a creamery which was deliberately making short-weight butter, resulted in a fine of $500 against the firm.

While a Congressional committee was investigating industry practices relative to short-weight and other types of deceptive packaging, a Federal court for the second time ruled against the Government in a case involving candy in what FDA charged was a deceptive container. (See Court Interpretations.)

In another case FDA charged, among other things, that the package of a shortening product was misleading. The product was labeled "made by a revolutionary new process that actually whips out calories." The only difference between the old and the new product was that the new had been "fluffed up" with 22 percent nitrogen gas so that a cupful actually contained less shortening. The package was misleading because the 1-pound can familiar to consumers held only 14 ounces of the new product and the 3-pound can held only 2 pounds 10 ounces.

Swiss cheese into which eyes were cut to give the appearance of a more expensive grade was seized on charges of concealment of inferiority.

In cheats where the debasement is deliberate the adulterators often use surreptitious means to avoid detection. FDA laboratory analysts found that a "pure orange juice" product was adulterated with sugar and water. FDA inspectors visited the plant many times but never were able to locate the sugar because the plant was either shut down or it was packing pure orange juice. Finally the inspectors rented an apartment which overlooked the plant and nearby sheds, and by using binoculars observed an unmarked truck pulling up to a shed. The operators carried sugar from the truck into the shed then began a sort of bucket brigade in which the sugar was carried into the plant. The inspectors' telephoto lens recorded the maneuvers. Conviction of the firm resulted in fines totaling $20,000, suspended jail sentences with long probations for three of the firm's principals, and a 6-month jail term to be served by one defendant. The defendants also con-

sented to an injunction. The case further led to another indictment of three defendants for perjury.

In other economic cheats where cheaper ingredients than the labels led the purchaser to expect were added, one firm and its president were fined a total of $1,500 for adding salt to monosodium glutamate, and another firm was fined $1,000 for shipping black pepper adulterated with ground buckwheat hulls and packing the product short weight.

One firm was placed on a 1-year probation and another fined $100 for selling colored oleomargarine labeled as butter. Two firms were fined $400; one shipped oysters containing excessive water, and the other shipped cottonseed meal deficient in protein and containing an excess of fiber. A cooking oil labeled as containing 25 percent pure olive oil was seized on charges that it contained little or no olive oil but a blend of cheaper oils, and another purporting to be corn oil was actually cottonseed oil. An industry complaint led to the seizure of grouper fish which were substituted for the more expensive red snapper. Other seizures included "pure" sorghum sirup which was blended with invert sugar sirup, "pure" vanilla in which imitation vanilla was added, and sauerkraut which contained excessive brine.

Among the products seized for failure to comply with official standards were butter that was low in milk fat; cheese that was high in moisture and made from unpasteurized milk; nonfat dry milk solids in which sodium caseinate was added; evaporated milk with vitamin D omitted; tuna that was below standard for fill of container—it also contained bone pieces and scales; canned apricots, beans, peas, tomatoes, and peaches which fell below standards of identity, quality, or fill; and enriched flour deficient in enrichment and failing to bear mandatory labeling information as to its vitamin and mineral properties.

Foods for Special Dietary Purposes

Within the year 900-calorie diet products for weight control have expanded into sales exceeding $100 million a year. FDA collected and examined 90 samples which resulted in seizures from 6 manufacturers. Two actions were based on low protein content and other deviations from the declared ingredients. Four were based on charges of misleading dietary representations and unwarranted claims. Other actions against so-called dietary products are discussed with misbranded drugs because of their promotion for therapeutic uses.

DRUGS AND DEVICES

Recalls.—Forty-nine defective or misbranded drugs were recalled by manufacturers during the year, either on their own initiative or at the request of FDA. Twenty-six were defective because of such things as low potency, high moisture, nonsterility, off-flavor and odor, and gas pressure that caused bottles to explode. Fourteen of the recalls were made because of improper labeling resulting from label mixups or absence of declared ingredients. Eight were shipped without clearance through antibiotic or new-drug requirements. For only one product recalled had FDA received injury reports: it consisted of eye drops that caused immediate unfavorable reaction. Patients recovered within 1 to 2 days after discontinuance of the medication.

Illegal Sales of Prescription Drugs

Illegal sale of dangerous drugs and their diversion into bootleg channels continue to be a serious problem. Most frequently involved are the amphetamine drugs. Abusive use of these drugs may cause highway deaths, mental and physical deterioration, juvenile delinquency, and crime.

Of 144 criminal cases terminated during the year on charges of illegal sales, 78 involved unlicensed outlets, such as truckstops, cafes, and peddlers, some of whom operated on a wholesale basis. Sixty-two were based on sales by drugstores or licensed pharmacists without prescription. Three physicians were involved in sales without a bona fide doctor-patient relationship, and in another case, involving use of drugs in reducing treatments in a beauty parlor, a "doctor front" was used.

Fourteen unlicensed individuals and three pharmacists were required to serve prison sentences ranging from 10 days to 4 years. Thirty-four others received jail sentences which were suspended on condition that illegal sales be discontinued. Many of the defendants fined were also placed on probation.

Amphetamines are followed by the barbiturates in the drugs most often involved in both bootleg and unauthorized pharmacy sales. Other medicines sometimes sold originally or on refilled prescription in pharmacies without authorization of a physician are tranquilizers, hormone preparations, antibiotics, sulfonamides, and thyroid.

New criminal cases filed during the year numbered 137. Particular attention was given to investigating the primary points of diversion from legitimate channels to bootleg distribution of these dangerous drugs. In a criminal case pending at the end of the year, Federal and State investigators found that a North Carolina wholesale druggist had purchased and illegally distributed about 6 million units of

drugs, largely amphetamines, within the past 3 years. It was estimated that this would supply all of the drugstores of the State with their legitimate needs for 12 years.

In an attempt to apprehend as many of the big-time operators as possible, simultaneous arrests were made in various judicial districts. In one case where 8 criminal cases were brought in 4 Southeastern States, 15 individuals forming a syndicate were charged with conspiracy as well as direct sales of dangerous drugs. Jail sentences of 2½ and 1 years have been imposed on two of the conspirators and the remaining were awaiting trial at the end of the year. At the time of the arrest, about 122,000 drug tablets were found in the trunk of one of their cars and seized.

Counterfeit Drugs

Counterfeit drugs present a potential hazard. The genuine drugs they imitate are usually expensive new drugs often prescribed for serious illnesses. The genuine drugs are manufactured under new-drug safety clearances that take into account the rigid manufacturing controls that will be exercised. The counterfeit drugs are not made under these control procedures, and may or may not be of standard potency. Some of the counterfeits seized had been transported in unlabeled paper bags, and later delivered in unlabeled bottles, a situation lending itself to dangerous mixups.

Tablet dies and punches with the monogram of the original manufacturer are closely copied, and in some cases authentic ones have been stolen for use in duplicating drug tablet faces. The imitations are often so close that the spurious tablets can be distinguished only by microscopic examination and chemical analysis.

Drug counterfeiting has been a recurrent problem through the years and is now one of increasing intensity. In the early 50's a counterfeit racket in imitation hormone tablets was broken up by criminal and seizure actions. Efforts to control counterfeiting were renewed in the late 50's and two more drug counterfeiters were convicted in 1959.

In the summer of 1960 an investigation began to develop evidence of suspected large-scale distribution of counterfeits of well-known trademarked drugs. New Jersey State officials and the Department of Justice cooperated in the investigation. Most of the counterfeits whose origin has thus far been determined have been linked with a New Jersey drug firm which was charged in a 24-count information filed in March with shipping counterfeit prescription drugs. A Long Island firm and eight individuals were included in the charges. All 10 were charged with conspiracy to violate the Food, Drug, and Cos-

metic Act. Among the individuals were a Texas druggist and his son who were also indicted for shipments from Houston, Tex., and for bootleg sales from an automobile in two Louisiana cities. These cases have not yet been tried. Separate criminal cases charging counterfeiting were filed against 10 other individuals and 5 firms. Nine seizures were made of counterfeit drugs in retail drugstores.

It is hoped that the backbone of the major counterfeit racket in the country has been broken by the 1961 actions, but constant vigilance must be maintained. Druggists have been urged in FDA press releases and in their own association bulletin to accept drugs only in the original, sealed manufacturer's packaging, and to do business only with reputable firms whose representatives they know and respect.

Repacked Physicians' Samples

Another situation inviting mixups and mislabeling is a mushrooming business in repacking physicians' samples and prescription drugs collected from physicians and drug salesmen. Hundreds of thousands of samples initially prepared for distribution to physicians are involved.

The repackers frequently destroy the essential labeling, such as "Caution: Federal law prohibits dispensing without prescription," the common or usual name of the drugs, the identifying lot or control number, and the name and address of the manufacturer, packer, or distributor. New drugs or antibiotics requiring official FDA release before distribution are frequently involved. Some who do the repacking are wholly untrained people. FDA investigators uncovered two serious mixups where potent drugs had been substituted for milder ones named on the labels. The seizure program initiated in mid-June was expanding rapidly at the end of the fiscal year.

False and Misleading Claims

The last remaining major source of the discredited Hoxsey cancer treatment, which has been discussed in many previous reports, was eliminated by a Federal court order in September. The decree against Harry M. Hoxsey, the original promoter, called for "complete and final discontinuation," and a supplementary decree ordered him to cease sharing the profits of his former clinic in Texas which he had been leasing for 50 percent of the profits, for continued use of his cancer treatment. Another decree ordered the lessors to stop permanently the sale of the Hoxsey medications. It is estimated that cancer patients or those who feared they had cancer, paid over $10 million for the worthless treatment since its inception, including 10 years of almost continuous litigation.

A rapid halt was brought to the revival of the worthless Koch injection, a product sold until the midforties to unorthodox medical practitioners for the treatment of cancer patients. Its originator left the country after two long criminal trials terminated in mistrials. In November, a seizure of the injection equipment and promotional literature was made in possession of an unlicensed chiropractor who was operating a treatment clinic and a mail-order business in do-it-yourself injection kits. Use of such equipment by untrained persons would endanger their very lives. A temporary injunction was granted but by January it was necessary to bring a criminal contempt action for continued distribution. The defendant was fined and sentenced to jail. The penalties were suspended and he was placed on probation for 2 years on condition that he not violate the permanent injunction simultaneously ordered by the court.

A worthless arthritis "remedy" was forced off the market in March 1961 after 7 years of litigation by a permanent injunction in February prohibiting the introduction into interstate commerce of Tri-Wonda or any similar article claiming usefulness in treating or relieving any form of arthritis or rheumatism or their symptoms. Court action against the product began in 1953 with a seizure action. In 1954, FDA requested an injunction. This was granted in 1958, but permitted continued distribution of the product under label representations objectionable to FDA. On appeal, the circuit court ruled for the Government and remanded the case for further proceedings.

This protracted case illustrates the difficulty of providing prompt and adequate consumer protection and the need for more effective public education in this field, where laymen are not capable of self-diagnosis or proper treatment. The Arthritis and Rheumatism Foundation estimates that a quarter of a billion dollars is spent annually on falsely promoted "remedies" for these diseases.

Seizures of vitamins and dietary supplements claiming to be effective in curing or preventing almost every type of serious disease conditions included large bulk lots and literature from mail-order houses. One consisted of 26 mail sacks containing more than 1,000 individual parcel post shipments labeled for the treatment of 32 physical and mental conditions. It was also falsely claimed that each capsule was nutritionally equivalent to milk, meat, eggs, vegetables, and other foods that would have totaled 30 pounds. Another mail-order house shipment consisted of 7 million capsules misbranded with claims for circulatory, nervous, digestive, and mental ailments, damaged liver, as well as resistance to infection, sound teeth, nerves, bones, and muscles. In common with most of the vitamin and mineral products seized, "vim and vigor" was also promised.

Vitamin seizures included products of some of the large firms whose products had traditionally been legally labeled but who had succumbed to the financial lure of the exaggerated claim for prevention or treatment of serious diseases.

The 1960 report mentioned seizures of Honegar, a combination of honey and vinegar, launched through a big publicity campaign revolving around the popular interest in a book called "Folk Medicine" in which a New England physician attributed great healing powers to the product. In another seizure of this product, made in August, 700 copies of this best-seller book were seized on charges that it constituted false and misleading labeling because it was displayed near the product. The court permitted the claimant to take the Honegar involved in the first seizure out under bond and relabel it to bring it into compliance with the law; the claimant posted a bond but has not attempted to salvage the product. Several other seizures of honey and vinegar, separate or mixed, were based on promotional tie-ins with the folk medicine book.

Although medical authorities long ago concluded that there are no health benefits to be obtained by adding sea water to the diet, a wave of sea water products appeared on the market during the year, labeled with cure-all claims. Distribution was stimulated by a series of syndicated articles by a physician claiming that sea salt added to the diet would benefit such conditions as colds, middle-age diseases, diabetes, grey hair, baldness, multiple sclerosis, etc. He attributed the rejuvenation of his 97-year-old father-in-law to sea salt.

Concentrations of both Atlantic and Pacific sea water were seized, as well as sea salt. Ordinarily such products swindle the purchasers and threaten the health of those using them for treating conditions that should have medical care. Direct injuries were caused to a cardiac patient who developed a serious edema after taking sea salt for several days for pernicious anemia and cataracts, and to her husband whose ankles started swelling after using some of the salt for rheumatism.

Multiple seizures were made of a number of brands of the ocean water products accompanied by reprints of the syndicated articles. Some concentrates sold for $3.75 a gallon, others for $1.95 a pint, and one brand of sea salt for $1.50 a pound. One of the articles reprinted and distributed with Atlantic ocean water promised that "by taking a little sea water per day, we can offer our glands a 'chemical smorgasbord.' Figuratively, therefore, the pancreas, liver and spleen, bone marrow, thyroid, adrenals and other organs can march around this chemical smorgasbord helping themselves to whatever they require to produce the manufactured secretions that guard your health."

An injunction recommended to the Department of Justice in May 1961 to restrain one of the largest producers from distribution of misbranded Sea Brine resulted in a temporary decree early in June.

Another drug injunction restrained a self-styled health and nutrition expert from offering various foods as treatments for serious disease conditions to persons who attended his lectures. Many promoters, aware of FDA activity in this area, go to extreme length to disguise their claims in subtle statements still designed to sell their wares to the gullible on the basis of curing the ill and making well people feel even better.

Promoters have more opportunity in house-to-house sales of making direct curative claims for "health foods" than do public lecturers. One agent for pills and capsules containing such ingredients as alfalfa, watercress, parsley, wheat germ, mint leaves, beets, buckwheat, yeast, rose hips, rice polishings, oyster- and egg-shells, clay, unsaturated fatty and amino acids, in addition to vitamins and minerals, was convicted for claims in her home sales talk that the products were of value in the treatment of arthritis, high blood pressure, heart disease, goiter, etc. The defendant had even tried to persuade an FDA Inspector to become a distributor, and described to him in glowing terms the profits he could make.

These are examples of several types of promotion of worthless supplements for serious diseases. In all, 145 seizures of such items and medicines misbranded with direct false and misleading claims were made, in addition to many others which were charged to be inadequately labeled because they did not furnish directions in the labeling for uses for which they were promoted by other means.

Substandard Drugs

The 55 drug seizures made on charges of failure to meet official or labeled standards of composition included 34 subpotent vitamin and nutritional items, 8 drugs for human use, and 13 veterinary drugs and medicated feeds. Other substandard drugs, removed from the market by manufacturers' recalls, are reported earlier in this section.

Devices

Devices seized included 45 charged to be misbranded and 19 to be adulterated because of defects. The defective items were 17 shipments of rubber prophylactics with holes, one of nonsterile bandages, and one of clinical thermometers that did not register accurately.

Among the misbranded devices were 14 consignments of air purifiers, filters, and humidifiers with claims not only to improve the air but also to ward off various diseases, including respiratory ailments, asthma, sinusitis, hay fever and other allergies; and to screen out air-

borne bacteria and viruses. One also was promoted with claims for the lowering of high blood pressure, and another for preventing diphtheria, smallpox, measles, anthrax, and tuberculosis.

Nine of the devices seized were massagers, vibrators, and "passive exercisers" promising weight reduction, figure control, toning of the muscles, and elimination of wrinkles. Many also were promoted with misleading claims for the relief of arthritis and bursitis aches and pains. A tenth seizure of a massager was a vibrator for the gums, with claims for preventing loosening of the teeth, pyorrhea, and the promotion of strong health. Thirty contour chairs were seized for labeling suggesting their effectiveness in the treatment of arthritis, cardiac maladies, acute infectious diseases, nervous exhaustion, and other serious conditions.

Among the other devices misbranded with false curative claims were "electronic" and "frequency" instruments to give pulsations when applied by pads to the patients' bodies; porous clay discs to be used to add natural cosmic rays to water for consumption by man and beast; and bracelets to convert thermal energy into electric energy. All of these were seriously misbranded through diagnostic or curative claims, or both, for a variety of diseases but worthless for any medical purpose. One of the "frequency" instruments was claimed to devitalize "micro-living organisms detrimental to mankind" and thus overcome cancer, colds, ulcers, cataract, glaucoma, tuberculosis, bubonic plague, polio, and leprosy.

These misbranded devices were innocuous apart from claims that turned people away from competent medical treatment, but a number of others seized were potentially dangerous. One was a head-harness traction device that had caused at least two fatalities from asphyxia due to strangulation. Other users were rescued after they had "blacked out." Another dangerous device was a syringe for the self-administration of insulin on which improper dosage scales were inscribed. An ultrasonic device was seized in possession of a beauty parlor operator who intended to use it to treat arthritis. This is a prescription device that could cause serious injury when operated by untrained persons. Also potentially dangerous were breast "rejuvenators" employing hydro massage.

New Drugs

During the fiscal year 463 new drug applications were received, 201 of which were for veterinary drugs. Within this period 223 applications became effective including 68 for veterinary drugs. Favorable action was taken also on 931 supplemental applications which included 145 for veterinary drugs. Five effective applications were suspended without issuance of notice of hearing and with the consent

of the distributors. One administrative hearing was held to determine whether or not an application should be suspended; the decision is still pending. No drugs were changed from prescription to over-the-counter labeling.

Among new products introduced were six drugs for mental conditions; an injection for pre-anesthetic sedation and one to stimulate depressed respiration; two antibiotics, one useful for systemic infections caused by gram-negative bacteria and some gastrointestinal infections, and one for Candida infections of the vagina; three anti-inflammatory steroids, two for topical use in skin conditions, and one for oral use; a steroid to reverse wasting processes and to promote tissue building and weight gain; a diuretic for the treatment of edemas; two drugs to depress cough; five drugs for gastrointestinal conditions, three which reduce spasm and stomach acid recommended for the treatment of peptic ulcer, one for diarrhea, and one to control vomiting; an appetite depressant; a remedy for pinworms; an enzyme taken by mouth to treat various inflammatory conditions; an antithyroid drug; a drug for the treatment of arthritic conditions; two new antihistamines; a hormone preparation to counteract overdosage of insulin; a drug for the treatment of high blood pressure; two skin antiseptics and two for fungal infections of the skin; a pain-relieving drug; an anticancer drug useful for the palliation of Hodgkin's disease; a drug for tuberculosis; and one for treating certain types of epilepsy.

Veterinary drugs cleared included a coccidiostat for chickens; injectable iron preparations for swine to correct iron deficiency anemias, a considerable economic problem in the past decade; an antibiotic combination of oleandomycin and oxytetracycline in animal feeds as growth promotants; and, for use in chicken feeds, the antibiotic hygromycin, which is effective against three species of internal parasites that cause considerable economic loss in meat and egg production.

COSMETICS AND COLORS

Discovery on the market of eyebrow pencils containing synthetic organic (coal-tar) colors which are banned under the law and had not been encountered for many years led to an urgent collection and testing program by FDA's inspectional and analytical staffs. Within a month in the spring of 1961, about 2,000 samples of pencils, refills, and cores were tested and more than 900,000 were seized. Nearly every major cosmetic house immediately recalled outstanding stocks, since 95 percent of the pencils on the market contained cores manufactured by a single firm that had turned to the use of nonpermitted colors. This firm notified all customers to withdraw from the market

all shades involved, for replacement, and within a short period all retail stocks contained permitted colors only. FDA inspectors witnessed the voluntary destruction of several million eye pencils and cores.

Serious eye injuries that had occured before cosmetics were brought under Federal control in 1938 had led to the banning of coal-tar colors in cosmetics to be used in the area of the eye. The first seizures under the 1938 law—made within 3 weeks of its enactment—were of eyelash and brow dyes containing the potentially injurious colors.

Another cosmetic recall removed from the market a shampoo containing a chemical that was dangerous to eye mucosa.

Other cosmetics seized were lipsticks falsely claimed to contain colors derived from raspberries and beets and to contain no coal-tar colors; a fingernail corrective and beautifier; dusting powder claimed to contain milk solids from Tyrolean goats, the secret of "life-giving nourishment"; and a consignment on the Brooklyn docks contaminated by polluted harbor water during hurricane Donna. Also seized were 2,000 pairs of hosiery with claims to beautify the legs; labeling indicated that they contained turtle and mink oils, royal jelly, lanolin, and a secret formula.

A number of other misbranded cosmetics were seized on charges that they violated the drug provisions of the law by promising corrective treatment for acne, skin regeneration, healing poison oak, altering body circulation, etc.

CERTIFICATION SERVICES

Color additives.—All color additives used in foods, drugs, and cosmetics (except hair dyes) must be from batches certified by FDA as harmless. In 1961, 5,844 batches representing over 4,092 tons were certified, and 35 batches representing 16 tons were rejected.

Insulin.—All batches of insulin must be tested and certified before distribution. Examination of 343 samples resulted in the certification of 279 batches of insulin drugs and 61 batches of materials for use in making insulin-containing drugs. One trial mixture of protamine zinc insulin was not approved because it did not meet the requirements for a satisfactory biological reaction test.

Antibiotics.—The predistribution testing and certification of certain antibiotics also is provided for by amendments to the act. Examinations were made of 12,937 batches of penicillin, tetracycline, chlortetracycline, bacitracin, chloramphenicol, streptomycin, dihydrostreptomycin, neomycin, novobiocin, nystatin, oleandomycin, triacetyloleandomycin, polymyxin, erythromycin, amphotericin B, and paromomycin intended for commercial distribution. The last nine antibiotics are not included in the certification amendments, but are tested

when they are mixed with those requiring certification. One hundred and fifteen batches were found unsatisfactory by either FDA or the manufacturer for failing to meet the following standards: potency (48), moisture (35), pH (9), high streptomycin content (8), sterility (7), pyrogens (5), melting point (2), and syringeability (1). An additional 16 batches were refused certification when factory inspectional evidence indicated that the samples submitted were not representative of the batches.

Other Government agencies submitted 475 batches of antibiotic preparations for potency testing before extending their expiration dates. In addition, 222 dairy samples were tested for content of antibiotics and 75 antibiotic medicated feeds were tested for labeled potency.

During the last quarter of the fiscal year, provisions were made for the certification of antibiotic sensitivity discs which are used to aid physicians in choosing the best drug to treat specific infections. Of the 207 batches tested, 41 were rejected for failure to meet potency and uniformity standards.

Enforcement of Other Acts

A total of 107,029,133 pounds of tea was examined under the Tea Importation Act, a drop of more than 7 million pounds below last year's imports. Rejections amounted to 232,050 pounds for failure to measure up to the standards set by the U.S. Board of Tea Experts. Four rejections were appealed to the U.S. Board of Tea Appeals, but the decision of the FDA examiner was upheld in all four cases.

A bowl cleaner was seized because the word "poison" on the label was in smaller type than that required by the Caustic Poison Act.

No actions were taken under the Filled Milk Act; one application under the Import Milk Act is pending a report from Canadian officials as to sanitary practices and tuberculin certification of the herds.

No court actions were taken under the Federal Hazardous Substances Labeling Act, since this was a preparatory year for surveys of the scope the program should cover, regulation formulation, and educational activities. It is estimated that 5,000 to 8,000 manufacturers produce about 300,000 household items falling within the definitions of the act.

Civil Defense

Eleven civil defense positions were financed by funds appropriated for the Office of Civil Defense and Mobilization.

The Biological Warfare Research Program proceeded beyond the planning stage which was developed in fiscal year 1960 to study the

vulnerability of wholesale packages of foods and drugs to bacteriological agents which may be introduced by an enemy during overt or covert attacks, and to devise simple procedures for decontamination of affected products. Biological warfare stimulants were used in a specially equipped laboratory on food packaging materials to test the effects. Preliminary studies were undertaken with two stimulants.

FDA started conducting studies using biological warfare agents in food products. Decontamination studies in this project are underway. Fluorescent antibody antisera for detecting certain biological warfare agents in food were prepared and studies to develop detection techniques were begun.

A project was set up to determine the amount of contamination of an average total diet caused by fallout of radioactive materials. The normal diet of a 19-year-old boy is being used as the test diet because it represents the largest customary food intake for this purpose (19-year-old boys eat more than any other comparable group in the population). Samples are being collected from four food stores in the metropolitan Washington area during 2-week periods and the food is being analyzed for radioactive material. The tests will be made quarterly for a year and may be extended later to other parts of the country.

The FDA Civil Defense Training Program for Federal, State, and local food and drug officials and industry food officials, which was reactivated in 1960, was expanded to include individual courses for each group. A radiological monitoring course for Department of Health, Education, and Welfare personnel was initiated. A total of 1,033 persons attended the 33 training courses which were given in 27 cities. These courses showed the effects of radiological, chemical, and biological agents on food and drugs, monitoring techniques, procedures for testing exposed food and drugs, and methods of decontamination or destruction of contaminated food and drugs. The industry course was directed toward problems that must be solved by a specific food industry in case of enemy attack.

New Court Interpretations

The Court of Appeals for the Second Circuit held that the reach of the Federal Food, Drug, and Cosmetic Act extends to an oil blend made from individual oils received in interstate commerce, even though the final blend was sold only within the State where prepared.

This reversed a lower court decision that the mixed oils were no longer subject to the Federal law and that such situations could be dealt with adequately under State laws.

The blended oil was labeled as containing 25 percent olive oil, but actually contained little or none. The individual oils making up the blend were properly labeled when shipped.

The appellate court decision interprets the law most favorably from the standpoint of maximum consumer protection.

The same court in another case upheld the authority of the Secretary of Health, Education, and Welfare to cancel previously issued certificates of harmlessness of batches of coal-tar colors when new evidence showed that the colors were not in fact harmless.

In another case related to the point regarding the reach of the Federal law, the District Court for the Eastern District of Michigan held that a drug product sold locally but manufactured from ingredients received in interstate commerce was subject to Federal jurisdiction. In its opinion the court stated: "The Supreme Court has warned against creating 'loopholes' at the expense of public protection, through restrictive or technical constructions of the Act."

In the fourth court contest of the section of the law that holds a product to be misbranded "if its package is so made, formed or filled as to be misleading," the District Court of New Jersey again ruled against the Government. The case involved chocolate mints, in a package with hollow ends and dividers. The mints occupied only 44 percent of the total volume of the package, and only 75 percent of its practical volume.

The Court of Appeals for the Third Circuit held that the district court had not made sufficient findings to support its ruling, and remanded the case with instruction to the trial court that it might find that even though the package may lead the purchaser to think it contains more than it actually does, the form and fill of the package are justified to protect the product from breakage, taking into account alternative packaging methods available. The district court was told that the deception could only be justified by findings that the effectiveness of the package in protecting the contents outweighs its deceptive quality, and that the available alternative effective packages are no less deceptive.

The district court again ruled that the product was not misbranded, and that the usefulness of the package, both from the standpoint of protecting the contents and of economy of manufacture, outweighs its deceptive quality.

The Government has not decided whether to appeal the case again as this report goes to press.

In a decision interpreting the specific prohibition in the law against non-nutritive substances in confectionery, a Federal court in California held that saccharine and sodium cyclamate were not non-nutritive substances of the type which Congress intended to bar.

The Food and Drug Administration had charged that a shipment of "low-calorie" candy was adulterated because it contained these artificial sweeteners which are considered non-nutritive from the dietary point of view. The court based its interpretation on legislative history of the section of the law involved, showing that primary concern at the time was to ban dangerous trinkets and other harmful and inedible substances in candy.

The U.S. District Court of Kansas dismissed a case against a grain elevator when the Government was unable to supply the defendant with a portion of the samples on which the case was based. The Government charged that the elevator was operating under insanitary conditions.

The Government took the position that inability to furnish the samples did not affect jurisdiction since the case was based on conditions found in the plant. The court held that the defendant was entitled to portions of the Government's samples in order to prepare his defense, and that failure to produce them prejudiced his substantive rights.

In a case involving decomposed brazil nuts, the District Court for the Northern District of Georgia ruled that it was not necessary for the Secretary to fix tolerances in order to enforce the prohibition against decomposition in foods.

The Court of Appeals for the Fifth Circuit ruled that it is not necessary to allege actual contamination or a "reasonable probability" of contamination in order to seek an injunction against careless use of rodenticide 1080 in food warehouses by an exterminator firm. The appellate court held that what the Government was required to allege was that there was reasonable *possibility* that the rodenticide would contaminate the food. The case was referred back to the District Court for the Northern District of Texas for further proceedings. (The appellate decision occurred after the close of the fiscal year.)

Changes in the Law and Regulations

The Color Additive Amendments to the Food, Drug, and Cosmetic Act and the Federal Hazardous Substances Labeling Act, both enacted on July 12, 1960, were discussed in the previous report. On April 7, 1961, Public Law 87–19 was enacted, providing time extensions for uses of food additives until not beyond June 30, 1964, provided that actions to develop scientific data necessary for a food additive order had been commenced before March 6, 1960, and extension until March 5, 1961, had been granted or applications for such extensions were pending on that date. This amendment makes the same provisions for time extension of pesticide tolerances or exemp-

tions under the Nematocide, Plant Regulator, Defoliant, and Desiccant Amendment of 1959.

REGULATIONS

Drugs.—Revisions in regulations will affect the labeling of prescription drugs and devices and FDA's program for inspecting the manufacture of new drugs. These revisions are expected to cause the most sweeping change in labeling, including promotional literature supplied to physicians for potent pharmaceuticals, since the passage of the 1938 act. Promotional literature now must disclose hazards as well as advantages of the drugs and will provide the physician with the full information needed by him for using the drug in his practice. The label of a drug now must give more complete information about its ingredients. A change in the new-drug regulations permits FDA to stop the marketing of a new drug until it has been given an opportunity to make a complete inspection of the methods, facilities, and controls to insure the purity of the drug.

An amendment to the new-drug regulations requires the manufacturer to submit to FDA more samples of the new drug and its ingredients with information concerning tests run so that FDA may check the firm's test procedures for identity, strength, and purity.

A statement of policy limits potassium permanganate preparations to prescription sale because of the public health problem created by its misuse to induce abortion.

A policy statement was published requiring the labeling of drugs given to milk-producing animals to warn against their use in these animals or to specify the time during which milk should be discarded after administration of the drug to avoid food use of milk contaminated with drug residues. Formerly this type of label warning was required only for certain antibiotic preparations.

An amendment to the antibiotic regulations affecting the labeling of chloramphenicol (Chloromycetin) requires greater emphasis on the warnings against its administration in minor infections and the necessity for adequate blood studies when used. The National Research Council confirmed FDA's view that chloramphenicol is a valuable drug, but it can cause serious or even fatal blood disorders and should therefore be administered only in those cases where its use is clearly justified.

Labeling requirements were revised for the certification of human parenteral preparations containing dihydrostreptomycin to require a warning against its use except in patients who cannot tolerate streptomycin, or full doses of it, in the treatment of tuberculosis. Small amounts of dihydrostreptomycin may cause deafness.

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An amendment to the regulations for the certification of antibiotic drugs provides for batch certification for safety and efficacy of antibiotic sensitivity discs which are used in determining the drug best suited for the treatment of patients. Evidence showed that discs on the market were unreliable.

The antibiotic regulations added 788 amendments and 13 new monographs.

Food Additives.—Eighty-six new regulations were issued in fiscal year 1961 in accordance with the Food Additives Amendment and provide for both indirect and direct additives. These regulations will serve as models to expedite issuance of future regulations. The regulations proposed in the form of petitions, not all of which are suitable for filing, are now in excess of 500.

Typical of the regulations providing for packaging materials are those which deal with nylon resins, slimicides in paper, polyethylene, and cellophane. Direct additives included resins to be applied on fruits such as limes, lemons, oranges, etc.; modified food starch; a peroxide to be used for flour maturing; and antioxidants to be used in potato granules.

In August 1960 a statement of policy was issued classifying vitamin preparations containing more than 0.4 milligram of folic acid per daily dose as drugs which must be labeled only upon prescription. Folic acid is not itself harmful but it has been known to mask the symptoms of pernicious anemia when used in sufficient quantities. Food supplements containing up to 0.4 milligram of folic acid per daily intake may be marketed temporarily under an extension of the Food Additives Amendment. Larger amounts require specific safety clearance before marketing.

Color Additives.—The Color Additive Amendments of July 12, 1960, provide that for 2½ years after enactment established color additives may be listed provisionally, if consistent with the public health, before the permanent listing is issued. The first provisional regulations were published on October 12, 1960, with subsequent provisional regulations published on October 19, November 5 and 26, and January 10, 1961. These regulations listed most of the coal-tar colors previously certified and also a number of non-coal-tar colors. The provisional listings of external D&C Yellow Nos. 9 and 10 were terminated and their use was prohibited for any purpose. The provisional listing of FD&C Red No. 1 was terminated and a color with its specifications was subsequently listed as Ext. D&C Red No. 15 for use only in external drugs and cosmetics. D&C Orange Nos. 5 and 17; and D&C Red Nos. 8, 9, 10, 11, 12, 13, 19, and 33 were listed provisionally for use in lipsticks (not more than 6 percent by weight of pure dye) and without restrictions for external drugs and cosmetics.

D&C Orange Nos. 3, 4, and 5; and D&C Red Nos. 8, 19, 33, and 37 were listed provisionally for use in drugs taken internally and in other preparations such as mouthwashes and dentifrices, but the amount ingested in 1 day was limited to 0.75 milligram of the pure dye.

On January 24, 1961, proposed definitions and procedural and interpretive regulations were published which clarified the definitions of color additives, provided guidelines for submitting color-additive petitions, prescribed certification procedures, and provided fee schedules. The first color-additive regulation, permitting dried algae meal for use in chicken feeds to enhance the yellow color of chicken skin and eggs, was published on July 1, 1961.

Pesticides.—One hundred thirty-seven pesticide tolerances or exemptions were established for raw agricultural commodities involving 36 pesticide chemicals. Three of these tolerances changed tolerance levels while temporary tolerances were established for 3 pesticides involving 17 commodities. The tolerance for DDT on sweet corn was changed because of the tendency for transfer of DDT residues from canning waste or corn stover used as livestock feed, to milk and meat. Two pesticide chemicals were added to the list of those generally recognized as safe. Since the enactment of the Pesticide Chemicals Amendment, 2,300 tolerances or exemptions have been established for 122 pesticide chemicals.

Six petitions for use of pesticides on 12 crops were withdrawn when it was determined that data were insufficient for reaching a conclusion of safety for residues from the proposed uses.

Plant regulators and nematocides along with defoliants and desiccants were brought under the pesticide amendment through Public Law 86–139. Clearances were given for certain of the regulators and nematocides when their use results in residues on raw agricultural commodities.

Food Standards.—Final definitions and standards of identity were published for ice cream, french ice cream, ice milk, fruit sherbets, and water ices. Some parts of the order were appealed for judicial review, but most of the provisions became effective. The standards were later amended to permit the addition of an emulsifying agent and small amounts of edible oil to enhance smoothness. This established minimum requirements for milk fat and total milk solids and maximum limits on air and water content.

As a result of objections filed to the order setting standards for orange juice and orange juice products, hearings were held and the standards were stayed until interested parties have time to file briefs stating their objections.

Food standards were amended to permit the use of corn sirup, glucose, and dried forms of these sirups in canned sweetpotatoes; the

addition of traces of specified calcium salts to canned lima beans, and of stannous chloride to canned asparagus; the use of oxystearin in salad oil to inhibit crystallization, and of hydroxypropyl methylcellulose as an emulsifying ingredient in french and salad dressings; the addition of acetone-peroxides as bleaching and maturing agents in flour and of sodium aluminum phosphate, an acid-reacting ingredient, in self-rising flours; the use of an oxidizing ingredient, calcium iodate, and of calcium stearyl-2-lactylate in bread; and the addition of propylene glycol alginate in cream and neufchatel cheeses.

Hazardous Substances.—Proposed general regulations for the Federal Hazardous Substances Labeling Act, enacted in July 1960, were published April 29, 1961. A 60-day period was given in which to receive comments on these proposals; final regulations were published August 12, 1961. They list special warnings required for certain products. For example, carbon tetrachloride and methyl alcohol must be labeled "DANGER," and "POISON," and bear the skull and crossbones symbol. In addition, carbon tetrachloride labels must bear the statements "May be fatal if inhaled and swallowed," and "Avoid contact with flame or hot surface." Methyl alcohol must be labeled "Vapor harmful," "May be fatal if swallowed," and "Cannot be made nonpoisonous." Specific warnings also are given in the regulations for turpentine and petroleum distillates, and ethylene glycol and diethylene glycol. The regulations specify the placement and typography of signal words and statements of hazards.

To give manufacturers adequate time to label their products in compliance with the law and final regulations, order No. 1 extended the penalty and condemnation provisions of the act until August 31, 1961; order No. 2 extended this date to February 1, 1962, the maximum time allowed by the act. Since the act itself contained definitions for "Highly Toxic" based on animal tests, and definitions for "Extremely Flammable" and "Flammable" (except for extremely flammable and flammable solids and self-pressurized containers) based on a physical test involving the flashpoint of the substance, the penalty and condemnation provisions for such substances became effective on February 1, 1961.

Scientific Investigations

Successful regulatory action would not be possible without reliable scientific information to serve as evidence of violations. The work of the seven laboratory divisions that comprise the Bureau of Biological and Physical Sciences helps form the foundation on which enforcement of the law is based.

The analytical problems which the scientists of the Food and Drug Administration must solve have increased in number and complexity as advances in the technology of producing and distributing foods, drugs, and cosmetics introduce new chemicals and processing techniques. Some of these problems could scarcely be solved by conventional procedures and apparatus; however, new and ingenious instruments have been developed and have proved remarkably successful in detecting and identifying minute quantities of material. Their relatively high cost is more than balanced by the speed with which reliable results are obtained, and the consequent saving in man-hours of routine analytical work.

Gas chromatography, for example, has been applied to the identification of aromatic diamines in dyes; to the separation of fatty acids, whose presence in food in large quantities is usually a sign of decomposition; to the classification of the chick edema factor as a chlorinated organic substance; and to the detection of adulteration of commercial oils with inferior oils. In studies of adulterated peanut oil, gas chromatography has detected the presence of other oils, and the study is now being extended to include positive identification of the adulterants. Similarly, in a survey of commercial margarines purported to have been made from corn oil (a "low-cholesterol" substance), gas chromatography was used to distinguish between corn oil products and those made from cottonseed oil. Refined techniques are being developed to detect and identify the substances that emerge from the gas chromatographic apparatus to improve the sensitivity of the test and increase the speed of analysis even further.

The substitution of cheaper species of fish in large lots of fish used in the manufacture of fish sticks and similar prepared foods is a practice which has been suspected for many years, but difficult to prove. Such adulteration can now be detected by separation and identification of characteristic fish proteins through starch gel zone electrophoresis. Analyses by this technique have been used successfully as evidence in regulatory actions.

The X-ray fluorescence apparatus, by which small quantities of elements of higher atomic weights can be measured, has been used to determine heavy metals in inorganic dyes and zirconium in cosmetic creams. The basic apparatus has been modified to record data automatically for more rapid and accurate measurement.

Other examples of advanced instrumentation are the use of polarography to analyze drugs and to study the effects of light on pesticide residues; the use of fluorescence measurements to detect the presence of polynuclear hydrocarbons in foods and to differentiate between vitamin D_2 and vitamin D_3; employment of a new instrument, the micro-

goniometer, for study of surface active agents in the separation of insect fragments from food; and adaptation of an older instrument, the tensiometer, to measure surface and interfacial tensions between liquids in the detection of filth in foods and drugs.

The infrared spectrophotometer has been used alone and in combination with other techniques to show the presence of petroleum hydrocarbon resins in foods and to analyze minute quantities of certain mixtures of sulfonamides, barbiturates, and adrenocortical steroids. A project has been initiated to record the infrared absorption spectra of all U.S.P. and N.F. Reference Standards. The published spectra will be of great value to all investigators who need to identify unknown drug substances, and will give further insight into the relationships between the spectra and the chemical structures of the drugs.

Many studies have been carried out by the use of established chemical and biological techniques. The effects of combinations of antibiotics on staphylococcus were compared to the effect of the single antibiotic, for example. Twelve strains of staphylococcus that were resistant to penicillin and to erythromycin separately proved to be inhibited by extremely small concentrations of mixtures of the two. A new semi-synthetic penicillin, 2,6-dimethoxyphenyl penicillin, was observed to kill strains of staphylococcus resistant to most forms of penicillin. Apparently the enzyme elaborated by staphylococcus, which counteracts the action of most penicillins, attacks the new penicillin only very slowly.

Special microscopic techniques have been developed to identify drug tablets by manufacturer, and many cases of counterfeiting have been exposed as a consequence. The technique has been greatly refined and a special microscope accessory stage has been developed for use in these investigations.

In continued studies of the chick edema factor, a newly developed assay, more sensitive than previous methods, was used to test fats from the market to determine whether the toxic factor was present in commercial fat derivatives for food use. Another toxic principle has been observed to occur in fatty acids, and is under investigation.

Related to this problem is the investigation of the presence of toxic products in heated fats. The toxic products are chiefly unusual materials that do not form adducts with urea, which is a characteristic of normal fatty acids; to determine the nature of these substances, the urea filtrate containing the nonadducting materials is fractionated into groups and the composition of each group is determined. Other studies on food fats deal with their general nutritional properties, effects on blood cholesterol, caloric availability, and effects on oxidative metabolism.

A test procedure has been designed to assess the nutritional adequacy of the so-called 900-calorie diets discussed in the section Foods for Special Dietary Uses. The unique feature of the procedure is the use of a high-fat diet for growing rats in the attempt to simulate the metabolic condition of an obese person who is in the process of losing weight. One-third of the caloric intake of the rat is derived from the test product; the other two-thirds is fat, corresponding to the human's average loss of half a pound per day.

The problem created by the use of crotalaria as a green manure crop is discussed in the section Potential Health Hazards. These seeds cause destruction of the liver, and edema in the lungs. As little as 0.015 percent of seeds, equivalent to about 3–4 seeds per pound of grain, has proved lethal to rats. Current work is designed to define exactly the toxic response to the alkaloid monocrotaline, derived from the seeds, to develop analytical methods for determining contamination in grain products, and to study the distribution of the alkaloid in tissues of treated animals.

The study of antibiotic residues in milk continues. Two methods for determining penicillin in milk, the rapid disc assay for field use and the so-called overnight plate assay, were compared in analyses of unknown samples. The overnight plate assay, although not as rapid, is about 10 times more sensitive. The occurrence and persistence of dihydrostreptomycin, neomycin, bacitracin, polymixin, and erythromycin in milk as a result of treatment of cows for mastitis are being investigated and the effects of a number of variables and interferences are being evaluated.

The conventional method of testing antibiotics for contaminants by addition of the antibiotic to a sterile growth medium has been improved by separating the contaminant from the antibiotic material through filtration. Methods proposed for the assay of very small amounts of bacitracin in feed have been evaluated and improved.

Research has been initiated to determine whether colorants produce toxic derivatives when they are subjected to the conditions of normal food processing. The effect of heat on typical organic dyes has been investigated, and several of the decomposition products of these dyes have been isolated and identified. Similarly, the chemical reactions between selected colorants and food constituents, including common food additives, have been studied.

Additional work on food additives included evaluation of methods proposed by the manufacturers for such substances as migrants from packaging material and food container closures. Attempts were made to measure migration by use of a solvent scheme that simulates actual food conditions. The physiological effects of food additives under a variety of nutrient conditions were studied by the use of tissue culture, bacterial cells, and animal tests. An investigation was made of

arsenicals in feeds with respect to methodology, migration of the arsenical from the feed into the portions of the animal used for food, and the fate of arsenic after it enters the body.

Studies of decomposition in fish included the effects of chlortetracycline in the ice in which the fish are packed. The determination of carbonyls, purines, and trimethylamine has been investigated as a possible index of decomposition in fish.

A collaborative study was made of a method for caffeine in beverages in which interfering substances (principally carbon dioxide) are eliminated and the final determination is made by ultraviolet spectrophotometry. Improved methods were developed to determine safrole, a weak carcinogen formerly used in flavorings.

Efforts toward the development of specific and accurate methods of analysis for organic phosphorus pesticides continue. Paper chromatography, measurements of organic phosphorus and organic sulfur, and infrared absorption are all under trial. Bioassay with fruit flies and brine shrimp as test animals can be used for semi-specific evidence of the presence of these and other types of pesticides; more precise identification generally depends on paper chromatography.

A more sensitive method for 3-amino-1,2,4-triazole has been developed. This method detects the metabolites of the herbicide as well as the parent compound; it is still uncertain whether the metabolites are equally toxic.

A review of methods for identifying animal hairs in food and drug products resulted in a better technique of mounting the hairs for examination and a more satisfactory explanation of structural differences in hairs from different animals. The method for determining filth in import cheese has been improved by providing for histological differentiation of plant material so that the filth can be related to its source.

A serological procedure for identifying staphylococcus enterotoxin and a rapid method for growing concentrated relatively pure toxin for antisera will be used to develop methods for determining the enterotoxin in foods. A survey of the extent of contamination of raw whole milk intended for use in manufacture showed that 83 percent of the 1,195 samples examined contained staphylococci, although only 10.3 percent contained more than 100,000 viable staphylococci per milliliter. Studies were also made of the temperatures best suited for isolation of coli and the presence of botulinus toxin in packaged smoked fish.

Microbiological methods for the B vitamins and amino acids have been improved by changes in the basal medium for vitamin B_{12} and by the greater precision achieved through using absorbance, rather than percent transmittance, in measuring the response of organisms.

Investigations of the composition of several new synthetic adrenocortical steroids revealed the presence of contaminating substances. Paper chromatographic procedures to detect these contaminants have been adopted as limiting tests for impurities in several monographs of the U.S. Pharmacopeia. Analytical methods have been perfected for the assay of many drug preparations, including solanaceous, curare, and ergot alkaloids; estrogenic hormones; and several antihistaminics.

Thyroid preparations on the market have recently been encountered which appeared to be therapeutically inactive, even though they met the U.S.P. requirements. The official assay method depends on the chemical determination of organic iodine. Controlled animal tests for biological potency confirmed the suspected deficiency in therapeutic effect. The biological assay for these preparations is extremely slow and time consuming. Efforts are being made to develop more rapid biological methods, and more specific chemical assays.

Toxicity experiments have shown that FD&C Red No. 1 produces liver damage and liver tumors, and on this basis the authorized use of this dye was denied recently. Further study has revealed that the animal body produces phenols, aromatic amines, and aromatic acids in the metabolic breakdown of FD&C Red No. 1, and an attempt is being made to determine which of these detoxification products are chiefly responsible for the toxicity of the dye.

In the Bureau of Medicine, as a part of the medical evaluation of hazardous substances and development of the medical aspects of their labeling, basic clinical and technical information is being collected from and exchanged with other Federal and interested private organizations.

Hospitals reporting on adverse drug reactions increased from 12 to 35 during the year; they include some of the most prominent centers in the country. While the program is still small, the groundwork is being established for a badly needed national repository of drug reaction information. Significant individual case reports point up the need for more informative labeling of some drugs for safe use.

The clinical evaluation of various medical devices was initiated during the year under contract for studies to establish the falsity of extravagant claims. Seizure of a number of air purifying devices was the first result of this new program.

In the second year of the Government Industry Cooperative Oyster Research Program analysis was completed of the extensive chemical and biological data compiled earlier. Statistical methods were applied to the field and laboratory data collected. The objective of the study is to develop a sound basis for the formulation of enforceable standards to prevent excess water in shucked oysters.

Enforcement Statistics

The year's activities included 26,276 inspections of factories and warehouses; 3,669 inspections of pesticide practices; 4,045 of public eating places to check on the notification of the serving of oleomargarine; 199 inspections involving illegal sales of prescription drugs; 88 for radioactivity in foods; 56 of spieler and lecturer activities; 790 to check on manufacture of color additives; and 491 inspections of firms making or handling hazardous household substances. Of 44,466 domestic samples collected, 26,028 were foods, 15,860 drugs and devices, 2,483 cosmetics and colors, and 95 miscellaneous.

In the 202 criminal actions terminated (or terminated for some defendants) in the Federal courts during 1961, fines assessed totaled $138,118. Jail sentences ranging from 10 days to 6 years were imposed in 53 cases involving 63 defendants. Twenty-one individuals were required to serve imposed sentences, averaging 10 months; sentences were suspended for 42 on condition that violative practices be discontinued. Records of actions terminated in the courts were published in 1,010 notices of judgment.

Table 2.—*Number of samples on which criminal prosecutions and seizures were based and number of court actions instituted during the fiscal year 1961*

Item	Total		Criminal prosecutions instituted		Seizures accomplished		Injunctions requested
	Violative samples	Actions	Violative samples[1]	Actions	Violative samples	Actions	
Total	3,543	1,326	1,483	269	2,060	1,038	19
Foods	1,501	824	420	106	1,081	707	11
Drugs and devices	1,923	475	1,063	163	860	304	8
Cosmetics (colors)	117	26	----------	----------	117	26	----------
Caustic poisons	2	1	----------	----------	2	1	----------

[1] The number of samples on which the actions are based always exceeds the number of actions; in seizures a variety of articles may be contained in a single shipment, while in criminal actions each sample usually represents a single shipment which forms one count of action.

A regulatory report inevitably deals at some length with the activities of the minority—the ignorant, the heedless, and the greedy—who violate the requirements of the law to the detriment of both consumers and ethical manufacturers. However, progress in consumer protection is best reflected by the vast number and proportion of producers and handlers whose products are in compliance with the law. In the final analysis, it is the responsibility of the public to be vigilant and sensitive to consumer protection needs, and to see that its laws and their administration are consistent with those needs.

Table 3.—*Import samples collected, examinations made, and lots detained during the fiscal year 1961*

Item	Samples collected	Examinations made	Lots detained
Total	14,502	16,422	5,077
Foods	11,051	15,731	2,715
Drugs and devices	3,261	533	2,286
Cosmetics, colors, miscellaneous	190	158	76

Conclusion

Nineteen sixty-one was a year of definite progress in carrying out the mission of the Food and Drug Administration to protect consumers.

Drug counterfeiting was investigated vigorously and actions begun against major operators; a campaign was begun to stop abuses in repackaging of physicians' samples; two major quack remedies—one for cancer and one for arthritis and rheumatism—were finally put off the market after several years of court action on each; a major ring of packers of incubator-reject eggs was broken; a major drive was begun against short-weight packages and concealment of label information required by law to be conspicuous. Regulations were tightened to assure that doctors and druggists are fully informed about the hazards as well as the potential benefits of new drugs. The Food and Drug Administration staff continued to grow, and construction of the new headquarters laboratory building got underway.

But the unfinished business at year's end left no room for complacency. Still in the tooling-up stage for full administration were the new Food Additives and Color Additive Amendments, and the Federal Hazardous Substances Labeling Act.

Approximately 99.7 percent of all shipments of fresh produce moving to market were still untested for possibly harmful amounts of pesticide residues. The full impact of resumption of nuclear weapons testing by the Soviet Union on the safety of our food supply remains to be seen. Food and drug manufacturing and distributing establishments were being inspected on an average of only once every 3 years. And experience has shown numerous gaps in consumer protection that can only be closed by further amendments to the law.

Much has been accomplished, but the problems have changed and the challenges are as great as ever.

Office of Vocational Rehabilitation

Rehabilitations of Disabled Persons Grow in Number as Research, Training, and Facilities Expand

In the fiscal year that ended June 30, 1961,[1] another new high was reached in the number of disabled persons who were helped to overcome their handicaps and placed in satisfactory employment through the services of their State rehabilitation agencies. The 1961 total of persons rehabilitated through the State–Federal program was 92,500, almost five percent more than the year before.

Despite a generally high level of unemployment during 1961, the placement of 92,500 handicapped workers in jobs for which they were prepared through the public program of vocational rehabilitation is a large step toward the ultimate goal of the national program—provision of opportunity for all handicapped persons to make the most of their abilities.

1961 was a year in which there was a great amount of progress—and an even greater amount of consolidation of previous gains—in the three basic elements which do most to move the national rehabilitation program forward: Research and demonstration; a training program producing more and better qualified workers in the disciplines whose principles contribute to the art of rehabilitating disabled persons; and the addition of rehabilitation centers, workshops, and other facilities, where new rehabilitation knowledge can be applied with greater effectiveness.

These advances were a high point in the march of vocational rehabilitation into the nation's pattern of health and welfare activities.

The State–Federal relationship for aid to the disabled began in 1920. In four decades it has progressed from training designed primarily for vocational objectives into services under a greatly expanded philosophy which holds that before vocational training is attempted

[1] Unless otherwise indicated, all subsequent references to 1961 will be to the fiscal year, that is to say, the period between July 1, 1960, and June 30, 1961.

disabilities should first be removed or reduced; that disabled persons be aided in adjusting, if need be, to new sets of circumstances in their personal lives; and that rehabilitation services should be both more personalized and more comprehensive.

There were several legislative actions along the way as experience was gained, and as rehabilitation began to be viewed as a part of the national health program, and a measure having economic as well as social importance. Rehabilitation of the disabled was included as part of the social security laws of the early thirties; mental troubles were recognized as targets for rehabilitative measures, and physical restoration was added as a program objective in the Barden-LaFollette amendments of 1943; and the State–Federal partnership was given a sounder financial base and improved resources for bringing disabled persons to productive employment in Public Law 565, enacted in 1954.

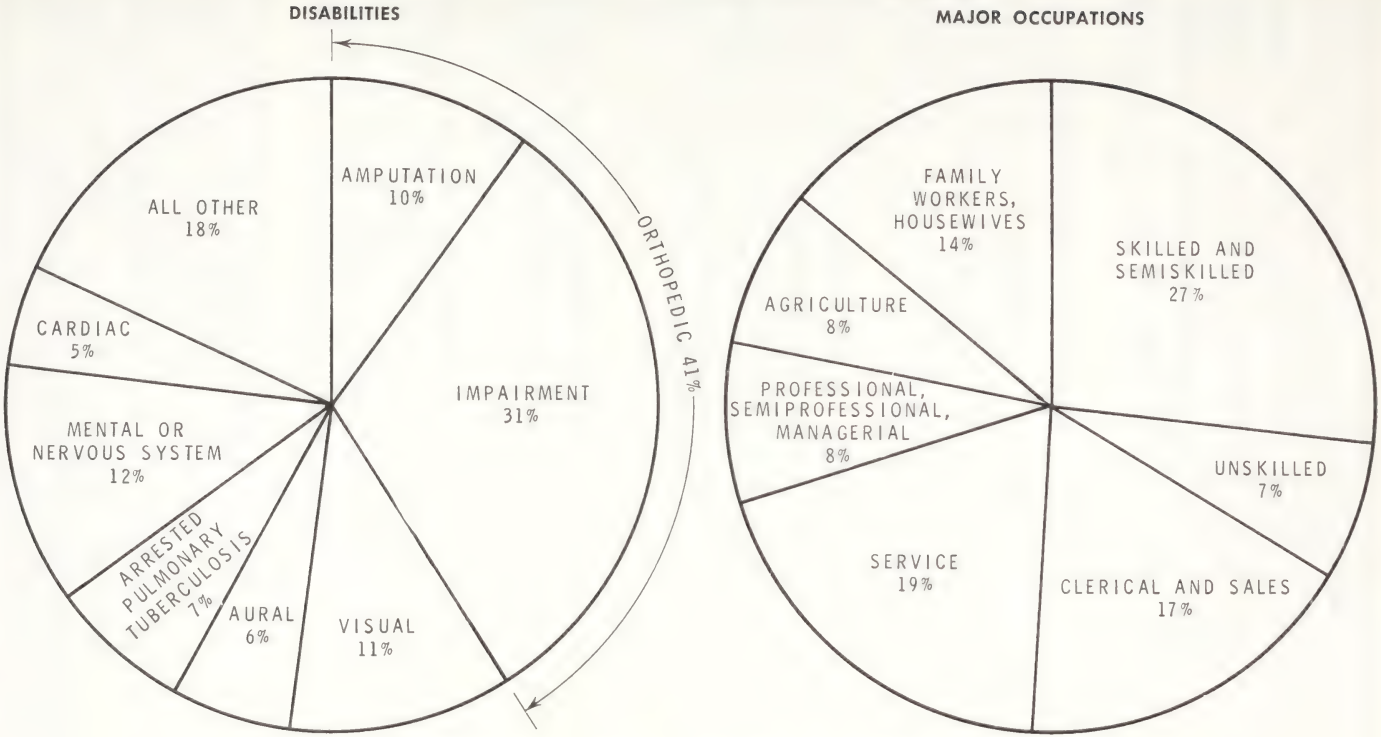
Since 1954, advances have come more swiftly. The more severe disabilities are under harder attack. State rehabilitation agencies and private groups are concentrating on the effects of mental illness and retardation as handicaps to employment; communities are participating to a greater extent in activities for helping their disabled and a dynamic program of research is pouring new riches of information into the public knowledge.

The research and demonstration program expanded in every way in 1961. There were 116 projects approved for action during the year, approximately a quarter of the total of 460 for which grants have been made since the first award in 1955. The geographical spread among project locations has grown from the 8 States and the District of Columbia where the initial 18 projects of 1955 were located, to 48 States, the District of Columbia, Puerto Rico and the Virgin Islands. Expenditures for the 18 projects of 1955 amounted to less than $300,000. Grants for the 116 projects of 1961, and for continuation of prior projects amounted to $8.17 million. This brought the Federal investment in rehabilitation research and demonstration to approximately $26 million.

The training program grew in several directions. A significant action was a series of institutes, for which the Office of Vocational Rehabilitation contributed support, that brought organized labor and community agencies into closer relationships with State rehabilitation agencies, for ultimate benefits to handicapped or industrially injured workers.

There was renewed response within the training program to the need for more social workers to cope with the impact of disability on individuals, families, and communities. There was a study of professional preparation in speech pathology and audiology, and ini-

CHART 1.—DISABILITIES AND MAJOR OCCUPATIONAL GROUPS



Percent of rehabilitants, by types of disability at acceptance and by major occupational group at closure, fiscal year 1961

tial planning for academic training to prepare persons for modern rehabilitative work with deaf persons. There were special training activities to prepare instructors for teaching the blind to get about with greater facility, and for other objectives. There was renewed emphasis on the training of counselors, which, next to the funds granted in support of instruction in rehabilitation medicine, received the most financial support. Forty schools of medicine and osteopathic medicine—almost half the total of such schools—received training grant funds in 1961 for instruction of undergraduate medical students in rehabilitation principles.

The approximate level of construction of rehabilitation facilities that has spurred the progress of rehabilitation in recent years was maintained during the year. Two more States were added to the list of those that own and operate rehabilitation facilities for their own particular objectives. Seven States are now in this category—Virginia, West Virginia, Pennsylvania, Iowa, Kansas, North Carolina, and Arkansas.

The 36 projects for construction of rehabilitation facilities that were approved during the year for partial support from the Federal government through the Hill–Burton Act—which was amended in 1954 to include rehabilitation facilities in its provisions—brought the total of facilities built with that support to a total of 176, a good indication of surging community interest in rehabilitation.

REHABILITATIONS IN 1961

The new record in the number of persons rehabilitated into employment—5 percent more than in the previous year—reflected gains in a majority of the States, and in the District of Columbia, Puerto Rico, and Guam.

The preponderance of these persons continued to be those with orthopedic disabilities—amputations and other crippling conditions. About 41 percent (38,000) were disabled by such conditions, and, of these, about three-fifths resulted from accidental injuries, about one-fifth were from poliomyelitis, osteomyelitis, or arthritis, and the remainder from other orthopedic impairments.

Referrals came from many sources, but the largest proportion (34 percent) came from physicians, health agencies, or hospitals. Another 14 percent was referred by public welfare agencies, and 7 percent by State employment service offices. About 12 percent applied for services on their own initiative. The remainder came from such sources as educational institutions, employers, and unions. Nearly half of the rehabilitants had dependents, and 63 percent were male.

The occupations in which rehabilitants of 1961 were placed included nearly all types of work, including more than 4 percent who went into such short-supply professions as teaching, engineering, and medicine.

The proportions employed in other major occupational groups remain similar to those in previous years—skilled and semiskilled, 27 percent; clerical and sales, 17 percent; service workers, 19 percent; family workers and housewives, 14 percent; professional, semiprofessional, and managerial, 8 percent; agriculture, 8 percent; and unskilled, 7 percent.

At the close of the fiscal year, 197,000 other disabled people were receiving services from State rehabilitation agencies, against a total of 180,000 in 1960.

ECONOMIC VALUE OF THE PROGRAM

The extent to which the public vocational rehabilitation program can improve the economic status of handicapped persons, increase the Nation's productive potential, and relieve some of the dependency upon public assistance was strikingly shown in 1961.

About 70,000 of the 92,500 handicapped persons prepared for and placed in employment during 1961 were unemployed when their rehabilitation began. The group that had been working at the time they were accepted for service was earning at a rate of about $70 million a year and generally the individuals were employed in unsafe, unsuitable, or part-time work. In the first full year of employment for the entire group after rehabilitation, it is estimated that they will have earnings at the rate of $180 million.

Nearly 18,500 of those who were rehabilitated received public assistance at some time during the process, at the estimated rate of $18 million a year. The estimated total cost of the rehabilitation of these persons was about $18 million, a one-time outlay.

It is estimated further that those who were established or placed in employment through the public rehabilitation program will pay, during the remainder of their working lives, from seven to ten dollars in Federal income taxes for every Federal dollar invested in their rehabilitation, so that the conversion of so many persons from tax consumers to taxpayers is of pronounced economic benefit to the Nation.

Research Points Out New Objectives

The general nature of the research and demonstration projects for which the Office made supporting grants during the year revealed some sharpened objectives of the public program which are leading it into new paths.

Rehabilitation research, in the first years after it was initiated under provisions of 1954's Public Law 565, was, in a high proportion, directed toward developing means of assistance that voluntary groups

could give to State rehabilitation agencies, to help them to examine their on-going programs, and to improve their content and method.

The need for such projects continues. Yet, in the increasing number of project proposals submitted to the Office, there is evidence of a much stronger drive toward research into fundamental aspects of disability and rehabilitation. The psychological aspects of disability, the attitudes of communities toward disabled people and those of employers toward hiring them, the adaptation of electronics and powered devices to artificial limbs and sensory aids, the special rehabilitation needs among the growing proportion of older disabled people in the population and among disabled mothers with dependent children, special help for severely disabled persons whose rehabilitation may be beyond the means or facilities of their State agencies—these are examples of the directions in which research and demonstration are leading the program.

In these ways the public program is reaching beyond specific techniques of treating ordinary forms of disability, and has gotten well into an unfolding three-fold set of objectives (1) to direct more attention to the severer forms of disability, (2) to demonstrate in communities that disabilities can be helped more substantially and in better fashion by local application of new techniques and knowledge, and (3) to help communities to establish rehabilitation facilities and services on a sound basis so that they may continue when Federal support is ended.

There are, for example, 83 special demonstration projects over the country for which the Office has given supporting grants so that communities and States may have greater opportunity to apply new knowledge in coping with forms of disability. Nine of them are now operating without Federal aid.

At the end of the year, 460 research and demonstration projects had been completed, or were in operation, or approved for activation. They were about half the number of proposals that have been made to the Office of Vocational Rehabilitation. The approved projects represent a total Federal investment of approximately $26 million. Fifty-two percent of the grant awards were to private, nonprofit agencies; 31 percent went to colleges or universities; and 17 percent went to public groups, including State rehabilitation agencies, which has been a growing trend in the program.

The selection and approval of projects is through a National Advisory Council of 12 members, a statutory body appointed by the Secretary. The members are leaders in those phases of scientific, educational, and public affairs whose attainments qualify them for responsible judgments on the suitability of research grants for the particular purposes of the national rehabilitation program. Miss

Mary E. Switzer, Director of the Office of Vocational Rehabilitation, is chairman of the Council.

The growing volume of applications for grants brought the necessity during the year for a preliminary screening process within the Office. Many applications propose ventures into areas where ramifications of the many disciplines used in rehabilitation become involved, so that expert opinions in those fields are needed to relate the value of the proposals to rehabilitation objectives.

Within the year, two Study Sections were established. One panel advises the Council on applications involving the psycho-social sciences, and the other gives preliminary consideration to applications concerning sensory disabilities. A third Section, which will consider applications primarily involving medicine, was being established as the year closed.

NEW SERVICES FOR THE SEVERELY DISABLED

A new type of research and demonstration project designed to increase and intensify rehabilitation services for persons with extremely severe disabilities was initiated during the year.

Five of the new kind of projects were put into operation in Massachusetts, Texas, West Virginia, Michigan, and Pennsylvania. They are directed primarily toward services for people receiving disability cash payments under the disability provisions of Old Age, Survivors, and Disability Insurance legislation.

Persons with such disabilities as cardiovascular, neuromuscular, or respiratory conditions are expected to be the chief beneficiaries of the services, extended to them because the severity of their conditions requires intensive and long-term services, generally at high cost, and frequently out of their residence area.

The Federal government will bear part of the costs of these projects, which will include special surgery and other rehabilitative measures not ordinarily available to such disabled persons from their State rehabilitation agencies.

Grants totaling almost $381,000 were awarded for the projects. Applications have been received from other States for grants to enable the adaptation of these projects as prototypes.

SCIENTIFIC ADVANCES APPLIED TO REHABILITATION

The application of scientific advances and principles to help disabled persons to cope with their handicaps was undertaken at two technological schools during the year. Basic and applied research is being undertaken at the Massachusetts Institute of Technology and at the Case Institute of Technology to discover ways in which electronics, pneumatics, hydraulics, and other sciences may be used for

alleviation of various forms of disability; and to construct devices for practical application of theoretical principles.

A part of this research will be in aids for blind persons. Studies will be made of the probing patterns of blind persons using guide canes, and ways will be sought to improve communication by Braille, including a high-speed machine which can operate at electric typewriter speeds for simultaneous Braille typing.

Case Institute has a project for development of electronic and related equipment capable of guiding a powered prosthetic device through several predetermined patterns. With such a device, a person having a completely paralyzed arm could perform several activities, such as feeding himself and meeting other personal daily needs.

Another project will experiment with a device which will record differences in pressure produced on various parts of the body of a person lying in bed. There is no successful device of the sort available, and its development would greatly benefit physical medicine and rehabilitation by more knowledge of the prevention and cure of "bed sores."

A fourth project will experiment with a tiny electronic device which, when permanently implanted in living tissue, could pick up and transmit nerve impulses, and in return activate an artificial limb or brace.

MENTAL RETARDATION

The widespread interest in mental retardation was accelerated during the year by increased activity in research and demonstrations relating to this disability.

About one in every ten projects approved for activation has been in the field of mental retardation, and cumulative grant funds for projects concerned with social, psychological, and vocational problems of retarded persons rank first in relation to other research areas. In all, 49 projects dealing with mental retardation have been approved since the beginning of the OVR research program. Of these, 20 are research and demonstration and 29 are selected demonstrations—which are occupational training centers to apply on a national basis the new procedures and services that were developed through research.

Heavy emphasis was placed on helping mentally retarded high school students. A project in the Minneapolis public schools is establishing facilities and developing techniques to give vocational guidance, training, and on-the-job experience to mentally retarded youths during their last year of high school. The project will serve as a prototype for extension to other school systems.

A similar project to develop on-the-job work situations for retarded adolescents is in progress in Maryland. New York's rehabilitation

agency is studying the early application of vocational services for retardates in a large urban area, and the Georgia agency is preparing a program to assist its public schools in developing skills and advancing maturity in mentally retarded youths prior to their entering the labor market. There are studies along related lines in Wisconsin, Missouri, and Oklahoma, and a New York project has the purpose of discovering ways in which vocational rehabilitation can be used among emotionally disturbed children who show tendencies toward delinquency.

AID FOR DISABLED MOTHERS

An experimental project which has nationwide implications was initiated in the District of Columbia during the year, designed to aid a category of disability that had been untouched—disabled mothers with dependent children.

The purpose of the project is to prepare disabled mothers who receive public assistance for their children to become self-supporting and to care for their families.

A mother must have a physical, mental, or emotional disturbance to be eligible for these services. With her children, she moves into a training center, where they continue to live until the mother is trained for and placed in employment, and finds a new home.

Physical restoration services, hospital care, and medical treatment are available as required, and instruction is given in personal hygiene, homemaking, and child care. The project is assisted by teachers from public schools, public health nurses, recreation agencies, and the U.S. Employment Service; and the D.C. Department of Public Welfare shares responsibility with the District's Department of Vocational Rehabilitation for the full operation of the endeavor.

MENTAL ILLNESS AND PERSONALITY DISORDERS

The role of the public rehabilitation program in the restoration of the mentally ill to community life and to employment was stressed more than ever during the year.

The final report of the Joint Commission on Mental Illness and Health, "Action for Mental Health," was published during the year. In it was the following statement:

"The objective of modern treatment of persons with major mental illness is to enable the patient to maintain himself in the community in a normal manner. To do so, it is necessary (1) to save the patient from the debilitating effects of institutionalization as much as possible, (2) if the patient requires hospitalization, to return him to home and community life as soon as possible, and (3) thereafter to maintain him in the community as long as possible. Therefore, aftercare and rehabilitation are essential parts of all services to mental patients,

and the various methods of achieving rehabilitation should be integrated in all forms of service, among them day hospitals, night hospitals, aftercare clinics, public health nursing services, foster family care, convalescent nursing homes, rehabilitation centers, work services, and expatient groups. We recommend that demonstration programs for day and night hospitals and the more flexible use of mental hospital facilities, in the treatment of both the acute and the chronic patient, be encouraged and augmented through institutional, program, and project grants."

The research and demonstration grants that have been approved in the field of mental illness—including 18 during 1961—show a marked parallel to these recommendations. There have been projects concerned with establishing, developing, and improving therapeutic and vocational techniques of the community hospital, such as those at the Vermont State hospital and the Massachusetts Mental Health Center, and in the day hospital at the last-named institution; half-way houses, as in Vermont, and those established during the year in West Virginia, Kentucky, and Missouri; greater use of work therapy, as in mental hospitals in Kentucky, Illinois, and the Goodwill Industries in Fort Worth, Texas; the screening of hospital patients for potential vocational rehabilitation, as is done by the agencies in Arkansas and Georgia; outpatient counseling and rehabilitation aftercare, as is done by the Manhattan Aftercare Clinic and the Butler Health Center, of Providence; and the training and placement of emotionally disturbed persons in eight selected demonstrations.

These projects illustrate a strong trend to weld together in the community a complete series of the services developed and tested in specialized projects. It will eventually be done through well-designed large-scale combined research and demonstration projects which have as a primary objective the logical organization and the controlled testing of cooperation and coordination of existing services of various types, as well as provision of additional services not yet available but needed to complete a basic sequence.

OLDER DISABLED WORKERS AND THE CHRONICALLY ILL

A project previously reported is a "Demonstration of Feasibility of Vocational Rehabilitation of Disabled Persons 60 Years of Age and Older," initiated by the Federation Employment and Guidance Service of New York City. Recent statistics from this project covering the past two years report 406 clients served with a median age of 64, a 75-percent placement rate for clients considered placeable, and a median gross pay of $44.50 per week (despite many part-time placements) as compared to a median weekly income of less than half this amount from all sources prior to entering the project. More than 60 percent of these older disabled clients had a secondary disability.

In fiscal 1960 this project and its established pattern of services was designated as a prototype around which other agencies could develop similar programs. To date the OVR has provided funds for five additional projects, in as many localities, of this nature. One of these is sponsored by the Kiwanis Opportunity Workshop in Milwaukee, and is a good example of a service organization assisting in meeting the rehabilitation needs of a community. A similar project is being sponsored by the Mankato Rehabilitation Center, Mankato, Minn.

The 1954 amendments to the Social Security Act give State vocational rehabilitation agencies a key role in the cash disability benefits program. It is essential that those responsible for administering such a program have available the best techniques and procedures with which to facilitate the screening of large numbers of applicants for OASI disability benefits.

Recently the OVR approved projects with a university and two rehabilitation facilities, including the Sister Kenny Foundation in Minneapolis, to carry out, simultaneously in three regions, duplicate research programs which will provide quantitative as well as precise information on how the process of evaluation and determination of disability and the rehabilitation potential may be made more efficient.

MOBILE REHABILITATION TEAMS

The Oklahoma Division of Vocational Rehabilitation during the year inaugurated a mobile team of rehabilitation experts which is extending services of the agency to severely disabled persons in their own communities. The project is supported by a research grant, and the results will be evaluated for use in other States, particularly in extension of services to rural areas.

A principal objective of the team is to stimulate community interest in rehabilitation and to create awareness of its potentialities. The team, in its visits, mobilizes all elements of the community that can help with the rehabilitation of disabled persons, and assists local counselors in cases that present special problems.

STUDIES IN DEPRESSED AREAS

A study of the rehabilitation needs of disabled persons residing in economically depressed areas was initiated during the year with a grant to West Virginia's Division of Vocational Rehabilitation.

The project is undertaking to study the prevalence of disability in depressed sections of the State; the need for rehabilitation services among the residents; the drain that unrehabilitated disabled persons are on the community; and the contribution that vocational rehabilitation can make in solving these problems. The project is regarded as a pilot endeavor for guidance of other States.

ALCOHOLISM

There was increasing activity in research relating to alcoholism as a personality disorder, and in several projects there are studies of work therapy and vocational counseling as means of countering alcoholism, and in applying general rehabilitation methods to this disability.

INCREASING EMPLOYMENT FOR DEAF PERSONS

Increased employment opportunities for deaf persons is the goal of three research grants made during the year.

The Michigan Department of Public Health inaugurated a 3-year program to distinguish deaf persons from retarded persons in State training schools to determine whether the major disability is in hearing or retardation. The findings will shape the course of training in communications and in vocational skills.

Another Michigan project is the establishment of a center by the Association for Better Hearing, which will make a 4-year effort to provide special personal adjustment and job training for about 100 deaf men now considered unemployable.

A year-long study is in progress at the University of Pittsburgh to determine the extent that hearing loss caused by nerve impairment destroys the ability to localize sounds. Significant findings in this field could help development of hearing aids of greater use and adaptability.

SELECTED DEMONSTRATIONS IN 1961

The number and geographical spread of selected demonstration projects grew during the year. These projects are in special categories of severe disability, and are now operated in 83 communities in 40 States and the Virgin Islands to utilize new rehabilitation knowledge and methods. The number of projects had doubled since the first was established in 1958. The totals now:

Occupational centers for mentally retarded	29
Work classification and evaluation centers for cerebral palsied	7
Work adjustment centers for disabled persons with emotional problems	8
Occupational adjustment services for epileptics	2
Services for the homebound:	
Industrial homework	3
Vocational adjustment in a community home-care program	1
Blind and visually handicapped: Optical aids clinics	18
Work evaluation of older disabled workers	9
Rehabilitation of the chronically ill	2
Services to blind farmers	1
Rehabilitation of the mentally ill	3
Total	83

Medicine and Counseling Are Emphasized in Training Program

1961 was a year of consolidation of the gains of the training program in previous years, rather than one of expansion, for the increase of only $1,060,000 over the 1960 appropriation permitted comparatively small increases in assistance to educational institutions and scholarship assistance to students preparing for careers in rehabilitation.

Of the $7,260,000 appropriated for training, grants totaling $7,253,719 were made. Teaching grants numbered 209, as compared with 201 in 1960. Traineeships were granted for 1,586 students, as compared with 1,460 in the previous year.

Medicine received the largest proportion of support—27 percent of the total granted for long-term training. Rehabilitation counseling was next, with 25 percent of the total. Speech pathology and audiology received 10 percent.

Sixty-two of the 91 State vocational rehabilitation agencies received grants for staff development, largely to assist them in conducting organized in-service training for their staff. OVR funds supported 187 short-term courses which reached nearly 4,000 individuals and 26 persons received rehabilitation research fellowships.

Definite strides have been made in improving the content of instruction in rehabilitation counselor and undergraduate medical student training programs, through the medium of short-term training courses for faculty members. In rehabilitation counseling a workshop on occupational information and job placement was held during the year, supplemented by committee work in eight other aspects of the rehabilitation counseling curriculum.

REHABILITATION COUNSELING

Training programs designed to prepare graduate students for work in State vocational rehabilitaton agencies and other community rehabilitation programs received OVR support in 32 universities, with a full-time enrollment of 531. Students receiving OVR traineeships numbered 459 (86 percent). The estimated number of graduates in 1961 was 225, or only 37 percent of the 600 graduates estimated to be needed annually for employment in expanding agencies or as replacements for those leaving the field.

The 1960 study of graduates of the training programs since 1954 indicated that about 800 students had been graduated from rehabilitation counselor training programs. Nearly 80 percent were employed in rehabilitation programs. Eight percent were enrolled in graduate

study. Less than 5 percent were employed in work unrelated to rehabilitation of the disabled.

MEDICINE

Forty of the 87 schools of medicine and osteopathic medicine received teaching grants for instruction of undergraduate medical students in rehabilitation principles. These 40 schools have an enrollment of about 12,830 students, or about 40 percent of the total enrollment.

Traineeships have been awarded to 182 physicians enrolled in residency training programs, chiefly in physical medicine and rehabilitation and to 145 undergraduate medical students interested in a special training experience in research or clinical service in rehabilitation.

OCCUPATIONAL THERAPY

Grants in 1961 were made to 16 of the 31 AMA-approved schools of occupational therapy to permit them to employ additional faculty, to develop new teaching materials, or to strengthen the integration of the classroom courses with the students' clinical experience. OVR traineeships were awarded to 230 students in the basic curricula, or 12 percent of the 1,850 enrolled in the schools in 1960–61.

The graduate traineeship program, initiated in 1960 to produce personnel for teaching positions, gave scholarship assistance to 21 individuals in the 1960–61 academic year.

A training grant for the instruction of occupational therapists in psychiatric aspects of rehabilitation was awarded to the University of Pennsylvania's School of Occupational Therapy. A grant also was made to the American Occupational Therapy Association to support partially the services of a psychiatric occupational therapy consultant to schools and clinics.

A pilot program of recruitment in New York City will serve as a demonstration for other communities and other schools. Its contacts with schools and colleges throughout New York and New England, plus a summer work experience in occupational therapy departments of hospitals for selected students, have increased the number of applicants for admission.

PHYSICAL THERAPY

Teaching grants were made to 22 of the 40 AMA approved schools of physical therapy, chiefly for expansion of the faculty. Schools are experiencing difficulty in recruiting students, chiefly because of lack of scholarship assistance for the 4-year training program plus the clinical affiliation.

Shortages of qualified teachers had impelled OVR to institute grants for graduate traineeships in 1959. In the 1960–61 academic year 20 individuals were enrolled in graduate training programs, the majority in anatomy, physiology, and physical therapy. The majority of those who completed graduate study in the previous year are teachers.

PROSTHETICS AND ORTHOTICS

Seven educational institutions received a total of $607,483 in 1961 to enable them to employ faculty for a series of short-term training courses in prosthetics (artificial limbs) and orthotics (braces and assistive devices). During the year these short-term courses reached over 600 physicians, surgeons, rehabilitation counselors, therapists, prosthetists, orthotists, and other personnel concerned with procurement of prosthetic devices.

PSYCHOLOGY

The need for trained psychologists with particular competence in serving physically disabled persons, especially in the area of psychological assessment of the potential for rehibilitation in severely handicapped persons, is being met. In 1961, grants were made to 5 universities interested in strengthening the rehabilitation content of basic curricula for all psychology students. Traineeships were awarded to 23 students specializing in rehabilitation at the graduate level.

SOCIAL WORK

OVR training grants have stimulated an increased awareness of the impact of physical and mental disabilities not only on individuals, but on families and communities as well. Several new training units for social work are now operating in State agencies, the most recent in the Rhode Island State agency. Establishment of these units indicates a growing recognition of the importance of social components in the rehabilitation process by State Directors and Regional Representatives, and has strengthened the relationships between the schools of social work and the staffs of the State agencies and Regional offices.

Teaching grants were made to 33 schools of social work with a total enrollment of 3,164. Traineeships reached 138 students in the first and second years of the curricula. Estimates of the number of trained social workers needed for work in health and rehabilitation agencies are about 1,500 annually, so that OVR is contributing less than 4 percent of the needed graduates in the health and rehabilitation aspects of social work.

SPEECH PATHOLOGY AND AUDIOLOGY

A study of professional preparation in speech pathology and audiology was completed in 1961. Its findings have provided a valuable base for planning the future direction that training grants in this field should take. Conducted under the auspices of the American Speech and Hearing Association, the Office of Education, Children's Bureau, and OVR, the study undertook to define both status and needs for training in this field. In the 1960–61 academic year 777 students received graduate degrees, about half of the 1,500 graduates estimated to be needed annually for rehabilitation of persons with communications disorders.

Teaching grants were made to 26 of the 193 training centers offering graduate training, and traineeships were awarded for 173 trainees.

Initial planning for a new academic training program designed to prepare persons for modern rehabilitative work with the deaf has been completed and recruitment is under way for the 1961–62 academic year, as a cooperative enterprise of San Fernando Valley State College and the John Tracy Clinic in Los Angeles.

Eight short-term training courses on social, economic, and personal problems of deaf persons have been held for audiologists, psychologists, clergymen, social workers, rehabilitation counselors, and other persons serving the deaf.

Slightly over $80,000 has been granted in this field in 1961.

WORKERS FOR THE BLIND

About 5 percent of the total appropriation for training in 1961 has been devoted to preparation of personnel for rehabilitation of blind persons.

Two academic programs for instructors in mobility (independent travel) have been established. Boston College will graduate its first class in August; Western Michigan will probably accept it first students in 1961–62.

Short-term training courses have been conducted in a number of significant aspects of service to blind persons. They have included courses on psychological aspects of blindness, supervision of vending stand programs, casework services, interagency cooperation, and placement of blind persons in competitive industry.

SHORT-TERM TRAINING COURSES

Continuous educational programs for practitioners in all professional fields in 1961 included 187 short-term courses reaching nearly 3,500 individuals. Some courses dealt with rehabilitation of amputees, services to the deaf, blind, and mentally retarded, rehabilitation of the mentally ill, and treatment of organic voice problems.

Others were concerned with orientation of newly employed rehabilitation counselors, or with raising the level of skill of administrators, supervisors, and medical personnel of State vocational rehabilitation agencies.

LABOR'S INCREASING SUPPORT OF REHABILITATION

Four regional demonstration institutes have been held for personnel of State vocational rehabilitation agencies, rehabilitation centers, State Councils of AFL–CIO and other key community agencies. The institutes, held under the sponsorship of the National Institute of Rehabilitation and Labor Health Services, served to increase the knowledge of rehabilitation on the part of labor leaders and to stimulate interest in further cooperation on behalf of handicapped or industrially injured workers.

Rehabilitation Facilities Grow in Number

Increasing utilization of rehabilitation medicine has led many more hospitals to request Federal assistance in establishing rehabilitation facilities as part of their program.

The facilities are of many kinds, ranging from comprehensive rehabilitation centers—some of which are located in the leading teaching and research institutions in the country—to sheltered workshops which furnish transitional employment to severely disabled persons gradually returning to full employability in competitive industry. There are also smaller special purpose facilities such as half-way houses and speech and hearing centers.

Fifty-eight State agencies now have a regulatory basis for establishing rehabilitation facilities with regular program funds or Federal grants for extension and improvement of their programs. A third of the States have enabling legislation allowed them to provide services for independent living for disabled persons, as distinguished from vocational rehabilitation, if Federal funds become available for the purpose. One State has ventured into this endeavor without Federal assistance.

In 1961, 32 States spent a total of $1.7 million of their own and Federal funds for facilities and workshops, the Federal share amounting to $1.2 million.

STATE-OPERATED FACILITIES

At the beginning of the fiscal year, five State rehabilitation agencies operated facilities designed to provide vocational training and other services especially needed by their rehabilitation clients. Now there are seven.

The Office of Vocational Rehabilitation and the Surgeon General of the Public Health Service approved 36 community projects during the year for the construction of rehabilitation facilities under Hill-Burton legislation. The total cost will be $19,122,205. The Federal share amounts to $7,159,013.

Since 1954, 176 such facilities in 50 States have been approved. They cost a total of $123,603,912, in which the Federal government participated to the extent of $37,607,059. Of the 176 projects, 61 were sponsored by nonprofit hospitals, 44 by State-owned hospitals, 4 by city or county hospitals, and 67 by nonprofit organizations other than hospitals. Of the 176, 129 were to serve a variety of disabled people. Thirty-one were for mentally retarded or emotionally disturbed cases, five for deaf and hard of hearing, four for blind persons, and seven for others with special problems.

Counteraction in Isolation of Deaf Persons

A basic need in the rehabilitation of deaf persons is to reduce their isolation so that they may take greater part in local and national community activities. Interaction for this purpose among national, State, and local groups was inaugurated at an OVR-supported national meeting attended by some 50 leaders in work for the deaf, some themselves deaf and others who could hear, where the groundwork was laid for nationwide efforts to foster dynamic programs for those with hearing loss.

A similar result, but with a different approach, is being sought through religious groups, to spur the vocational rehabilitation of deaf persons within their congregations. Clergy and lay workers have for many years worked with deaf persons in spiritual, social, and vocational affairs. An OVR effort to direct these activities into wider and more productive channels came in 1961 in Washington, D.C., with a pilot workshop supported by the Office for priests, nuns, seminarians, and lay workers of the Catholic church, to acquaint them with their State agencies and the program of vocational rehabilitation. The workshop was so productive that similar ones are planned within other denominations.

NEW STUDIES IN BLINDNESS

The vocational placement of blind persons was given substantial aid during the year by a wide study of well over 400 blind workers in professional fields. The study was made by Pennsylvania's Office for the Blind, with the aid of a grant from the Office of Vocational

Rehabilitation, and covered workers in 42 States, the District of Columbia and Puerto Rico.

Direct interviews were held with blind lawyers, judges, scientists, engineers, teachers, social workers, psychologists, and mathematicians, and were recorded on tape and transcribed. The compendium of material that came out of the study, showing how these blind persons function practically and successfully in their jobs, is a highly useful document in the placement of blind persons.

There also was action during the year to bring into the programs for the blind the benefits of invention and of scientific advances, particularly in electronics. The research project under way at the Massachusetts Institute of Technology, to find ways to apply new scientific principles to the reduction of disability, is of great interest to blind persons and those who work with them. The principal area of concern for the blind in this project is in finding ways to improve the ability to read, to move about with greater ease and safety, and interpretation of sensory cues, such as traffic sounds.

Another study of considerable importance to blind persons and their instructors was completed during the year. The American Association of Workers for the Blind, with the aid of an OVR grant, made an analysis of the functions and duties of home teachers of blind persons. The teachers—a large proportion of them blind—are now receiving reports of the study, which contain advice and suggestions from physical and occupational therapists, social workers, persons in various public health activities, and others who are acquainted with the special problems of home instruction of the blind.

Since the Office of Vocational Rehabilitation has had resources available for research and demonstration projects, 38 projects concerned with blindness have been supported by grants. In addition, there are 11 low-vision clinics where highly skilled personnel teach the use of optical aids to persons whose residual vision is so low that they are considered as blind.

Shortage of trained personnel offers a particularly serious problem. In addition to other kinds of training, the Office of Vocational Rehabilitation instituted a course for supervisors of vending stand operators through the training facilities of Harbridge House.

The vending stand program for the blind continued to set new records. At the end of the fiscal year a total of 2,174 stands operated by blind persons had been reached. Six hundred fifty-six of them were on Federal property, and the rest on State, local, or private property. Some, operated in such places as national parks, were seasonal.

The stands had a gross business of $42,057,398 or $3,838,058 more than the year before; they returned $8,460,727 in net profits to 2,332 operators; and the average profit for all operators was $3,936.

OASDI APPLICANTS

Disability provisions of the Social Security Act, which provide insurance protection for workers against loss of income due to disabling injury and disease, hold as an equally important objective the rehabilitation of as many as possible of those who apply for disability benefits, the primary purpose being to return them to productive employment.

State agencies (all but four of which are State vocational rehabilitation agencies) made approximately 365,000 initial determinations of disability of applicants applying for disability insurance benefits in 1961. About 400,000 applicants were screened for rehabilitation potential, and more than 40,000 were accepted for possible rehabilitation services.

During 1960, 4,200 applicants were enabled to return to work through the provision of rehabilitation services.

Efforts to develop new and improved methods to serve these applicants are being carried out through several research and demonstration projects. Three projects concerned with evaluating the extent of disability of applicants and assessing the rehabilitation potential were initiated. Five others are designed to demonstrate how many of the severely disabled applicants can be rehabilitated through concentrated and intensive medical, therapeutic and counseling services.

Medical Training

One of the acute needs in the public program of vocational rehabilitation is for physicians trained in the modern practice of physical medicine. In an effort to meet this need, the Office is supporting the training of more than 180 resident physicians in physical medicine and rehabilitation, which is an increase of some 40 percent over those in such training in 1960. Another effort in this direction was to stimulate interest in residency training among those undergraduates in medical schools who attend summer sessions.

Added recognition was given during the year to the specialty of rehabilitation nursing. A consultant in rehabilitation nursing was added to the central Office staff during the year and emphasis was given to the establishment of additional training facilities for nurses, resulting in an increase in applications for training grants in this field for the coming year.

Expenditures for the Support Program

Grants to States and Territories for services for basic support of vocational rehabilitation services were $54,302,013 in 1961. This is an increase of about 11 percent over 1960 and more than 136 percent over the $23 million which States received in 1954. Eleven States, the District of Columbia, and Guam acquired all of the Federal allotments available to them by making available sufficient matching amounts. Six States acquired more than 95 percent but less than 100 percent, 2 States 90–95 percent, 10 States and Puerto Rico 70–80 percent; 6 States and the Virgin Islands 60–70 percent, 5 States 50–60 percent, 3 States 40–50 percent, and 1 State less than 40 percent.

The average per-capita expenditures for vocational rehabilitation services in all States and Territories rose from 22 cents in 1954 to 49 cents in 1961, an increase of 123 percent.

EXTENSION AND IMPROVEMENT PROGRAM

Federal grants totaling $1,019,483 were made in 1961 to provide additional financial assistance to State agencies for projects which would extend and improve their existing vocational rehabilitation programs. During 1961, grants were made for a total of 92 projects in 41 States. They were made for these purposes: establishment of workshops and rehabilitation facilities, including optical aids centers; improvement of specialized services to disability groups such as mentally ill, mentally retarded, homebound, epileptics, cardiac and other disability groups; and improvement of program administration.

Among the disability groups served by the extension of program activity in 1961 were the mentally ill, mentally retarded, blind, aged, cerebral palsied, deaf, those with speech and hearing disabilities, and alcoholics. Twenty-six of the projects were for the establishment of either rehabilitation facilities or workshops and 32 were for the employment of specialized counselors or other professional staff.

STATE PLANS

Six State agencies amended their plans for vocational rehabilitation services to include provisions for the establishment of workshops, bringing the total number of State agencies with such plan provisions to 57. The number of State agencies with plan provisions for the establishment of rehabilitation facilities remained unchanged at 58.

State vocational rehabilitation legislation included, in 1961, an enactment of comprehensive basic legislation, by Kansas, embracing

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authority for rehabilitation services to help disabled people achieve self-care rather than employment; and brings the States and Territories with such authority to one-third of the total number.

Small Business

State rehabilitation agencies are authorized by legislation to use funds to encourage and establish disabled persons in small business enterprises when, in an agency's discretion, it will be the most suitable and effective means of an individual's rehabilitation.

In such cases, vocational training is directed toward operation of a specific business, after which necessary tools, licenses and an initial stock of goods are provided, and the operation given nominal supervision by the State agency.

The small business enterprises which were established for disabled persons and supervised by State rehabilitation agencies in 1961 involved about one percent of the 92,500 rehabilitations during the year.

A 3-year study of the causes of success or failure of small businesses operated by handicapped persons has revealed that, as a general rule, maturity, rather than age, was a factor for success; that formal education was an insignificant factor, compared to good personality traits; that the severity of disability does not seem to affect customer relationships; and that disabled operators who have a stake of their own in the business are more likely to succeed.

The study was made possible through a research and demonstration grant from the Office, and the complete results will be available to all State rehabilitation agencies as a standard guide.

International Research

Rehabilitation research received added impetus during the year with institution of a cooperative program among the United States and nine foreign countries.

Under provisions of Public Law 480—the Agricultural Trade Development and Assistance Act—the Congress alloted $930,000 in counterpart funds to the Office, to support cooperative research in India, Pakistan, Brazil, Yugoslavia, UAR-Egypt, Burma, Indonesia, Israel, and Poland. The funds have accumulated to the credit of the United States from the sale of surplus commodities to those countries, and may be spent only for beneficial purposes within their borders.

At the close of the year, 13 projects in three of the countries had been approved for activation—6 in Israel, 4 in India, and 3 in Brazil. Projects in the six other countries were in various stages of development, and India and Israel were preparing additional projects.

India has a great need for more research into vocational rehabilitation of lepers and is directing some of its research plans in this direction, as well as into planning for vocational training of disabled persons according to prevailing industrial and agricultural patterns. Israel, among other projects, is experimenting with methods of training blind persons for work in the textile industry, and methods of preparing cerebral palsied persons for employment.

Plans were under way during the year to send 12 United States surgeons of outstanding reputation to India to do research work with Dr. Paul Brand at the Christian Medical College, in Vellore, and to help build a broad program for the rehabilitation of lepers. The surgeons will go in rotation and each will work in India for a period of appromixately 2 months.

A request has gone out to the Indian Ministry of Health to nominate Indian surgeons on an exchange basis.

The Office of Vocational Rehabilitation, during the fiscal year 1961 planned programs for 18 long-term rehabilitation trainees from 13 foreign countries—Brazil, Chile, Uruguay, Costa Rica, Viet Nam, India, the Philippines, Israel, Sweden, Denmark, Finland, Guatemala, and Yugoslavia. The areas of study included rehabilitation philosophy and methods, physical therapy, prosthetics, occupational therapy, orthopedic surgery, and physical medicine and rehabilitation. Trainees were interested in both the physically and mentally handicapped.

The Office also planned short-term visits for some 140 persons of professional and technical backgrounds related to rehabilitation who were interested in becoming better acquainted with the U.S. program.

Table 1.—*Number of referrals and cases, by agency, fiscal year 1961*

Agency[1]	Referrals				Cases				
	During fiscal year				During fiscal year				
	Total	Accepted for services	Not accepted for services[2]	Remaining at end of year[3]	Total active load (receiving services)	Closed from active load			Remaining at end of year[6]
						Rehabilitated	*After* rehabilitation plan initiated[4]	*Before* rehabilitation plan initiated[5]	
United States, total	409,295	140,476	135,490	133,329	320,963	92,501	11,980	19,460	197,022
Alabama	7,660	3,721	1,480	2,459	9,663	2,787	409	588	5,879
Alaska	334	88	72	174	286	43	14	26	203
Arizona:									
General	1,756	642	597	517	1,345	440	71	72	762
Blind	125	53	40	32	176	36	8	6	126
Arkansas	7,543	2,855	2,523	2,165	5,598	2,459	183	129	2,827
California	27,646	6,900	16,054	4,692	16,115	2,487	1,052	2,839	9,737
Colorado	4,712	2,004	1,126	1,582	3,992	1,152	280	145	2,415
Connecticut:									
General	3,273	1,435	1,056	782	3,904	874	173	207	2,650
Blind	211	82	75	54	212	62	24	0	126
Delaware:									
General	1,216	581	476	159	1,300	520	16	76	688
Blind	64	37	23	4	55	17	12	2	24
District of Columbia	4,903	1,460	2,792	651	2,727	713	165	222	1,627
Florida:									
General	15,153	4,661	6,277	4,215	9,864	3,404	539	627	5,294
Blind	4,054	425	2,343	1,286	1,095	300	59	44	692
Georgia	21,685	6,867	6,428	8,390	12,816	6,014	325	366	6,111
Guam	171	22	114	35	97	20	6	27	44
Hawaii:									
General	1,953	626	491	836	1,037	210	97	124	606
Blind	27	13	6	8	54	9	5	2	38
Idaho:									
General	2,045	406	936	703	950	330	39	22	559
Blind	44	25	15	4	56	12	4	3	37
Illinois	12,519	6,702	3,436	2,381	15,404	3,879	871	1,537	9,117
Indiana:									
General	3,088	1,709	677	702	4,217	1,162	61	130	2,864
Blind	163	84	42	37	236	42	18	30	146
Iowa:									
General	5,914	1,883	1,663	2,368	4,066	1,234	168	168	2,496
Blind	178	71	37	70	205	44	5	5	151
Kansas:									
General	3,567	1,280	927	1,360	3,205	961	117	235	1,892
Blind	395	107	136	152	284	76	9	17	182
Kentucky	7,294	1,884	3,120	2,290	4,072	1,475	82	248	2,267
Louisiana:									
General	5,298	3,288	1,062	948	8,390	1,996	239	529	5,626
Blind	747	186	104	457	694	120	24	24	526
Maine:									
General	2,106	492	702	912	1,264	376	66	87	735
Blind	284	202	61	21	293	65	14	42	172
Maryland	5,652	2,304	1,407	1,941	5,925	1,491	187	524	3,723
Massachusetts:									
General	8,974	2,448	2,740	3,786	5,497	1,687	163	334	3,313
Blind	303	134	32	137	407	85	15	20	287
Michigan:									
General	9,649	3,687	1,943	4,019	9,777	3,000	435	158	6,184
Blind	360	183	87	90	471	87	46	49	289
Minnesota:									
General	6,976	2,169	2,223	2,584	5,644	1,311	280	137	3,916
Blind	1,025	130	327	568	448	99	10	24	315
Mississippi:									
General	3,622	1,793	594	1,235	3,721	1,360	81	203	2,077
Blind	1,168	454	485	229	1,044	343	56	39	606
Missouri:									
General	7,721	2,352	3,013	2,356	5,149	1,625	248	204	3,072
Blind	720	193	242	285	516	142	24	11	339
Montana:									
General	2,188	647	759	782	1,570	425	16	38	1,091
Blind	367	47	281	39	78	22	2	3	51
Nebraska:									
General	1,703	889	220	594	2,433	570	40	64	1,759
Blind	279	82	125	72	161	65	4	3	89

See footnotes at end of table.

Table 1.—*Number of referrals and cases, by agency, fiscal year 1961*—Con.

Agency [1]	Referrals				Cases				
	During fiscal year			Remaining at end of year [3]	During fiscal year				Remaining at end of year [6]
	Total	Accepted for services	Not accepted for services [2]		Total active load (receiving services)	Closed from active load			
						Rehabilitated	*After* rehabilitation plan initiated [4]	*Before* rehabilitation plan initiated [5]	
Nevada:									
General	796	205	518	73	389	116	55	60	158
Blind	53	22	12	19	54	14	2	2	36
New Hampshire:									
General	495	290	94	111	771	194	132	9	436
Blind	45	20	10	15	69	15	4	3	47
New Jersey:									
General	6,520	2,440	1,934	2,146	4,901	1,521	210	261	2,909
Blind	827	216	206	405	531	161	16	16	338
New Mexico:									
General	1,355	353	648	354	684	284	51	9	340
Blind	233	55	48	130	117	34	0	1	82
New York:									
General	28,928	10,003	9,113	9,812	21,221	6,447	765	1,225	12,784
Blind	1,214	433	285	496	1,044	286	36	93	629
North Carolina:									
General	12,022	7,775	3,055	1,192	15,532	5,328	464	608	9,132
Blind	1,317	483	570	264	1,457	432	25	91	909
North Dakota	1,818	505	538	775	1,296	355	43	57	841
Ohio:									
General	9,470	3,343	2,996	3,131	7,062	1,875	212	439	4,536
Blind	864	433	156	275	1,007	203	30	46	728
Oklahoma	6,292	2,874	1,403	2,015	8,288	1,750	187	556	5,795
Oregon:									
General	5,640	984	2,693	1,963	2,650	745	165	242	1,498
Blind	244	41	121	82	151	38	8	7	98
Pennsylvania:									
General	30,332	10,692	7,778	11,862	22,791	6,235	902	836	14,818
Blind	1,753	362	547	844	996	221	40	46	689
Puerto Rico	9,400	2,145	2,081	5,174	5,751	1,193	105	404	4,049
Rhode Island:									
General	2,740	1,134	485	1,121	2,547	803	158	24	1,562
Blind	115	90	7	18	271	58	16	8	189
South Carolina:									
General	10,988	3,172	4,712	3,104	6,461	2,008	174	227	4,052
Blind	358	161	139	58	350	109	8	20	213
South Dakota:									
General	1,084	295	255	534	1,018	250	72	20	676
Blind	427	31	211	185	103	27	3	1	72
Tennessee:									
General	10,067	3,329	3,139	3,599	7,293	2,469	258	279	4,287
Blind	1,197	309	299	589	860	258	19	49	534
Texas:									
General	13,764	3,863	4,514	5,387	11,513	2,720	300	1,196	7,297
Blind	1,267	443	465	359	861	376	9	17	459
Utah	1,910	817	515	578	2,114	547	72	28	1,467
Vermont:									
General	1,240	363	241	636	839	183	70	41	545
Blind	50	19	23	8	53	10	11	3	29
Virginia:									
General	14,877	4,428	6,449	4,000	9,091	3,239	213	587	5,052
Blind	660	138	208	314	292	113	13	5	161
Virgin Islands	91	27	0	64	81	21	1	0	59
Washington:									
General	5,821	1,720	2,224	1,877	4,233	984	190	394	2,665
Blind	336	122	121	93	259	71	12	10	166
West Virginia	16,906	5,578	4,301	7,027	12,690	3,490	70	1,104	8,026
Wisconsin:									
General	8,172	2,201	2,748	3,223	6,149	1,521	75	32	4,521
Blind	161	88	40	33	217	56	7	4	150
Wyoming	611	171	219	221	393	110	15	10	258

[1] In States with 2 agencies, the State division of vocational rehabilitation is designated as "general," and the agency under the State commission or other agency for the blind is designated as "blind."

[2] Services declined, services not needed, individual not eligible, individual needing services other than vocational rehabilitation, referred to other agencies, migratory shifting of the individual, etc.

[3] Eligibility for rehabilitation not yet determined.

[4] Closed after rehabilitation plan was initiated; received rehabilitation service but never reached the point of employment because of personal factors, illness, aggravated disability, etc.

[5] Closed prior to initiation of rehabilitation plan because of indifference of individual, increase in degree of disability, loss of contact, etc.

[6] In process of rehabilitation on June 30, 1961.

Table 2.—*Vocational rehabilitation grants, 1961, State divisions of vocational rehabilitation*

State or territory	Support grants	Extension and improvement grants	Total
Total	$48,498,563	$925,351	$49,423,914
Alabama	2,251,500		2,251,500
Alaska	118,966		118,966
Arizona	422,178	8,414	430,592
Arkansas	1,468,318	14,554	1,482,872
California	2,904,802	121,984	3,026,786
Colorado	695,958	14,253	710,211
Connecticut	343,416	16,521	359,937
Delaware	136,625	5,000	141,625
District of Columbia	227,958	3,750	231,708
Florida	1,355,417		1,355,417
Georgia	2,634,810	32,025	2,666,835
Guam	60,969	5,000	65,969
Hawaii	181,402	5,094	186,496
Idaho	172,504		172,504
Illinois	2,080,765	78,418	2,159,183
Indiana	473,852	20,312	494,164
Iowa	807,857	17,869	825,726
Kansas	604,803	13,580	618,383
Kentucky	590,332	24,733	615,065
Louisiana	1,082,578		1,082,578
Maine	272,174		272,174
Maryland	632,250		632,250
Massachusetts	865,966	32,178	898,144
Michigan	1,343,251	63,841	1,407,092
Minnesota	963,953	27,155	991,108
Mississippi	836,025		836,025
Missouri	642,844	28,693	671,537
Montana	184,058	5,486	189,544
Nebraska	308,849	7,658	316,507
Nevada	54,293		54,293
New Hampshire	79,339		79,339
New Jersey	961,625	39,858	1,001,483
New Mexico	199,093	7,245	206,338
New York	3,348,146	47,688	3,395,834
North Carolina	1,922,192	37,145	1,959,337
North Dakota	368,158	5,148	373,306
Ohio	1,034,413	49,929	1,084,342
Oklahoma	1,338,755	18,898	1,357,653
Oregon	491,082	12,551	503,633
Pennsylvania	3,877,028	65,075	3,942,103
Puerto Rico	852,431		852,431
Rhode Island	269,241	5,738	274,979
South Carolina	1,114,295		1,114,295
South Dakota	243,100	4,451	247,551
Tennessee	1,347,754		1,347,754
Texas	1,462,031	12,000	1,474,031
Utah	304,680	7,280	311,960
Vermont	166,182		166,182
Virginia	1,276,278		1,276,278
Virgin Islands	20,037		20,037
Washington	879,447	23,160	902,607
West Virginia	1,197,729	15,167	1,212,896
Wisconson	930,843	22,500	953,343
Wyoming	96,011	5,000	101,011

Table 3.—*Vocational rehabilitation grants, 1961, State commissions or agencies for the blind*

State or Territory	Support grants	Extension and improvement grants	Total
Total	$5,803,450	$94,132	$5,897,582
Arizona	84,781	2,107	86,888
Connecticut	59,075	4,130	63,205
Delaware	35,519		35,519
Florida	450,000		450,000
Hawaii	38,772		38,772
Idaho	16,584		16,584
Indiana	58,345		58,345
Iowa	156,806	4,601	161,407
Kansas	134,000	3,855	137,855
Louisiana	150,000		150,000
Maine	79,478		79,478
Massachusetts	172,250	9,820	182,070
Michigan	116,813		116,813
Minnesota	182,073		182,073
Mississippi	398,711		398,711
Missouri	240,545		240,545
Montana	38,655		38,655
Nebraska	73,893	3,829	77,722
Nevada	15,120	5,000	20,120
New Hampshire	26,715	1,250	27,965
New Jersey	203,365	3,693	207,058
New Mexico	50,367		50,367
New York	421,498	29,653	451,151
North Carolina	554,274		554,274
Ohio	346,199	9,250	355,449
Oregon	89,548		89,548
Pennsylvania	410,301	14,439	424,740
Rhode Island	63,897	1,200	65,097
South Carolina	74,729		74,729
South Dakota	60,767	1,112	61,879
Tennessee	338,183		338,183
Texas	293,212		293,212
Vermont	43,703	193	43,896
Virginia	107,502		107,502
Washington	123,472		123,472
Wisconsin	94,298		94,298

Saint Elizabeths Hospital

THE PAST YEAR has been one of activity; a number of changes have been made in the care of the patients and in the administration of the Hospital. Probably in no field of medicine is change so striking as in that of psychiatry. New concepts of patient care are emerging, a greater stress is being laid on the social rehabilitation of patients, and on the introduction of social concepts into the operation of the Hospital itself. Some of these changes in concept are illustrated by the report of the Joint Commission on Mental Illness and Health which appeared during the year. In general, it may be said that this volume points up first of all the drastic shortages which exist throughout the country in the professional and subprofessional fields relating to hospital treatment of the mentally ill. Space does not permit a full discussion of the various recommendations of the Commission, but the comment may be made that in spite of the recommendations it seems likely that for many years to come the large mental hospital will be needed. There seems no practical way of eliminating some of the large hospitals, among which Saint Elizabeths is to be counted. The best that can be done in the foreseeable future is to decentralize to some extent; this is being done in Saint Elizabeths Hospital as elsewhere.

The two major problems which confront the Hospital are those of understaffing and overcrowding. Some progress has been made in remedying the latter situation. A vigorous attempt has been made to send to nonmental institutions patients who could properly be cared for outside the Hospital. A considerable number, for instance, have been sent through the years to the District of Columbia Village, and more recently, foster homes are being found. The Glenn Dale Hospital, formerly used entirely for tuberculosis patients, is being converted by the District into a chronic-disease hospital, and several patients have been sent there. A considerable number, too, are being referred to the Adult Mental Health Clinic of the District for outpatient treatment. Every attempt is thus being made to return patients to the community or to provide care in other types of institutions for patients who do not need the intensive care which can be given in a hospital like Saint Elizabeths.

During the year, the admissions reached their highest point since 1945, namely 1,981. Discharges have risen at a somewhat more rapid rate, reaching the sum of 1,395 during the year, the live discharges equaling 77 percent of the total admissions. The number of patients on the rolls increased by almost 300, but this includes a large number who are on temporary or convalescent leave in the community, but not finally discharged. There has been a slight decrease in the average number of patients in the hospital, a situation quite different from that of two decades ago when an increment of 100 a year was to be expected.

In the field of staffing, an active recruiting campaign has been carried on especially as to physicians and nurses. Thanks to the generosity of the Congress, a personnel increase of 323 took place during the year. There are still vacancies for physicians; once again attention is invited to the fact that Federal salaries for trained physicians in the field of psychiatry particularly are not keeping pace with those offered by the several States. It is indeed an open question whether the salaries authorized under the Classification Act are adequate or can be made adequate to meet the increased competition from other sources. At least one other Government agency, the Veterans Administration, is able to pay substantially higher salaries. During the year, the nursing assistants were reclassified upward, and it is the hope that this may result in increasing the quality of the personnel on the wards and in holding them once they are recruited and trained.

The general health of the patient population has been good, thanks to the untiring efforts of the entire staff. Even though the physicians and nurses are working under pressure, they have shown a high degree of dedication to duty, and it is a pleasure to pay tribute to them. Various programs of patient care have been prosecuted and developed; the use of open wards; the setting up of remotivation programs; the use of patients' self-government, for example. The so-called "tranquilizers" are proving their value, although at times the cost appears almost staggering. The question may be raised whether, occasionally at least, the use of the tranquilizers does not do more to allay the anxieties of the physician than it does those of the patient!

The aged continue to be a problem, and this is not peculiar to Saint Elizabeths. The proper care of the aged person who is showing mild mental symptoms is a problem which has not yet been satisfactorily solved. As a result, the mental hospital seems to be the only way out for the families who are troubled by the vagaries of the patients.

During the year, the Biometrics Branch has been reactivated. The statistical knowledge of mental hospital patients is extraordinarily deficient, and it is the hope of the Hospital that this Branch may cast

much light upon the details of the incidence and duration of mental disorders among those hospitalized.

Mention has been made earlier of the apparent abuse of the writ of habeas corpus by the patients. It is realized that this writ is a constitutionally guaranteed remedy, but the fact remains that an inordinate amount of time of the physicians, ward and clinical personnel, is taken up in answering in writing and by live testimony in court, the petitions filed by the patients. During the year, 212 orders to show cause were served on the Hospital and 177 writs of habeas corpus were issued. Each of the latter means that the physicians must go to court with the patient and testify as to why he is being held. It is of some interest that only three of these petitions were granted and one continued. This in itself indicates the frivolousness of many of the petitions. The Hospital has formally requested the District Court to arrange to have hearings on these writs held at the Hospital rather than in court. So far, this request has been denied, but it is still our hope that the saving of the time of the judges as well as of the Hospital staff may prevail and that this arrangement can be put into effect.

As a part of its program of public education, the Hospital conducted a very successful Mental Health Week, as a part of which a Mental Health Institute was held. At this Institute, several prominent speakers appeared, including the Secretary of Health, Education, and Welfare, the Honorable Abraham Ribicoff. Something over 5,000 persons visited the Hospital during the "Open House Day."

As usual, many visitors from foreign countries have come to the Hospital. This year especially, as a result of a tour of the International Hospital Federation, and the meeting of the World Congress of Psychiatry, no less than 37 countries were represented among the visitors. It is always gratifying to know that Saint Elizabeths excites so much interest among the professional people of other countries, and such visits are most stimulating to the Staff.

The various agencies of Government have been most cooperative and helpful; notably, the Veterans Administration, the Department of Justice, and the Health Department, Public Welfare Department, and Rehabilitation Office of the District of Columbia.

The interest of various individuals and organizations in the community continues unabated, and indeed is growing. No less than 767 volunteers have during the year given 24,000 hours of uncompensated service. This has meant much to the patients, and indirectly has been of service in promoting understanding on the part of the public. Unfortunately, it is impossible to enumerate the various organizations, but the thanks of the Hospital are none the less most sincere. For

the coming summer, a plan for the use of high school students as volunteers is being worked out. This promises to be very successful as the means of bringing to young people a true concept of what mental illness is like and how those afflicted may be helped.

The Hospital is well aware of its primary obligation; namely, to give the best possible treatment to the patients. It has, however, other obligations, notably in the field of training of personnel and research into the causes and prevention and treatment of mental disorder. As for training, the George Washington University and Howard University Medical Schools have utilized the facilities of the Hospital for the training of their medical students. The Hospital, likewise, is the only public mental institution in the country which is approved for rotating internship. It is approved, likewise, for a 3-year residency in psychiatry, and for residencies in surgery and in radiology. During the year, it has been approved for a 2-year residency in anatomical pathology. The Hospital is fully accredited by the Joint Commission on the Accreditation of Hospitals. During the year, plans for a third-year of Chaplaincy residency have been developed. There are also internships, residencies, and planned fieldwork in dentistry, psychology, social work, occupational therapy, and clinical pastoral work. Instruction in nursing is carried on on both the undergraduate and graduate levels, the former by affiliation with various hospital training schools. A closed circuit television has been a substantial addition to the training program. Forty percent of the cost of training is now borne directly by the Federal Government, the balance, that portion representing service to patients, being included in the per diem charged to the District of Columbia for its patients.

The other and third obligation of the Hospital is in the field of research. This has been very substantially expanded and this year for the first time a separate budget for research was included in the appropriations for the Hospital, the cost of this item being charged entirely to the Federal Government and not allocated in part to the District Government. The research activities of the Hospital have been thoroughly integrated with those of the Clinical Neuropharmacology Research Center operated by the National Institute of Mental Health in conjunction with the Hospital. No less than 23 clinical projects are under way in addition to a substantial amount of basic science studies. Several grants have already been made to the Hospital by the National Institute of Mental Health under legislation recently enacted.

Division of Clinical Services

CLINICAL BRANCHES

At present, the general care and treatment of the patients is carried on by four clinical branches, three of which are subdivided into services. In addition, a Medical and Surgical Branch is charged with the acute medical and surgical treatment of all patients and emergency attention to employees. There are three admission services. Civilian patients under 64 years of age are admitted directly to the Dix Pavilion, those over 64 being admitted directly to the Geriatric Building. Sex psychopaths and male prisoners, under charges or sentence, or found not guilty by reason of insanity, are admitted directly to the John Howard Pavilion. It is planned to make the William A. White Service also an admitting service. As previously noted, there is a steady increase in the number of elderly and infirm patients, and there seems to be no reason to expect this to diminish unless other suitable facilities of a nonpsychiatric nature can be found or established in the community. The West Side Service, temporarily abolished when the transfer of patients was made from the old Howard Hall to the new John Howard Pavilion, has now been re-established. The number of voluntary admissions has increased slightly, being 226 during the year. This provision of law should be used more than it is, particularly since the present commitment laws of the District of Columbia are among the most cumbersome and traumatic to the patient of any in the United States. It may be hoped that some time in the future the commitment laws of the District may be revised to become at least as humane as those of most of the other States.

All of the accepted treatments are being used; group and individual psychotherapy, psychodrama, occasional electro-convulsive therapy, medications, milieu therapy, and remotivation programs. Two of the latter have been started during the year, one on the Detached Service and one on the West Lodge Service, which are showing excellent results. In these particular projects, the use of volunteers has been invaluable.

MEDICAL AND SURGICAL BRANCH

A very considerable expansion of activity and of staff has taken place in this Branch and much more may be expected within the next year or two. A study is now under way by a group of hospital consultants as to the needs in building, organization, and personnel. The present Medical and Surgical Building is over 30 years old, and serious attention should be given to the possibility of its replacement. Pharmacy activities have been increased and now all of the wards

are receiving their drugs directly from the Pharmacy. The Branch has cared for over 2,000 inpatients and 50,000 outpatients during the year, the average stay in the Medical and Surgical Building being 29 days. The Dental Section enumerated over 11,000 visits. The work of the Branch continues to be unusually varied and of high efficiency.

NURSING BRANCH

This Branch, in spite of its shortages, notably in the graduate nurse field, has rendered excellent service in the care of patients. An active program of in-service training for all types of ward personnel is carried on, and 12 schools of nursing and the Navy Hospital Corps send affiliates for instruction in the care of the mentally ill. Training on a post-graduate level is provided for graduate students from Catholic University and from Columbia Union College. In this Branch, as in other parts of the Hospital, the employee development program has been utilized, employees being sent for longer or shorter periods of time to take courses of instruction which will make them more useful in their Hospital service.

PSYCHOTHERAPY BRANCH

This Branch embraces individual and group psychotherapy, psychodrama, dance and art therapy. The Director of this Branch is also the coordinator of professional training. The various types of professional training continue to expand and it is expected very shortly that a new type of internship, namely, that of psychodrama intern, will be established.

PSYCHOLOGY BRANCH

Four research projects were completed during the year, one of them being a thesis for the degree of Doctor of Philosophy. Four are now under way. One hundred and seventy-five hours of teaching were carried out by the members of the Branch, and very nearly 5,000 tests were given. In addition, a certain amount of individual and group psychotherapy is carried on by the Branch.

RECREATIONAL THERAPY BRANCH

The personnel of this Branch has been expanded and the program accordingly. Many parties and entertainments, both on the wards and in the Red Cross Building and in Hitchcock Hall, have been conducted. The Bolling Air Force Base has been most generous in permitting the patients to use the swimming pool. It is hoped that eventually the Hospital may have a pool of its own, as this form of

exercise and recreation means much to the patient. Community participation in the whole program has been most remarkable.

OCCUPATIONAL THERAPY BRANCH

In this Branch too, the personnel and program have been substantially expanded and must be expanded still further. Eight student interns have each received three months of affiliation in psychiatry as related to occupational therapy.

VOLUNTEER SERVICES BRANCH

As it has been mentioned above, the work of the volunteers is a particularly valuable feature of the Hospital, both from the point of view of the patient and the point of view of public understanding. During the year, 767 volunteers participated, giving 24,000 hours of entirely uncompensated work. The activities of this Branch continue to expand as public interest and understanding grow.

SOCIAL SERVICE BRANCH

This Branch, likewise, has shown a very substantial expansion in personnel and in activity, and works closely with the rehabilitation counselors provided by the District of Columbia Division of Rehabilitation. During the year, members of the Branch conducted interviews with patients and others totalling nearly 24,000. Three hundred and seventy-one transfers, foster home placements, or referrals to other agencies were arranged, an increase over the preceding year of 254. The value of the return of this number of patients to the community can hardly be overestimated. There is need for further foster homes and nursing homes and adequate financing by the District of Columbia for them. If they were available, more patients still could be returned to the community. In addition to the work of the Social Service Branch, a special public health nursing project has been carried on at the Hospital under a grant to the Health Department of the District of Columbia.

CHAPLAIN SERVICE BRANCH

The Chaplain Service Branch, under Jewish, Protestant, and Roman Catholic chaplains, carries out religious ministry to the patients, both in chapel services and on the wards. New patients are visited, and such other patients as request the services of the chaplains of their faith. Training is carried on both for Protestant and Roman Catholic clergy and for theological students. The community clergy as well have been most helpful in participating in special services. The Director of Protestant Chaplain Services served during the year

as the Chairman of the Mental Health Week Committee. The recent finishing off of the rest of the Chapel Undercroft has greatly improved the office facilities of the Branch.

MEDICAL RECORDS BRANCH

The value of readily accessible adequate records is important to any well regulated hospital. During the year, in addition to the continuation of the open-shelf filing, which has worked out very well, preparations have been made for some microfilming, and for the elimination of some old duplicate records. The inauguration of the addressograph system has reduced the likelihood of errors in filing. The Branch has taken on the responsibility for the preparation of medical abstracts.

LABORATORY BRANCH

The demands on this Branch continue to grow, but they are being well met. An isotope unit is now complete and much new equipment has been obtained. The use of automation has been developed substantially. If it were not for this, it is unlikely that the total of 204,000 tests could very well have been carried out. During the year, the Laboratory Branch was approved for a 2-year residency training in anatomical pathology. Considerable research is under way. During the year, 193 autopsies or 45.4 percent were performed.

LIBRARY SERVICES

The Medical Library provides library service to the medical staff, both by making accessible volumes in the Hospital library and the several branches such as those in the Nursing Branch, Laboratory, and Medical and Surgical Branch and obtaining others through interlibrary loans. There were 1,120 accessions during the year, bringing the total of accessioned volumes to 22,000, plus a large number of reprints and other miscellaneous papers. Two hundred and eighty-six periodicals are subscribed to. It is expected that within the next few months, work will begin on the additions to the Administration Building, which among other things, will provide a very considerable additional space for the Medical Library. The space is greatly needed and the addition will be most welcome. The Patients' Circulating Library carried on a very active program with the aid of 12 volunteers. There are now 68,000 volumes in the library, with a gain during the current year of 3,950. Books are provided to the various wards, and a large number of additional programs are carried on, such as bookbinding, language lessons, typewriting and stenographic lessons, and book reviews.

BEHAVIORAL SCIENCES BRANCH

This Branch, set up during the current year, is operated in close coordination with the National Institute of Mental Health joint project previously mentioned. Eleven papers were published by members of the Branch during the year. This is the first year in which a separate appropriation has been made by the Congress for research at Saint Elizabeths Hospital.

SANITARY ENGINEERING BRANCH

This Branch carries out a number of important activites—insect and rodent control, inspection of food handling and service, among others.

Division of Administration

Unfortunately, space does not permit an enumeration of the various activities of the branches and sections in this division. They are varied and include such matters as financial, personnel, construction, engineering, grounds, purchasing and warehousing, laundry, dietary, budget, and maintenance. All of these sections have been extremely active during the year and highly efficient. Much is involved in the day-to-day maintenance of the physical plant of an institution of this size. In addition, various improvements have been carried out and some reconstruction. Work has been started on the Continued Treatment Building No. 9, and it is expected that within a few months construction will begin on the addition to the Administration Building. Planning is now under way for the Rehabilitation Building for which preliminary appropriations have already been made.

The employee development program should be mentioned as one which has contributed considerably to the efficiency of the employees. It has been actively utilized under the general supervision of the Personnel Branch.

Needs of the Hospital

In general, these may be summed up in the three words—personnel, buildings, and equipment. Although expansion of the capacity of the Hospital is probably not needed, many older buildings should be replaced in line with modern ideas. A salary scale competitive with those of the States and of other agencies of the Federal Government is urgently needed, especially for trained psychiatrists. Saint Elizabeths Hospital is a National institution, and should be a model for the States. This principle has already been recognized in part by the

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Congress, and the support of the Secretary of Health, Education, and Welfare in the national goals of the Hospital is deeply appreciated. Over 100 years ago, the Superintendent of Saint Elizabeths Hospital wrote, "A government establishment situated at the capital of the republic is in every respect a representative institution." Those words are equally true today. Saint Elizabeths has always aimed, and will continue to aim, at the goal expressed in the organic act, "the most humane care and enlightened curative treatment" of the mentally ill.

Table 1.—*Movement of patient population, fiscal year 1961*

	Total	Male			Female		
		White	Colored	Total	White	Colored	Total
Total number under care and treatment, fiscal year 1961	9,827	2,688	2,299	4,987	2,730	2,110	4,840
Remaining on rolls, June 30, 1960	7,846	2,134	1,760	3,894	2,234	1,718	3,952
Admitted during fiscal year 1961	1,981	554	539	1,093	496	392	888
Total discharged and deceased	1,835	520	421	941	555	339	894
Discharged	1,395	397	334	731	401	263	664
Conditions on discharge:							
Recovered	56	20	20	40	9	7	16
Social recovery	480	84	73	157	167	156	323
Improved	593	175	148	323	186	84	270
Unimproved	196	100	42	142	38	16	54
Worse	0	0	0	0	0	0	0
No mental disorder	67	17	49	66	1	0	1
Unknown	3	1	2	3	0	0	0
Deceased	440	123	87	210	154	76	230
Remaining on rolls, June 30, 1961	7,992	2,168	1,878	4,046	2,175	1,771	3,946
Corrections, change in sex and color	0	+1	−1	0	0	0	0
Adjusted on rolls, June 30, 1961	7,992	2,169	1,877	4,046	2,175	1,771	3,946
Absent on visit and elopement	1,128	168	260	428	299	401	700
Patients in hospital, June 30, 1961	6,864	2,001	1,617	3,618	1,876	1,370	3,246

Table 2.—*Consolidated statement of movement of patients, by classification, fiscal year 1961*

	Reimbursable patients								Nonreimbursable patients																		
	Total	Subtotal	Bureau of Indian Affairs	D.C. residents	D.C. voluntary	U.S. Soldiers' Home	Veterans' Administration	Other	Subtotal	Army	Bureau of Employees Compensation	Immigration and Naturalization Service	Bureau of National Homes	Canadian insane	Canal Zone	Coast Guard	D.C. nonresidents	Federal reservations	Foreign Service	Interned aliens	Marine Corps	Navy	D.C. prisoners (sexual psychopaths)	D.C. prisoners	Military prisoners	U.S. prisoners	Public Health Service	Virgin Islands
On rolls, June 30, 1960	7,846	6,220	58	5,494	228	48	386	6	1,626	197	2	2	2	53	16	15	275	38	8	4	17	69	63	594	23	81	38	129
Admitted to June 30, 1961	1,981	1,481	0	1,214	226	19	12	10	500	0	0	0	0	0	0	0	1	66	11	0	0	0	7	377	0	20	0	18
Separated, fiscal year 1961	1,835	1,214	13	947	157	16	72	9	621	6	1	0	0	2	0	1	259	62	9	0	3	2	5	230	1	21	10	9
Deaths	440	402	1	365	13	5	18	0	38	5	0	0	0	1	0	1	17	3	2	0	2	1	0	2	1	0	0	3
Discharges	1,395	812	12	582	144	11	54	9	583	1	1	0	0	1	0	0	242	59	7	0	1	1	5	228	0	21	10	6
On rolls, June 30, 1961	7,992	6,487	45	5,761	297	51	326	7	1,505	191	1	2	2	51	16	14	17	42	10	4	14	67	65	741	22	80	28	138
Changes in category	0	−222	----	−297	−5	----	+80	----	+222	----	+1	----	----	----	----	----	+296	−5	----	----	----	----	−1	−19	----	−50	----	----
Adjusted on rolls, June 30, 1961	7,992	6,265	45	5,464	292	51	406	7	1,727	191	2	2	2	51	16	14	313	37	10	4	14	67	64	722	22	30	28	138
On visits and elopement, June 30, 1961	1,128	947	----	726	140	11	64	6	181	----	----	----	----	----	----	----	72	18	4	----	----	1	24	58	----	----	----	4
In hospital, June 30, 1961	6,864	5,318	45	4,738	152	40	342	1	1,546	191	2	2	2	51	16	14	241	19	6	4	14	66	40	664	22	30	28	134
Total treated, fiscal year 1961	9,827	7,701	58	6,708	454	67	398	16	2,126	197	2	2	2	53	16	15	276	−104	19	4	17	69	70	971	23	−101	38	147

American Printing House for the Blind

As the official schoolbook printery for the blind in the United States, one of the principal functions of the American Printing House for the Blind, in Louisville, Ky., is the provision of special educational books and supplies for the blind school children throughout the country through the Federal Act "To Promote the Education of the Blind." This act, originally passed in 1879, authorizes an annual appropriation to the Printing House for this purpose. Allocations of books and materials are made on a per capita basis. Only those pupils may be registered whose vision comes within the accepted definition of blindness as follows: "Central visual acuity of 20/200 or less in the better eye with correcting glasses, or a peripheral field so contracted that the widest diameter of such field subtends an angular distance no greater than 20 degreees."

The Printing House maintains large catalogs of Braille books, Talking Books, recorded tapes, Braille music publications, large-type texts, and tangible apparatus. A rich collection of educational material is thereby provided for the kindergarten through the high school grades. A total of 7,396 blind pupils was enrolled in the residential schools for the blind and 7,366 in public schools—a total of 14,762 blind pupils being served by the Printing House—for the fiscal year ending June 30, 1961.

During the 1961 fiscal year, Braille books, educational periodicals, and music made up approximately 46.8 percent of the materials required by the schools; Braille slates, Braillewriters, maps, and other mechanical devices about 19 percent; Talking Books about 2.7 percent; recorded educational tapes about 1.5 percent; and large-type books about 28 percent. Approximately 3 percent was used for miscellaneous items.

Gallaudet College

GALLAUDET COLLEGE, established in 1857, is the only institution of higher learning in the world devoted exclusively to the education of the deaf. Public Law 420, 83d Congress, approved June 18, 1954, clearly defines its status as a college, its relationship with the Federal Government, and its responsibility to provide education and training to deaf persons and otherwise to further the education of the deaf.

KENDALL SCHOOL

Primary and secondary schooling is provided for deaf children in the Kendall School, which also serves as a laboratory school for teachers training in the college. The oral method of instruction is used for all pupils except those who make no progress under it. Enrollment last year was 94, of which 85 came from the District of Columbia.

GALLAUDET COLLEGE

In addition to the 4-year undergraduate college, Gallaudet offers a 1-year preparatory course which bridges the gap between the secondary schools for the deaf in the United States and the freshman class in the college. Deaf children of nursery age are taught in the Hearing and Speech Center. Elementary and secondary education for deaf children of the District of Columbia and adjacent States is provided by the Kendall School, a laboratory school serving the college's Department of Education. This department, established in 1891, trains graduate students, both deaf and hearing, for positions as teachers and administrators in schools for the deaf. For the past 4 years the college has offered a summer session for graduate students who wish to earn the master's degree in this field over a period of 4 years. Total enrollment in the college last year was 471, with students from 44 States, the District of Columbia, and 7 foreign countries.

In addition to instruction, the college is also engaged in basic and applied research into deafness. The Office of Psycho-Educational Research and the Office of Social and Environmental Research are concerned with psychological aspects of deafness and with the deaf person's relations to his society. In cooperation with the American

Speech and Hearing Association, the college publishes a quarterly journal of abstracts of current literature in the fields of deafness, speech, and hearing. Research into the communicative abilities of deaf people is a continuing function of the Hearing and Speech Center, as acoustics and electronics are a concern of the Department of Physics. Basic linguistic research into the language of signs used by deaf people has been undertaken for the first time at Gallaudet College and has been in progress for the past 4 years.

Howard University

HOWARD UNIVERSITY, located in the District of Columbia, was chartered by Act of Congress on March 2, 1867. The university offers programs of higher education on the undergraduate, graduate, and professional levels. Undergraduate students are registered in the college of liberal arts; graduate students seeking the master's and doctor of philosophy degrees are registered in the graduate school; professional students are registered in the colleges of medicine, dentistry, pharmacy, fine arts (of which the school of music and the departments of art and drama are parts) and the schools of engineering and architecture, social work, law, and religion. (The school of religion receives no support from Federal funds.)

The educational program of Howard University is conducted in keeping with the democratic purposes of the land-grant colleges and State universities with the low tuition fees and living costs which characterize these State institutions and with an educational program resting upon and permeated by the content and spirit of a general or liberal education. The university admits students of both sexes, from every race, creed, and national origin, but it accepts and undertakes to discharge a special responsibility for the admission and training of Negro students.

ENROLLMENT OF STUDENTS

During the school year 1960–61, the university served a total of 7,898 students as follows: 5,972 during the regular academic year and 1,926 in the summer session of 1960. The total net enrollment, excluding all duplicates, was 6,910, distributed in the 10 schools and colleges as follows: liberal arts, 3,472; graduate school, 723; engineering and architecture, 826; music, 316; social work, 135; dentistry, 722; medicine, 368; pharmacy, 179; law, 105; and religion, 64. This enrollment included a larger number of Negro professional students than in all universities of public support in all the Southern States combined.

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

Of a total of 6,340 students seeking degrees, 5,373, or 84.7 percent, came from 46 States and the District of Columbia while 967 students, or 15.3 percent, came from outside the continental United States including 2 possessions of the United States, 53 foreign countries, and 17 island possessions of the British, French, and Dutch West Indies. This percentage of foreign student enrollment was the largest in any American university.

The 5,373 students from the United States were distributed as follows: New England States, 92; Middle Atlantic States, 878; East North Central States, 321; West North Central States, 83; South Atlantic States, 3,218; East South Central States, 404; West South Central States, 319; Mountain States, 15; and Pacific States, 43.

The 967 students from outside the continental United States came from 53 foreign countries including Canada, 2 countries in the West Indies, 3 countries in Central America, 3 countries in South America, 10 countries in Europe, 15 countries in Africa, 19 countries in Asia and the Middle East, and 17 island possessions of the British, French, and Dutch West Indies.

VETERANS

During the 1960–61 school year, the student enrollment included 475 veterans receiving educational benefits from the Veterans Administration. These veterans were distributed among the 10 schools and colleges as follows: 217 in liberal arts, 31 in the graduate school, 6 in music, 80 in engineering and architecture, 11 in pharmacy, 43 in medicine, 59 in dentistry, 7 in social work, 18 in law, and 3 in religion.

ARMY AND AIR FORCE ROTC

Army ROTC.—There were 494 students enrolled in Army ROTC during the school year 1960–61. Of this number, 264 were in the first-year course, 137 were in the second year, 40 were in the third year, and 53 were in the fourth year. During the year, 36 students were commissioned as reserve officers in the Army.

Air Force ROTC.—There were 445 students enrolled in Air Force ROTC. Of this number, 256 were in the first-year course, 158 were in the second year, 16 were in the third year, and 15 were in the fourth year. During the year 13 students received commissions as reserve officers in the Air Force.

THE FACULTY

A total of 686 teachers served the university during the school year 1960–61. This number included 385 full-time teachers and 301 part-

time teachers. The full-time equivalent of the teaching staff was 457.3. Of this number, 408.3 were teaching in the rank of instructor and above.

From its establishment in 1867, the university has continued to have on its faculty the most learned and able men and women available, selected on the basis of their competence and character, without regard to sex, race, creed, color, or national origin. It was a major purpose of the founders of the university, however, to employ Negro teachers, among others, on every faculty. The Negro members of these faculties continue to constitute a larger group of professional teachers than all Negroes so employed in all other American universities combined. Many of the most outstanding Negroes in the public life of the United States have served on faculties of the university. Such persons include the founder and operator of the first blood-plasma bank, the first Negro governor of an American possession, the first Negro in the Secretariat of the United Nations, and the first Negro member of the United States Court of Appeals.

THE BUILDING PROGRAM

Construction was completed on the auditorium-fine arts building during the fall of 1960, and the building was put into operation at the beginning of the second semester of the 1960–61 school year.

Work was begun in the construction of the home economics building, which is expected to be ready for use at the beginning of the 1962–63 school year. This new building will contain 22,000 square feet of usable space and will provide facilities for work in the general areas of foods and nutrition, clothing and textiles, household furnishings and household equipment, and child development.

In addition, work was begun toward providing plans and specifications for a new classroom building for the college of liberal arts and a new women's residence hall.

GRADUATES

During the 1960–61 school year, there were 673 graduates from the 10 schools and colleges. These graduates came from 37 States, the District of Columbia, the Virgin Islands, Puerto Rico, 20 foreign countries, and 9 island possessions of the British and Dutch West Indies. These 20 foreign countries included Panama, British Guiana, Haiti, 7 countries in Africa, 7 countries in Asia and the Middle East, and 3 countries in Europe.

The 673 graduates were distributed among the 10 schools and colleges as follows: liberal arts, 304; engineering and architecture, 77; music, 15; the graduate school, 42; social work, 49; medicine, 83; den-

tistry, 48; dental hygiene, 5; pharmacy, 11; law, 24; and religion, 15. Three honorary degrees were also conferred.

Since its establishment in 1867, the university has graduated 22,443 persons. The large majority by far of these graduates have been Negroes. Their number represents a larger body of graduates in medicine, dentistry, pharmacy, engineering, music, law, and social work than the entire output of Negro professional graduates in all the publicly supported colleges and universities in the South.

The largest number of graduates has entered the field of teaching, primarily in the Southern States. In the field of medicine there have been 3,167 graduates; 2,479 have entered the practice of dentistry and dental hygiene; 2,433 have entered the field of law; 812 have entered the ministry; 861 have gone into engineering and architecture; and 528 have entered the field of social work. In addition, a large number of graduates has been engaged in government activities.

SERVICE IN FOREIGN COUNTRIES

Teachers and students from Howard University have continued to render distinguished service in foreign countries. They have worked and studied in many parts of the world including West Germany, Italy, Israel, Iran, Iraq, India, Ceylon, Burma, Vietnam, Japan, Indonesia, Egypt, Ethiopia, the Sudan, Kenya, Liberia, Ghana, Nigeria, the Congo, the British West Indies, and British Guiana. Fulbright scholars from Howard University have served in such countries as England, France, Norway, Sweden, Denmark, Italy, Greece, Egypt, Iraq, India, and Ghana.

During the year 1960–61 a number of members of the staff worked abroad in various capacities. The dean of the school of social work served as visiting lecturer and consultant on social work education at the University College of the West Indies. The dean of the college of medicine served as adviser on medical education to aid American and Vietnamese architects in designing a medical center for the faculty of medicine and pharmacy at the University of Saigon. The head of the department of preventive medicine and public health acted as a medical consultant for the United States Operations Mission in Ghana. A professor of architecture completed 2 years of service as architecture-engineering education adviser of the United States Operations Mission in the Sudan.

In September 1960 the university choir completed a tour of more than 11 weeks, during which it visited and gave performances in 18 countries and 34 cities of South and Central America. Some 75,000 Colombians heard the singers during their 2 days in Bogota; 12,000 were on hand for a concert at Mexico City; 10,000 in Buenos Aires; and a standing-room-only audience of 9,000 at Fortaleza, Brazil.

Among the comments made by the press regarding the appearances of the choir, "El Universal" of Mexico City described a performance as "one of the greatest musical events to be applauded by the Mexican capital in the last decade." "El Nacional" of Caracas stated that "this choir should give all Venezuelan students a great example of young, artistic unity, of love for music and culture."

It is apparent that by their services and performances abroad, both students and faculty are continuing to make a valuable contribution to international understanding and are aiding in the improvement of relationships with people in many parts of the world.

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Annual Report **1962**

UNITED STATES DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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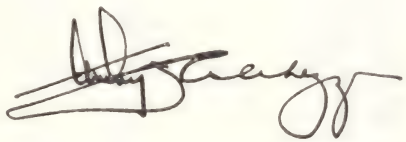
Letter of Transmittal

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Washington, D.C., December 1, 1962.

DEAR MR. PRESIDENT: I have the honor to submit herewith the annual report of the Department of Health, Education, and Welfare for the fiscal year ending June 30, 1962.

Respectfully,

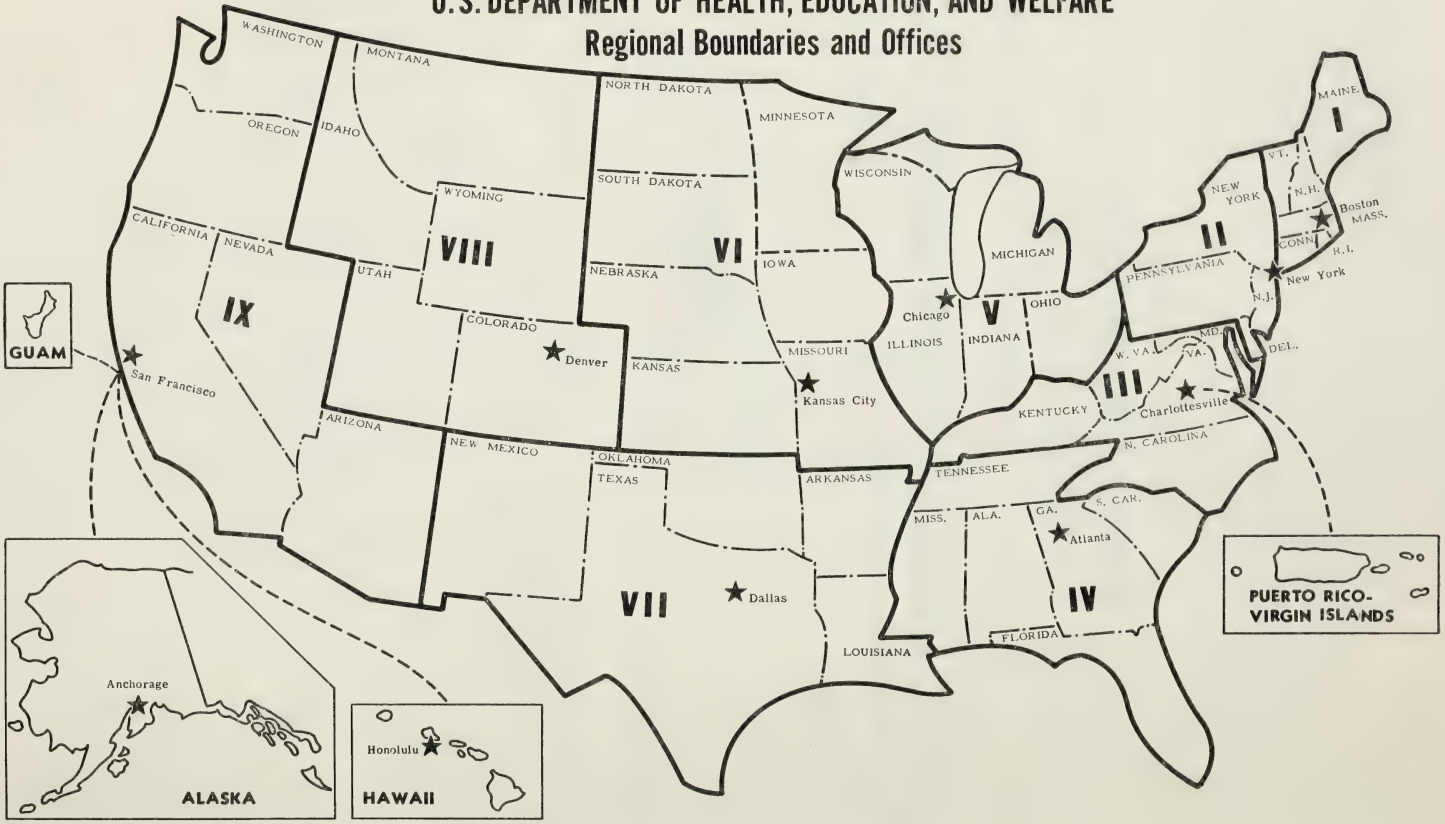


Secretary.

THE PRESIDENT,
THE WHITE HOUSE,
Washington, D.C.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Regional Boundaries and Offices



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A detailed listing of the contents of this report, by topic headings, will be found on pages 421–433

Anthony J. Celebrezze of Cleveland, Ohio, was nominated by the President on July 16, 1962, as the new Secretary of Health, Education, and Welfare. He was confirmed by the Senate on July 20, 1962, and was sworn in by the President on July 31, 1962. He replaced Abraham Ribicoff of Connecticut.

The Secretary's Report

THE DIMENSIONS of progress are varied and changing, and the measure of progress an intricate task. It requires looking both to the past and to the future.

This report reflects the many dimensions of progress in the Department of Health, Education, and Welfare during the fiscal year 1962. Looking back over a year of effort, it seeks to measure advances in health, education, and welfare through the Department's 112 programs. It tries also to assess the present and to anticipate the future—to identify shortcomings, realign perspectives, and to fix new sights.

To Promote the General Welfare

The responsibility of this Department—simply stated—is to help promote the general welfare of the 185 million men, women, and children who make up our national family. It is concerned with their present well-being—their hope for the future. Its constant aim is to improve the conditions of life in which we all share, to enlarge the capacity of individuals to create for themselves and their society a good—a better—life.

This is no simple task, for the conditions of modern life are increasingly complex and the problems affecting our national well-being seldom are easily solved.

We are living in an era of change—rapid, revolutionary change—in which the patterns of relationships between man and his environment and between man and his fellow man are in process of transformation. We are living in a time in which new concepts and new technologies are born in such swift succession that the stability of a society is no longer measured by its constancy but by its ability to move and adapt itself to the new conditions it has created.

The great surge forward in science and technology has not been accompanied by an equal advance in the conditions of human welfare. Social progress lags behind the achievements of our scientists and technicians.

Science has given us powerful new tools for the conquest of disease and the further expansion of human knowledge, but it has also presented mankind with new problems and new perils. The swift advance of technology in agriculture and industry has brought new prosperity to our people—new comforts and new wealth—but the increased efficiency of machinery, which brings us better products at reduced cost, has created severe personal problems for workers whose skills are displaced or made obsolete.

The extension of the average lifespan from 47 years at the beginning of this century to a record 70 years is a notable achievement, but the value of this progress in human terms is diminished by the fact that these added years of life do not always bring added years of happiness.

Our population growth, the expansion of knowledge, the unleashing of nuclear power to build or to destroy, the economic and technical revolutions of the 20th century—all these are among the complicating factors which contribute to the massive problems involved in our effort to "promote the general welfare."

This Department's approach to these problems is at once positive and constructive. It combines humanity and commonsense. It is rooted in the traditional American respect for independence and self-reliance. It seeks to lift the shackles that bind and handicap an individual, that prevent him from accomplishing all that he might be capable of.

In short, we view our responsibility as guarding and conserving the human resources of this Nation—protecting the well-being of the individual citizens whose combined strength is the measure of our national strength today and in the generations to come.

Organization for Action

Since its establishment in 1953, the Department has exercised its responsibilities through five major operating agencies: The Public Health Service, the Office of Education, the Social Security Administration, the Food and Drug Administration, and the Office of Vocational Rehabilitation. Late in 1962 plans were announced for the establishment of a sixth major agency—the Welfare Administration—to bring together the Department's principal welfare programs under the direction of a new Federal Commissioner of Welfare. Programs concerned with the welfare of children, the aging, and families and individuals in need had previously been attached to the Social

Security Administration or to the Secretary's immediate office. Their regrouping under a central Welfare Administration reflects the new responsibilities placed on the Federal-State welfare programs by the Public Welfare Amendments of 1962 and the need for full-time leadership and direction for both the welfare and social security programs to insure their careful administration. The old-age, survivors, and disability insurance program, which now employs nearly half the Department's personnel, will have top-level administrative status as the primary mission of the Social Security Administration.

The work of all these agencies involves 112 separate programs and, in 1962, accounted for a total Federal expenditure of nearly $4.5 billion. Some of these programs—such as social security and the inspection of food and drugs—are carried out directly by the Department. The majority of the Department's programs, however, are cooperative undertakings with the States which share our responsibilities for the welfare of the people.

Most of the Department's money goes out across the country in the form of grants to the States, local communities, and institutions to support local projects in health, education, and welfare, and to aid in research that promises new benefits to all people. In 1962 almost 90 percent of its budget was devoted to these purposes. The largest single expenditure was in grants for public assistance.

We do not work alone, and neither do we seek to dictate policies or to control the actions of responsible agencies—public or private—which have joined with us in this broad effort on behalf of all the American people. The fundamental philosophy underlying all the Department's programs is one of respecting, preserving, and encouraging local initiative—for here lies the true strength of America. We provide the mechanisms for cooperative action on health, education, and welfare programs throughout the land. We respond to local needs wherever possible with money and expert technical assistance. The success of our undertakings is determined not by how many programs we administer or how much money we expend but by the degree of cooperation we achieve with States and communities and with public-spirited organizations and individuals in all walks of life.

Past as Prologue

The work of the Department is based on two fundamental concepts: (1) the prevention of human suffering and waste of human potential, and (2) the rehabilitation and restoration to productive capacity of individuals who have fallen victim to the age-old scourges of disease and poverty or to newer hardships born of progress.

Our programs of prevention and rehabilitation reach across all fields of endeavor. In the field of health this kind of activity has long been familiar to the public through the efforts of the Public Health Service to control or eliminate the agents of disease. For many years the Public Health Service has worked to help insure the physical well-being of the American people through improved sanitation, accident prevention campaigns, mass inoculations against contagious diseases, insect eradication programs, and other measures essentially preventive in character. Today these programs have been extended to meet new health hazards created by man himself—among them the contamination of our atmosphere by automobile exhaust fumes and radioactive fallout, and the pollution of our waterways by manmade chemicals which have come to plague as well as protect us.

The Food and Drug Administration, too, has long played a protective role in guarding the Nation's health. Its ward is the consumer; its statutory responsibility is the protection of the public against unsafe drugs and cosmetics, contaminated foods, medical quackery, and dishonest labeling of commercial products. In many ways it serves to complement and reinforce the preventive measures of its sister agency, the Public Health Service.

The concept of rehabilitation as a public responsibility and as sound public welfare policy has been successfully pioneered by the Office of Vocational Rehabilitation in close cooperation with State agencies. This joint Federal-State program has demonstrated beyond all doubt the enormous gains in personal happiness and economic well-being that are possible for both the individual and the Nation when disabled or handicapped persons are given the opportunity to reduce their impairments, to learn new skills, to find useful employment, and to take their places as self-supporting, self-reliant members of society.

Progress—1962

In 1962 this pattern of prevention, protection, and rehabilitation was carried further into the fields of education and welfare. In this way, we have begun to knit together allied programs in separate fields, giving to each and to all greater strength and effectiveness.

Adequate education, for example, is a concept as old as civilization itself: the idea that man must learn in childhood and adolescence to provide for himself and his family in adult life. In this modern age, an individual's ability to work, to earn a living, and to enjoy the cultural benefits of the world around him depend in large part

on formal education and training. Without the basic educational skills—reading, writing, and simple arithmetic—he cannot carry out his responsibilities as a worker, a parent, and a citizen. In today's highly developed industrial society, individuals with educational deficiencies are the last to be hired and the first to be fired. Among their ranks is found the greatest incidence of disease, poverty, and crime. They make up the largest number of public welfare recipients.

Our new look in welfare, then, involves preventive health measures; adequate education; rehabilitation programs for those with physical, emotional, or educational handicaps—and, undergirding all this, a new emphasis on family and community services. These efforts require a degree of cooperation within the Department and among State, local, and private welfare agencies never before attempted on such a broad scale. Actually, there is hardly a program in the Department that is not concerned in one way or another with helping to reduce dependency—helping every citizen, old and young, to achieve the sense of personal security that is the foundation of freedom.

Building upon the past and laying new foundations for the future we have strengthened the Department's program on many fronts and in many fields:

—A focal point for cooperative health services was established with the creation of a new Division of Community Health Services in the Public Health Service. This new administrative unit works with local communities to help find ways to coordinate public and private health and medical services, and to improve and expand preventive, curative, and restorative services wherever they are needed. Under the Community Health Services and Facilities Act of 1961, we have been able to support widespread research on ways to improve out-of-hospital services, particularly for the aged and the chronically ill.

—In the vast area of medical research important gains have been made in our continuing quest for deeper understanding of the complex processes of life. The partial cracking of the "genetic code" by scientists at the National Institutes of Health and elsewhere has brought us to the threshold of understanding long-hidden mysteries involved in the systematic reproduction of all living matter and bears far-reaching implications for the future health and well-being of mankind.

—A National Institute of Child Health and Human Development was created by the Congress to provide a central facility for research on unsolved problems relating to child health, maternal health, prenatal development, and aging. At the same time the Division of General Medical Sciences was elevated to Institute status, giving added recognition to a Federal program which supports research in sciences basic to medicine and biology.

—In the area of environmental health, additional safeguards were established to protect the public from the growing dangers of air and water pollution.

Amendments to the Federal Water Pollution Control Act have enabled us to increase the amount of Federal aid to States and municipalities for construction of sewage-treatment plants so that 754 projects received Federal funds in 1962, compared with 590 the previous year. The new amendments also strengthened the enforcement provisions of the act and provided for an expanded program of research to find new ways of combating this national health menace.

New protective measures against air pollution were put into effect, and surveillance programs were intensified. An important step toward clearing the air—particularly in urban areas—was an agreement by automobile manufacturers to install blowby devices on all 1963 model cars to help reduce the amount of potentially harmful exhaust fumes from the millions of automobiles traveling the Nation's roadways.

The Federal-State Radiation Surveillance Network, which monitors the level of radioactive fallout throughout the country, was expanded from 45 to more than 65 stations, and, with the resumption of nuclear weapons testing by the U.S.S.R. in the fall, all stations were placed on a round-the-clock schedule.

—Additional protection for the consumer was provided by important changes in regulations under the Food, Drug, and Cosmetic Act. Among these are requirements for more complete and accurate information on the dangers as well as the usefulness of prescription drugs, revised inspection procedures to insure their purity, and strengthened controls over testing in clinical trials. Public attention was focused on the need for these changes when a new drug, thalidomide—which may produce tragic deformities in babies when taken by mothers during pregnancy—was widely used in clinical investigations in spite of the fact that it had been withheld from the market because its safety was questioned by Dr. Frances O. Kelsey, the responsible Federal review officer. New legislation to provide more adequate authority to control the manufacture and marketing of drugs was enacted by the Congress.

—Wider enforcement of food and drug laws covering the amount of toxic residues that may safely remain on raw foods was made possible by an increase in the FDA inspection staff and the development of improved methods of detecting and measuring agricultural poisons. Still, inspections cover only a minute fraction of the total 2½ million annual interstate shipments of fresh fruit and vegetables. Before the end of next year, by more than tripling the current number of samplings, we will bring our inspection coverage up to 1 percent

of all shipments. Appraisal of the results of this intensified program will enable us to determine whether a still further increase in the sampling and inspection coverage is necessary to assure protection of the public from unsafe residues on foods.

—A concerted effort was made to alert the public to frauds connected with medical and nutritional quackery, which cost the American consumer an estimated $1 billion a year. New regulations have been proposed on labeling of special dietary foods to prevent exploitation of the consumer by false or misleading claims. In addition, the first National Congress on Medical Quackery was called in October and brought together representatives from private and Government agencies and the communications media to design special information projects to protect the public from hucksters of pseudomedicine.

—Programs to alleviate the problems faced by the Nation's 17.5 million senior citizens have been strengthened throughout the Department. The Special Staff on Aging was doubled in size and given an increased budget so that it could better coordinate our programs on aging and provide special services to State, community, and voluntary organizations working in this field. A 29-member panel of nationally known specialists was appointed to advise the Secretary on problems of the aging, and, upon the recommendation of this Department, a President's Council on Aging was established in May 1962 to coordinate all Federal programs in this field.

—The new amendments to our welfare laws, coupled with sweeping administrative changes in the public assistance program, have allowed us to make substantial progress in the welfare field. The newly designated Bureau of Family Services now offers a family-centered approach to welfare problems and provides a broader framework for preventive and rehabilitative services designed to help move people off the welfare rolls. Special stress has been brought to bear on meeting problems of illegitimacy, desertion, and protection of children, and on community planning responsibilities.

—There has been broad and significant expansion of child health and welfare services. Increased appropriations for 1962 permitted States to expand and extend maternal and child health, crippled children's, and child welfare services. For the first time, in 1962, Federal funds were made available for research and demonstration projects in child welfare. The 1960 amendments to the child health and crippled children's provisions, to permit special project grants to be made directly to institutions of higher education, were also implemented in 1962.

The 1962 amendments to the Social Security Act represent the most important changes in the child welfare program since 1935. These

changes provide for gradually doubling the amount authorized for annual appropriations from $25 million to $50 million per year; for special project grants for training personnel in the field of child welfare, including traineeships, so that insofar as it is possible there will be full geographical coverage in the child welfare services field by July 1, 1975; and for earmarking up to $10 million of Federal child welfare funds for day-care services. Since no supplemental appropriation for day-care services during fiscal 1963 was made before Congress adjourned, this latter provision has not been implemented.

—Several important improvements were made in the old-age, survivors, and disability insurance program by the 1961 amendments to the Social Security Act. A reduction in eligibility requirements for insurance benefits brought additional thousands of elderly persons under the protective shield of social security. The new amendments increased the minimum benefits paid to retired workers in general, and increased aged widows' benefits by 10 percent. They also lowered the retirement age for men from 65 to 62 and gave added incentive to workers to continue part-time employment after retirement.

—In the field of education, although legislation to give much needed assistance to the States and to higher education failed, notable progress was made in our drive to stimulate new efforts toward excellence in the Nation's schools and colleges. A stepped-up research and development program in the field of English has set the pace for a new national appraisal of instruction in this basic subject and serves to complement the very successful programs for expansion and improvement of instruction in mathematics, science, and foreign languages operating under the National Defense Education Act.

—The passage of the Manpower Development and Training Act in March 1962 was a singular achievement in vocational education and carries important implications for the future. Here vocational education is being supported by the Federal Government on a broad national scale in an attempt to solve the problem of unemployment and consequent dependency among workers with obsolete skills or limited educational attainment. At the same time, this legislation has stimulated new approaches to the entire field of vocational and technical training. Under this program, vocational training is being directed to specific jobs in fields where manpower is in short supply. The whole field of vocational and technical education and its relationship to national manpower needs was under study during the year by a special panel of national representatives from industry, labor, and education. Their recommendations for new directions in vocational education were presented near the end of the year and provide a basis for reshaping the Federal vocational acts and the programs to which they are directed.

—The Federal-State vocational rehabilitation program passed an important milestone this year by providing physical restoration, new skills, and economic independence to more than 100,000 disabled persons. This marks the passage of the halfway post on the road to 200,000 rehabilitations a year—a goal set for the program when the rehabilitation legislation was enacted in 1954. The Office of Vocational Rehabilitation, which administers this program, was renamed the "Vocational Rehabilitation Administration" early in 1963, and its head was given the title of "Commissioner of Vocational Rehabilitation."

—Efforts to prevent and cure juvenile delinquency have been stepped up during the year under the overall direction of the President's Committee on Juvenile Delinquency and Youth Crime, which consists of the Attorney General, the Secretary of Labor, and the Secretary of Health, Education, and Welfare. Grants under the Juvenile Delinquency and Youth Offenses Control Act of 1961 have been made to support 15 community planning projects in which cities are preparing broad action programs, 26 training programs for youth workers, and a major demonstration project—the Mobilization for Youth program in New York's lower East Side. Under the direction and coordination of the President's Committee, Federal youth-service agencies—including those of this Department—are giving technical assistance to the communities which have received grants under the act.

—By the end of 1962, over 155,000 Cuban refugees who had fled the Castro regime had registered at the Department's Cuban Refugee Center in Miami and had been provided with a variety of health, welfare, educational, and employment services. As the result of an intensive campaign conducted by the Department, with the assistance of a number of volunteer agencies, more than 52,000 of these refugees have been resettled in over 1,100 communities throughout the Nation, where they have opportunities to put their skills to use, to continue their education, and to build new lives for themselves during their exile from their homeland. The urgent need for continued resettlement efforts is underlined by the fact that two out of three of the 100,000 refugees still in the Miami area require public assistance because of the limited job opportunities there.

Tasks for Tomorrow

Against the backdrop of the past, it can truthfully be said that the American people have never been as well served—in health, education, and welfare—as they are today. But comparison with the past is an imperfect measure of progress, for we are living in a changing

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present and we face an uncertain future. Our efforts of today merge with our tasks for tomorrow—and with our hopes for a better life for ourselves and our posterity.

We are not content to see the costly burden of medical care clouding the latter years of life for most of the Nation's 17.5 million people over the age of 65. The high and still-rising costs of illness in old age present a fearful specter to our older people—and to their families—for when illness strikes the elderly it can reduce otherwise independent people to poverty almost overnight. The problem we must resolve is how to provide needed health services to all older people—how to prevent illness from forcing them into the poverty and dependency which can tarnish the "golden years" of life. This administration's proposed solution to this problem is a program of health insurance for the aged, financed through social security—a plan which would make it possible for people to acquire paid-up health insurance at age 65 through small regular contributions during their working years. In addition, we will continue to encourage those States that have not done so to establish medical assistance plans for the aged under the Kerr-Mills Act of 1960.

We do not accept as inevitable and insoluble the appalling waste of human lives and the incalculable cost and suffering resulting from mental retardation among some 5.4 million American children and adults. We recognize the need to concentrate greater effort on research into the causes and prevention of mental retardation, as well as the need to make better use of our present resources and present knowledge. With the report of the President's Panel on Mental Retardation serving as a blueprint, we plan to establish a comprehensive, long-range program to prevent, treat, and alleviate this major national problem.

We are not content with our national posture in the field of education, and we will continue to press for measures to strengthen our schools and colleges. We have long recognized our obligation to protect the public interest in matters regarding public health and the quality, safety, and effectiveness of such tangibles as foods, drugs, and cosmetics. Education—although it is not manufactured, packaged, and labeled—is no less tangible a commodity for public use and no less vital to the Nation's well-being. If our young people are shortchanged in the quality of education they receive and if their educational opportunities are limited, the Nation as a whole suffers—in loss of talent and productive energy, in blighted hopes and wasted lives.

Adequate education, then, is an essential corollary to preventive measures in health and welfare. It involves increased efforts to wipe out adult illiteracy and to provide the American people—young and

adult—with the skills and knowledge essential for independent, productive lives. It requires broad retraining opportunities for men and women whose skills are made obsolete by technological advances. It calls for measures to eliminate the financial barriers to higher education for young people of limited resources but unusual ability. It means putting an end to discriminatory practices in education. It means increased attention to the quality of education our children receive. It means assurance that adequate space is available in our schools and colleges, that the schools are staffed with a sufficient number of well-trained teachers, and that the tools of education—materials and equipment—are up to date.

We are dissatisfied with our present efforts in accident prevention and public safety. During 1961 alone, 45 million people suffered accidental injuries—from motor vehicles, home accidents, poisoning, and other causes. Accidents are the fourth leading cause of death for Americans of all ages, following heart disease, cancer, and stroke. For persons aged 1–35, accidents are the leading cause of death. We believe that this needless source of human suffering—this appalling waste of life—can and must be prevented. Just as research and technology have provided us protection against the fatal and crippling effects of disease, so must they now seek out and define the real causes of accidents and develop new means of prevention.

A similar program of research and prevention needs to be launched against the problems of alcoholism and drug addiction. These costly and debilitating afflictions, which strike alike at rich and poor, have for too long been shrouded with mystery and misunderstanding. Much more can and should be done by health, education, and welfare agencies to aid in their prevention and control.

We are, in fact, not satisfied with resting on our accomplishments in any field or any program. Too many questions remain unanswered; too many problems remain unsolved.

How we ourselves have fulfilled the public trust is the final dimension to our measure of progress. We are acutely aware of the huge responsibility we bear to the American public for effective, efficient administration of the programs entrusted to our care. We are responsible for the investment of billions of dollars of public funds, and we bear a continuing responsibility to see that the public receives full returns on its investment. This means efficient management of our programs, careful expenditure of the tax dollar, resourceful use of our personnel, effective coordination among our agencies.

It is not possible in this fast-moving age to stop and say we are done. We can only pause from time to time to say that we have begun—knowing that other beginnings, other tasks, await our attention tomorrow.

Table 1.—*Grants to States: Total grants under all Department of Health, Education, and Welfare programs, fiscal year 1962*

[On checks-issued basis]

States	Tota	Social Security Administration	Public Health Service [1]	Office of Education	Office of Vocational Rehabilitation	American Printing House for the Blind [2]	White House Conference on Aging
Total	$3,217,801,775	$2,498,729,820	$255,670,997	$397,674,578	$65,077,625	$680,000	−$31,245
Alabama	90,078,370	72,690,489	5,565,156	9,249,636	2,560,487	12,602	
Alaska	15,089,559	2,273,273	4,032,144	8,667,002	117,704		−564
Arizona	27,488,912	18,027,287	2,303,172	6,592,762	559,730	5,961	
Arkansas	50,462,654	37,466,788	5,548,279	5,487,674	1,953,272	6,641	
California	330,628,600	266,248,284	11,732,450	49,252,341	3,333,797	61,728	
Colorado	56,341,752	42,477,847	2,963,365	10,160,191	734,068	6,281	
Connecticut	29,170,597	22,258,445	1,783,150	4,721,344	393,050	15,002	−394
Delaware	6,078,610	3,297,747	1,287,446	1,323,575	174,095	1,920	−6,173
District of Columbia	12,633,261	10,951,274	1,048,797	348,393	283,157	1,640	
Florida	84,899,464	64,606,081	7,761,615	10,111,498	2,401,748	18,522	
Georgia	92,888,391	71,336,812	8,304,343	9,707,697	3,522,857	16,682	
Hawaii	18,032,719	5,434,941	2,163,912	9,978,681	452,465	2,720	
Idaho	13,883,734	9,240,087	1,934,579	2,481,514	230,010	1,120	−3,576
Illinois	144,403,814	123,855,813	8,437,084	9,530,681	2,550,552	29,684	
Indiana	38,120,325	28,297,812	5,172,921	4,025,773	610,777	13,042	
Iowa	43,068,207	34,043,994	4,596,555	3,387,133	1,033,524	7,001	
Kansas	40,941,438	28,334,260	3,919,323	7,862,532	817,082	8,241	
Kentucky	64,676,368	53,919,970	6,075,229	3,884,331	792,231	7,281	−2,674
Louisiana	130,581,384	120,785,880	4,508,469	3,199,848	2,075,946	11,241	
Maine	19,592,253	14,700,171	1,541,439	2,996,998	352,045	1,600	
Maryland	40,504,810	23,810,276	4,330,878	11,639,456	710,078	14,122	
Massachusetts	98,859,859	80,327,783	5,256,330	11,867,828	1,382,419	26,483	−984
Michigan	97,099,575	77,806,289	7,958,318	9,671,211	1,636,747	28,124	−1,114
Minnesota	53,438,422	43,873,938	5,094,442	3,195,155	1,263,766	11,121	
Mississippi	51,699,232	39,824,141	6,842,519	3,881,011	1,144,840	6,721	
Missouri	105,081,945	91,722,344	5,919,687	6,148,591	1,280,402	10,921	
Montana	11,869,195	6,846,659	1,503,835	3,187,370	329,211	2,120	
Nebraska	22,491,446	15,478,274	1,958,477	4,612,366	439,899	3,761	−1,331
Nevada	7,150,762	3,141,089	1,323,068	2,599,947	85,818	840	
New Hampshire	9,024,148	5,227,501	1,640,136	2,017,355	142,710	1,960	−5,514
New Jersey	50,924,167	35,643,240	5,046,480	8,931,557	1,278,607	24,283	
New Mexico	28,265,892	17,734,091	2,713,192	7,544,939	269,229	4,441	
New York	249,136,174	214,468,265	14,735,094	14,982,889	4,888,358	61,568	
North Carolina	83,293,191	63,244,124	8,376,818	9,066,815	2,585,752	19,682	
North Dakota	14,686,441	9,160,921	2,661,535	2,462,995	399,710	1,280	
Ohio	121,243,198	98,027,086	8,986,488	12,538,008	1,659,652	31,964	
Oklahoma	105,822,373	89,715,142	4,238,034	10,305,571	1,559,545	4,081	
Oregon	29,529,064	22,660,650	2,836,451	3,324,094	699,028	8,841	
Pennsylvania	141,656,989	111,600,418	13,525,561	10,950,904	5,533,700	46,406	
Rhode Island	17,350,470	12,698,724	1,443,062	2,760,116	445,288	3,280	
South Carolina	38,037,801	24,043,689	6,032,868	6,583,910	1,370,333	7,001	
South Dakota	15,849,441	9,659,013	1,929,610	3,952,873	305,945	2,000	
Tennessee	61,232,582	46,836,688	7,067,078	5,487,145	1,829,469	12,202	
Texas	178,301,681	142,790,014	14,164,483	19,307,414	2,016,287	23,483	
Utah	16,522,808	11,165,007	1,384,575	3,685,580	292,040	2,840	−7,234
Vermont	7,417,059	5,354,638	1,077,820	736,501	247,260	840	
Virginia	52,871,969	24,362,816	8,327,140	18,665,073	1,503,138	13,802	
Washington	61,777,796	45,864,424	3,152,190	11,870,037	879,437	11,962	−254
West Virginia	52,076,932	45,817,432	2,745,407	1,920,531	1,585,399	8,561	−398
Wisconsin	46,333,301	34,905,620	5,726,305	4,558,708	1,132,416	11,001	−749
Wyoming	5,780,851	3,265,806	718,977	1,679,842	115,066	1,160	
Canal Zone	128,491	128,411				80	
Guam	8,383,981	1,750,669	4,803,740	1,762,498	67,074		
Puerto Rico	13,381,232	9,223,612	1,401,617	1,730,009	1,022,907	3,160	−73
Virgin Islands	604,680	303,771	69,354	204,270	27,498		−213
Undistributed	10,913,405			10,872,405		41,000	

[1] Excludes $252,447 paid to water pollution interstate agencies.
[2] Includes permanent annual appropriation of $10,000.

Social Security Administration

Social Security in 1962

Significant new emphases stemming from the conviction that we can and must do more to shape our public welfare programs toward the goals of preventing and reducing dependency marked developments during fiscal year 1962. That conviction and the emphases it generated found concrete expression in actions on a broad front—in legislative developments, in administrative changes, and in new directions in social welfare research.

Achievement of a new emphasis in public welfare began with a comprehensive review of the public welfare programs of the Social Security Act. State and local welfare officials and leaders in voluntary organizations contributed to the study. This activity culminated in a number of administrative changes, detailed in subsequent sections of this report, and in the development of legislative proposals for submittal to Congress. The proposals were embodied in the Public Welfare Amendments of 1962, enacted shortly after the close of the fiscal year.

The amendments emphasize provision of services to help families become self-sufficient. The States will be enabled to provide incentives that will contribute to reduction in the need for continued public assistance. This approach recognizes the importance of rehabilitation in helping welfare recipients better to be able to care for themselves and, wherever possible, to become self-supporting.

The amendments also have the objective of maintaining and strengthening family life for children. In addition, emphasis is placed on training to increase the supply of adequately qualified public welfare personnel to provide some of the services that can help to reduce the need for and the cost of the public assistance programs.

Signifying the increased emphasis on the importance of welfare services directed toward strengthening family life and the self-reliance of individuals, the name of the Bureau of Public Assistance was changed to Bureau of Family Services effective January 1, 1962.

Other action on the administrative and legislative fronts that made our social security programs better suited to serving the Nation's

social and economic needs included implementation of the Social Security Amendments of 1961. Provisions of the 1961 amendments reduced some of the hardships resulting from old age, disability, or death of the family wage-earner by liberalizing the Federal old-age, survivors, and disability insurance program and by increasing Federal sharing in State assistance payments to the aged, the blind, and the disabled. Also, under the provisions of Public Law 87–31, 15 States extended the coverage of their aid to dependent children programs to help children of unemployed parents. The Public Welfare Amendments of 1962 included a provision making Federal funds available for such aid through fiscal year 1967.

The Juvenile Delinquency and Youth Offenses Control Act of 1961 authorized a 3-year program that provides for (1) grants to finance projects that will demonstrate and evaluate techniques and practices for the prevention and control of juvenile delinquency and youth offenses, (2) grants for the training of personnel, and (3) technical assistance services to public and private agencies working in this field. Funds were appropriated and the program was put into effect before the end of calendar year 1961.

Although important social security legislation was passed and implemented, the President's proposal for adding health insurance for the aged to the protection provided by the old-age, survivors, and disability insurance program was tabled in the Senate and remained a major issue. Continuing efforts were made to improve and extend the medical care available to needy aged persons through the regular old-age assistance program and the more recently enacted medical assistance for the aged program. But "social security protection, financed by payments made during the working years, supplemented by private programs and backed up by the Federal-State public assistance provisions for medical care," said the Secretary of Health, Education, and Welfare, "is the only way to a truly effective solution of the problem." President Kennedy announced that a bill incorporating this approach to meeting the problems arising from the costs of health care in old age would be introduced again early in the next session of Congress.

In the Social Security Administration's research program, emphasis on searching out the causes of dependency was continued from previous years.

The absence of a research effort having as its main focus increased knowledge relating to the prevention or reduction of dependency was long cited by the Social Security Administration as a major gap in the total research effort in this country. The 1956 amendments to the Social Security Act provided authorization for a program of research and demonstration grants to help fill this gap. It was not until Sep-

tember 1960, however, that funds were appropriated to implement the program. At the close of fiscal year 1962, the Social Security Administration had made thirty-nine grant awards totaling more than $1 million to educational institutions, public agencies, and other nonprofit organizations for a broad range of research of significance to social security programs and social welfare.

Federal funds for a new program of child welfare research and demonstration grants were made available for the first time in 1962. The purpose of this grant program, which was authorized by Congress in 1960, is to provide support for (1) special research and demonstration projects in the field of child welfare that are of regional or national significance, and (2) special projects for the demonstration of new methods or facilities that show promise of substantial contribution to the advancement of child welfare. Seventeen grant awards were approved for the fiscal year.

A new international cooperative social welfare research program of the Social Security Administration is reported on in the section on international activities.

The intramural research activities of the Social Security Administration were strengthened during 1962 by steps taken in accordance with the recommendations of an advisory group of experts from outside Government. The major recommendation of the group in its August 1961 report to the Commissioner of Social Security was for the creation of a new unit in the Division of Program Research in the Commissioner's Office with responsibility for long-range research, that is, research into fundamental questions relating to the nature of poverty and insecurity in modern society, the character and dimensions of poverty, and the social and other factors involving dependency and independence.

A continuing advisory committee on research development established on the recommendation of the expert group met for the first time toward the fiscal year's close. The purpose of the committee is to assist the Commissioner in formulating a research program for the Social Security Administration—including the work of the new long-range research unit—and in stimulating close working relationships with research personnel in universities and private research centers.

Work was initiated on another major research project—a nationwide cross-section survey of persons 62 years and over, designed to provide information on the demographic characteristics, living arrangements, economic circumstances, and health care costs of old-age, survivors, and disability insurance beneficiaries and other aged persons. Among other uses, the survey will help meet the detailed information needs of the Statutory Advisory Council on Social Security, which will be appointed in calendar year 1963. It will, in addi-

tion, provide much of the information requested by the 29-member Panel of Consultants on Aging to the Secretary of Health, Education, and Welfare. As a supplement to this study, similar information on social and economic circumstances will be obtained for a sample of mother-child beneficiaries under the old-age, survivors, and disability insurance program. Field collection and tabulation will be undertaken by the Bureau of the Census under contract with the Social Security Administration.

At the end of fiscal year 1962, social insurance, related payments, and public assistance accounted for about 7 percent of total personal income in the United States. The social insurance and related payments portion amounted to $27.2 billion on a seasonally adjusted annual basis. The payments went to beneficiaries covered by public retirement, disability, unemployment, and veterans' programs and included benefits for work injuries under Federal employer liability acts and cash and medical payments made under workmen's compensation and temporary disability insurance laws. Public assistance payments in the same month, excluding vendor payments to suppliers of medical care, were made at an annual rate of $3.5 billion.

Under old-age, survivors, and disability insurance—the largest social insurance program by far—the number of beneficiaries in current payment status increased 11 percent during the fiscal year to 17,280,000. The monthly benefit rate increased 14 percent from $992 million in June 1961 to $1,128 million in June 1962.

The number of disability insurance beneficiaries increased from 200,400 at the end of fiscal year 1958—the fiscal year when such benefits first became payable—to 679,300 at the end of fiscal year 1962. The provision in the Social Security Amendments of 1960 which extended benefits to disabled workers under age 50 and to their dependents, beginning November 1960, spurred the rate of increase.

Over the 4-year period from July 1957 to June 1961, the proportion that retired workers were of total old-age and survivors insurance beneficiaries rose slightly, from 56.4 percent to 57.1 percent. At the end of fiscal year 1962, the proportion was 58.0 percent, reflecting the effect of the provision in the 1961 amendments making benefits payable to men aged 62–64. By June 30, 1962, old-age benefits had been awarded to 525,000 men aged 62–64 and wife's or child's benefits to 195,000 dependents of these men.

In federally aided assistance for persons 65 and over, 2.2 million were receiving old-age assistance, and more than 102,000 received medical assistance for the aged in the 27 States that were administering such programs in June 1962. Almost 3.7 million children and their adult caretakers received aid to dependent children, including 237,000 recipients in the unemployed-parent group; 100,000 received aid to

the blind, and 417,000 received aid to the permanently and totally disabled. In addition, 812,000 persons received general assistance financed from State and local funds. Payments for all types of public assistance for the month totaled $365 million.

The 1962 appropriation of about $70 million for the maternal and child health, crippled children's, and child welfare programs of the Children's Bureau, which marked its 50th anniversary on April 9, 1962, was an increase of about $17 million over the amount available for these programs during fiscal year 1961.

More than 1,000 new members on the average joined Federal credit unions each business day in fiscal year 1962. More than $3 billion was lent to individuals in a total membership of 6½ million in these mutually owned institutions.

Following the precedent set in naming his predecessor, Robert M. Ball, a career Social Security Administration official, was sworn in April 17, 1962, as Commissioner of Social Security to succeed William L. Mitchell.

The Social Security Administration had 35,304 employees on duty at the end of the fiscal year. The great majority of the employees were in the Federal program of old-age, survivors, and disability insurance.

International Activities

The Social Security Administration initiated new international activities during the fiscal year and cooperated in making facilities available for other programs administered by the Department of State, the United Nations, the Organization of American States, and the many voluntary agencies operating overseas exchange programs.

The SSA planned for experts and participants coming to the United States from 92 countries, an increase of 11 countries over the last fiscal year, and 17 over fiscal year 1960. Newly independent countries are looking to the U.S. for guidance in establishing their welfare and social security programs or for training of administrative or technical personnel. A majority of the participants sponsored by governmental organizations come through the United Nations programs or the Department of State's Cultural Exchange, with the Agency for International Development sending relatively few participants in the social welfare or social security field. The training programs planned for the participants and experts reflect new trends, both in the use of U.S. training resources and in areas of interest in social welfare. A greater number of the participants attended full-time graduate schools and remained to complete work for the degree. These persons were preparing for key posts in their own governments or to train personnel in their own universities. Other visitors, experi-

enced administrators coming for a shorter period, had observation programs in the several different fields of competence of the Social Security Administration—family and child welfare, planning and administration of social insurance, prevention and treatment of juvenile delinquency, training of personnel, and credit cooperatives. Requests for programs combining several areas of the social field included social services in public housing and urban development, coordinated planning for social and industrial development, and legislative planning for social security and social services.

The Social Security Administration began a new partnership in cooperation with other countries when an international research program using U.S.-owned local currencies under Public Law 480 was undertaken. Negotiations with the seven countries in which funds are available—Burma, India, Israel, Pakistan, Poland, UAR-Egypt, and Yugoslavia—resulted in the approval by the end of the fiscal year of projects in social services, juvenile delinquency, child care, and maternal and child health. Projects approved will contribute new knowledge to the United States. As an illustration, it is anticipated that one of the projects accepted will produce data useful in evaluating successful methods of working with young delinquents. Another project, a study of toxemia of pregnancy, will be of value as toxemia of pregnancy is the leading cause of maternal death in the U.S. and little is definitely known as yet of its cause.

Cooperation with the Agency for International Development reflected new aspects as a result of the foreign aid legislation which underwent drastic revision during the fiscal year. With specific language in the legislation emphasizing social as well as economic aspects of development and the "development of human resources," a base was provided for more attention to social welfare. In response to a request from the Agency for International Development Administrator, the Social Security Administration detailed a senior social welfare officer for full-time duty in the agency with a view to effective utilization of Social Security Administration resources in the foreign aid program.

In July 1961, a member of the staff of the International Service of the Social Security Administration was appointed by the President to serve as the U.S. Representative on the Directing Council of the Inter-American Children's Institute. This Council held its annual meeting at the Pan American Union in October 1961. One of its major achievements was the formulation of a proposed agreement with the Organization of American States. This agreement, which will have the effect of merging the administrative and fiscal organization of the Institute with that of the OAS while respecting its complete technical autonomy, was signed by the Director General of

the Institute and the Secretary General of the OAS in Washington in May 1962.

The 1962 conference of the International Labor Organization adopted a new convention on the subject of equality of treatment in social security. A staff member of the Division of Program Research served as advisor on the U.S. delegation.

The International Social Security Association general meeting in Istanbul in September was attended by social security officials from every industrialized country of the world and many of the less developed as well. The U.S. delegation, headed by the Commissioner of Social Security, invited the conference to hold its next meeting in the United States in 1964. This will be the first such session ever held in this country.

Research in social security systems to serve as a basis for providing technical assistance in this field was carried on cooperatively by the Social Security Administration and the Agency for International Development. Experts in social security financing and administration served as Social Security Administration consultants on the study.

At the United Nations, the 14th Session of the Social Commission in April and May 1962 marked resumption of annual Commission meetings for consideration of international social questions, social policies, and technical assistance. Chief accomplishments of the Commission were the recommendations for establishment for the first time of an international committee on housing, requests for a revamped and strengthened international social welfare program, and the development of an expert report on social and economic planning with particular attention to allocation of resources. The UNICEF Executive Board Meeting approved increased requests for funds for projects in new fields such as social services, vocational training, and education as well as continuing substantial grants in the health field. The Social Security Administration provided technical advisers for the U.S. Delegations to both the Social Commission and the UNICEF Board Meetings.

Cuban Refugee Program

In the past 2 years, the United States has become a country of first asylum for large numbers of political refugees from Cuba. The U.S. Government has found it necessary to develop a program of help for refugees from a neighboring republic and to assume major responsibility for the health, education, and welfare needs of these unfortunate people. By June 30, 1962, about 150,000 Cubans had found political refuge in the United States.

The principal port of entry for Cuban refugees is Miami, where many remain. A number of the refugees are professionally or technically trained; they were not permitted to take any resources when they left Cuba. On reaching the United States, most need assistance of one kind or another—financial aid, employment counseling, retraining, English language instruction, or help in resettlement and adjustment to American customs.

The severity of the Cuban refugee problems became evident near the end of 1960. President Kennedy early in 1961 expressed his concern and directed Secretary Ribicoff to undertake a study of the situation and to develop a program of assistance.

The program as it has developed since 1961 provides:

(1) Financial assistance, supplemented by surplus commodities, to provide food, clothing, and shelter to needy refugees registered at the Miami Cuban Refugee Center and who are living in Florida or who resettle outside Florida with the help of voluntary agencies.

(2) Financial assistance in relocating refugees to homes and jobs elsewhere in the United States.

(3) Health services and long-term hospitalization.

(4) Assistance to the public schools of Dade County, Fla., in providing instruction to the refugee children as well as English instruction and vocational training to adults.

(5) Loans to refugee students in college and funds for English and refresher courses for lawyers, doctors, and other professional persons.

(6) Care of children unaccompanied by relatives.

Administration and coordination of the program are assigned to the Commissioner of Social Security. In operating the program, the Commissioner has made full use of existing resources, as, for example, the Office of Education, the Public Health Service, the Children's Bureau and the Bureau of Family Services within the Social Security Administration, the Bureau of Employment Security of the Department of Labor, the Dade County Board of Education, the Florida State Department of Public Welfare, and the Florida State Board of Health.

Four voluntary agencies (National Catholic Welfare Conference, International Rescue Committee, Church World Service, and United Hebrew Immigrant Aid Society) are under contract with the Social Security Administration to handle the resettlement of Cubans to homes and jobs away from the Miami area to other parts of the country and overseas.

During the fiscal year 1961, the program was carried out under authorities contained in the Mutual Security Act of 1954, as amended, with expenditures of nearly $5 million. During the fiscal year 1962, the program operated under authority contained in the Foreign Assist-

ance Act of 1961, with expenditures of $38,502,000. On June 28, 1962, the Migration and Refugee Assistance Act of 1962 (Public Law 87–510) was enacted. This law authorizes assistance to refugees and an appropriation of $71,110,000 for providing such assistance during fiscal 1963 was made.

Increasing emphasis is being placed on the resettlement of refugees from the Miami area to other places in the United States and overseas. New entrants from Cuba have ranged from 1,600 to 1,800 per week for the last year. By June 30, 1962, there were about 95,000 refugees living in greater Miami. Roughly 60 percent of the refugees in Florida were on assistance. Successful resettlements are essential if the refugees are to become self-supporting and the public assistance load reduced.

Thirty-two thousand two hundred fifty-five Cuban refugees had been resettled by June 30, 1962, to over 900 communities in 49 States, Puerto Rico, the Virgin Islands, and 23 other countries. The rate of resettlement has risen in fiscal year 1962 from 1,259 persons during July 1961, to 3,454 during June 1962.

A transition resettlement allowance averaging $80 to persons receiving assistance in Miami who resettle elsewhere was authorized in May 1962. This allowance is designed to promote resettlement by allaying the fears of the refugees over being stranded without funds in a strange city. This allowance is also intended to increase the number of sponsors; by lessening their personal financial obligations, they can be asked to place greater emphasis on providing personal services.

The intensive efforts made to accelerate resettlements and to stimulate employment opportunities are reflected in the approximately 8,800 public assistance cases closed between January and June 1962. About 38 percent of the cases closed represented resettlements, and 31 percent represented reemployed persons.

During the fiscal year, some 28,000 individuals, or 12,700 refugee family groups, were resettled in communities outside Florida. Relatively few of the resettled refugees (about 400 in June 1962) had to apply for assistance from local welfare agencies in the new communities; and, in most cases, the duration of assistance payments was relatively short.

Plans were completed for the Cuban Refugee Emergency Center in Miami to move into much larger quarters on July 1, 1962. It will now be possible to step up resettlement work because more workers can be added by the voluntary agencies for this purpose. The Center was established in Miami as a focal point for Cuban refugee registration and resettlement activities and to coordinate the local aspects of the Federal Government's general program of aid to Cuban refugees.

At the beginning of fiscal year 1962, 35,000 Cuban refugees had registered at the Center, and registrations were at the rate of 5,600 a month. Registrations at the end of the fiscal year were at the rate of 7,400 a month, and 90,000 refugees registered at the Center during fiscal year 1962.

ASSISTANCE PROVIDED TO CUBAN REFUGEES

By request of the Commissioner of Social Security, the Bureau of Family Services became an active participant in the emergency program of assistance to Cuban refugees in January 1961, when members of the Bureau's staff made an initial reconnaissance visit to Miami. The Bureau also participated in the Department's task force which developed basic data for a comprehensive Federal program of health, education, employment, welfare, and resettlement services for needy Cuban refugees.

In February 1961, the Bureau was assigned operating responsibility for temporary financial assistance and related social and welfare services.

Under an agreement with the Social Security Administration, the Florida State Department of Public Welfare administers the Bureau's part of the program, using assistance standards similar to those established for other Florida residents in providing the basic necessities of life and hospital care.

Other State public welfare agencies provide assistance to refugees whose resettlement plans, for a variety of reasons, are not fulfilled or who need other services.

By the end of June 1961, approximately 8,700 cases had received assistance under the program in the Miami area. By September 1961, this number had increased to 12,600 and to 28,000 by the end of June 1962. During this 9-month period, 31,500 applications were received—an average of 715 per week. Many were emergencies. During August and September, the number of boat cases averaged 100 per week. These were persons who escaped Cuba in small craft and who needed immediate assistance and services, often medical care due to dehydration, overexposure, and injuries incurred en route.

UNACCOMPANIED CUBAN REFUGEE CHILDREN'S PROGRAM

By delegation from the Commissioner of Social Security, the Children's Bureau is responsible for child welfare services, including the care and protection of unaccompanied Cuban children. These were described by the President as "the most defenseless and troubled group among the refugee population." The Florida State Department of Public Welfare acts as agent for the Department of Health, Education, and Welfare and bears responsibility for the overall supervision and administration of the Cuban Child Welfare Pro-

gram, implemented by contracts with voluntary agencies which accept children for placement in group care or in foster family care.

The four voluntary agencies under contract with the Florida State Department of Public Welfare are the Catholic Welfare Bureau, Miami; Jewish Family and Children's Service, Miami; United Hebrew Immigrant Aid Society, Inc.; and the Children's Service Bureau of Dade County, Miami. These agencies have arranged placement for the children through cooperating child-placing agencies or institutions in the various States licensed or approved by appropriate State authorities.

On June 30, 1962, more than 6,100 Cuban children had received either group care or been placed in foster family homes since the beginning of the program. More than 2,400 Cuban children, or about 40 percent of the total number placed had been reunited with their parents or with the family group as it was constituted in Cuba.

Of the almost 4,000 children remaining under care on June 30, 1962, 71.2 percent were in group care and 19.7 percent in foster family homes. Thirty-eight percent of the children were being cared for in the Miami area while 62 percent had been placed outside the Miami area in 38 States and 85 communities. The majority of the children under care on June 30, 1962, were adolescent boys; over 60 percent of the total number of children under care were boys, and over 85 percent were over 10 years of age.

The large number of children arriving and the emergency nature of the program made it necessary to place over 75 percent of them in institutions or group homes until foster family homes became available or until the children could be returned to their own parents or relatives. Since it has been assumed that these children will eventually be returning to their parents who still have guardianship, the children cannot be placed for adoption.

Old-Age, Survivors, and Disability Insurance

The federally administered old-age, survivors, and disability insurance program plays a major role in achieving our national goal of eliminating dependency and want. It provides the base upon which almost every American builds his plans for family security in old age and in the event of his death or disablement. Under the program about 9 out of 10 gainfully employed people—self-employed as well as employees—contribute toward providing income for themselves and their families when their work income is cut off or greatly reduced by retirement or is cut off by disability or death. In the course of a year about 74 million earners contribute to the program. More than

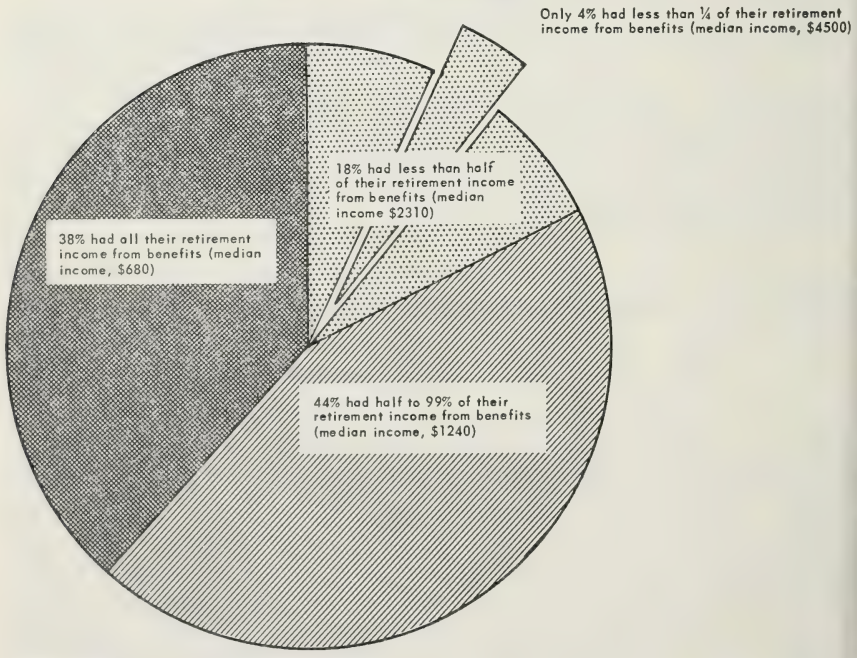
9 out of 10 mothers and children are protected against loss of income resulting from the death of the family breadwinner.

Eighty-seven percent of the people reaching age 65 in 1962 were eligible for retirement benefits and, based on present projections, this proportion will rise to about 95 percent by 1985. Two-thirds of the insured group under age 65—over 50 million workers—have enough credits to meet the work requirements for disability insurance benefits and this proportion will also increase each year.

By the end of fiscal year 1962 over a billion dollars in benefits was being paid each month to about 17.3 million beneficiaries.

These benefits make up a critical part of the income on which the retired aged, the permanently and totally disabled, and widows and orphans must rely for support. They are an especially important source of support for old people. A survey conducted by the Bureau of Old-Age and Survivors Insurance in 1957 indicated that for more than half of the aged social security beneficiaries the benefit is the only significant source of regular income, and for the great majority of the others the benefit is the major source of regular income. (Chart 1.) Of course, a survey of old-age and survivors insurance beneficiaries taken today would be expected to show that more beneficiaries

CHART 1.—82 PERCENT OF AGED BENEFICIARIES HAD HALF OR MORE OF THEIR RETIREMENT INCOME FROM BENEFITS*



*Data from a nation-wide survey of aged beneficiaries made in 1957.

have additional sources of retirement income. The number of people getting payments under private pension plans, for example, has increased substantially in recent years. Since the number of aged old-age and survivors insurance beneficiaries has grown at about the same rate, though, the proportion of old-age and survivors insurance beneficiaries getting such income would not be very much different today than it was in 1957. And, even though vesting provisions are becoming more common in private pension plans and the coverage of such plans is growing, old-age and survivors insurance benefits will continue to be the main reliance of a majority of retired persons in the foreseeable future as it is today.

Providing this regular social security income to many millions of families that might otherwise have been unable to provide for themselves is not only vital to their welfare, it is also important in protecting society from the many evils bred by widespread poverty. In addition, the benefits paid under the program provide an assured source of purchasing power, in bad times as well as good times, and thus have an important stabilizing effect on our economy.

The program also reinforces the American traditions of independence and self-help. It provides the way for a person to earn his future security as he earns his living. He pays toward the cost of his protection out of his earnings. Since a person's right to benefits does not depend on his current need but arises out of his past work, and since the benefit amount is related to earnings, the program is in line with our system of incentives. Furthermore, since benefits are payable regardless of the person's financial resources, they serve as a base upon which he is encouraged to build additional income protection for himself and for his family.

Thus, by providing a continuing income for workers and their families when earnings are cut off or greatly reduced by retirement in old age or are cut off by disability or death, the program increases the social and economic stability of our society, and it does this in a way that enhances the dignity and self-reliance of the people whose lives it touches. Because it has this tremendous social and economic impact on the American people, the program cannot be allowed to remain static. It must be responsive to the needs of the people in the face of changing social and economic conditions.

If the program were allowed to remain static—for example, if benefits were not increased as wages, prices, and levels of living increase—it could not fulfill the role intended for it. In reporting on the bill that created the program in 1935, the Committee on Ways and Means of the House of Representatives spoke of benefits ". . . in amounts which will insure not merely subsistence but some of the comforts of

life . . ."; and the Committee on Finance of the Senate spoke of benefits ". . . which will provide something more than merely reasonable subsistence. . . ." Although benefit increases and other improvements made over the years, reflecting changes in the economy and experience with the program, have gone a long way toward fulfilling this promise of security to the American people, much remains to be done.

The Congress has recognized the need for periodic re-evaluation and improvement in the program and has given the Secretary of Health, Education, and Welfare responsibility (section 702 of the Social Security Act) for "studying and making recommendations as to the most effective methods of providing economic security through social insurance, and as to legislation and matters of administrative policy concerning old-age pensions . . . and related subjects." The effectiveness of the Department in carrying out this statutory duty is dependent to a large degree on research designed to evaluate the effectiveness of the protection provided by the program and to identify new trends and problems. There are now under way several major studies designed to supply basic information about the adequacy of present provisions and to point up areas in which provisions need to be strengthened.

Unmet Needs

HEALTH INSURANCE FOR THE ELDERLY

A serious shortcoming in the protection afforded by the present program is the failure to protect the elderly against the tragic hardships resulting from expensive illness. In 1935 the great need of the aged was for income loss protection; the great need today is for protection against the cost of health care. More people are living longer and so more people are exposed to the risk of the diseases that attack the aged. In 1935, there were 7.8 million people aged 65 and over (6.1 percent of the total population). By 1962 the aged numbered 17.4 million (9.3 percent of the population). Improved techniques and facilities for providing health care are expensive. Since 1935, hospital charges have gone up 500 percent; during the same period, the cost of living has risen 200 percent.

While the cash social security benefits go a long way in helping to meet regular and recurring expenses like food, clothing, and rent, the impact of health costs varies greatly from month to month and even from year to year. A person over 65 may have no appreciable health costs for several years and then in a short time have health costs running into thousands of dollars, costs that often mean financial disaster. And the problem of meeting high health care costs is one

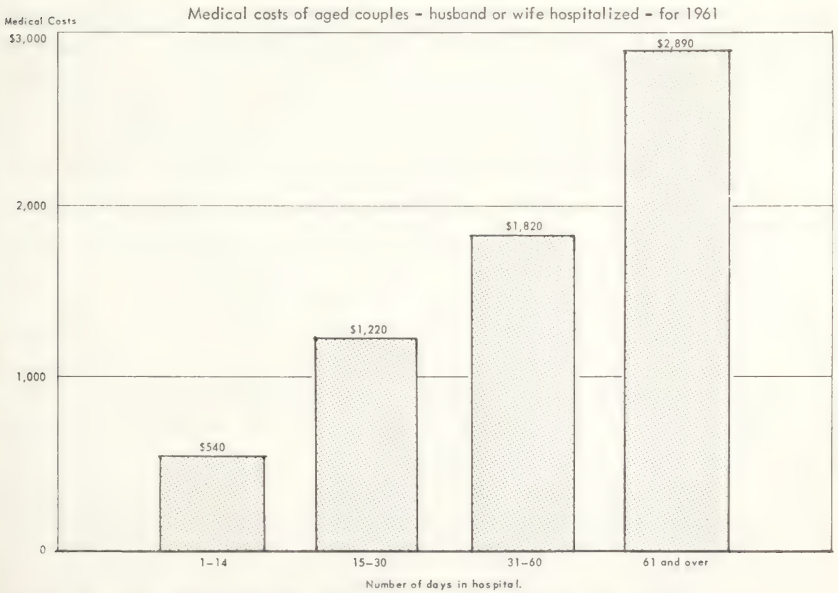
that confronts virtually all aged people—not just the very poor. (Chart 2.)

Cash social security benefits, even when supplemented by other retirement income and savings, clearly cannot be expected to meet the costs of an expensive illness. Obviously, it would not be possible to increase cash social security benefits sufficiently to cover the large health care expenses that many aged people incur.

While necessary for filling certain gaps, public assistance cannot be a good primary basis for financing the health needs of the elderly; an assistance program is designed primarily to meet the problem of dependency after it occurs. Also, public assistance is seriously handicapped in meeting the medical care needs of even the very poor because of the inadequacies of State financing. During fiscal year 1962, four high-income States accounted for about 90 percent of the payments made under the medical assistance for the aged provisions of the 1960 public assistance legislation.

When confronted with a risk to which all are subject but which falls unevenly on those exposed, it is only natural to turn to insurance for protection. Unfortunately, the elderly have not been able to protect themselves adequately through the existing health insurance arrangements as younger people have. The biggest obstacle is simply that most older people cannot afford adequate health insurance. In

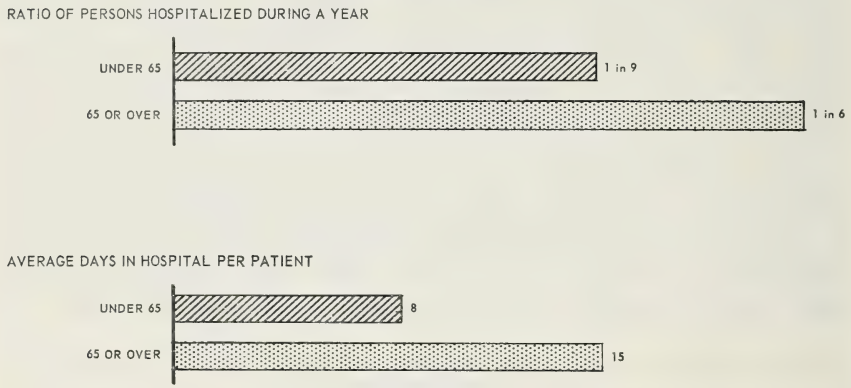
CHART 2.—WHEN HOSPITALIZATION BECOMES NECESSARY, MEDICAL COSTS FOR THE AGED RUN HIGH



Source: 1957 OASI Beneficiary Survey, adjusted for increases in medical care prices.

1960, the average income of aged couples in this country was only about $2,500—less than one-half the average income of younger couples. For aged people living alone, the average annual income was about $1,050 a year as compared with about $2,570 for younger people living alone. There are, of course, other factors that put adequate health insurance out of reach of most of the aged. Their above-average hospital use results in high health costs which tend to make health insurance much more expensive for the aged than for younger people. (Chart 3.) Also, the aged, unlike working people who can

CHART 3.—OLD PEOPLE GO TO THE HOSPITAL MORE OFTEN AND STAY LONGER THAN YOUNGER PERSONS



get group coverage, must generally be insured on an individual basis, a form of health insurance that sometimes costs twice as much as group coverage offering the same protection. It is not surprising that only about one-half of the elderly have any health insurance, or that the insurance even this group can afford is often inadequate.

The Administration has concluded that the social security mechanism offers the most practical solution to the problem of insuring the elderly against the cost of expensive illness. Through social security people would provide for the high health costs they will face in retirement by making contributions while they are working. Also, use of the social security mechanism would put coverage of the elderly on a group basis and avoid the high administrative costs which most elderly people must now pay under their individual enrollment policies. Similarly, the sound and proven method of financing the existing program, the work-related and dynamic character of social security benefits and the principle of paying benefits as an earned right, the practically universal coverage of the program—all these characteristics are a part of the Administration's health insurance proposal.

Like the present social insurance program, the proposed health in-

surance program would not provide more than basic protection. Since for the aged who need medical care the heaviest financial burden generally falls upon those needing hospitalization, it was concluded that insurance against the cost of hospital care was the proper point of concentration. As in the case of the present retirement, survivors, and disability benefits, the individual could build on his basic social insurance protection and by his own means obtain protection against the cost of physicians' services, drugs, and other health needs that would not be covered under the proposed plan. And, like the present cash benefits program, the proposed health insurance program would depend upon public assistance to fill in the gaps that would remain. In fact, with a health insurance program for the aged, the financial problems faced by the States in their efforts to aid the aged with their medical costs would be greatly reduced; and it seems reasonable to expect that the States would be able to move toward a more effective health care program for the aged who would still need help in meeting their health care costs. Thus, the proposal would carry on the threefold attack against indigency in old age that has been so successful in the area of income maintenance—an attack carried out by social insurance, voluntary insurance, and public assistance—all working in partnership.

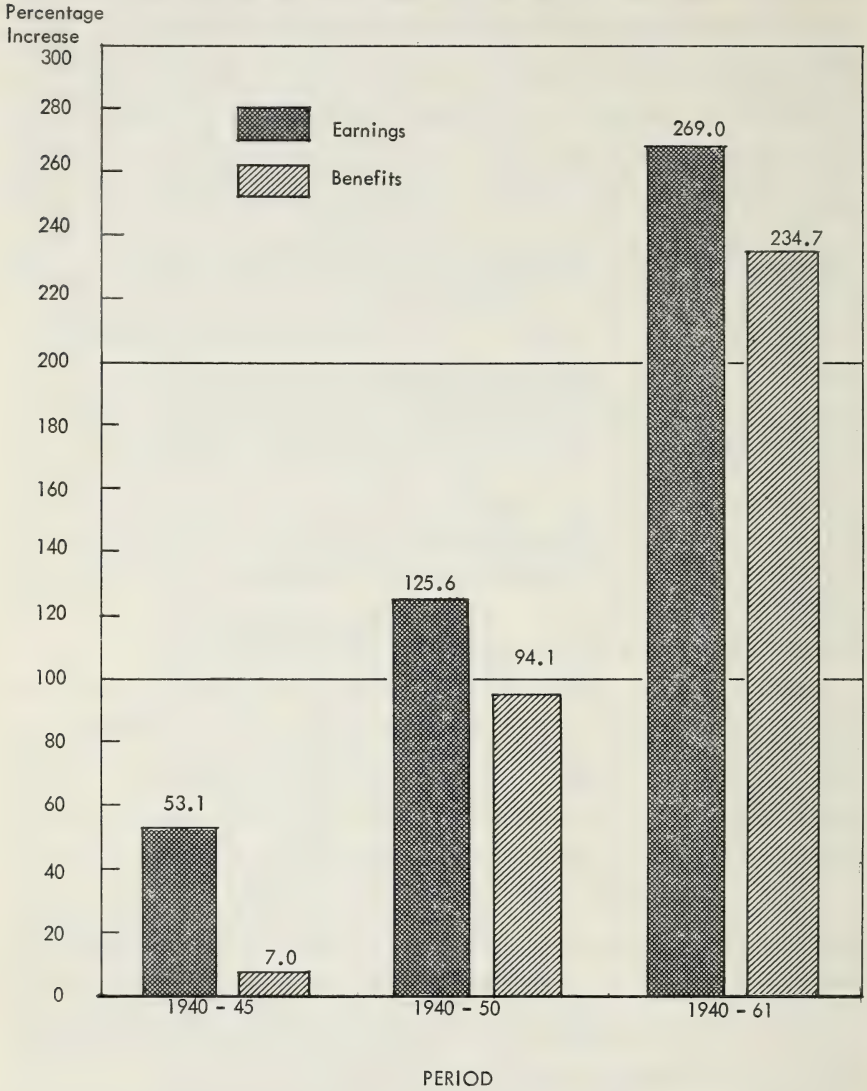
KEEPING BENEFITS UP TO DATE

Another problem now under study is that of keeping the amount of the benefits paid under the program up to date. While benefits have more than kept up with the changes in prices over the years, the program, in spite of the many improvements that have been made, has not kept up with the increased productivity of the American economy, as reflected by higher wage levels, and the consequent rise in the level of living of the American worker. (Chart 4.)

The basic structure of the program now has built into it only a small measure of response to changing wage levels. Under present law, benefit amounts over the long run will be based on a lifetime average of the worker's earnings in covered work. As earnings go up, the average on which the benefits are based will be held below current wage levels by the lower wages paid in the past.

This is not a problem at present because as new groups of workers have been brought into the program, the social security law has been changed so that, in the period immediately after these extensions of the program, benefit amounts could be based on earnings over a relatively short and recent period. This was done to avoid disadvantaging the newly covered workers who reached retirement age or died shortly after they came under the program. As a result, benefits awarded over the past decade have generally been based on fairly

CHART 4.—BETWEEN 1940 AND 1961 THE PERCENTAGE INCREASE IN AVERAGE EARNINGS EXCEEDED THE PERCENTAGE INCREASE IN AVERAGE BENEFITS



current wage levels. In 1961, for example, most of the benefits awarded were related to an average of no more than the worker's highest 5 years of earnings after 1950; benefits awarded in 1962 were typically related to no more than the highest 6 years. Unless the law is changed, though, retirement benefits will eventually be based on a person's average earnings over virtually all of his working life and the generally higher earnings level at the time of retirement will be offset by lower earnings in earlier years.

Various ways in which benefits reasonably related to fairly current earnings could be provided, including the costs that most such plans involve, are being studied. Providing a benefit that is based on reasonably current earnings at the time it is awarded, though, will not, in itself, ensure the adequacy of benefits as wages and prices go up. The worker who retires today may still be living—and depending primarily on his social insurance benefit—10, 20, or even 30 years hence. The adequacy of his benefit will depend on whether it keeps pace with changes in the economy after he retires. This involves more than merely adjusting his benefits so that they will retain their original purchasing value. During this period of his retirement not only the price level but also the average level of living in the United States undoubtedly will rise.

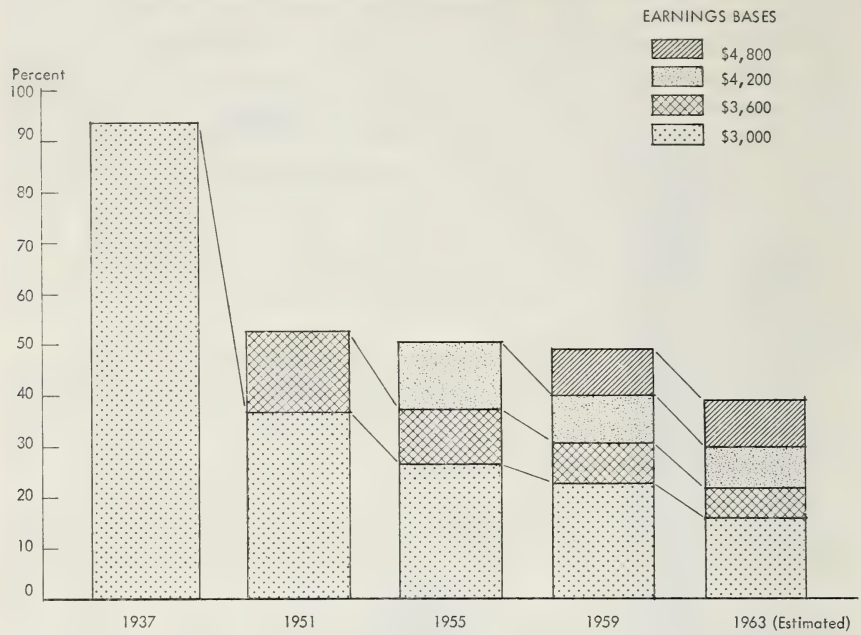
Basic to any consideration of the problem of keeping the program in line with the changing economy is the matter of adjusting the ceiling on the amount of earnings that can be taxed and credited toward benefits under the program. Only people whose annual earnings do not exceed $4,800—the upper limitation on earnings creditable for benefits—will have their benefit amounts related to their full earnings. Unless the ceiling on the amount of earnings that can be taxed and credited toward benefits is raised as earnings levels rise, more and more people will be earning above the ceiling and fewer people will have their benefit amounts related to their total earnings. In 1938, when the ceiling was $3,000, about 94 percent of all regularly employed men had all their earnings taxed and counted toward benefits. In 1963, despite three increases in the ceiling since 1938, only about 39 percent of such workers will have all of their earnings taxed and counted toward benefits. (Chart 5.) While it is generally agreed among responsible individuals and groups who have studied the question that the ceiling does have to be raised from time to time as earnings go up, there have been differences of opinion on the amount and timing of increases.

There is also a question of how these adjustments to keep the benefit structure of the program in line with changes in the economy should be made—that is, should automatic changes in benefits and the benefit base be provided for or should we continue to depend on periodic amendments to keep the program up to date? Some foreign systems have adopted provisions of the former kind, and the desirability and feasibility of adopting some automatic method of adjustment in this country is now under study.

EXTENSION OF PROGRAM COVERAGE

Also under study are the problems of extending coverage under the program to those who are still without its protection. Today about

CHART 5.—THE EARNINGS BASE COVERS THE TOTAL ANNUAL EARNINGS OF A SMALLER PERCENTAGE OF REGULARLY EMPLOYED MEN THAN IN THE PAST*

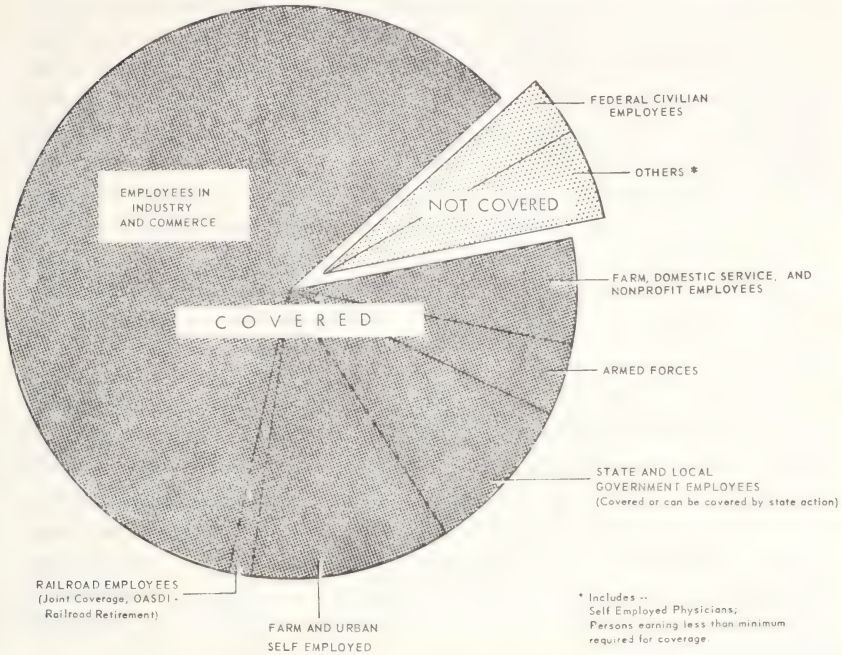


*Year shown is the first year for which the higher earnings base was effective (except 1963).

9 out of 10 workers are covered. But there are still gaps in the coverage of the program. The desirability of extending the protection of the old-age, survivors, and disability insurance program to virtually all regular workers of the Nation and their families has been recognized ever since the establishment of the program, and coverage extension proposals have received active consideration and support by the Congress and this Department. To the extent that progress is made toward permitting everyone employed with some degree of regularity to earn protection under the program, more and more workers and their families will of course obtain the valuable protection of the old-age, survivors, and disability insurance program and can look forward to benefits that are related to the level of past earnings from practically all gainful work.

The largest group of workers still without social security coverage are the more than 2 million civilian employees of the Federal Government who are covered under Federal staff retirement programs. (Chart 6.) Many of these Federal employees switch once or more between the Federal service and work outside the Government, with the result that their retirement, survivor, and disability protection depends largely on chance. Some ultimately qualify for benefits under

CHART 6.—9 OUT OF 10 WORKERS ARE COVERED UNDER THE OASDI PROGRAM



both a Federal staff retirement program and the old-age, survivors, and disability insurance program. Many others qualify under one program or another for benefits that reflect only part of their working lifetime and thus provide inadequate protection. Some fail to qualify under any program.

If their employment with the Federal Government were covered by social security, people who spend part of their working lives in Federal employment would be assured of retirement, survivors, and disability insurance that would follow them as they shift from one job to another. Social security coverage for Federal employees, supplemented by coverage under a staff retirement program, would provide them with protection comparable to that afforded many workers in private industry, employees of State and local governments, and members of the uniformed services. This improved protection can be furnished without impairing in any way the independence of the Federal staff retirement programs and without undue cost to employees of the Government or the Government itself.

Self-employed physicians are also excluded from social security coverage. Many self-employed doctors have become aware of the value of old-age, survivors, and disability insurance protection and

many desire coverage. The position of their principal organization, however, continues to be opposed to social insurance coverage.

Aside from civilian employees of the Federal Government and self-employed physicians, the great majority of workers for whom coverage is not available under the Federal law are those who are irregularly employed, or have earnings which do not meet the minimum requirements for coverage. While some of these workers will, over their working lifetimes, obtain old-age, survivors, and disability insurance protection as a result of their coverage under the program during periods of more regular employment or on the basis of the coverage of a member of their family, many will have no protection unless the law is changed to provide wider coverage of marginal workers.

DISABILITY INSURANCE

Continuing study is being made of the effectiveness of the protection afforded disabled workers and their families under the program. Although the provisions for disability insurance benefits are still relatively new, the program now provides a large measure of protection to workers and their families against loss of earnings due to severe long-term disability of the worker. As of June 30, 1962, over 1¼ million persons were receiving benefits amounting to more than $80 million a month on account of their own disabilities or that of the family earner.

During the fiscal year definite progress was made in improving procedures and plans for obtaining more comprehensive evidence relating to the medical and vocational limitations of claimants. The Social Security Administration has also been developing more effective techniques for giving due weight to vocational and other nonmedical factors in evaluating disability. Regulations to this effect are being expanded.

There remain several significant gaps in the protection provided by the disability provisions. For example, some workers are totally disabled over many months or even several years but cannot receive benefits for themselves or their families only because their disability is one from which they may be expected to recover.

Another gap in the protection afforded disabled persons is represented by wives and widows who are totally disabled before reaching age 62. These disabled wives and widows cannot qualify for any benefits under the present law unless they have a child in their care, although they are, of course, in much the same position as those aged 62 and over. Benefits are payable at age 62 to wives and widows without children because it seems reasonable to assume that at age 62 a large number of persons, for health or other reasons, may no longer be able to support themselves by working.

Under present law, in the case of applications for disability protection filed after June 30, 1962, the starting date of a period of disability can be established only as far back as 18 months before the date of application, even though the actual onset of disability occurred much earlier. As a result, where filing of application is delayed, the benefits of disabled workers and their dependents may be substantially reduced, and some workers and their families may lose all rights to social security protection. The Department has recommended elimination of the restriction in present law.

THE RETIREMENT TEST

There are strong pressures to liberalize, or to eliminate entirely, the provision in the law—generally called the retirement test—that is designed to assure that the funds available for the old-age, survivors, and disability insurance program are used to pay benefits only to people who meet a reasonable test of retirement from full-time work and to their dependents and survivors who do not have substantial earnings from work. In the 87th Congress more bills were introduced on the retirement test than on any other provision of the social security law. Included in the total of 629 social security bills are 32 bills to eliminate the test, 71 bills to raise the exempt amount, and 15 to change other provisions of the test.

Under the present retirement test, $1 in benefits is withheld for each $2 of annual earnings between $1,200 and $1,700 and for each $1 above $1,700 (except that benefits are not withheld for any month in which the beneficiary neither earned wages of more than $100 nor rendered substantial services in self-employment, regardless of the amount of his annual earnings). The present test is a decided improvement over the test in effect before 1961, because it adjusts benefits in proportion to the amount of earnings above $1,200, thus reducing the deterrent to work and removing certain inequities that existed under the previous test. Under the present test, a beneficiary will always have more combined income from work plus benefits if he earns between $1,200 and $1,700 than if he earned only $1,200. However, there is no incentive, and even some deterrent, for a beneficiary to earn above $1,700 (unless he earns a good deal more than $1,700), since for every $1 in taxable earnings above $1,700 he loses $1 in *tax-exempt* benefits.

It is, of course, desirable that the test be framed so as not to discourage beneficiaries from working. On the other hand, it does not seem desirable to use the limited funds of the program to provide benefits for people who have not suffered a loss of work income. An ideal retirement test for the old-age and survivors insurance program would be one that would not deter any retired person from seeking

an opportunity to do all the work he wants to do and would also prevent the payment of benefits to people who are not retired but are working full time at their regular jobs after the age at which benefits are payable. Unfortunately, it is not possible to devise a test which in all respects meets both of these criteria. A test which included an annual exempt amount of more than $1,200 would allow people to do more work and still get all of their benefits for the year, but raising the exempt amount would be relatively costly and would result in paying benefits to additional people who had not suffered any reduction in earned income. Raising to $2,400 the present $1,700 limit on the area in which the $1-for-$2 reduction applies would improve incentives for older people to work, at a considerably smaller cost. No doubt the retirement test will continue to be an important area of concern to the Department, to Congress, and to the public.

OTHER OBJECTIVES

Another proposal now under consideration would cover tips as wages for social security purposes. Because tips are generally not counted as wages under the program, employees who receive a sizeable part of their work income in the form of tips have only partial protection. As a result, their benefits do not reflect their true level of earnings. The Department of Health, Education, and Welfare and the Department of the Treasury have recommended a plan to provide that tips received by an employee in the course of his employment, whether paid over to the employee by his employer or received directly from a person other than the employer, be considered wages for purposes of the old-age, survivors, and disability insurance program and for income tax withholding.

These are only some of the major projects now under way; many others are in various stages of development. In addition, numerous problems and proposed program changes of a minor and technical nature are always under study.

What the Program Is Doing

BENEFICIARIES AND BENEFIT AMOUNTS

During the fiscal year ended June 30, 1962, benefits paid under the old-age, survivors, and disability insurance program totaled $13,669 million—an increase of $1,781 million over the amount paid in the preceding fiscal year. Benefit payments to disabled workers and their dependents were 44 percent higher than in fiscal year 1960–61 and totaled $1,011 million. Old-age and survivors insurance monthly benefits rose 13 percent to $12,484 million and lump-sum death payments amounted to $174 million, about $7 million higher than in the previous fiscal year.

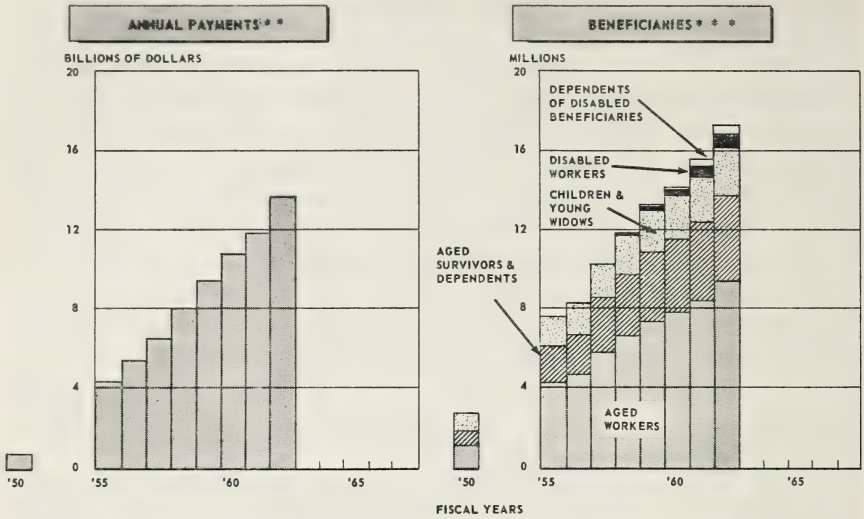
About 3.2 million monthly benefits were awarded in fiscal year 1962, almost half a million more than the previous record number made in fiscal year 1957. New highs were set for awards of old-age benefits (1,490,000), child's benefits (590,000), and mother's benefits (98,000). The record number of awards stemmed largely from (1) the 525,000 old-age benefits awarded to men aged 62–64, (2) the 195,000 wife's or child's benefits awarded to dependents of these men, and (3) the 169,000 monthly benefit awards attributable to the liberalized insured-status provisions in the 1960 and 1961 amendments. Old-age (retired-worker) benefits accounted for almost three-fourths of the awards under the new insured-status provisions; the average monthly amount for beneficiaries who became insured only because of the change in the law was about $43 compared with $80 for all other old-age benefit awards made in the fiscal year. The 492,000 monthly benefits awarded to disabled workers and their wives, husbands, and children was only 48,000 less than the record number awarded in the preceding fiscal year.

The 851,000 lump-sum death payments awarded in fiscal year 1962 were 26,000 more than the previous record number in fiscal year 1961. About 823,000 deceased workers were represented in the awards. The average lump-sum amount per worker was $211.43, about a dollar higher than the average for the preceding year.

The number and amount of monthly benefits in current-payment status increased sharply during fiscal year 1962. The number of monthly benefits went up nearly 1.7 million (11 percent)—294,000 more than the increase in fiscal year 1961—and the monthly rate of payment rose $136.1 million (14 percent). The growth in the number of beneficiaries produced most of the increase in the monthly rate. Other factors were the provisions in the 1961 amendments which raised the minimum monthly benefit and increased benefits for most aged survivors. At the end of June 1962, about 17.3 million beneficiaries were receiving benefits at a monthly rate of $1,128.2 million. A year earlier, monthly benefits totaling $992.0 million were going to 15.6 million beneficiaries. (Chart 7.)

At the end of June 1962, about 13.5 million persons aged 62 or over were receiving old-age and survivors insurance monthly benefits—1.2 million more than in June 1961. Old-age (retired-worker) benefits were going to 69 percent of the aged group, wife's or husband's benefits to 17 percent, widow's or widower's to 13 percent, and the remainder—primarily parent's benefits—to less than one-half of 1 percent. An increase of 351,000 for the 12 months brought the number of mothers and children receiving monthly benefits to 3.1 million. Disabled-worker beneficiaries under age 65 numbered 679,000, an increase of 121,000.

CHART 7.—BOTH BENEFIT PAYMENTS AND NUMBER OF BENEFICIARIES HAVE INCREASED RAPIDLY SINCE 1950*



*The 1950 amendments made major improvements in the program.
**Payments in fiscal year. Includes a small percentage of lump-sum death payments.
***Beneficiaries on the rolls at the end of the fiscal year.

In June 1962, the average old-age benefit being paid to a retired worker who had no dependents also receiving benefits was $72.40 a month. When the worker and his wife were both receiving benefits, the average family benefit was $127.10. For families composed of a disabled worker, his young wife, and one or more children, the average was $191.70, and for families consisting of a widowed mother and two children the average benefit was $191.40. The average monthly benefit for an aged widow alone was $65.40 in June; the rise of $7.20 from the average at the end of June 1961 resulted mainly from the higher rate provided by the 1961 amendments. Among beneficiaries on the rolls at the end of June 1962 whose benefits were based on earnings after 1950, the average family benefits being paid were $79.90 for a retired worker with no dependents receiving benefits, $135.20 for an aged couple, $200.70 for a disabled worker, his young wife, and one or more children, $212.70 for a widowed mother and two children, and $76.50 for an aged widow alone. At the end of June 1962, about 73 percent of all retired-worker families were receiving benefits based on earnings after 1950.

DISABILITY PROVISIONS

During the fiscal year, a period of disability was established for about 245,000 workers, 25,000 more than the previous record number in fiscal year 1960–61. About 26,500 disabled persons aged 18 or over

who had applied for child's monthly benefits were found to have a disability that began before they were 18 years of age; the number was about 4,500 greater than in 1960–61. Since the beginning of the program, about 1,450,000 persons have been found to meet the disability requirements under the law.

The number of disabled workers receiving monthly benefits rose 22 percent in the fiscal year and reached 679,000 at the end of June. Almost 473,000 benefits were being paid to the wives, husbands, and children of these beneficiaries—a 39 percent increase. By the end of June 1962 child's monthly benefits were being paid at a monthly rate of $6.2 million to 135,000 disabled persons aged 18 or over—dependent sons or daughters of deceased, disabled, or retired insured workers—whose disability began before age 18. About 15,000 women—who would not otherwise be eligible for benefits—were receiving wife's or mother's benefits as the mothers of disabled persons receiving child's benefits.

A preliminary estimate indicates that by the end of June 1962, about 150,000 persons were receiving old-age benefits that had been increased by an average of $8 a month because their social security records were frozen for periods while they were disabled before reaching retirement age. About 55,000 wives, husbands, and children of retired workers and about 85,000 widows, widowers, children, and parents of workers who had their social security records frozen before death were also receiving larger monthly benefits because of the freeze. For the same reason, lump-sum death payments in fiscal year 1962 based on the earnings records of almost 24,000 deceased workers were increased by an average of about $24 per worker.

THE PROTECTION PROVIDED

At the beginning of 1962, more than 89 million people had worked long enough in covered employment to be insured for benefits under the program (53 million of them permanently insured so that they could get benefits even if they had no more covered work). Of the population under age 65, an estimated 80 million were insured at the beginning of the calendar year. Some 44 million of these people were permanently insured—that is, whether or not they continue to work in covered jobs, they will be eligible for benefits when they reach retirement age, and their families are protected if they die. (Included in this total were about 1.8 million men and 1.1 million women aged 62–64 who were already eligible for old-age benefits but on a reduced basis.) The remaining 36 million were insured but must continue in covered work for an additional period to be insured permanently. Nine out of 10 mothers and young children in the Nation can count on receiving monthly survivors insurance benefits if the

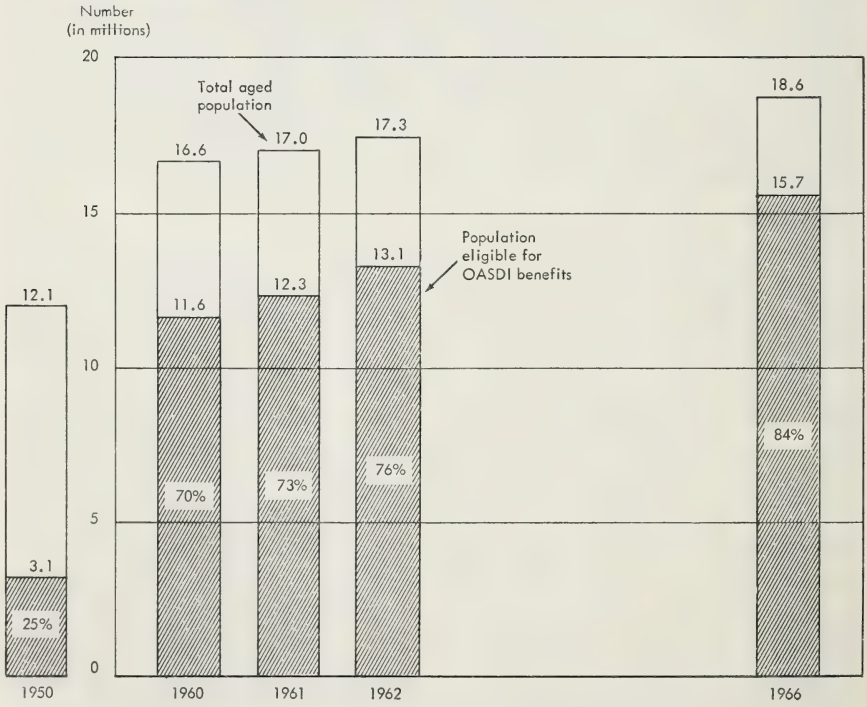
family breadwinner should die. An estimated 51 million of the insured persons under age 65 also met the insured status requirements for protection against the risk of long-term and severe disability.

Of the 17.3 million people aged 65 or over in the United States at the beginning of 1962, 76 percent were eligible for benefits under the program. (Chart 8.) Sixty-seven percent were actually receiving benefits, and 9 percent were not receiving benefits because they or their husbands were receiving substantial income from work. The percentage of eligible aged persons is expected to rise to 84 by the beginning of 1966.

INCOME AND DISBURSEMENTS

Expenditures from the Federal Old-Age and Survivors Insurance Trust Fund during the fiscal year totaled $13,259 million, of which $12,658 million was for benefit payments, $350 million for transfers to the railroad retirement account and $251 million, including Treasury Department costs, for administrative expenses. Total receipts were $11,985 million including $11,455 million in net contributions and $530 million in interest on investments. Disbursements exceeded re-

CHART 8.—THE NUMBER AND PERCENTAGE OF POPULATION AGED 65 AND OVER ELIGIBLE FOR OASDI BENEFITS ARE INCREASING*



*Figures as of January 1.

ceipts by $1,274 million, the amount of the decrease in the trust fund during the year. At the end of June 1962 this fund totaled $19.6 billion.

Total assets of the old-age and survivors insurance trust fund, except for $1,191 million held in cash, were invested in United States Government securities as required by law; $3.4 billion was invested in public issues (identical to Treasury securities owned by private investors), and $15.1 billion was invested in securities of varying maturities issued for purchase by the trust fund. The average interest rate, figured on the coupon rate and face amount of all investments of this fund at the end of the fiscal year, was 2.87 percent.

Expenditures from the Federal Disability Insurance Trust Fund during fiscal year 1962 totaled $1,086 million, of which $1,011 million was for benefit payments, $11 million for transfers to the railroad retirement account, and the remainder—some $64 million—for administrative expenses. Total receipts were $1,088 million, including $1,021 million in net contributions and $67 million in net interest on investments. Receipts exceeded disbursements by $2 million, the amount of increase in the fund during the year. At the end of June 1962, the fund totaled $2,507 million. (Contributions to this fund first became payable in January 1957 and benefit disbursements began in August of that year.)

Assets of the disability insurance trust fund consisted of $2,407 million in United States Government securities and a cash balance of $101 million. The invested assets consisted of $102 million in public issues and $2,304 million in securities of varying maturities issued for purchase by the trust fund. The average interest rate, figured on the coupon rate and face amount of all investments of this fund at the end of the fiscal year, was 2.94 percent.

Administering the Program

During fiscal year 1962, the Bureau of Old-Age and Survivors Insurance faced two major administrative tasks; processing increased workloads growing out of the 1961 amendments, and continuing its program to improve administration and provide a higher quality of service to the public.

Provisions of the 1961 amendments which added substantially to the Bureau's growing workloads were those which permitted men to become entitled to old-age insurance benefits as early as age 62 with the benefits actuarially reduced to take account of the longer period of payment; liberalized the eligibility requirements and retirement test provisions; and raised the minimum and widows' benefits. The application of electronic data processing to the Bureau's operations

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was used to special advantage in implementing the latter provisions, as the benefit rates for about 3.7 million individuals whose benefits were increased by law were converted electronically. In the limited time allowed by the legislation, it would have been impossible to accomplish the conversion without the use of electronic equipment.

The Bureau of Old-Age and Survivors Insurance received a total of 3,438,000 applications for old-age and survivors insurance during the year, plus 659,000 claims for disability insurance benefits. Social security account numbers were established for 3,902,000 persons, and approximately 3,220,000 duplicate account number cards were issued to individuals who had lost their cards or needed new cards for one reason or another. Approximately 264,726,000 earnings items were received from employers or the self-employed for posting to the individual accounts. The district offices handled more than 14,166,000 inquiries about the old-age, survivors, and disability insurance program.

These are massive figures and they indicate why substantial numbers of well-trained employees are necessary to administer the program properly—to pay benefits on time and in the right amount. Bureau staff on duty at the end of the year totaled 33,454, an increase of 2,482 employees during the year. Although there has been a series of significant amendments to the Social Security Act—in 7 out of the last 12 years—which have greatly increased the continuing level of Bureau work and the complexity of the job to be done, the Bureau of Old-Age and Survivors Insurance has demonstrated a capacity to do a larger and more involved job without a proportionate increase in manpower. Although Bureau workloads are more than four times as great as they were in 1950, Bureau staff required to handle these workloads is only some three times as large as in 1950. Thus, 77 employees now perform about the same amount of work as 100 did in 1950. This improvement in productivity has been achieved in spite of the increasing complexity of the program and the necessity of training large numbers of new personnel.

Continuing efforts to improve the quality and timeliness of service to the public set the tone for all endeavors during the year. As an example of these efforts to improve public service, 17 additional district offices were opened in various sections of the country where surveys indicated the most pressing need. The new offices are located in the following cities: White Plains, Flushing, and Freeport, N.Y.; Butler, Pa.; Glen Burnie, Md.; Goldsboro and Greenville, N.C.; Elizabethtown and Campbellsville, Ky.; Cookeville, Tenn.; LaSalle, Ill.; East Liverpool, Ohio; Mt. Pleasant, Mich.; Big Spring, Tex.; Helena, Ark.; Whittier, Calif.; and Hilo, Hawaii. At the end of the fiscal year, the program was being administered through a network of

601 district offices, 11 regional offices, 7 payment centers, and the central headquarters in Baltimore. In addition, public service visits are made on a regular and recurring basis to more than 3,600 communities, in order to bring a personalized service to as large a share of the population as is possible.

A special service initiated during the year was a nationwide campaign to notify through the press, radio, and television all people over 65 who were made eligible for benefits by the 1960 and 1961 amendments but who had so far failed to apply for them. In the latter part of the fiscal year, a program was begun to advise by personal letter those aged insured workers who had not claimed benefits because they were unaware of their entitlement to them. This special program, which is being continued in fiscal year 1963, resulted in the filing, during fiscal year 1962, of almost 38,000 additional claims by workers and their dependents or survivors.

An example of the Bureau's continuing efforts to improve its services to beneficiaries already on the rolls is the special study of beneficiaries aged 85 and over whose numbers have been increasing at a rate of about 40,000 annually. At the beginning of 1961, there were approximately 285,000 such beneficiaries. Because the Bureau's channels of communication with them were limited, a question existed as to the situation of persons in the group. The Bureau, therefore, conducted a nationwide survey during the period from June through September 1961 to determine the extent to which benefit checks might be going to individuals who (1) were in need of a representative payee (i.e., who were incapable of managing their own funds and were in need of someone to receive and expend benefits on their behalf), or (2) had died without their deaths being reported to the Bureau. Personal contact was made with a sample of 1,937 beneficiaries over age 85. The results of the survey indicated that there was no problem of unreported deaths. Nor in any case was evidence found that benefits had been misappropriated or misused by persons responsible for the beneficiaries' monthly checks. There were a number of cases, however, in which the beneficiaries were not capable of handling their own funds and whose inability had not been previously reported. To safeguard benefit rights and to verify the continuing eligibility of this and other groups of beneficiaries, procedures have been developed for a permanent survey program to be conducted on an annual basis.

Late in fiscal year 1962, the Bureau of Old-Age and Survivors Insurance initiated a 14-month pilot project in the State of Maryland to test the design for a nationwide study of the representative payee procedures, under which the benefits of minor children and incapable adults are paid to another person for the beneficiary's use. Data will

be collected concerning the management of the benefit by the payee, the current situation and needs of beneficiaries, and the availability and use of community protective services and welfare facilities. The findings will provide a basis for appraising both the policies governing the selection of representative payees and the procedures for safeguarding the interest of beneficiaries having payees. The nationwide survey is scheduled for late 1963, upon completion of the Maryland pilot project.

During the year, the Bureau successfully completed the installation of its data communications system, which interconnects the district offices, the regional offices, the payment centers, and the central headquarters. This system has made it possible for the Bureau to processs and pay insurance claims more rapidly than would otherwise be possible and is an important part of the Bureau's integrated data processing system for the handling of claims and related activities. The use of computers is, likewise, an integral part of this system and, during the year, the processing capabilities of the Bureau were substantially enlarged. The programs developed for these computers have simplified the process of certifying to the Treasury Disbursing Offices the payment of old-age, survivors, and disability insurance benefits, and are replacing statistical operations previously performed on electric accounting machines. The Bureau has further expanded its use of computer facilities by integrating the preparation of the award form with the certification of the earnings record in its claims operations. This process has reduced the clerical effort previously devoted to forms preparation and the manual calculation of benefit amounts, and has reduced errors stemming from manual calculations and transcriptions.

Work to accomplish a total, Bureau-wide integration of claims processing will proceed in fiscal year 1963 with simultaneous and interrelated attention being given to further development of electronic data processing and long-range total systems planning.

A feasibility study was completed for the Bureau of Old-Age and Survivors Insurance in February 1961 by a research team from Johns Hopkins University to determine whether operations research techniques could be profitably applied to processing and organizational problems in the long-range aspects of the Bureau's work. The feasibility study was thoroughly considered during the first half of fiscal year 1962 and, after an analysis of the detailed proposals submitted by six research organizations, a contract was signed on January 30, 1962, with Dunlap and Associates, Inc., Stamford, Conn., for operations research assistance in the Bureau's long-range studies of the claims process. The objectives established for the operations research program are, through use of the highly technical assistance supplied

by the Dunlap firm, to: (1) determine the best size and number of claims review points and the best organizational structuring for claims development, adjudication and review; (2) supplement the Bureau's studies of those aspects of the claims process requiring exercise of sound judgment; and (3) develop within the Bureau a staff capable of employing operations research techniques on a long-range basis. For purposes of the third objective, the Bureau selected five employees to form the nucleus of the internal operations research group. Detailed plans for on-the-job and academic training for the group were developed and initiated. In addition, the trainees are working as research assistants on the project.

Early in fiscal year 1962, the Bureau established a Foreign Claims Branch as a component of the Division of Claims Control, with responsibility for the centralized administration of the old-age, survivors, and disability insurance program abroad. The establishment of this new Branch was prompted by numerous considerations, the most important of which were: (1) the increasing number of beneficiaries who reside abroad; and (2) a number of special problems in this area which have come to the Bureau's attention in recent years. Many areas have been defined in which additional effort to improve Bureau operations abroad is required and in fiscal year 1963 the Bureau will be engaged in the solution of these problems.

The Form SS–5 file of account number applications, record changes, and indicators of claims actions now contains approximately 175 million forms and is growing at the rate of 7,772,000 forms annually. The file now occupies about 40,000 square feet of floor space. Attempts to find a method for converting this file to a more efficient system were continued and, during fiscal year 1962, the Bureau collaborated with systems engineers from seven companies in the development of a film-medium substitute for the Form SS–5 file. Schemes developed by these companies range from sophisticated microfilm systems to video tape processes, with a considerable degree of automation of updating and reference operations. Serious consideration is now being given to each of the proposals for converting the file and it is expected that one system will be adopted if it can be shown conclusively that any increase in cost would be offset by increased efficiency in updating and reference operations.

By agreement between the Department of Health, Education, and Welfare and the Treasury Department, the Bureau of Old-Age and Survivors Insurance has incurred a substantial new workload in the issuance of social security account numbers for Internal Revenue Service identification purposes. This enumeration project for Internal Revenue Service involves the Bureau in four distinct phases. The first phase was concluded on March 30, 1962, and resulted in the proc-

essing of 116,312 applications for account numbers that had been filled out by Federal Civil Service employees. The second phase, started near the end of the fiscal year, will involve the processing of applications for account numbers to be completed by approximately 2 million people who filed 1961 and who will file 1962 income tax returns. The third phase will start in the second quarter of fiscal year 1963 and will involve the processing of approximately 2,750,000 applications for account numbers to be completed by the recipients of dividends, interest, and other income subject to income tax reporting. The last phase of this enumeration project is expected to start in the first half of fiscal year 1964 and will involve those taxpayers and recipients of dividends, interest, etc., who did not obtain account numbers in the earlier phases. Details of this entire project are being developed jointly by the Internal Revenue Service and the Bureau.

In continuing its efforts for greater operating economy and efficiency, the Bureau implemented new and revised procedures and obtained new and improved equipment for its earnings record activities. Two of the Bureau's older computers were replaced by newer models with greater speed and capacity. Experience with this new equipment is extremely gratifying. Under the improved system, a number of programs have been combined to save processing time, to produce the end product at an earlier date, and to take advantage of the greater memory capacity of the newer model. Further improvements in the operations of these new computers were achieved when the newer high speed tape units, which record data at a density of 800 characters to the inch, were placed in operation during the fourth quarter of the fiscal year.

During the year, there was an increase in employers' use of magnetic tape reporting of employees' earnings. By the end of fiscal year 1962, over 4 million employee earnings items per quarter from 28 private companies, 6 State and local governments, and 4 military organizations were being reported on magnetic tape. This method of reporting employee earnings saves time and money both for the Government and for the employers who make use of it.

A total of 258 employers, each having 10,000 or more employees, are currently participating in the Bureau's direct submittal plan (reporting employees' earnings direct to the Social Security Administration rather than through the Internal Revenue Service). As a result, 7,600,000 earnings items are being received early each quarter, thereby enabling the Bureau to get a correspondingly early start on updating individual earnings accounts.

Both the magnetic tape reporting and direct submittal plans have been used only by employers reporting 10,000 or more employees. In fiscal year 1963, the Bureau is planning to extend each of these plans to employers who have between 5,000 and 10,000 employees.

An electronic data processing system for payroll and leave accounting for central office personnel was implemented during the year. The transition to the new system was accomplished in the latter half of fiscal year 1962 in a series of steps, beginning with a data verification and clean-up project, and concluding with a period of parallel operations to verify the accuracy of the new system before discontinuing the old procedures.

Adequate space for Bureau personnel and equipment continues to be a problem, although alleviated somewhat in Baltimore by construction of an Annex (largely completed during the fiscal year) to the Social Security Building. The Annex was ready for occupancy in August 1962 and most of the Bureau personnel located in downtown Baltimore buildings have been moved into the new space. Plans are now being developed to construct a 5-bay enlargement of the Annex, to alleviate further crowded conditions in the Social Security Building and to meet additional space needs. Lack of adequate space for district offices and payment centers remains a serious problem.

Research Activities

In cooperation with the Division of Program Research of the Social Security Administration and the Bureau of the Census, the Bureau of Old-Age and Survivors Insurance participated in the planning and preparatory work for a survey of all persons 62 years of age and over and a companion study of mother-child old-age and survivors insurance beneficiaries. The Bureau of Old-Age and Survivors Insurance is also participating with the Bureau of Family Services in planning or carrying out a number of studies designed to determine: (a) why a significant number of public assistance recipients are not qualifying for old-age, survivors, and disability insurance benefits, and (b) why old-age, survivors, and disability insurance beneficiaries require public assistance.

The Bureau also advanced preparations for a longitudinal study of aged beneficiaries, which is now scheduled to be launched with an initial survey in the spring of 1964. During the year the Bureau released additional analyses based on data from the 1957 cross-section survey of beneficiaries. Data from the 1960 survey of disability beneficiaries and of disabled workers who were awarded a period of disability for benefit computation purposes in the eight largest metropolitan areas were tabulated in preparation for analysis and release of the survey findings.

The Bureau published a monograph on average and aggregate paid manhours of employment of wage workers in covered employment, by industry division.

During the year the Bureau also made progress in its continuing survey of applicants for old-age benefits designed to provide data on, among other things, the factors affecting the worker's decision to apply for benefits.

A study of persons who failed to meet the requirements for a period of disability or disability benefits in 1957, 1958, and 1959 was continued. Reports of findings from this study will be prepared during the coming fiscal year comparing the characteristics and subsequent experience of workers who were denied a period of disability in these years.

The Bureau, in cooperation with the Office of Vocational Rehabilitation, continued its study of the rehabilitation experience of 2,100 disabled persons who were referred by the Bureau to State rehabilitation agencies and who were reported as rehabilitated in 1957–58. A report is scheduled for completion in fiscal 1963.

The Bureau published an analysis of provisions for survivor benefits in private pension plans. Work advanced on an analysis of findings from the Bureau's survey of State and local retirement systems. During the coming fiscal year the Bureau, jointly with the Bureau of Labor Statistics, will continue to develop a program of studies in the private pension and welfare field.

Work on other socio-economic research studies was advanced during the year, including studies of the taxation of income of the aged, and a cohort study of 61,000 men and women wage earners with earnings in 1957 that shows changes in the cumulative employment and cumulative wage credits of these wage earners as they aged from 1937 to 1957.

Financing the Program

The old-age, survivors, and disability insurance system has an estimated benefit cost that is very closely in balance with contribution income. In enacting the 1961 amendments Congress again made clear its intent that the program continue to be self-supporting from contributions of covered workers and employers. Careful review was given to intermediate-range and long-range actuarial cost estimates prepared for use of the congressional committees in their legislative considerations. The program as amended continues to be financed on an actuarially sound basis, both for the next 15 to 20 years and for the distant future.

The difficulties involved in making exact predictions of the actuarial status of a program that reaches into the distant future are widely recognized. If different assumptions as to, say, interest, mortality, retirement, disability, or earnings had been used, different results would have been obtained. Accordingly, no one set of estimates should be looked upon as final, in view of the fact that future experi-

ence may vary from the actuarial assumptions. Nonetheless, the intent that the system be actuarially sound can be expressed in law by a contribution schedule that, according to the intermediate-cost estimate, results in the system being substantially in balance. The Department, in carrying out its policy of continually reexamining the cost estimates of the program, is now conducting a complete review of its cost estimates in the light of the latest information available.

OLD-AGE AND SURVIVORS INSURANCE BENEFITS

The level-premium cost of old-age and survivors insurance benefits after 1961, on an intermediate basis, assuming interest of 3.02 percent and earnings at about the levels that prevailed during 1959, is estimated at 8.79 percent of payroll (after adjustments to allow for administrative expenses and interest earnings on the existing trust fund). The level contribution rate, equivalent to the graduated rates in the law, is estimated at 8.55 percent of payroll, leaving a small actuarial insufficiency of 0.24 percent of payroll. In view of the very long range over which these projections are made, and the many variable factors included, the insufficiency is so small that the system may be considered in actuarial balance.

DISABILITY INSURANCE BENEFITS

The Social Security Amendments of 1956 established a system for financing disability benefits which is entirely separate from the financing of old-age and survivors insurance benefits. The estimated level-premium cost of the disability benefits (adjusted to allow for administrative expenses and interest earnings on the existing trust fund) on an intermediate basis is 0.56 percent of payroll. Contribution income has been specifically allocated to finance these benefits; this income is equivalent to 0.50 percent of payroll, leaving a small actuarial insufficiency of 0.06 percent of payroll. Future experience with this program will be studied carefully to determine whether the actuarial cost factors used are appropriate or if the financing basis needs to be modified.

Summary and Conclusions

The old-age, survivors, and disability insurance program is a major institution in the economic and social life of the Nation. Over the years, this "social utility" has proven to be an effective and efficient method of preventing widespread dependency and want that is in every way consistent with the principles of our free society. If it is to fully realize its potential contribution toward eliminating poverty in our society, though, it can not be allowed to remain static. It must respond to changing conditions and emerging problems. The Depart-

ment of Health, Education, and Welfare will continue carefully to evaluate the effectiveness of the present program and to plan for its improvement. The legislative history of the program gives us every reason to believe that the program will be kept effective and responsive to changing needs and by efficient administration that it will be able to fulfill its promise of security to the American people.

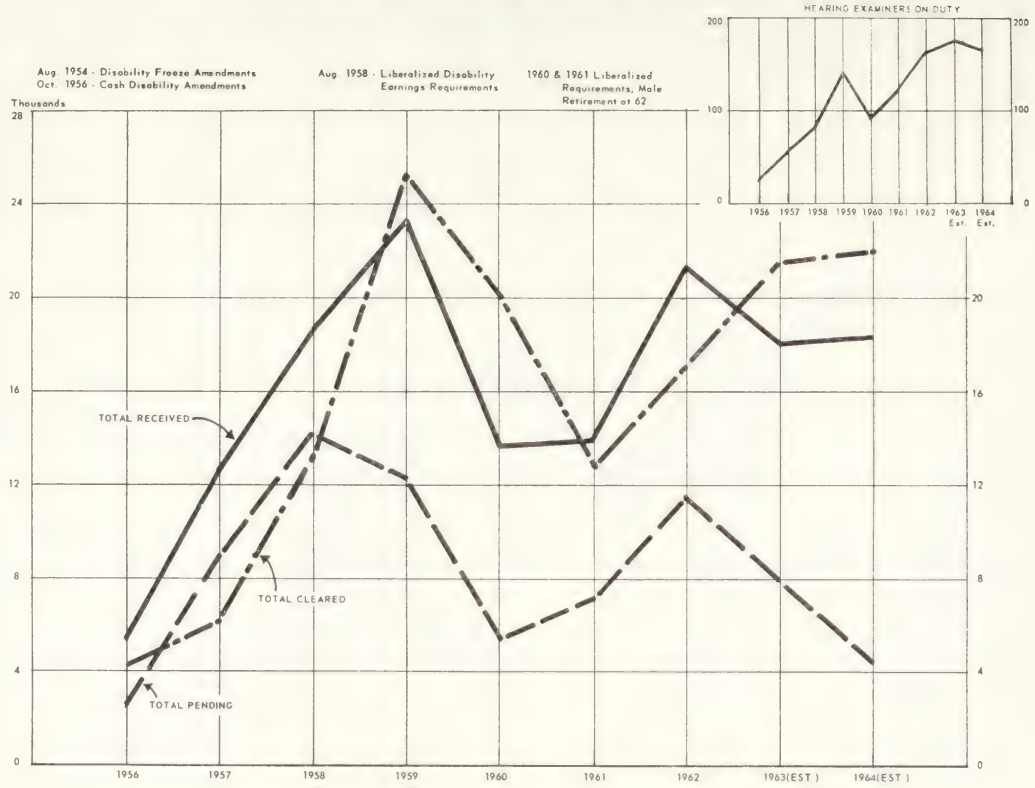
Bureau of Hearings and Appeals

Prior to 1939, when the Bureau of Old-Age and Survivors Insurance denied an application for social security benefits, the determination was final. Recognizing that a claimant who disagreed with such determination was entitled to an opportunity to protect his rights, Congress in that year amended the Social Security Act so as to provide for administrative hearings and judicial review on claims for benefits. To implement that provision there was established within the Social Security Administration an office which was charged with responsibility of conducting quasi-judicial proceedings and issuing decisions which would be subject to review by the courts.

These adjudicative responsibilities are carried out through hearing examiners stationed in the various States and certain territories, and through the Appeals Council sitting in Washington, D.C. The hearing examiners conduct hearings during which the claimant has the right to a representative of his own choosing. Sworn testimony is recorded verbatim by a reporter, documentary evidence is admissible, and oral and written arguments may be presented. After a full record has been made, the hearing examiner issues a written decision which may affirm, reverse or modify the determination of the Bureau of Old-Age and Survivors Insurance. Such decision is subject to full review by the Appeals Council at its option. If the Council decides to review a case it then issues a written decision. Thereafter, a claimant who continues to feel aggrieved may appeal to the courts.

Following enactment of the disability provisions of the Social Security Act, the number of requests for hearings filed by claimants increased sharply until a high of 23,450 was reached in fiscal 1959—an increase of 500 percent over 1955. The number declined in 1960 and 1961; but statutory amendments in those years resulted in 21,400 requests for hearings in fiscal 1962, an increase of 52 percent over the preceding fiscal year (Chart 9). The goal is to afford each claimant a prompt hearing and a decision by the hearing examiner within 90 days thereafter. Efforts to achieve that goal have been made through a substantial increase in the size of the hearing examiner corps, the maintenance of a continuing program of technical training, and the use of such devices as overtime and reassignment of cases.

CHART 9—HEARING REQUESTS: TOTAL RECEIVED, CLEARED, AND PENDING



The tremendous increase in hearing requests has also brought about concomitant increase in the workload of the Appeals Council (Chart 10). Thus, whereas 970 requests for review of hearing examiners' decisions were filed in 1956, the number rose to 7,300 in 1960. After a decline in 1961, new statutory amendments contributed in part to an increase in requests for review to 6,400 in 1962. It is estimated that over 9,000 such requests will be filed in fiscal 1963 and a comparable number in fiscal 1964. In addition, the greatly increased volume of litigation has added special burdens (Chart 11).

The drastic increase in workload has created major problems in maintaining our goal of avoiding "delayed" justice, while continuing to render proper and fair decisions. In addition to the staff increase, and step-up in technical training, other innovations have been made. For example, in order to obtain as complete a record as possible in disability cases, plans have been made to facilitate the appearance of physicians and vocational specialists as witnesses at hearings. Their expert testimony should contribute greatly to the decisional process.

In 1960, a Subcommittee of the House Ways and Means Committee issued a preliminary report on the social security disability program, in which some of the problem areas which had arisen in the appeals process were considered. The Commissioner thereupon selected an outstanding law firm experienced in administrative law to survey the operation of the Office of Hearings and Appeals. The report of this study, submitted to the Commissioner in December 1960, while making recommendations for certain changes and reorganization, stated in its conclusions: "We are impressed, moreover, with the efforts now being made further to reduce the time required to dispose of claims."

The culmination of the reviews of the appeals process was the Secretary's action during the past year in creating the Bureau of Hearings and Appeals to replace and assume the functions of the Office of Hearings and Appeals. The Secretary stated that elevation of the appeals organization to Bureau status would "emphasize its importance and its independence from the initial adjudicating body, the Bureau of Old-Age and Survivors Insurance," and would "give increased emphasis to the management needs of what has become a large organization by providing the framework for full management staffing." The important changes in internal organization during the year were the establishment of the position of Deputy Director, who also serves as Deputy Chairman of the Appeals Council, in order to relieve the Director and Chairman of many responsibilities of administration; the separation of general administrative functions from those relating to field operations, through the creation of the Division of Administration and the Field Division with increased responsibilities; and the expansion of the Program Division.

CHART 10.—REVIEWS BEFORE APPEALS COUNCIL: RECEIPTS, DISPOSALS, AND PENDING

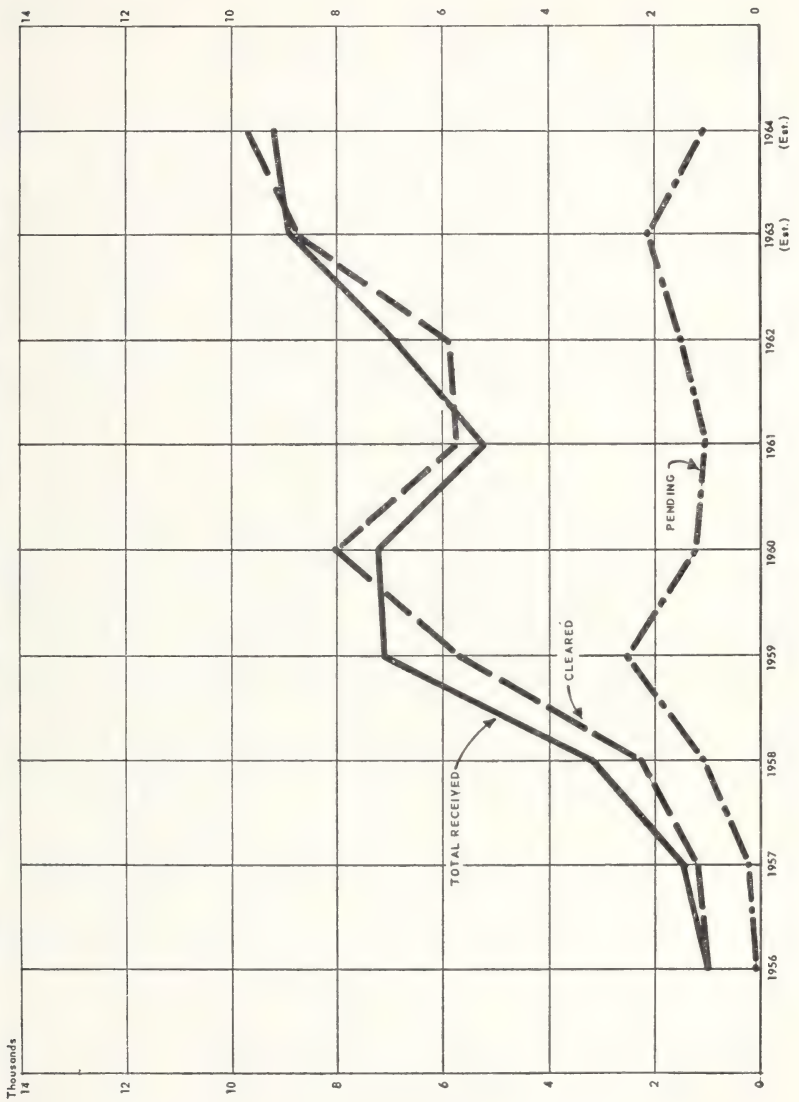
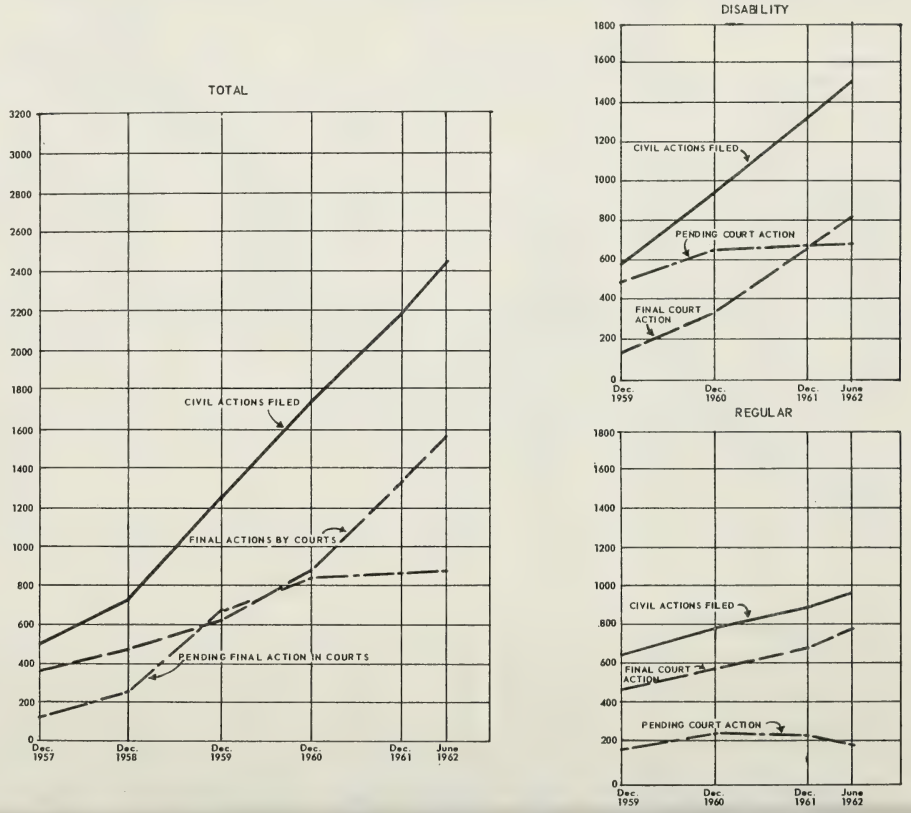


CHART 11.—CUMULATIVE CIVIL ACTIONS FILED, DECIDED, AND PENDING, DECEMBER 1957 THROUGH JUNE 1962



Public Assistance

Public assistance is intended to help individuals and families meet their essential needs when they are unable to do so themselves, and other resources, including social insurance, are not adequate or available to them.

Federal governmental aid, first provided in the early 1930's to meet emergency financial need due to unemployment, was replaced by long-range preventive measures under the Social Security Act passed in 1935 and subsequently amended. By 1950 the measures included (1) social insurance against the risks of unemployment, old-age, and dependency of widows and children because of the death of the wage earner; and (2) federally aided State public assistance to help meet basic unmet needs of certain dependent persons—the needy aged, blind, or disabled, and needy children deprived of parental care or support because of the death, incapacity, or absence of a parent.

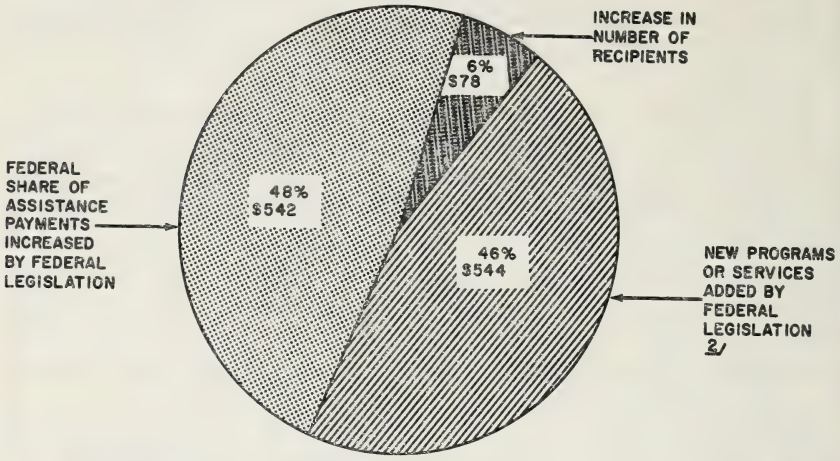
Through subsequent legislative changes, the scope and coverage of the Federal-State public assistance programs were broadened, and the amount of Federal financial participation increased to enable States to raise assistance payments to keep pace more fully with rising costs of living. In 1950, the permanently and totally disabled were included, and measures were added to extend and improve medical care for the needy. In 1956, clarification was made of the availability of Federal financial participation in the costs of providing services to help needy persons increase their capacity for more independent living. Federal funds were also authorized, but not appropriated, for training to upgrade the qualifications of public welfare personnel. In 1960, a separate program of medical assistance for the aged was established, and in 1961, the aid to dependent children program (ADC) was temporarily broadened to provide assistance to needy children in families with an unemployed parent, and to pay for foster family care for certain ADC children.

Legislative changes made during the past quarter century to meet more adequately the needs of a growing population (especially the aged and children) in a period of rising prices contributed to increased welfare caseloads and expenditures. (See chart 12.)

In recent years, public concern about welfare expenditures and dependency of welfare recipients has been reflected in widespread publicity about individual instances of fraud, unmarried parenthood, desertion, and other social problems. But there has also been an increasing recognition that the economic need of some groups is a consequence of a healthy, growing industrial society in which technological change and automation have produced economic and social problems with which some individuals, families, and even communities, can no longer cope.

CHART 12.—WHY INCREASED PUBLIC ASSISTANCE EXPENDITURES?

1949–1961 1/
(AMOUNTS IN MILLIONS)



[1] Represents 131 percent increase over 1949.
[2] Includes $199 million vendor medical payments in OAA, ADC, and AB; $166 million in APTD; $142 million for the adult caretaker in ADC; $31 million in MAA; $8 million for Guam, Puerto Rico, and the Virgin Islands; $7 million for additional State plans; and $3 million for children of unemployed parents in ADC.

Public concern over rising welfare costs, as well as wide interest in welfare methods and goals, led in 1961 to a concerted departmental effort to find new and better ways of dealing with dependency. Soon after taking office, Secretary Ribicoff announced that improvement of welfare programs would be one of his principal objectives. Early in the year, he sought and received advice and reports from several groups of experts in welfare and related fields on how welfare programs could be more effectively used as a constructive force in preventing and alleviating dependency and other related social problems.

According to Secretary Ribicoff: "What has emerged from this review is a clear recognition of the fact that today in 1961 the outlook of 1935 is not up to date. Born of depression emergencies, the original Federal welfare legislation well met the problems of that time. But the quarter of a century that has passed has taught us many new things. We are not satisfied with our welfare programs, and we know there is much that can be done to improve them. We must move toward two objectives: eliminating whatever abuses have crept into these programs and developing more constructive approaches to get people off assistance and back into useful roles in society."

To accomplish these goals, there was general agreement of the need for: (1) greater emphasis on rehabilitation and family-centered social services; (2) more adequate protection and support of needy children; (3) an administrative structure more helpful to the States in achieving

these objectives, including better qualified public welfare personnel, and methods of dealing more effectively with fraud and location of deserting parents; and (4) increased development and utilization of community resources in dealing with social welfare problems.

Administrative Actions in Fiscal 1962

A substantial start in modifying the public assistance program was made under existing legislative authority in December 1961 when Secretary Ribicoff directed the Commissioner of Social Security to:

change the name of the Bureau of Public Assistance to the Bureau of Family Services to reflect the increased emphasis on family-centered welfare services;

establish a new Division of Welfare Services (absorbing the functions of the former Division of Program Standards and Development) to implement the welfare services emphasis, to assist the States in the development of their services programs, and to study work and training activities and other incentives to employment;

modify existing Federal policy to permit and encourage the States to allow income of children to be conserved for appropriate future needs (such as the costs of education, and training for employment) without deduction from the public assistance payment; and

require State agencies to:

identify needy families with problems such as unmarried parenthood, desertion, and children in other hazardous home situations; and assign such cases to qualified staff for the provision of services, including frequent home visits, and close coordination to assure maximum use of the child welfare staff for consultation and services;

improve staff training and development programs through an assessment of personnel and training needs to carry out the objectives of the proposed family-welfare-service-oriented program;

establish a special unit responsible for locating deserting parents of needy children, assisting law enforcement officers and others in their efforts to require effective discharge of family responsibilities, reuniting families whenever feasible, and obtaining support; and

include in the State plan pertinent points relating to methods, procedures, and placement of responsibility for dealing with instances of suspected fraud, and submittal of periodic reports on the nature and extent of this problem.

In January 1962, Secretary Ribicoff announced the following additional administrative actions:

extension of the earlier policy change allowing conservation of income of ADC children for future educational and training purposes to permit the income of the ADC mother also to be used for this purpose, and identification

of specific steps to be taken by the States to assure that ADC children obtain the full educational opportunities available to them;

organization of a work group to assist the Department in simplifying and improving welfare forms and procedures, and in eliminating unnecessary paperwork to allow more staff time for work with recipients;

establishment of a work group to develop further informaton on the causes of illegitimacy and the most effective methods of dealing with it, to review existing programs to see where further study is needed, to highlight promising areas of research, and to develop programs that will help combat illegitimacy and the economic dependency of children; and

expansion in the Social Security Administration's research facilities to assure continuing attention to developing and carrying out studies in the broad field of human resources and social welfare, and appointment of a continuing committee to advise on the Department's research planning responsibilities, especially in finding ways to reduce dependency and to stimulate self-care and self-support.

Cooperative effort was also encouraged with the following newly established groups:

the Children's Bureau's special Youth Development Unit, to help local communities plan for improved coordination of welfare services to meet special problems of youth, particularly those on ADC;

the Office of Education's Youth Development Section, to promote better coordination between school authorities and welfare agencies in working on school problems of children, especially those on welfare rolls, and on the school drop-out problem;

the Office of Vocational Rehabilitation's task force established to determine what administrative steps can be taken under present law to expand and improve vocational rehabilitation services for disabled persons on welfare rolls; and

the special committee of deans of schools of social work, to increase the supply of adequately trained personnel for public welfare.

A further policy change announced by the Secretary in March was designed to help mental patients return to community living by permitting Federal financial participation in assistance payments to them or on their behalf on their conditional release from a mental institution, if the patient goes to his own home, the home of a relative, a boarding home, or to a nursing home not specifically established for psychiatric care.

STATE AGENCY REACTION TO ADMINISTRATIVE CHANGES

State agency administrators meeting in Washington the latter part of January to discuss the implications of the earlier administrative

actions and to plan for their implementation at the State and local level reported "basic agreement between the two levels of government, an eagerness to move forward on a broad front in improving and strengthening public welfare programs, and satisfaction in the far-reaching progressive leadership given by Secretary Ribicoff, Wilbur Cohen, and other members of the Department."

They pointed up areas needing further clarification; asked for help in developing in-service training programs, in preparing plan material, and in case classification; and urged the Department to give strong leadership in helping social work gain increased recognition. They also asked for guide materials in planning for social services on a statewide basis, recognizing the lack of community resources in remote areas and the differences in staff capabilities. They cautioned that a sound service program must be based upon adequate financial assistance and expressed concern that an increased emphasis on services to children not result in diminished services for the aged, blind, and disabled.

While there was unanimous support for the goals and objectives of both the administrative directives and the overall legislative proposals, the State administrators pointed out that "such changes take much time . . . we will of necessity be slow in implementation of many of the facets; we will not promptly reduce the caseloads or costs, and there are many factors which indicate we will always have high, and perhaps higher, caseloads and increased costs. . . ."

Some of the Secretary's directives and many of the recommendations made by the State administrators and other groups, including the White House Conference on Aging, were subsequently reflected in amendments to the Social Security Act passed in 1962.

Public Welfare Amendments of 1962

Public Law 87–543, approved July 25, 1962, provides a legislative base for implementing the Administration's goals to help needy persons attain or retain capability for self-care and self-support, and to maintain and strengthen family life for children.

Through new financial incentives, the States were urged to provide welfare services that are likely to prevent or reduce dependency, and to develop training programs to increase the number and skill of workers providing such services. Increased Federal funds were allocated for the adult assistance programs to enable the States to increase payments to recipients. In aid to families with dependent children (AFDC formerly ADC), Federal financial participation was authorized in expenditures for work performed by adult relatives under community work and training programs that provide opportunities

for conserving and developing work skills. Special protection for the child was provided in the event his parent or other relative does not spend the assistance money for the benefit of the child. Several new provisions also were directed toward more effective administration of the welfare programs.

In approving the Public Welfare Amendments of 1962, President Kennedy said, "the new legislation marks a real turning point in the Nation's effort to cope realistically and helpfully with pressing welfare problems."

The major provisions of the law, directed to certain objectives, are outlined below.

To Promote Self-Reliance

Federal participation in the State's administrative costs of providing prescribed or specified services in all the assistance programs was increased to encourage States to provide social services to alleviate economic or personal dependency or contribute to its prevention. Services to persons formerly but not now receiving assistance, or considered likely to become dependent within a specified time, however, are to be provided only upon request.

In the period September 1, 1962, through June 30, 1963, 75-percent matching is available for certain services designated by the Secretary. Beginning July 1, 1963, the Secretary is authorized to prescribe these minimum services. If the minimum prescribed services are provided, 75-percent matching is available in the costs of such services and also in other specified, but optional, services that may prevent or reduce dependency. If a State does not provide the prescribed minimum services, Federal participation will be 50 percent, as before.

As previously, in all programs, the choice remains with the State agency as to whether services are to be provided, but the State plan must include a description of any services that are made available and steps to assure maximum use of related agencies. Beginning July 1, 1963, in the aid to families with dependent children program (AFDC) the State plan must also provide for the development and application of such welfare and related services as may be necessary because of home conditions and the specific needs of each child, and for the coordination of services provided under the public assistance program with those provided by the State's child welfare program.

Services generally are to be provided by public assistance staff. If the State public assistance agency determines, within the limits prescribed by the Secretary, that it cannot offer welfare and related services economically or efficiently and such services are not reasonably available otherwise to persons in need of them, these services may be purchased, by agreement, from other State agencies. There is further provision concerning vocational rehabilitation services (as defined in the Vocational Rehabilitation Act, e.g., counseling, training, and placement for the physically or mentally handicapped) available through the State vocational rehabilitation agency, or which this agency is willing to provide pursuant to agreement.

To Upgrade Staff Skill in Providing Services

A major objective of the new legislation—to help people move from dependency toward self-reliance—is largely dependent upon personnel capable of providing necessary services. To upgrade staff skill, Federal participation was *increased* from 50 *to 75 percent* in a State's expenditures for training personnel employed or preparing for employment in public assistance. This applies to the administrative costs of in-service training programs, training grants for prospective employees, and stipends to welfare staff on educational leave, effective September 1, 1962, for States with an approved staff development plan. Beginning July 1, 1963, the 75-percent matching of a State's costs for staff development will be available only to those States which also provide the minimum prescribed services to recipients.

Funds were also authorized for other training to be administered by the Department directly or through grants to or contracts with institutions of higher learning without State financial participation, but no appropriation was made under this authority in 1962.

To Provide Work Incentives and Encourage Efforts To Achieve Self-Support

To encourage States to provide useful work experience and constructive training for adults receiving assistance under aid to families with dependent children, Federal participation was provided in the form of payments for work by those employed on community work and training projects that meet prescribed working conditions and safeguards.

All specified requirements became effective October 1, 1962. However, States were permitted to claim Federal matching for work payments in any period beginning July 1, 1961, through September 30, 1962, if specified conditions, with certain exceptions, were met. This program was authorized for a temporary period, ending June 30, 1967.

Other work incentives were afforded through provisions that (1) require taking into account necessary expenses that can reasonably be attributed to the earning of income in determining need under all the federally aided assistance programs; (2) permit exemption of some earned income in determining need under the old-age assistance program; (3) require disregarding, for not more than 12 months, income and resources in determining need for an aid to the blind recipient who has a plan for achieving self-support in addition to the amount of earned income otherwise exempt; and (4) permit States to set aside earned or other income of an AFDC family for future identifiable needs.

Thus, in determining need and the amount of an old-age assistance payment, States are permitted to disregard the first $10 of earned income plus one-half the remainder of the first $50, effective January 1, 1963.

In the aid to the blind program, in addition to the provision of a 1960 amendment, effective July 1, 1962, which requires disregarding the first $85 per month of earned income plus one-half of earned income in excess of $85, further provision was made to disregard additional amounts of other income and resources for a period not to exceed 12 months to enable a blind individual to fulfill a State-agency-approved plan for achieving self-support.

To Extend the Adequacy and Scope of Public Assistance

The formula for determining the amount of Federal participation in State public assistance payments to the aged, blind, and disabled was liberalized, effective October 1, 1962. The Federal share of the average monthly assistance payment in old-age assistance, aid to the blind, and aid to the permanently and totally disabled was *raised* from 4/5 of the first $31 *to* 29/35 *of the first $35*, and the average maximum was *increased* from $66 *to $70*.

In approving the 1962 amendments, President Kennedy pointed out that, "The reports of both the Ways and Means Committee of the House of Representatives and of the Committee on Finance of the Senate make it clear that the States are expected to pass these additional funds on to the recipients under these programs. It would truly be a miscarriage of justice and a frustration of the legislative intent if these new Federal funds merely replaced existing State funds, and those for whom the increase was intended were denied the full benefit."

Assistance to dependent children of unemployed parents, authorized in 1961 for a 14-month period ending June 30, 1962, was extended for 5 years, to June 30, 1967. Also, the aid to families with dependent children program was broadened to include both parents as eligible recipients when deprivation of parental care or support is due to incapacity or unemployment.

To assure that an assistance payment made on behalf of a child is spent in his best interests, in instances where there is evidence that the money is being used in ways that are detrimental to or threaten the well-being of the child, the State agency may take any of the following actions. It may provide counseling and guidance services to the relative payee on the proper use of such payment; it may advise the relative that continued failure to use the payment for the benefit of the child may result in court appointment of a legal representative or guardian, or in criminal or civil penalties imposed by a court of competent jurisdiction; or under specified conditions, it may make a "protective payment" without loss of Federal funds.

A "protective payment" is a money payment to a substitute payee—a third party, such as a relative, friend, or individual who is a member of a church, community service group, or public or voluntary agency who is interested in the welfare of the family. When such payments are made, safeguards are included to assure that (1) consideration is given in the selection of a substitute payee to qualifications for assuming this responsibility and acceptability of the individual to the family, the needs, and problems in the home and the nature of the difficulties that led to the present need for help in money management; and (2) special efforts or services are directed toward helping the relative payee develop his ability to manage funds, since the purpose of the protective payment is to strengthen the child's own family rather than to provide care for the child in a foster home.

The State may receive full Federal financial participation in protective payments made to a limited number of recipients (not exceeding 5 percent of the number of other AFDC recipients in the State for such month) during the period October 1, 1962, through June 30, 1967.

To increase resources for the care of children removed from the home, the following actions were taken.

(1) The 1961 amendment, which temporarily provided Federal financial participation in State expenditures for a dependent child in a foster family home, was made permanent.

(2) The limitation that responsibility for placement and care be only in the State or local agency administering AFDC was modified until June 30, 1963, to include responsibility for placement and care by other public agencies. However, a current interagency agreement must assure the development of a plan for the children that will accomplish the objectives of the AFDC program. Before March 1963, the Secretary is to report on the effectiveness of this provision and recommend further action.

(3) Federal participation was also temporarily authorized in State AFDC payments in the form of foster care for children who must be removed from their home and placed in a licensed or approved private nonprofit child-care institution (from October 1, 1962, through September 30, 1964). Payments for maintenance, such as board and room, clothing, medical care, and other needs—but not overhead costs of the institution—may be made to the institution.

The program of assistance to Americans repatriated to the United States from abroad was extended from June 30, 1962, through June 30, 1964. This program was authorized by Congress in 1961 because of the need for emergency aid that might result from international crises or severe personal problems which befall the increasing number of Americans living or traveling abroad.

To Assure More Effective Administration

A move toward a noncategorical approach was reflected in title XVI added to the Social Security Act to permit replacing the present separate State plans with a single plan consolidating all adult programs, effective October 1, 1962. (In States which have a separate agency for the blind under title X, that agency may be designated to administer or supervise as a separate plan the portion of the State plan under title XVI which relates to blind individuals.)

The new title does not, in most instances, modify existing provisions in titles I, X, and XIV, but to the extent that eligibility conditions are the same for aged, blind, or disabled persons, the new program under a single State plan permits simplification. The single State plan would have a common standard for determining need and payment, except for the disregard of earned income of those in the aged and blind groups; and assistance payments for the aged, blind, or disabled would be averaged in computing the amount of Federal financial participation under the new program. Also, the separate and additional Federal financial participation for medical care authorized under title I will be available under title XVI for medical care for the blind or disabled, as well as the aged. Medical care for the first 42 days of an aged individual's stay in a general medical institution as a result of a diagnosis of psychosis or tuberculosis is also extended to blind or disabled persons.

To stimulate experimental projects to test new ideas and ways of dealing with public welfare problems, the Secretary is permitted to waive State plan requirements that may interfere with such demonstrations, such as the requirement that a plan must be in effect throughout the State, since such projects usually are not statewide. The law also authorizes use of not more than $2 million

a year, for 5 years, of funds appropriated for public assistance to assist in paying that portion of the costs of projects not otherwise subject to Federal participation.

A 12-member Advisory Council on Public Welfare is to be appointed in 1964. This group, representing the general public and various interests concerned with public and voluntary welfare programs, is to review and make recommendations on the Federal-State public assistance and child welfare services programs; and to study the relationship between the public assistance and the old-age, survivors, and disability insurance programs. The first Advisory Council is to submit a report to the Secretary by July 1, 1966. Subsequent similar councils are also authorized.

Trends in Caseloads and Expenditures

In June 1962 assistance was available in all 54 jurisdictions of the country (including the District of Columbia, Guam, Puerto Rico, and the Virgin Islands) under federally aided programs of old-age assistance (OAA), aid to the blind (AB), and aid to families with dependent children (AFDC).

Fifteen jurisdictions administering AFDC also made payments to unemployed-parent families, compared with 6 in June 1961, and 13 jurisdictions made payments for the foster-family care of children, compared with 1 in June 1961.

Federally aided programs for the permanently and totally disabled were administered by 50 jurisdictions, and an additional APTD program was started in Arizona on July 1, 1962.

Twenty-seven jurisdictions, compared with 10 in June 1961, had a program of medical assistance for the aged, now in its second year.

General assistance (wholly State and/or locally financed), in some form for some persons, was available in all 54 jurisdictions.

CASELOADS

About 7.3 million persons were receiving aid in June 1962 under the six public assistance programs—old-age assistance, medical assistance for the aged, aid to families with dependent children, aid to the permanently and totally disabled, aid to the blind, and general assistance. With increases in MAA, AFDC, and APTD more than offsetting decreases in OAA, AB, and GA, the net increase in June 1962 over June 1961 was 180,000 recipients (or 2.5 percent)—considerably less than the 432,000 (or 6.3 percent) increase in June 1961 over June 1960.

There were 101,600 recipients of MAA in the 27 States with such programs in June 1962 compared with 46,000 receiving such assistance in June 1961, when only 10 States had such programs. The MAA program was initiated in October 1960 under an amendment passed in September 1960.

In AFDC, the 3,692,600 recipients (including 2,853,400 children in 944,000 families) assisted in June 1962 represents an increase of 310,000 over June 1961. This 9.2-percent increase is attributable in part to the increase of 125,000 recipients in unemployed-parent families, and also reflects the continuing growth in child population.

The 417,000 persons receiving APTD in June 1962 represents an increase of 8.7 percent over the 384,000 aided a year earlier. The increase in 1962, slightly higher than the 5.8-percent increase in June 1961 over June 1960, is a continuation of the gradual but steady increase in the number aided under this program since its initiation in 1950.

The 2.2 million recipients of old-age assistance in June 1962 represents a 59,000 (or 2.6 percent) decrease from June 1961, due largely to liberalizations in eligibility requirements for the old-age, survivors, and disability insurance program (OASDI) and transfers of aged persons in medical institutions and/or nursing homes to newly established programs of MAA. A similar 2.6-percent decline in OAA recipients in June 1961 from June 1960 is part of the slow but steady decline in the number receiving OAA since 1951.

However, the 34 percent of OAA recipients receiving both public assistance and social insurance in June 1962 because their insurance benefits and other resources were insufficient to meet their basic needs, such as medical care, is a continuation of the steady increase in concurrent receipt of assistance and insurance. Since 1950 when OAA and OASDI were concurrently received by less than one-tenth of the total OAA caseload, the number receiving both has steadily grown until they represented slightly more than one-third of all OAA recipients in 1962.

The 100,400 recipients of aid to the blind in June 1962 represents a 4.9-percent decline from the 106,000 aided in June 1961. The June-to-June decline in 1962 is greater than the 2.2-percent decrease for the same period between 1961 and 1960.

The 812,000 persons in 340,000 cases receiving general assistance in June 1962 represents a 16-percent decrease from the 1,040,000 persons in 405,000 cases receiving general assistance a year earlier.

One in 25 persons in the total population was a recipient of public assistance in June 1962. The recipient rate varied widely by program. One out of every 8 aged persons received old-age assistance; only 1 out of every 24 children received AFDC.

The recipient rate also varied by State, due in part to variations in per capita income. States with relatively high per capita income are likely to have a relatively small proportion of their population in need; conversely, States with low per capita income usually have a high incidence of need.

Although a majority of persons applying for assistance do not receive OASDI benefits (e.g., voluntary reports from 29 States indicate that of the cases approved January–June 1961, 97 percent in AFDC, 97 percent in GA, 90 percent in APTD, 86 percent in AB, and 53 percent in OAA were not receiving OASDI benefits), a State's assistance recipient rate is usually inversely related to the proportion of persons in the State who do receive OASDI benefits. In general, in States where more persons receive OASDI benefits, the proportion of the aged receiving OAA is lower than in States with smaller numbers of OASDI beneficiaries.

Voluntary reports from 29 States also indicate that one out of every six applicants for whom old-age assistance was approved during the last 6 months of fiscal 1961 found it necessary to apply for assistance because of increased need for medical care or because of exhaustion or reduction of assets to meet medical care expenses during the 6 months preceding application. For persons who have been receiving OASDI benefits and have found it necessary to ask for old-age assistance, the proportion for whom medical care is the immediate reason was more than twice as high (29.3 percent) as that for persons approved for assistance who are not receiving OASDI benefits (12.2 percent).

EXPENDITURES

Total assistance expenditures, including vendor payments for medical care, for all six programs for the fiscal year 1962 were $4,269 million—an 8.4-percent increase over expenditures in 1961. Total expenditures in June 1962 compared with a year earlier reflect both *increases* of $220 million or 19.6 percent in AFDC, $153 million or 357.2 percent in MAA, and $33 million or 11.0 percent in APTD; and *decreases* of $16 million or 0.8 percent in OAA, $1 million or 1.2 percent in AB, and $58 million or 12.4 percent in GA programs in 52 States. Assistance payments during 1962 represented about a cent per dollar of total personal income in the Nation during 1961. The cost per person in the United States was $22.92.

In aid to families with dependent children, the national average monthly payment was $31.48 per recipient in June 1962, compared with $30.30 a year earlier. Average payments per recipient ranged from $9.15 in Mississippi (except for $3.76 in Puerto Rico) to $47.52 in New Jersey.

In old-age assistance, the average payment was $72.55 per recipient in June 1962, compared with $67.85 in June 1961—an increase of nearly $5. Average payments ranged from $36.03 in Mississippi (except for $9.05 in Puerto Rico and $33.89 in the Virgin Islands) to $103.42 in California. For all States, the average medical care vendor

payment per recipient of old-age assistance increased from $11.12 per recipient in June 1961 to $14.49 in June 1962.

In medical assistance for the aged, the average vendor payment per recipient, as reported by 26 of the 27 States with programs in June 1962, was $171.36, compared with $201.33 per recipient in the 9 States making payments in June 1961. Average MAA payments ranged from $18.40 in Kentucky (except for $18.10 in the Virgin Islands [1]) to $394.15 in Louisiana.

In aid to the permanently and totally disabled, the average payment per recipient was $72 in June 1962, compared with $68.21 a year earlier. The nearly $4 increase was centered largely in vendor payments. Average payments ranged from $34.44 in Mississippi (except for $8.75 in Puerto Rico, $24.85 in Guam, and $34.08 in the Virgin Islands) to $131.77 in Massachusetts.

In aid to the blind, the average payment per recipient was $77.47 in June 1962, compared with $73.36 a year earlier. Average payments ranged from $38.13 in Mississippi (except for $8.33 in Puerto Rico [2]) to $121.72 in California.

In State and/or locally financed general assistance programs, the average payment per case excluding medical care vendor payments, was $65.78 in June 1962, compared with $65.13 in June 1961 for 52 jurisdictions (Idaho and Indiana excluded). Average payments per case ranged from $12.65 in Alabama (except for $8.31 in Puerto Rico [3]) to $123.94 in New Jersey. Thirty-seven percent of all cases were family cases, including an average of 4.4 persons per family.

The wide variation in average monthly payments between States is closely related to per capita income and willingness to support public assistance programs.

States with relatively high per capita income usually have a relatively small proportion of their population in need, but a relatively greater fiscal capacity to meet needs that occur. States with relatively high per capita income, thus, usually make relatively higher payments than States with low per capita income in which there is both a high incidence of need and low fiscal capacity.

Some States with low per capita income make a strong effort to finance public assistance, and as a result, their expenditures per inhabitant are larger than other States with similar per capita income. In general, however, States with low per capita income provide smaller average amounts of assistance. Therefore, matching formulas for Federal participation in State expenditures for public assistance

[1] Too few recipients in Guam and New Hampshire to compute a reliable average payment.

[2] Too few recipients in Guam and the Virgin Islands to compute a reliable average payment.

[3] Too few recipients in Guam to compute a reliable average payment.

have been designed to be of relatively greatest help financially to low-income States.

Factors contributing to increased expenditures in 1962 include: the increase of 125,000 persons in the unemployed segment of the AFDC program, growth in existing MAA programs and initiation of new programs in 17 States, initiation of vendor payments in OAA for certain types of medical care in 6 States, an increase in rates for vendor medical services in several States due to the rising cost of medical care, and an increase in the level of money payments to meet the rising cost of living.

Higher level of payments in several States resulted from actions taken to utilize additional Federal funds made available for OAA, AB, and APTD under the 1961 amendments to the Social Security Act. Cost standards used in determining eligibility for and the amount of assistance payments, for example, were also increased in one or more programs in about a fourth of the States, a few States raised their maximums on individual monthly payments, and some States removed or lessened percentage reductions in need met.

SOURCE OF FUNDS FOR PUBLIC ASSISTANCE PAYMENTS

Of $4,269 million expended for the six public assistance programs in fiscal 1962, about 54.0 percent, or $2,304 million, came from Federal funds; 34.7 percent, or $1,482 million, from the States; and 11.3 percent, or $483 million, from the localities.

For the five special types of public assistance, the Federal share of total costs was 59.7 percent; the State share, 32.7 percent; and the local share, 7.7 percent.

Program Developments

In addition to the new program provisions provided through administrative action or legislative change during the year, significant developments have occurred in several program areas.

DEVELOPMENTS IN MEDICAL CARE

By 1960, more than four-fifths of the Nation's jurisdictions had some provision in their public assistance programs to pay for medical care directly to the suppliers of such services, commonly known as the vendor payment, and many of the jurisdictions provided for some items of medical care in the money payment to recipients. However, the majority of the States are not yet providing the broad scope of services needed by most sick people.

In September 1960, two additional medical care provisions for the aged were authorized by Congress under Public Law 86–778, popularly known as the Kerr-Mills legislation. These included: (1) a new

Federal-State program of medical assistance for the aged with Federal funds to help the States pay for medical care for older persons whose income and other resources are above the financial level of eligibility for old-age assistance, but not sufficient to meet the costs of their medical care needs; and (2) increased Federal funds to enable the States to improve medical care services in their existing old-age assistance programs, or to develop such medical care services.

The 1960 provisions augmented the amount of medical care that could be made available previously under federally aided public assistance programs. As a result, payments by States to suppliers of medical care under the federally aided public assistance programs, including medical assistance for the aged, have increased from less than $400 million in fiscal 1960 to about $712 million in fiscal 1962. About $195 million of the 1962 expenditures are attributable to the new medical assistance for the aged program.

Medical Assistance for the Aged (MAA)

The Federal provisions of the MAA program are liberal and flexible. The Federal Government shares with the States in the total cost of the program without any limitation on the individual payment or on total State expenditures. The amount of Federal participation ranges from 50 to 80 percent of medical care expenditures paid to suppliers of medical care in behalf of eligible recipients, the higher percentages going to the States with lowest per capita income.

Under this new program States may make available a broad scope of medical services: inpatient hospital services; skilled nursing-home services; physicians' services; outpatient hospital or clinic services; home health care services; private-duty nursing services; physical therapy and related services; dental services; laboratory and X-ray services; prescribed drugs; eyeglasses, dentures, and prosthetic devices; diagnostic, screening, and preventive services; and any other medical or remedial care recognized under State law.

Although the law specifies a broad scope of care and services that may be provided as medical assistance for the aged, the States determine the kinds and extent of services for which costs will be assumed and the conditions of eligibility for such services. Relatively few conditions are imposed by the Federal act: the State must include both institutional and noninstitutional care; a durational residence requirement is not permitted; a lien may not be placed against the property of any individual prior to his death on account of medical assistance properly paid in his behalf, and recovery of such assistance cannot be made except from his estate after the death of the surviving spouse, if any; no charge, such as an enrollment fee or premium, is permitted as a condition of eligibility; and disclosure of information

concerning applicants and recipients is restricted to purposes directly connected with the administration of the program.

State implementation of the MAA program.—By August 31, 1962, half the States and 3 other jurisdictions had MAA programs in operation; the number had doubled from 14 States in August 1961 to 28 States [4] in August 1962. The number of recipients under this program nearly doubled during the year, from 59,100 in August 1961 to 108,900 in August 1962. About a third of the recipients for whom MAA was authorized since it began came from other assistance programs primarily in States that paid for nursing-home care, and whose average payments under OAA exceeded the maximum amounts in which Federal financial participation is available.

There is considerable range among the participating States both in the number and proportion of persons receiving medical care under MAA and in the average payment per recipient. For example, in August 1962, the number aided ranged from 20 in New Hampshire to 30,503 in New York, and 2 States made no payments during the month. Nearly two-thirds of the recipients were in three States. Average MAA payments ranged from $20.86 in Kentucky to $418.47 in Illinois. The average payment for all States was $215.61.

The States, in most instances, began on a conservative basis. Of the 28 States (25 States and 3 other jurisdictions) operating medical assistance for the aged programs in August 1962, 3 provided for comprehensive care in each of the 5 major areas of medical services (hospitalization, nursing-home care, physicians' services, prescribed drugs, and dental care). Four additional States gave some care in each of the major areas but with significant limitations on the condition for which care would be provided or the extent of such care. Six States provided only two services, one institutional and one noninstitutional, the minimum required by law.

All 28 jurisdictions provided for hospitalization on some basis, but with varying limitations as to the number of days of hospital care and the nature of the medical need, e.g., emergency or life-endangering conditions.

Nursing-home care was included in 18 of the State programs. In four of these States, care was restricted to post-hospital care. In the other 14 States, restrictions related largely to rates of payment.

Twenty-six States provided physicians' services but in two of these States, such services were available only as outpatient clinic services. In 17 programs,

[4] Alabama, Arkansas, California, Connecticut, Guam, Hawaii, Idaho, Illinois, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New York, North Dakota, Oklahoma, Oregon, Pennsylvania, Puerto Rico, South Carolina, Tennessee, Utah, Vermont, Virgin Islands, Washington, and West Virginia.

physicians' services were limited as to the number of visits during a given period or the nature of the illness or condition covered.

Prescribed drugs were included in 16 States, and were available without narrow limitations in 8 of these States. Dental care was covered in 11 States but with restrictions; most of the States did not provide for dentures.

Five of the 28 States provided for more medical services in MAA than in OAA; 13 provided substantially the same breadth of service as was available in old-age assistance through vendor-payment provisions; 8 provided for less service than for OAA recipients, usually omitting dental care, prescribed drugs, or nursing-home care; and in 2, the variations prevented classifications under any of the above headings.

The extent to which States are reaching into the group of medically indigent through this program is limited. The basis on which eligibility for MAA is determined by the different States is only slightly higher than that used for old-age assistance, as evidenced by the consideration given by the States to income and other resources, such as personal property, life insurance, and real property in determining eligibility. In addition, in more than half the 28 States, persons otherwise eligible can receive help under MAA only after health insurance or such other potential resource has been utilized. Eight States also include a deductible feature—an amount, such as $50 or $100, which must have been obligated by an individual in a year for medical care before he can be eligible for participation in the program.

Consideration of income.—Generally, the States with MAA programs use a specified level of income in determining financial eligibility. In most States, a person with income in excess of a specified amount is ineligible. In six States, the income figure represents the amount considered as needed for living expenses, and income or available assets beyond that amount are evaluated against the probable cost of medical care needed by the individual. The most liberal annual income figure used by a State is $2,000 for a single person. The most common amount is $1,500, and the next most common amount is $1,200, with two States below this figure. The most common figure of $1,500 approximates the highest figure—$1,587—in a State OAA program (excluding Alaska) for a single person living alone for essential maintenance costs, in January 1961.

Consideration of life insurance.—Twenty-six of the 28 States exempt life insurance under specified conditions, such as: 1 State, a reasonable cash surrender value; 15 States, within a dollar maximum ranging from $500 to $2,000, with $1,000 the most usual limit; and 10 States, within the dollar maximum for all personal property. The other two

States provide for full utilization of any cash resource available from the insurance.

Consideration of other personal property.—All 28 States take into account the availability of other personal property to meet medical care costs. In 26 States, there are dollar limits on the amount that may be held without affecting eligibility. These range from $50 to $2,800, with most between $1,000 and $2,500. Nine include both real and personal property within the stated limit.

Consideration of real property.—All States exempt the property used as a home but six States require that equity in the home not exceed a stated amount. With respect to real property other than that used as a home, five States do not allow holding such property, and four States set limits on the value of such property that can be held but require it to be income-producing. Of the other States, some require the value of such property in excess of certain limits to be applied to medical costs, and others specify limits on the value of such property which may be held.

In general, States have been more liberal in the limits set for real and personal property which an individual may retain and remain eligible for medical assistance for the aged than is true for old-age assistance. However, with but 28 of the 54 jurisdictions utilizing Federal aid available for MAA, the limited scope of medical services being provided, and limitations imposed on income and resources, the benefits of the MAA program are reaching a relatively small segment of the elderly of the Nation, and the potential of the Federal legislation is not yet being realized. With more experience in this area, some States will probably expand their MAA programs, and others will establish programs, but the cost factor could continue to be a deterrent to expansion.

The Secretary of Health, Education, and Welfare, in transmitting to the House Ways and Means Committee the "Report on Medical Care Under Public Assistance" covering the first year's experience under the Kerr-Mills legislation (October 1960–October 1961), concluded that "to rely on existing public assistance legislation alone as a means of meeting the medical-care needs of aged persons would not only fail to cover many aged people in need, but would also be very costly in general revenues. The legislation could, and in my judgment should, be a supplement to the type of protection which would be afforded under the administration's proposals for health insurance for the aged through social security."

Increased Medical Care Provisions Under Old-Age Assistance (OAA)

The 1960 legislation provided for a substantial expansion in Federal participation in payments to suppliers of medical care for old-age

assistance recipients. In addition to the usual share in assistance payments, the Federal Government provided an additional amount based on expenditures for payments to suppliers of medical care up to a monthly maximum of $12 per recipient (raised to $15 in 1961). The additional funds were intended to enable States to improve or to initiate medical care services in old-age assistance programs.

Between October 1, 1960, (the effective date of the new legislation) and August 31, 1962, of the 43 States which were already making some vendor payments for medical care costs of old-age assistance recipients, 25 expanded or improved the coverage or content of medical care services, 4 broadened the scope by including persons only in need of medical care, and 14 continued the level of services previously offered. Ten of the other 11 jurisdictions provided medical care services for the first time through vendor payments, and 1 secured legislative authority for vendor payments for old-age assistance recipients.

Scope of medical care provided.—Of the 53 jurisdictions making vendor payments for medical care services for OAA recipients in August 1962, 22 were providing a relatively comprehensive scope of services—15 made vendor payments in each of the five major kinds of medical care (hospital care, nursing-home care, physicians' services, dental care, and prescribed drugs); and 7 used the vendor-payment method for all of these services except nursing-home care (for which payment was made through the money payment to the recipient).

Of the other 31 States providing vendor-medical care payments, 11 provided 4 of the major services (2 of them used the money payment for nursing-home care); 5 provided hospital and nursing-home care plus other physicians' services or prescribed drugs; and 15 provided 1 or 2 of the major services, usually hospitalization.

Content of medical care provided.—Hospitalization, the kind of care most frequently provided through the vendor payment, was available in 47 States, although usually limited as to the nature of illness or duration of care needed. (One State used the money payment for hospital care.)

Nursing-home care was provided through the vendor payment by 36 States (14 used the money payment for this—in 4 of these States, the maximum on the individual money payment was $100 or less per month, and in the others, the limitations were related to rates for specified kinds of care).

Payments to physicians, the service next most frequently provided through the vendor payment, was available in 38 States (6 used the money payment for physicians' services), although usually restricted the number of physicians' visits.

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Dental services were provided by 30 States through the vendor payment (9 used the money payment), but frequently were limited to relief of pain or necessary extractions; some States which include dentures limited the circumstances under which such services may be authorized.

Prescribed drugs were provided by 31 States primarily through the vendor payment (9 used the money payment).

Many States also provided for other medical services through the vendor payment, such as special nursing care in the patient's own home, transportation to receive medical care, or rehabilitative services (physical or speech therapy, outpatient laboratory and diagnostic services, and prosthetic appliances or special equipment).

States with high average vendor payments presumably provide a more adequate level of medical care to aged recipients. Chart 13 shows that in June 1962 States having high average vendor payments per recipient under the MAA program were widely scattered throughout the country. For OAA, States with relatively high average vendor payments for medical care were largely concentrated in the Northeast, the North-central, and the Pacific Northwest areas. Averages were generally low in the South.

As indicated in chart 14 the amount of expenditures for medical services provided to recipients of the different federally aided assistance programs varies greatly. This is clearly evident in the wide

CHART 13.—MEDICAL ASSISTANCE FOR THE AGED: AVERAGE PAYMENT PER RECIPIENT FOR VENDOR PAYMENTS FOR MEDICAL CARE, JUNE 1962

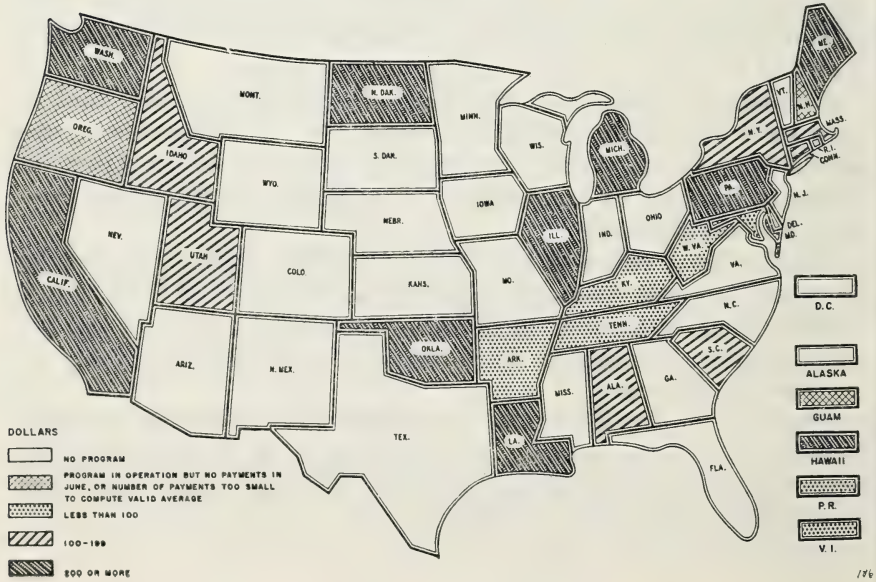
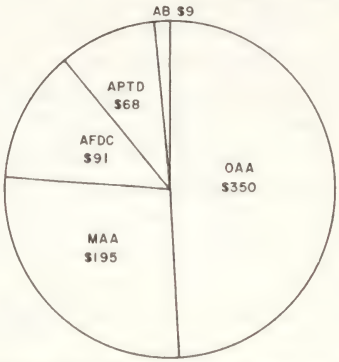


CHART 14.—VENDOR PAYMENTS FOR MEDICAL CARE

AVERAGE PAYMENT PER RECIPIENT
JUNE 1962 [1]

PROGRAM	AMOUNT
MAA	$171.65
APTD	15.58
OAA	14.49
AB	8.08
AFDC	2.29

PAYMENTS, FISCAL YEAR 1962
IN MILLIONS—TOTAL $712



[1] Except for MAA, averages based on cases receiving money payments, vendor payments for medical care, or both.

range in the average monthly medical vendor payment per recipient in June 1962—from $2.29 in aid to families with dependent children to $171.36 in medical assistance for the aged. These averages, however, not only reflect differences in medical care available under the programs, but also differences in utilization of services, availability of treatment through other sources, and relative costs of similar care for different types of cases.

Efforts To Improve Medical Care Programs

High priority was given to consideration of major policy issues under the 1960 medical care provisions, development of instructional material for State use in improving the scope and quality of their medical services, and issuance of interpretative materials. Consultation was provided to State agencies on the development of necessary State legislation and plans to put the new medical care provisions into effect. State officials also met with Bureau staff in Washington to consider specific State situations.

The Bureau released to the States a statement entitled "Financial Eligibility: Medical Assistance for the Aged," summarizing the criteria and methods governing financial eligibility requirements developed by the first 10 States to begin MAA programs. "Casework Services in Public Assistance Medical Care," issued by the Bureau in May 1962 as a guide for the use of State agencies, discusses the skills and services frequently necessary to enable those requiring medical attention to obtain early treatment, to use the opportunity fully, and to maintain the benefits of such care. This publication, available from the U.S. Government Printing Office, is now in its second printing.

Work continued, with the help of the medical advisory group appointed in 1961, on developing the content for guides and recommended standards in the provision of medical care by public assistance agencies.

Policy was also developed to implement the administrative actions taken by the Secretary on March 5, 1962, liberalizing the interpretation governing Federal financial participation in assistance to or on behalf of persons on conditional release from institutions for mental illness. A modification in the definition of "inmate" permits Federal financial participation in assistance payments to or on behalf of persons who are on conditional release from mental institutions without regard to the kind of control still exercised by the institution. After October 1, 1962, the State public assistance agency must develop an agreement with the State agency or agencies responsible for the care of the mentally ill.

A report of a study of selected content of State provisions for the blind in four States was prepared as a basis for strengthening services for this group of recipients. Work materials were also developed for a review of State practice in the administration of medical care provisions on a comparable base throughout the Nation.

Discussions of mutual benefit were undertaken with State supervising ophthalmologists associated with aid to the blind programs to exchange ideas about their role in this category of public assistance; and with an ad hoc committee of the American Hospital Association to discuss plans for a study of hospital utilization by aged assistance recipients. Joint field visits were made with the Community Health Services Division of the Public Health Service to four States and two other jurisdictions to study relationships between State health and welfare departments that have contracts or agreements for the provision or purchase of medical care for public assistance recipients.

Information was supplied in 1961 for the report, "Medical Resources Available to Meet the Needs of Public Assistance Recipients." A subsequent report, "Medical Care Under Public Assistance," covering the first year of operation under the 1960 amendments (October 1960–October 1961) was prepared and submitted to Congress in March 1962. Both reports were published by the House Ways and Means Committee. "Characteristics of State Public Assistance Plans Under the Social Security Act: Provisions for Medical and Remedial Care," Public Assistance Report No. 49, was issued in March 1962.

To promote better public understanding, a pamphlet on "Medical Aid for Older Persons Through Public Assistance," was prepared; and medical care in public assistance, as provided by the two Federal-State assistance programs for the aged, was the theme of an exhibit, "Public Assistance Helps the Elderly To Meet Their Needs," first

shown at the White House Conference on Aging in January 1961, and subsequently requested for use in various parts of the country.

Since enactment of the Kerr-Mills legislation, requests for information about medical care under public assistance have come from individuals seeking guidance for themselves, their families, and acquaintances; from editors, reporters, and writers; from a wide range of government and private organizations; and from schools. Efforts have been made to obtain up-to-date information on State developments as changes occurred. The constant stream of requests from national organizations, congressional committees, and the press for reports on the progress of the medical care program is evidence of the great public interest in providing help and services for the medically needy.

FROM WORK RELIEF TO WORK AND TRAINING

Work relief—a form of governmental assistance in which needy unemployed persons earn all or part of the assistance payment through employment—was widely used during the thirties to maintain work habits and morale. In the sixties, its objective shifted to rehabilitation through work, education, and training.

When Federal funds became available in May 1961 for assistance to children in families with unemployed parents, States transferred some needy families from their general assistance programs to the amended ADC program. Of the 13 States that provided aid to families with unemployed parents during September 1961, 12 included work relief projects in their general assistance program. In 7 of these 12 States, employable ADC fathers were assigned to work relief projects to earn the State and/or locally financed portion of their assistance payment which was above the maximum amount for which Federal financial participation was available.

A nationwide inquiry into the nature and extent of work relief was made by the Bureau in September 1961. According to the published report of this study, "Work Relief—A Current Look," work relief projects in 438 local jurisdictions in 27 States employed some 30,400 persons. Of those assigned to work relief projects, 86 percent were concentrated in seven States—California, Illinois, Michigan, Ohio, Pennsylvania, West Virginia, and Wisconsin. Work relief recipients represented only a small proportion of the general assistance caseload in these States.

Projects ranged from brush-cutting along remote country roads to training-oriented projects in big-city hospitals. The most prevalent projects, in the order named, were maintenance of streets and roads, custodial work in public buildings, care of park and recreation facili-

ties, and distribution of surplus food commodities. Urban areas offered a greater variety of work than rural areas.

The average monthly amount credited toward the assistance payment of those on work relief was about $92, and most recipients—92 percent—received their remuneration in the form of an assistance payment; the remaining 8 percent received wages, usually limited by the family's needs as budgeted by the welfare agency. The value of the assistance worked for and wages paid on all work relief projects was about 12 percent of the total spent for general assistance and comparable programs in the 27 States with work relief programs.

The cost of providing work relief beyond assistance was estimated by the Bureau, in the absence of other available data, at $15 a month per employed recipient to cover expense of transportation, extra food, and clothing; and about $4 a month per recipient for coordinating the program and assigning recipients to projects. Other costs—materials, tools, and supervision—were usually borne by project sponsors.

Even though relatively few ADC parents were assigned to work relief projects, several States asked that Federal participation be extended to assistance in the form of wages earned under work relief by unemployed parents with dependent children.

A subsequent provision was, therefore, made in the Public Welfare Amendments of 1962 for community work and training programs, for a temporary period ending June 30, 1967, to encourage the education, employment, reemployment, retraining, conservation of work skills, and the development of new skills for potentially employable recipients of the federally aided program of aid to families with dependent children.

The new legislation also provides safeguards, many of which were suggested from earlier experience with work relief. Provision must be made for adequate protection of the health and safety of workers, and appropriate arrangements must be made for the care and protection of children during the absence of parents doing such work. Payment for work done must be at rates not less than those for similar work in the community, and in determining need, consideration must be given to reasonable expenses attributed to such work. Work performed must serve a useful purpose and not interfere with or displace regular employees. Opportunity must be given the worker to seek regular employment and to secure available training. Cooperative arrangements must also be established and maintained with State employment and vocational and adult education agencies for maximum utilization of their resources to improve opportunities of such recipients for regular employment.

EFFECT OF FEDERAL AID TO THE UNEMPLOYED

A temporary measure effective May 1961, for a 14-month period, extended the aid to dependent children program to include families of needy unemployed persons. To determine the extent to which this provision was meeting needs and helping the unemployed parent use community resources to regain employment, a study of its first 7 months' operation was also undertaken by the Bureau. In addition to reviewing State plan provisions and statistical information reported by the States, a review and evaluation of practice was made in 45 localities in the 13 States [5] making payments under this provision from May through November 1961.

During this period assistance had been granted to 66,100 of the 86,300 unemployed parents who applied in 12 of the 13 States making such payments; nearly half (46 percent) had been transferred from State or local general assistance programs operative in 12 of the States. Unemployment insurance benefits were much less frequently a resource for this group of recipients. Only 12 percent of the families were receiving unemployment compensation at the time of approval of their application for assistance. An additional 19 percent had received such benefits during the 6 months prior to the approval of their application, and 20 percent of the applicants had filed a claim which was pending at the time of approval of the application.

In November 1961, under this new provision, $6.7 million reached 43,200 unemployed-parent families with 157,000 children; 95 percent of these families lived in 6 States (Connecticut, Illinois, New York, Pennsylvania, Washington, and West Virginia). The average payment per family was $155, the average payment per recipient, $34. The average payment per recipient ranged from $18 in Delaware to $48 in Illinois. Most of the States aiding unemployed-parent families made higher payments per recipient to families receiving assistance for reasons other than unemployment than because of the unemployment of a parent.

Nearly 40 percent of the cases approved for assistance during the period of the study were closed by the end of the seventh month of operation of the program usually because of employment. About a third of these parents returned to a former job and about two-thirds found work on their own initiative or with the help of friends or relatives; only 3 percent obtained employment through a public employment service referral. The small number who obtained work through such referral highlights the difficulties unemployed persons

[5] Connecticut, Delaware, Hawaii, Illinois, Maryland, Massachusetts, New York, Oklahoma, Pennsylvania, Rhode Island, Utah, Washington, and West Virginia. (Subsequently, North Carolina and Oregon initiated such payments. On June 30, 1962, Delaware and Washington discontinued them.)

with low education and limited or no skill undoubtedly have in competing with other job applicants. A few welfare agencies in the communities studied established their own employment divisions. Nearly all the 13 States also gave training courses for practical nursing, supervision of food preparation and handling, machine operation, sewing, and typing.

From a review of 1,800 case records of unemployed-parent families in the communities included in the study, it appeared that at the end of September 1961, the unemployed parents aided could be broadly classified into three major groups: (1) unskilled laborers with physical, mental, or emotional handicaps in addition to little education and poor work experience, whose reemployment opportunities seem limited; (2) fathers unemployed less than 3 months, mainly under 45 years of age, with stable work records (many were steel, construction, or seasonal workers) who were already moving toward reemployment on their own initiative; and (3) a larger number of unemployed fathers whose chances of returning to work could probably be improved with training, retraining, or other special services—this group included school "drop outs" and young persons recently discharged from military service with no previous work experience or skills; young workers with several children, limited education, and no skills who had moved from one short-term job to another, with no vocational goal; and older men, generally with large families, education below the eighth-grade level, and, with little, if any, skill transferable to other jobs.

The provision of financial aid under this program undoubtedly prevented family breakup and sharpened public awareness of the needs of families affected by unemployment. But it also made clearly evident the urgent need for more effective mobilization or development of training and other community resources, if significant inroads are to be made on the basic and underlying difficulties facing this segment of the unemployed today.

ASSISTANCE TO U.S. CITIZENS RETURNED FROM FOREIGN COUNTRIES

Americans who become stranded, ill, or destitute in foreign countries are helped to re-establish themselves in the United States through a year-old Federal program. Under this program, assistance and other services are provided for Americans and their dependents identified by the Department of State as having been returned to the United States because of destitution, illness, or international crisis. In cooperation with State and local welfare departments and voluntary welfare agencies, arrangements are made for reception and transportation, temporary financial aid, and necessary social services or medical care.

The first year's operation provided assistance and services to 505 cases of U.S. citizens returned from foreign countries: 153 cases (236 people), including 55 mentally ill persons, referred by the Department of State; 291 cases of U.S. citizens repatriated from Cuba; and 61 mentally ill persons receiving care at St. Elizabeths Hospital. Information or service was provided to 11 additional cases. A total of $501,000 was expended; $195,301 for mentally ill persons, and most of the rest for citizens returned from Cuba. (See pp. 19–23 for information on assistance provided to Cuban refugees.)

Policies and procedures for administering this program were developed, and an informational leaflet prepared describing services available to destitute or ill repatriates, and their responsibilities, including repayment for assistance provided, when warranted. Agreement forms were devised for use with cooperating State agencies. Agreements were also made with the Medical Division of the Department of State to facilitate necessary care and treatment of their employees who become mentally ill in foreign countries and are returned to the United States.

The earlier ad hoc Committee on Reception and Processing of U.S. Citizens Returned from Foreign Countries in a National Emergency was reconstituted as the Interdepartmental Committee on Services to U.S. Citizens Returned from Foreign Countries in Emergencies. This committee included, for the first time, representatives from the Office of the Assistant Secretary of Defense (Manpower), the Office of the Assistant Secretary of Defense (Civil Defense), and the Office of Emergency Planning.

The New York regional office continued to carry the major portion of cases referred by the Department of State, since New York is the port of entry of the majority of such repatriated persons. The Atlanta regional office carried primary responsibility for U.S. citizens returned from Cuba. The Atlanta, Chicago, and San Francisco regional offices provided continuing assistance and services to an increasing number of these cases. A number of referrals were also initiated by regional offices and State or local agencies following a returnee's arrival, or at the request of a relative or friend regarding the circumstances of a potential returnee who may not have contacted the Department of State. These situations were brought to the attention of the Department of State.

The Bureau, which receives all referrals initially, continued to arrange for services as needed in individual cases through the regional offices acting under the general coordination and direction of the central office. Services were provided by both public and voluntary agencies. The Division of Hospitals of the U.S. Public Health Serv-

ice continued to provide medical care and services at the ports of entry, and the Division of Foreign Quarantine of the U.S. Public Health Service was involved in providing medical services under P.L. 86–571 at United States Consulates overseas and at ports of entry in the United States. The Bureau's relationships with the Office of Special Consular Services, Department of State, and the Children's Bureau in providing services under these programs were continued and expanded.

CIVIL DEFENSE EMERGENCY WELFARE SERVICES

Emergency preparedness functions were assigned to the Department under Executive Order 11001 on February 16, 1962, with additional responsibilities added for "refuge in shelters." Such functions relating to the welfare field were delegated by the Secretary to the Commissioner of Social Security for administration by the Bureau of Family Services working with the Children's Bureau. This followed the conversion of the Office of Civil and Defense Mobilization to the Office of Emergency Planning, and the assignment of certain civil defense activities to the Office of Civil Defense in the Department of Defense (OCD–DoD).

During the fiscal year, 38 States entered into agreements with the Bureau of Family Services to provide a full range of welfare services in a war-caused emergency. Additional Memoranda of Understanding completed with national voluntary welfare organizations and related national professional and business organizations brought the total to 16.

Under an agreement with OCD–DoD, plans were initiated and questionnaires prepared for a preliminary field review which was conducted in eight cities to determine community readiness to provide emergency welfare services, especially in connection with community fallout shelters.

Information was provided OCD–DoD on welfare resources throughout the country, and data on resources and requirements were provided to the Office of Emergency Planning. Other resources evaluation and damage assessment activities were conducted.

Administrative Developments

Bureau activity during the year was concentrated on developing policy, procedure, and informational materials to implement the Secretary's administrative directives and on planning for proposed legislative changes. Work also continued in implementing measures passed in 1961, and in carrying responsibility for the ongoing public assistance programs.

WELFARE SERVICES

The change in name from the Bureau of Public Assistance to the Bureau of Family Services and the establishment of a Division of Welfare Services reflects the nature of much of the work undertaken during the year in implementing the welfare services emphasis.

Policy framework and interpretative materials were initiated or developed to help States implement measures directed toward providing services to unmarried parents, dealing with family disruption because of desertion, locating absent parents, assuring protection of needy children, assisting families with special problems arising from financial mismanagement or mental or physical inadequacy, initiating work and training programs, and assuming other community planning responsibilities. Work also was undertaken in developing policies and guide materials in problem areas such as residence, earned income in aid to the blind, parental neglect, and institutional care needs of the aged and disabled.

Advisory groups of State representatives helped in the development of policy on foster care and social services, including the identification of services for which increased Federal matching funds would be available and methods of determining the cost of such services. Draft policy materials were prepared and discussed with an ad hoc advisory committee and with State administrators. Methods for a review of State practice in providing services were substantially completed, and planning initiated for State reporting on the services provided. A compilation was also made of State projects on services.

A publication, "Improving Home and Family Living Among Low-Income Families," developed jointly with the Office of Education as a guide for State use in developing projects to increase the housekeeping skills of mothers dependent on public assistance, was sent to State departments of education and State welfare departments. Another publication, "Unmarried Parents—A Guide for the Development of Services in Public Welfare," distributed to State public assistance and child welfare agencies in October 1961 and put on sale by the U.S. Government Printing Office, is now in its second printing. This pamphlet was used as the basis for a joint public assistance and child welfare regional meeting. "Homemaker Service in Public Welfare, the North Carolina Experience," another report in the "How They Do It" series, was issued in December.

Cooperative work also continued with other public and voluntary agencies. Bureau staff participated with the American Public Welfare Association's Project on Aging in their institute on "Planning Improved Services for the Aging Through Public Welfare;" and, in cooperation with other national agencies, in planning and imple-

menting two seminars on community planning on behalf of older persons. One of the seminars was held at Brandeis University in August 1961, and dealt with local community planning; and the other at Arden House, Harriman, New York, in March 1962, was on community planning at the State level. Joint consideration was given also by the Office of Vocational Rehabilitation and the Bureau to ways the vocational rehabilitation and public assistance programs can be more effectively utilized in combating dependency of handicapped persons.

ADMINISTRATIVE AND FISCAL STANDARDS

Policy and guide materials were developed for State use in prevention and control of fraud, including procedures and methods of investigation consistent with the legal rights of individuals. To implement the objective of reducing the number of forms in use and eliminating unnecessary paperwork, a group of State and local staff assisted in considering areas in which simplification of forms and paperwork might be possible, and proposed methods for doing this.

Developmental work also continued on workload standards, case recording, auxiliary staff to the caseworker, single State agency, State field services, caseload classification, and the best use of the caseworker's time. A digest of the Bureau's resource material on the organizational, management, and administrative aspects of the public assistance programs was issued under the title, "Selected References for Public Assistance Administration."

A survey made in Milwaukee focused on finding ways to eliminate nonprofessional functions performed by caseworkers, and to make maximum effective use of professional staff time. A survey of three jurisdictions in Maryland evaluated utilization of professional and clerical staff, as well as the effect of State agency requirements on local agencies. Institutes for county superintendents were held in three States around principles of administration, and the responsibility and practical management of the administrator's job. A statement for the use of county board members was prepared as a result of one of these sessions. Another in the series of conferences of large urban agencies was held in San Francisco in May 1962 to consider various aspects of administration in large cities, including organization, workload standards, caseload management, and procedures by which policy is put into effect. Consultation was also provided on request to several States on machine operations and/or electronic data processing as effective timesaving devices.

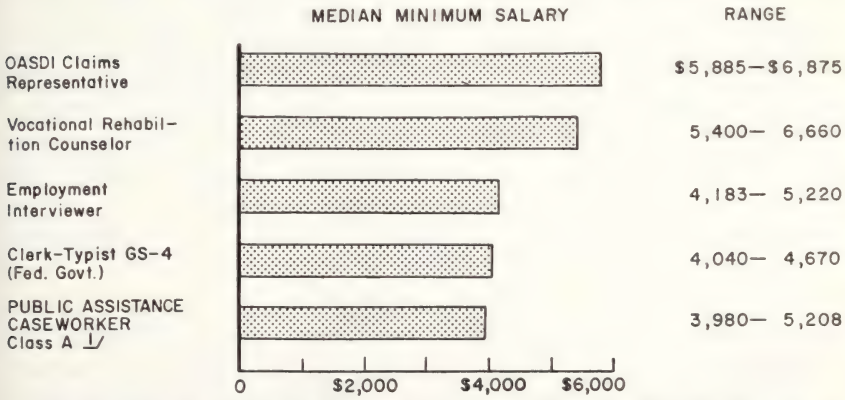
STAFF DEVELOPMENT

With expansion in the scope of public assistance programs and the accent on preventive and rehabilitative services, the complex demands of the public welfare job continue to outstrip efforts to prepare staff to carry that job most effectively. According to the 1960 manpower study, only about 1 percent of the casework group and 13 percent of the supervisory group had a graduate social work degree, 89 percent of the caseworkers had no study in any graduate school of social work, and about a third of those in social work positions did not complete college. Although each caseworker authorizes an average expenditure of $150,000 a year in assistance payments and the welfare of hundreds of dependent persons is affected by her skill and experience, there was only one caseworker with a graduate social work degree for every 23,000 assistance recipients.

Equally serious is the relatively low salary of those working in public assistance. In 1960, the median salary for caseworkers was $4,338, and for supervisors, $5,798. Comparison with other jobs with relative responsibilities, as indicated in chart 15, vividly points up the need for raising salary levels if qualified staff are to accept and remain in public assistance jobs.

Realistically facing the dearth of social work personnel throughout the country, the Bureau's present goal is a third of staff with professional education for leadership positions and casework services to families with serious social problems, and two-thirds of staff with an undergraduate college degree plus agency in-service training to pro-

CHART 15.—SALARY, PUBLIC ASSISTANCE CASEWORKER AND OTHER SELECTED POSITIONS, JULY 1962



[1] *Function:* Establish eligibility and extent of need and explain laws, regulations and eligibility requirements. (Class B—range $4,680 to $6,000—also includes providing social services to clients; usually requires graduate training in social work, but in some States experience may be substituted. However, according to the 1960 Manpower Study, there is only 1 public assistance caseworker with full graduate social work training for every 23,000 assistance recipients.)

Source: Department of Health, Education, and Welfare, Office of Field Administration, Division of State Merit Systems; and U.S. Civil Service Commission.

vide services relating to less serious social problems. Provisions in the Secretary's administrative actions and in the Public Welfare Amendments of 1962 were directed toward making this goal more feasible.

The Secretary's directive in December 1961 required States to have a continuous statewide staff development program fully developed by July 1, 1967. Starting with minimum requirements effective July 1, 1962, flexibility was provided in effecting on a progressive basis an organized staff development program appropriate to the circumstances in individual States. Effective October 1962, States were required to establish a unit responsible for a statewide staff development program headed by a qualified full-time director of staff development, and to have training personnel carry major teaching responsibility to supplement line supervision in order to deepen and broaden knowledge and skill of staff at every level. The 1962 amendments authorized use of Federal funds for the training and professional education of persons employed or preparing for employment in public assistance programs, and provided for increased Federal financial participation in expenditures for training by States providing minimum prescribed services.

During the year, Bureau staff assisted States in the development and implementation of their staff development programs. Guide materials were developed and work initiated in preparing teaching materials directed toward the needs of the new worker and the county director; in identifying and adapting casework concepts appropriate for use by staff without professional education, and in developing criteria for selection of staff for educational leave. Work also continued on the Educational Standards Project in determining functions that can best be performed by staff with a professional education, a college degree, or technical training. Following a meeting of State staff development personnel in Washington in September 1961, a statement was prepared on standards of staff development common to the Children's Bureau and the Bureau of Family Services. A second meeting of State staff development personnel was planned for the fall of 1962. Planning was also initiated for regional seminars and nationwide training sessions if and when Federal funds for direct administration of training, authorized but not yet appropriated, are made available.

An advisory committee representing schools and agencies assisted the Bureau in considering the many proposals made by professional organizations, schools of social work, and individuals for academic and professional education, inservice training, and the most effective use of staff. A committee of deans of schools of social work also advised the Department on ways of increasing the supply of adequately trained personnel for public welfare. Bureau staff partic-

ipated in the American Public Welfare Association's Committee on Social Work Education and Personnel, and in various committees of the Council of Social Work Education.

About 42 States now have full-time staff development directors, and the majority of the remainder are in the process of filling this position. There are other evidences in the States that planning for achieving sound staff development programs by 1967 is well on the way, although its ultimate success will depend largely on the availability of necessary State funds for this purpose.

PROGRAM INTERPRETATION

Public interest in the assistance programs continued at an all-time high, as reflected in the greatly increased number of telephone inquiries, personal visits, requests for press information service, and incoming mail.

Requests for information were concentrated largely on the aid to families with dependent children program, and developments in specific States under the Kerr-Mills legislation and under provisions of the 1961 amendments. Other areas of great interest were: work relief, Cuban refugees, crisis situations in particular communities, Federal participation in assistance payments to patients on conditional release from mental institutions and other provisions included in the Secretary's directives, and legislative proposals subsequently incorporated in the Public Welfare Amendments of 1962. Keen interest was also expressed, largely by professional groups, in the studies about public welfare made for the Secretary.

The number of letters received directly by the Bureau was 16 percent greater than a year earlier, and congressional inquiries forwarded to the Bureau amounted to twice as many as in the previous year. Incoming mail averaged about 2,200 letters a month—1,600 more than the normal monthly load prior to the spring of 1961.

Press releases reported progress in many program areas. Informational materials, special statements, and reports were also prepared to help meet requests for more specific information in certain problem areas.

A position of Public Information Officer was established within the Office of the Director of the Bureau to develop a program of public information on the programs for which the Bureau carries responsibility.

International Activities

Bureau staff participated in three meetings of the Committee on International Social Welfare of the National Social Welfare Assembly; in the Fourth Pan American Conference of Social Service held

in Costa Rica; and in the community-wide conference on social welfare planning held in Panama.

In cooperation with the International Service in the Office of the Commissioner, consultation was provided to UN fellows and AID participants, and leaders and specialists under the Department of State's Educational and Cultural Exchange program. With the cooperation of regional offices, training programs were also provided for international visitors, including arranging contacts to supplement academic and field work programs of those attending graduate schools of social work, providing for observation in various public and private agencies, and arranging intern-like placements.

A section on developments in public assistance and other social services was prepared for the United Nations Biennial Report on Developments in Family, Youth and Child Welfare for 1960–61; and social welfare documents developed by the United Nations Social Commission were reviewed. Research projects proposed by foreign countries were also reviewed, and projects of interest to the Bureau were submitted for consideration under Public Law 480. Review was also made of UNICEF's social service projects dealing primarily with social work education and training, urban development, and family welfare.

Children's Bureau

On April 9, 1962, the Children's Bureau was 50 years old. This anniversary gave the Bureau an opportunity to evaluate what had been accomplished for children during this half century—and to look ahead to determine goals for the next decade.

The pervasive interest in the fiftieth anniversary did not dwarf the very important changes which came about during the year, especially in relation to the new emphasis in the Bureau, the Department, and the Administration on expanding and improving health and welfare services to help children develop to their full potential and families become more self-reliant and self-sustaining. During fiscal 1962, many gains were made for children.

The legal base of the Children's Bureau for serving the children of the United States is contained in two acts. Under its basic act of 1912, the Bureau is charged with investigating and reporting "upon all matters pertaining to the welfare of children and child life among all classes of our people." The Bureau studies many types of conditions affecting the lives of children, makes recommendations to improve practices in child health and child welfare programs, and helps establish standards for the care of children.

Under Title V of the Social Security Act, as amended, the Bureau administers grants to States for three programs: (1) maternal and child health services; (2) crippled children's services; and (3) child welfare services.

A program of grants for research and demonstration in the field of child welfare was authorized under Title V, part 3, of the Act in 1960. Funds for these grants were appropriated for fiscal year 1962, and the first grants were made in the spring of that year. In 1961, the child health and crippled children's provisions were broadened to permit special project grants to be made directly to institutions of higher learning. Real progress was made during fiscal 1962 in implementing these provisions.

These then are the present purposes of the Children's Bureau today:

to assemble facts needed to keep the country informed about children and matters adversely affecting their well-being;

to recommend measures that will advance the wholesome development of children, and in preventing and treating the ill effects of adverse conditions;

to give technical assistance to public and voluntary agencies and to citizens groups in improving the conditions of childhood; and

to administer the grants appropriated each year under Title V of the Social Security Act to aid in building the health and welfare of children.

The Bureau's approach to the problems of children proceeds from a concern for the child with his family or wherever else he may live. The interrelationship between the physical, emotional, and social factors in child growth, child health, and child welfare permeates all that the Bureau does, and that it stimulates others to do, in research and action for children.

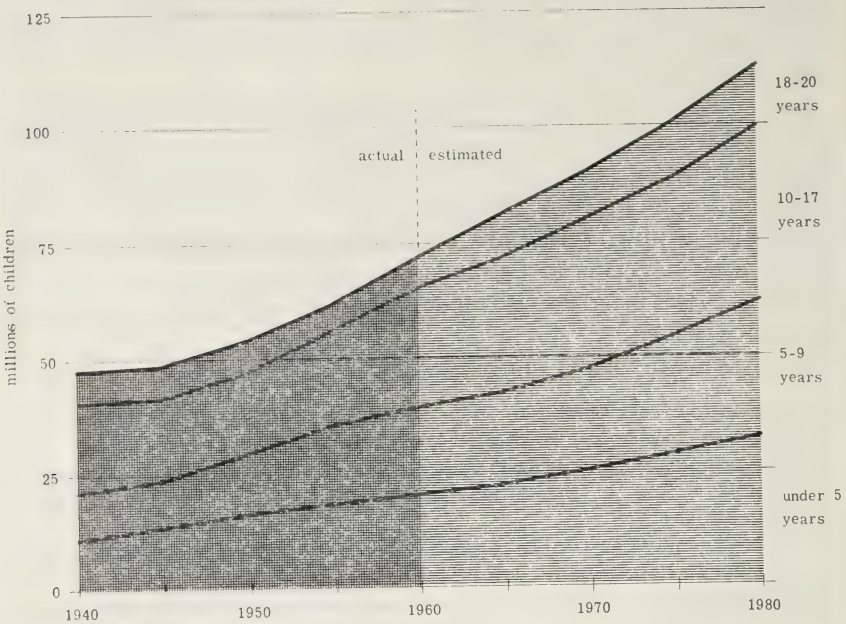
From many sources, the Children's Bureau gathers all the facts and figures that will help children's workers and citizens in the United States know the size of their wealth in children, the extent of conditions that are adverse to them, and the trends in our society affecting child life.

The population of the United States is increasing at an extraordinary rate for a country which has attained such a high level of development. The annual rate of increase since 1953 is 1.7 percent (1.0 in Japan, 0.05 percent in Great Britain). The rate of increase is close to that of India (1.9 percent), the same as that reported by U.S.S.R., and higher than European countries except Albania, Iceland, and Poland.

This phenomenon of rapid population growth in the United States is not due to immigration (271,350 in 1961), but to some increase in the size of the family and to a lengthening of the life span. The third and later children in the family make up nearly one-half of all of

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CHART 16.—INCREASING CHILD POPULATION



annual births as contrasted with only two-fifths of these births in 1940. The expectation of life at birth is now 69.7 years as against 65.9 in 1945. Even if there is no further reduction in mortality below current levels, nearly one-half of the newborn today will live to at least 75 years of age and nearly a fifth to at least 85.

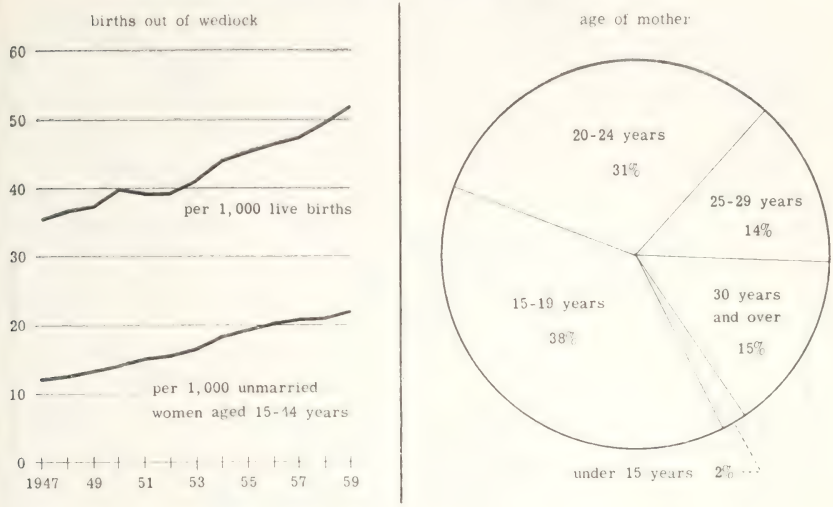
The estimated number of children under 18 in the resident population of the United States in 1961 was 65,854,000 or 36.4 percent of the total population.

Estimated birth figures for the United States counties and metropolitan areas in 1960 highlight the increasing urban character of the Nation. The national total was 4,282,000. One-third of these were born to residents of the 24 metropolitan areas with a million or more inhabitants.

Infant mortality in the United States declined in 1961 for the third successive year. The provisional 1961 rate, 25.3 per 1,000 live births, set a record low, about 2 percent under the rate for 1960, the previous low (25.7), compared with 26.4 for 1959.

There were 221,000 births out of wedlock in the United States in 1959—the highest *number* on record. This represents an increase of nearly 12,000 over 1958. One out of every 20 babies (52 out of every 1,000 live births) in the United States is born out of wedlock—the highest *ratio* of births out of wedlock on record.

CHART 17.—BIRTHS OUT OF WEDLOCK ARE INCREASING



About 40 percent (89,000) of all mothers reported as bearing children out of wedlock in a year are teenagers, and 22 percent (48,000) under 18 years of age. Of all unmarried girls aged 15–19 years, 1.5 percent bear children out of wedlock in a year, compared with a 3 percent rate for unmarried women between 20 and 30 years of age. The illegitimacy for teenagers doubled between 1940 and 1955 but has barely changed since.

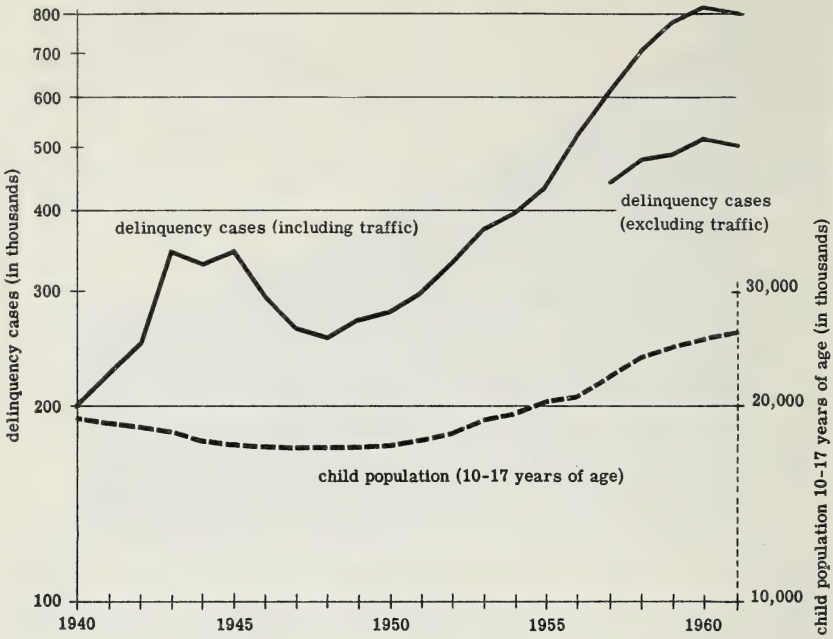
Families continue to grow larger—having risen in average size from 3.54 in 1950 to 3.71 in 1961.

On the average, families have gained in real income throughout the past decade. But in 1960, there were still 12.5 million children living in families with less than $3,000 annual income.

For the first time in 13 years, the number of juvenile delinquency cases coming before juvenile courts showed a slight drop in 1961 (1 percent) when the child population was increasing by 3 percent.

One of the most significant social changes in this century is the great increase in the number of married women in the labor force. About 3 million mothers with children under 6 and about 5 million mothers with children over 6 are now working. Economic necessity probably is the major reason why most mothers work. The lower the father's income, the larger the proportion of children whose mother is employed. Twenty-seven percent of all children under 18 in husband-wife families whose fathers are not employed or earn less than $2,000 a year have employed mothers; for children whose fathers earn between $6,000 and $10,000 a year, 18 percent.

CHART 18.—TRENDS IN JUVENILE COURT DELINQUENCY CASES AND CHILD POPULATION 10 TO 17 YEARS OF AGE, 1940–60



The total number of young men and women between 16 and 25 who will enter the labor force in the 1960's is a staggering 26 million, a volume unprecedented in our history. In 1965 alone, 3.8 million young people will become 18 years of age, an increase of 1.2 million over 1960. Large numbers of youth of this age are now and probably will continue to be unemployed and out of school.

Legislative Developments

Fiscal year 1962 saw the introduction of Administration proposals for far-reaching amendments to Title V of the Social Security Act which, if enacted, would enable the Children's Bureau to expand very substantially its services in behalf of children. These included recommendations for major changes in the child welfare provisions of the act, as part of the President's proposals on public welfare, which were enacted soon after the close of the fiscal year. They also included proposals for extending the Bureau's research authority to permit making grants or entering into other cooperative financial arrangements for research relating to maternal and child health and crippled children's services. These amendments were not acted on by Congress prior to adjournment.

PUBLIC WELFARE AMENDMENTS OF 1962

These Amendments incorporate the President's recommendations for changes in the child welfare provisions of the Social Security Act, and, as stated by the President in approving them on July 25, 1962, make "possible the most far-reaching revision of our Public Welfare program since it was enacted in 1935."

The law increases the amounts authorized for annual appropriation for grants to the States for child welfare services from the previous level of $25,000,000 as follows:

$30,000,000 for the fiscal year ending June 30, 1963.
$35,000,000 for the fiscal year ending June 30, 1964.
$40,000,000 for the fiscal years 1965 and 1966.
$45,000,000 for the fiscal years 1967 and 1968.
$50,000,000 for the fiscal year 1969 and each year thereafter.

Coordination with dependent children program and extension of child welfare services.—Part 3 of Title V of the Social Security Act continues to provide for grants to States for the use of cooperating State public welfare agencies in carrying out the State plan developed jointly by the State agency and the Secretary. The new law adds to these provisions, effective July 1, 1963, so as to require:

1. Inclusion in the State child welfare plan of provision for coordination between the services provided under it and those which are provided for children under the State plan relating to dependent children which is approved under Title IV of the Social Security Act.

2. A satisfactory showing by the State that it is extending the provision of child welfare services in the State, with priority being given to communities with the greatest need for such services after giving consideration to their relative financial need, and with a view to making available by July 1, 1975, in all political subdivisions of the State, for all children in need thereof, child welfare services provided by the staff (which shall to the extent feasible be composed of trained child welfare personnel) of the State public welfare agency or of the local agency participating in the administration of the plan in the political subdivision.

The new law also requires, effective July 1, 1963, with respect to day-care services (including the provision of such care) provided under the State child welfare plan that the State plan shall provide:

1. For cooperative arrangements with the State health authority and the State agency primarily responsible for State supervision of public schools to assure maximum utilization of such agencies in providing necessary health services and education for children receiving day care.

2. For an advisory committee, to advise the State public welfare agency on the general policy involved in the provision of day-care

services under the State plan, including representatives of other State agencies concerned with day care or related services and persons representative of professional or civic or other public or nonprofit private agencies, organizations, or groups concerned with the provision of day care.

3. For such safeguards as may be necessary to assure provision of day care under the plan only in cases in which it is in the best interest of the child and the mother and only in cases in which it is determined, under criteria established by the State, that a need for such care exists; and, in cases in which the family is able to pay part or all of the costs of such care, for payment of such fees as may be reasonable in the light of such ability.

4. For giving priority in determining the existence of need for day care, to members of low-income or other groups in the population and to geographical areas which have the greatest relative need for extension of day care.

Day care.—The law further provides that beginning June 30, 1962, the excess above $25 million, up to a maximum of $10 million, of the annual appropriation for child welfare services, shall be earmarked for the provision of day care under the State child welfare plan. (In fiscal 1963, the maximum earmarked could not exceed $5 million since $30 million is authorized to be appropriated for that fiscal year for all child welfare services.) Such care may be provided only in facilities (including private homes) which are licensed by the State, or are approved (as meeting the standards established for such licensing) by the State agency responsible for licensing facilities of this type.

The law adds to the section of the act, which authorizes grants for research or demonstration projects in the field of child welfare under Title V, part 3, provisions to authorize grants to institutions of higher learning for special projects for training personnel for work in the field of child welfare, including traineeships.

The definition of child welfare services for which Federal funds may be used under State child welfare plans is clarified and somewhat broadened.

No supplemental appropriation to implement the day care and training provisions of the 1962 amendments was made by the Congress before adjournment.

During the fiscal year 1962, the Congress acted upon two other pieces of legislation covering subjects on which the Bureau and the Department had been recommending legislation for several years and on which there had been considerable activity and interest on the part of Congress. These two pieces of unfinished legislative business were acted on early in the fiscal year and before the first session of the

87th Congress ended on September 26, 1961. They related to intercountry adoptions and to juvenile delinquency.

INTERCOUNTRY ADOPTIONS

In September 1961, legislation (P.L. 87–301) was enacted which incorporated in the basic immigration law provisions for nonquota visas for eligible orphans, thereby making these provisions permanent. The Department of Health, Education, and Welfare does not carry any responsibility in the administration of these provisions.

JUVENILE DELINQUENCY

In May 1961, President Kennedy transmitted to the Speaker of the House the Administration juvenile delinquency proposal. On September 22, 1961, the President approved the Juvenile Delinquency and Youth Offenses Control Act of 1961 (P.L. 87–274).

As finally enacted, the law authorizes a 3-year program, beginning with the fiscal year 1962, of: (1) grants for demonstration and evaluation projects; (2) grants for the training of personnel; and (3) technical assistance services. An annual appropriation of $10 million is authorized for carrying out the Act for each of the fiscal years 1962, 1963, and 1964.

On September 30, 1961, the President approved a supplemental appropriation bill (P.L. 87–332) which contained an appropriation to enable implementing the new legislation immediately. The grants are administered by the Secretary's office but, under this appropriation, the Children's Bureau received funds for expanding its technical assistance services.

1962 APPROPRIATIONS FOR THE CHILDREN'S BUREAU

The amounts appropriated for the Children's Bureau for fiscal 1962 under P.L. 87–290 were:

Salaries and expenses	$2,668,000
Grants for maternal and child welfare	69,100,000
Maternal and child health services	25,000,000
Crippled children's services	25,000,000
Child welfare services	18,750,000
Research or demonstration projects in child welfare	350,000

The budget for the Social Security Administration, in the same appropriation act, provided $1,607,000 for research and training under the special foreign currency program. A substantial portion of these counterpart funds was for projects relating to maternal and child health. Projects relating to child welfare and juvenile delinquency are also included.

Youth Development Unit

In January 1962 Secretary Ribicoff instructed the Office of Education and the Children's Bureau to augment their services for youth. The Bureau's new Youth Development Unit was set up in the Office of the Chief. The Unit is staffed by specialists experienced in youth work, in community organization and development, and in the training of persons working with youth. The staff of the Unit is financed from funds under the Juvenile Delinquency and Youth Offenses Act of 1961. Consequently, the first priority of the Unit is to assist in the administration of the demonstration and training grant programs of the Department under the new juvenile delinquency legislation. It cooperates with other Divisions of the Bureau in stimulating research and demonstration projects; in encouraging better training of personnel; in analyzing, interpreting, and disseminating research materials; and in preparing publications related to youth development and expanding opportunities for youth. The Unit offers help to States, communities, and voluntary organizations in developing broad programs for youth.

Goals for the immediate future of this Unit are:

To identify national problems and needs.
To initiate broad plans for the accomplishment of objectives of P.L. 87–274.
To develop consultative relationships with national and local leaders in fields affecting youth.
To develop guides, standards, and recommendations for use in planning special youth development programs and services.

The Interdepartmental Committee on Children and Youth

Within the Federal Government, 36 agencies have programs concerned with children or youth. The Interdepartmental Committee on Children and Youth was established to coordinate related efforts of these agencies and to serve as the Government's liaison with national organizations and State committees for children and youth. The Chief of the Children's Bureau is Acting Chairman of the Committee, by delegation of the Secretary of Health, Education, and Welfare, who is its Chairman. The Bureau also provides the secretariat for the Committee.

Through its monthly program meetings and the work of its subcommittees, the Interdepartmental Committee keeps in touch with all programs affecting the Nation's children and youth, identifies problems which are outside the responsibility of any one agency, and encourages collaborative action. For example, the Subcommittee

on Community Services for Selective Service Registrants is initiating demonstration projects under which young men not accepted for military service because of physical or educational limitations are referred to community resources to help them become qualified members of the labor force and of society. Ten Federal agencies are involved in this project.

During fiscal 1962, the Interdepartmental Committee studied a number of major new Federal programs and agencies relating to youth, including the Peace Corps, the President's Committee on Juvenile Delinquency and Youth Crime, the Area Redevelopment Administration, and the Manpower Development and Training Act of 1961. In addition, the Committee gave special attention to changes affecting the lives of rural youth; Federal programs to provide equality of opportunity in housing, education, health, and employment for Negroes and their children; and migrant and welfare legislation pending before the Congress.

The National Committee for Children and Youth

Both the Interdepartmental Committee on Children and Youth and the Children's Bureau have close working relationships with the National Committee for Children and Youth in its efforts to implement followup of the 1960 White House Conference on Children and Youth. The Chief of the Bureau serves as Vice Chairman of the National Committee.

The most notable event for the National Committee in fiscal 1962 was the Fifth Joint Conference on Children and Youth held April 10–12 to consider ways of creating experience opportunities for youth to achieve a more responsible role in our society. This Conference was sponsored by the National Committee for Children and Youth, the National Council of State Committees for Children and Youth, the Council of National Organizations for Children and Youth, and the Interdepartmental Committee for Children and Youth.

Services to State Committees for Children and Youth

The Interdepartmental Committee and the Children's Bureau also work jointly to provide consultation and other services to the 45 statewide committees for children and youth. Regional representatives of member agencies of the Committee are called on increasingly to give technical consultation to the State committees. In addition, in September the Children's Bureau appointed a special consultant on mobilization of community resources to work with regional

staff of various Federal agencies through Children's Bureau regional staff and directly with State committees.

As a result of several workshops held last year, most State committees now include representatives of the State affiliates of the national voluntary agencies which serve children and youth.

The Interdepartmental Committee continues to supply publications, reports of new research findings, program aids, and other informational materials to the State committees as these become available through Federal agencies, universities, voluntary groups, and industry. The Committee also serves as a clearinghouse for the exchange of reports of State committees.

United Nations International Children's Fund (UNICEF)

June 1962 marked the end of the first year of an expanded program of aid by UNICEF, designed to give countries an opportunity to seek aid for their highest priority needs.

Several projects for vocational training of out-of-school youth were approved, all in the Americas. The first was an urban project in Mexico involving housing improvement, environmental sanitation, and vocational guidance and training in several shantytown areas of Mexico City. The project was built upon self-help activities already begun among the inhabitants.

Aid for primary and secondary education, with special emphasis on training of teachers, was sought and approved for the first time. This type of aid is expected to be sought increasingly by the developing countries. The first of these projects is in Africa.

The social service program which got off to a slow start in 1959 has gained momentum. Twenty-one family and child welfare projects were approved this year, bringing the total to 43. Requests in this field are expected to increase to about $2 million by 1964.

Dr. Katherine Bain, Deputy Chief of the Bureau, acted as a special advisor to the Executive Board of UNICEF at its sessions. The U.S. delegation was headed by Mr. Fred DelliQuadri. The June meeting of the Board centered around the theme, *Planning for Children in National Development.* UNICEF is prepared to assist countries in reviewing their needs and in developing long-range plans to meet them as part of their social and economic development.

Civil Defense

Under contract with the Office of Civil Defense, the Children's Bureau developed two reports on shelter care—*Maternal and Newborn Care in Fallout Shelters* and *The Care of Infants and Children in*

Fallout Shelters. Nine temporary staff members prepared these reports, under the direction of the Deputy Chief. They were then reviewed by Children's Bureau staff and by two panels of consultants. The final documents were sent to the Department of Defense for use in establishing guidelines for the care of mothers and children in community fallout shelters. Recommendations for community stockpiling of food and equipment were also included.

Programs of the Bureau

RESEARCH IN CHILD LIFE

The Bureau's research staff has a major responsibility for carrying out the legislative mandate "to investigate and report upon all matters pertaining to the welfare of children." In addition to its own studies and cooperating in joint studies, the Bureau stimulates other agencies to undertake research in child life by formulating questions needing study, developing research methods, and providing technical assistance.

Technical Research

Some of the technical research studies carried on by the Bureau follow:

1. Childhood Morbidity.—The National Health Survey is yielding data on childhood morbidity on a broad national basis. These have been made available to the Children's Bureau for analysis and preparation of a joint report. The data are obtained on a sample basis by means of household interviews.

In the 2-year period beginning July 1959 and ending June 1961, the National Health Survey data show that there was an average of 11 days each year per child under 15 in which, because of illness and injury, children were unable to engage in as much activity as they usually did. Almost 5 of the 11 days were spent in bed. This restriction of activity was caused by both acute and chronic illnesses and included the number of days spent by children in hospitals.

The outstanding characteristic of acute conditions among children is their high incidence. For the year ending June 1961, which was probably a typical year, the Survey found 169,891,000 acute conditions among children under 15, or a rate of 297.1 per 100 children; that is, three episodes of acute illness per year for every child. Of the acute conditions reported, respiratory conditions were by far the largest single group. Days lost from school because of acute conditions averaged almost four per child.

Injuries are frequent in children. For the 2-year period July 1959 through June 1961, the average annual number of children injured

was 18,904,000, which is at the rate of 30.5 per 100 children, or almost 1 injury per year for every 3 children.

Of all the children who suffered injuries, one-third were in the 5–9 age group. More than half of the injuries to all children under 17 were home accidents, either inside or outside the home. Injuries caused an average loss from school of 3.9 days for all children 5–16 suffering injuries.

2. Children with Phenylketonuria in Maternal and Child Health and Crippled Children's Programs.—The Bureau is planning a cooperative followup study of children with phenylketonuria which will invite the participation of all mental retardation clinical programs and other maternal and child health and crippled children's programs which provide for dietary treatment of phenylketonuric children.

Preparatory to planning this followup study, the Bureau investigated the number of children with this condition likely to be available for study. An inventory was taken by means of questionnaire to find out the location, age, and current treatment status of children diagnosed as having phenylketonuria in clinical programs for mentally retarded children from 1957 through 1961.

There is general agreement that early detection of phenylketonuria and treatment in the early months of life offer a reasonable chance of preventing mental retardation. However, sufficient information is not available to substantiate agreement on effectiveness in relation to age and intelligence level of the child at the time treatment is initiated; or the optimal length of time treatment should be continued; or the factors that determine the success or failure of the child or his family in adjusting to the diet.

3. Board Rates and Related Costs of Foster Care for Children.—The Children's Bureau has long been interested in the cost of providing child welfare services. Work is in progress on the development of a questionnaire to State public welfare agencies concerning current board rates and other costs of foster family and institutional care of children. Within the past year, there has been much interest in current costs, in connection, for example, with the Federal program for unaccompanied Cuban refugee children and with consideration of public policy concerning purchase of care from voluntary agencies.

4. Studies of Unmarried Mothers.—Because of special interest of the Committee on Appropriations of the House of Representatives in increased use of Federal funds for child welfare services to strengthen programs for young unmarried mothers, the Bureau undertook to assemble facts from States on services now provided by public and voluntary child welfare agencies, needs not being met and plans for improving services. Information was obtained from 52 State depart-

ments of public welfare. One conclusion of the study is that increased service to unmarried mothers from public child welfare agencies is clearly needed in at least two-thirds of the States.

In addition, the Bureau has reviewed a great many research studies and demonstration projects in order to determine what we do and do not know about problems relating to births out of wedlock. A report of this review is now in process. It will serve as background to recommending projects and priorities for research, for demonstrations, and for programs.

5. Characteristics of Children Receiving Child Welfare Services.—A national sample study of the problems and characteristics of children and the services they receive from public and voluntary child welfare programs was launched in the spring of 1961 with the cooperation of the Child Welfare League of America.

6. Perinatal Mortality.—In a special study of data on perinatal mortality (fetal deaths in pregnancies of 20 or more weeks duration and neonatal deaths), the 1959 U.S. rate of 34.6 perinatal deaths per 1,000 births was the lowest recorded, thus resuming the gradual downward trend in rate which prevailed prior to the interruption by a rise in 1958 to 35.4. In comparison to a decade ago, 1959's perinatal mortality rate is down 14.6 percent. The relative improvement was larger in the fetal death rate, 18.1 reduction from 1949's rate, than in the neonatal death rate, which decreased 11.2 percent.

Statistical Reports

During the year, the Bureau compiled and published current statistical data received from State agencies administering the maternal and child health, crippled children's, and child welfare programs. It also published data on mental retardation clinics, services in public and voluntary child welfare programs, public child welfare personnel, geographic coverage of public child welfare service, adoption, day care, juvenile court statistics, institutions for delinquent children, juveniles waived by juvenile courts to criminal courts.

Research Interpretation

Public inquiries showed pretty much the same trend they have for the past few years—more from students, less from parents.

A fact sheet was prepared on *Working Mothers and Day Care Services in the United States.* Revisions of *Your Child from Six to Twelve* and *Infant Care* were underway.

A special listing of 477 research projects on juvenile delinquency entitled *Research Relating to Juvenile Delinquency* was published by the Bureau's Clearinghouse for Research in Child Life.

HEALTH SERVICES FOR MOTHERS AND CHILDREN

Beginning July 1, 1961, appropriations for both maternal and child health and crippled children's services were increased to $25 million, the full authorization for each program. This action by the Congress was crucial not only to the further development of these programs but even to the maintenance of their present level.

The 1960 Social Security Amendments authorized grants directly to institutions of higher learning as well as to State agencies for special projects of regional or national significance in maternal and child health and crippled children's services.

Currently, grants are going to institutions of higher learning to help in financing training in maternal and child health for maternity and pediatric nurses, medical social workers, and nutritionists; training in audiology; projects and demonstrations concerned with evaluation of child health conferences; prosthetic research; children's rehabilitation centers; regional congenital heart centers; care for children with epilepsy; a study of hard-of-hearing preschool children.

Out of these grants come more people skilled in working with mothers and children in many places outside the States receiving the special grants, and new and better services for children.

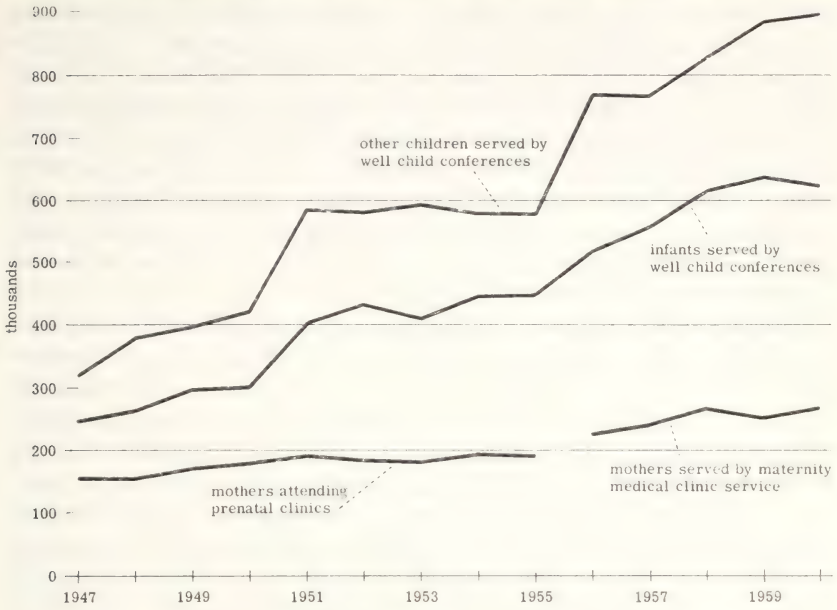
Maternal and Child Health Programs

All States, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam received Federal funds to improve services for promoting the health of mothers and children.

Maternal and child health programs continue to broaden and expand. During 1960, 267,000 expectant mothers were provided with medical, prenatal, and postnatal clinic services. Medical and hospital care were provided 38,000 mothers who had complications of pregnancy. Care in hospital premature centers was provided 10,073 premature infants. Well child conferences served over 1,500,000 babies and preschool children. Nurses gave a hand to the mothers of 3,412,693 children through home visits. School children received over 2,395,000 medical examinations. Some 2,557,000 children were immunized against smallpox; 3,594 against diphtheria; 5,818,000 against polio; 2,476,000 against whooping cough; and 3,778,000 against tetanus. Over 7 million children were given screening tests of vision; over 4 million tests of hearing.

Progress is being made in services to mentally retarded children for which $1 million of the $25 million appropriation is earmarked. Forty-six States are providing some special direct clinical services to retarded children and their families. Special clinical programs served over 12,000 such children in 1960. Training of medical personnel in

CHART 19.—MATERNAL AND CHILD HEALTH SERVICES ARE REACHING MORE PEOPLE



this field was increasing; some 4,500 medical students have received training through use of these special clinics; over 25,000 public health nurses have received some orientation in working with mentally retarded children and their families.

A broad-scope screening program for detection of phenylketonuria, financed by a Children's Bureau grant, is underway in hospitals in more than 30 States. Designed to test the effectiveness of routine screening of newborn infants as a regular part of hospital procedure, the program is expected to encompass over 400,000 children during the coming year.

The Bureau has also completed an inventory of children with phenylketonuria as a basis for its followup study of the effects of dietary treatment on the mental development of PKU children. (See p. 100.)

The changing picture of medical care of children has resulted in new challenges as well as new problems for health personnel. Whereas formerly children suffered from predominantly environmental, often acute, conditions (especially infectious and nutritional diseases, and accidents), an increasing number now suffer from genetic or partially genetic diseases or conditions produced by birth trauma—conditions which are usually present at birth, chronic in nature, and may require life-long therapy.

Whether congenital anomalies are increasing in incidence or prevalence is not known for certain; nevertheless they do constitute an increasing proportion of pediatric hospitalized patients and of the State crippled children caseload. A sizeable number of these are multiple handicapped children, some of whom have neurological defects and are severely disabled. Many of them have conditions so complex that a high degree of professional skill and specialization by several disciplines is required for treatment and habilitation or rehabilitation. These are the children who cannot be adequately cared for by the family physician but who require the services of a well staffed and equipped medical center.

Because of the increased demand for genetic counseling, the Dight Institute of Human Genetics and the Minnesota Human Genetics League proposed for enactment by the 1959 Minnesota State Legislature a bill providing for the establishment of a human genetics unit within the Minnesota State Board of Health. Minnesota thus became the first State to offer genetic counseling through the maternal and child health unit of its health department. The two main functions of the unit in its early years of development are to provide genetic counseling to parents and informative and educational material to various professional groups who are directly involved in human genetic problems.

An increased awareness of the need for expanded pediatric services among a number of States is evident. Not only are the States recognizing this activity as a necessary component of services for mothers and children, but they are recognizing the need to extend and improve its scope and coverage.

In Kentucky, pediatric clinics are being organized and conducted in cooperation with the Pediatric Department of the University of Kentucky Medical Center.

In spite of economic difficulties, West Virginia has expanded its services to children. In order to meet the needs of children with long-term illness and crippling conditions, the State health department's maternal and child health program has established pediatric centers offering diagnostic, evaluation, hospitalization, and followup services. Home care services are also offered to the child confined at home.

In North Carolina, general clinics have been developed in many of the counties, and efforts are now being directed to developing pediatric screening clinics to evaluate children with defects and refer these to supporting services and special clinic services, such as developmental and evaluation clinics.

The needs of chronically ill children for home care services are of special concern to the Children's Bureau. In an effort to gain greater

insight into these services and to stimulate interest in them, in February 1962, the Bureau approved a special project grant to Montefiore Hospital, Pittsburgh, submitted through the Pennsylvania Department of Health for home care services for chronically ill children. The first phase of the project is geared toward obtaining information about the number and location of chronically ill children within a defined geographical area, nature of illness and disease categories, extent of related social problems and services necessary to meet these needs through a coordinated home care program. In the second phase, home care services will be provided and evaluated according to the needs of various diagnostic groups. Individual cost accounting methods will be employed toward accurate analysis of the cost of services and to determine the essential requisites of such services to children.

The question of why patients do not seek or accept prenatal care is of concern to many State maternal and child health programs. Studies conducted by the California State Department of Public Health show that mothers who do not get sufficient prenatal care come from the group who are disadvantaged because of discrimination against minorities, low income, lack of vocational skills, poor education, and undesirable living conditions. Similar findings have been reported in New York City in a study of deterrents to prenatal care, particularly for the unmarried mother; by the Philadelphia Health Department; and in Washington, D.C.

The prematurity rate varies directly with the percent of women who receive little or no prenatal care. In the District of Columbia for example, the prematurity rate was 22.7 percent among women who had had no prenatal care as compared with 10.4 percent among those who had some prenatal care.

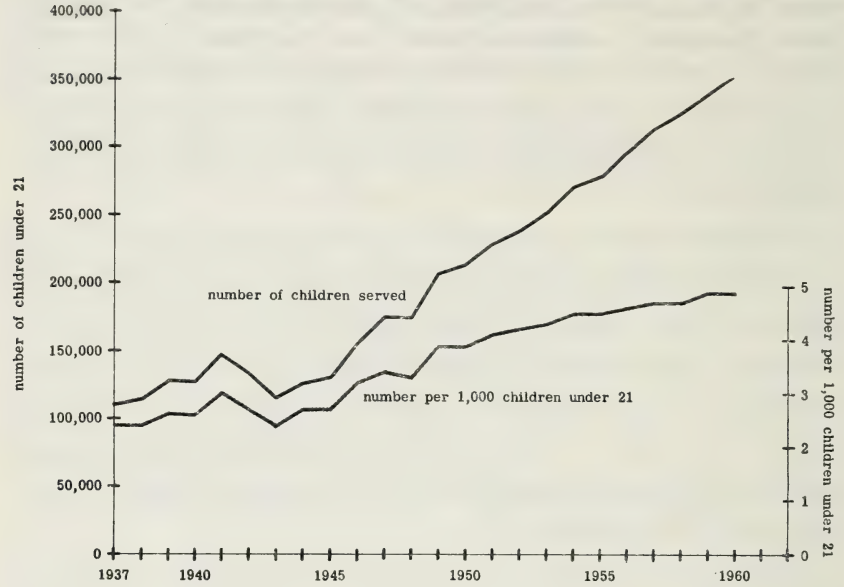
A growing trend in many areas of the country is the increasing coordination and integration of health, social welfare, and education programs for children. The basic stimulus has come from the complex nature of unsolved problems relating to children. Attention today is focused on the child with multiple handicaps, the refugee child, the juvenile delinquent, the unwed mother, the mentally retarded child, etc. All of these represent groups not served by any one agency or discipline. Present knowledge concerning these groups is not limited to a few professional areas. In serving these children, most communities seek the maximum professional effort from each worker for the child who needs services, without too much concern as to the worker's place in an administrative organization. This attempt leads to improved coordination and integration of programs.

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Crippled Children's Services

All States (excepting Arizona), the District of Columbia, Puerto Rico, the Virgin Islands, and Guam participated in the crippled children's program during fiscal 1962.

CHART 20.—TREND IN THE NUMBER OF CHILDREN SERVED IN THE CRIPPLED CHILDREN'S PROGRAM AND IN THE NUMBER PER 1,000 CHILDREN UNDER 21, 1937–60



State crippled children's programs provided care in 1960 to 355,000 children with many different impairments. About 17 in every 100 received hospital care and each of them averaged about a 3-week stay in the hospital. Averaging a little more than 2 visits each, 271,000 children came to clinics. About 79,000 children were seen by physicians during office and home visits. For every 1,000 children under 21 years of age, 4.9 children were receiving care under these programs.

The majority of the children in the program had nonorthopedic defects. States continued to broaden their programs to include such handicapping conditions as cystic fibrosis, nephrosis, epilepsy, hearing, and certain neurological defects.

The largest single group of children (about 100,000) who received diagnostic treatment and rehabilitative care in 1960 were children with impairments at birth. The program now includes children for whom medical or surgical care formerly was not available or feasible.

In fiscal 1960, 16,784 children with congenital heart disease were served by the crippled children's program. All States with the exception of three gave services to such children for diagnosis, treatment, or surgery.

Of special significance is the development of a project by the California State Department of Health, financed with a grant from the Children's Bureau, to study the immediate and long-term results of current methods of treating congenital heart disease. The California crippled children's program is in a unique position to carry such a study in view of its extensive experience in providing care for 5,000 children with congenital heart disease in 1959–60 of whom 1,000 were hospitalized for diagnosis and treatment.

The Children's Bureau is working with the Pennsylvania State Department of Health in the development of a plan for care of infants born with congenital anomalies that are incompatible with life in a special unit at the Children's Hospital, Philadelphia. Care will be available to infants from the Philadelphia area and southern New Jersey. Such a service will contribute appreciably to the reduction of neonatal mortality and to the early correction of seriously crippling conditions. This program will serve as a prototype for other services.

There is growing interest on the part of departments of pediatrics in medical schools in organizing special centers for the diagnosis and long-range treatment and counseling of children with multiple handicaps. These centers are being developed for the training of pediatricians, medical social workers, nurses, and others concerned with this complex and growing problem. Four such projects are now receiving grants from the Children's Bureau.

The keystone to further progress in maternal and child health programs lies in the broader distribution of services to groups of mothers and children who are barely or inadequately reached. These services are still lacking or inadequate in many areas and for some socially and economically deprived groups in cities.

CHILD WELFARE SERVICES

Fiscal 1962 heralded a solid breakthrough for child welfare services. The imminent passage of the 1962 Public Welfare Amendments at year's end furnished tanglible evidence of the Nation's determination to underwrite on a long-range basis the orderly improvement and extension of child welfare services to all children in need of them.

Research and Demonstration Projects in Child Welfare

The first grants were awarded to 16 projects totaling $219,413 by the Chief of the Children's Bureau on June 29, 1962, under the child welfare research and demonstration grant program originally authorized by the 1960 amendments to part 3, Title V, of the Social Security Act. Funds to put the program into operation became available with passage of the Appropriation Act of 1962. Immediately upon Presidential approval of the Appropriation Act, policies and

procedures for administering the new program were issued, personnel employed, and announcements of grant availability widely distributed by the Bureau.

Subject matter of the approved projects falls within the following areas: adoptions, rehabilitation, services to children in their own homes, day care, foster care, unmarried mothers, mentally retarded children, emotionally disturbed children, staff utilization, and educational materials and methods. Eight of the grants went to institutions of higher learning, six to voluntary agencies, two to public agencies.

Teamwork To Improve Child Welfare and Family Services

Federal administrative and legislative developments in public welfare since December 1961 greatly accelerated the pace of joint planning and collaboration between the Children's Bureau and the Bureau of Family Services. Late in January 1962, regional child welfare staff of the Children's Bureau came to Washington for the meeting called by the Commissioner of Social Security with State welfare administrators. This provided an opportunity to bring staff of both agencies up to date on the new public welfare administrative and legislative proposals as well, and to consider the implications for both programs.

During the last quarter of the fiscal year, Children's Bureau staff participated in regional office meetings held by the Bureau of Family Services for discussion of handbook materials on staff development and provision of social services for public assistance recipients.

Regional representatives of both agencies were considering together an increasing number of broad State matters relating to these programs. These include questions of State agency structure and organization, merit systems, and staff development.

Two joint publications were developed during the year. The demand for the pamphlet *Unmarried Parents: A Guide for the Development of Services in Public Welfare* was widespread and came from a wide range of groups and individuals, including judges, lawyers, ministers, physicians, housing authorities, and religious organizations. The second publication, dealing with staff development, will be published shortly. It is the end product of many meetings held by a special joint work group on training.

Financing the Ongoing Child Welfare Program

A sizeable increase was made in the Federal grant-in-aid appropriation for child welfare services in fiscal 1962—from $13,666,000 to $18,750,000.

No funds were reallotted during the year because of the small amount released by the States in relation to the amount requested under this procedure. Only 1 State released $8,176 and 19 States requested additional funds in the amount of $364,000. Consequently, the percentage of funds left in the Federal Treasury at the end of the year remained consistently low—only 0.6 percent.

On a nationwide basis, State and local funds expended for child welfare services almost doubled between 1953 and 1961. Expenditures for such purposes rose from $112,999,000 to $210,400,000. While the actual percentage increases have varied from year to year, the overall trend has been for increased State and local expenditures for the child welfare program.

Improvement in Child Welfare Services

Under Federal legislation still pending at the end of the fiscal year, the ceilings authorized for annual appropriations for child welfare grants would be increased gradually from the present $25 million to $50 million by 1969 to provide a wider range of constructive welfare services for children. A specified portion of the additional money would be used to encourage the establishment of day care facilities and services (see page 93 for other provisions).

These provisions hold great promise for progress in improving both the availability and scope of child welfare services.

Steps To Meet Continuing Staff Shortages

Over the course of the year, the Children's Bureau and the Bureau of Family Services have continued their joint efforts to stimulate schools of social work to expand their training possibilities. Schedules returned from the States on a joint project in field instruction resources and potentialities are presently being reviewed. In another approach to improve the quantity and quality of welfare staff, Washington and regional staff of the Bureau held an exploratory meeting with schools of social work in the Boston area to discuss ways in which the level of staff in the State agencies can be improved as well as the more general needs for trained social work manpower.

Some gains were made by States in raising salary levels for child welfare positions and in liberalizing educational leave provisions. Generally good progress was also made in increasing the number of State supervisory and consultant staff, particularly Connecticut, Massachusetts, New Hampshire, Georgia, Tennessee, South Carolina, New Mexico, Oklahoma, Wyoming, and Montana.

Changes in State Structure for Services

Much State activity during the year was directed toward program reviews and reorganizations of varying degrees of magnitude. Such

planning was in process or completed in 12 States in 7 of the 9 DHEW regions. In eight of the States, the changes were internal and geared toward improving the public child welfare program itself. In the remaining four States, the changes related to plans which would provide services to families and children through a combined administrative structure.

Development of Child Welfare Services in Specialized Areas

The report of the House Appropriations Committee (House Report No. 392, 87th Congress, 1st Session) expressed the concern of the Congress over the fact that a "thriving black market in babies . . . is made possible to a large extent by the lack of decent programs for unwed mothers and their children." The Children's Bureau was instructed to "use a portion of the increased funds in fiscal year 1962 to get effective programs started to deal with the problem better . . . ."

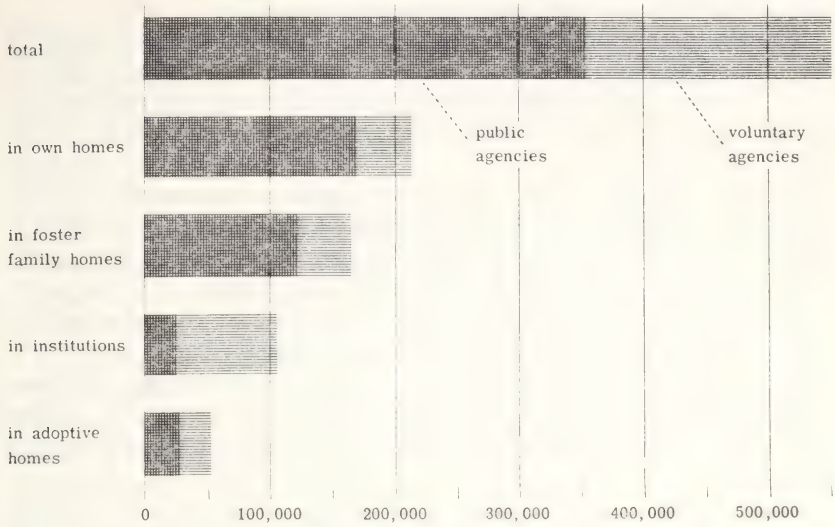
The Children's Bureau accordingly moved ahead to obtain as solid an informational base as possible to implement the congressional intent. A special questionnaire was sent to the States requesting data on services available for unmarried mothers, gaps in services, and plans proposed to meet these gaps. A report based on these findings was sent to Congress in January 1962.

Responses from the State departments of public welfare indicate their plans include extension of services for unmarried mothers and their babies through the use of regular child welfare service funds by such means as: additional professional training of staff, workshops and informal in-service training activities, publications of special materials, and efforts to improve cooperation among agencies.

However, States vary greatly in the types and availability of services provided unmarried mothers and their babies. Residence requirements limit care in some States. Help in meeting medical expenses, or paying for "shelter care" during pregnancy, is available through the public child welfare agencies in every county in only about half of the States. The lack of facilities and services for Negro unmarried mothers is a most serious problem.

Neglect and abuse of children constitute one of the most difficult and challenging problems for child welfare. In October 1961, the Children's Bureau took steps to consider the responsibility of the Federal Government in relation to children who are seriously abused or physically injured by their parents. In January 1962, an ad hoc meeting was held with representatives of various disciplines interested and active in working on this problem. A meeting in March with a second group of consultants focused on steps which could be taken to control child abuse. This group recommended the establishment of legal machinery in all States making mandatory the reporting

CHART 21.—CHILD WELFARE AGENCIES PROVIDE SOCIAL SERVICES FOR CHILDREN



by physicians and certain hospital administrative personnel of cases of suspected physical abuse of children by adults. The proposed statute would relieve such an individual reporting from civil liability.

The long-term goal for child welfare continues to be the maintenance of adequate family life for every child. During the past 6 months, State public welfare agencies have been actively engaged in assessing how they could best make use of special Federal funds for day care, one of the ways to maintain family life for children in today's society. Through these funds, every State would be able to begin immediately to develop a variety of these services—not only for the care and protection of children whose mothers work, but also as a preventive to full-time placement. A broadly representative Ad Hoc advisory committee was called together by the Children's Bureau in May 1962 to explore the new proposals for day care.

Requests for technical consultation to assist States in this planning have intensified. The report of the National Conference on Day Care for Children held in Washington in November 1960—*Day Care Services: Form and Substance*, jointly sponsored by the Children's Bureau and the Department of Labor—has proved very helpful in this connection. It has been widely distributed and the demand for it continues to be brisk.

States are reporting a mounting number of children coming into care as the result of family disruption. Although millions of dollars are invested annually in the care of children outside of their own homes, no uniform cost accounting methods have been developed or

accepted for use in the purchase of care, comparisons of costs of foster care, budgeting and internal program planning.

The Children's Bureau has employed a consultant on a temporary basis to stimulate use of cost analysis methods in child care institutions, using several models originally tested in about 21 institutions. The Bureau and the Child Welfare League of America are cooperating in this venture.

During December 1961, Children's Bureau Publication No. 394, *Legislative Guides for the Termination of Parental Rights and Responsibilities and the Adoption of Children*, was distributed to a wide range of agencies and organizations, including deans of law schools, The American Bar Association, the Council of State Governments, public welfare agencies (with additional copies for legal counsel, advisers, and staff development people), and national voluntary agencies. Response to the guide material has been excellent. Both Connecticut and West Virginia used the document in studies on needed welfare revisions.

Efforts to follow through on the findings of studies of irregular adoptions, as well as improvement of adoption laws generally, continued to be very much in the foreground among States on the west coast. The adoption program of the New York City Department of Welfare, financed by Federal child welfare services funds, completed its first full year of operation in December 1961, involving consideration of some 1,500 adoptive situations.

Two Federal developments during the year coalesced to accelerate the expansion of social services for mentally retarded children and their families: hearings held in various communities by the President's Panel on Mental Retardation to study the Nation's needs and make recommendations in local, State, and Federal action, and the announcement of grants for research and demonstration projects in child welfare.

Special interest was shown in setting up demonstration projects for mentally retarded children in the areas of foster family care, day care, development of the capacities of such children, and group therapy under the new grant program.

Public responsibility for the administration and support of day care centers for retarded children was extended to several additional States during the year (California, Connecticut, Maryland, Minnesota). Some eight States now make such provisions. Voluntary national agencies are also exploring the possibilities of this type of service for retarded children.

As the program for Cuban refugee children has moved into a more regularized phase and as the characteristics of the children arriving have changed, new aspects in planning have had to be considered. By

the end of May, 3,773 children were being cared for in 34 States. They resemble more closely now the children in the regular child welfare caseloads of public agencies over the country. Some have physical, mental, and emotional handicaps. Because of the large number of children arriving, over 75 percent have had to be placed in institutions, until foster homes can be made available for those needing such care.

The past 6 months brought greatly increased pressure upon the Children's Bureau with regard to the demands of this program, both in terms of policy decisions and in handling the flood of inquiries from the public and the Congress. The Florida State Department of Public Welfare and the voluntary agencies have been and are continuing to carry heavy responsibilities for the program.

The Bureau's child welfare specialist in civil defense planning has continued to cooperate with the Bureau of Family Services in planning and implementing the Emergency Welfare Services Program. Among the significant activities was: participation in a review made by an Ad Hoc Committee of the draft of *Welfare Institutions: A Civil Defense Guide for Fallout Protection of Population and Staff;* preparation of guides used by a survey team for a preliminary review of *Community Readiness to Provide Emergency Welfare Services* in eight selected cities, and assisting in consideration of the roles and interrelationships of public and voluntary agencies in the new national civil defense program.

Child welfare programs in 1961 fell far short of reaching all of the children with emotional and social problems with which social workers could help. Few States had programs geared to give the range and competence of service required to meet the needs of children. But the pending Federal legislation provides the opportunity for States to work realistically toward the goal of more well-trained workers and the richer variety of services so greatly needed.

JUVENILE DELINQUENCY SERVICE

Juvenile delinquency continues to be of great public concern. Our increasingly complex society intensifies the need for well-coordinated programs in this area.

The national concern about this problem has stimulated requests coming to the Bureau for various types of technical consultation, survey work, and guide material. The urgency of the juvenile delinquency problem in States and communities is pressing on State and local agency administrators and their personnel, as well as the general public, to seek effective techniques to alleviate the situation. A greater number, as well as variety, of requests have been received by the Bureau during fiscal 1962.

1. State legislative commissions have asked for standard setting material on training schools, detention centers, courts and law enforcement agencies, community organization and training. They have also asked the Bureau for on-the-spot consultation on services for delinquent children and for help with surveys of statewide services for these youth.

2. State departments responsible for delinquency control have asked the Bureau for similar types of assistance. Individual training schools, police departments, and detention programs have requested more specific types of help, such as suggestions of appropriate in-service training programs and how to implement such training; how to organize an institution or department to cope with the increasing number of children brought to their attention.

3. Communities experiencing a high incidence of problems with adolescents have turned to the Bureau for help on developing more effective leisure time programs, and exploring the various ramifications of school dropouts and employment and work programs for youth.

4. Schools of social work have requested consultation on delinquency problems and their implications for curriculum development.

5. The President's Committee on Juvenile Delinquency and Youth Crime has requested various types of help from the Bureau as the Committee established criteria to implement the Juvenile Delinquency and Youth Offenses Control Act. Their requests related to the Bureau's Division of Juvenile Delinquency Service staff making site field visits to appraise the degree of community commitment to planning a comprehensive delinquency prevention program; to their readiness to receive a planning grant; analysis of projects received by the President's Committee; technical assistance to schools of social work, agencies and communities requesting grants; and consultation relative to the knowledge and experience required by the Juvenile Delinquency Division Service staff since its establishment.

6. Many requests have come to the Bureau from foreign visitors and agencies for orientation and interpretation of this country's juvenile delinquency control programs.

The Children's Bureau met 1,043 requests for consultation on juvenile delinquency during fiscal year 1962. Of these requests, 568 were made from the field. The remaining 475 were through office consultation or by letter. In addition, the staff of the Division participated as speakers, leaders, or panel participants in workshop groups at national, State, and local meetings throughout the country. Requests for surveys and consultation far exceeded the Bureau's resources to meet them.

The past year saw the completion of a pioneer standard setting document in the law enforcement field—*Police Work with Children:*

Perspectives and Principles. This publication was developed in cooperation with the International Juvenile Officers Association, the International Association of Women Police, the National Council on Crime and Delinquency, the National Police Officers Association of America, and the National Sheriff's Association.

In the institutional field, the standard setting document, *Institutions Serving Delinquent Children: Guides and Goals*, was revised with the participation of the National Association of Training Schools and Juvenile Agencies. *A Theoretical Study of the Cottage Parent Position and Cottage Work Situations* was published in the Bureau series *Juvenile Delinquency: Facts and Facets.*

An annotated and classified compilation of Children's Bureau publications on juvenile delinquency was published. A training publication, *Training for Juvenile Probation Officers: The Report of a Workshop*, is in press. A community organization publication, *Community Planning to Prevent Juvenile Deliquency*, is underway.

INTERNATIONAL ACTIVITIES

International Research (Foreign Currency Program)

Under section 104(k) of P.L. 83–480, The Agricultural Trade Development and Assistance Act of 1954, as amended, funds were made available for research in health and other fields in specified countries. For fiscal year 1962, the Social Security Administration appropriation for international research was $1,607,000 of which $992,000 was for maternal and child health; $7,000 for medical care for the aged; and $608,000 for social welfare. The latter sum includes child welfare and juvenile delinquency. These funds were made available in August 1961, to be used in six countries—Israel, India, Pakistan, Poland, United Arab Republic, and Yugoslavia. Funds were approved in August 1961 and made available for use in the countries in December 1961.

The Bureau participated in the development of a manual, *Guide and Instructions for the P.L. 480 International Research Program in Social Welfare and Maternal and Child Health*, issued by the Social Security Administration in December 1961. Program areas were described, instructions given for submitting research proposals, and general requirements of the grant program stated.

Visits were made to five of the six countries by representatives of the Children's Bureau and the Social Security Administration to explain the program, meet with representatives of governmental, voluntary health and social agencies, and of medical schools, schools of public health, and schools of social work. These visits provided the staff with an opportunity to see something of these countries, their problems and programs, to meet and talk with outstanding national

and international workers as to research interest and possibilities for cooperative research undertakings.

The response in the number of research proposals submitted has been good. Eight proposals were received from Israel in maternal and child health and one from Pakistan during fiscal year 1962. Of these, the Bureau has approved three: *A Survey of Diarrheal Diseases in Pakistani Children*, *Socioethnological Factors in the Etiology of Toxemia of Pregnancy*, and *A Longitudinal Study of Growth and Development of Children from Various Social Strata and Ethnic Groups in Israel.*

Most of the fiscal year 1962 funds from Israel and Pakistan have been reserved for these projects, which will absorb about 25 percent of the year's total maternal and child health funds. Research proposals from Poland, Egypt, and India are under advisement.

During fiscal year 1962, one project in child welfare, *Institutionalization of Children*, and one in juvenile delinquency, *Forces Acting in "Street Corner Groups"* were approved for Israel. Six proposals dealing with juvenile delinquency or related fields and two in child welfare have been received. A total of 9 projects in maternal and child health and 17 in social welfare were received during fiscal year 1962.

The lack of trained personnel, research experience, and facilities in some of the countries limits the amount and type of cooperative research that can be developed. Also, the lack of dollar currency for administrative purposes, for providing materials and equipment for research which are not available with local currencies in the countries, for training of personnel in research outside of their country—in the United States or in other countries—also limits the research which is feasible under the program.

The Congress did not appropriate funds to the Social Security Administration for fiscal year 1963, thereby limiting the development of the program for the next fiscal year to the six countries and the funds available under the 1962 program.

International Training

Long-term trainees.[1]—The number of programs developed and implemented for foreign professional students for whose training in the United States the Bureau carries program responsibility increased markedly in fiscal 1962. Programs were developed for 75 specialists from 32 countries. Thirty-eight of these were physicians, 12 were nurses, and 4 students were in other health fields: a physical therapist, an occupational therapist, an X-ray technician, and a staff mem-

[1] Foreign visitors for whom the Bureau plans and carries out programs of 2 weeks or more are classified as long-term.

ber of a ministry of health and welfare whose major interest was the administrative and management aspects of programs for handicapped children. Of the 21 other students, 8 were studying child welfare, 1 was a medical social worker, and 12 were studying juvenile delinquency. Thirty-seven were new arrivals during the year.

Consistent with the pattern of recent years, the largest group of students was sponsored by the Agency for International Development. Of the 58 AID participants, 34 were physicians.

For a number of reasons, such as the duration of the educational grant, insufficient academic preparation in the home country, or the purpose of the training, many students attend our universities or medical schools as nondegree candidates. A few, however, successfully complete the degree requirements. For example, two physicians received master's degrees in public health; a nurse from India received her master's degree from Wayne State University; another nurse from India, her bachelor's from Columbia; a social work student from Ethiopia received a master of social work from the University of Denver; a Vietnamese physician successfully passed the written examination of the American Board of Pediatrics in January and will take her orals before she leaves the United States.

The majority of participants sponsored by the Agency for International Development are sent to the United States for a year. In some instances, however, particularly with respect to medical education in a specialty, grants are extended for 2 or 3 years. Of the 75 students in long-term training status during fiscal year 1962, 26 had programs which lasted 12 months, and 17 were following programs extending beyond a single year. For 15 of the long-term students, the Bureau carried program responsibility for less than 6 months. At the end of the year, 25 students were continuing their programs into the new year.

Short-term visitors.—The number of foreign visitors who came to the Bureau for programs which ranged from conferences of an hour or two to programs which lasted a week or 10 days decreased. One hundred and thirty-six visitors from 47 countries visited during the fiscal year. The comparable figure for 1961 was 170 visitors from 70 countries. Slightly more than half of the visitors were referred by international or Federal agencies. Nearly half of the visitors came on their own.

Of the 136 visitors, 15 had a major interest in child welfare and 32 were primarily interested in juvenile delinquency. Maternal and child health and services for handicapped children were of major interest to 19.

A 5-year picture.—A look at the record of the training program for the past 5 years shows no discernible trend in the numbers of either

long-term students or visitors. One factor is constant—the high proportion of trainees in the health professions. Each year, more than 65 percent of the long-term students were physicians, nurses, or other health personnel. In 1962, the percentage was 72.

Assistance to Other Training Agencies

Other agencies, both Federal and voluntary, engaged in program planning for international visitors, turn to the Bureau for guidance in selecting appropriate resources to which to send visitors. Whenever possible, this is done only following a conference with the visitor, but in instances where a conferences is not practical, the Bureau suggests resources throughout the country which fit the training objectives of the program. All plans and arrangements are made by the responsible agency. Typical of agencies requesting such advice are the American Council on Education, the Governmental Affairs Institute, and the Office of Education.

Summary

In fiscal 1962, the Children's Bureau has had a new sense of direction and purpose based on the perspectives of the past and the promise of the future. This year, as the Bureau prepared for and celebrated its own 50th anniversary, the accent was on moving ahead. Far-reaching amendments to Title V of the Social Security Act will make it possible for the Bureau to expand its services to children substantially and to increase the pool of trained workers for children's services in the years ahead.

Growing concern with children's services in States and communities was on the upswing. Greater Federal support was in the offing.

Countrywide coverage by the Bureau's three grant-in-aid programs was still far from complete, either in variety of services or geographically. But steady advances were being made in these programs and in the Bureau's reporting and investigating activities. The demand for consultation on children's programs by public and voluntary agencies far outstripped the Bureau's capacity to meet them.

Fiscal 1962 was a year of ferment and steady progress for the Children's Bureau and its programs.

Bureau of Federal Credit Unions

The Bureau of Federal Credit Unions supervises more than 10,500 Federal credit unions under provisions of the Federal Credit Union Act of 1934, as amended. These privately operated cooperative associations are presently serving some 6½ million families located in

every State, in the District of Columbia, the Canal Zone, Guam, Puerto Rico, and the Virgin Islands.

Stated broadly, the Bureau's mission is to:

1. Promote self-help security through privately-owned and democratically-controlled Federal credit unions.

2. Stimulate systematic savings to provide capital and cash reserves for credit union members.

3. Make available to people of small means credit for provident purposes at reasonable rates of interest through a national system of cooperative thrift and credit.

4. Help stabilize the economy of the United States by developing sound thrift, credit, and personal financial management practices.

To achieve these objectives, the Bureau encourages and actively participates in the organization of Federal credit unions; periodically examines all Federal credit unions for financial soundness and to ensure compliance with the laws and bylaws; and exercises general supervision over these groups. Manuals and other informational material and instructions are prepared for the guidance of the credit union officials.

Since 1953, the Bureau has not received appropriations from general funds but has operated entirely on the charter, supervision, and examination fees collected from Federal credit unions.

Federal credit unions do not serve the general public, but are limited to dealing with their members. Membership is based on a common bond of occupation or association, or to residence in a well-defined community. Membership in Federal credit unions increased 7½ percent in 1961 to 6,543,000, representing a net increase of 455,000 for the year. Membership participation edged up to 55 percent of the potential membership, from 54 percent a year earlier. The vast majority—83 percent at the end of 1961—serve workers in the huge complex of American industry, from the pineapple plantations in Hawaii to the steel mills in Pittsburgh. Fifteen percent of the Federal credit unions are organized among associational groups—cooperatives, fraternal and professional groups, churches, and labor unions—and 2 percent serve the members of closely knit urban or rural areas.

Two important milestones in credit union operations were passed mid-way in the fiscal year when the number of operating groups passed the 10,000 mark, and total assets of these groups exceeded $3 billion for the first time. Later in the fiscal year—in May 1962—a third important event took place when credit union services were extended to Guam, bringing the number of jurisdictions served by Federal credit unions to 55.

Consumer Protection

Increased emphasis has been given to the role of credit unions in protecting consumers against credit grantors who fail to disclose the true cost of credit. Federal credit unions are making progress on this front through the use of better financial counseling and educational programs. Credit union representatives and departmental officials have testified in favor of legislation to require extenders of credit to disclose its true cost on a uniform basis to enable consumers to make more informed decisions about where and how to obtain credit. (S. 1740, 87th Congress, second session, "Truth in Lending Bill.")

The need for more and better preventive counseling and consumer education by credit unions requires leadership and encouragement by the Bureau and cooperation with social service agencies. A beginning has been made in some of the larger cities but much more needs to be done to make social service agencies generally aware of the services of credit unions and credit unions aware of social services in their respective communities.

Student Loans for Higher Education

The Bureau recognized the desire and need of Federal credit unions to make a greater contribution toward helping students gain a higher education. An amendment to the Rules and Regulations for Federal Credit Unions liberalized repayment terms of loans to students for higher education. This action will enable Federal credit unions to participate more widely in State-guaranteed loan plans. It will also broaden their opportunities for service to members in the effort to make it possible for students to gain a higher education.

Manpower Utilization

Emphasis continued to be placed on the Bureau's examination program. Improved operations were accomplished through a continuing training program for Bureau examiners, and measurable results were achieved. Productivity of the examiners has steadily increased. Measured in terms of man-days required to perform the examination program in fiscal year 1962, the aggregate saving in time compared to fiscal years 1959, 1960, and 1961 was 4,748 man-days. Throughout this period, there has been no increase in fees charged the credit unions for examinations, and on the basis of the saving in man-days required to complete the program, Federal credit unions saved about $227,900 while an additional $71,600 accrued to the Bureau in terms of higher average fees per examination day.

Strengthening Research and Statistics

Another important area in which noteworthy improvement took place during the past fiscal year was in the Bureau's statistical program. A completely new classification system for Federal credit unions, by type-of-membership, was set up, involving reclassification of more than 10,000 active groups. The new system was patterned after the Standard Industrial Classification, and will permit greater utilization of the data on Federal credit unions. This is an important step toward filling the need for more adequate research in depth.

Expansion and improvement of the Bureau's research program is a major area of emphasis. It will be essential to have more complete knowledge about many aspects of credit unions and their members to provide sound bases for decisions on proposed legislation and policies which will more effectively carry out the Bureau's mission.

International Activities

The Bureau's role in international activities took on added stature during fiscal year 1962, when the Assistant to the Director participated in the First International Conference of Cooperatives at Bogota, Colombia, and the Bureau provided technical assistance to the Inter-American Development Bank in connection with a loan to the Central Credit Union of Peru, which, in turn, will make loans to Peruvians of low income for building homes, for improving the use of the land and for potable water and sanitation projects. Bureau staff also participated in training several foreign visitors and learned from these contacts of the vast need for credit union literature in the language of the countries concerned. To fill this void, at least partially, during fiscal year 1962, the Bureau published the Federal Credit Union Act, the Standard Bylaws, and a general informational leaflet about credit unions, in Spanish.

The Bureau is continuing its efforts to enlist the cooperation of AID and USIA in meeting the urgent, unmet need for translation, publication, and distribution of technical operating and accounting manuals in the languages of developing countries.

The Assistant to the Director represented the Department of Health, Education, and Welfare on a work group which evaluated International Cooperation Administration assistance to cooperatives in other countries. Recommendations were made to the Advisory Committee on Cooperatives for implementing and accelerating technical and financial assistance for establishing cooperatives in developing countries. Some of these recommendations are now being implemented by AID. Whenever requested, the Bureau cooperates with

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AID in planning and providing training for participants seeking to widen their knowledge and skills in connection with credit unions. The much-publicized program of assistance to cooperatives as yet has hardly gotten off the ground with respect to credit unions. These basic cooperatives are most effective in enabling people of low income to mobilize and control their meager savings while learning the fundamentals of democratic procedures. This potential for effective aid which strengthens the dignity of people with very modest expenditures of money should be developed more rapidly. In keeping with the objectives of encouraging self-help in the foreign aid programs overseas, credit union development should be speeded up.

Extending Coverage to Low–Income Groups

Extension of coverage to all who need and want credit union services is the ultimate goal, which can best be achieved through a program of consumer education in conjunction with a realistic chartering policy. Credit unions are voluntary associations of people, and the organization of a credit union originates with the group, not with the Bureau. The fact that new groups generally do not pay the full cost of supervision and examination during the first year or two need not act as a deterrent in chartering. This is especially true for low-income groups, who have the most need for credit union and other services and yet may experience a slower and more difficult growth. The enormous social values evolving from coverage of these groups should receive full weight, in relation to the financial considerations. The practice has been accepted that established credit unions help the smaller groups. It is generally known that many low income groups still do not have credit union service available. Overcoming the administrative and other difficulties inherent in extension of coverage to large segments of the low income population would be a major achievement in Bureau operations.

There were no amendments to the Federal Credit Union Act during the fiscal year.

Table 1.—*Social Security Administration: Funds available and obligations incurred, fiscal years 1962 and 1961* [1]

[In thousands, data as of June 30, 1962]

	Funds available [2]		Obligations incurred	
	1962	1961	1962	1961
Total	$2,751,996	$2,471,014	$2,811,631	$2,470,676
Grants to States	2,470,300	2,228,833	2,535,323	2,231,990
Public assistance [3]	2,401,200	2,177,000	2,466,974	2,180,466
Old-age assistance			1,256,388	1,211,709
Aid to the blind			47,483	48,517
Aid to families with dependent children			853,685	704,108
Aid to the permanently and totally disabled			199,552	182,625
Medical assistance for the aged			109,866	33,507
Maternal and child health and welfare services	69,100	51,833	68,349	51,524
Maternal and child health services	25,000	18,167	24,844	18,114
Services for crippled children	25,000	20,000	24,638	19,797
Child welfare services	18,750	13,666	18,648	13,613
Research or demonstration projects in child welfare	350		219	
Assistance for repatriated United States nationals	764		517	
Cooperative research and demonstration projects	700	350	695	347
Research and training (special foreign currency program)	1,607		353	
Administrative expenses [4]	278,625	241,831	274,743	238,339
Office of the Commissioner [5]	912	669	787	659
Bureau of Old-Age and Survivors Insurance [6]	267,570	232,200	264,289	228,909
Bureau of Hearings and Appeals [6]				
Bureau of Family Services	3,442	2,727	3,210	2,677
Children's Bureau [7]	2,668	2,494	2,630	2,486
White House Conference on Children and Youth		150		146
Bureau of Federal Credit Unions	4,033	3,591	3,827	3,462

[1] Funds available and obligations reported by administrative agencies.

[2] Funds made available by regular and supplemental appropriations, authorizations, transfers, allotments, recoveries, and fee collections for services rendered.

[3] Obligations for 1961 include $3,465,750 used from 1962 appropriation to complete 1961 requirements; obligations for 1962 exclude the aforementioned $3,465,750 and include $69,240,142 used from 1963 appropriation to complete 1962 requirements.

[4] Funds made available and obligations incurred for salaries, printing and binding, communications, traveling expenses, and all other objects of expenditure.

[5] Appropriations by Congress from general revenues accounted for approximately 50 percent of the administrative expenses of the Office of the Commissioner in 1961 and 1962; balance from old-age and survivors insurance trust fund.

[6] Administrative costs of the old-age, survivors, and disability insurance program, which involved benefit payments of $11,884,000,000 in 1961 and $13,579,000,000 in 1962; does not include construction costs of new buildings as follows: *Funds available:* 1961, $5,179,585; 1962, $966,893. *Obligations incurred:* 1961, $4,212,692; 1962, $568,334. Also includes expenses for the Bureau of Hearings and Appeals as follows: *Funds available:* 1961, $4,436,602; 1962, $6,457,114. *Obligations incurred:* 1961, $4,248,625; 1962, $5,733,309.

[7] Includes expenses for investigating and reporting on matters pertaining to the welfare of children uthorized by the Act of 1912, as well as expenses for administration of grants to States.

Table 2.—*Financing social insurance under the Social Security Act: Contributions collected and trust fund operations, fiscal years 1960–62*

[In millions, independently rounded]

Item	1962	1961	1960
Contributions collected under—			
Federal Insurance Contributions Act [1] [2]	$12,475	$12,315	$10,830
Federal Unemployment Tax Act [3]	458	345	341
State unemployment insurance laws [4] [5]	2,709	2,361	2,165
Old-age and survivors insurance trust fund:			
Receipts, total	11,985	11,814	10,342
Net appropriations and deposits	11,454	11,293	9,843
Net interest and profits on investments	530	522	500
Expenditures, total	13,259	11,743	11,055
Monthly benefits and lump-sum payments	12,657	11,185	10,270
Transfer under financial interchange with railroad retirement account [6]	350	322	583
Administration	251	236	202
Assets, end of year	19,626	20,900	20,829
Disability insurance trust fund:			
Receipts, total	1,088	1,082	1,061
Net appropriations and deposits	1,021	1,022	987
Transfers from railroad retirement account [6]			26
Net interest and profit	67	60	48
Expenditures, total	1,086	745	560
Monthly benefits	1,011	704	528
Transfers to railroad retirement account [6]	11	5	
Administration	63	36	32
Assets, end of year	2,507	2,504	2,167
State accounts in unemployment trust fund:			
Receipts, total	2,932	2,614	2,351
Deposits [5]	2,767	2,417	2,169
Interest	165	196	182
Withdrawals for benefit payments	2,857	3,558	2,366
Assets, end of year	5,805	3,729	6,673

[1] Contributions on earnings up to and including $4,800 a year beginning Jan. 1, 1959. Contribution rate paid by employers and employees: 2½ percent each beginning Jan. 1, 1959; 3 percent each beginning Jan. 1, 1960. Contribution rate paid by self-employed: 3¾ percent beginning Jan. 1, 1959; 4½ percent beginning Jan. 1, 1960. Includes deposits by States under voluntary agreements for coverage of State and local employees. Includes deductions to adjust for reimbursements to general funds of the Treasury of the estimated amount of employee taxes subject to refund on wages in excess of wage base.

[2] Includes old-age and survivors insurance and, beginning Jan. 1, 1957, disability insurance contributions.

[3] Prior to 1957 tax could be paid in quarterly installments by employers of 8 or more; beginning Jan. 31, 1957, tax payable annually on preceding year's wages by employers of 4 or more. Rate is 3 percent (beginning Jan. 1, 1961, 3.1 percent) on first $3,000 a year of wages paid to each employee by subject employer. Because of credit offset, permitted for contributions paid under State unemployment insurance laws (or for full contribution if reduced by State experience rating provisions), effective rate of 0.3 percent (beginning Jan. 1, 1961, 0.4 percent) of such wages.

[4] Contributions plus penalties and interest collected from employers and contributions from employees, reported by State agencies.

[5] Contributions and deposits by States usually differ slightly, because of time lag in making deposits. Deposits in the State accounts also include loans from the Federal unemployment account of the unemployment trust fund.

[6] Under the financial interchange with the railroad retirement account the two social security trust funds are to be placed in the financial position in which they would have been had railroad employment always been covered under the Social Security Act.

Source: Compiled from *Final Statement of Receipts and Expenditures of the United States Government*, other Treasury reports, and State agency reports.

Table 3.—*Old-age, survivors, and disability insurance: Number of families and beneficiaries receiving benefits and average monthly benefit in current-payment status, by family group, end of December 1961 and December 1960*

[In thousands, except for average benefit]

Family classification of beneficiaries	Dec. 31, 1961			Dec. 31, 1960		
	Number of families	Number of beneficiaries	Average monthly amount per family	Number of families	Number of beneficiaries	Average monthly amount per family
Total	12,173.6	16,494.8		10,959.6	14,844.6	
Retired-worker families	8,924.8	11,655.2		8,061.5	10,599.0	
Worker only	6,470.2	6,470.2	$71.90	5,741.8	5,741.8	$69.90
Male	3,335.9	3,335.9	81.20	2,921.7	2,921.7	79.90
Female	3,134.3	3,134.3	62.00	2,820.2	2,820.2	59.60
Worker and aged wife [1]	2,213.6	4,427.1	126.60	2,122.0	4,243.9	123.90
Worker and young wife [2 3]	.9	1.9	108.50	1.0	2.0	111.00
Worker and aged dependent husband	13.6	27.2	107.50	14.3	28.6	105.50
Worker and 1 or more children	62.6	141.2	120.90	50.2	113.4	119.40
Worker, aged wife,[1] and 1 or more children	25.2	77.4	159.20	22.0	67.4	157.60
Worker, young wife,[2] and 1 or more children	138.6	509.7	149.20	109.9	401.2	152.30
Worker, husband, and 1 or more children	.1	.4	123.30	.2	.6	115.70
Survivor families	2,630.7	3,812.5		2,442.8	3,558.1	
Aged widow	1,677.4	1,677.4	64.90	1,527.3	1,527.3	57.70
Aged widow and 1 or more children	17.3	35.4	122.90	14.2	29.2	112.90
Aged widow and 1 or 2 aged dependent parents	.3	.5	153.80	.3	.6	131.00
Aged dependent widower	2.3	2.3	62.10	2.0	2.0	54.10
Widower and 1 or more children	.1	.1	91.30	(4)	.1	84.40
Widowed mother only [3]	1.1	1.1	61.50	1.4	1.4	64.20
Widowed mother [3] and 1 aged dependent parent	0	0	0	(4)	(4)	173.70
Widowed mother and 1 child	184.6	369.2	135.00	171.9	343.9	131.70
Widowed mother and 2 children	120.3	361.0	189.30	113.4	340.1	188.00
Widowed mother and 3 or more children	121.3	587.5	182.80	113.8	547.6	181.70
Widowed mother, 1 or more children, and 1 or 2 aged dependent parents	.4	1.4	231.00	.5	1.8	214.70
Widowed mother, divorced wife, and children	(4)	.1	247.90	0	0	0
Divorced wife and 1 or more children	.4	1.0	170.10	.4	1.0	163.40
1 child only	302.2	302.2	60.70	296.4	296.4	58.50
2 children	104.6	209.2	124.60	106.6	213.2	122.50
3 children	40.8	122.5	160.10	38.3	115.0	155.00
4 or more children	23.1	104.8	168.30	22.6	102.5	157.20
1 or more children and 1 or 2 aged dependent parents	.5	1.1	145.30	.7	1.5	137.60
1 aged dependent parent	32.5	32.5	68.10	31.6	31.6	60.90
2 aged dependent parents	1.5	3.1	111.00	1.5	3.0	107.90
Disabled-worker families	618.1	1,027.1		455.4	687.5	
Worker only	459.3	459.3	87.70	356.8	356.8	87.90
Male	332.0	332.0	91.50	261.3	261.3	91.90
Female	127.3	127.3	77.70	95.5	95.5	76.90
Worker and aged wife [1]	24.5	48.9	136.50	21.7	43.5	135.60
Worker and young wife [2 3]	.1	.1	156.90	.2	.4	143.20
Worker and aged dependent husband	.3	.6	115.80	.2	.4	120.70
Worker and 1 or more children	40.6	106.4	154.90	22.0	55.8	154.40
Worker, aged wife,[1] and 1 or more children	.2	.6	186.60	.1	.3	186.20
Worker, young wife,[2] and 1 or more children	93.2	411.2	191.10	54.4	230.3	189.10

[1] Wife aged 65 or over or wife aged 62–64 with no entitled children in her care.
[2] Wife under age 65 with 1 or more entitled children in her care.
[3] Benefits to children were being withheld.
[4] Less than 50.

Table 4.—*Old-age, survivors, and disability insurance: Number and amount of monthly benefits in current-payment status at end of June 1962 and amount of benefit payments in fiscal year 1962, by State*

[In thousands]

Beneficiary's State of residence	Monthly benefits in current-payment status, June 30, 1962						Benefit payments in fiscal year 1962 [2]			
	Total		OASI [1]		DI [1]		Total	OASI [1]		DI [1]
	Number	Monthly amount	Number	Monthly amount	Number	Monthly amount		Monthly benefits	Lump-sum death payments	
Total	17,280.4	$1,128,166	16,128.5	$1,053,102	1,151.8	$75,064	$13,669,212	$12,483,747	$174,089	$1,011,376
Alabama	290.9	15,369	259.8	13,624	31.1	1,745	186,195	160,250	2,517	23,428
Alaska	7.1	429	6.7	403	.4	26	5,251	4,834	84	333
American Samoa	.1	2	.1	2	0	0	19	19	0	0
Arizona	107.0	7,004	96.9	6,309	10.1	695	84,181	73,978	1,040	9,163
Arkansas	197.3	10,175	181.8	9,319	15.5	856	121,588	108,827	1,460	11,301
California	1,348.6	92,884	1,269.9	87,005	78.6	5,878	1,122,706	1,029,821	14,273	78,612
Colorado	144.8	9,294	136.4	8,738	8.4	557	112,284	103,570	1,413	7,301
Connecticut	250.6	18,741	238.3	17,816	12.3	925	228,281	212,702	2,839	12,740
Delaware	38.2	2,606	35.7	2,432	2.5	174	31,577	28,783	450	2,344
District of Columbia	57.2	3,598	53.1	3,321	4.2	276	44,240	39,791	788	3,661
Florida	595.8	39,771	555.1	37,080	40.8	2,691	474,241	433,802	4,624	35,815
Georgia	313.7	16,655	277.3	14,670	36.4	1,985	200,870	171,926	2,854	26,090
Guam	.2	5	.2	5	[3]	[4]	69	68	0	1
Hawaii	36.2	2,210	33.7	2,043	2.6	167	26,644	24,008	348	2,288
Idaho	61.6	3,915	58.4	3,708	3.2	207	47,663	44,228	650	2,785
Illinois	957.2	67,810	903.4	63,868	53.8	3,941	823,548	759,514	11,158	52,876
Indiana	473.9	31,944	446.0	30,049	27.9	1,895	387,080	356,569	4,716	25,795
Iowa	301.0	19,428	288.9	18,637	12.1	791	235,178	221,684	2,676	10,818
Kansas	219.3	13,775	208.7	13,086	10.6	689	167,236	155,650	2,046	9,540
Kentucky	330.6	18,099	294.2	16,214	36.4	1,885	218,856	191,463	2,444	24,949
Louisiana	236.6	13,116	211.1	11,700	25.5	1,416	157,640	136,587	2,407	18,646
Maine	113.0	7,079	106.5	6,684	6.5	395	86,121	79,505	1,091	5,525
Maryland	227.3	14,963	213.0	13,980	14.3	983	181,444	165,154	2,764	13,526
Massachusetts	552.0	39,047	523.0	36,994	28.9	2,053	477,560	443,052	6,118	28,390
Michigan	727.3	52,434	681.9	49,171	45.4	3,264	634,561	582,777	7,558	44,226
Minnesota	336.2	21,751	323.3	20,886	13.0	865	263,415	248,697	2,840	11,878
Mississippi	201.5	9,416	183.1	8,482	18.5	934	112,714	99,092	1,443	12,179
Missouri	466.1	29,546	437.7	27,720	28.4	1,826	357,422	328,173	4,536	24,713
Montana	65.8	4,346	62.3	4,110	3.5	235	53,283	49,502	638	3,143
Nebraska	149.0	9,324	143.5	8,970	5.5	354	112,576	106,422	1,316	4,838
Nevada	19.6	1,348	18.5	1,261	1.1	87	16,180	14,710	279	1,191
New Hampshire	69.8	4,689	66.7	4,473	3.1	216	56,894	53,093	755	3,046

New Jersey	592.7	43,494	561.4	41,154	31.3	2,340	529,279	489,437	7,456	32,386
New Mexico	59.0	3,229	53.9	2,961	5.1	268	38,898	34,801	554	3,543
New York	1,709.8	122,974	1,613.8	115,942	96.0	7,032	1,493,763	1,378,302	20,081	95,380
North Carolina	391.1	20,731	352.6	18,617	38.5	2,114	249,637	218,172	3,380	28,085
North Dakota	58.5	3,549	56.2	3,424	2.3	126	43,243	41,108	481	1,654
Ohio	908.2	63,223	850.9	59,249	57.3	3,973	770,345	706,485	9,720	54,140
Oklahoma	222.6	13,215	206.2	12,195	16.4	1,020	158,247	143,055	1,951	13,241
Oregon	195.6	13,322	184.9	12,560	10.8	761	161,920	149,740	1,954	10,226
Pennsylvania	1,171.9	82,022	1,094.8	76,506	77.0	5,517	1,004,132	914,699	13,254	76,179
Puerto Rico	149.8	5,025	140.4	4,739	9.4	287	57,225	53,391	551	3,283
Rhode Island	95.7	6,671	90.0	6,265	5.8	406	81,283	74,849	966	5,468
South Carolina	188.4	9,747	166.2	8,549	22.2	1,199	118,061	100,519	1,725	15,817
South Dakota	68.5	4,160	65.8	4,002	2.7	158	50,702	47,932	591	2,179
Tennessee	333.0	17,630	301.1	15,870	31.9	1,760	211,814	186,169	2,757	22,888
Texas	740.6	42,757	685.8	39,472	54.8	3,286	512,498	461,725	7,005	43,768
Utah	63.6	4,191	60.6	3,989	3.0	203	50,851	47,418	696	2,737
Vermont	44.5	2,801	41.6	2,623	2.9	179	34,057	31,145	423	2,489
Virgin Islands	1.5	70	1.5	68	[3]	3	807	766	13	28
Virginia	323.8	18,437	291.5	16,584	32.3	1,854	223,682	196,083	2,996	24,603
Washington	277.3	19,093	262.9	18,054	14.4	1,039	233,296	216,344	2,699	14,253
West Virginia	223.7	13,311	191.2	11,479	32.5	1,832	163,176	136,534	1,727	24,915
Wisconsin	419.5	28,326	399.3	26,947	20.2	1,379	343,150	320,569	3,891	18,690
Wyoming	26.7	1,738	25.2	1,643	1.5	95	20,935	19,360	309	1,266
Abroad	118.5	7,676	115.5	7,454	2.9	222	90,694	86,893	784	3,017

[1] Benefits under the old-age and survivors insurance (OASI) parts of the old-age, survivors, and disability insurance program are payable from the OASI trust fund to old-age (retired-worker) beneficiaries and their dependents and to survivors of deceased workers. Benefits under the disability insurance (DI) part of the program are payable from the DI trust fund to disability (disabled-worker) beneficiaries and their dependents.

[2] Distribution by State estimated.

[3] Less than 50.

[4] Less than $500.

Table 5.—*Old-age, survivors, and disability insurance: Selected data on employers, workers, taxable earnings, and contributions, by State for specified periods*

[In thousands, except for average taxable earnings. Preliminary, corrected to October 26, 1962]

State	Employers reporting taxable wages July–September 1961 [1]	Calendar year 1959			
		Workers reported with taxable earnings [2]	Reported taxable earnings [3]		Contributions [4]
			Amount	Average per worker	
Total	4,260	71,500	$202,346,000	$2,830	$9,884,400
Alabama	64	1,090	2,419,000	2,220	118,300
Alaska	4	80	205,000	2,560	10,000
Arizona	28	490	1,220,000	2,490	59,700
Arkansas	40	580	1,114,000	1,920	53,400
California	383	6,270	18,256,000	2,910	891,500
Colorado	42	680	1,665,000	2,450	80,300
Connecticut	66	1,150	3,406,000	2,960	167,300
Delaware	13	210	567,000	2,700	27,900
District of Columbia	30	480	1,141,000	2,380	56,400
Florida	133	1,940	4,268,000	2,200	207,900
Georgia	94	1,450	3,098,000	2,140	151,500
Hawaii	13	230	600,000	2,610	29,400
Idaho	15	280	634,000	2,260	30,200
Illinois	227	4,500	13,332,000	2,960	652,300
Indiana	100	1,930	5,585,000	2,890	273,100
Iowa	66	1,090	2,751,000	2,520	129,700
Kansas	54	880	2,110,000	2,400	100,600
Kentucky	61	980	2,183,000	2,230	105,300
Louisiana	67	1,050	2,449,000	2,330	119,700
Maine	25	390	858,000	2,200	41,800
Maryland	77	1,190	2,931,000	2,460	143,400
Massachusetts	122	2,240	6,234,000	2,780	306,600
Michigan	159	3,150	9,941,000	3,160	488,200
Minnesota	74	1,310	3,453,000	2,640	166,400
Mississippi	38	640	1,228,000	1,920	59,500
Missouri	108	1,840	4,753,000	2,580	231,000
Montana	16	280	706,000	2,520	33,800
Nebraska	39	600	1,392,000	2,320	65,400
Nevada	8	150	356,000	2,370	17,400
New Hampshire	17	280	740,000	2,640	36,300
New Jersey	158	2,700	7,885,000	2,920	386,900
New Mexico	20	340	723,000	2,130	35,100
New York	481	8,100	24,470,000	3,020	1,202,200
North Carolina	104	1,740	3,809,000	2,190	185,700
North Dakota	14	230	509,000	2,210	23,300
Ohio	203	3,850	11,550,000	3,000	566,200
Oklahoma	49	900	2,071,000	2,300	100,000
Oregon	43	790	2,033,000	2,570	98,600
Pennsylvania	257	4,680	13,662,000	2,920	669,900
Puerto Rico	19	470	543,000	1,160	26,500
Rhode Island	21	360	944,000	2,620	46,300
South Carolina	51	830	1,769,000	2,130	86,600
South Dakota	18	250	547,000	2,190	25,300
Tennessee	79	1,270	2,865,000	2,260	139,500
Texas	236	3,740	8,614,000	2,300	418,200
Utah	17	360	870,000	2,420	42,400
Vermont	11	150	331,000	2,210	16,000
Virgin Islands	1	10	15,000	1,500	800
Virginia	91	1,400	3,282,000	2,340	160,600
Washington	65	1,150	3,230,000	2,810	157,400
West Virginia	37	650	1,660,000	2,550	81,500
Wisconsin	94	1,620	4,546,000	2,810	220,700
Wyoming	9	150	340,000	2,270	16,300
Foreign [5]	1	90	274,000	3,040	13,500
Oceanborne vessels	----------	110	330,000	3,000	16,500
Uniformed services (on basic pay)	----------	3,300	5,883,000	1,780	294,200

[1] Data represent number of employers reporting taxable wages by the State of their reporting headquarters. An employer is a legal entity such as a corporation, partnership, or a single ownership for which a single tax return is filed. Excludes agricultural employers.

[2] Workers employed in more than one State are counted in each State. National and state totals represent unduplicated counts of workers.

[3] Annual taxable limit with respect to wages from a single employer, or on self-employment income was $4,800 in 1959. Averages rounded to nearest $10.

[4] Contribution rate was 2½ percent, each, for employees and employers; and 3¾ percent for self-employed persons in 1959.

[5] Represents employment and earnings of U.S. citizens outside the listed States and groups by American employers and their foreign subsidiaries.

Table 6.—*Old-age, survivors, and disability insurance: Selected data on benefits, employers, workers, and taxable earnings for specified periods, 1960–62*

[In thousands, except for average monthly benefit and average taxable earnings; corrected to October 18, 1962]

Item	1962	1961	1960
	Fiscal year		
Benefits in current-payment status (end of period):			
Number (OASI and DI) [1]	17,280.4	15,624.2	14,261.8
Number (OASI)	16,128.5	14,726.5	13,740.3
Number (DI)	1,151.8	897.7	521.6
Old-age (retired-worker)	9,347.6	8,414.0	7,813.0
Disability (disabled-worker)	679.3	558.1	370.8
Wife's or husband's (OASI and DI)	2,596.6	2,432.5	2,279.9
Wife's or husband's (OASI)	2,463.9	2,329.9	2,223.5
Wife's or husband's (DI)	132.7	102.6	56.4
Child's (OASI and DI) [2]	2,407.5	2,141.3	1,903.5
Child's (OASI) [2]	2,067.6	1,904.3	1,809.1
Child's (DI) [2]	339.9	237.0	94.4
Widow's or widower's	1,778.1	1,621.9	1,471.3
Mother's	434.6	419.9	387.9
Parent's	36.7	36.4	35.5
Total monthly amount (OASI and DI)	$1,128,166	$992,032	$889,863
Total monthly amount (OASI)	$1,053,102	$931,705	$851,791
Total monthly amount (DI)	$75,064	$60,327	$38,071
Old-age (retired-worker)	$710,736	$627,400	$575,295
Disability (disabled-worker)	$60,948	$49,895	$33,123
Wife's or husband's (OASI and DI)	$101,821	$94,195	$87,701
Wife's or husband's (OASI)	$97,489	$90,759	$85,676
Wife's or husband's (DI)	$4,333	$3,437	$2,025
Child's (OASI and DI) [2]	$110,061	$99,233	$84,789
Child's (OASI) [2]	$100,277	$92,238	$81,865
Child's (DI) [2]	$9,784	$6,995	$2,924
Widow's or widower's	$116,317	$94,270	$84,229
Mother's	$25,797	$24,823	$22,609
Parent's	$2,487	$2,215	$2,117
Average monthly amount:			
Old-age (retired-worker)	$76.03	$74.57	$73.63
Disability (disabled-worker)	$89.73	$89.41	$89.33
Wife's or husband's (OASI and DI)	$39.21	$38.72	$38.47
Wife's or husband's (OASI)	$39.57	$38.95	$38.53
Wife's or husband's (DI)	$32.65	$33.50	$35.92
Child's (OASI and DI) [2]	$45.71	$46.34	$44.54
Child's (OASI) [2]	$48.50	$48.44	$45.25
Child's (DI) [2]	$28.78	$29.51	$30.98
Widow's or widower's	$65.42	$58.12	$57.25
Mother's	$59.36	$59.11	$58.29
Parent's	$67.68	$60.85	$59.67
Benefit payments during period:			
Monthly benefits (OASI and DI)	$13,495,123	$11,721,534	$10,632,223
Monthly benefits (OASI)	$12,483,747	$11,017,539	$10,103,937
Monthly benefits (DI)	$1,011,376	$703,995	$528,304
Old-age (retired-worker)	$8,339,881	$7,371,205	$6,803,478
Disability (disabled-worker)	$816,349	$589,497	$450,114
Supplementary (OASI and DI)	$1,485,396	$1,300,137	$1,183,515
Supplementary (OASI)	$1,290,369	$1,185,639	$1,105,327
Supplementary (DI)	$195,027	$114,498	$78,190
Survivor	$2,853,497	$2,460,695	$2,195,132
Lump-sum death payments	$174,089	$166,993	$165,772
Workers insured for OASI benefits (midpoint of period—Jan. 1): [3]	89,300	85,300	79,600
Fully insured	88,700	84,400	76,600
Currently but not fully insured	600	1,000	2,900
Workers insured for disability (midpoint of period—Jan. 1): [3]	50,900	48,800	46,300
Estimated number of employers reporting taxable wages, 1st quarter of fiscal year [4]	4,250	4,230	4,170
	Calendar year		
Estimated number of workers with taxable earnings	75,000	74,000	73,000
Estimated amount of taxable earnings	$220,000,000	$210,000,000	$207,600,000
Average taxable earnings [5]	$2,930	$2,840	$2,840

[1] Benefits under the old-age and survivors insurance (OASI) parts of the old-age, survivors, and disability insurance program are payable from the OASI trust fund to old-age insurance (retired-worker) beneficaries and their dependents and to survivors of deceased workers. Benefits under the disability insurance (DI) part of the program are payable from the DI trust fund to disability insurance (disabled-worker) beneficiaries and their dependents.

[2] Includes benefits payable to disabled persons aged 18 or over—dependent sons and daughters of disabled, deceased, or retired workers—whose disability began before age 18.

[3] Estimates of insured workers have not been adjusted to reflect changes in insurance status arising from: (1) provisions that coordinate the old-age, survivors, and disability insurance and railroad retirement programs and (2) wage credits for military service. Estimates are only partially adjusted to eliminate duplicate count of persons with taxable earnings reported on more than 1 account number.

[4] Excludes agricultural employers.

[5] Rounded to nearest $10.

Table 7.—*Special types of public assistance under plans approved by the June 1962, and total payments to recipients,*

[Including vendor payments for medical care and cases

State	Old-age assistance			Medical assistance for the aged			Aid to dependent children		
		Payments to recipients			Payments to recipients		Number of recipients, June		
	Number of recipients, June	Average payment, June	Total, fiscal year (in thousands)	Number of recipients, June	Average payment, June	Total, fiscal year (in thousands)	Families	Total [1]	Children
Fiscal year:									
1960	2,358,539	$68.01	$1,894,639				794,396	3,023,311	2,330,108
1961	2,295,925	67.90	1,914,946	46,247	$201.33	$42.899	877,961	3,382,095	2,612,611
1962	2,236,870	72.55	1,899,039	101,634	171.36	196.127	944,043	3,692,566	2,853,387
Alabama	101,234	62.93	72,076	162	183.90	121	21,794	88,320	69,331
Alaska	1,362	70.45	1,157				1,252	4,301	3,236
Arizona	13,690	59.34	9,961				9,214	38,003	29,369
Arkansas	55,513	56.54	35,302	1,343	47.40	355	6,396	24,662	19,011
California	257,999	103.42	292,760	16,429	290.45	18,002	90,461	337,022	260,052
Colorado	49,518	99.11	58,317				8,761	33,886	26,697
Connecticut	9,851	80.77	18,945	3,961	192.42	1,152	11,146	42,043	32,141
Delaware	1,129	49.44	692				2,023	8,486	6,634
District of Columbia	2,911	83.99	2,937				4,976	22,724	18,133
Florida	70,422	60.19	50,376				26,321	97,956	78,339
Georgia	93,156	49.17	53,325				16,758	62,818	48,761
Guam	131	38.39	37	17	[2]	[3]	185	1,003	841
Hawaii	1,193	70.44	998	412	260.06	811	3,018	12,351	9,876
Idaho	5,742	71.42	5,259	1,168	143.72	1,804	2,476	9,337	6,908
Illinois	66,285	82.90	66,115	392	246.76	634	61,492	264,520	206,411
Indiana	24,967	68.58	20,439				12,381	46,887	35,650
Iowa	31,568	73.00	32,904				10,052	37,718	28,661
Kansas	25,880	86.51	26,894				6,662	25,788	20,462
Kentucky	54,757	53.86	35,190	2,164	18.40	311	22,155	79,655	59,871
Louisiana	126,995	81.24	114,355	270	394.15	359	22,327	92,231	71,973
Maine	11,111	69.85	9,181	397	265.72	402	6,028	21,540	16,001
Maryland	9,435	69.48	7,531	5,051	54.79	1,832	11,957	50,527	39,893
Massachusetts	59,410	81.72	62,175	20,391	179.03	41,673	19,041	66,180	49,701
Michigan	53,100	80.30	51,398	4,896	318.81	17,149	33,342	120,017	88,446
Minnesota	44,241	101.22	51,780				11,371	39,940	31,344
Mississippi	78,949	36.03	33,674				20,522	80,459	63,159
Missouri	109,252	61.35	81,287				26,913	104,970	80,206
Montana	6,183	65.37	4,937				1,882	7,212	5,600
Nebraska	13,534	77.92	12,794				3,285	12,880	9,943
Nevada	2,483	83.89	2,394				1,284	4,683	3,740
New Hampshire	4,628	90.66	5,067	33	[2]	13	1,045	4,155	3,189
New Jersey	18,527	95.03	18,567				20,996	76,326	58,193
New Mexico	10,843	59.66	8,913				7,427	29,221	22,579
New York	58,039	79.39	57,932	26,965	135.48	99,071	87,037	360,547	277,649
North Carolina	45,908	50.94	27,402				28,253	111,727	86,545
North Dakota	6,181	82.50	6,651	836	210.45	1,450	1,845	6,922	5,416
Ohio	87,828	80.93	83,677				35,238	140,300	107,517
Oklahoma	85,399	84.47	86,478	571	239.60	886	19,325	70,652	53,946
Oregon	15,815	86.25	16,064	[4]	[4]	231	8,217	30,476	23,371
Pennsylvania	48,191	74.55	41,074	3,926	245.80	2,883	69,059	280,685	214,804
Puerto Rico	36,255	9.05	3,911	1,913	26.14	331	57,560	226,436	181,595
Rhode Island	6,233	82.74	6,266				5,019	19,003	14,500
South Carolina	28,932	41.53	14,999	494	156.50	852	8,991	36,040	28,734
South Dakota	8,145	77.16	7,510				2,948	10,438	7,953
Tennessee	50,479	45.60	27,993	678	57.21	182	22,391	84,477	64,445
Texas	221,039	64.84	155,542				19,643	81,530	62,196
Utah	6,733	73.85	6,596	612	148.08	508	4,063	15,678	11,998
Vermont	5,483	72.98	4,796				1,345	4,880	3,668
Virgin Islands	532	33.89	222	88	18.10	24	302	1,043	877
Virginia	14,084	56.10	9,327				10,704	43,652	34,273
Washington	44,153	97.00	48,450	948	217.18	1,409	13,424	49,698	37,608
West Virginia	17,114	44.30	8,978	7,517	36.97	3,683	31,804	125,872	97,612
Wisconsin	31,578	87.63	34,784				11,168	41,814	32,096
Wyoming	2,750	78.35	2,649				764	2,875	2,233

[1] Includes as recipients the children and 1 parent or other adult relative in families in which the requirements of at least 1 such adult were considered in determining the amount of assistance.

Social Security Administration: Number of recipients and average payment, by program and State, fiscal year 1962

receiving only such payments; data corrected to October 15, 1962]

Aid to dependent children—Continued			Aid to the blind			Aid to the permanently and totally disabled		
Payments to recipients			Number of recipients, June	Payments to recipients		Number of recipients, June	Payments to recipients	
Average payment per family, June	Average payment per recipient, June	Total, fiscal year (in thousands)		Average payment, June	Total, fiscal year (in thousands)		Average payment, June	Total, fiscal year (in thousands)
$110.78	$29.11	$1,021,097	107,978	$72.85	$92,309	362,815	$65.96	$271,208
116.70	30.29	1,118,991	105,601	73.36	93,991	383,675	68.21	301,361
123.14	31.48	1,338,603	100,398	77.47	92,819	417,042	72.00	334,528
45.35	11.19	11,089	1,628	43.93	842	12,753	40.85	5,998
86.38	25.14	1,677	98	77.20	90	----	----	----
122.36	29.67	13,014	865	71.94	754	----	----	----
62.16	16.12	4,885	1,967	61.17	1,358	7,706	48.32	3,900
168.61	45.26	178,448	12,886	121.72	17,909	21,978	100.79	21,258
134.01	34.65	13,054	248	86.83	250	5,647	71.85	4,718
159.40	42.26	21,397	301	99.34	385	2,349	123.41	3,614
91.40	21.79	2,482	265	76.51	221	450	64.50	342
151.92	33.27	9,887	196	69.92	171	3,049	75.27	2,499
62.04	16.67	18,710	2,523	62.28	1,866	12,908	66.03	9,197
86.84	23.17	17,237	3,217	52.20	2,179	24,567	51.34	14,555
67.36	12.42	145	6	(2)	2	84	24.85	26
148.46	36.28	4,894	83	99.66	86	1,037	107.83	1,165
156.32	41.45	4,478	130	73.51	119	1,994	67.74	1,348
199.86	46.46	125,553	2,883	91.39	3,115	27,167	98.49	26,261
108.78	28.72	15,705	1,850	76.68	1,702	----	----	----
146.45	39.03	15,170	1,328	100.21	1,620	801	67.86	603
143.16	36.98	11,359	566	87.08	592	4,175	90.10	4,418
90.69	25.22	23,529	2,418	60.07	1,738	8,670	62.70	6,267
100.57	24.35	26,361	2,754	81.21	2,666	17,649	57.71	11,504
100.40	28.10	7,150	411	71.40	340	2,247	71.23	1,887
128.25	30.35	17,273	418	66.00	333	6,486	67.63	5,062
158.49	45.60	34,824	2,228	121.18	3,251	10,436	131.77	15,989
143.92	39.98	53,027	1,723	81.55	1,660	5,981	102.62	6,326
165.06	46.99	21,232	1,026	108.96	1,354	2,843	60.58	1,956
35.87	9.15	8,839	3,485	38.13	1,893	13,312	34.44	5,356
95.15	24.40	30,235	4,833	65.00	3,820	15,032	63.41	11,584
130.21	33.98	2,981	295	73.54	273	1,260	73.67	1,115
118.13	30.13	4,534	701	94.15	822	2,196	78.87	2,008
107.21	29.39	1,695	174	98.94	209	----	----	----
166.55	41.89	2,092	246	95.72	263	488	106.13	564
172.75	47.52	39,340	930	88.78	965	7,533	94.65	7,512
122.86	31.23	11,272	362	69.57	283	2,898	72.80	2,390
177.12	42.76	184,879	3,347	96.61	3,963	35,383	110.21	46,990
87.26	22.06	28,941	5,045	56.59	3,400	21,275	61.72	14,465
153.64	40.95	3,413	88	80.40	81	1,247	103.70	1,422
116.93	29.37	47,321	3,438	80.35	3,198	15,400	79.77	13,051
124.32	34.01	28,222	1,746	104.75	2,056	10,855	98.81	12,362
137.83	37.16	14,025	315	94.37	298	4,886	92.65	5,345
130.73	32.17	107,256	17,857	74.68	16,079	18,476	64.13	13,327
14.79	3.76	10,298	1,687	8.33	173	22,350	8.75	2,325
51.16	39.92	9,265	114	84.42	115	2,740	86.24	2,964
57.20	14.27	6,242	1,699	48.85	993	8,144	45.32	4,443
103.71	29.29	3,652	149	63.77	117	1,109	65.04	861
69.88	18.52	19,043	2,504	46.28	1,443	11,522	45.68	6,150
78.87	19.00	18,115	5,345	61.86	4,310	7,741	54.00	4,926
133.37	34.56	6,913	173	78.10	175	3,676	77.84	3,165
110.10	30.34	1,718	106	61.70	79	874	63.85	656
56.87	16.47	205	16	(3)	6	96	34.08	41
99.13	24.31	12,606	1,175	62.64	867	6,553	62.09	4,834
148.63	40.15	24,759	675	108.86	814	8,419	94.70	7,971
109.20	27.59	37,307	935	47.32	522	7,327	45.62	3,834
168.35	44.96	19,539	880	94.26	946	4,700	104.91	5,430
140.86	37.43	1,314	60	80.78	55	573	78.90	541

[2] Average payment not computed on base of fewer than 50 recipients.
[3] Less than $500.
[4] No payments made in June 1962.

Table 8.—*Special types of public assistance under plans approved by expenditures and percent from Federal funds,*

[Includes vendor payments for medical care; amounts

State	Federal grants to States[1]						Expenditures for assistance and administration	
	Total	Old-age assistance	Medical assistance for the aged	Aid to dependent children	Aid to the blind	Aid to the permanently and totally disabled	Old-age assistance	
							Amount	Percent from Federal funds
Fiscal year:								
1960	$2,033,761	$1,157,523	--------	$660,232	$48,824	$167,182	$2,014,736	58.1
1961	2,180,466	1,211,709	$33,507	704,108	48,517	182,625	2,035,554	59.9
1962	2,466,974	1,256,388	109,866	853,685	47,483	199,552	2,020,168	62.8
Alabama	69,592	54,403	200	9,569	653	4,767	75,231	72.9
Alaska	1,865	748	--------	1,062	56	----------	1,257	59.8
Arizona	17,749	7,254	--------	9,968	527	----------	10,196	70.9
Arkansas	36,586	27,584	438	4,373	1,020	3,171	36,656	74.9
California	288,115	161,555	16,268	92,247	7,558	10,487	314,459	49.6
Colorado	41,749	29,280	--------	9,190	143	3,136	60,677	50.7
Connecticut	19,857	8,070	--------	10,281	152	1,355	20,074	42.0
Delaware	2,960	514	--------	2,031	149	265	764	66.9
Dist. of Col	10,271	1,957	--------	6,716	102	1,495	3,250	59.4
Florida	62,485	38,035	--------	16,365	1,319	6,766	52,918	71.7
Georgia	68,951	41,740	--------	14,204	1,725	11,282	56,537	73.7
Guam	125	25	--------	81	2	17	42	50.0
Hawaii	4,749	732	354	3,086	51	525	1,096	65.8
Idaho	8,721	3,741	1,289	2,582	81	1,027	5,477	69.7
Illinois	120,743	42,765	646	62,961	1,691	12,681	72,739	59.3
Indiana	27,090	14,149	--------	11,837	1,104	----------	22,525	65.2
Iowa	33,140	21,588	--------	10,277	801	474	35,296	61.8
Kansas	27,855	17,897	--------	7,205	336	2,416	28,852	61.8
Kentucky	52,722	27,141	253	19,138	1,336	4,854	36,833	73.4
Louisiana	118,088	82,149	1,614	23,347	1,659	9,320	119,034	70.5
Maine	14,146	6,675	360	5,549	230	1,333	9,590	71.1
Maryland	22,402	4,998	842	13,035	216	3,312	7,945	64.3
Massachusetts	84,227	37,105	22,319	17,864	1,205	5,734	67,902	57.3
Michigan	75,147	32,375	9,031	29,721	895	3,126	55,323	60.2
Minnesota	42,295	29,267	--------	10,961	612	1,455	54,553	55.2
Mississippi	41,769	27,601	--------	8,101	1,516	4,552	35,758	76.9
Missouri	90,403	57,240	--------	22,920	2,195	8,048	85,186	67.1
Montana	6,394	3,434	--------	2,034	181	745	5,356	65.9
Nebraska	13,998	8,767	--------	3,505	421	1,305	13,793	65.0
Nevada	2,862	1,459	--------	1,295	108	----------	2,574	58.7
New Hampshire	4,927	3,158	111	1,226	143	288	5,439	59.3
New Jersey	34,705	10,490	--------	19,891	522	3,803	20,184	53.7
New Mexico	17,196	6,820	--------	8,446	214	1,715	9,574	71.9
New York	203.023	36,118	42,669	101,648	2,054	20,534	67,507	58.4
North Carolina	59,616	21,571	--------	24,489	2,712	10,845	29,018	74.4
North Dakota	8,627	4,706	1,047	2,087	59	728	7,220	66.1
Ohio	95,322	50,839	--------	34,478	1,939	8,066	88,906	59.7
Oklahoma	88,846	61,107	476	19,772	1,047	6,444	89,248	68.4
Oregon	22,034	10,038	1,187	7,889	152	2,768	17,569	59.7
Pennsylvania	119,569	26,608	4,395	77,012	3,064	8,491	44,548	61.9
Puerto Rico	8,875	1,997	--------	5,431	101	1,345	4,492	46.2
Rhode Island	11,414	4,061	--------	5,634	66	1,653	6,855	60.3
South Carolina	22,447	11,926	770	5,509	760	3,482	15,884	75.7
South Dakota	9,329	5,498	--------	3,058	93	680	8,021	70.6
Tennessee	44,852	22,108	244	16,473	1,121	4,906	29,798	75.1
Texas	137,702	115,251	--------	15,371	3,227	3,852	160,501	71.3
Utah	11,670	4,493	396	4,835	107	1,838	6,979	67.9
Vermont	5,458	3,511	--------	1,372	63	512	5,070	70.4
Virgin Islands	310	143	14	121	5	27	261	49.9
Virginia	22,599	7,515	--------	10,552	669	3,864	10,125	74.8
Washington	50,140	28,738	565	16,432	386	4,018	51,173	55.9
West Virginia	44,954	7,304	4,377	29,615	407	3,251	9,465	76.9
Wisconsin	33,360	20,398	--------	10,001	498	2,463	37,541	56.0
Wyoming	2,947	1,745	--------	839	31	332	2,895	61.4

[1] Based on cash advanced for the year; may differ slightly from fiscal-year expenditures from Federal funds reported by States.

[2] Less than $500.

the Social Security Administration: Federal grants to States and total by program and State, fiscal year 1962

In thousands; data corrected to October 15, 1962]

Expenditures for assistance and administration—Continued

Medical assistance for the aged		Aid to dependent children		Aid to the blind		Aid to the permanently and totally disabled	
Amount	Percent from Federal funds	Amount	Percent from Federal funds	Amount	Percent from Federal funds	Amount	Percent from Federal funds
		$1,130,515	58.9	$100,203	48.9	$302,925	55.8
$45,899	49.8	1,240,092	57.8	102,212	47.6	335,615	54.7
208,752	50.7	1,488,491	56.8	101,493	46.9	373,350	54.0
145	74.2	12,162	79.4	888	74.2	6,494	74.3
		1,775	60.8	99	55.2		
		13,430	73.6	793	64.7		
436	74.4	5,290	79.8	1,411	72.1	4,324	72.9
19,365	50.0	206,966	44.7	19,926	37.0	25,119	42.3
		14,973	60.6	274	53.3	5,303	59.5
1,283	34.4	23,623	43.9	410	39.2	3,945	34.3
		2,765	72.7	256	58.4	406	62.3
		10,897	60.3	185	59.5	2,710	55.7
		20,593	79.4	1,974	68.0	10,132	66.7
		18,655	75.6	2,323	72.4	15,786	72.1
(2)	50.0	155	50.0	2	49.9	31	50.0
839	53.2	5,547	57.6	114	48.6	1,283	42.1
1,955	65.0	4,800	54.3	127	64.0	1,481	70.2
675	50.0	137,943	45.3	3,567	47.1	29,146	42.7
		17,545	67.9	2,010	55.0		
		16,749	60.8	1,763	45.6	717	64.3
		12,419	57.1	643	52.1	4,816	50.7
453	67.6	25,065	75.3	1,864	71.5	6,753	70.9
485	66.7	30,231	73.9	2,834	58.6	13,463	69.6
408	66.4	7,720	73.5	355	68.2	2,057	65.1
1,953	50.0	19,175	66.4	352	63.3	5,426	62.7
43,855	48.6	38,755	44.2	3,457	35.1	17,578	33.0
17,578	50.0	56,530	52.4	1,737	51.9	6,757	45.7
		23,335	47.3	1,448	42.1	2,153	67.4
		10,240	77.9	2,020	75.3	6,119	74.7
		32,798	71.8	4,171	53.5	12,372	65.1
		3,320	61.2	323	57.8	1,305	58.8
		4,971	68.7	884	47.9	2,237	56.8
		1,940	65.8	244	44.0		
14	57.5	2,323	52.0	286	49.4	662	44.8
		43,475	44.6	1,111	48.4	8,786	44.8
		12,346	69.1	307	71.4	2,674	64.5
105,402	49.9	212,811	47.4	4,820	44.3	54,109	39.7
		31,359	76.5	3,863	70.3	15,608	71.2
1,609	69.1	3,780	54.5	97	61.0	1,593	47.4
		51,510	66.3	3,733	53.8	14,567	55.4
918	65.9	29,636	66.7	2,136	49.2	13,158	49.1
386	51.4	15,819	50.4	324	46.7	5,921	47.2
2,935	50.0	118,664	63.2	17,030	18.6	15,122	59.8
341	50.0	11,633	46.3	214	47.1	2,846	47.1
		10,219	52.4	129	50.9	3,299	49.3
1,054	74.3	6,843	79.5	1,068	72.6	4,827	72.9
		4,095	72.5	130	70.1	959	69.9
379	62.5	20,763	78.2	1,532	73.4	6,716	72.9
		19,688	77.8	4,493	69.7	5,513	69.4
534	62.8	7,686	61.6	182	58.1	3,361	56.2
		1,910	71.3	87	70.6	727	70.0
43	50.0	256	49.8	8	50.0	47	49.5
		14,035	73.8	961	70.4	5,484	69.8
1,467	49.8	27,383	56.5	872	43.4	8,636	47.1
4,239	67.7	38,893	74.8	550	73.7	4,225	73.0
		21,482	47.4	1,046	48.5	6,002	41.8
		1,514	54.0	60	54.0	594	53.8

Table 9.—*Maternal and child health and welfare services: Grants for maternal and child health services, services for crippled children, child welfare services, and research or demonstration projects in child welfare under the Social Security Act, by program and State, fiscal year 1962* [1]

[In thousands]

State	Maternal and child health services	Crippled children's services	Child welfare services
United States	$23,851.7	$24,093.5	$18,645.9
Alabama	684.4	766.4	472.5
Alaska	173.9	148.8	69.7
Arizona	232.5	----------	184.8
Arkansas	386.9	403.6	283.5
California	1,338.0	1,080.9	1,027.6
Colorado	423.2	304.6	208.2
Connecticut	396.2	286.2	182.9
Delaware	130.1	129.6	77.4
District of Columbia	311.2	280.2	89.2
Florida	774.1	584.3	453.7
Georgia	734.2	841.9	533.9
Guam	68.7	52.0	7.8
Hawaii	180.4	181.9	115.4
Idaho	190.6	162.9	95.3
Illinois	673.3	748.0	700.9
Indiana	373.6	572.2	444.5
Iowa	307.0	498.7	315.9
Kansas	260.5	287.3	251.5
Kentucky	548.7	526.7	430.5
Louisiana	480.5	569.7	446.0
Maine	177.7	155.2	149.7
Maryland	451.3	465.7	296.6
Massachusetts	416.3	452.3	404.4
Michigan	920.9	954.3	733.9
Minnesota	509.4	693.7	380.9
Mississippi	625.4	565.0	362.3
Missouri	523.3	442.1	411.4
Montana	141.7	193.3	119.6
Nebraska	140.5	121.3	184.2
Nevada	123.2	82.3	71.7
New Hampshire	108.9	124.0	100.1
New Jersey	354.7	276.6	418.1
New Mexico	254.9	217.7	160.5
New York	1,179.3	894.5	1,010.7
North Carolina	889.0	1,011.4	631.6
North Dakota	140.2	145.1	130.1
Ohio	1,005.0	910.5	818.8
Oklahoma	381.1	366.9	283.7
Oregon	212.3	239.0	206.3
Pennsylvania	1,091.1	1,130.8	939.5
Puerto Rico	531.3	654.3	440.5
Rhode Island	220.1	178.0	120.9
South Carolina	527.0	583.1	400.4
South Dakota	63.4	140.5	130.5
Tennessee	666.8	727.0	471.7
Texas	1,036.0	1,485.0	1,039.6
Utah	138.8	164.4	156.8
Vermont	125.7	126.0	91.9
Virgin Islands	108.7	108.6	56.3
Virginia	753.1	695.1	472.4
Washington	389.4	320.3	284.9
West Virginia	431.1	404.4	278.8
Wisconsin	417.5	513.4	413.2
Wyoming	128.6	125.8	82.7

[1] Based on checks issued basis. Additional payments were made for special project grants to institutions of higher learning and to public or other non-profit agencies and organizations as follows: maternal and child health services, $986.0; services for crippled children, $544.1; research or demonstration projects in child welfare, $131.3.

Table 10.—*Federal credit unions: Assets, liabilities, and capital, Dec. 31, 1960, and Dec. 31, 1961*

Assets, liabilities, and capital	Amount			Percentage distribution	
	Dec. 31, 1961	Dec. 31, 1960	Change during year	Dec. 31, 1961	Dec. 31, 1960
Number of operating Federal credit unions	10,271	9,905	366		
Total assets	$3,028,293,938	$2,669,734,298	$358,559,640	100.0	100.0
Loans to members	2,245,223,299	2,021,463,195	223,760,104	74.2	75.7
Cash	190,190,576	157,615,757	32,574,819	6.3	5.9
U.S. Government obligations	94,652,577	93,577,264	1,075,313	3.1	3.5
Savings and loan shares	412,428,717	306,249,764	106,178,953	13.6	11.5
Loans to other credit unions	54,943,499	61,701,066	−6,757,567	1.8	2.3
Land and buildings	11,861,150	9,699,908	2,161,242	.4	.4
Other assets	18,994,120	19,427,344	−433,224	.6	.7
Total liabilities and capital	3,028,293,938	2,669,734,298	358,559,640	100.0	100.0
Notes payable	59,698,027	71,275,679	−11,577,652	2.0	2.7
Accounts payable and other liabilities	16,151,362	12,372,686	3,778,676	.5	.4
Shares	2,673,488,298	2,344,337,197	329,151,101	88.3	87.8
Regular reserve	133,939,870	111,703,332	22,236,538	4.4	4.2
Special reserve for delinquent loans	4,604,374	4,456,218	148,156	.2	.2
Other reserves [1]	7,645,471	5,899,292	1,746,179	.2	.2
Undivided earnings [2]	132,766,536	119,689,894	13,076,642	4.4	4.5

[1] Reserve for contingencies and special reserve for losses.
[2] Before payment of yearend dividends.

Table 11.—*Federal credit unions: Selected data on operations, as of Dec. 31, for each year 1934–61* [1]

Year	Number of operating Federal credit unions	Number of members	Assets	Shares	Loans outstanding
1934 [2]	39	3,240	$23,300	$23,100	$15,400
1935	772	119,420	2,372,100	2,228,400	1,834,200
1936	1,751	309,700	9,158,100	8,510,900	7,343,800
1937	2,313	483,920	19,264,700	17,649,700	15,695,300
1938	2,760	632,050	29,623,000	26,876,100	23,830,100
1939	3,182	850,770	47,810,600	43,326,900	37,673,000
1940	3,756	1,127,940	72,530,200	65,805,800	55,818,300
1941	4,228	1,408,880	106,052,400	97,208,900	69,484,700
1942	4,145	1,356,940	119,591,400	109,822,200	43,052,500
1943	3,938	1,311,620	127,329,200	117,339,100	35,376,200
1944	3,815	1,306,000	144,365,400	133,677,400	34,438,400
1945	3,757	1,216,625	153,103,120	140,613,962	35,155,414
1946	3,761	1,302,132	173,166,459	159,718,040	56,800,937
1947	3,845	1,445,915	210,375,571	192,410,043	91,372,197
1948	4,058	1,628,339	258,411,736	235,008,368	137,642,327
1949	4,495	1,819,606	316,362,504	285,000,934	186,218,022
1950	4,984	2,126,823	405,834,976	361,924,778	263,735,838
1951	5,398	2,463,898	504,714,580	457,402,124	299,755,775
1952	5,925	2,853,241	662,408,869	597,374,117	415,062,315
1953	6,578	3,255,422	854,232,007	767,571,092	573,973,529
1954	7,227	3,598,790	1,033,179,042	931,407,456	681,970,336
1955	7,806	4,032,220	1,267,427,045	1,135,164,876	863,042,049
1956	8,350	4,502,210	1,529,201,927	1,366,258,073	1,049,188,549
1957	8,735	4,897,689	1,788,768,332	1,589,190,585	1,257,319,328
1958	9,030	5,209,912	2,034,865,575	1,812,017,273	1,379,723,727
1959	9,447	5,643,248	2,352,813,400	2,075,055,019	1,666,525,512
1960	9,905	6,087,378	2,669,734,298	2,344,337,197	2,021,463,195
1961	10,271	6,542,603	3,028,293,938	2,673,488,298	2,245,223,299

[1] Data for 1934-44 on membership, assets, shares, and loans outstanding are partly estimated.
[2] First charter approved Oct. 1, 1934.

Table 12.—*Federal credit unions: Selected data on operations, by asset size and State, 1961*

Asset size and State	Number of credit unions	Number of members	Total assets (thousands)	Amount of members' shares		Amount of loans to members		
				Total (thousands)	Average [1] per member	Made during 1961		Outstanding as of Dec. 31, 1961 (thousands)
						Total (thousands)	Average [1]	
All credit unions	10,271	6,542,603	$3,028,294	$2,673,488	$409	$3,134,278	$672	$2,245,223
Credit unions with assets of:								
Less than $5,000	614	45,101	1,536	1,434	32	1,525	126	995
$5,000–$9,999	575	60,915	4,301	3,859	63	5,193	177	3,107
$10,000–$24,999	1,258	178,993	21,356	18,865	105	28,949	257	16,116
$25,000–$49,000	1,356	264,114	49,437	43,346	164	63,023	348	38,038
$50,000–$99,999	1,616	438,955	117,429	102,536	234	136,462	454	89,670
$100,000–$249,999	2,130	939,938	344,584	302,331	322	361,923	567	257,878
$250,000–$499,999	1,247	1,001,809	442,554	388,852	388	463,124	634	333,838
$500,000–$999,999	819	1,171,326	570,548	503,892	430	595,266	702	424,293
$1,000,000–$1,999,999	421	1,063,938	581,590	511,999	481	599,839	766	438,589
$2,000,000–$4,999,999	192	843,522	536,856	477,575	566	539,753	825	390,080
$5,000,000 and over	43	533,992	358,103	318,799	597	339,221	907	252,619
Credit unions located in:								
Alabama	172	88,119	36,761	32,358	367	41,215	532	27,767
Alaska	30	25,148	9,107	8,319	331	11,453	564	7,440
Arizona	77	73,263	36,315	32,168	439	44,293	768	31,849
Arkansas	61	24,343	8,325	7,437	307	12,162	551	6,754
California	1,056	852,214	441,302	393,828	462	455,581	742	347,402
Canal Zone	7	11,938	3,188	2,865	240	3,946	210	1,759
Colorado	144	93,349	44,566	39,358	422	49,063	803	36,910
Connecticut	302	218,255	124,109	110,920	508	107,394	650	74,245
Delaware	40	21,946	7,697	6,716	306	8,003	642	6,403
District of Columbia	141	233,352	105,997	92,795	398	114,562	755	86,190
Florida	260	206,610	85,636	75,608	366	100,591	590	70,099
Georgia	182	102,436	37,028	32,193	314	48,052	456	28,152
Hawaii	164	116,199	82,331	73,420	632	80,493	965	57,844
Idaho	57	29,013	13,767	12,084	417	13,665	746	11,610
Illinois	217	114,546	57,785	51,798	452	53,003	714	38,044
Indiana	359	203,568	106,773	95,222	468	95,928	656	62,491
Iowa	6	3,887	2,263	2,089	537	2,211	884	1,675
Kansas	80	60,230	30,464	27,130	450	28,031	801	24,728
Kentucky	74	28,725	10,374	9,390	327	11,313	548	7,202
Louisiana	297	143,430	62,418	54,995	383	66,243	620	45,926
Maine	107	61,806	27,113	23,240	376	29,763	668	20,121
Maryland	144	102,085	34,250	30,219	296	40,681	492	27,756
Massachusetts	287	145,442	55,095	49,411	340	53,383	539	37,512

Michigan	411	442,519	244,173	213,131	482	225,598	880	187,347
Minnesota	43	23,538	8,949	7,865	334	8,237	696	7,225
Mississippi	87	47,254	17,952	15,609	330	22,421	480	15,021
Missouri	44	28,093	12,981	11,689	416	11,754	612	8,215
Montana	106	38,951	16,209	13,864	356	14,581	710	12,921
Nebraska	86	51,814	24,084	21,385	413	24,765	797	18,139
Nevada	58	30,134	14,259	12,471	414	17,504	739	11,932
New Hampshire	25	18,448	6,830	6,145	333	7,419	552	5,169
New Jersey	457	255,350	109,273	96,559	378	94,754	593	69,965
New Mexico	48	46,517	23,263	20,393	438	30,208	764	18,824
New York	912	521,765	225,674	200,124	384	218,362	671	159,720
North Carolina	47	37,217	9,671	8,442	227	12,651	417	8,031
North Dakota	32	11,185	4,489	3,947	353	3,948	655	3,649
Ohio	545	331,029	147,294	130,521	394	143,009	695	103,303
Oklahoma	117	62,648	30,703	27,110	433	33,194	764	24,613
Oregon	179	78,988	35,297	30,865	391	40,227	778	29,689
Pennsylvania	1,030	553,513	223,664	194,028	351	231,061	624	152,104
Puerto Rico	35	16,583	5,126	4,369	263	6,332	373	4,417
Rhode Island	19	6,530	2,906	2,623	402	2,698	700	1,412
South Carolina	73	46,209	9,861	8,880	192	16,286	340	8,392
South Dakota	90	31,624	14,262	12,598	398	16,552	826	10,921
Tennessee	184	105,584	53,998	47,858	453	65,361	627	38,973
Texas	785	490,490	228,877	199,843	407	266,429	665	177,738
Utah	84	35,979	18,264	16,180	450	21,135	835	15,449
Vermont	3	1,351	537	457	338	462	269	276
Virginia	158	94,263	30,707	26,616	282	36,218	513	24,267
Virgin Islands	4	1,494	167	145	97	132	397	150
Washington	173	112,898	59,898	53,177	471	61,792	775	47,131
West Virginia	113	40,259	16,715	14,535	361	20,340	571	12,531
Wisconsin	4	995	403	355	357	255	527	332
Wyoming	55	19,477	9,144	8,141	418	9,564	884	7,488

[1] Based on unrounded data.

Public Health Service

Health of the Nation

As the Federal Agency principally concerned with protecting and advancing the Nation's health, the Public Health Service has a two-fold obligation. It must concentrate on the urgent health needs of today, while looking to and preparing for emerging needs and long range goals.

Both parts of this obligation are heavily affected by the change and growth which are such notable characteristics of our present society: growth of the population, and change in its composition; growth of industries and cities, of medical science and health knowledge, of techniques and resources; change in the way people live and work and use their leisure time.

Responding to this changing scene and its implications for the future, the Public Health Service is placing major emphasis on several broad problem areas.

They include environmental health and community health services. Last year's annual report called special attention to these two topics, and the progress that has been made on them is discussed in detail in the appropriate sections of this report.

Other broad areas which are receiving major attention include health manpower, where the need is great and will become more serious; research, which must be continued and accelerated; scientific communications, where the object is to speed the application of new knowledge in the health care of the people; the chronic conditions—heart disease, mental illness, cancer, and the others high on the list of causes of death or disability and of special import to the aged.

The Service's attacks on such problems are multifaceted. Typically they cut across more than one of the three major Bureaus and involve Divisions of the Office of the Surgeon General.

Illustrative of both the need for this approach and the conduct of it is the realm of scientific communications. Here, the rapidly accelerating research effort—world wide in scope—is reporting results in

such scope and volume that existing communication systems are not adequate to cope with the torrent of information.

The Service's response includes a vital action by the National Library of Medicine—the design, development, and installation of an electronic storage and retrieval system known as MEDLARS (Medical Literature Analysis and Retrieval System).

The completion of this project will give the medical sciences in the United States access to a powerful tool unequaled elsewhere in the world. MEDLARS will provide a base for the centralized preliminary processing of information now conducted under circumstances of duplication and economic waste by multiple independent secondary publications. Further, it will constitute a new key to medical libraries generally, and, when coupled with photoduplication service, will enable libraries to meet modern research requirements for information with unprecedented effectiveness. The impact of the MEDLARS system on future developments in electronic storage and retrieval in particular, and on the structure of medical communication in general, is expected to be considerable.

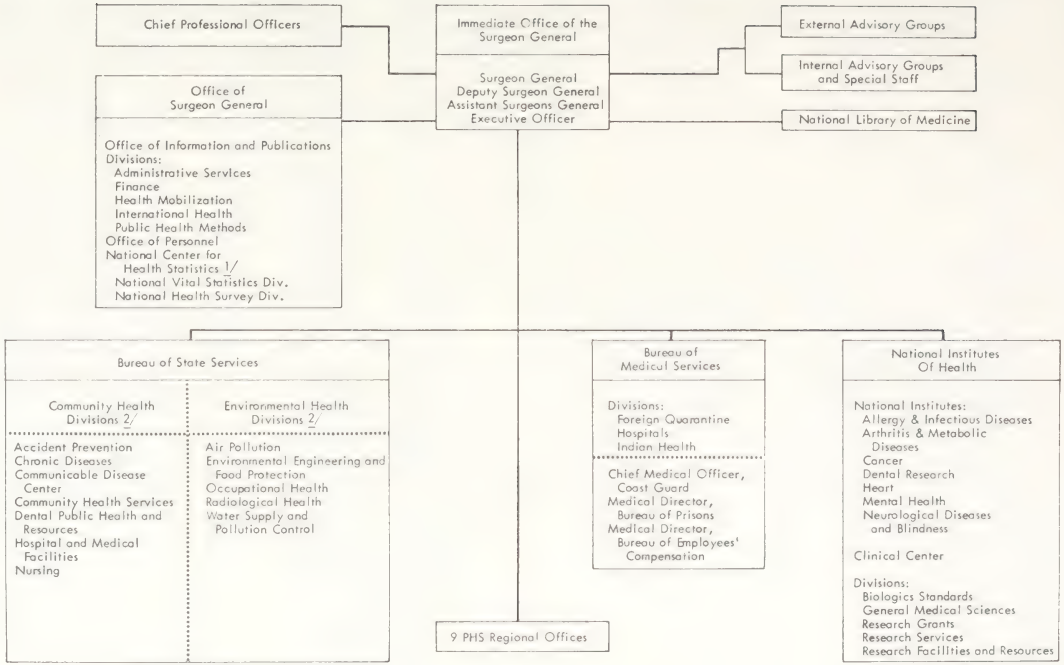
At the same time, the National Center for Health Statistics has completed installation of its computer facilities—modern data processing equipment which will result in more timely reporting of the health intelligence embodied in the national vital and health statistics produced by the Center.

Also, during the year the National Institutes of Health published for the first time a *Research Grants Index.* This is a comprehensive listing of the scientists supported through PHS research grants programs, and it contains an index to the content of their work. It is unique in that it refers to work in progress rather than work that is described—months or even years after its completion—in published papers. Since the Service supports about half of all the medical research in the United States, plus some in other countries, the Index will help greatly to solve the mounting problem of keeping up with who is doing what and where it is being done.

Other programs in all three Bureaus are aimed at the scientific communications problem. The importance of the subject has been recognized organizationally by the formalization in the Office of the Surgeon General of the Office of Information and Publications, and the Surgeon General has scheduled for the fall of 1962 a meeting at which representatives of the health professions can discuss PHS actions and proposals and relate them to the responsibilities of other organizations and groups.

Another broad area which provides an example of action on several fronts is that of health manpower—which has been the subject of con-

CHART 1.—PUBLIC HEALTH SERVICE—1962



1/Separate organizational status similar to the National Library of Medicine is proposed under the reorganization plan.

2/These groupings would become bureaus under the reorganization plan.

July 1, 1962

tinuing and increasing Public Health Service attention. The Service recognizes that the need is both quantitative—in terms of the greater number of people that are required—and qualitative—in terms of the kinds and varieties of personnel needed—and is working on the problem accordingly.

The PHS has worked to increase the supply of physicians and dentists. At the same time, the Division of Public Health Methods has completed two more of its series of health manpower studies—Section 12 on *Medical and Psychiatric Social Workers* and section 13 on *Hospital House Staffs.* It has also cooperated with the National League for Nursing in a study of practical nurse education published as "Education for Practical Nursing, 1960." Many service programs support training of professional and technical personnel in a wide variety of disciplines.

The institution of the NIH Research Career Award Program has given the Service a means of providing stable incomes for research careers in academic and research environments; and since the inauguration of the program in January 1962, awards have been made to 106 individuals in 61 institutions.

A variety of Service programs are designed to promote more efficient use of existing manpower. For example, experimental projects demonstrated that dentists who work with a chairside assistant can treat substantially greater numbers of patients than can those who work alone; and the demonstrations have now been followed by a grants program to support the training of dental students in the use of chairside assistants.

Toward a better utilization of its own manpower, the Surgeon General requested, and the Secretary of Health, Education, and Welfare appointed, an Advisory Committee on Public Health Service Personnel Systems. The Committee made its report in March 1962, and the Office of Personnel has begun the implementation of its recommendations.

The Service is working in a comprehensive manner also on some of the more circumscribed but equally important topics, such as the problem of infant mortality. In this area, where there remains a great deal we do not know, the research programs of the National Institutes of Health and the Communicable Disease Center are continuously increasing medical knowledge of the factors contributing to infant mortality.

The cooperative study now being sponsored by NIH, for example, is accumulating data related particularly to asphyxia in the newborn and congenital malformations. This study is certain to produce findings that will lead to the prevention of many infant deaths due to these causes. The Communicable Disease Center is conducting research

and developing control measures affecting the infectious diseases of infancy, particularly infant diarrhea and hospital-acquired infections. The accident prevention program also is cooperating in efforts to reduce the toll of accidental poisoning and home conflagrations which account for a large number of deaths among infants and young children. Other work is going forward in other parts of the PHS.

The Service carries out its programs through the Divisions of the Office of the Surgeon General, such organizational units as the National Center for Health Statistics, the National Library of Medicine, and the three major Bureaus—Bureau of Medical Services, Bureau of State Services, and National Institutes of Health.

While each of the organizational entities has its own particular program responsibilities, certain types of activities are common to many of the organizational units. Thus, research activities are associated with all areas of PHS responsibility. Cooperation with other agencies—State and local health departments, international organizations, public and private institutions, voluntary organizations—is a conspicuous aspect of many programs. Grants-in-aid for a wide variety of objectives are administered by many Divisions. Many different programs are sources of technical aid, consultation, and training assistance.

Health Record

Latest data from the continuing National Health Survey indicate that Americans, except those in resident institutions, experienced 359 million acute illnesses and injuries in a year. This equals about two conditions per person per year. These statistics refer largely to short-term conditions involving either medical attention or at least a day of restricted activity.

The 359 million acute conditions included 50 million accidental injury diagnoses among 45 million persons injured. Of the injured, 2.9 million were in accidents involving motor vehicles. The bulk of the remainder, 20.2 million, occurred in the home.

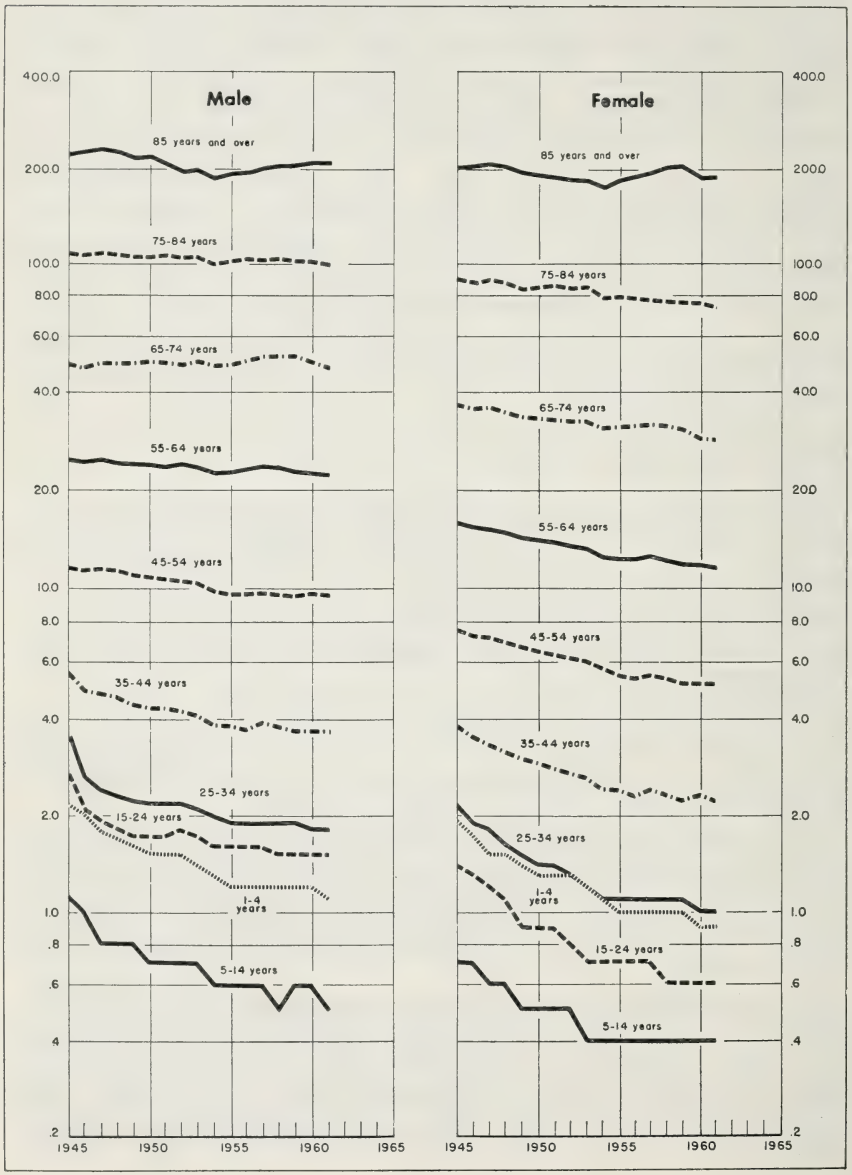
In the same year, the average American's activity was restricted some 16 days due to illness and injury. Six of the 16 days involved bed disability. Persons 17 years of age and older lost 5.4 days of work due to ill health, and children from 6 to 16 averaged 4.8 days lost from school.

An estimated 74 million Americans—42 percent of the population—were reported to have 1 or more chronic conditions of varying severity. About 1 person in 12—14,217,000 in all, was limited in his major activity by chronic disease or impairment, and 1 in about 200—some 915,000 in all—was confined to the house continually by a chronic ailment.

After a long period of decline, the trend of the crude death rate appears to have leveled off. This phenomenon is not peculiar to this Nation: it seems to be occurring also in such countries as England and Wales, Finland, Norway, Sweden, Denmark, Japan, and Chile.

The 1957 rate for the United States—9.6 per 100,000 population was

CHART 2.—DEATH RATES BY AGE AND SEX, 1945–61
(Rates per 100,000 population)



almost 5 percent larger than the 1954 rate of 9.2, which was an all-time low. In 1961, the crude rate stood at 9.3.[1]

Crude rates are calculated on the total population of each period covered. This population almost invariably changes in composition over the years in ways that may affect crude rates. Thus, the greatest risk of dying occurs in infancy and in old age, and our present population is simultaneously growing both older and younger in composition. The proportion of the population over 65 probably has been increasing since the 18th century, while the proportion under 5 years of age has been increasing for more than 25 years.

Since the leveling off of the crude death rate is also evident in the age-adjusted rate, the failure to decline cannot be ascribed to the changing age composition of the population. The 1961 age-adjusted death rate stands at 7.3 compared to the 1954 rate of 7.7. In recent years both the crude and the age-adjusted rates have varied only slightly from year to year, and almost entirely according to the presence or absence of respiratory disease outbreaks during the year.

Obviously it is impossible for the death rate to decline indefinitely. But present levels of death rates in various countries do not seem to be at the irreducible minima, nor do they appear to be due to artifacts of registration or other technicalities; and an intensive study and evaluation of the situation is in order.

For the United States, a primary reason cannot be found in the fact that death rates already are extremely low, since a number of countries have still lower rates.

A general resistance to decline in recent years is evident as far as age and sex are concerned. Since the curves of the chart are drawn on a uniform logarithmic (ratio) scale, direct comparison between curves or any of their parts can be made by comparing degrees of slope. In no age group is the rate of decline greater since 1954 than before. The chart also shows that male death rates by age in general have declined less rapidly since 1954 than the rates for females. Closer study of the data also shows that the divergence between the sexes by age and color groups is greater over the 7 years since 1954 than over the 7 preceding years, except for persons aged 15–34 (whites) and 15–24 (nonwhites). Males, then, not only have lagged behind females but at present they are falling even further behind. In what areas?

The four leading causes of death are now diseases of the heart, malignant neoplasms ("cancer"), vascular lesions affecting the central nervous system ("strokes"), and accidents. In terms of age-adjusted rates, these four causes accounted for a little over 68 percent of all deaths about 10 years ago, compared to about 72 percent now, so

[1] All vital data are for calendar years.

that their importance is increasing. While sizeable declines were recorded for white and nonwhite male groups when the four leading causes were excluded, these declines were nevertheless smaller than those scored by the female groups.

For each of the four leading causes of death, males in each color group have fared less well in recent years than females. For diseases of the heart there was virtually no change in the male rates while each of the female rates was decreasing about 10 percent. For cancer, male rates increased while female rates were unchanged or decreased. For stroke, a decline for white males was surpassed by a greater decline for white females, while nonwhite males had an increase compared to a decrease for nonwhite females. For accidents, the decline registered by each female group was greater than those scored by the comparable male group.

About 1 infant in 40 died within a year of birth in 1961, compared to 1 in 10 during 1915. But while the infant death rate declined by 25 percent or more for every 10-year period until 1950, since then this rate of decline has been sharply reduced. Although the 1961 rate of 25.3 per 1,000 live births is the lowest yet recorded in the United States, the curve nevertheless is declining more slowly over recent years; nor is the rate as low as that in some other countries.

The maternal death rate—31.7 per 10,000 live births in 1941—reached 7.5 in 1951 and 3.7 in 1961. This rate has declined so far that it may be pressing against a virtually irreducible lower limit.

As a summary expression of all the forces working to extend or shorten life, in 1961 for the first time the life expectancy of the country's total population at birth exceeded 70 years, reaching 70.2. This compares to 68.4 in 1951 and 64.8 in 1941, giving gains of 2.6 and 5.6 percent for the later and the earlier periods.

In 1960, life expectancy by color and sex was as follows: white males, 67.4 years; white females, 74.1 years; nonwhite males, 61.1 years; and nonwhite females, 66.3 years. In recent years the average length of life has been increasing at a faster rate for women than for men, and at a faster rate for the nonwhite population than for the white population.

Births, Marriages, and Divorces

The total of 4,268,326 live births registered in 1961 were only slightly more than the 4,257,850 births of 1960. Since the number of births has not changed much during the past 5 years, and the population has continued to grow, the crude birth rate has declined somewhat each year since 1957. The rate was 25.0 per 1,000 live births in that year, 23.7 in 1960, and 23.3 in 1961.

The fertility rate, or number of live births per 1,000 women 15–44 years of age, also has declined somewhat annually since 1957. The 121.2 rate of that year was higher than any rate since World War I. The 1961 rate of 117.3 is slightly below the 1960 rate of 118.0. In recent years the fertility rate for nonwhites has been about 40 births per 1,000 above the rate for whites.

In 1961, about 1,547,000 marriages were performed, an increase of 1.3 percent over the 1960 figure of 1,527,000. Because of concurrent changes in the country's total population, however, the crude marriage rate remained constant for 1959, 1960, and 1961 at 8.5 marriages per 1,000 population.

Divorces were estimated at 391,000 in 1960, compared to 395,000 in 1959. The crude divorce rate was 2.2 per 1,000 population in 1959, 1960 and 1961.

Funds

The total funds available to the Public Health Service in fiscal year 1962 amounted to $1,633.4 million (see table 1, p. 226). Appropriations and authorizations accounted for about $1,392.4 million of this amount. The balance was made up of repayments for services given to other agencies and of unobligated balances from previous years.

About 72 percent of the total funds available was allocated to others, in the form of grants to State and local agencies, private institutions, universities, hospitals, and individuals outside the Federal Government. The remainder was used to support the direct responsibilities of the Public Health Service, such as hospital and medical care for legally designated beneficiaries, foreign and interstate quarantine, and Indian health services.

Office of Personnel

At the request of the Surgeon General, the Secretary of the Department of Health, Education, and Welfare appointed an Advisory Committee on Public Health Service Personnel Systems to study the recruitment and retention of personnel. The Committee, headed by former DHEW Secretary Marion B. Folsom, began its study in October 1961 and completed it in March 1962.

In brief, the recommendations of the Committee were: (1) that the Surgeon General personally accept responsibility for the direction of personnel management in the Service; (2) that personnel staff services be reorganized and strengthened; (3) that personnel operations be substantially improved; and (4) that pay and rank be carefully examined and if inadequate, to explore the possibility of legislation that would make them more equitable.

A new Assistant to the Surgeon General for Personnel has been named, and under his direction, the Office of Personnel has begun the implementation of the recommendations of the Committee.

PERSONNEL

At the close of the fiscal year 1962, the Public Health Service had a total staff of 32,638. (See table 2, page 228.) This number includes 4,501 Commissioned Corps Officers, 26,808 full-time and 1,329 part-time Civil Service employees. (See table 3, page 230.) Commissioned Officers on duty included 1,909 members of the Regular Commissioned Corps, 2,366 members of the Reserve Corps on Active duty, and 226 Commissioned Reserve on temporary training duty.

National Center for Health Statistics

The National Center for Health Statistics, nearing the end of its second year in July 1962, has modernized its data processing by installing computer facilities. This has resulted in more timely reporting of Center activities. Another result is far better use of the Center's professional manpower.

When not being used for Center programs, the computer equipment is available to other elements of the Public Health Service, principally in the area of health statistics.

As an experiment, the Center has undertaken negotiation of contracts with statisticians of foreign nations to provide analyses of mortality trends in those countries. This probably will be expanded to bring otherwise unavailable professional resources to bear on the Center's statistical problems.

NATIONAL HEALTH SURVEY

During the year, the National Health Survey accelerated work on its newest data collection program—the Health Records Survey. With help from the Bureau of the Census, a master list of all types of resident institutions and hospitals in the Nation was constructed. This list will be used as a base for sampling studies. Next, pretesting began in the first of a series of surveys based on the master list. This is a survey of Resident Places Providing Nursing or Personal Care, designed to produce up-to-date knowledge of a population known to consist almost entirely of old people.

The National Health Survey Division also operates a program of studies to improve health survey methods. Among these are projects to develop new methods of gathering information on personal health expenditures and to evaluate and refine the collection of data on health insurance coverage in the general population. A third continues the

Health Survey's series of studies to evaluate chronic disease information reported in the Health Interview Survey.

By the end of the fiscal year, full-scale operation of the Health Examination Survey was beginning to be achieved. Data collection on the first cycle, primarily concerned with certain chronic diseases in the adult population, was more than three-fourths completed and work on the pattern of tabulation and analysis of these data was well under way. Meanwhile, plans were being completed for the second cycle, a nationwide probability sample of children from 6 through 11 years of age.

The Health Interview Survey produced reports on several topics not previously reported on by the National Health Survey: (1) Persons receiving care in the home, (2) Proportion of hospital bill paid by insurance, (3) Duration of limitation of activity due to chronic conditions, and (4) Selected impairments by etiology and activity limitation. Estimates for topics discussed in earlier reports were updated with more recent data. Health interview data also served as the basis of a report on the health characteristics of currently employed persons.

NATIONAL VITAL STATISTICS DIVISION

During the year, the Division made substantial progress to reduce the lag between receipt and publication of data from the States. Considerable mortality and natality statistics for the 1961 data year were released well before the end of 1962.

In fiscal year 1962 the Division published annual and provisional monthly data in vital statistics and six special studies: (1) Occupational mortality, (2) Number and type of medical care institutions, (3) Matching birth certificates and census information, (4) Characteristics of Georgia marriages, (5) Improving national divorce statistics, and (6) Standard error of age-adjusted death rates.

The Division undertook its largest single reimbursable project to date, involving more than $300,000, to provide technical assistance for a series of monographs sponsored by the American Public Health Association to synthesize data of concern to public health and demography drawn from a wide array of sources.

The Division's computer programmer staff, built entirely during the year, is largely complete and trained. The Division and other Center components are developing ideas to use the computer facilities to strengthen vital statistics programs in the States.

The ninth national meeting of the biennial Public Health Conference on Records and Statistics in June 1962 was singularly successful in improving vital and health statistics and makng them more useful and usable.

The Division is in the second year of the national mortality sample survey, based on a sample of deaths occurring throughout the country. Plans have been developed to begin a continuing national natality sample early in 1963. The third phase of a cystic fibrosis study is nearing completion.

For the 1960 census year, marriage and divorce statistics were based on nationwide samples of marriage and divorce records collected from States and local areas. For 1961 and 1962, the samples are being collected only from the registration areas, which at the end of the fiscal year contained 35 States and 4 other areas for marriages and 21 States and 1 other area for divorces.

The Division stimulated discussion and provided technical and consultative advice as required on the need for retaining the item on race-color on vital records, beginning with a panel discussion at the annual meeting of the American Public Health Association.

Efforts have been intensified, cooperating with State and Federal agencies, to develop minimum safeguards to reduce fraud associated with vital records and promote the integrity of vital records. A draft of measures to be applied was written.

OFFICE OF ELECTRONIC SYSTEMS

During the year, the Office of Electronic Systems completed installation of computer equipment—and IBM 1401 and the more powerful 1410 system. Conversion of data processing from mechanical equipment and from rented electronic equipment is proceeding on schedule.

OFFICE OF HEALTH STATISTICS ANALYSIS

This Office made some progress in staff recruiting and training. A start was made in the development of an index of health. The Office continued its study of changes in the general mortality trend as well as the infant mortality trend in the United States. Contracts have been negotiated in several countries for study to determine, if possible, the factor or factors responsible for the change in mortality trends in various parts of the world. This approach significantly increases the professional resources the Office can bring to bear on the problem.

National Library of Medicine

The new building in Bethesda, occupied April 16, 1962, affords the National Library of Medicine an excellent facility for the implementation of its computer-based bibliographic system termed MEDLARS. To become fully operational about September 1963, the new system will offer the capability of providing very detailed and specialized reference services, and enlarge, improve, and speed the preparation

of *Index Medicus*. The preliminary design phase of the MEDLARS project was completed in December 1961. Work is progressing on the second phase covering detailed system design, equipment and facility specifications, site preparation, personnel training, and computer programs. Plans are to negotiate a contract for the final (implementation phase) in September 1962.

BOARD OF REGENTS

The Board of Regents held two meetings, on December 14, 1961, and on April 13, 1962. Building problems, moving problems, budget problems, the progress of MEDLARS, and the progress of the Extramural Program occupied the major part of the Board's attention. Drs. Norman Q. Brill, Harve J. Carlson, and Saul Jarcho joined the Board in the fall. Dr. Worth B. Daniels served as Chairman of the Board during the year, and was succeeded in April by Dr. Warner L. Wells.

SCIENCE TRANSLATION PROGRAM

On July 1, 1961, the Russian Scientific Translation Program was transferred from the National Institutes of Health to the National Library of Medicine. This change presented a new challenge to the Library and the opportunity to coordinate and improve international medical communication activities. The objective of the Science Translation Program is to communicate the results of high-quality medical research published in languages unfamiliar to American medical scientists. This program has supported the cover-to-cover translation of nine Soviet research journals, the comprehensive abstracting of Soviet research publications, and the preparation and publication of critical review papers. As a result of an extensive program evaluation begun early in 1962, the program has undergone some modification, stressing the coverage of such literature by abstracts and critical reviews. While full attention will be paid to Soviet contributions, the program will support translation and other communication activities from such languages as Japanese, where the quality of research is high. These activities will be closely coordinated with the Public Law 480 translation program conducted by the Library, and with similar programs conducted by the National Science Foundation.

PROGRAM STATISTICS

In fiscal year 1962 the Library acquired 11,338 books, 63,959 serial pieces, and added 739 new serial titles, increasing its collections to 1,084,256 items. The History of Medicine collection was increased by 147 old and rare items. The staff cataloged 17,257 titles, and 471 pictures were added to the art collection. There were 161,090 volumes circulated, and 10,242 reference questions answered. Main entries

published in the *National Library of Medicine Catalog* totaled 20,260. The *Index Medicus* published 141,911 items from 2,132 journal titles. Interlibrary loans increased to 113,485. Microfilm production amounted to 2,840,400 pages of which 570,662 pages were for preservation purposes and 2,243,862 pages for interlibrary loan.

Division of Public Health Methods

The Division of Public Health Methods conducts studies to identify emerging national health problems and to assess the significance of social, scientific, economic, and educational developments to health services and resources. In these areas, the Division provides advisory and consultative services within the Service, to other governmental agencies, and to national professional and voluntary agencies. Division responsibilities involve it also in planning, policy coordination, and program development and analysis within the Service. Finally, the Division provides technical assistance, clearance, and reference services on legislative matters other than appropriations; coordinates and analyzes plans of the several Service programs for substantive survey projects; and performs additional staff services in support of the Surgeon General and the Service as they are required.

ORGANIZATIONAL CHANGES

During the year, staff and resources engaged in studies and other activities in the general area of health economics were transferred to the Bureau of State Services to become part of the newly created Division of Community Health Services. The Division of Public Health Methods acquired from the Bureau of State Services the responsibility for providing staff services in support of the Surgeon General's annual conferences with State and Territorial health authorities.

Responsibility for editing and publishing *Public Health Reports*, the Service' official journal in public health practice and administration, was transferred to the Office of Information, Office of the Surgeon General. The Clearinghouse on Morbidity Projects, which puts out annual listings of current morbidity studies, was moved to the Division of Community Health Services, Bureau of State Services.

PROFESSIONAL EDUCATION

"Education for Practical Nursing, 1960," published during the year, reports the findings of the first nationwide study of practical nurse training programs. The study was conducted in cooperation with the National League for Nursing.

Data acquired from two questionnaires sent to all State-approved programs revealed great variation among them in number of students

admitted, size of affiliating hospital, curriculum length and content, types of nursing experience, faculty size and qualifications, and costs. Study findings for practical nurse training as a whole include the following: State-approved training programs increased from 150 in 1950 to 662 in 1960, a decade in which yearly graduates from practical nurse programs rose from 3,000 to more than 16,000. Of the 23,000 students admitted to training programs in the 1959–60 school year, more than two-thirds were high school graduates. One-third of these entering students were less than 20 years old. Most training programs are a year in length, and all provide for clinical experience in hospitals.

In response to a request from the Bureau of the Budget, the Division made a study of Federal support of schools of public health. Scheduled for publication in *Public Health Reports*, the report shows the amount and nature of Federal assistance in 1961 to the 11 schools of public health then in full operation and presents additional data concerning the schools' enrollment, expenditures, and other sources of funds. Federal interest in higher education and the several methods currently used for providing Federal support are also discussed.

HEALTH MANPOWER

During the year, two publications were added to the Health Manpower Source Book series:

Section 12, "Medical and Psychiatric Social Workers," analyzes employment characteristics, levels of education, and annual salaries for the estimated 11,700 of these workers employed full-time in 1960. Findings with respect to professional training showed the proportion of workers with 2 or more years of graduate education in a school of social work to be generally higher for psychiatric than for medical social workers, for those in health programs rather than programs pointed at other objectives, for employees of National rather than State or local agencies, and for those in supervisory or consultative rather than direct-service positions.

"Hospital House Staffs," section 13 in the source book series, presents data for 1940–60 on internships and residencies in U.S. hospitals. The number of these positions offered, the number filled, and the number filled by graduates of foreign medical schools are related to the control, size, and geographic location of hospitals. The marked increase in house staff positions and the hospitals' growing dependence on foreign medical graduates to fill them are indicated by the facts: throughout the 'fifties more than 10 percent of all positions offered went unfilled, while the proportion of filled positions accounted for by foreign house staff was rising from 10 percent in 1951 to 25 percent in 1960.

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A summary of trends since 1900 and current statistics indicating the Nation's total health manpower resources, the numbers of workers in the major health manpower categories, and the general health status of the population, was published under the title, "Chart Book on Health Status and Health Manpower."

Several shorter manpower studies were completed for publication. The latest report in a series on trends in medical practice appeared in the *Journal of Medical Education*, November 1961. It reports changes in the professional careers of physicians shown in a recent resurvey of 1935, 1940, and 1945 medical graduates. A second study, on osteopathic college alumni, was published in the May 1962 issue of the *Journal of the American Osteopathic Association.* Another, presenting physician-population projections from 1961 through 1975 is scheduled for publication in the *American Journal of Public Health.*

Other projects underway include a nationwide study of the number, distribution, and characteristics of pharmacists, and an extensive study of medical specialists which will show age, sex, race, State location, medical school attended, membership in specialty societies, and type of practice for some 26 specialties.

Division of International Health

During the year, the Division arranged for official United States representation and members served on delegations to the 15th World Health Assembly in Geneva, Switzerland, in May 1962, the 28th and 29th Sessions of the Executive Board of the World Health Organization also in Geneva, the 13th Meeting of the Directing Council of the Pan American Health Organization in Washington in October 1961, the 44th and 45th Meetings of the Pan American Health Organizations' Executive Committee in Washington in October 1961 and April 1962, and the 12th Session of the Western Pacific Regional Committee of the World Health Organization which was held in Wellington, New Zealand in September 1961. In addition a member of the Division served as Alternate Commissioner to the Regular Annual Session of the South Pacific Commission in October 1961. This meeting was held in Noumea, New Caledonia.

Official U.S. policies on topics discussed at these meetings were developed by the Division in consultation with the Department of State and the technical areas of the Public Health Service. The Division also participated in the development of policy on health related matters which came before meetings of the Food and Agricultural Organization, the United Nations Childrens Fund, the International Labor Organization, the Social Commission of the United Nations, and the South Pacific Commission.

The Division assisted in the appointment of more than 300 U.S. experts to serve as members of the WHO Expert Advisory Panels or as short-term consultants to the World Health Organization, or the Pan American Health Organization; and continued the assignment of 73 officers to the Headquarters' Staff and overseas missions of the Agency of International Development.

Twenty-seven Public Health Service officers were detailed to staff the medical organization of the Peace Corps. These officers are principally responsible for the health of Peace Corps volunteers. In addition they supply such local health service as time will permit on a volunteer basis.

The International Education and Training Branch of the Bureau of State Services was transferred to the Division of International Health and provided program and guidance services to 623 new visitors and students from 92 countries.

Arrangements were made under U.S.-U.S.S.R. agreements negotiated by the Division for the exchange of four scientific missions in FY 1962. These were in the fields of medical ecology, neurophysiology and pathology, virology and thoracic surgery. The latest agreement, concluded early in 1962, calls for the exchange of nine missions in calendar years 1962 and 1963. The agreement also calls for the exchange of up to 25 individual scientists from each country and the convening of joint meetings on specific subjects, including cancer, rheumatic diseases and virology.

The Health Studies Program of the Division was combined with the International Survey activities of the Department, and the staff was transferred to the Office of the Secretary of HEW. The Division continues to provide the reference and research facilities for the program.

Division of Health Mobilization

The authority and scope of the health mobilization program were considerably increased during the past year through the issuance of two Executive orders which assigned to the Department of Health, Education, and Welfare full responsibility for (a) the development of requirements, plans, and operating procedures regarding the Nation's Emergency Medical Stockpile; (b) the preparation of national emergency plans and the development of preparedness programs covering health services, civilian health manpower, health resources, and educational programs.

Prior to these orders, management of the emergency medical stockpile and coordination of the health mobilization activities had been carried on under the program direction and policy control of the Office of Civil and Defense Mobilization.

During the year, major program emphasis was concentrated in three areas:

1. Preparation of the civilan to meet his own health needs when deprived of the services of a physician.

The medical self-help training course developed in cooperation with the American Medical Association and endorsed by all major governmental and private health organizations was introduced to the general population. Five thousand training kits containing film strips, projector, instructors' lesson plans, student handbooks, and a resource manual, *Family Guide—Emergency Health Care*, were allocated to the respective States. All instruction is being conducted on a volunteer basis with training of one person in each family set as an ultimate goal.

2. Assistance to States and local communities to ensure an operational capability to care for civilian health needs in an emergency.

Effective preparedness depends on having sufficient quantities of medical and surgical supplies and hospital facilities for use where they are needed; and on having predesignated personnel organized and trained to act in a disaster situation and utilize supplies and facilties in the most efficient, prudent manner possible.

The contents and condition of the nearly $200 million civil defense medical stockpile were reviewed and plans coordinated for its incorporation into community survival efforts. Expansion was begun to increase the supplies of the 1,930 200-bed civil defense emergency hospitals (CDEH's) stored throughout the United States to a 30-day capability from the former 3- to 4-day potential, and arrangements were made for the procurement, assembly, and distribution of an additional 750 hospitals.

Physicians and members of the allied health professions were given training in the health aspects of civil defense, setup and utilization of CDEH's, and in expanded functions whereby the allied health professions can relieve physicians by performing additional duties in an emergency.

3. Development of a coordinated emergency program for Federal agencies having health or health-related responsibilities.

Basic policy on the objectives, organization, functions and administration of the headquarters and regional Emergency Health Service structure was developed and issued in coordination with other agencies, and policy formulation begun for each field facility.

To answer a need of community civil defense health planners, a guide is being prepared to give detailed advice on developing a community emergency health service plan and organization and putting

them into operation. The guide will serve as a standard of comparison for evaluating and improving community emergency health service plans and organizations already in existence, and for creating new ones where there is a need.

Bureau of Medical Services

The Bureau of Medical Services operates hospitals, clinics, health centers, and other health services in 256 full-time and 429 part-time locations, in this country and abroad, on land and on the sea, at major ports and on remote inland reservations. Some 13,000 staff members are engaged in these activities of the Public Health Service that provide direct health care to many people and help to safeguard the Nation's strength.

Medical and hospital care is provided for American seamen. International travelers arriving from foreign points are checked against any possibility of contagious disease. American Indians and natives of Alaska are given comprehensive health care because they are not yet ready to provide it for themselves. Protection of the health of the men of the Coast Guard and the Coast and Geodetic Survey, and the cadets at the Coast Guard and Merchant Marine academies, is a responsibility of the Bureau.

Members and retired members of the armed forces and their families receive care at hospitals and clinics of the Bureau where more convenient than military hospitals; in turn, Public Health Service commissioned officers may receive care in military facilities.

A special hospital is devoted to treatment of leprosy. Treatment for narcotic addiction is given in two neuropsychiatric hospitals. The Bureau is responsible for medical and hospital care in all the Federal prisons and correctional institutions throughout the country.

Medical and hospital care for civilian employees of the Government who are injured on duty or become ill from causes related to their work is administered by the personnel of the Bureau. In another program, health units are operated for a number of Federal departments and agencies that have asked for this help in protecting their employees' health.

The Bureau of Medical Services conducts clinical research and carries on training programs for medical and health personnel.

The Bureau is guided by recommendations of the BMS Advisory Committee on Hospitals and Clinics, and the Indian Health Advisory Committee, made up of experts from hospitals and health programs all over the country.

Division of Hospitals

The mission of the Division of Hospitals is primarily the operation of a medical care program for American seamen and other groups designated by Congress. In addition to seamen, patients include Coast Guardsmen and their dependents, uniformed service members of the Army, Navy, Air Force, Public Health Service, and Coast and Geodetic Survey and their dependents, civil service employees injured in line of duty, persons with leprosy, narcotic drug addicts, and several other groups.

It maintains working relationships with other components of the Public Health Service, constituent agencies of the Department of Health, Education, and Welfare, other Government programs, and public and private organizations that relate to the work of the Division.

The Division contributes to the fulfillment of the Nation's needs for scientific and technical manpower and for improved health care by training physicians, dentists, and paramedical personnel in its hospitals, by conducting clinical research, and by providing medical care to a substantial segment of the population, including persons having leprosy and those addicted to narcotic drugs.

A problem yet to be resolved which is felt nationwide but particularly in the larger cities is the need for post-hospital treatment and follow-up services at the local level for narcotic addicts.

VOLUME OF PATIENT CARE

Utilization of the 15 hospitals operated by the Division in fiscal 1962 exceeded that of the previous year. Admissions during 1962 totaled 51,251—an increase of 3.4 percent over 1961. In addition, 948 babies were born. The average daily inpatient census rose 1.4 percent to 4,801. Total outpatient visits increased 6.9 percent, to reach 1,277,965.

Department of Defense uniformed service personnel and their dependents accounted for 33 percent of all admissions, 14 percent of the total average daily patient load, and 39 percent of all outpatient visits to PHS hospitals and outpatient clinics.

COOPERATION REGARDING NARCOTIC PROBLEMS

Thirteen Federal officials, representing the Interdepartmental Committee on Narcotics, met at the Lexington PHS Hospital in June 1962 to become familiar with its operations and the program for the care of narcotic addicts. An Assistant Secretary of the Treasury headed the group. Members of the committee represented the White House, the Department of State, Justice, and Defense, the Public Health Service, the Bureau of Narcotics, and the Bureau of Customs.

Three narcotic control officers from Thailand spent 3 days at the Lexington PHS Hospital observing its program for treating narcotic addict patients. Members of the National Narcotic Enforcement Officers Association, Inc., visited Lexington for orientation to the hospital's program for medical care and vocational rehabilitation of narcotic addicts. The association has a membership of 80 Federal, State, and municipal enforcement officers.

RESEARCH

In cooperation with the National Cancer Institute, NIH, a collaborative cancer research program is being developed in Public Health Service hospitals. Initial plans primarily concern cancer chemotherapy and involve the PHS hospitals at Baltimore and Boston.

The San Francisco PHS Hospital and the Division of Chronic Diseases, BSS, are conducting joint research projects in heart disease control.

A new program is underway for the early detection of oral cancer among patients in PHS hospitals and outpatient clinics. A pilot study is planned in the Staten Island, San Francisco, and Baltimore PHS hospitals and in the clinics in Washington, D.C., and Pittsburgh.

A preventive medicine clinic was established in 1962 at the Boston PHS Hospital, in collaboration with the Division of Chronic Diseases, BSS. The new project aims to study and define the role of the hospital in the field of preventive medicine and public health. Intensive examination of outpatients from the hospital's regular outpatient population is conducted. Patients with detected disease entities are referred to the appropriate inpatient or outpatient service for definitive therapy. The coordinator of preventive medicine activities also stimulates the interest of the hospital staff in public health practices and methods and coordinates existing practices from the standpoint of preventive medicine.

Twenty-one research projects were completed in the Division's research program in fiscal year 1962.

PROFESSIONAL TRAINING

Ninety medical interns completed formal training in the hospitals in 1962. Of these, 59 remained in the Public Health Service.

Forty residents completed formal training in the following categories: anesthesiology, 2; dermatology, 1; general practice, 7; internal medicine, 9; obstetrics-gynecology, 1; ophthalmology, 3; pathology, 1; psychiatry, 3; radiology, 4; surgery, 8; urology, 1.

Two medical officers completed 1-year residency training in otolaryngology. Two specialists completed 2 years of training in research methodology.

Plans were completed for the addition of full pediatric services at the Baltimore and Seattle hospitals.

GOALS FOR FUTURE

Goals of the Division include: improved physical facilities and equipment to enable the hospitals and clinics to provide medical care of a quality equal to that available in non-Government facilities; improvement of medical care for an increasing number of patients; continuation of present research programs and expansion of research; continuation and increase of staff participation in teaching programs at medical and dental schools; expansion of approved residency training programs in the hospitals.

FEDERAL EMPLOYEE HEALTH PROGRAM

Health protection for Federal employees was recognized as a responsibility of management in 1914 when the Treasury Department established a "relief room" in its main building. Today there has evolved an employee health service, sanctioned by Congress, which authorizes preventive health programs, with professional responsibility for the programs vested in a physician in charge. On a reimbursable basis, the Federal Employee Health Program operates health units for Federal agencies requesting this service which serve as patterns of this type of health service.

In 1962 two new health units were added, bringing the total to 39 serving more than 60,000 employees.

Employee health maintenance examinations for personnel 40 years of age and older totaled 3,789. Immunizations were given as follows: influenza, 32,322; poliomyelitis, 12,017; smallpox, 2,129; tetanus, 32,147. Screening tests given were: diabetes, 9,342; glaucoma, 728; visual acuity, 2,553.

More than a quarter of a million visits were made to the health units. About 1 of every 5 visits was for some service prescribed by a private physician or dentist; 1 of every 15 visits resulted in a referral to a private physician.

FREEDMEN'S HOSPITAL

Freedmen's Hospital, Washington, D.C., provided care for 14,218 patients. The average daily census of 375 was the same as in 1961. The average length of stay for the 14,211 discharged patients was 9.8 days. There were 3,199 live births.

Outpatient visits in 1962 totaled 96,267, a slight increase over 1961.

Inadequacies of the hospital's physical facilities caused numerous operating problems in caring for these patients. Excessive crowding frequently occurred in the medical, obstetrical, and newborn serv-

ices. Renovations were undertaken on the third floor of the annex to allow the addition of 50 beds for medical and surgical patients.

The attending and consulting staff of physicians and dentists totaled 217, an increase of 4; the courtesy staff consisted of 114.

All training accreditations of the hospital were maintained. The hospital serves as the clinical teaching facility for junior and senior students of Howard University's College of Medicine. The hospital also offers approved medical, dental, pharmaceutical, and dietetic internships and residency training in 14 medical specialties and in hospital administration. It has a school of nursing and a school of X-ray technology.

The 50 available residency appointments at Freedmen's Hospital were filled in 1962; among the residents were 20 graduates of foreign medical schools. There were also 22 medical interns, 2 dental interns, 2 pharmaceutical interns, 10 dietetic interns, 11 research fellows, and 1 administrative resident.

The school of nursing graduated 35 student nurses, raising the total of the school's graduates to 1,480.

The school of X-ray technology continued efforts toward improving curriculum, clinical practice, and other activities. The six 1962 graduates of this 2-year course brought the total to 56.

More than 32 clinical research projects were in progress during the year. Sixty or more scientific articles by staff members were published or were in press.

Legislation authorizing the transfer of Freedmen's Hospital to Howard University was approved by the 87th Congress on September 21, 1961. The actual transfer date had not been established as of the close of the 1962 fiscal year.

Foreign Quarantine

For the 15th successive year the Nation was free from quarantinable diseases known to have been introduced from abroad.

Quarantinable diseases were introduced into some countries that had been free of such infection, and there was a resurgence of these diseases in some endemic areas of the world. The Division of Foreign Quarantine faces an increasingly significant challenge in preventing the importation of quarantinable diseases. In 10 years there has been an increase of nearly 300 percent in the annual number of quarantine inspections of persons arriving in this country by air.

Special vigilance was maintained at U.S. quarantine stations during the year on the basis of outbreaks of quarantinable disease. By direct efforts and through cooperation of State and local health departments and other organizations, the Division took action to raise the immunity level of the traveling public, of persons employed in

port areas and adjacent communities, and of persons throughout the Nation who meet or treat the sick.

QUARANTINABLE DISEASES

There were five separate importations of smallpox into England and Wales, all from South Asia. These resulted in 69 additional cases with 24 deaths. One of the imported cases and one secondary case were not recognized as smallpox until resultant cases and deaths had been diagnosed.

There were two smallpox importations into Germany, one from Africa, the other from South Asia.

Several smallpox cases were detected on ships. The most significant instance occurred at Nowy Port, Poland, where one crew member of the S.S. *Indian Resolve* was found to have the disease. There were 70 secondary cases in crew members, and cases were confirmed in a quarantine officer and three Polish guards.

There was a resurgence of smallpox in Ceylon. The disease is endemic in Brazil, Ecuador, and parts of Africa and Asia.

The magnitude of the spread of cholera to areas of eastern Asia cannot be estimated. More than 7,000 cases were reported in the Philippines, where the presence of the disease posed a threat to other nations—especially danger of importation by small fishing craft into other Pacific islands.

Sporadic cases of yellow fever continued to be reported from endemic areas of South America and Africa.

Plague cases occurred sporadically in old endemic foci, with two major outbreaks—in Kolar District, India, and in Ecuador, including the port of Manta. Two cases of plague were reported in the United States in persons who had been in contact with wild rodents or their ectoparasites in areas of New Mexico of no importance to international traffic.

Typhus (louse-borne) continued to be present at a low endemic level in some areas of Mexico, Ecuador, and Peru and in Yugoslavia and the United Arab Republic. Typhus and relapsing fever are a major problem in Ethiopia, where more than 2,000 cases of each disease were reported in calendar year 1961.

INTERNATIONAL TRAFFIC

In the United States, the number of inspections of aircraft for quarantine or immigration-medical purposes was about the same as in 1961—over 65,000. There was an increase of 12.9 percent in quarantine inspections of persons arriving by plane—from 2,417,238 to 2,728,253. Inspections of ships increased from 32,105 to 32,980 and inspections of persons arriving by ship increased from 1,966,580 to 1,985,318.

Persons subject to quarantine inspection arriving in the United States by all modes of travel, including land entry from the interior of Mexico, increased from 5,607,218 in 1961 to 6,112,332 in 1962. It was necessary to detain 65 persons in isolation, compared with 11 in 1961. The number of persons who were allowed to continue to their destinations in the United States, but placed under medical surveillance, was 328,928 compared with 91,985 in 1961.

MEDICAL EXAMINATIONS

Establishment of Fee

A fee of $10 was established for visa medical examinations performed by the Division of Foreign Quarantine, effective December 1, 1961. Fee collections will repay the Government for cost of the visa examination activities of the Division of Foreign Quarantine.

General Program

The number of alien applicants for visas who were examined by medical officers abroad increased 2.2 percent, from 185,142 in 1961 to 189,192 in 1962. Of these, 97 percent were immigrants. There were 1,765 who were found to have diseases or conditions excludable under immigration law. Aliens examined on arrival at U.S. ports increased 5.2 percent, from 3,132,313 to 3,295,999. There were 3,049 found to have excludable diseases or defects; 18 percent of these had been so diagnosed abroad, but were admitted under special provisions of immigration law.

Staff in Europe examined 6,552 refugee-escapees under Public Law 86–648, and 111 were found to have excludable conditions. Some with excludable conditions were admitted to the United States by the Immigration Service subject to necessary controls.

Special arrangements were made for medical examination of Chinese refugees leaving Hong Kong for the United States.

Immigration of Tuberculous Aliens

The Division arranged for health controls for certain immigrants with tuberculosis whose entry is authorized by amendment to the Immigration and Nationality Act effective September 26, 1961. The immigrants must be members of the immediate family of a U.S. citizen, of a resident alien, or of an alien who has been issued an immigrant visa. Health control provisions contain improvements over those enforced under a similar, temporary law that applied to tuberculous aliens receiving visas before July 1, 1961.

The U.S. quarantine service placed 800 arriving aliens under health controls for tuberculosis in 1962, compared with 929 in 1961.

Additional Change in Immigration Law

Amendment to the Immigration and Nationality Act also provided that "leprosy" and "tuberculosis in any form" are no longer specified within the act itself as conditions excluding aliens from admission to the United States. Leprosy and tuberculosis are now designated in Public Health Service regulations as "dangerous contagious diseases," which are excludable under the act. Coverage of these two diseases by regulations allows more flexibility of terminology and procedures, in line with current medical concepts.

Migratory Farm Labor

In the program of recruiting farm workers from Mexico, 292,087 laborers were examined, with 4,533 rejections, at 3 centers in Mexico. At 5 border reception centers in the United States 310,247 examinations were made, with 5,519 rejections. At the reception centers 287,672 serologic tests for syphilis were made, with 13,267 positive reactors. The rate of positive reactors decreased from 52 per 1,000 men tested in 1961 to 46 per 1,000 in 1962. Treatment is given to positive cases, and they are admitted to the country.

ENTOMOLOGY AND SANITATION PROGRAMS

The program for control of the yellow fever mosquito, *Aedes aegypti*, was carried on in more than 100 international traffic areas within the yellow fever receptive zone in southern United States and insular possessions. The infestation index was kept at zero in 88 of these areas and at a relatively low level in the rest.

Inspections of aircraft arriving from foreign countries revealed the presence of more than 21,000 insects, including many of medical importance. There were 53 species of mosquitoes, 15 of which do not occur in this country.

The Division's entomologist in Honolulu discovered the presence of two species of mosquitoes new to Hawaii and Guam, respectively. *Aedes vexans nocturnus*, suspected in the transmission of Japanese-B encephalitis, was detected in Hawaii. *Culex tritaeniorhynchus*, the principal vector of Japanese-B encephalitis, was discovered in Guam.

Only a small percentage of ships entering United States ports showed evidence of appreciable numbers of rats.

The sanitation program has resulted in considerable improvements on many ships.

OTHER QUARANTINE ACTIVITIES

An improved surveillance method was adopted for use in placing arriving international travelers under control by local health officers.

The U.S. Armed Services jointly issued revised quarantine regula-

tions affording stronger defenses against disease importation, in accord with suggestions from the Division of Foreign Quarantine.

At El Paso, Tex., procedure was initiated that permits certain private aircraft to enter from northern Mexico without inspection by a Public Health Service quarantine officer, provided the pilot completes a health certification form in the presence of a customs officer. A quarantine officer must be called in if any health problem arises. Extension of the procedure to private aircraft throughout the entire border area can help provide protection where coverage of all traffic by each Government inspection agency would present tremendous practical problems.

The International Certificates of Vaccination against smallpox, cholera, and yellow fever were included in a booklet form published by the Division.

Health Services for Indians and Alaska Natives

More than 380,000 American Indians and Alaska Natives (Aleuts, Indians, and Eskimos) look to the Indian health program for preventive and curative medical service. The purpose of the Division of Indian Health is to provide this care to Indians and Alaska Natives where they are and when they need it, and to raise the level of health to that of the general population.

MEDICAL FACILITIES

In 1962, the Division operated 24 health centers, 17 school health centers, and several hundred field stations, 50 hospitals (seven in Alaska) with 3,280 beds, and had contract arrangements with 200 other hospitals with 1,000 beds. There were 18 contracts with State and local health departments for public health services. Physicians and dentists in private practice furnished medical and dental care on a contract basis. A new 34-bed hospital was opened at Keams Canyon, Ariz. A new 50-bed hospital was opened at Kotzebue, Alaska—150 miles across the Bering Strait from the Soviet Union.

The Kotzebue Hospital serves 7,500 natives, mostly Eskimos, from an area of 68,000 square miles and 28 scattered villages. There are no roads leading into Kotzebue. Transportation is by plane, dogsled, or boat.

Additions to hospitals at Cass Lake, Minn., and Fort Defiance, Ariz., were completed. Health stations were constructed at Ponemah, Minn., Pryor, Mont., and La Plant, Wakpala, and Norris, S. Dak.

HEALTH RESULTS

Illustrative of the advances that have been made since the program was transferred to the Public Health Service in 1955 is the decline in

the numbers of new cases and of deaths due to tuberculosis, a continuous downward trend since a peak in 1956.

The downward trend results partially from the new drugs and other measures being used successfully in controlling tuberculosis during the last few years. Of equal importance is the substantial improvement in the quality and scope of health services provided. For example, there has been an increase in outpatient treatment and in case finding.

Even with the advances in the last 7 years, the average age at death is 41 for an Indian and 30 for an Alaska Native as compared to 62 for the general population. The tuberculosis rate is still 4½ times greater among Indians and seven times greater among Alaska Natives than among the general population.

The infant mortality rate has declined 40 percent since 1954 but is still three times greater than that of the total population.

Despite the high prevalence of influenza, pneumonia, tuberculosis, and gastroenteritis, accidents are the leading cause of death. The rate of deaths due to accidents is three times higher among Indians and four times higher among Alaska Natives than in the total population. Accident prevention campaigns are under way.

The second most common cause of death is heart disease. Degenerative diseases are less frequent than in the general population, because half of the Indians are under 20 years of age.

PROFESSIONAL STAFF

Improvements have been made in correcting critical staffing deficiencies. Additional health workers—including physicians, dentists, sanitary engineers, sanitarians and sanitarian aides, pharmacists, public health nurses, trained practical nurses, dental assistants, social workers, medical record librarians, nutritionists, dietitians, and health education workers—have been added to the field staff.

The full-time staff now numbers about 5,000 with less than 150 in Washington. More than half of the staff is of Indian descent.

HEALTH EDUCATION

The goal of health education activities is to bring to the Indian people a better understanding of the fundamentals of good health, and to create within them a desire to assume responsibility for taking the necessary steps to improve their health.

That a measurable degree of success is being achieved is indicated by the increasing cooperation of Indians in program activities—immunization, for example—and by the growing number of Indians who participate directly in program planning.

In 1962 the health education staff numbered 41, most of whom were Indians with college training in education, anthropology, or sociology.

THERAPEUTIC SERVICES

The more than 81,000 admissions to Indian hospitals in 1962 reflected a changing pattern in Indian health. There were fewer tuberculosis patients, and their hospitalization periods were shorter. This meant more facilities were available for the practice of preventive medicine.

In 1962, the number of therapeutic services to outpatients and preventive health services continued to increase. At the hospitals, 674,000 outpatients visits were recorded in 1962—an increase of 7 percent over 1961. More than 400,000 visits for medical services were made to health centers, stations, and other clinic locations.

There was a 6 percent increase in hospital nursing and a 5 percent increase in field nursing. The professional competence of nursing staff was upgraded through advanced training in nursing services administration and in maternal and child health. Additional training in pediatrics, obstetrics, medical surgical nursing, operating room nursing, and central supply techniques was provided for practical nurses.

In Alaska, the number of clinics held in villages increased. Almost 100 villages were reached by doctor, nurse, or technician.

Three additional hospitals were staffed with pharmacists in 1962, so that 89 percent of patients and 81 percent of those coming for outpatient care received medical care at hospitals with pharmacists. During the year 627,000 prescriptions were dispensed to 510,000 outpatients, an increase of 23 percent. The 175 health facilities which did not have pharmacists (schools, small hospitals, health centers, health stations and locations) received drugs and pharmacy services from hospitals with pharmacists.

Many Indians living on reservations are almost untouched by present-day views of nutrition. Often their food customs have been handed down from generation to generation. In some instances their food resources are scarce. Thus education, in-service training, and cooperative research were important in the work of the nutrition and dietetics staff in 1962.

Nutrition education and training materials were developed. Studies of nutritional status and dietary practice were conducted on two Montana reservations, in cooperation with the Interdepartmental Committee on Nutrition for National Defense. A 3-year nutrition-dental study in Indian boarding schools in North Dakota and South

Dakota was completed. A diabetes study among Oklahoma Indians was begun, in cooperation with the Division of Chronic Diseases, Bureau of State Services.

Medical record librarians were added to the staffs of the hospitals in Gallup, N. Mex., Fort Defiance, Ariz., and Tuba City, Ariz. The goal is to provide a librarian for every hospital of 50 beds or more. For smaller hospitals, young Indians will be trained as medical record technicians.

MATERNAL AND CHILD CARE

An increasingly successful part of the Division's work in maternal and child care has been in bringing to Indian mothers a perception of health practices that is in accordance with modern medicine. Eighty-eight percent of Indian mothers now give birth to their babies in hospitals, and there is greater acceptance of prenatal care.

Infant mortality has declined 30 percent in the past 7 years but the death rate between the ages of 28 days and 11 months remains high. Principal causes of these deaths are diarrhea and respiratory diseases. Therefore, efforts have been increased to educate mother and family in good health habits, and to inform them of the availability of health facilities and the importance of early care for sick children. Significant reduction in infant mortality will be realized only as economic status, housing, sanitation, and living conditions in general are improved.

Consultants and physicians with special training in maternal and child health have been added to the staff. Specialized training in many phases of maternal and child care has been provided.

Rehabilitation of handicapped children received increased attention.

TUBERCULOSIS

Tuberculosis, once the leading cause of death among Indians, has dropped to eighth place. The number of Indians entering hospitals with tuberculosis, the length of their stay, and the rate of new cases reported have declined, but in some areas tuberculosis is still several times more frequent than in the general population.

In 1962 the daily tuberculosis census in the hospitals was approximately 24 percent of the total daily census—a reduction of approximately 58 percent in 7 years.

The decline in the death rate in the last 7 years has been 48 percent among Indians and 83 percent among Alaska natives.

DENTAL HEALTH

Emphasis on preventive dental care was increased in 1962. Fluoridation equipment was provided at Mount Edgecumbe, Alaska, and

Metlakatla, Alaska, and on the Menominee Reservation in Wisconsin, and a program was begun for the use of dietary fluorides where water fluoridation is not feasible or adequate.

There were 203,000 dental visits during the year; 95,500 patients were examined and 85,000 received dental services. This means that approximately 25 percent of the 380,000 Indians and Alaska natives were examined and they received about 54 percent of the care needed.

A periodontal program was instituted by a trained periodontist. A total of 33 dental officers and 19 auxiliary dental workers received some type of training. Twenty-four women, Indians and Alaska natives, were trained as dental assistants.

New mobile dental units were placed in service in the Aberdeen and Albuquerque areas.

ENVIRONMENTAL SANITATION

Environmental sanitation is a basic problem. Water supplies are often polluted and inadequate for domestic use, and frequently must be hauled for great distances. Waste disposal is often primitive.

Under Public Law 86–121, enacted in 1959, the Public Health Service was given authority to work with the Indians and Alaska natives in construction of sanitation facilities for their homes and communities.

The work is handled on an individual project basis. Participation of Indians and Alaska natives in the project construction and their assumption of responsibility for operation and maintenance of completed facilities are essential elements of the activity.

In 1962, there were 57 projects authorized, on 30 Indian reservations and in 6 Alaska native villages and 6 Indian communities, to serve 4,800 homes and 24,000 persons. Funds appropriated aggregated $3 million.

TRAINING FOR INDIANS AND ALASKA NATIVES

More than half the employees of the Division are of Indian heritage. Formal courses and in-service training are provided for them and for Alaska natives in almost every phase of the Indian health program.

Fifty-eight young women were trained as practical nurses in the Public Health Service school of practical nursing in Albuquerque. For the first time, practical nurses were given additional training to assist public health field nurses.

Courses for sanitation aides, dental assistants, community health workers, and food service supervisors were given at many locations.

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CONSTRUCTION ACTIVITIES

A new 36-bed hospital at San Carlos, Ariz., was to be completed in the fall of 1962. Plans were developed for a new 12-bed hospital at Barrow, Alaska. Hospital additions at Red Lake, Minn., and Bethel, Alaska, were under construction. Alterations changing the former Fort Peck Hospital at Poplar, Mont, to an outpatient health clinic were underway. Contracts were being negotiated for plans and specifications for a new 27-bed hospital at Fort Yates, N. Dak., and for an additional wing and alterations at the Crow Agency Hospital, Crow, Mont. A study was underway of the feasibility of a 200-bed hospital in Phoenix, Ariz.

Ninety-five new quarters for personnel at various locations were under construction, and 119 housing units were completed.

PROSPECTS FOR THE FUTURE

The success of the drive against tuberculosis and other critical health problems of the Indians has brought brighter prospects for the liberation of these Americans from the bondage of illness. Health education is contagious. More and more Indian people are learning and using improved health practices in their homes and communities. Tribes are creating new health programs of their own, and expanding existing activities. The low economic level of the Indians and Alaska natives, the barriers of language and culture, the hazards of travel over miles of desert or tundra are formidable obstacles. But a sound beginning has been made. The program is moving with faster pace toward the time when people now aided by the Federal Government may well assume the major responsibility for their own health services.

Medical Services for Federal Agencies

The medical services of the U.S. Coast Guard and the Federal Bureau of Prisons are legal responsibilities of the Public Health Service and are operated by Bureau of Medical Services personnel assigned to these agencies. The medical programs of the Bureau of Employees' Compensation of the Department of Labor and the Maritime Administration of the Department of Commerce are conducted by personnel detailed to these agencies.

UNITED STATES COAST GUARD, TREASURY DEPARTMENT

A crew member aboard the U.S.C.G.C. *Northwind* while on the Bering Sea Patrol was struck by a large section of falling ice as it was being cleared from the vessel, and was knocked unconscious. Examination by the medical officer found the patient in shock, bleeding from the mouth, ears, and nose, and with serious head and back

injuries with suspected fractured skull and ribs. Treatment for shock was successful, and the patient soon became conscious and rational although in critical condition. He was evacuated by air to hospital facilities ashore. The physician, a Public Health Service officer, was credited with saving his life.

In all, 103 PHS officers served the U.S. Coast Guard in 1962—33 physicians, 52 dentists, 12 nurses, a pharmacist, a dietitian, a scientist, and a sanitary engineer. Most were on full-time duty. Some were on temporary assignment aboard vessels in the Bering Sea Patrol or icebreakers in the Arctic and Antarctic, or on ocean weather duty in the Atlantic and Pacific.

A training program to provide a small group of flight surgeons for the Coast Guard was begun. A training officer was added to headquarters staff to help develop training aids for nonmedical personnel, indoctrinate new professional personnel in military medicine, and review medical practices and standards. Improved utilization of mobile dental units was effected.

BUREAU OF EMPLOYEES' COMPENSATION, DEPARTMENT OF LABOR

In July 1961 a student employed during the summer as a smoke jumper with the Aerial Fire Depot, Forest Service, Missoula, Mont., sustained serious back injuries when dashed against a rock by oscillations of his parachute. This resulted in loss of use of both legs and loss of major functions of both arms. Following approximately a year of rehabilitation services at the Institute of Physical Medicine and Rehabilitation, New York City, he was able to move about in a wheelchair and was ready to go on with his education—to prepare for a suitable vocation. He planned to enter the University of Florida in the fall of 1962.

The case illustrates the continuing emphasis the Bureau of Employees' Compensation gave in 1962 to the rehabilitation of Federal employees injured in the performance of duty. Rehabilitation facilities throughout the United States were used. Through cooperation with the Office of Vocational Rehabilitation, there was increased utilization of State vocational rehabilitation services.

Medical officers of the U.S. Public Health Service are assigned to the Bureau and administer the complete medical program under the Federal Employees' Compensation Act and related acts. During the year the Bureau was completely decentralized. Field offices were established in San Francisco, Seattle, Chicago, Cleveland, Boston, New York City, Washington, D.C., Jacksonville, and New Orleans. Medical services for injured employees are provided by hospitals and clinics of the Public Health Service and other Federal hospitals. Where no Federal medical facilities are available, medical treatment

in private hospitals is provided through the direction of private physicians designated by the Bureau.

MARITIME ADMINISTRATION, DEPARTMENT OF COMMERCE

The physician and two dental officers on duty at the U.S. Merchant Marine Academy, Kings Point, N.Y., cared for the health of 700 cadet midshipmen. The medical officer in charge of the Public Health Service Hospital on Staten Island acted as professional consultant for the academy's health program.

There were 692 admissions to the academy's Patten Hospital. Outpatient medical services and treatments given by the physician numbered 4,066. There were 4,053 dental visits. The North Shore Hospital, a community hospital in Manhasset, N.Y., provided emergency medical care for cadets when necessary.

BUREAU OF PRISONS, DEPARTMENT OF JUSTICE

For the 32d year, the Public Health Service provided medical, psychiatric, psychological, dental, nursing, and related health services for Federal prisoners. The Bureau of Prisons operated 24 hospitals and 6 infirmaries in institutions over the country. Fifteen of the hospitals have been fully accredited by the Joint Commission on Accreditation of Hospitals.

Full-time staff assigned to the program numbered 272. The staff was augmented by 275 consultants in the various medical specialties. Approximately 900 prisoners were assigned to the medical services where they receive training and assist with hospital care.

There were more than 23,800 Federal prisoners at the end of the year. The hospitals provided 417,838 hospital relief days during the year, medical staffs performed 862 major operations and 6,649 minor operations, and the outpatient departments provided 1,054,502 treatments. A total of 36,634 physical examinations were performed. The two institutions for women reported 31 births. Deaths in all institutions totaled 45.

There was a continued increase in the demand for psychiatric diagnostic and treatment services, which are required under the provisions of the Youth Corrections Act, the New Sentencing Act, and the act providing for the care and custody of insane persons charged with or convicted of offenses against the United States. Efforts to recruit additional trained personnel to provide these services were continued.

Plans for New Psychiatric Hospital

In May 1962 the Attorney General announced that a new 700-bed psychiatric hospital for Federal prisoners will be located at Butner, N.C., a site within easy commuting distance of the Duke University, University of North Carolina, and Bowman-Gray medical schools.

Planning of the facilities was completed with the assistance of consultants from the National Institute of Mental Health, Saint Elizabeths Hospital, and the Veterans Administration. An architectural competition for the hospital design was held, and a design prepared by A. L. Aydelott and Associates of Memphis, Tenn., was chosen by the judges. The new hospital will provide a full range of facilities and resources for diagnosis, treatment, training, and research.

Recommendations of Advisory Committee

The Surgeon General's Advisory Committee on Hospitals and Clinics met at Atlanta in April 1962, following visits to prison hospitals, to consider the prison medical care program. The committee made a series of recommendations which included increases in staff and improvements in hospitals. These recommendations are receiving continued study.

Hospital Improvements

Modernization of the hospital at Chillicothe, Ohio, was completed; one wing was converted into office and conference rooms for the psychology training program. New offices were completed at the Atlanta penitentiary for the psychiatrist and psychologist. The hospital in Danbury, Conn., was renovated. Planning and construction of improved facilities for the care of disturbed psychiatric patients was underway in several locations. Some refurbishing of the hospital at Terre Haute, Ind., was completed. Construction of a new central dental laboratory was begun at Lewisburg, Pa.

Clinical Services

Cancer detection and the control of tuberculosis and other infectious diseases were stressed in preventive health programs at several institutions, including Alcatraz; Alderson, W. Va.; Atlanta; Leavenworth; El Reno, Okla.; and McNeil Island, Wash.

Psychiatric services were extended in several institutions through use of consultants. For example, members of the psychiatric staff at the Public Health Service Hospital, Lexington, Ky., now visit the Federal Reformatory for Women at Alderson regularly to provide much needed psychiatric consultative services for women prisoners. This gives the Lexington staff access to certain unusual cases with important teaching value, which can be transferred to Lexington for continued study and treatment. The staff at Chillicothe obtains specialized eye, ear, nose, and throat treatments for young men through a similar cooperative arrangement with the Ohio State University Hospital.

Continued emphasis was given to high quality dental care, use of group treatment methods, and careful control of sedative-type drugs to prevent any abuses in their use. Improvements were made in training programs for medical technical assistants and in the programs for training prisoners in nursing techniques. The central dental laboratory at the Springfield Medical Center completed 2,505 dental prosthetic appliances.

Demonstration Counseling

A demonstration project in group counseling was begun at the National Training School for Boys, Washington, D.C. Directed by a psychologist and a psychiatric social worker, the project is designed to establish a group counseling program using existing staff, and to measure the effect of the program on individual boys and on the school as a whole. Early reports indicated that the program was having a favorable effect in rehabilitation of youthful offenders.

Research

Recruitment of prisoner volunteers for cold virus studies conducted at the Clinical Center, National Institutes of Health, was continued. The staff at Leavenworth continued studies of prisoners with histories of drug addiction. At Lewisburg, a study to improve the standardization of the glucose tolerance test was begun. The psychiatrist and psychologist at Lewisburg are participating in this study with a pilot program designed to learn more about the motivation of prisoner volunteers. The staff at Atlanta worked with the Communicable Disease Center in a study of the transmission of gonorrhea, employing prisoner volunteers. Malaria studies at Atlanta were continued.

Participation in Community Affairs

Medical personnel shared professional experiences with colleagues in nearby communities. For example, the staff at Leavenworth attended medical grand rounds at the Wadsworth Veterans Administration Hospital and clinical pathological conferences at the Kansas City Medical Center. The staff at Ashland, Ky., exchanged visits with the Department of Psychiatry at the University of Cincinnati. The staff of the Medical Center for Federal Prisoners in Springfield, Mo., is active in the Greene County Medical Society, and psychiatric personnel from the Medical Center assist in the staffing of the Greene County Guidance Clinic. Prisoners' blood donations to the American Red Cross and local blood banks in 1962 totaled 12,531 pints.

Bureau of State Services

Programs of the Bureau of State Services are primarily responsible for the application of health knowledge in two broad areas of need—to encourage the development of comprehensive health services in the Nations' communities, and to safeguard human health against hazards of the natural and man-made environment. The solution to both these problems depends in large measure upon the actions of State and local health agencies. Therefore the Bureau concentrates a major share of its attention upon strengthening these activities—through grants in aid, through training and demonstration projects, and in many other ways.

The programs of the Bureau have been grouped into two operating units, concerned respectively with community and environmental health, to make possible a more efficient and effective attack on these problems.

Among the year's highlights was the passage of the Community Health Services and Facilities Act of 1961, designed to stimulate improved community programs, particularly for the chronically ill and aged. In the first 6 months of operation, 44 grants were awarded under this act, totaling $2.3 million in Federal funds, to help support a wide range of special projects in this field.

The Robert A. Taft Sanitary Engineering Center, now directly under the administration of the Bureau, conducts an extensive program of research training and consultation in problems of air and water pollution, radiological health, and food sanitation. Many of its projects are reported by the divisions in these program areas. The Arctic Health Research Center at Anchorage, Alaska, conducts studies of special health problems related to life in cold climates.

Division of Accident Prevention

Support of research into accident causes and preventive measures increased about 50 percent, both in funds and in projects, in fiscal year 1962 over fiscal year 1961—38 grants and $1,917,419 as against 25 grants and $1,254,666. This graphically illustrates the increasing interest and ability of the scientific community to devote its capabilities toward providing needed basic knowledge of both the human and the environmental factors involved in accidents—still the fourth leading cause of death in the United States, the leading cause in the age groups from 1 to 35 years old, and the leading destroyer of the Nation's military and productive strength.

Similar progress accompanied the Division's efforts in areas of immediate, practical interest. A dramatic increase in the installation and use of automobile seat belts resulted largely from the Division's national campaign in cooperation with the American Medical Association and the National Safety Council. Results of the study on community organization and publicity to reduce accident rates in the Shenandoah Valley of Virginia were distributed to all public-health agencies. The Arkansas fire-prevention project continued to draw wide interest and praise from health and fire authorities. The "Blueprint for Life" program in Cleveland, Ohio, is providing valuable experience in the integration of all official civic and voluntary agencies on a concentrated effort to reduce accidents in a metropolitan area; the seven films produced in connection with it are now in nationwide use, and two were awarded Certificates of Merit by the National Committee on Films for Safety.

Among many major new projects begun in fiscal year 1962 are:

1. Establishment of a center for the study of accidents to the aged, in cooperation with the Florida State and Pinellas County Health Departments.

2. A study of emergency medical services, in cooperation with the California State and San Francisco City-County Health Departments.

3. A study of methods to prevent injuries to the head (especially dental, visual and hearing impairments) in contact sports and outdoor recreation.

4. A study of accidental poisonings among children, with emphasis on preventive measures, in Charleston, S.C. (The Division is a cooperative member of the Steering Committee for National Poison Prevention Week, which was proclaimed for the first time in March 1962 by the President. Over 470 poison-control centers are now affiliated with the National Clearinghouse in this Division.)

5. A study of prevalence and prevention of accidents involving glass doors and glass areas adjacent to glass doors.

6. A study in Philadelphia, Pa., into the effectiveness of the group-discussion technique in reducing accidents.

Many other projects are in various stages of planning, operation, and reporting, including such diverse subjects as mouth-to-mouth resuscitation; incorporation of accident prevention into the daily routine of local public-health nurses and sanitarians; accidents involving the use of power lawn mowers, flotation devices, guns, and coin-operated dry cleaners; and the comparative value of various media of communication in indoctrinating specific audiences.

Division of Chronic Diseases

In fiscal 1962 the program activities of the Division of Chronic Diseases focused largely on the expansion and improvement of community-based, out-of-hospital services for the chronically ill and the aged.

These activities were carried out in two principal stages:

1. The utilization of a 1.7 million dollar appropriation to stimulate and support a series of pilot projects in selected States and communities, and;

2. The rapid extension of such pilot projects to additional States and communities following passage in mid-year of the Community Health Services and Facilities Act of 1961.

The Division carried the major burden of administering the expanded program of formula grants in the Act as well as a new program of special project grants. Under the former responsibility $4,858,872 (81 percent) of the total $6 million appropriation was utilized by the States.

Of the 44 special project grants in the community health area which were approved and funded, 26 are being administered by the Division. These 26 projects account for nearly $1 million of the total $2.3 million first-year appropriation.

CANCER CONTROL

The Cancer Control Program is concerned with communication of "practice-ready" research information to medical and health workers in a form which will enable them to use it in their own communities.

Demonstration Projects

Grant projects offer (1) a means of testing and evaluating pilot programs under field conditions, and (2) an instrument utilized to demonstrate to local communities techniques and procedures of proven and established value. Since the inception of the project grant program in 1959, there have been 255 grants approved, in 34 States, the District of Columbia, Puerto Rico, and in cooperation with 4 national medical organizations. The amount of money involved totals $6,564,219.

More than 250 conferences were held with staffs of health agencies in all of the States and Puerto Rico, largely to bring results of the experiences of demonstrations and pilot projects to other groups encountering similar problems.

It is generally accepted that the best opportunity for cancer control lies in cancer of the cervix, since the Papanicolaou smear offers the possibility of early detection. However, this program is an extremely

complex one which has in it many chances for error. Based upon 3 years of intensive work with cervical cancer detection programs, the Cancer Control Program stated the 14 elements which are essential to the successful detection project. Utilizing resources available in the demonstration grant system, 18 communities throughout the country, which have technical resources available for good control programs, were selected for "model" programs. These showcase communities are to be used to communicate the procedures of good cervical cancer control to other areas.

Clinical Traineeships, State Grants

During the year, a program of senior clinical traineeships was initiated. Support in the form of stipends is made available to fully-trained physicians who have completed resident training in a medical specialty and who desire additional training in the specialty as it deals with the management of patients with neoplastic diseases.

A system of grants to States for development of cancer control programs is being administered by the Cancer Control Program. In the fiscal year 1962, the amount granted to States was $3,500,000.

DIABETES AND ARTHRITIS PROGRAM

Activities of the Diabetes and Arthritis Program continue to be directed toward the goal of minimizing the severity and complications of diseases in its area of interest by early detection and prevention.

Program Application

Consultative services to States and regions were continued along with provisions for supplying screening materials and temporary loan of personnel. Continued evaluation of diabetes reporting by States was executed. A system designed to facilitate statistical reporting was developed and initiated on a pilot basis.

Field trials of a teaching machine began. Adapted with a film sequence on diabetes, the machine was placed in various clinic settings for evaluation as a teaching method. Preliminary data suggest that it will be a valuable tool for education of both newly diagnosed patients and those with disease of long standing. Plans for a similar application of the teaching machine method to professional education resulted in extensive work on the filmstrip portion. Toward the end of the fiscal year, a physician director and a public health advisor were assigned to the Branch full-time for arthritis activities programing.

Applied Research

Plans took shape for studies in arthritis by the Boston Laboratory. Preparations were made for investigating methods of screening for gout and estimating its prevalence.

A study was initiated in a Federal prison to determine the reproducibility of the Glucose Tolerance Test and its proper place in the diagnosis of diabetes. Preliminary evaluation of data on the Federal Employee's Health Study was begun. Factors relative to the prediction of diabetes and its long and short-term effects on new found cases are being considered.

HEART DISEASE CONTROL PROGRAM

The Heart Disease Control Program provides professional, technical, and financial assistance to health departments in all States and Territories to help them apply heart disease research findings in as many communities as possible.

A major method is assignment of field officers to stimulate or conduct heart disease control programs. This year, 131 officers—medical, nursing, nutrition, social service, physical therapy, or public health advisors—have been assigned to States that requested them. Eleven career medical officers are training in public health.

Heart Disease in Children

Sixty-six laboratory technicians from all 50 States, 4 Territories, and 5 cities have now been trained in cooperation with the Communicable Disease Center in the fluorescent antibody technique for the rapid identification of the organism associated with the onset of rheumatic fever and rheumatic heart disease. In-State training courses have been conducted in 17 States for 320 technicians, and full use of training equipment and personnel is scheduled into late 1963. The aim is to make the technique widely available so that physicians will have a rapid means of diagnosing "strep throats" in order to prescribe antibiotic prophylaxis. Inexpensive portable equipment to tape-record heart sounds was developed for use in screening school children for heart disease, and preliminary field testing of the equipment was conducted in Dickinson, N. Dak., and Michigan City, Ind.

Heart Disease in Adults

Various projects have demonstrated effective methods of rehabilitating stroke patients, and services are being expanded. Prevention of strokes, though difficult, may be practical as a community service. A Portland, Oreg., study is investigating methods of preventing major strokes by early diagnosis and medical and surgical treatment of patients with signs and symptoms of cerebrovascular insufficiency.

Childhood obesity in relation to adult morbidity and premature mortality from cardiovascular and other diseases is being evaluated in a Hagerstown, Md., study.

An electronic system, including a digital computer, for analyzing electrocardiograms was developed and installed in Washington, D.C.

Tests relaying electrocardiographic signals by telephone from San Francisco and other locations to Washington will be conducted to demonstrate the use of the computer system as an aid to physicians in the diagnosis of heart disease.

The program is conducting four field stations. The Heart Disease Control Laboratory at the Communicable Disease Center serves as a "bureau of standards" for many State and epidemiologic laboratories for the development and standardization of cholesterol determinations. A field and training station was established in San Francisco to provide professional consultative and laboratory services to health agencies and medical groups in the West. The reasons for the large geographic differences in the occurence of heart disease will be studied at the new Ecology Field Station in Columbia, Mo. The present study of the family aggregation of hypertension will be continued and new hypertension programs will be developed at the Memphis, Tenn., field station.

NEUROLOGICAL AND SENSORY DISEASE SERVICE PROGRAM

The Neurological and Sensory Disease Service Program, established in January 1962, launched a major national program to hasten community application of research knowledge in the care of persons with epilepsy, cerebral palsy, multiple sclerosis, Parkinson's disease, mental retardation, vision, speech, and hearing defects, and other disorders of the nervous system.

Project Grants

The first project grants made by the new program gave impetus to the development and support of State and local efforts to improve and expand community services. Twenty-three grants were awarded to official, voluntary, and private nonprofit agencies, medical schools, and medical centers in 13 States and the Virgin Islands to support projects encompassing a broad spectrum of activities.

Vision Conservation

The Glaucoma Collaborative Study, involving validation of various screening tests to identify glaucoma in the earliest stage, continued in its third year at five university clinics in California, Iowa, Maryland, Missouri, and New York.

At the University of Tennessee School of Medicine 300 of 4,500 persons screened for glaucoma have been selected for continuing study to confirm the efficiency of the Schiotz-type tonometer as a screening instrument. Evaluation of the effectiveness of followup procedures as a means of increasing the rate of successful referrals from glaucoma detection programs was inaugurated at the University of North Carolina School of Public Health.

Glaucoma test demonstration manikins were developed to provide physician orientation in testing for glaucoma. The plastic life-like models of the human head have movable eyelids and eyes that provide tension readings in the normal and glaucomatous range in alternate eyes when tested with the Schiotz tonometer.

Hearing Conservation

A regional audiometric calibration center is being established at the North Carolina School of Medicine. The purpose is to determine the feasibility of such regional facilities for use by local programs, and their relationship to promotion of community speech and hearing conservation programs.

HEALTH SERVICES FOR LONG-TERM ILLNESS PROGRAM

The program is concerned with the development of programs and projects for preventing the onset or progression of chronic disease and disability as well as care services both in nursing homes and in non-institutional settings.

Support of Projects

An increase in direct operationg funds during the fiscal year enabled the program to award $1.2 million to 47 nonprofit organizations and official health agencies in the form of contracts and cooperative agreements.

The projects varied in complexity and scope from the creation of a homemaker program by a hospital in a rural community in Nebraska to a nationwide program by the National Sociey of Crippled Children and Adults to eliminate those architectural barriers in public buildings which prevent disabled persons from participating in normal activities.

The program supported a 2-week national conference at Michigan State University attended by nutritionists and dietary consultants from 28 States to demonstrate new techniques for improving food service standards in nursing homes.

An experimental and intensive 6-week summer school course in nursing home administration carrying degree credit, the first of its kind in the Nation, was conducted by the University of Oklahoma; 33 students from 16 States attended.

Development of Materials, Data Collection

The Kenny Rehabilitation Institute in Minneapolis received financial support from the program to develop resource material for the training of personnel who will provide rehabilitation nursing.

A project intended to stimulate medical schools and schools of public health to incorporate into their curricula the concepts and methodology for the prevention of disability is in progress.

Four workshops based on a simplified method of teaching nursing skills were conducted by the program. An Instructor's Guide for Teacher Training Courses is being prepared.

Program staff worked on the compilation of data received from the first national inventory of coordinated home-care programs. Two regional workshops on home care were held during the year and a second National Workshop for Home Care is scheduled for December 1962.

Communicable Disease Center

The Communicable Disease Center, Atlanta, Ga., carries out Public Health Service programs in the control of infectious diseases. It conducts epidemiological, field, and laboratory studies and provides various types of technical assistance to State health departments. Because of the global nature of infectious diseases, CDC also participates in health efforts around the world. It provides technical support and personnel for the health programs spearheaded by the International Cooperation Administration. It also cooperates with the World Health Organization through representation on expert advisory panels and committees and as a laboratory diagnostic and study center.

Plans were completed for the physical transfer of the Tuberculosis Branch from Washington to the Atlanta headquarters, although the move did not take place until the beginning of the 1963 fiscal year. This transfer brings to the Atlanta headquarters all of the CDC Branches: Epidemiology, Laboratory, Technology, Tuberculosis, Venereal Disease, Training, and Audiovisual, which was given branch status this year.

Of special note was a series of 13 3-day seminars on hepatitis beginning early in 1962 and continuing throughout the spring, summer, and fall. Sponsored in cooperation with State public health associations, the seminars were designed to communicate existing knowledge of hepatitis and its control to State and local practitioners of public health. The seminars followed in the wake of an unusually high number of cases of hepatitis in 1961. Additional seminar series are planned in other important diseases.

Also of special interest was a program of communicable disease control demonstrations sponsored by CDC in cooperation with State and local health departments and DHEW Regional Offices. The demonstrations are designed to measure selected communities for their health status, including immunization levels and conditions favorable to transmission of communicable diseases. Effective prevention and control measures will later be demonstrated. Demonstrations have

been initiated in Huntsville, Ala.; Fredericksburg, Va.; and Lebanon, Pa.

EPIDEMIC AND DISASTER AID

Epidemic aid included calls in 27 States, four Indian reservations, an interstate steamboat, a U.S. Navy base, Chile, the Philippines, Honduras, and American Samoa. Also investigated was a *Salmonella hartford* epidemic involving 19 States.

Hepatitis led with eight epidemic aid calls. There were five influenza calls and four poliomyelitis calls. Other calls were for enteric diseases, Coxsackie infections, diphtheria, encephalitis, staphylococcal infections, plague, tularemia, histoplasmosis, erythema infectiosum, rabies, measles, and typhoid. CDC assisted the Texas State Department of Health with vector control during hurricane Carla in 1961.

REPRESENTATIVE DISEASE STUDIES

Quota Sample Surveys

The quota sample survey, a useful tool developed at CDC in 1959 to assess polio immunization levels of different population groups within a community, was adapted to include diphtheria, whooping cough, and tetanus. CDC has contracted with the Bureau of the Census to include questions on immunization against these four diseases in its Current Population Survey. Methods are being developed to improve the immunization level of infants in the lower socioeconomic groups shown by quota sampling surveys to be the hardest to reach.

Venereal Diseases

The threefold increase in reported cases of infectious syphilis since 1957 underscores the urgency of the National Venereal Disease Program's syphilis eradication campaign. All available resources of the National Program are directed toward implementing the recommendations of the Task Force on Syphilis Control in the United States.

This five-member Task Force, in its report to the Surgeon General, pressed for increased effort in epidemiology, development of a comprehensive educational program, continued research in immunology, therapy, and laboratory procedure, and expansion of research in the sex behavior of adolescents and young adults.

Epidemiologic activities were strengthened along lines recommended by the Task Force. Shortage of venereal disease control personnel has always hampered operations in the field. On July 1, 1962, the National Program assigned 461 persons to State and local health departments to assist them in eradication activities.

Another high-priority item was the development of a comprehensive educational program to reach the general public and also professional personnel, including physicians, nurses, teachers, social workers, ministers, and youth and family-serving agency personnel.

Laboratory research was continued to develop new diagnostic tests and to refine widely-used older ones for syphilis and gonorrhea. Of particular interest in syphilis serology was the development of the Rapid Plasma Reagin (RPR) card test. Featuring the use of a plastic-coated card, this test can be completed quickly outside the laboratory. It is intended primarily for screening purposes. Additional progress was made in the effort to develop an effective fluorescent antibody procedure for detecting *Neisseria gonorrhoeae.* Such a procedure would have particular value in diagnosing gonorrhea in the asymptomatic female.

Tuberculosis

Continued gains in the control of tuberculosis are contingent on bringing all known patients under treatment. In 1962 Congress for the first time authorized special project grants for tuberculosis. Twenty-six areas with unusually severe tuberculosis problems received grants to improve their services to these patients and their contacts, and, in some instances, to increase diagnostic services for persons with X-rays suggesting tuberculosis.

Funds were used also to provide three 3-day regional symposia on "Rational Therapy and Control of Tuberculosis" for physicians. Some 350 physicians in public health and clinical practice attended the symposia.

Large-scale prophylactic trials of isoniazid, a drug widely used in the treatment of tuberculosis, showed it to be effective in preventing disease among household contacts of patients during the year the drug was taken. Further observations are being made to determine the duration of protection after the drug is stopped and to see whether there are any unsuspected beneficial or detrimental long-term effects of the drug.

Influenza

Warning of expected widespread outbreaks of influenza in the United States in the winter of 1962–63 was made public in April. The warning was based on findings of the Surgeon General's Advisory Committee on Influenza, which met in Washington, D.C. The public was informed that population groups at highest risk should begin immunization by September.

In their capacity as International Influenza Center for the Americas (WHO), CDC's respirovirus laboratories were instrumental in identifying strains of virus active within the Western Hemisphere.

Isolation of influenza A from other countries led to the prediction that Asian influenza would recur during the winter of 1962–63.

Poliomyelitis

Pending the licensing of all three types of Sabin oral polio vaccine, CDC urged mass use of Salk vaccine during the fall and winter to protect infants, pre-school children, and other susceptible groups in advance of the polio season. The CDC epidemic reserve of oral polio vaccine has been used to stop epidemics in Syracuse, Atlanta, Laredo, San Antonio, and Newberry County, S.C. These areas received over 3 million doses. Also, in a gesture of international good will, CDC rushed 354,000 doses to Chile to stop a severe epidemic.

Measles Vaccine Trials

Trials were conducted cooperatively with health departments in Seattle, Cincinnati, Rochester, Buffalo, and in DeKalb County, Ga. A series of three injections was given to 4,860 children: 50 percent received placebos, 25 percent received 2 injections of killed vaccine and 1 of live vaccine, and 25 percent received 3 injections of killed vaccine.

Leprosy, Other Diseases

For the first time in medical history, a technique of growing leprosy bacilli (*Mycobacterium leprae*) has been developed. It is being grown in the footpads of mice at CDC, and will provide an effective means for testing different drugs. Preliminary results of experimental work at CDC also indicate that a vaccine against leprosy is likely. Research shows that BCG vaccine imparts significant levels of immunity against *M. leprae.*

The CDC also made important progress with regard to salmonellosis, rabies, mosquito-borne viral encephalitis, and vector control.

LABORATORY

A major step benefiting diagnostic laboratories in the world is the development of model specifications for production of bacterial and viral reagents. Diagnostic reagents standardization is being developed in close cooperation with the NIH program for developing specifications for respiratory virus reagents. An ad hoc committee of experts drew up model specifications for the Laboratory Branch. Production specifications for most commonly used reagents should be available to commercial companies within 3 years.

Three years of effort in developing a single standard complement fixation test applicable for use as a diagnostic procedure for identification of fungal, viral, parasitic, and bacterial infections met with success during fiscal year 1962. A standard test, the "Laboratory Branch Complement Fixation Test" (LBCF), has been evaluated, its

sensitivity and specificity found acceptable, and the protocol distributed to State laboratories.

AUDIOVISUAL

On January 1, 1962, the National Archives of Medical Motion Pictures were transferred from the National Library of Medicine to the Public Health Service Audiovisual Facility at CDC. The Facility is developing as a national information center on medical films and where they can be obtained.

During the year, the Facility completed 28 motion pictures, 26 filmstrips, and 26 exhibits. More than 50,000 showings of CDC films throughout the country reached an estimated audience of more than 2 million people.

TRAINING

More than 9,000 persons from State and local health departments, Federal agencies, academic institutions, industry, and other organizations attended 379 CDC courses in communicable disease control presented throughout the country and at CDC headquarters. Of these, more than 2,000 persons participated in short seminars—developed to present current data on single subjects of immediate, widespread interest—at 13 State public health association meetings, and 148 attended the MEND symposium on Control of Infectious Diseases in Emergencies.

CDC's training personnel also developed courses and training material for other Divisions of the Public Health Service and for the Peace Corps. Under contract with the Department of Defense, they reviewed now rare communicable diseases that might become important in a major disaster.

Division of Community Health Services

In the area of community health services, an important forward step was the establishment in November 1961 of the Division of Community Health Services.

The Division's responsibilities are to coordinate the Service's activities in the fields of medical care administration, health economics, and public health administration. It administers public health training grants and awards programs, and coordinates the administration of special project grants affecting community health services. Health education, migrant health, and school health are also Division responsibilities.

GRANTS FOR IMPROVING COMMUNITY HEALTH SERVICES

Special Project Grants

One hundred and ninety-four applications were received and 44 projects approved and funded this year under provisions of the Community Health Services and Facilities Act. The applicants represent a wide variety of public and other nonprofit national, State, and local groups.

Many of the projects now in progress are concerned with some particular aspect of out-of-hospital care for the chronically ill and aged. Others are aimed at basic problems of comprehensive care and community coordination involving all pertinent public and private organizations in their areas.

One community project would provide a full range of medical and other out-of-hospital services to medically indigent individuals on an outpatient basis. The center represents the combined resources of five of the community's hospitals. It will also coordinate home nursing, physical therapy, homemaker, psychiatric, and screening services through inter-agency cooperation.

Another is working toward the establishment of a regional health information center. It will utilize electronic equipment to store patient data and will make this information rapidly available in order to improve patient care. The center will also serve teaching and research purposes.

No organized community efforts have responded effectively to health problems identified by Selective Service rejections. Now two large cities are operating pilot projects to pave the way for a nationwide program for helping these young men.

Formula Grants

The strongest direct impact of Federal aid on community health probably is to be found in the response of State health departments to the new chronic illness formula grants. With a few exceptions, State health departments are using the bulk of these funds to strengthen central staff concerned with the chronically ill and aged. As a result, for example, additional numbers of these people will receive some measure of community health service in their own homes; more nursing homes will offer a better than minimum standard of care to their patients; more people will be screened for certain chronic conditions.

TRAINING

Larger appropriations to the Public Health Service have enabled schools of public health, nursing, and engineering to increase enrollment and strengthen their educational programs. An encouraging

amount is going into programs in the newer aspects of public health—such as medical care administration, air and water pollution, control of chronic diseases, radiological health, accident prevention, and metropolitan planning.

MIGRATORY AGRICULTURAL WORKERS

The Division has developed plans for implementing the President's recommendations on migrant health in his Health Message of 1962. Under these plans, special project grants to public and private organizations will be made for establishment and operation of family health service clinics and other projects to improve migrants' health services and conditions.

OTHER DIVISION ACTIVITIES

A source book on medical care financing and utilization was completed.

The Division assisted in planning and carrying out the International Conference on Health and Health Education, held in the United States for the first time.

Studies conducted or under way include one to correlate chronic illness morbidity with expenditures for medical care; an analysis of X-ray and laboratory costs for a defined population; two studies on prepayment for drugs; and several projects in the area of the behavioral sciences.

In cooperation with the Children's Bureau and the Social Security Administration, the Division published a *Directory of Homemakers Services—1961.*

Division of Dental Public Health and Resources

The Division seeks to promote an adequate supply of dental manpower and to assure that professional skills are used most efficiently and effectively; to assist State and local health agencies in expanding dental health programs and to experiment with methods for their improvement; to influence more people to seek dental care and to find ways of making care available to those whose needs cannot be met under current patterns of dental practice. It is concerned as well with both research into the prevalence of dental diseases and a wider application of known measures of prevention.

STRENGTHENING MANPOWER AND EDUCATIONAL RESOURCES

A better trained and more productive dental force is essential to adequate dental care for all our people; and the Division emphasizes programs which will stretch the available manpower supply by teaching dentists more efficient methods of practice. In 1962,

undergraduate students in 42 dental schools were learning to work effectively with chairside assistants under a grants program administered by the Division. Proper use of a chairside assistant enables the dentist to provide improved services for more people.

In cooperation with the Division, six universities, junior colleges, and vocational schools were engaged in experimental programs testing how much and what kind of training a qualified dental assistant should have. The Division continued its effort to stimulate interest in dental assisting as a career by preparing brochures and a recruitment film and by developing a program to aid vocational educators in inaugurating and expanding dental assistant training courses.

Continuing activities in dental education included preparation for a comprehensive survey of the costs of dental education, to be conducted in cooperation with the American Association of Dental Schools, and consultative services to domestic and foreign dental schools on facilities planning. Research in programmed instruction in selected aspects of dental education initiated this year will seek ways of improving the dental curriculum.

SPECIAL PATIENT CARE

The dental health of millions of aged, handicapped, and chronically ill persons poses a particular challenge to dentistry and public health agencies. The institutionalized and homebound cannot go to the dentist; the dentist traditionally is neither prepared to go to the patient nor schooled in the techniques of care for patients with handicaps. Programs initiated this year in 10 dental schools are giving students necessary technical training and practical experience in treating institutionalized and homebound persons. Extension of the programs to other schools will assure that future dentists are prepared to treat special patients. Publication of *Dental Care for the Chronically Ill and Aged: A Community Experiment*, a report on the Division's 4-year study of the dental treatment needed by the chronically ill and aged of Kansas City and a service program conducted to meet that need, provides guidance and stimulus for community action. A hospital-centered program established this year in Missouri will obtain additional information on the problems of service for special patients and provide a second prototype for community programs.

DENTAL CARE FINANCING PLANS

Dental prepayment plans have proved to be a potent weapon not only in reducing the cost barrier to the receipt of dental care but in increasing utilization of services. The Division encourages the development of dental care financing plans by assisting professional and

consumer groups in their organization and operation and by operating a national clearing house for information on prepayment.

ATTITUDE STUDIES

Studies conducted by the Division attempt to reveal why people seek, or fail to seek, dental care, why they support, or oppose, such measures as the fluoridation of water supplies, and why they choose to enroll in dental prepayment plans.

COMBATING DENTAL DISEASES

To strengthen its efforts to promote the use of fluoridation, the one best means of preventing dental caries, the Division established a special fluoridation unit staffed by specialists in engineering, social science, information, and statistics to provide assistance to States and communities seeking to adopt water fluoridation. As of June 30, 1962, over 42,350,000 people in 2,245 communities were enjoying the protection derived from drinking artificially fluoridated water.

Testing of home fluoridators, intended for areas where central water supplies are not used, devices for defluoridation of water with excessive fluorides, and the effects of fluoridating school water systems continued. First-year examinations were conducted in a study of the effectiveness of a stannous fluoride dentifrice on 2,200 children in Seattle, Wash. Continuing also was a study of cytological testing of oral smears as a screening method in the early detection of oral cancer.

IMPROVING DENTAL PUBLIC HEALTH PRACTICE

Completion of a comprehensive survey of State dental programs, which includes details of activities, staffing, and financial support, provided information necessary to efforts to improve the practice of dental public health. A similar survey of community dental health programs was initiated in 1962.

A NATIONAL DENTAL CENTER FOR RESEARCH AND TRAINING

Formally opened on November 6, 1961, the Dental Health Center in San Francisco is a new facility for applied research into the epidemiology of dental diseases and methods for their prevention and for the training of dental public health workers. Already underway is the first comprehensive birth-record study ever undertaken of cleft lip and palate, malformations which afflict 250,000 people.

Training programs at the Center, now just beginning, ultimately will teach dental public health personnel from State and community agencies and foreign countries better methods of conducting public programs.

Division of Hospital and Medical Facilities

In steadily increasing numbers, communities around the Nation are finding that their growing health facility problems can best be resolved through coordinated commmunitywide planning. Thus, the Division of Hospital and Medical Facilities, during the past year, has directed much of its efforts to providing guidance along with the necessary incentive for communities to carry out such planning. In addition to providing leadership to State and local planning agencies in the planning process, grants were awarded to a dozen communities where planning activities are being accelerated. The experience gained will have widespread application for other communities with similar problems. These grants are the first to be made for this purpose under the newly expanded Hill-Burton hospital research and demonstration program made possible by the 1961 Community Health Services and Facilities Act.

There are many other continuing activities in the planning area in which the Division staff is engaged.

PROGRAM HIGHLIGHTS

For the public at large, the Hill-Burton program is thought of chiefly in terms of its tremendous impact on hospital and medical facility construction in every section of the United States. While in itself an outstanding achievement, of equal—if not greater—importance are the qualitative contributions of the program enumerated below:

Continuous statewide planning for additional hospitals and health facilities was initiated, bringing a sense of orderliness to the improvement and distribution of facilities within each State.

Standards of bed and facility needs were introduced.

A better distribution of facilities has been achieved, vitally needed physicians and board qualified specialists have been attracted to many rural areas, and, in general, the quality of medical care in rural areas has been upgraded.

Health facility operations have been improved through the requirement of the Hill-Burton program that States adopt standards of maintenance and operation for health facilities constructed under the program. Most States have gone much farther than is required by this legislative provision by making such standards applicable to all health facilities and establishing such standards in the form of a licensure program.

THE CONSTRUCTION PROGRAM

Although a large portion of the Hill-Burton funds goes into the construction of general hospitals, other types of facilities are also

provided grants. These grants average approximately one-third of the total cost of the projects. Other facilities aided include nursing homes, diagnostic and treatment centers, chronic disease hospitals, mental hospitals, public health centers, rehabilitation facilities, tuberculosis hospitals, and State health laboratories. Federal funds in the amount of $1.8 billion have been channeled into the construction and remodeling of these facilities as of June 30, 1962. Since the first Hill-Burton grant was awarded in 1947, a total of 6,236 projects have been approved. Of this total, 4,728 were completed and in operation as of June 30, 1962. The remaining 1,508 are under construction or in the planning stage. These projects will provide 274,208 inpatient beds and 1,644 other health facilities.

RESEARCH ACTIVITIES

A growing activity in the Hill-Burton program is hospital research which operated on a budget of $8.1 million last year as compared with $1.2 million which was authorized during previous years. Some of the areas of investigation include the development of more effective organizational patterns for providing services; better community planning and coordination of hospital facilities and operations; improvements in architectural and equipment design; noise control; fire and explosion hazards; bacterial contamination in hospitals and other health facilities; and the various aspects of progressive patient care.

UNMET NEEDS

A constant effort is being made to adjust the program to resolve the wide array of health facility problems which still confront the Nation. Chief among these are: obsolescence of many facilities—mainly in metropolitan areas; an ever-increasing critical shortage of long-term care beds; the need for better planning and coordination of health facilities; and the acute shortage of community-based facilities and services for the mentally ill and mentally retarded.

Division of Nursing

The Division of Nursing, with its responsibility for a diversified program of consultation to health agencies and institutions, training for nurses, and research, is constantly seeking new and improved ways to meet the increasing and pressing nursing needs.

TRAINING IN RESTORATIVE NURSING

Funds were made available by the Congress this year for demonstration training for public health nurses in new methods of restorative nursing services for the chronically ill at home; and the Division

negotiated special contracts with two universities and one hospital to sponsor intensive courses. As a result, about 100 nurses will have the opportunity to learn the newest restorative measures which can be applied for patients in their own homes or in nursing homes.

OUT-OF-HOSPITAL NURSING CARE

Still the greatest single nursing need is for more care available to patients outside hospitals, and especially to the chronically ill at home. The Division made a significant contribution in this area through provision of consultation, methods and materials to help States and agencies developing programs of nursing care in the home.

Two projects were completed and publications issued to promote extrahospital nursing services. "How to Determine Nursing Expenditures in Small Health Agencies" (PHS Pub. No. 902) outlines a simple time study method which agencies with limited accounting resources can use for establishing appropriate fees for various nursing services. Conferences to teach its application have been held on request in 10 States to date. "Nursing Care of the Sick at Home in Selected U.S. Cities" (PHS Pub. No. 901) updates the information first collected and analyzed by the Division in 1959 on the extent and distribution of agencies in the Nation which regularly provide home nursing care for the sick.

A survey planned last year is underway to determine the proportion of patients receiving care at home who are over 65, the services they require, and source of payment.

Extensive consultation was given to State health departments on the use of formula grants for extension of nursing services and on applications for nursing project grants. Five nursing projects were approved this year.

HOSPITAL NURSING

Studies of outpatient nursing activities to improve services were completed this year cooperatively with three university hospitals. Findings show that administration could be improved so that patients could receive more skilled care if professional personnel were relieved of messenger, clerical, and other miscellaneous duties. Consultation was given to 18 hospitals in two States on studies of nurse utilization in inpatient units, and to another State which is conducting a statewide study of nurse utilization in 25 hospitals.

FIELD CENTER FOR NURSING STUDIES

Initiating a response to a long-recognized need, the Division was able to establish, equip, and staff in San Francisco, a small nursing research field center for nursing studies and demonstrations. Studies have already been undertaken, cooperatively with the Public Health

Service Hospital there, to determine optimum staffing patterns and standards for quality of care.

MANPOWER AND RELATED STUDIES

The most comprehensive inventory of the Nation's nurse supply ever conducted will be carried out by the American Nurses' Association under contract agreements arranged by the Division. To be completed by October 1963, the inventory will provide an enumeration of nurses by city and State, as well as other data including areas of specialization. The Office of Civil Defense, Department of Defense, contributed funds to help finance this project.

The Division's biennial census of public health nurses has been expanded this year to include data on the work of nurse consultants in State and local health agencies and boards of education.

For several years communities have been offering refresher courses to reorient inactive nurses to current practice and encourage their return to nursing, but the effect of such courses had not been evaluated. This year, in cooperation with the Chicago Council on Community Nursing, a follow-up study was completed of 453 refresher "graduates," most of whom had been professionally inactive for 10 to 24 years. The study revealed that three-fourths of their number are now at work and making a significant contribution to nursing.

Inactive nurses in 12 States are being asked if they plan to return to work and under what conditions they would do so. Some 9,000 nurses in 6 States have already responded to their questionnaires.

Data from 6,000 questionnaires are being analyzed to determine what proportion of needed nursing service the 66,000 "part-time" nurses in hospitals actually supply. A tentative finding is that a part-time nurse works about 20 hours a week.

All 1,800 nurses in Wyoming are being asked by questionnaire about their employment history for a 2-year period to find out more about the factors contributing to mobility.

For the 1964 conference required by law to evaluate the professional nurse traineeship program, work is progressing on the study of educational needs of nurses.

PROFESSIONAL NURSE TRAINEESHIP PROGRAM

A total of $6,604,000 was appropriated this year to help prepare professional nurses as teachers, supervisors, and administrators.

Ninety-three schools of nursing and of public health received grants to support full-time long-term study for 2,000 nurses. The program also enabled 6,000 nurses to participate in 125 short-term intensive courses, including 10 home health institutes for 200 students.

SUPPORT OF EXTRAMURAL RESEARCH AND RESEARCH TRAINING

Awards under the Research Grants and Fellowships Program reached almost $1,900,000. Of this total $1,500,000 was for research projects and the remainder for fellowships and a new program of research training. The first grants for research training for nurses were awarded to the University of California at San Francisco, which will offer nurses preparing for research a doctoral program in sociology and to Boston University for similar programs for nurses in psychology, biology, anthropology, or sociology. Full-time predoctoral fellowships were awarded to 62 Fellows, including 26 new appointees, for study at 27 universities. Fellows are enrolled for research training in graduate departments of education, social and biologic science (including human growth and development), and biostatistics.

Funds for research supported continuation grants for earlier studies and 15 new projects—more than half of which are in clinical areas.

INTRA-AGENCY COOPERATION

To assist the Surgeon General's Consultant Group on Nursing in arriving at recommendations for the Federal role in improving nursing service, the Division supplied staff and services. Statistical and research personnel made projections of future nurse supply and demand, interpreted study data on costs of nursing education and professional school capacity, and developed an analysis of needs in research and graduate education.

Division of Air Pollution

With the swift advances of our scientific-technologic age, the protection of the air around us as a vital environmental resource has surged into a national problem of critical importance. The problem is compounded by the concentration of population in metropolitan areas.

To help combat this growing problem, the Division of Air Pollution is authorized (by Public Law 84–159) to conduct a national program with three principal features: research, personnel training, and technical assistance to States and communities.

RESEARCH

In response to the directive contained in Public Law 86–493, the Division made a thorough study of the health effects of motor vehicle emissions. The final report, entitled "Motor Vehicles, Air Pollution, and Health," incorporated the findings of many intramural research

projects and extramural research grants, and was presented to Congress in June 1962.

Continuing field studies sought to determine the relationship of air pollution to asthma, industrial absenteeism, respiratory infections, respiratory symptoms, pulmonary function, and infant mortality. Laboratory studies on health effects were expanded. Many of these explored the biological and physiological effects of air pollutants on animals. Lung cancer of a type found in humans was produced in mice exposed to ozonized gasoline following recovery from an influenza virus infection. Animals were also rendered more susceptible to respiratory infections from a bacterium causing pneumonia following exposure to ozone or nitrogen dioxide.

INSTRUMENTATION, SAMPLING, AND ANALYSIS

Further advances were made in designing instruments for sampling pollutants or assessing their effects. Improved filter devices were developed for industrial-type installations.

The National Air Sampling Network continued sampling particulates and certain gaseous pollutants. A Continuous Air Monitoring Program was established in seven cities to record continuously the concentration of seven different gases.

TECHNICAL ASSISTANCE AND TRAINING

Statewide air pollution surveys were completed, in cooperation with each State's health agency, in Colorado, South Dakota, and Kansas; and substantial assistance was given in surveys conducted by State or local health departments in eight other States.

Intensive technical courses in air pollution were given at the Sanitary Engineering Center to 193 trainees. Two field courses were presented 8 times, to 801 trainees.

GOALS

To explore ways of utilizing more widely and more rapidly technological control measures which are already available is one of the major objectives of a forthcoming National Conference on Air Pollution, called by the Surgeon General, to be held in Washington December 10–12, 1962.

The Division continues to be guided by the basic recommendations for air pollution research and time phasing which were presented in the 1960 report (by the Surgeon General's Task Group) entitled "National Goals in Air Pollution Research." The 1962 report of the Surgeon General's Committee on Environmental Health Problems (the Gross Committee) endorsed these goals but found the recommended level of support to be "minimal." The report identified the following areas as currently in need of particular emphasis: studies

of urban pollution levels; interrelationships of air pollution and the social and economic development of communities; development of automatic instrumentation for identification and measurement of air pollutants; interactions of pollutants in the atmosphere; and synergistic effects of pollutants on physical and biological systems. The Division will undertake to provide that emphasis.

For the long run, the Division's primary goals will be to learn more about the health effects of air pollution and—above all—to expedite the translation of what is now known and what is learned hereafter about air pollution into actual control measures.

Division of Environmental Engineering and Food Protection

Programs carried out in this division are directed to safeguarding drinking water, milk, and other food supply; controlling environmental dangers which arise because of urbanization; and protection against environmental risks encountered in the home, at work, while aboard common carriers in interstate travel, and in outdoor recreational areas.

MILK AND FOOD BRANCH

Technical assistance was given to all States and to industry. More than 120 seminars and training courses on milk and food sanitation attended by over 7,000 individuals were sponsored or participated in by PHS milk and food personnel.

Participation by States in the Cooperative State-PHS Program for the Certification of Interstate Milk Shippers increased for the tenth consecutive year. The *1962 Food Service Sanitation Manual* was published as a guide for both public health agencies and the food service industry in the conduct of effective food protection programs. A method has been devised for removing strontium–90 from milk by ion-exchange resins. A pilot project, cosponsored by the Public Health Service, the Department of Agriculture and the Atomic Energy Commission has been established at Beltsville, Md. Studies have been initiated on iodine–131 countermeasure proposals in cooperation with State and local health agencies and national dairy industry organizations.

SHELLFISH SANITATION BRANCH

During the year a new Shellfish Sanitation Branch within the Division was created to strengthen and emphasize this activity. Two Shellfish sanitation research centers, one at Kingston, R.I., and the other at Dauphin Island, Ala., were authorized.

During 1962, 22 shellfish producing States participated in the Cooperative Program for the Certification of Interstate Shellfish Shippers. The Fourth National Shellfish Sanitation Workshop was held in Washington, D.C., with an attendance of 148 persons including industry, State agencies, the Federal Government, and the Government of Canada.

A survey party from the Division visited the Hiroshima area of Japan at the request of the Japanese Government to review the sanitary aspects of shellfish production prior to the completion of an agreement between the U.S. and the Japanese Government covering importation of fresh or frozen shellfish between the two countries.

SPECIAL ENGINEERING SERVICES BRANCH

Two publications dealing with recreational sanitation were issued, and special efforts were devoted to solid waste engineering activities. In cooperation with the Office of Education a manual on environmental engineering for the schools was produced and distributed. A major aspect of the Branch's activities continues to be the handling of requests from individuals, organizations, and governmental agencies on problems of general sanitation.

INTERSTATE CARRIER BRANCH

In carrying out PHS regulatory functions under the Interstate Quarantine Regulations, special citations and letters of commendation for excellence in sanitation were awarded to 20 railroad and 41 vessel operating companies during the year.

The Advisory Committee on Revision of the Public Health Service Drinking Water Standards completed its work and the 1962 standards became effective April 6, 1962. Drinking water supply quality was determined nationally by analyses of 194 public water supplies in 134 cities. Studies were continued on possible relationships between drinking water quality and cancer, heart disease, and infectious hepatitis. The Division assisted Alabama University research scientists in their study of water quality and possible relationship to the incidence of arthritis; the State of Maine in a study of agricultural insecticides and water supplies; and the Department of Defense in a study of drinking water stored in public fallout shelters.

Division of Occupational Health

As American technology develops, occupational health must not only continue the application of conventional methods for the detection of old and new toxic agents, but must also extend its traditional concept in new dimensions. The combined effects of physical and

chemical agents, for example, require deeper study. The psychological component of occupational health problems must also be persistently considered. The role of the occupational environment in the cause and progression of chronic diseases, too, must be studied more thoroughly.

The establishment last year of a section of physiology and the addition of a staff psychologist will permit a new depth and direction in studies by the Division of Occupational Health. This new direction is reflected in a changing emphasis in the noise studies being conducted by the Division. Long interested in the effects of industrial noise on hearing, the Division is now probing psychologic and neurophysiologic effects.

In toxicology, a new area of exploration is opening up with recent work on a predictive test of hypersusceptibility to hemolytic chemicals and drugs. This test is based on the detection of inherited deficiencies of specific enzymes. Predictive tests may have great significance for industry, where approximately one million workers are involved in the manufacture of industrial chemicals and several times that number are exposed to chemicals through handling and use.

Field studies during the year ranged from health hazards in uranium mining to health and medical problems at airports. Field work in the revaluation of the silicosis problem in the metal mining industry was completed, and the extensive data are now being analyzed.

The strengthening of the Division's statistical competence has permitted expanded studies of occupational morbidity and mortality. Currently, mortality records of workers in the asbestos products industry throughout the country are being examined, with a detailed and searching analysis of the mortality experience of asbestos products workers in a selected State. This epidemiologic technique, using records of the Federal Bureau of Old-Age and Survivors Insurance, will be extended to other industries.

At the request of the governor, the Division undertook a study of occupational health problems and needs in the State of Washington.

As part of its program to offer short-term training courses not given elsewhere, the Division presented 16 separate courses. In addition to basic courses on industrial hygiene engineering and chemistry, four special technical courses were given on ion exchange techniques for fluoride and mercury, heat stress and its control, solvent analysis techniques, and air sampling and evaluation. Special workshops and courses were also held for local health officers, occupational health nurses, and sanitarians.

Division of Radiological Health

The Division of Radiological Health is responsible for the development of a public health program to prevent undue radiation exposure of the population. The principal components of this program are environmental surveillance and special radiation safety activities, technical assistance to the States, basic and applied research, and training of radiological health personnel.

ENVIRONMENTAL SURVEILLANCE

With the resumption of Soviet nuclear testing in September 1961 and U.S. testing in April 1962, the Division's radiation surveillance activities were accelerated and expanded. A Radiation Surveillance Center was established in the Division to provide comprehensive and continuing evaluation of environmental radioactivity data collected by the Federal-State monitoring networks.

More than 20 air sampling stations were added to the existing 45-station Radiation Surveillance Network; operation of this Federal-State activity was placed on a round-the-clock schedule. Sampling of milk, water, and food was increased to determine more specifically the amounts of radioactive materials likely to be ingested. The analytical laboratories went on double-shift operations when required in order to handle the increased work-load. Early in 1962, a third regional laboratory was opened at Winchester, Mass., to conduct radiochemical support activities for 15 northeastern States.

The Institutional Diet Sampling Program, initiated in 1960, was expanded. The purpose of this program is to secure an estimate of the total dietary intake of radionuclides by children and teenagers aged 5 to 18 years. In conjunction with this program, the Division contracted with Consumers Union of U.S.A., Inc. to sample teenage and infant diets in 30 cities for the presence of strontium 90 and other radionuclides.

In connection with the development of a Radiation Intelligence System, a pilot project was conducted during the summer of 1961 in Montgomery County, Md., to evaluate the effectiveness of household interviewing techniques in assessing radiation exposure to the population. The findings were sufficiently encouraging to warrant extension of the methodology on a national scale, utilizing the interview system of the Bureau of the Census.

The Division participated in a number of special long-term radiation safety projects during the year, including surveillance activities with Joint Task Force-8 in Hawaii and the Pacific testing area; medical and health physics support for the nuclear ship *Savannah* during its sea trial period; and off-site and on-site surveillance at *Savannah* ports-of-call.

STATE ASSISTANCE

A major step was taken to strengthen State radiological health programs with the approval by Congress of a system of matching grants to the States—$1,500,000 for the first year.

Fifty professional staff members of the Division have been assigned to State health departments; some 25 more are being trained for early State assignments.

Through the Division's diagnostic X-ray inspection and correction program, more than 50,000 dental X-ray machines in some 45 States have been inspected, either by physical survey or the Surpak (mail survey) method. Work is in progress to adapt the Surpak technique for use in the inspection of medical X-ray machines.

RESEARCH

A number of long-term research projects were initiated to determine more accurately the genetic and somatic effects of low-level radiation.

A Radiological Health Animal Research Laboratory was established at Colorado State University, Fort Collins, Colo. At this facility, a large colony (2,000) dogs will be studied for their response to low-level radiation.

The development of a Registry of Radiation Pathology will further the knowledge of radiation effects through the study of morbid anatomy. The Registry has been established under the auspices of the Research Council of the National Academy of Sciences and is located in the Armed Forces Institute of Pathology.

Other projects of long-term significance include a tri-State study of congenital malformations, a joint study of radiation effects on primates, a nationwide bone sampling program for radio-strontium analysis, and a midwest environmental health study.

In addition to intramural and contract research, the Division completed its first full year of managing a system of extramural grants formerly funded by the National Institutes of Health. There are now 66 active grants funded by DRH in the amount of $1,196,000.

TRAINING

For the second year, the Division provided grants to universities for the training of radiation health specialists. Congressional support of the program was increased to $1 million in fiscal year 1962, enabling assistance to 20 schools.

The Division also stepped up its own training programs: short-course training was provided for more than 1,100 public health personnel in government and industry.

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Division of Water Supply and Pollution Control

Since the turn of the century, while the national population has a little more than doubled, there has been an eightfold increase in water use. Present use of 325 billion gallons a day is expected to double by 1980 and triple by the year 2000. Wise management of the water resource has therefore assumed a position of number one social-economic importance. Prominently involved is the abatement, control, and prevention of pollution, for there is now nearly six times as much pollution in the Nation's surface waters as 60 years ago.

Since its beginning in 1948, this program has emphasized Federal-State-local cooperation under a declared policy to "recognize, preserve, and protect the primary responsibilities and rights of the States." The Water Pollution Control Act goes beyond the usual public health legislation, directing the conservation of "waters for public water supplies, propagation of fish and aquatic life and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses." Thus it assigns to the Department of Health, Education, and Welfare a major role in conservation and water resource development. During the first year under major amendments (July 1961) to the Federal Water Pollution Control Act the Division's program has nearly doubled in size and scope.

CONSTRUCTION GRANTS, PROGRAM GRANTS

As a result of increased funds for construction grants, fiscal 1962 set an all-time record with a 22 percent increase over the preceding year in municipal sewage treatment construction. Approved were 754 projects to which the Federal grants contributed $65 million, and local governments $332 million, a ratio of about 1–5. In the 6-year history of this grant program 3,500 awards totaling $290 million have been made to support municipal funding of $1.4 billion. All this will provide sewage treatment for 35 million people and improve water quality in over 38,000 miles of streams.

Despite this massive effort, there are still 5,290 U.S. communities of 43 million total population needing new, enlarged, or improved sewage treatment facilities.

Grant funds to State and interstate agencies, increased from $3 million to $5 million per year under the 1961 legislation, have enabled most of the States to expand their water pollution control programs. Stimulated by the grants, State funding has risen from $4.2 million in 1956 (before grants) to $7.6 million in 1961 (under the $3 million authorization) to $9 million in 1962 (under the $5 million authorization). Water pollution control budgets of 33 States showed substantial increases in 1962 over 1961.

BASIC DATA

To maintain continuous intelligence on the nature and extent of pollution, the National Water Quality Network of major watercourse sampling stations was enlarged from 91 to 121, with 300 as the ultimate goal. Thus are regular checks made on more than 15 physical and chemical parameters in water, including radioactivity, organic chemicals, coliform organisms, temperature, alkalinity, plankton, dissolved oxygen, and others. Experiments in electronic measuring and recording promise completely automatic network monitoring of waterways in the early future.

Continuing data are also collected, analyzed and published on water and waste treatment facilities and needs, on bond issues to finance these public works, on contracts awarded for the construction of such facilities, and on pollution-caused fish kills. Completed during the year was the first nationwide inventory of Federal establishments to determine the extent of pollution coming from them.

ENFORCEMENT

Five enforcement actions (two at request of the Governors of Washington and Michigan under the new intrastate provision of the Water Pollution Control Act) were initiated as follows: (1) Puget Sound, Wash.; (2) Detroit River, Mich.; (3) Raritan Bay, N.Y.-N.J.; (4) Mississippi River, Clinton Area, Iowa-Ill.; and (5) North Platte River, Nebr.-Wyo.

Additional conference sessions were held in pending cases: (1) the North Fork of Holston River, Va.-Tenn.; and (2) the Colorado River Basin, Ariz.-Calif.-Colo.-N. Mex.-Nev.-Utah-Wyo.

The three-step Federal enforcement procedure—conference, public hearing, and court action—has been initiated in 18 situations in the history of the program. In only one case has the third (court action) step of the enforcement procedure been necessary.

RESEARCH AND TRAINING

Research activities include both intramural projects at the Robert A. Taft Sanitary Engineering Center, Cincinnati, and extramural research projects supported by grants in some 80 universities and other institutions in about 40 States. Together they seek answers to problems in wastes origin; more efficient and economical characterization, treatment and disposal of wastes; improved methods in water quality measurement; and the supplementation and conservation of water supplies. A major project in advanced waste treatment to approach 100 percent purification of wastes, is continuing.

Research grants awarded during the year supported 159 projects totaling $2.67 million, including 1 in support of the first international

conference on water pollution research scheduled for September 1962.

Newly implemented in fiscal 1962 were fellowships totaling $98,000 to scientists and engineers at academic institutions in 16 States and 1 foreign country; 11 demonstration (applied research) grants totaling $300,000 in 10 States; and 23 grants totaling $693,000 to institutions in 13 States to establish or expand training programs in the field of water supply and pollution control.

Sites were selected for four of seven regional laboratory and research facilities authorized in 1961.

COMPREHENSIVE PROGRAMS, INTERAGENCY COORDINATION

Comprehensive water pollution control programs to protect and conserve water quality for all uses for a projected period of 50 years have been initiated or expanded in basins of the Columbia River, Great Lakes and Illinois Waterway, Susquehanna River and Chesapeake Bay, Delaware River, Ohio River, and Colorado River. In addition, field study projects on problems of national significance have been established with respect to the effects of pesticides on water quality and of recreational uses on water supply reservoirs.

Coordination of programs with other Federal water resource development agencies continued. Technical services under such interagency agreements represent a major and expanding activity. Of particular significance in Federal reservoir construction are requirements of the Water Supply Act of 1958 and of the 1961 amendments to the Water Pollution Control Act requiring, respectively, a determination of municipal and industrial water supply needs and stream flow regulation for quality control. Serving much the same as a consulting engineer, the Division has prepared reports for the Federal construction agencies on 97 projects, and has 209 others in progress or scheduled.

ADVISORY BOARD

The nine-member Presidentially appointed Water Pollution Control Advisory Board continued its policy of holding certain of its meetings outside of Washington to provide public forums to assess regional problems and progress in water pollution control.

The National Institutes of Health

National Institutes of Health continued to grow and reorganize as necessary to meet its expanding role in support of biomedical research. At the period's end, plans were completed for establishing the new Division of Research Facilities and Resources. Designed to centralize administration of some of NIH's major research support activities, the new Division will oversee programs for: health research facilities con-

struction, support for primate centers, general clinical research centers, special resources centers, and general research support grants.

In this period a new branch was set up in the Viruses and Cancer Program to help fulfill the broadened program for study of virus-cancer relationship, and the Cancer Chemotherapy National Service Center was reorganized to quicken the search for drugs useful in cancer treatment.

At the request of the President, legislation to convert the Division of General Medical Sciences to Institute status and to establish a new National Institute of Child Health and Human Development was introduced early in this period.

The new Institute—which would incorporate both the Center for Aging Research and the Center for Research in Child Health—would conduct and support research and training relating to child health and human development, particularly the special health problems of children and aged persons. Its research would cover the gamut of development and adaptation beginning with reproduction and terminating in old age.

Increased costs of large-scale clinical research facilities and enlarged manpower needs have caused a sharp upswing in expenditure per professional worker. Anticipated large-scale population studies; use of more complex, automated instrumentation; and expanding U.S. involvement in international medical research are expected to swell the requirements for highly skilled technicians and professionals. In the decade, 1960–70, it is expected that the existing pool of trained biomedical investigators will increase each year by 4,500, in contrast to the 3,500 annual increment in the 1954–60 interval.

To help achieve this goal, plans were made for a steady growth of training facilities, so that, by 1970, the medical research manpower pool would be doubled. Steps taken include:

(1) Expansion of the pre-doctoral fellowship program to attract research students in the medical sciences.

(2) Expansion of the medical student research program, which exposes selected undergraduate students to research.

(3) Extension of the post-doctoral fellowship and graduate training programs to provide advanced training for research.

(4) Provision of support to graduate schools.

(5) Increase in training of foreign nationals in the United States and of U.S. citizens for research overseas.

Growth has now brought the training program to a point where a simpler mechanism is needed within NIH to help training institutions plan, finance, and conduct a more orderly program of science education. Such education must look to the long-range needs in medical research manpower: a large, strong group of medical and biologi-

cal scientists not limited in training to a specialized aspect of a disease problem, but so schooled as to be able to meet unpredictable problems.

Communicating results of research is, ultimately, a function of education and training. The continued growth of knowledge and technology requires incorporation of new findings into the educative scheme of the health sciences. NIH programs continue to have profound influence upon education and training in these sciences. More than half of the $400 million in research grants made available during this period through NIH has gone to medical, dental, and other health professional schools of the country. In addition, NIH devoted over $135 million to direct support of fellowships, training grants, and other training activities, many of which seek improvement in content of the undergraduate and graduate curricula and effective communication of current research information to health practitioners.

NIH maintained close liaison with the State Department in carrying out its research obligations under the International Health Research Act of 1960 (which for the first time explicitly established the authority of the Public Health Service to support research and related activities in foreign countries) and under Public Law 480 (which authorizes use of excess U.S.-owned foreign currencies for the mutual benefit of those countries and the United States).

Public Law 480 funds have thus far been made available in nine countries: Brazil, Burma, Egypt, India, Indonesia, Israel, Pakistan, Poland, and Yugoslavia. In these countries, NIH has developed a total of 58 proposals for collaborative research projects, covering an extensive range of pertinent subjects.

Since NIH's foreign program is primarily designed to improve health in the United States, any grant under this program must necessarily be of benefit to the United States as well as to the host country. The obligation to the latter, however, is a continuing one and NIH has been giving increasing attention to the effects of a grant on the medical research of a recipient country.

To facilitate more effective administration of foreign grants through increased mutual knowledge and understanding of the problems, NIH's Office of International Research established a small unit in Paris during this period, as an extension of the office of the Science Attaché housed within the American Embassy, and plans were being made for setting up two or three similar units in other countries.

Steady annual increases in support since 1946 have produced, as of the end of this reporting period, a research grants program of $400 million, supporting more than 15,000 research projects conducted in almost 1,500 institutions throughout this country and abroad, and covering the full gamut of biomedical research. While the major portion of the program continues to aid investigations originating in

grantee institutions, a significant number of grants sustain programs (cancer chemotherapy, psychopharmacology, and other collaborative projects) which reflect initiative of NIH staff.

Careful review and reassessment have been undertaken of policy and operational procedures of the NIH extramural programs, which, for the past 5 years, have experienced unprecedented growth. The mutual dependence of Federal Government and Institutions of higher learning resulting from this growth necessitates examining the instruments—the grant and the contract—which have been the basis of their relationship.

The programs of the National Institutes of Health have utilized almost exclusively the grant as the basic means of providing support for research and research training activities carried out in universities and institutions of higher learning. Although it has been acknowledged that there are circumstances where a contract is preferable to a grant—as in sponsoring research by a profit-making organization—the grant will continue as the basic instrument for sponsoring research. A contract—in essence a procurement instrument—is a promise to deliver a specified product for a predetermined price. It makes a recipient of funds an agency of government, and thus subject to the full extent of restrictions that bear upon use of Federal funds by a Federal department and its agents.

A grant, on the other hand, is a conditional gift, a bestowal in response to a request, representing a mutual pursuit by grantor and grantee of a common objective. The grant establishes a relationship of trust; it imposes on grantor and grantee the obligation to act in the public interest. In accepting the grant, the grantee assumes the obligation to use the funds for their designated purpose and with the same probity and prudence with which that institution uses its own funds. It is under conditions of mutual trust and restraint made possible by a grant that scientific freedom can best be guaranteed.

Improved administration of grants and tighter control over monies granted (more detailed accounting and more precise audits) have been introduced with the purpose of furthering the quality and productivity of medical research, while maintaining freedom and flexibility for investigator and institution.

In this period, the Research Career Award Program was put into effect. Consisting of two groups—Research Career and Research Career Development Awards—the program is designed to assure younger as well as more mature investigators some measure of support early in their careers, thus permitting individuals of superior potential to reach their maximum productivity.

At the end of the period, there were a total of 50 General Clinical Research Centers. Authorized by Congress in 1960, the Centers pro-

vide a special setting for unrestricted but significant clinical investigation in medical schools and other medical research institutions, permitting precise controls and observations of the patient, his diet, therapy, and necessary tests and procedures.

Institute of Allergy and Infectious Diseases

This Institute is concerned with a formidable array of diseases, such as measles, asthma and hay fever, hepatitis, viral encephalitis, smallpox, streptococcal and staphylococcal infections, tuberculosis, poliomyelitis, rabies and others. Steady progress is being reported in every area, particularly in the field of upper respiratory infections, our most prevalent illnesses.

Due to accomplishments in clarifying the causes of respiratory diseases, the opportunity is now present to design protective vaccines. During the past year, the Vaccine Development Program was initiated. A number of contracts have now been awarded to non-Federal research groups experienced in developing and testing vaccines. This major collaborative effort to design vaccines against the widespread respiratory infections often grouped under the term "common cold" is also aimed at serious complications of colds, such as viral pneumonias.

One of the infectious organisms being employed in the experimental vaccines is the "Eaton agent," an important cause of pneumonias in children and adults. As a step toward culturing this formerly little-understood microbe for vaccines and for diagnosis of illness, Institute investigators collaborated with specialists at the Wistar Institute in Philadelphia and succeeded for the first time in growing it in cell-free media. They also resolved the question of the precise nature of this agent, previously thought to be a virus, by identifying it as a member of the obscure pleuropneumonia-like organisms group. This is the first "PPLO" linked with any human disease. The new finding provides the rationale for tetracycline therapy of the infection.

The Institute also has established a Viral Reference Reagents Program of wide import. It will provide standardized reagent materials which eventually will permit virus researchers throughout the world to recognize the viruses they isolate and compare their results.

The Institute continued its assessment of resistance of malaria strains to widely used drugs and participated in development of new antimalarials. Its scientists developed a sensitive and reliable blood test for observing antibody production in response to malaria infection. This may help identify previously undetected human reservoirs of the disease which afflicts hundreds of millions of people, imposing a heavy tribute on world health and economy.

Institute of Arthritis and Metabolic Diseases

One of the most significant and dramatic scientific accomplishments of the year—representing a major breakthrough in the chemistry of heredity—was the partial "cracking" of the so-called genetic code by Institute biochemists. This code involves the two hereditary chemicals, DNA and RNA, and provides the means by which living cells store and transmit genetic information. In collaboration with researchers from the University of California, these scientists have demonstrated that a universal genetic code may control the development of a variety of organisms. These findings, illuminating certain aspects of the systematic reproduction of all living matter, have attracted world-wide attention.

From continuing studies of rheumatoid arthritis it has become apparent that both immunologic and genetic aspects are involved in this crippling disease. During the past year, major emphasis has been given to the immunological mechanisms, particularly those relating to the so-called rheumatoid factors.

The rheumatoid factors are found in the blood of most rheumatoid arthritics, and recent studies of their source as well as their physical, chemical, and biological characteristics suggest they are large antibodies produced as a body defense against an altered type of gamma globulin in the blood.

Under continuing investigation are such aspects of the rheumatic diseases as genetic and environmental factors. Institute scientists making a family study of patients with Sjogren's syndrome, a disorder often accompanied by rheumatoid arthritis, have found that normal blood relatives of patients often have a variety of hidden or ignored signs of the disease, thus indicating a genetic predisposition.

Advances have also been made in management of the various forms of arthritis. Institute scientists have found, for example, that a high calcium diet may offset further "bone-thinning" that often occurs in patients treated with the corticosteroid hormones.

Striking progress was made in studies of gout, another of the rheumatic disorders. Scientists at the Institute were able to demonstrate that deposits of sodium urate crystals are the cause of the acute inflammation and painful and disabling attacks of gout. They have shown also that the painful symptoms of gout probably result from the metabolic activity of white blood cells in the inflamed joint, and that the familiar drug colchicine decreases the activity of these cells, and thus interrupts the gouty attack.

In diabetes research, one of the most promising advances of the year has been the development by grantees at the Joslin Clinic in Boston of special tests which can reveal the "pre-diabetic" patient

before he develops frank diabetes and is discovered through current tests.

Encouraging results have come from studies of several other serious but less known diseases including Wilson's disease, marked by accumulation of excess copper in the body; a newly-discovered metabolic disease, histidinemia, which may cause speech and hearing defects in some children; and an uncommon but serious form of blood disease occurring in newborn infants, which has been found to result from blood-platelet differences in mother and offspring.

The Institute has continued to extend its extramural research program in gastroenterology. Grantees at the University of Minnesota Medical School have been able to produce rapid healing of duodenal ulcers in a substantial number of patients by freezing stomach mucosa for short periods of time. Freezing is done by a subzero cooling liquid circulated through a balloon placed in the stomach. Further studies are needed, but the new technique may avoid the need for surgery in many duodenal ulcer cases. Another advance in the field of gastroenterology has been the development of a unique, flexible endoscope by a grantee at the University of Alabama Medical School. The device has a revolutionary optic system, employing fiber optics, which permits examination of gastrointestinal areas not previously accessible with conventional instruments.

Cancer Institute

There are, according to a new estimate, approximately 105 basic kinds of cancer, and each presents a somewhat different set of problems in research on causes, detection and diagnosis, and treatment. Accordingly, an increasing share of the research conducted and supported by the National Cancer Institute is focused on specific kinds of cancer and on the individual who has cancer.

During the year, the 25th since the establishment of the National Cancer Institute, its programs were strengthened to take maximum advantage of the resources provided by the Congress and to capitalize on the latest experimental and clinical findings. An effort was begun to coordinate and accelerate research on treatment of acute leukemia patients and on the relationship of viruses to leukemia. A contract-supported program set up to provide essential supplies and services for virus-cancer investigators moved rapidly toward full-scale operation. A series of steps was taken to increase the effectiveness of the nationwide cancer chemotherapy research program, which the National Cancer Institute administers. Experimental and epidemiological studies of potential cancer hazards in the environment were expanded. And finally, the investment in efforts to develop improved methods of diagnosing cancer was increased.

INSTITUTE RESEARCH

The advantages of orienting research toward specific kinds of cancer were exemplified by advances made in caring for patients with acute leukemia. Thanks to the work of scientists in many places, gradual progress has been made in drug treatment and supportive therapy, with the result that 50 percent of acute leukemia patients now live a year or more from diagnosis. The results of clinical research during the year raised the prospect of an additional increase.

The leading achievement was a reduction in the risks of fatal hemorrhage and infection, complications that often take the lives of acute leukemia patients before drug treatment has had time to take effect. Transfusions of pooled platelets from numerous donors proved highly effective in preventing and controlling hemorrhage.

Tests of two new drugs rang another hopeful note. One of them, vincristine, a periwinkle plant extract, showed promise in acute lymphocytic leukemia, the type that children usually have, and in lymphomas, such as Hodgkin's disease and lymphosarcoma.

The other new drug, a synthetic compound known as methyl-GAG (for methylglyoxal-bis-guenylhydrazone), though its side effects required careful attention, induced remissions of acute granulocytic leukemia more often than any drug previously available.

A promising approach to direct studies of the role of viruses in human leukemia materialized early in the year as a result of work with a virus-induced leukemia of mice and rats. An electron-microscope study provided the key by revealing virus particles in the blood of animals bearing the experimental leukemia. The same technique is now in use for studies of blood samples from acute leukemia patients.

Also in virus research, a new experimental leukemia virus was isolated that causes recognizable effects in mice in 7 days, thus making available a system potentially useful for rapid testing of new drugs.

There were also a number of noteworthy accomplishments in research on other aspects of cancer. The effects of a gene on normal growth and on the occurrence of liver tumors in mice of an inbred strain were eliminated by removing the pituitary gland from animals 1-to-2 months old. Thus, the mice were prevented from growing normally, and when they were 16 months old none had liver tumors, though 60 percent or more would ordinarily have had them at that age. Several other genes are also known to influence the occurrence of certain tumors in inbred mice in addition to governing the inheritance of normal characteristics. A broader understanding of these effects and of the role of normal growth processes in the genesis of cancer is being sought.

GRANT-SUPPORTED RESEARCH

A long-term investigation of the transmission of a virus that causes leukemia in chickens turned up evidence that chickens born with the virus, unlike those infected later in life, became tolerant of it; that is, they did not form antibodies to it. The virus survived and was reproduced in their bodies as long as they lived. The virus passed from hens to their offspring during pregnancy; roosters played no role. Chickens that were not born with the virus picked it up from those who were. Thus, the virus spread through an entire laboratory flock. Though few chickens developed leukemia, the incidence was six times as high in those born with the virus as in those infected by contact.

Evidence was obtained that virus-caused tumors can be reproduced with nucleic acid isolated from them even when they appear to contain little or no whole virus. This was one achievement in experiments with virus-induced tumors in rabbits. A similar approach is being used for human cancer studies at the National Cancer Institute and elsewhere. Also, an experimental vaccine was developed that increased the frequency with which virus-induced benign tumors in rabbits regressed instead of becoming malignant.

A monkey virus that contaminated some lots of polio vaccine and caused cancers when tested in newborn hamsters was found to cause abnormalities in adult human cells in tissue culture.

An abnormal chromosome, called the Philadelphia chromosome, previously seen in white cells from a few patients with chronic myelocytic leukemia, has been found in a high percentage of untreated patients. It disappears from the blood after treatment. That it is related to the genesis of leukemia has yet to be determined; no flow like it has been seen regularly in other types of leukemia, nor has the Philadelphia chromosome appeared in all cases of the chronic myelocytic type.

Encouraging preliminary results were achieved with two investigative methods of therapy for lung cancer, in which the prognosis has long been poor. Published reports on work with small numbers of patients indicated that high-voltage cobalt-60 radiation prior to surgery made operations possible in some cases originally deemed inoperable, and that combined radiation and treatment with a drug, AB–132, brought about marked regression of inoperable cancer. Both approaches are being studied in larger groups of patients.

New evidence that exposure of pregnant women to X-rays in diagnostic doses makes their children's risk of dying from cancer abnormally high came from a survey of births in 37 large hospitals from 1947 to 1954.

One of the year's outstanding accomplishments by a grantee won recognition from scientists everywhere for its significance in the understanding of one of the basic phenomena of life—the immune response, which helps protect man against disease and causes him to reject transplants of tissue from any donor except an identical twin.

Institute of Dental Research

Laboratory research reaffirmed previous findings that, as an infectious and transmissible disease, experimental dental decay is far more specific than has been realized, and is highly dependent on the critical interaction between host, diet, and microflora. Knowledge that dental decay could be induced in a strain of caries-inactive hamsters by oral inoculation of a specific strain of streptococcus opened the way for studies to determine the feasibility of vaccines for immunizing test animals against tooth decay. Although it would be premature at this time to apply any of these findings to humans, the Dental Institute plans to direct a major emphasis to clinical studies.

Studies of nutrition and dental caries emphasized changing concepts of the dietary etiology of dental caries. Focus on the necessity for calcium and the avoidance of sugar was widened to include such diet factors as the quantity and quality of protein, the role of lysine, and the cariogenicity of certain heat-processed food.

Gains were made in new knowledge of the submicroscopic structure, and physical and chemical properties of teeth. In research on periodontal disease, a better understanding of calculus formation was achieved through use of new techniques of germfree study, electron diffraction, and X-ray and electron microscopy.

Significant results of studies of hereditary conditions with oral manifestations included: description of a heretofore unrecognized hereditary disease (benign intra-epithelial dyskeratosis) affecting the conjunctiva and the soft tissues of the mouth; description of a new neurological condition inherited as a recessive trait which, in addition to causing spasticity and certain skin changes, also causes defects of speech and chewing; and clarification of mechanisms of abnormal oral development based on longitudinal twin studies and analysis of family data.

A new clinical program was launched in a multidisciplinary approach to physiological studies of laryngeal and pharyngeal anatomy and function in children, and cleft-palate patients with speech and feeding disorders.

GRANTS AND AWARDS

Basic studies bearing on periodontal disease with special emphasis on the physiology of occlusion and the responses of tooth-supporting

tissues to traumatic or other injurious influences are being pursued by grantees at Eastman Dental Dispensary, Rochester, N.Y. Grantees at the University of Kentucky Medical Center are studying chromosomal abnormalities as possible causes of a cleft palate in association with one or more unrelated physical defects, and the distribution of such genetic defects in families of children with cleft palate.

Increased grants were made to non-Federal institutions to train clinical and basic science personnel for research, and support was continued to dental schools for training undergraduate dental students to work with chairside assistants.

Heart Institute

In 1962, the attack on the complex of disorders of the heart and blood vessels was accelerated by strengthened programs of the National Heart Institute in support of research and training, and the aid provided, through its appropriation, for community programs.

In atherosclerosis, the complicated processes of fat metabolism were the focus of productive investigations, and cholesterol continued to receive much attention. Heart Institute studies have defined the probable sequence of steps involved in cholesterol synthesis and identified the intermediate products evolved; this basic knowledge has been of notable importance and current pertinence with relation to cholesterol-lowering drugs.

Recent findings in other basic studies suggest that the body may regulate its serum lipid levels through nerve, hormonal, or other mechanisms that affect triglyceride synthesis or breakdown, and that one of the most important regulatory factors may be glucose. Glucose appears to be essential to the synthesis of triglycerides, the form to which fatty acids absorbed from the circulation or synthesized from other substances are converted for storage in adipose tissue. Without glucose, triglycerides broken down to release their fatty acids to supply metabolic fuels could not be replaced.

In hypertension research, the study of amines received much attention since a number of these substances are powerful stimulants and blood-vessel constrictors, and several are thought to be involved in the mechanisms by which the body regulates blood pressure. One of these, norepinephrine, is of particular interest because it seems to be the key to the action of many drugs now used to treat hypertension.

Alpha methyl dopa is a new drug, still in the experimental stages, that appears to act by blocking the storage sites of norepinephrine at nerve terminals. Findings reported during the year suggest that the drug may have advantages over other blood-pressure-reducing agents.

Questions of toxicity and tolerance have not yet been completely answered, however.

Another experimental blood-pressure-lowering drug undergoing clinical tests is MO–911.

Among advances in diagnosis of heart attacks was the modification and improvement of precordial scanning as a simple and sensitive technique for detecting left-to-right shunts, one of the most frequently occurring signs of congenital heart disease. The technique has also been adapted to detect acquired valvular defects and for measuring heart output, although catheterization is required for these.

Findings from epidemiology studies further defined factors associated with an increased risk of developing coronary heart disease. Among these factors are an elevated serum-cholesterol level, elevated blood pressure, enlarged left ventricle, cigarette smoking, and low vital capacity. Accumulated data indicate that combinations of factors increase susceptibility, so that those at high risk can now be determined to some degree.

GRANT-SUPPORTED RESEARCH

Successful long-term use of implantable artificial cardiac pacemakers in patients with Stokes-Adams syndrome was reported by scientists at Harvard University and at the University of Minnesota. In this syndrome, the heart's conduction system—which originates and transmits the electrical impulses causing the heart to beat—is damaged by disease and partial or complete heart block may result. Regular heart rhythm can be restored with use of an artificial pacemaker, set at a pace suitable for normal activity, and then implanted under the skin to remain until its batteries require replacement in about five years.

A significant achievement was the development by investigators at Marquette University of instrumentation and techniques for accurately locating the heart's specialized conduction system during open heart operations.

Investigators at Jefferson Medical College reported that blood stored in acid-citrate-dextrose solution, the most widely used anticoagulant and preservative for banked blood, can be restored to a nearly normal biochemical state by a combination of anion and cation exchange resins.

Serum cholesterol levels can be reduced by thyroid hormones, but the doses needed to maintain low serum cholesterol also increase basal metabolic rate and may cause angina pain in heart patients. In doing studies at the University of Louisville it was found that several synthetic analogs, near relatives of thyroxine, appear able to hold serum cholesterol down without elevating basal metabolism in patients with normal thyroid function.

Angiotensin II, a blood-vessel constrictor that results from the action of a kidney enzyme called renin, has been suspected of playing an important role in essential hypertension, since blood angiotensin levels have been reported higher in patients with high blood pressure than in others. Findings from recent radioactive tracer studies by scientists at Mount Sinai Hospital, New York City, indicate that the metabolic inactivation of angiotensin proceeds more slowly in hypertensives than in normotensives, and may account for the higher concentrations found in hypertension.

Improved techniques for accurately locating clots and lesions obstructing coronary arteries and for preventing constriction of small blood vessels at the site of surgical incision have increased the safety and effectiveness of surgery to remove such atherosclerotic obstructions.

Impressive results continued to be reported by investigators at Baylor University and other institutions in surgical treatment of certain clots and atherosclerotic deposits that prevent an adequate supply of blood from reaching the brain.

Institute of Mental Health

Progress in the field of mental health has proceeded at an accelerated pace during recent years and important advances were made during the past year in the various Institute programs. The Institute's activities have included both those designed to develop more effective methods of treating mental and emotional disorders, and those which attempt to find ways of preventing such disorders.

The Institute's program was given impetus this year through the wide public interest aroused by *Action for Mental Health*, the Report of the Joint Commission on Mental Illness and Health. The Report, sharply focusing attention on needs in mental health and the promise for control of the mental disorders that lies in knowledge now at hand, has stimulated the initiation of new programs for action at community, State, and Federal levels. Its impact will increasingly be felt on mental health programs in the years ahead.

GRANT-SUPPORTED ACTIVITIES

The Institute's grant program is designed to support a complex variety of research programs, mental health projects and training activities—all ultimately aimed at the solutions of mental illness in its many forms.

More than a third of the grant program was concerned with the major psychosis, schizophrenia, which accounts for more than half of all patients hospitalized for mental disorders in the United States. Research covered a wide range of studies, including testing of prom-

ising therapeutic measures; the collection and analysis of trends in hospital populations, as well as programs for advanced training of personnel; and the development of hospital, clinic, and community services for diagnosis, treatment, and rehabilitation.

Over 18 percent of grant funds were directed to the important problems of mental retardation, juvenile delinquency, and other abnormal and behavioral problems.

Grant support in the area of alcoholism and drug addiction has made possible the relocation at Rutgers of the Center of Alcohol Studies, and such investigations as thyroid therapy for acute alcoholic stupor, studies on detection of problem drinkers among industrial employees, and programs for the rehabilitation of drug addicts.

The past year was a period of major development in the Institute's international research grant program, and a continuing expansion of this program is seen for the next several years.

The Psychopharmacology Service Center was engaged in stimulating and facilitating grant support of research in studies of drugs used in mental illness.

To facilitate dissemination of information on developments in psychopharmacology, an abstracting service was initiated. The publication, which provides coverage of world-wide current literature in this field, fills an important need in bringing together relevant information on drugs for the benefit of clinicians and scientists approaching the subject of psychopharmacology through many disciplines.

BASIC AND CLINICAL INTRAMURAL RESEARCH

Extensive research continued in the synthesis, degradation and distribution of the biogenic amines in the body and brain, in an effort to determine whether abnormalities in the metabolic processes may play some role in the etiology of mental illness, particularly schizophrenia.

The studies begun last year of factors affecting mobilization of free fatty acids (FFA) in schizophrenic and normal patients were extended. The results indicate that some schizophrenics do not exhibit a normal fall in FFA in response to insulin.

A major continuing project in the area of schizophrenia research is the study of families. NIMH investigators, for example, have found that the presence and variety of schizophrenic illness can be predicted from the form of thinking in the rest of the family in which the patient has developed. The findings suggest an environmentally determined rather than a gene-determined interpretation of schizophrenic thought disorder.

Testing the addiction liabilities of new narcotic drugs remains an important part of the Institute's research program at the Addiction

Research Center, Lexington, Ky. A search for analgesic compounds with effects differing from morphine has been the subject of intensive research at the Center in the past years. A new series of compounds, the indanes, has now become available. These indanes differ from agents previously studied in that they are analgesic in animals and in man.

The intermediate metabolism of psychoactive drugs, and the individual differences in their handling in the body, represents a principal research interest of the Institute's Clinical Neuropharmacology Research Center at St. Elizabeths Hospital, Washington, D.C.

COMMUNITY SERVICES AND PROGRAM DEVELOPMENT

The development of comprehensive community mental health programs was encouraged through grants-in-aid to the States, professional and technical assistance to States through consultation, surveys of special mental health problems, conferences, demonstration projects, and support of research projects designed to develop improved methods of diagnosis, care, treatment and rehabilitation of the mentally ill.

The Institute also extended its program development activities in special problem areas of significance for mental health—rehabilitation, aging, juvenile delinquency, mental retardation, suicide prevention, alcoholism, drug addiction, among others.

The Institute played a major role in activating a large demonstration project, Mobilization for Youth, designed to attack the problem of juvenile delinquency on the lower east side of Manhattan.

TRAINING

The Institute's training programs were widened this past year through increased support for psychiatric training of general practitioners, including both specialized residency training, and postgraduate education in psychiatry to enhance general practice skills.

Institute of Neurological Diseases and Blindness

To a decade of progress, observed by the Institute this year, may be added important gains in the Institute's programs toward increased prevention, control, and cure of disabling neurological and sensory disorders.

COLLABORATIVE PERINATAL RESEARCH

Useful and encouraging clues have begun to emerge from the Institute-supported mother-child study aimed at shedding light on the relationship between events of pregnancy, birth, and the first month of life, and the occurrence of brain-damaging disorders of infancy and childhood.

Analysis of information collected on 7,500 of the more than 25,000 pregnancy studies to date at the 15 collaborating medical centers has confirmed that expectant mothers who smoke are more likely to give birth to a premature infant than the nonsmoker. This finding is significant because prematurity is an important factor in brain damage and infant deaths.

Prematurity has also been linked to some symptomless infections in the expectant mother. This finding underscores the need for improved diagnosis and early treatment of maternal infections during pregnancy.

Special related studies conducted at some of the collaborating hospitals have also proved fruitful. For example, an Institute grantee developed a simple, inexpensive screening test which permits early detection of the brain-damaging but treatable disorder known as phenylketonuria, or PKU.

PRIMATE RESEARCH IN PUERTO RICO

The broad study of perinatal problems in humans is paralleled by studies of monkeys at Institute laboratories in Puerto Rico. Now in its sixth year of operation, the project has established conclusively that birth asphyxia causes brain damage resulting in syndromes resembling cerebral palsy and mental retardation in humans. Current research is aimed at developing means of prolonging survival of asphyxiated monkeys and preventing brain damage.

MULTIPLE SCLEROSIS, MUSCULAR AND NEUROMUSCULAR DISEASES, EPILEPSY

Further strides were made toward understanding the biochemical process by which myelin, the protective sheath around nerve fibers, is formed and is also caused to disintegrate. Observations of diseases in animals which have strikingly similar resemblances to multiple sclerosis support the theory that this and other disorders which rob nerve fibers of this protective sheath may be due to a latent viral agent. Also highly suspect as a possible cause is auto-immunization or sensitivity to certain substances normally occurring in brain tissue.

This year scientists identified a substance which induces an experimental disease in animals (allergic encephalomyelitis) as a small basic protein found in the nerve sheaths in the brain. Moreover, this same substance not only induced the disease but was utilized to suppress it as well. In similar studies of allergic encephalomyelitis in tissue culture, grantees helped demonstrate that an antibody-like factor in the blood of multiple sclerosis patients destroys myelin.

Developments in the intriguing field of immunology, especially in regard to auto-immune diseases, have also had an impact on neuromuscular research. Preliminary results reenforce earlier predictions

that myasthenia gravis might be an auto-immune disease. Grantees have determined that a constituent of serum, called serum complement, from myasthenic patients varies in concentration in relation to the severity of the symptoms. The constituent is involved in immune reactions of the blood.

Encouraging preliminary reports were made on the use of a new anticonvulsant drug, R594, in children with certain types of epilepsy previously resistant to drug therapy. In other studies of the clinical course and therapeutic evaluations, grantees have found brain-wave recordings to correspond to the type, degree and localization of seizure.

VISION, HEARING, HEADACHE

Research progress in the Institute's laboratories and at other research centers promises to aid in controlling and treating eye disorders which affect millions, especially older persons. In glaucoma, the second leading cause of blindness in the United States, Institute scientists identified an important enzyme in the fluid formation within the eye which causes increased pressure. This basic discovery is expected to pave the way to the clinical use of a new type of drug to inhibit formation of the excess fluid and prevent damage to eye tissue.

Last year an Institute trainee discovered a cure for herpes keratitis, or "winter pink eye," by applying an antiviral drug to the treatment of this common inflammatory eye disorder. The treatment rapidly cleared the acute inflammation without scarring the cornea. When the treatment is perfected, many people may be saved from blindness.

Outstanding basic research by an Institute grantee has established the mechanisms by which sounds received in the inner ear are conveyed to the brain. These findings make it possible to determine whether deafness is caused by damage to the ear or to the portion of the brain concerned with hearing.

To the countless sufferers from migraine headache, the release in 1962 of a research drug to physicians generally for prescription use brought hope that effective prevention was at hand. This drug was carefully checked by a "double-blind" technique by an Institute grantee and other specialists, and its minor side effects cautiously evaluated. Called methysergide maleate, the compound may not be used for all patients, but under medical guidance is proving helpful for many patients as a preventive.

Grantee findings that persons subject to migraine headaches had about twice the incidence of abnormal brain-wave patterns as other persons encouraged treatment with anticonvulsants. The reported results have been favorable in 80 percent of a highly selected group of cases.

Division of Biologics Standards

This Division is responsible for the administration of control measures for all biological products used for the prevention and cure of disease in man. These products—the vaccines, antitoxins, therapeutic serums, and human blood and its derivatives—are developed for the most part from potentially pathogenic microorganisms. Rigorous control procedures are essential in their preparation to reduce to a minimum the hazards which might occur in processing, and to ensure final products of satisfactory potency.

Effective administration of these responsibilities requires the design and development within a research context of adequate and practical standards for the production and testing of biologics, careful surveillance of production methods, and the continuous improvement of testing procedures. Thus, the varied research activities of the Division's six laboratories—Bacterial Products, Biophysics and Biochemistry, Blood and Blood Products, Control Activities, Viral Immunology, Virology and Rickettsiology—are essentially product-oriented. Their scope, direction, and intensity are dictated by the need to provide essential information for the formulation of requirements and regulations governing the licensing and release of biological products.

An appreciable part of the Division's research this year has been devoted to work on the adventitious simian virus, SV–40, found in some kidney-tissue cultures from which live and killed polio vaccines and adenovirus vaccine are prepared. Since, with few exceptions, the role of animal viruses in the production of human disease is unknown, their exclusion from all commercial vaccines is required by the Public Health Service. In addition to devising elaborate test systems for the detection of SV–40 during the processing of the vaccines, the Division is continuing to study the pathogenesis of the virus for man, monkeys, and other laboratory animals; the development of simpler tools for working with it; and the exploration of its ecology in monkeys in their native habitat as well as in the laboratory.

During the year, the solution of problems relating to the licensing of live poliovirus vaccine was of pressing urgency. This involved working out delicate testing methods to assure the genetic stability of the three virus strains, as well as developing techniques for detecting the presence of SV–40. These problems were satisfactorily resolved, and in March, Type 3 was licensed, thereby making available the complete series of oral vaccines for protection against all three types of polio.

The development this year of regulations for measles vaccines necessitated the formulation of an extensive array of controls covering three products—inactivated measles vaccine, live measles vaccine, and

standardized gammaglobulin. Concurrently, the Division is developing standard reference materials which will serve to correlate laboratory results so that the potency of the vaccines produced by individual manufacturers can be evaluated on a sound common basis.

Throughout the year, the Division's Laboratory of Blood and Blood Products carried on an extensive investigation of alleged violations of the Biologics Law in the sale of plasma and whole blood. The evidence, involving the updating of whole blood and the processing of plasma for sale without license, was turned over to the U.S. Department of Justice.

At the close of the fiscal year, 288 biological products were licensed under the provisions of the Public Health Service Act for commercial use in this country and abroad.

Division of General Medical Sciences

The primary responsibility of this Division is the administration of NIH grant and fellowship programs for research and training in the sciences basic to medicine and biology and in certain clinical areas which encompass or cut across categorical Institute programs. It administers certain other grant programs also, and the NIH centers for Aging Research and for Research in Child Health.

RESEARCH GRANTS

Grant-supported research has indicated that the genes of all living vertebrates may have a common evolutionary origin, so that deviation in the molecular structure of a gene actually constitutes a kind of "molecular disease." This approach to genetics may lead to practical methods of fighting diseases which originate in the germ plasm.

The hitherto mysterious role of the thymus gland is being analyzed. This has bearing on such varied things as skin grafts and growth. Here is a new approach to transplantation of organs as well as to stimulating healthful growth and inhibiting harmful growth.

Four different patterns of defective bilirubin metabolism have been described in jaundiced premature infants, and these have been tied to the patterns for recovery.

RESEARCH TRAINING GRANTS

Grant funds have been made available to research institutions to extend and improve graduate research training. Fellowships at various levels have been awarded to promising scientists and teachers. The Division is providing training aid in 20 different basic fields and for 596 separate programs.

THE GENERAL CLINICAL RESEARCH CENTERS

This period has seen the emergence of the General Clinical Research Center as a genuine research tool. By the end of the 1962 fiscal year,

56 awards had been made and 25 centers were open for patients. In addition to general centers for study of metabolic diseases, nutritional ailments, surgical conditions and other problems in adults, centers have been established for study of children's diseases and even for the special study of prematurity.

Reports from the basic scientists and physicians associated in the Centers indicate new leads in muscular dystrophy; knowledge of a new inborn error of metabolism; a new method for the use of a transistorized pacemaker for cardiac stimulation, a technique for utilizing the artificial kidney on a regular basis over a period of years, and a method for the determination of the life span of human blood platelets.

CENTER FOR RESEARCH IN CHILD HEALTH

In 1961, a Center for Research in Child Health—designed to achieve greater understanding of the pattern of human life and development—was established in the Division. The Center will be a focal point for research in health problems of childhood and adolescence, infant mortality, mental retardation, congenital abnormalities, and other conditions which primarily afflict children.

CENTER FOR AGING RESEARCH

The Center for Aging Research has encouraged research programs in the field of aging through the Division of General Medical Sciences and the Institutes, and has also provided a central clearing house for research information in the entire field of aging.

Grants for research in aging continue to increase, now constituting some 300 projects.

GENERAL RESEARCH SUPPORT GRANTS

General research support grants provided stable allotments to a substantial number of medical research institutions for developing and maintaining well-balanced programs of general research and research training. These broad institutional grants can be used with great flexibility within the research framework and within prescribed objectives to provide resources and personnel for new projects.

SPECIAL RESOURCE CENTERS

Research facilities of a highly complex type which can be used for several colleges or several departments within a parent institution constitute Special Resource Centers. If, for example, a university has dozens of projects which would benefit from the presence of a computer center, a special research resource facility for this can be established with grant funds. Such centers are designed to facilitate the many varying aspects of research, in broad scope or fine detail.

Division of Research Grants

The Division of Research Grants continued to administer and coordinate the grant and award program of the National Institutes of Health, and to provide both technical assistance and review and appraisal services for the other grant awarding units of the Public Health Service. Functions included processing and scientific or technical review of grant applications, and the providing of fiscal, statistical, and information services.

In response to the mounting volume of applications for grants, the number of study sections—whose primary function is technical review of applications—was increased from 40 to 45.

During the year the Division undertook to improve financial management of grants through the strengthening of its policies and the coordination and streamlining of accounting procedures to be followed by investigators and budget officers in grantee institutions.

A major contribution to medical and scientific communication was the Division's first issue of an annual subject-matter index of active PHS research grants.

A new "Grants Associate" program, designed to recruit and train professional staff for Institute and Division grants branches and for DRG, was established.

The Division published a survey of the current professional status and geographic distribution of 2,917 former PHS fellows. The survey showed that approximately 87 percent of former fellows remain engaged in some research activity, and that approximately 67 percent spend some time in teaching.

Division of Research Services

The NIH research investigator looks to the Division of Research Services as a central source for biomedical computing and data-processing services; for studies of environmental conditions having a bearing on his work; for planning and consultation on laboratory and structural design; for noncommercial scientific instruments, fabrication of necessary equipment, and plans for laboratory automation; for supplies of laboratory animals, glassware, and media; for visual documentation of research findings by means of exhibits, motion pictures, and other aids; and for central and satellite library services.

Pioneering work in germfree technology begun by the Division in 1954 led to the establishment of germfree laboratories in three of the Institutes. Most recently, in anticipation of the time when scientists will demand genetically defined animals, the Division has established foundation breeding colonies leading to the routine issuance of germfree and specific pathogen-free animals.

The NIH Animal Center at Poolesville, Md., is slated to become a model installation. The present schedule calls for completion of a farm animal building, kennel building, power plant, roadways, fencing, and utilities in 1964.

Far-ranging improvements leading to increasingly useful library and bibliographic services are under way. Satellite libraries have been inaugurated to serve the specialized information needs of geographically distant groups.

An ad hoc steering committee is studying the long-term needs of the Institutes for computer systems and data processing. The high-speed digital computer acquired in 1961 was operating near the two-shift level at the end of the fiscal year, with an almost equal balance between research, extramural, administrative, and epidemiological program applications.

Clinical Center

To meet the demand on all central services stimulated by an increase of 1,500-bed days over its predicted 75 percent utilization of available bed days, the Clinical Center, in this period, introduced automation and expanded services wherever feasible.

Clinical Center staff, collaborating with NHI and NINDB staff, expended much effort on preparations for the opening of the new surgical wing, scheduled for late fiscal year 1963. This unique facility will offer opportunities to observe parameters of surgery to a degree never before possible.

The Clinical Pathology Department, by adapting advanced research laboratory techniques and developing standards of precision, not only provided services crucial to the research patient's welfare, but also aided the entire field of medical diagnosis. The use and further development of automatic data computers illustrate the Pathology Department's techniques for solving the problems stemming from the large number of laboratory tests now available to the clinical investigator.

Table 1.—*Statement of appropriations, authorizations, and obligations, Public Health Service, fiscal year 1962*

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Total	$1,392,485	0	$71,985	$159,478	$1,633,437	$1,323,267
Appropriations, PHS	1,391,977	0	71,985	159,197	1,623,159	1,314,311
Buildings and facilities	18,230			5,027	23,257	2,171
Accident prevention	3,616		31		3,647	3,574
Chronic diseases and health of the aged	10,955	$2,000	74		13,029	10,585
Communicable disease activities (1962)	9,988		1,030		11,018	10,956
Communicable disease activities (1961 and 1962)				892	892	747
Community health practice and research	24,331	−2,000	16		22,347	21,958
Control of tuberculosis	6,493		9		6,502	6,463
Control of venereal diseases	6,000				6,000	5,985
Dental services and resources	2,500	−100			2,400	2,293
Nursing services and resources	7,673	−32	4		7,645	7,553
Hospital construction activities (1962)	1,772				1,772	1,766
Hospital construction activities (1962–63)	209,728				209,728	62,849
Hospital construction activities (1961–62)				124,515	124,515	124,423
Air pollution	8,590		7		8,597	8,283
Milk, food, interstate, and community sanitation	7,422		235		7,657	7,595
Occupational health	3,970		16		3,986	3,930
Radiological health	10,502	−20	829		11,311	11,230
Water supply and water pollution control	20,304	−34	505		20,775	19,383
Grants for waste treatment works construction	80,645				80,645	57,996
Grants for waste treatment works construction (1960–62)				1,101	1,101	1,098
Grants for waste treatment works construction (1961–62)				6,507	6,507	6,507
Hospitals and medical care	[1] 50,009		6,574		56,583	56,875
Foreign quarantine activities (1962)	6,082	−734	376		5,724	5,641
Foreign quarantine activities (1962–63)		734			734	563
Construction of Indian health facilities	8,285			4,498	12,783	7,018
General research and services, NIH	127,589				127,589	118,157
National Cancer Institute (1962)	142,738			26	142,764	117,660
National Cancer Institute (1961–63)				692	692	385
Mental health activities	108,838		72		108,910	108,084
National Heart Institute (1962)	131,862		18		131,880	110,867
National Heart Institute (1962–63)	1,000				1,000	
National Institute of Dental Research	17,335				17,335	15,103
Arthritis and metabolic diseases activities	81,802		391		82,193	79,318
Allergy and infectious diseases activities (1962)	56,074	−750	12		55,336	54,013
Allergy and infectious diseases activities (1962–63)		750			750	658
Neurology and blindness activities	70,762		1		70,763	62,987
Grants for cancer research facilities	5,000				5,000	5,000
Grants for construction of health research facilities	30,000			16	30,016	30,011
Scientific activities overseas (special foreign currency program)	9,000			3,679	12,679	3,915
National health statistics	4,642		171		4,813	4,658
Operations, National Library of Medicine	2,066		14		2,080	1,870
Retired pay of commissioned officers	[2] 2,360				2,360	2,360
Salaries and expenses, Office of the Surgeon General	5,374	186	323		5,883	5,789
Construction of mental health, neurology research facility				12,128	12,128	406

[1] Supplemental appropriation bill pending.
[2] Does not include $17,000 to be deappropriated.

Table 1.—*Statement of appropriations, authorizations, and obligations, Public Health Service, fiscal year 1962*—Continued

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Indian health activities	[3] $53,007		$901		$53,908	$53,596
Hospital and medical facility research	10,000				10,000	8,104
Bureau of State Services management fund			5,026		5,026	5,005
National Institutes of Health management fund			34,613		34,613	33,734
General research support grants, NIH			20,000		20,000	20,000
Civil defense medical stockpile activities	35,433				35,433	24,507
Consolidated working fund, HEW, grants for research			199	$116	315	165
Consolidated working fund, HEW, PHS			538		538	517
Appropriations, special project funds made available by other agencies					9,489	8,489
Salaries and expenses, Bureau of Prisons (transfer to HEW, PHS)					2,457	2,455
American Sections, International Commissions, State (transfer to HEW, PHS)					93	90
Salaries and expenses, Office of Emergency Planning (transfer to HEW, PHS)					115	114
Research and development, Office of Emergency Planning (transfer to HEW, PHS)					3	
Civil Defense, Department of Defense (transfer to HEW, PHS)					1	
Farm labor supply revolving fund, Bureau of Employment Security (transfer to HEW, PHS)					430	410
Inter American social economic program (transfer to HEW)					588	487
Civil defense and defense mobilization, functions of federal agencies, Office of Emergency Planning (transfer to HEW, Office of Secretary)					502	501
Administrative expenses, economic assistance, Executive (transfer to HEW)					39	38
Development grants, economic assistance, Executive (transfer to HEW)					3,709	3,003
Supporting assistance, economic assistance, Executive (transfer to HEW)					580	432
Contingency fund, economic assistance, Executive (transfer to HEW)					405	400
Military assistance, Executive (transfer to HEW)					51	51
Consolidated working fund, DHEW, Office of the Secretary					516	508
Gift funds donated for general and specific purposes	508.2			281.5	789.7	467.0
Contributions, Indian health facilities	288.9			178.5	467.4	283.2
Public Health service unconditional gift fund	35.3			30.8	66.1	25.9
Public Health service conditional gift fund	10.9			10.9	21.8	12.1
Patients' benefit fund, Public Health services hospitals	40.0			19.1	59.1	43.3
Special statistical work, vital statistics	133.1			42.2	175.3	102.5

[3] Includes $432,000 contract authorization, and excludes $435,000 liquidation of prior contract authorization.

Table 2.—*PHS total paid employment by Bureau and Division, as of June 30, 1962*

	Grand total	Full-time						Part-time and intermittent		
		Total	United States			Territories and possessions	Foreign countries	Total	Advisers and consultants	Other
			Total	Washington metropolitan area	Outside					
Public Health Service—All Bureaus	32,638	31,309	30,968	13,522	17,446	149	192	1,329	280	1,049
Office of the Surgeon General	1,286	1,269	1,185	1,053	132	1	83	17	10	7
Immediate Office of the Surgeon General	58	58	58	58						
Division of Finance	148	148	148	147	1					
Division of Administrative Services	136	136	136	89	47					
Division of Public Health Methods	56	55	54	54			1	1		1
Division of International Health	64	63	63	63				1	1	
Division of Health Mobilization	142	136	136	96	40			6	3	3
Office of Personnel	172	169	169	169				3		3
Office of Information	35	33	33	33				2	2	
National Center for Health Statistics	326	322	322	321	1			4	4	
Regional offices	38	38	38		38					
Details to AID	79	79	11	6	5		68			
Details to Peace Corps	22	22	7	7		1	14			
Other details	10	10	10	10						
Bureau of Medical Services	14,368	13,723	13,623	1,390	12,233	34	66	645	1	644
Office of the Chief	31	31	31	30	1					
Division of Foreign Quarantine	709	662	581	41	540	16	65	47		47
Division of Hospitals	6,954	6,577	6,559	299	6,260	18		377		377
Freedmen's Hospital	892	869	869	869				23		23
Division of Indian Health	5,387	5,193	5,193	123	5,070			194	1	193
Details to Bureau of Prisons	283	283	283	18	265					
Details to Bureau of Employees Compensation	11	8	8	4	4			3		3
Details to U.S. Coast Guard	91	90	90	5	85			1		1
Details to other agencies	10	10	9	1	8		1			
Bureau of State Services	6,715	6,440	6,415	1,913	4,502	17	8	275	130	145
Office of the Chief	528	516	516	200	316			12	2	10

Community Health										
Division of Accident Prevention	167	166	166	93	73			1		1
Division of Chronic Diseases	631	601	599	327	272	2		30	24	6
Communicable Disease Center	2,058	1,997	1,983	97	1,886	14		61	11	50
Division of Community Health Services	204	203	203	137	66			1		1
Division of Dental Public Health and Resources	276	188	188	115	73			88	51	37
Division of Hospital and Medical Facilities	186	185	185	118	67			1		1
Division of Nursing	87	87	87	63	24					
Details to other agencies	5	5	5	2	3					
Environmental Health										
Division of Air Pollution	360	352	352	83	269			8	1	7
Division of Environmental Engineering and Food Protection	271	266	266	88	178			5	2	3
Division of Occupational Health	176	176	176	45	131					
Division of Radiological Health	796	774	765	353	412	1	8	22	2	20
Division of Water Supply and Pollution Control	965	919	919	189	730			46	37	9
Details to other agencies	5	5	5	3	2					
National Institutes of Health	10,053	9,664	9,532	8,954	578	97	35	389	138	251
Office of the Director	1,213	1,194	1,187	1,186	1		7	19	2	17
National Cancer Institute	1,266	1,220	1,217	1,091	126		3	46	23	23
National Heart Institute	624	597	592	471	121		5	27	11	16
National Institute of Allergy and Infectious Diseases	657	651	608	427	181	36	7	6	2	4
National Institute of Arthritis and Metabolic Diseases	599	550	543	541	2		7	49	38	11
National Institute of Dental Research	241	234	233	230	3		1	7	6	1
National Institute of Mental Health	1,035	942	939	802	137		3	93	31	62
National Institute of Neurological Diseases and Blindness	612	580	518	513	5	61	11	32	20	12
Clinical Center	1,658	1,606	1,606	1,606				52		52
Division of Biologics Standards	209	209	209	209						
Division of Research Grants	562	536	536	536				26	1	25
Division of Research Services	1,229	1,205	1,205	1,203	2			24		24
Division of General Medical Sciences	143	135	135	135				8	4	4
Details to other agencies	5	5	4	4			1			
National Library of Medicine	216	213	213	212	1			3	1	2

Table 3.—*PHS total paid employment by Bureau, commissioned officers, and civil service, as of June 30, 1962*

	Grand total	Commissioned officers					Civil service				
		Total	United States			Territories, possessions, and foreign countries	Total	United States			Territories, possessions, and foreign countries
			Total	Washington metropolitan area	Outside			Total	Washington metropolitan area	Outside	
Public Health Service—Total	32,638	4,501	4,363	1,407	2,956	138	28,137	27,904	12,450	15,454	233
Office of the Surgeon General	1,286	190	106	85	21	84	1,096	1,096	977	119	----------
Bureau of Medical Services	14,368	1,862	1,845	92	1,753	17	12,506	12,402	1,330	11,072	104
Bureau of State Services	6,715	1,416	1,402	349	1,053	14	5,299	5,281	1,588	3,693	18
National Institutes of Health	10,053	1,031	1,008	880	128	23	9,022	8,911	8,341	570	111
National Library of Medicine	216	2	2	1	1	----------	214	214	214	----------	----------

Table 4.—*Research grants and awards, fiscal year 1962*

Program	Research projects		Research facilities		Fellowships				Training projects		Traineeships		Total	
					Full-time		Part-time							
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Total	15,088	$373,175,879	112	$36,759,841	3,736	$26,780,145	20	$12,960	3,348	$115,245,835	323	$2,825,839	22,627	$554,800,499
Allergy and infectious diseases	1,804	33,965,083	------	----------	193	1,805,908	------	----------	170	5,633,481	------	----------	2,167	41,404,472
Arthritis and metabolic diseases	2,756	53,103,397	------	----------	142	1,747,729	------	----------	332	9,556,342	54	371,694	3,284	64,779,162
Cancer	1,923	47,646,982	13	4,887,081	243	2,138,793	------	----------	220	6,932,165	------	----------	2,399	61,605,021
Dental research	412	6,591,614	------	----------	101	810,075	------	----------	158	4,039,818	------	----------	671	11,441,507
General medical sciences	2,366	85,617,614	------	----------	1,724	10,866,193	20	12,960	686	30,251,002	------	----------	4,796	126,747,769
Heart	2,604	69,406,141	------	----------	490	4,399,490	------	----------	377	11,493,113	------	----------	3,471	85,298,744
Mental health	1,724	40,481,055	------	----------	718	3,785,940	------	----------	1,145	39,374,975	------	----------	3,587	83,641,970
Neurological diseases and blindness	1,499	36,363,993	------	----------	125	1,226,017	------	----------	260	7,964,939	269	2,454,145	2,153	48,009,094
Health research facilities, Division of Research Grants	--------	----------	99	31,872,760	--------	----------	------	----------	--------	----------	------	----------	99	31,872,760

Table 5.—*Payments to States or localities within States for public health services, fiscal year 1962* [1]

[In thousands of dollars]

State	Venereal disease special projects	Tuberculosis control	General health	Mental health	Cancer control	Heart disease control	Water pollution control	Chronic diseases and health of the aged	Hospital and medical facilities construction	Waste treatment works construction
Totals	[2] $2,569	$3,499	[3] $14,920	$6,622	$3,389	$4,598	[4] $4,340	[5] $4,859	$164,384	$42,103
Alabama	40	80	398	125	77	117	97	115	3,265	1,220
Alaska	1	17	41	52	----------	4	16	----------	636	74
Arizona	17	45	132	50	25	1	36	17	1,540	427
Arkansas	75	53	256	58	44	78	63	62	4,031	870
California	107	252	989	465	240	275	268	356	7,004	1,736
Colorado	3	29	163	66	34	69	44	52	1,750	762
Connecticut	11	34	134	73	36	61	76	38	664	656
Delaware	11	15	27	66	26	28	48	40	639	379
District of Columbia	71	33	42	67	26	47	38	40	605	117
Florida	106	83	417	164	84	125	107	169	5,458	1,022
Georgia	234	76	433	145	84	126	109	47	5,800	1,264
Hawaii	1	19	56	67	26	44	36	40	695	331
Idaho	6	14	91	67	26	51	26	40	998	616
Illinois	218	197	611	298	155	169	149	254	4,895	1,624
Indiana	----------	65	349	144	77	113	112	53	3,160	1,101
Iowa	8	32	251	80	29	47	63	45	3,466	572
Kansas	15	28	196	73	44	59	55	81	2,574	795
Kentucky	40	87	302	112	61	99	88	89	4,117	1,091
Louisiana	67	71	337	118	67	111	89	43	2,271	1,315
Maine	----------	20	100	66	9	16	37	23	1,103	167
Maryland	35	74	222	98	52	89	89	73	2,999	611
Massachusetts	----------	86	349	149	95	120	135	135	3,180	1,004
Michigan	59	131	518	246	127	162	171	198	4,966	1,408
Minnesota	1	40	298	104	65	78	82	121	3,329	976
Mississippi	31	53	340	93	63	113	81	122	4,695	865
Missouri	43	82	351	141	85	118	52	153	4,315	633
Montana	7	18	82	67	21	30	24	23	801	434
Nebraska	13	20	148	66	31	13	28	20	1,277	341
Nevada	8	12	40	47	5	11	11	25	681	484
New Hampshire	----------	13	57	65	25	19	33	----------	1,254	175

New Jersey	67	96	370	184	100	122	145	144	2,834	1,008
New Mexico	35	30	117	67	26	57	30	40	1,514	805
New York	532	330	945	504	273	283	306	418	9,353	1,587
North Carolina	114	75	520	171	97	124	133	168	5,946	1,170
North Dakota	11	15	94	67	26	51	26	40	1,473	846
Ohio	9	153	661	304	161	197	208	262	5,745	1,287
Oklahoma	19	45	238	79	51	86	59	93	2,458	1,109
Oregon	6	30	148	66	25	35	46	22	1,685	773
Pennsylvania	117	214	823	362	206	226	240	340	8,484	2,503
Rhode Island	2	19	64	65	26	49	61	40	948	142
South Carolina	83	51	303	94	57	108	82	73	4,783	415
South Dakota	9	13	100	65	9	12	27	15	1,499	180
Tennessee	87	91	391	133	74	127	103	58	4,882	1,134
Texas	142	154	816	323	175	235	192	209	10,646	1,264
Utah		13	106	39	6	9	18		312	882
Vermont		14	54	67	26	14	26	33	417	403
Virginia	46	80	330	136	72	76	98	100	6,737	643
Washington	4	45	202	91	47	79	64	62	1,751	792
West Virginia	19	46	190	67	41	65	59	68	1,711	481
Wisconsin		49	310	128	74	103	97	105	3,992	824
Wyoming		10	54	24	7	14	18	33	274	289
Guam		9	11	29	6	6	6		4,727	
Puerto Rico	33	130	335	96	60	117	28	50	45	496
Virgin Islands	6	8	8	29	5	10	5	12		

[1] Additional amounts as follows were paid during fiscal year 1962: $1,943,000 for the Public Health Service traineeship program, $6,466,000 for the professional nurse traineeship program, $1,089,000 to schools of public health for the provision of public health training, $1,097,000 for project grants for graduate training in public health, $360,000 for the Public Health Service air pollution training and demonstration program, $502,000 for project grants for training in radiological health, $386,000 for the Cuban refugee health program, $1,486,000 for community cancer demonstration and training projects, including $56,000 for personal services in lieu of cash; $491,000 for tuberculosis control projects and $5,000 furnished in lieu of cash, $116,000 for Water Pollution Demonstration Projects, $310,000 for community health demonstration projects, $3,192,000 for Alaska psychiatric hospital.

[2] Includes $974,000 in services and supplies furnished in lieu of cash.

[3] Includes $6,000 withheld to cover assignment of commissioned officers in lieu of cash.

[4] Excludes $252,000 paid to water pollution interstate agencies as follows: $12,000 to New England Interstate Water Pollution Control Commission, $112,000 to Ohio River Valley Water Sanitation Commission, $42,000 to Interstate Commission on the Delaware River Basin, $59,000 to Interstate Sanitation Commission, $27,000 to Interstate Commission on the Potomac River Basin.

[5] Includes $4,000 withheld to cover assignment of commissioned officer in lieu of cash.

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Office of Education

Highlights of the Year's Activities

In 1962 the Office of Education recast its program and structure to increase its effectiveness for helping achieve excellence in education. The redirection has been focused on these principal concerns—that the highest quality educational program of which our Nation is capable be assured through all possible avenues, and that opportunities for desired education be extended to all the people.

Recognizing the need for trained technical manpower, the high level of unemployment among youth who leave school early, and the nationally pressing need for expanding and improving training opportunities for youth and adults, the Office of Education initiated a reassessment of existing vocational education programs with a view to their adaptation to the needs of the coming decade.

Following the pattern of successful programs in science and foreign languages, the Office of Education embarked on a project for the improvement of quality in the teaching of English. The combination of curriculum development and improved instructional practice is the objective of the project. The Office also planned a similar program in the social studies and surveyed means by which it might strengthen education in the arts.

Project English provides an illustration of the more effective coordination of Office and extramural resources. A broad approach to the problem of teaching English has been initiated with specialists of the Office in English, research, and administration working closely together. In this project, instruction at all levels is being considered through study, research, and demonstration in curriculum development and instructional technique. Research contracts in colleges and universities are coordinated with the Office staff work. The multilat-

eral approach in the Office has accelerated similar types of cooperation among professors of English, education, and other disciplines within the participating institutions.

The Office turned its attention also to the relationship of educational and social problems, such as those of education for expanding urban areas and adult literacy. It conducted a comprehensive review of current grant and contract programs in order to assure that they are supporting equal educational opportunity for all, and began to stimulate research and studies related to problems of desegregation, education of migrant children, the disadvantaged, and culturally different youth. It brought together responsible leaders to consider the need for educating the American people more effectively for the attainment of the goals of a free society, and the ways in which American ideals might be given better expression in education.

As the Federal interest in education has grown, so has the variety of programs and the number of departments and agencies responsible for their operation. Because of its concern that educational institutions be continually strengthened as they participate in Federal programs, the Office of Education laid the foundation for a pattern of relationships with Federal agencies for the purpose of promoting a more coherent Federal educational policy and better coordination of the educational activities of these agencies. This concern with the effects of Federal programs was included in a special study of the Federal Government and higher education, two parts of which were completed during the year.

These new directions have been accompanied by a change in the Office structure. The organization of the Office, which had largely reflected the levels of education or major grant-in-aid legislation, was revised with the formation of three bureaus concerned with: (*a*) educational research and development encompassing all levels of education; (*b*) financial assistance program administration; and (*c*) international education program administration. This bureau structure will enhance the ability of the Office to concentrate its resources more effectively for the solution of major problems that cut across educational levels. It will promote more uniform administration of financial assistance programs and thereby ease the administrative tasks of the State and local education agencies. It will assure more effective coordination of Office activities in the support of the overseas programs of the Federal Government.

The reshaping of Office activities has sharpened the accomplishments of the programs with which the Office has been entrusted over the years. Among the latter are financial assistance to improve the quality of education in specialized fields, as in vocational education, mathematics, science and foreign languages; administration of

financial aid to students in institutions of higher education; consultative service on a wide range of educational matters; the collection and dissemination of statistics describing the condition of American education, its needs and accomplishments; the advancement of fundamental research for the progress of education; the administration of the large and intricate program of assistance to the Nation's schools in federally impacted areas. These programs constitute the most substantial portion of the responsibilities placed upon the Office of Education. They are avenues through which the Federal Government contributes to a strengthening of the leadership as well as of the educational programs of the State and local education agencies and institutions of higher education.

The Office of Education has a responsibility to view from a national perspective the large educational needs that affect the Nation as a whole—the regions, the States, and the communities. It has a responsibility to report such needs and recast its efforts to assist in fulfilling these needs. In 1962, the Office initiated new programs that focused, as its continuing activities focus, on support and supplementation of State, local, and institutional efforts. It has done so with the constant concern that the pluralistic structure of American education be judiciously preserved and strengthened.

Social Problems and Education

PROBLEMS OF URBAN AREAS

As the result of a social and economic revolution leading to urbanization, almost two-thirds of the people of the United States are concentrated in 212 metropolitan areas. This upheaval of home and family and social organization has, of course, brought great problems to the cities. They are problems of education, health, and housing; of sanitation and transportation; of social adjustment and employment; of delinquency and crime. To an extent greater than in the past, the Office of Education is widening its field of vision to recognize more clearly the effects of social-demographic problems on education.

The changing nature of urban centers is a source of many problems in education. One of the problems has been that of coping with the educational needs and opportunities created by Federal action in such areas as public welfare, public housing, urban renewal, and freeway construction. In December 1961 a group of educators met with the Commissioner of Education to discuss the impact of Federal programs on education, and their meeting led to the May 1962 Conference on the Impact of Urbanization on Education, at which representatives of Federal agencies concerned with public housing, urban renewal, city freeways, child welfare, education and labor, and

youth employment and delinquency met with school board members and superintendents from the 15 large cities that form the Research Council of the Great Cities Program for School Improvement. A valuable opportunity was thus provided for Federal and local officials to discuss and better understand their mutual problems and responsibilities.

A series of intensive case studies will be undertaken in a limited number of large cities where effective work has been done in coordinating school system planning with the planning and programs of urban renewal and other related urban development projects.

School facilities planning problems, which exist in every metropolitan area, were the subject of a conference held in the spring of 1962. As a result of this conference, an effort is underway to identify and to analyze the characteristic problems of planning school facilities in metropolitan centers.

In addition, the financing of urban schools was the subject of a conference called in May which resulted in a study concerned with the improvement of State school fund distribution formulas.

Two other conferences held in May directly attacked the problem of teaching hard-to-reach youngsters: "Teaching Children and Youth Who are Educationally Disadvantaged," and "Improving English Skills of Culturally-Different Youth in Large Cities." At these meetings there was a review of promising efforts in the field, identification of significant problems hindering progress, and projection of new approaches to the problems.

The high rate of mobility of families has often contributed to a breakdown in the school-community rapport so necessary to the success of the school program. The need to identify, attract, and develop sources of support and leadership among new residents is recognized by a current project on the improvement of school-home programs in disadvantaged neighborhoods in selected large city school systems. Still another study, a cooperative research project, is designed to evaluate the effectiveness of all-day neighborhood schools in New York City. When completed, these studies may provide information concerning a more effective educational approach to culturally deprived children.

The Office of Education has also participated in the joint task force established by the Department of Health, Education, and Welfare and the Housing and Home Finance Agency to promote concerted and improved health, education, and welfare services in public housing projects and urban development areas. This joint task force is designed to help public housing families on relief rolls work their way out of dependency.

FREEDOM AND WORLD UNDERSTANDING

In March 1962 approximately 140 leaders in American education met at the Office of Education to consider the state of American education in the light of the traditional ideals of freedom and the present need for achieving a greater understanding of other cultures, and to discuss methods of educating more effectively for the attainment of the goals of a free society. This conference on "The Ideals of American Freedom and the International Dimensions of Education," was addressed by the Secretary of Health, Education, and Welfare, the Assistant Secretary of State, and the Commissioner of Education. Their addresses and a summary of the salient ideas evolved from the deliberations of several committee sections have been published under the title, *Education for Freedom and World Understanding.* Discussion at the conference was characterized by the acknowledgment of shortcomings and an eagerness to strengthen and improve the educational resources of the United States. The conferees sought to define that common core of ideals which should command the allegiance of all Americans, and to discover ways and means to give those ideals more effective expression in education.

EQUAL OPPORTUNITY FOR EDUCATION

On March 30, 1962, the Commissioner of Education announced before a subcommittee of Congress plans for a clearinghouse on the educational problems of school desegregation. The establishment of this clearinghouse in the Office of Education provides a means for disseminating to interested citizens reliable information on educational practices used successfully by various school systems. Professional advice of the highest quality can thus be made available to the community, and significant research on the educational implications of desegregation can be stimulated. The clearinghouse will become active in fiscal year 1963.

Further, the Office of Education has concerned itself with the matter of civil rights and education. All colleges and universities conducting institutes for high school language teachers and guidance counselors under titles V and VI of the NDEA starting in 1962–63 have agreed that in selecting individuals for attendance at the institute and in otherwise conducting the institute, no discrimination will be made on account of sex, race, creed, color, or national origin of an applicant or enrollee.

Advances toward the goal of equal education have been made through the administration of the programs of school assistance in federally affected areas. A policy has been adopted under which segregated schools will, in the fall of 1963, be deemed unsuitable for the dependents of military or civilian personnel living on a military

installation and attending off-base schools; appropriate steps will be taken, where necessary and feasible, to provide suitable education for these children on the installation.

As a part of its annual review of State vocational education programs supported with Federal funds, the Office this year is inquiring for the first time into the availability of courses of training in predominantly Negro and predominantly white schools. A directive will be sent to all States advising that any program for training in a vocation offered with the assistance of Federal funds must be equally available to all children of the school system in which it is offered.

Special Programs

EXCEPTIONAL CHILDREN

Of the approximately 6 million school-age "exceptional" children in the United States in need of special education, it is estimated that not over one-fourth have access to it. Exceptional children are usually defined as those who are blind, partially seeing, deaf, or hard of hearing; those with impaired speech; those who are crippled or who have special health problems; those who are socially maladjusted or emotionally disturbed, mentally retarded, or highly gifted. Statistical surveys made by the Office of Education in 1948 and 1958 show that progress is being made, for during that decade the estimated percentage of those receiving specialized help rose from about 10 percent to about 25 percent, although the progress was rather uneven from one area of exceptionality to another.

All States now have made some provision for meeting the needs of at least some types of exceptional children. Developments in State legislation and programs for children suggest that in the relatively near future a large number of States will offer special education opportunities to all types of exceptional children. The extension of programs into some of the more sparsely populated areas is also encouraging. Of significance too is the increase of special education staffs in the various State departments of education. *Special Education Personnel in State Education Departments*, a directory issued by the Office of Education in September 1961, listed about 270 such positions, or an average of over 5 persons per State.

Special programs are developing in new or neglected areas of education, especially for emotionally disturbed or multihandicapped children. Some of these programs are on an experimental basis. Attention is also being given to children of a wider age range, including those in nursery and kindergarten or those in the older age bracket for whom school-work programs are being developed increasingly.

A diversity of organizational patterns was also noted in the most recent studies: full-time attendance in special classes, part-time attendance in special education combined with part-time attendance in regular grades, instruction in home and hospital, or in residential schools. The net result of these developments will be provisions for meeting more precisely the educational needs of the individual child.

Special education has been expanding at such a rate that an adequate supply of qualified teachers, as well as personnel for professional preparation and supervisory positions, continues to be a difficult problem. This has appeared to be of sufficient nationwide importance to bring about congressional approval of two laws providing for the training of such personnel. Under the provisions of Public Law 85–926, approximately 500 fellowships have been made available for advanced study in the education of the retarded. Beginning in September 1962 under the provisions of Public Law 85–276, over 400 persons will receive scholarships to prepare to become teachers of the deaf. Thus, Federal funds are being used in two important areas of exceptionality to make an attack on the problem of shortage of professional personnel.

There is continued need for further research and fact-finding on the education of exceptional children. Through the authorization given the Office of Education under Public Law 531 (Cooperative Research Program) and Public Law 85–864 (National Defense Education Act) a substantial number of research studies in this field have been completed. The Office of Education is currently conducting its sixth study of the opportunities for professional preparation of teachers of exceptional children. It will include information on colleges and universities offering sequences of preparation in the various areas of exceptionality and other status information. In addition, the Office has underway studies on State financial aid to public school systems and studies in the special areas of the visually handicapped, those who have speech impairments, and the mentally retarded. These are all steps toward the ultimate goal of providing adequate educational opportunity for all children who need it.

CAPTIONED FILMS FOR THE DEAF

The Captioned Films for the Deaf program, for the first time since it was enacted in 1958 (Public Law 85–905) operated under the maximum authorized appropriation of $250,000. The program now serves 682 groups of deaf people in 48 of the 50 States.

A library of mostly full-length feature pictures, some of them educational or documentary films, tripled in size, reaching a total of 402 prints of some 113 titles. The demand continued to mount faster than supply, and the booking office located at the Indiana School

for the Deaf in Indianapolis was obliged to turn down many requests.

In addition to captioned educational films for classroom use, the Office has begun to provide educational and training films for the adult deaf. Due to the nature of their handicap, deaf adults benefit little from the many audiovisual training films available to the general public. However, these films can be acquired from commercial sources and captioned at a reasonable cost to make them highly serviceable to deaf people.

The films can be borrowed by groups of eight or more. The total audience for the year numbered 165,925 deaf persons, and participation continued to double in each 6-month period. Analysis of attendance records submitted to the Office of Education revealed that despite this growth, captioned films are still reaching only 10 percent of the total deaf population.

EARLY SCHOOL LEAVERS

In many American communities graduation from high school is considered the minimum education necessary for a boy or girl who wishes to obtain employment. This idea has grown steadily as unskilled labor has been replaced by machines. The manpower requirements for the future are expanding the aspiration for at least a high school education into a national goal.

In 1962 the percentage of young people of graduation age who completed high school was 64 percent. This national average varies by State from one which estimates that 80 percent of its young people graduate from high school to another which places its estimate at 40 percent.

Early school leaving occurs frequently in rural districts characterized by a low level of income. Although compulsory school attendance is generally not required beyond age 16, 2 years short of the age at which pupils normally graduate, there is little demand for raising the age to 18. More reliance is therefore placed on counseling pupils to remain in school, on the force of public opinion, and on the growing requirement that young men and women must have high school diplomas to qualify for the more desirable job openings. These measures in the past have brought a steady increase in high school completion; however, there is general agreement that the Nation's needs require a greatly accelerated increase in high school completion rates.

The national concern for finding means and methods of reducing the number of high school dropouts has produced a vast number of inquiries, in response to which the Office of Education supplies information and assistance through its several programs of review, research, and grants. Guidance specialists are on constant alert for

significant local guidance programs which have promise for holding potential dropouts in schools. The Office administers two grant programs which are contributing to the ultimate solution of this critical problem: under provisions of title V of the National Defense Education Act, grants for State and local guidance services, and for institutes for counselor training; and under title II of the act, loans to enable qualified college students to continue their education. During fiscal year 1962 plans were developed to undertake special guidance and counseling institutes for schools located in culturally deprived areas of large urban centers where the dropout problem is acute. In studying the dropout problem the Office cooperates with the President's Committee on Youth Employment and also with the President's Committee on Juvenile Delinquency.

PHYSICAL FITNESS SURVEY

At the request of President Kennedy's Council on Physical Fitness, the Office conducted a special study on physical fitness based on a scientific sample of the Nation's public schools. This study determined the extent to which schools were conducting physical fitness testing programs and the degree to which a bulletin published by the President's Council influenced the adoption of such a program. Results of this study as applied to the entire school-age population indicated that 15 million or approximately 40 percent of the Nation's young people failed to meet satisfactory physical standards. The Council has requested that this study be repeated during 1963 in order to provide a means of measuring the expansion and effectiveness of health and physical education programs in American schools.

PROGRAMS AND SERVICE FOR ADULTS

In the field of adult education, the Office of Education provides leadership and attempts to bring about a broad, unified, and coordinated approach. A major effort is the promotion of the concept of lifelong learning. The program includes general adult education, education for the aging, fundamental and literacy education, citizenship education, statistics on adult education, and professionalization of personnel in this field. The Office also provides consultative services to a substantial number of public and private agencies.

The following research reports have been completed and distributed: *Adventures in Learning; Frontiers Past Sixty in Hamilton, Ohio; Literacy and Basic Elementary Education for Adults: A Selected Annotated Bibliography;* and *Statistics of Public School Adult Education* (1958–59).

Three major research studies on aging have been approved under the Cooperative Research Program and are currently underway. They are: "Specialization of Attitudes Toward Adult Education by

Social Class," "A Study of the Role of Colleges and Universities in the Education of the Aged," and "An Evaluation of Communication Media Used in the Adult Liberal Studies Program."

Consultative services were provided to assist in the planning and development of curriculums for the aging in North Dakota, Iowa, and Minnesota. Assistance was also furnished the planning board of the Midwest Program on Airborne Television Instruction begun in June 1962 at Purdue University.

The Office provided advisory service to the Department of State for a mission to the Dominican Republic under the Agency for International Development, to the UNESCO World Committee of Literacy Experts, and to an African educational materials seminar.

Current statistics indicate that adult enrollments are increasing in all sections of the United States and State departments of public instruction are giving more attention to public school adult education. Eight States and Territories now have more than 1 staff specialist in this field at the State level; 12 others provide 1 staff person; 10 have one part-time person; 24 have no designated personnel for this purpose. In more than one-third of the cities, where the need for adult education programs is acute, there are no public school adult education programs.

TRAINING THE UNEMPLOYED

With the passage of the Manpower Development and Training Act of 1962 (Public Law 87–415), a program has been launched jointly by the Office of Education and the Department of Labor to meet the needs of unemployed and underemployed persons. Training projects usually originate at the local level, where training activities are conducted. Although no funds were made available until August 1962, it is anticipated that 45,000 people will be trained in fiscal year 1963.

The Office of Education also approves vocational retraining programs for unemployed and underemployed persons under the Area Redevelopment Act (Public Law 87–27), helps States and localities develop training program proposals, and provides sample syllabuses for the various programs. In fiscal year 1962, over 9,000 people in distressed areas in 34 States and in American Samoa were trained in 147 projects.

CIVIL DEFENSE EDUCATION

An understanding of the role of the individual, the family, and the community in State and national plans for protection against disasters which threaten the Nation and its people is an elemental need in the total civil defense effort. To contribute to fulfillment of this need, the Civil Defense Adult Education program was initiated by the Office of Education in cooperation with the Office of Civil and Defense

Mobilization in 1959. The success of pilot programs in Florida, Kentucky, Minnesota, and Texas, in 1959-60 led to extension to three other States in 1960-61 and eight more at the beginning of the 1962 fiscal year. Following the President's delegation of responsibility for the civil defense program to the Department of Defense in 1961, provisions were made for offering the Civil Defense Adult Education program to all States. By June 1962, 35 States, the District of Columbia, and Puerto Rico had contracted with the Office of Education to conduct the program in their States. Extension of the program to all States at an early date is an immediate goal.

This program is offered, without charge, through the adult education facilities in the various States. Twelve hours of instruction in the understanding of and protective measures against nuclear, chemical, and biological dangers, as well as natural disasters, is provided at the local level by selected teachers who receive special training in courses conducted by State staff members. Attendance of not less than 15 hours is required for teacher certification. The total cost of the program, $1,655,000 in 1962, including payment to teachers in the local areas, is paid through the Department of Defense from Federal funds provided to the States under contractual agreement with the Office of Education.

Interagency Cooperation

As the Office has recently concerned itself with areas previously neglected in large part, it has turned also to the relationship of the various Federal agencies whose activities involve or affect education, and to the effect of their programs on the educational resources of the Nation. The Office, in its function as the primary Federal agency concerned solely with education, during the year laid the foundation for a pattern of relationships with other Federal agencies to promote a more coherent Federal policy and better coordination of activities.

The need for the coordination of Federal programs, especially in institutions of higher education, has been documented in several major studies. To examine whether educational programs are distorted by the impact of a variety of Federal programs ranging from the purchase of specific research services to the support of students pursuing specific courses of study, the Office of Education completed certain phases of a survey which may serve as a benchmark for the development of policies and procedures to strengthen the educational programs and objectives of institutions of higher education in the national interest.

The Commissioner of Education sought both formally and informally to extend and increase the exchange of views and cooperation between the Office and other Government agencies. These efforts

led to joint projects and to the planning of future programs that involve the responsibilities of more than one agency. For example, close liaison was established with the directors of the Office of Science and Technology, the National Science Foundation, the Atomic Energy Commission, and the National Aeronautics and Space Administration for the purpose of coordinating information and policy regarding Federal programs in education and the impact of such programs. The above listed endorsed the establishment of a task force and a consultative policy group, each consisting of representatives of the departments and agencies operating programs in education, that will assist the Office in its responsibility to report on Federal programs in education and to assess the impact of such programs. The task force and the consultative group are now being formed.

The Office of Education is assisting the chairman of the Civil Service Commission in developing and undertaking a program to promote education for the public service. A committee within the Office of Education is considering ways to develop a better understanding of education for public service among the schools, including improved guidance services; steps necessary for the strengthening of inservice educational and training programs, both within the Office of Education and governmentwide; means of attracting more and better college students and graduates to educational preparation for public service positions; and ways of engaging colleges and universities more specifically and more vigorously in educational preparation for public service.

The Office of Education also assists in the administration of the Juvenile Delinquency and Youth Offenses Control Act of 1961. During fiscal year 1962 the staff of the Office assisted in the evaluation of applications to the President's Commission on Juvenile Delinquency and Youth Crime for training grants, planning grants, and grants for demonstration projects. Office personnel also provided technical counsel to citizens about to draw up requests for grants and prepared to provide field service to the committee on approved projects.

Under an agreement with the Department of Defense, the Office began a national inventory of school facilities and personnel for resource evaluation and damage assessment. Through the combined efforts of the Office, Bureau of the Census, and the State education agencies, more than 106,000 public and nonpublic school plants which can be made available to the Office in the event of an emergency disaster were added to the National Resource Evaluation Library. During 1963, inventory forms from each school will be processed. Additional funds from the Department of Defense will enable the Office to identify and inventory an estimated 10,000 additional schools, and add newly constructed school plants to keep the inventory data

current. A conversion deck of data cards with Census, Office of Education, and National Resource Evaluation Center codes will also be developed to establish a data flow system among the respective agencies.

International Organizations and Programs

Cooperation with other Federal agencies has extended to international activities. In the past year, coordination and cooperation in international programs have been greatly increased through closer contact with the Department of State, the U.S. Information Agency, and the Peace Corps. For example, an education liaison officer has been designated to work with the Agency for International Development of the State Department, and that Agency in turn is assigning one of its senior officers to a position in the Bureau of International Education of the Office.

The Office cooperated with the U.S. National Commission for UNESCO in the formulation, review, and revision of projects for the proposed UNESCO program and budget and in the dissemination of information on UNESCO's program to the U.S. educational community. The Office also participated in the planning of the Commission's biennial conference, and an Office specialist prepared background papers on African education for consideration at the conference.

The Office participated in a variety of international seminars, workshops, and meetings held under the auspices of intergovernmental organizations; prepared reports and annotated bibliographies; and supplied publications on U.S. educational practices in response to requests from various bodies of the United Nations, such as UNESCO and UNICEF, the International Labour Organization, the International Bureau of Education, the Organization of American States, and other international agencies.

A number of major studies on education in the United States were developed for international use, on subjects which included higher education, the access of women and girls to education in rural areas, vocational and technical education, educational planning, the education and training of professional engineers, and the inservice education of primary school teachers. The Office, which acts as secretariat for the United States membership in the International Bureau of Education, prepared the 1962 publication, *Progress of Public Education in the United States of America* in English, French, Russian, and Spanish for presentation to the IBE's International Conference on Public Education at Geneva in July. The Office also published in both French and English its replies to the questionnaires which

formed the basis of discussion of the two technical committees of the Conference.

Office specialists served as experts or delegates at some 20 international seminars, workshops, or conferences held in Europe, Asia, Africa, and Latin America under the sponsorship of the United Nations, UNESCO, International Bureau of Education, International Labour Office, and World Health Organization. The Office also was represented in Santiago, Chile, at the Conference on Education and Economic and Social Development in Latin America, and at a meeting of Asian ministers of education in Tokyo, Japan.

Educational Research and Development

Elementary and Secondary Education

STRENGTHENING STATE DEPARTMENTS OF EDUCATION

The Office of Education provides informational, consultative, and research services and administers several Federal assistance programs to enable State agencies to increase their effectiveness in dealing with the schools.

Improving Statistical Services.—One of the programs of the Office of Education is concerned with the improvement and expansion of the statistical services of State education agencies. Under this program, administered under the provisions of section 1009 of title X of the National Defense Education Act, the States may obtain grants of up to $50,000 annually on the basis of approved State plans, the Federal funds to be matched equally with State funds. As a result of this program the statistical services staff of the State education agencies has more than doubled, and the number of States and Territories using data processing equipment has almost quadrupled since 1958. In fiscal year 1962 there were 53 plans approved for a total of approximately $1.5 million. Several States requested the full $50,000 available to them, and some overmatched the Federal funds.

These Federal and State monies, with professional assistance of the Office of Education staff, have provided during this fiscal year continued improvement in the standardization of educational terminology and in the development of a total systems approach in the collection, processing, interpretation, and dissemination of educational information.

Improving Supervisory Services.—In addition, the National Defense Education Act provides Federal grants to expand and improve the consultant services of State supervisory staffs. Up to $5 million annually is authorized on a matching basis for State supervisory programs in science, mathematics, and modern foreign languages. Funds

are also authorized for State guidance supervisors. The number of State supervisors in the areas of science, mathematics, and modern foreign languages has increased from 33 to more than 200, and the number of guidance supervisors from 99 to approximately 250. State consultant services to local school districts have greatly improved. States are providing more inservice education programs for teachers and administrators, and curriculum guides and other professional publications have increased in number and improved in quality. There has also been a growth of local guidance programs in the secondary schools. The effectiveness of these programs has led educational administrators to explore ways of providing comparable leadership services in other areas and fields.

STAFF IN PUBLIC SCHOOLS

The seriousness of the problems of salary, of recruitment, and of teacher preparation must be alleviated if the schools of the Nation are to meet the responsibilities ahead of them, for the schools will be able to compete for personnel only when teaching offers a high level of personal and professional satisfaction. A system of free public education is accepted by society as vital to the growth of the Nation; but the schools will grow in strength only as the teaching staff grows, and if society demands the best education for its youth, it must also be willing to support the cost of the best possible education program.

Shortage of Teachers.—The continuously increasing public school population represents a critical factor in the Nation's ability to staff its schools with an adequate number of qualified teachers. In the fall of 1961 the number of classroom teachers in the public schools was 1,461,000, an increase of 53,000 over the previous year. However, it is estimated that more than 100,000 teachers leave the classroom annually and must be replaced. Tens of thousands are still needed to eliminate double sessions and overcrowding, to replace teachers who are inadequately prepared, and to provide certain vital educational services now omitted because of lack of staff.

Within the nationwide shortage of teachers, three types of imbalance are particularly noticeable. First, the extent of the shortage varies within and between different geographical regions. Second, the shortage of teachers in elementary schools is more critical than that in secondary schools, even though the latter currently have a higher enrollment growth rate. Third, the supply of teachers in certain fields is seriously inadequate. Comprehensive counseling programs at the college level are needed to help prospective teachers develop their career plans.

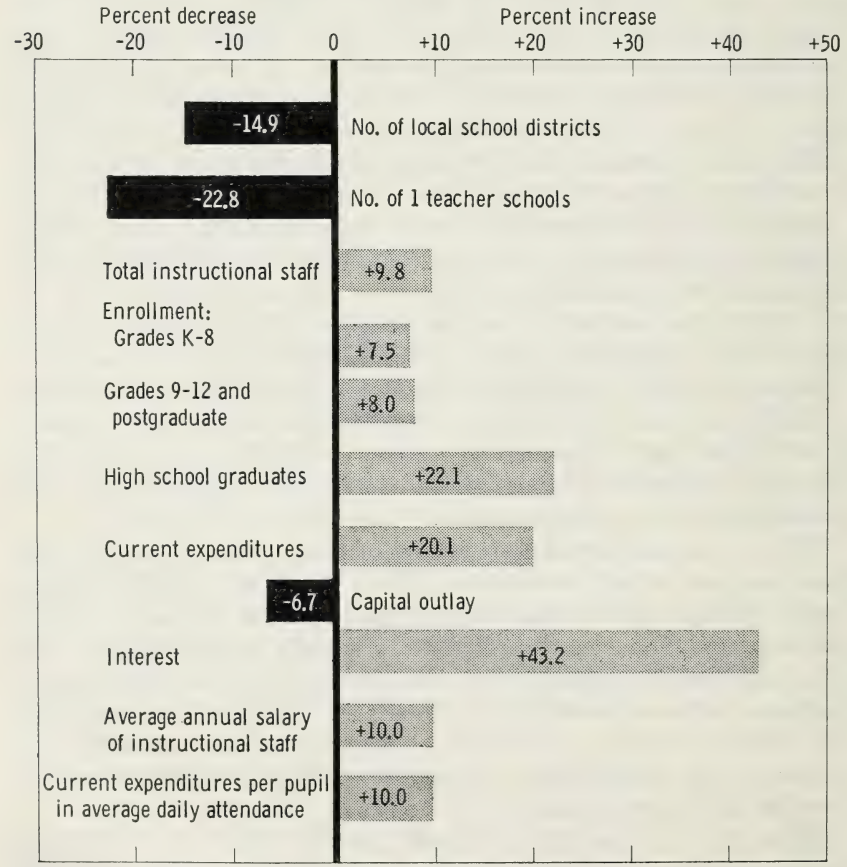
Need for Improved Selection and Training Procedures.—It is not enough merely to staff each classroom with a teacher—it is vital that

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the teacher be professionally qualified and competent. In the report, "Ten-Year Aims in Education, Staffing, and Constructing Public Elementary and Secondary Schools, 1959–1969," a dual program recommended for achieving this goal is to elevate the salary level and improve the procedures for the selection of teachers. The selection process includes first the recruitment of students into the teacher preparation program, followed by the preparation program itself, and then the attempt on the part of each local school district to select the most competent candidates possible.

It is essential to foster cooperative efforts among the agencies and groups responsible for training, selecting, and assisting in the upgrading of teaching personnel. The existence of cooperative professional relationships among the State departments of education, the local

CHART 1.—CHANGES WITHIN THE PUBLIC ELEMENTARY AND SECONDARY SCHOOL SYSTEM, UNITED STATES, 1957–58 TO 1959–60



Source: U.S. Department of Health, Education, and Welfare, Office of Education, *Statistics of State School Systems, 1959–60.*

districts, the professional associations, and the teacher education institutions is, the report notes, prerequisite to improvement in the quality of teacher education. There is evidence that, through the efforts of these several groups, a positive change is occurring in the teacher education program of the Nation.

The professional growth of the teacher in service is a matter of great concern to the Office. Recent developments in instructional techniques, organization, and materials have made the need for strong inservice development programs even more important than in the past.

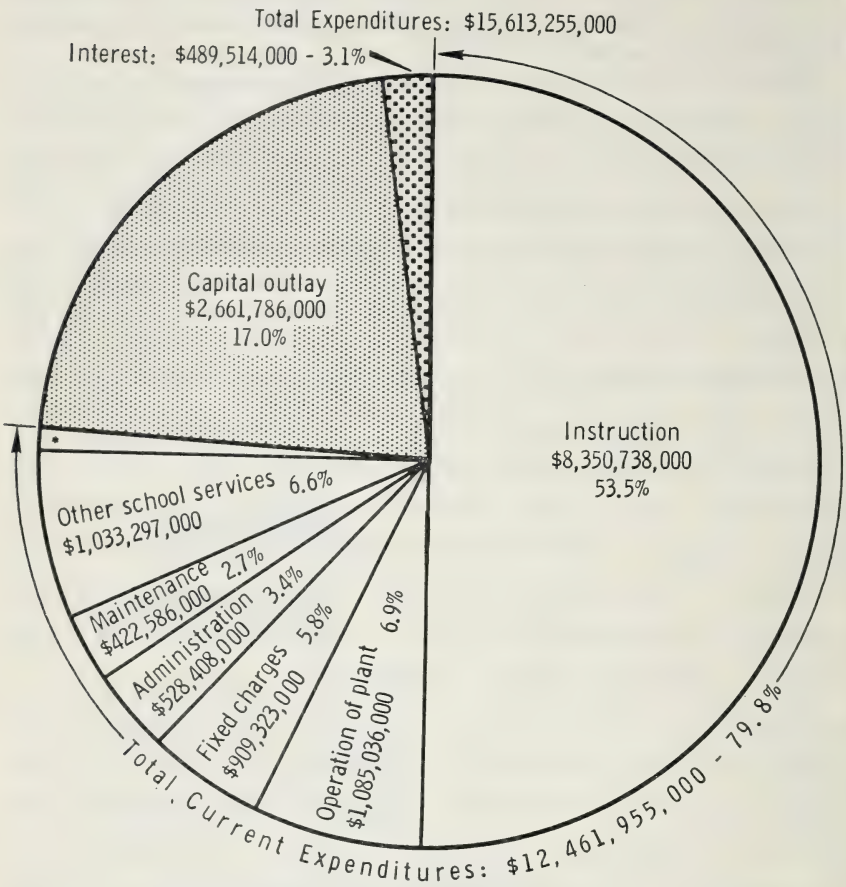
Need for Salaries Competitive With Those in Other Occupations.—The second major staffing aim is to provide for adequate salaries. An important criterion of adequacy of salary is the degree to which the salary is competitive with that in other occupations. Not long ago the Office of Education recommended a salary level increasing annually to about $7,200 by 1963–64, a figure which will not be met at the present rate of increase. This level, a 50-percent increase over the salary level 5 years earlier, would undoubtedly help the schools compete with other employers for college graduates. However, there are other salary features which must be considered in addition to the national average. The beginning salary, the potential maximum, and the anticipated timespan between the two are taken into account in estimating a career-earning potential. This is an index which is receiving increasing attention by salary analysts as well as by college students considering career choices.

Most teacher organizations strive for a salary schedule which has a minimum salary adequate to compete for staff and a maximum salary which doubles the minimum in approximately 10 years. This goal is met in few communities today. This relatively unfavorable competitive status applies not only to the recruitment of new staff, but also to the retention of existing staff. Beginning salaries for teachers are from $500 to $1,500 below the averages reported in major business and industrial positions requiring preparation comparable to that of the teacher, and salaries after 5 or 10 years show even larger differentials. The 30- or 40-year earning potential for classroom teachers is significantly below that which individuals in other occupations requiring similar experience and education can anticipate.

FACILITIES NEEDED

The public elementary and secondary schools in the 50 States and the District of Columbia enrolled 37.5 million pupils in the fall of 1961—an increase of 1.2 million, or 3.4 percent, over comparable enrollment 1 year earlier. Of the 1961 total, an estimated, 1,693,000 pupils, or 4.3 percent, were enrolled in excess of the normal capacity of accessible, publicly owned school facilities then in use.

CHART 2.—SUMMARY OF EXPENDITURES FOR PUBLIC ELEMENTARY AND SECONDARY SCHOOLS: UNITED STATES, 1959–60



*Other current expenditures: $132,567,000 - 0.8%

Note: Data are for 50 States and the District of Columbia. Because of rounding, detail may not add to totals.

Source: U.S. Department of Health, Education, and Welfare, Office of Education, *Statistics of State School Systems, 1959–60.*

Local school officials, confronted by more pupils than their facilities were designed to handle, followed one or more of several alternatives to accommodate them: using rented or donated quarters such as churches, lodge halls, and other buildings; converting to instructional use spaces in school buildings designed for other purposes; utilizing substandard and/or makeshift facilities; and dividing the school day into two or more sessions so that two or more groups could use the same facilities each day.

More than 571,000 pupils were affected by the shortened school day in 1961, an improvement over the previous year when 657,000 were affected by curtailed sessions. Notwithstanding this improvement, the country's need for additional classrooms is pressing; and in localities where population growth has been rapid, the need is acute.

In the fall of 1961, State education agencies reported the need of 127,300 additional instruction rooms—60,300 to accommodate pupils in excess of the normal capacity of accessible, publicly owned facilities and 67,000 to replace unsatisfactory rooms then in use. The percentage distribution for these two categories of need was 47.4 and 52.6, respectively, but this distribution was heavily weighted by the high concentration of unsatisfactory rooms in several States.

The present backlog results from the fact that construction of new facilities has not kept pace with needs. Of the 72,000 instruction rooms to be completed during 1961–62, only a small proportion could be applied against the reduction of the reported backlog of 127,300 rooms, because thousands of rooms are required to accommodate population shifts, to replace rooms abandoned for one reason or another during the year, and to house the enrollment increase of 1.4 million pupils from 1961–62 to 1962–63.

Moreover, under present and probable future conditions, classroom needs will continue during the remaining years of this decade. The average annual rate of classroom construction for the past 6 years (1955–56 through 1960–61) was 69,200 instruction rooms, a number only slightly in excess of requirements for increased enrollments.

Since an increasing number of school districts reached statutory debt limitations through long-term financing of school facilities, and a significant number of communities voted against school bond issues during the past year, the trend toward less school construction may continue. Meanwhile, classroom needs will continue to mount, for enrollment will increase by almost 1 million pupils in each of the remaining years of this decade; loss of school facilities by fire and other causes will continue; population shifts will cause abandonment of satisfactory facilities in some communities and create the need for new ones in others; current emphasis on urban renewal will have implications for school construction; limited-access highways are creating problems with respect to the location and size of present and future school centers; public acceptance of, and sometimes insistence upon, extending the school program downward to include kindergarten and nursery and upward to include junior college and perhaps programs for adult education (including retraining for new jobs) will create a need for thousands of additional classrooms; and finally, new concepts of teaching, of the learning process, and of goals to be accomplished

Table 1.—*Enrollment in grades 9–12 in public and nonpublic schools, and population 14–17 years of age: United States, 1889–90 to 1961–62*

School year	Enrollment, grades 9–12 and postgraduate [1]			Population 14–17 years of age [2]	Total number enrolled per 100 persons 14–17 years of age
	All schools	Public schools	Nonpublic schools		
1889–90	359,949	[3] 202,963	[3] 94,931	5,354,653	6.7
1899–1900	699,403	[3] 519,251	[3] 110,797	6,152,231	11.4
1909–10	1,115,398	[3] 915,061	[3] 117,400	7,220,298	15.4
1919–20	2,500,176	[3] 2,200,389	[3] 213,920	7,735,841	32.3
1929–30	4,804,255	[3] [4] 4,399,422	[3] [4] 341,158	9,341,221	51.4
1939–40	7,123,009	6,635,337	487,672	9,720,419	73.3
1941–42	6,933,265	6,420,544	512,721	[5] 9,749,000	71.1
1943–44	6,030,617	5,584,656	445,961	[5] 9,449,000	63.8
1945–46	6,237,133	5,664,528	572,605	[5] 9,056,000	68.9
1947–48	6,305,168	5,675,937	629,231	[5] 8,841,000	71.3
1949–50	6,453,009	5,757,810	695,199	8,404,768	76.8
1951–52	6,596,351	5,917,384	678,967	[5] 8,525,000	77.4
1953–54	7,108,973	6,330,565	778,408	[5] 8,878,000	80.1
1955–56	7,774,975	6,917,790	857,185	[5] 9,229,000	84.2
1957–58	8,868,586	7,905,569	963,017	[5] 10,164,000	87.3
1959–60 [6]	9,700,000	8,600,000	1,100,000	11,154,879	87.0
1961–62 [6]	10,800,000	9,600,000	1,200,000	[5] 12,027,000	89.8

[1] Unless otherwise indicated, includes enrollment in subcollegiate departments of institutions of higher education and in residential schools for exceptional children. Beginning in 1949–50, also includes Federal schools.

[2] Includes all persons residing in continental United States, but excludes Armed Forces overseas. Data shown are actual figures from the decennial censuses of population unless otherwise indicated.

[3] Excludes enrollment in subcollegiate departments of institutions of higher education and in residential schools for exceptional children.

[4] Data for 1927–28.

[5] Estimated by the Bureau of the Census as of July 1 preceding the opening of the school year.

[6] Estimated data for 50 States and the District of Columbia.

NOTE: Unless otherwise indicated, data are for 48 States and the District of Columbia.

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Biennial Survey of Education in the United States.*

will tend to make obsolete many buildings that might otherwise remain useful.

The Office of Education offers assistance to State departments of education, and through them to local school systems, by providing technical information and consultative services on numerous problems associated with schoolhousing needs, such as long-range planning; construction and technological advances; functional planning; the development of educational specifications; and the selection, purchase, and utilization of supplies, furniture, and equipment.

FINANCING PUBLIC EDUCATION

For the 1961–62 school year, the total amount of revenue provided from all sources for the support of public elementary and secondary schools was estimated to be approximately $16.6 billion. This represented an increase of more than $1.3 billion, or 8.7 percent over the estimated $15.3 billion provided during the previous year.

Local School Revenue

Taxes raised at the local level still provide over half the funds available to the local boards of education (see chart I). The system of local taxation is, therefore, of considerable significance as a source of funds for educational purposes.

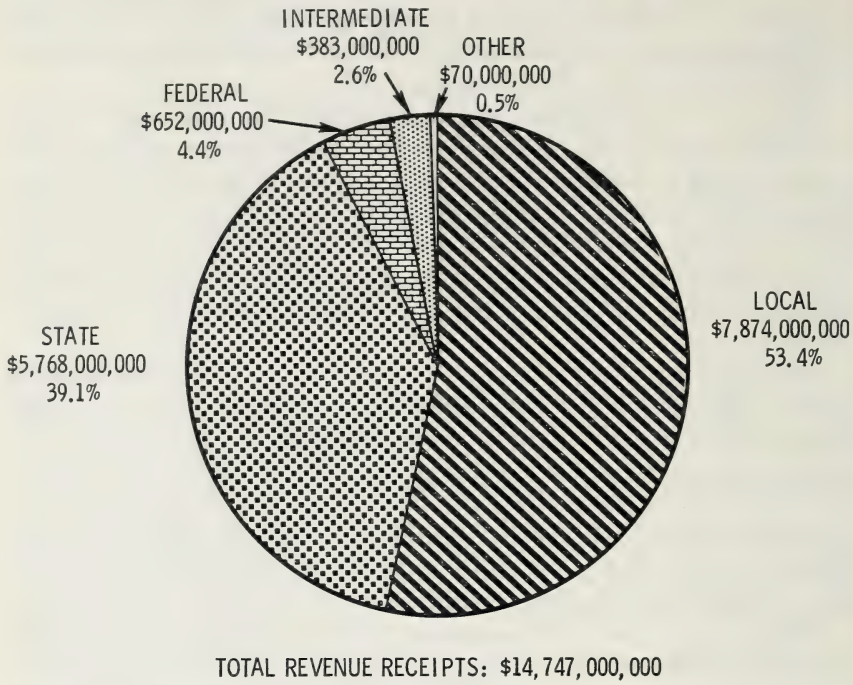
Property Taxes.—In the typical school district, the local board of education levies taxes on the property located in the district. The property tax is the basic source of revenue for the county or other intermediate unit. While the property tax continues to provide the bulk of money for education, it shows the least responsiveness to the growth of the economy. There is frequently a time lag between an increase in the value of property and the inclusion of the increase in the tax base.

While property tax levies and bases have increased greatly in the recent past, there is little assurance that this performance can be repeated in the future. Statutory and constitutional limitations as well as psychological factors have made it extremely difficult for many local units to obtain the levies needed to raise adequate funds. As a consequence there has been considerable interest expressed for greater State support and to a much lesser extent for relief of the property tax through local nonproperty taxes.

Nonproperty Taxes.—Taxes on such items as wages, motor vehicles, deed transfers, hotel occupancy, amusements, general sales, and other business transactions are among those levied on nonproperty sources for schools. Taxes of this type are not in general use, but they do produce about one-fifth of the local school revenue in Pennsylvania and considerably smaller amounts in other States. The town, city, or county which provides money for dependent schools tends to use nonproperty taxes to a greater extent than do independent school districts, but even here a major portion of the property tax rate is frequently designated for schools. This has the effect of shifting the nonproperty tax sources to nonschool functions, thereby causing the schools to rely heavily on the property tax.

Bonded Indebtness.—Since most school construction in the United States is based on bond financing, information on debt cost is important to school boards and officials. The Office of Education reports monthly in *School Life* the average net interest costs on Moody-rated school bonds. An annual publication, *Bond Sales for Public School Purposes*, gives State by State the number and amount of bond sales, as well as the net interest costs by issuing agencies and by Moody ratings. These reports supply boards of education with information which will help them make judgments on the acceptance or rejection of bids for the sale of bonds. According to the Moody ratings, the average net interest cost declined from 3.41 percent in July 1961 to 3.21 percent in June 1962.

CHART 3.—REVENUE RECEIPTS FOR PUBLIC ELEMENTARY AND SECONDARY SCHOOLS, BY SOURCE: UNITED STATES, 1959–60



Note: Data are for 50 States and the District of Columbia.

Source: U.S. Department of Health, Education, and Welfare, Office of Education, *Statistics of State School Systems, 1959–60.*

The annual sale of school bonds has increased from $1.87 billion to $2.56 billion over the 6-year period ending in 1961–62. In 1961–62 school bond sales rose to a high of $2.56 billion, 5.8 percent above the previous peak of $2.42 billion reached in 1957–58. This is 8.5 percent above the 1960–61 sales, which totaled $2.36 billion. The total amount of school bond sales for the 6-year period was $13.4 billion.

The average net interest rate on all school bonds, rated and nonrated, declined from 3.91 percent in 1959–60 to 3.52 percent in 1960–61 and continued downward to 3.33 percent in 1961–62. The total expenditure for debt service, amount required for repayment of principal and interest, is a rapidly expanding item in school budgets.

State Funds for Schools

In spite of the considerable pressure for increased funds, the States continued to provide an average of about 40 percent of the total public school revenue for grades K–12, a pattern which has prevailed since 1948. Although there is a slight tendency for this percentage to rise, the amount of rise is so slight that the plateau of State support

Table 2.—*Office of Education enrollment estimates: United States, 1960–61 and 1961–62*

[Estimates are for total enrollment during the school year. These figures are larger than the figures for fall enrollment]

Type of school, by grade level	School year 1960–61	School year 1961–62
Total, elementary, secondary, and higher education	47,900,000	49,300,000
Kindergarten through grade 8	33,800,000	34,200,000
Public school system (regular full-time)	28,400,000	28,700,000
Nonpublic schools (regular full-time)	5,200,000	5,300,000
Other schools [1]	200,000	200,000
Grades 9 through 12	10,100,000	10,800,000
Public school system (regular full-time)	8,900,000	9,500,000
Nonpublic schools (regular full-time)	1,100,000	1,200,000
Other schools [1]	100,000	100,000
Kindergarten through grade 12	43,900,000	45,000,000
Public school system (regular full-time)	37,300,000	38,200,000
Nonpublic schools (regular full-time)	6,300,000	6,500,000
Other schools [1]	300,000	300,000
Higher education: Universities, colleges, professional schools, junior colleges, normal schools, and teachers colleges (degree-credit enrollment)	4,000,000	4,300,000

[1] Includes Federal schools for Indians, federally operated elementary-secondary schools on posts, model and practice schools in teacher training institutions, subcollegiate departments of colleges, and residential schools for exceptional children.

NOTE: The figures in this table are all estimates for 50 States and the District of Columbia.

seems to be effectively maintained at just over 39 percent. Figures for the individual States, however, range from slightly in excess of 5 percent to more than 80 percent.

Sources of tax income for the programs of State support come almost entirely from nonproperty taxes in individual and corporate income taxes, sales taxes, death and gift taxes, taxes on natural resources, and motor vehicle licenses appropriated from the States' general revenue funds. An estimated 75 percent of the State funds for schools are provided from general revenue sources, while the remaining 25 percent of the funds are obtained from taxes collected specifically for the schools. Less than 1 percent of State collected revenue for schools is derived from State property taxes, either in general or earmarked revenue.

New provisions for State support of public elementary and secondary education reflect a growing awareness among the States of the need for educational and financial improvement. There is an increasing emphasis for some States to assume a percentage of the school expenditures above the foundation level, thus removing the support ceiling. In one State new foundation support levels may be established through executive adjustment rather than legislative specification, thus increasing the responsiveness of the State program to economic change. There are some States in which variations in the costs of education are recognized in the apportionment of State

funds, thus aiding special high-cost areas, such as large cities or remote rural areas.

Through the application of provisions such as these, States may overcome some of the most significant difficulties in providing an equitable program of State support for public education. Emphasis is directed toward better programs rather than minimal programs; adjustment of support levels is continuous rather than fixed by the legislature; and allowances are made for exceptional costs in the school districts.

Table 3.—*Gross national product related to total expenditures [1] for education: United States, 1929–30 to 1961–62*

Calendar year	Gross national product (in millions)	School year	Expenditures for education	
			Total (in millions)	As a percent of gross national product
1929	$104,436	1929–30	$3,234	3.10
1931	76,271	1931–32	2,966	3.89
1933	55,964	1933–34	2,295	4.10
1935	72,502	1935–36	2,651	3.65
1937	90,780	1937–38	3,014	3.32
1939	91,095	1939–40	3,200	3.51
1941	125,822	1941–42	3,204	2.55
1943	192,513	1943–44	3,522	1.83
1945	213,558	1945–46	4,168	1.95
1947	234,289	1947–48	6,574	2.81
1949	258,054	1949–50	8,796	3.41
1951	328,975	1951–52	11,312	3.44
1953	365,385	1953–54	13,950	3.82
1955	397,469	1955–56	16,812	4.23
1957	442,769	1957–58	21,120	4.77
1959	482,704	1959–60	[2] 24,722	5.12
1961	[2] 518,725	1961–62	[2] 28,962	5.58

[1] Includes expenditures of public and nonpublic schools at all levels of education (elementary, secondary and higher education).
[2] Estimate for 50 States and the District of Columbia.

NOTE: Unless otherwise indicated, data are for 48 States and the District of Columbia.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education, *Biennial Survey of Education in the United States;* U.S. Department of Commerce, Office of Business Economics, *Survey of Current Business,* July 1958 and July 1962.

Federal Support

Federal appropriations to the 50 States and the District of Columbia for public elementary and secondary schools totaled an estimated $609 million for 1961–62 and accounted for an estimated 3.7 percent of the total revenue from all sources. This proportion is roughly comparable to other recent years.

Perhaps the most significant fact is that receipts from Federal sources increased $26 million, 4.5 percent over the previous year. Yet, the Federal funds continue to amount only to some 4 percent of the total school revenue, since both local and State revenues have continued to increase correspondingly.

For details concerning specific programs in education, see Educational Assistance Programs.

OFFERINGS AND ENROLLMENTS

English

During the past year national interest in the English curriculum has been raised to a high level. State departments of education and colleges and universities have shown enthusiasm for undertaking research in English and developing new curriculum materials, principally for the secondary schools. The curriculum areas most frequently studied are written composition, linguistics, and reading. For information on Project English, see Sponsored Research on page 279.

Several cooperative research studies sponsored by the Office of Education have significance for the elementary school program. Two studies completed this year concern children's language use as related to the language of their reading textbooks. It is probable that these studies will influence the production of new reading texts and the revision of existing textbooks. Curriculum centers for Project English include two which will give attention to the development of reading materials at the elementary school level.

Special emphasis has been placed on curriculum for the college-bound student by the Commission on English of the College Entrance Examination Board. The Commission held a summer conference of college teachers and others to plan institutes for selected high school teachers, who would receive grants to attend. The conference designated composition, language, and literature as the three areas of study which legitimately constitute the English curriculum.

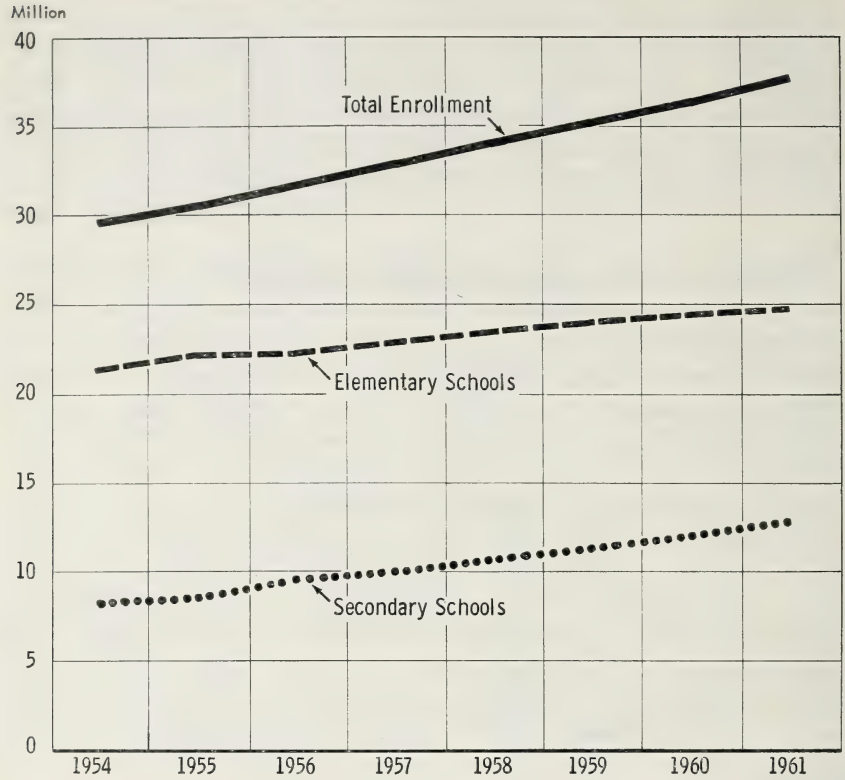
The Arts

The neglect of the arts in American life has become a cause of grave concern to an increasing number of national leaders. History has demonstrated that the arts contribute in a high degree to the intellectual and spiritual development of a people. The Nation can ill afford to slight this creative dimension of education. During the year the Office of Education gave serious consideration to the place of the arts in education and examined its role in achieving an increased emphasis on the arts in schools and colleges. It created a Division of Continuing Education and Cultural Affairs and developed the groundwork for a program to assess the status and condition of art education throughout the Nation and to encourage and to promote through a variety of activities the more effective teaching of the arts at all educational levels.

Foreign Languages

The expansion of both foreign language enrollments and foreign language offerings has continued during 1961–62. At the elementary school level attention has been focused on the evaluation of existing

CHART 4.—TRENDS IN ENROLLMENT IN FULL-TIME ELEMENTARY AND SECONDARY DAY SCHOOLS: UNITED STATES, FALL 1954 TO FALL 1961



Source: U.S. Department of Health, Education, and Welfare, Office of Education. *Fall 1960 Statistics on Enrollment, Teachers, and Schoolhousing.*

foreign language programs. Reports of research studies in this area have been significant in bringing about a review of purpose and a refinement of curriculum. Improved programs stress orderly language progression within the elementary school system and articulation with the junior high school program.

Junior and senior high schools have given increasing attention to the development of new methods and techniques for integrating listening and speaking with reading and writing. These practices are designed to achieve greater efficiency in the development of the four language skills.

Electronic instructional equipment, most of which was acquired by matching funds under title III of the National Defense Education Act, is a basic element in the development of understanding and speaking skills. By 1962 at least 5,000 foreign language laboratories were in use in public secondary schools, as compared with 46 prior to NDEA. However, more than three-fourths of the public high schools in this country are still without language laboratories.

Financial assistance also was available to expand the language supervisory services of State educational agencies. By July 1962, 57 State supervisors of modern foreign languages were employed in 37 States and the District of Columbia. Through inservice teacher education programs and consultative services to local schools these specialists have contributed substantially to the quality and quantity of modern foreign language instruction in the public schools. New and improved programs of study have been developed, resulting in the addition of new languages to the curriculum and the lengthening of the usual 2-year program of instruction to 4, 6, or even 8 years in some school systems. This expansion included the addition of many new foreign language programs in the elementary schools. The Modern Language Association of America under a title VI grant reported in September 1962 that 60.8 percent of the high schools were offering a modern foreign language (as compared with 50.4 percent in 1958) and enrollments in modern foreign languages had increased in grades 9 to 12 from 1,300,882 in the fall of 1958 to 1,872,946 in the fall of 1960.

State foreign language supervisors have developed a variety of curriculum guides to aid teachers in the expanded programs and have kept teachers informed of developments in foreign language teaching through a network of newsletters and bulletins. These specialists also devoted their efforts to the strengthening of certification requirements and to the achievement of better coordination with institutions which prepare teachers. The high degree of success of strong supervisory and consultant services at the State level has highlighted the value of this provision of the NDEA. These efforts must continue to increase if the Nation is to achieve the goal of adequate foreign language preparation for American citizens.

There is no doubt about the interest and desire of the elementary and secondary school teachers of modern foreign languages to improve personal skills in the languages taught and to learn better methods of teaching languages: more than 20,000 applications were received from such teachers for attendance at the National Defense Education Act language institutes during the summer of 1962, although only 4,368 could be accommodated.

Science

Science teaching in the public schools continues to improve, thanks to the impetus of space technology over the past year.

The financial support provided for improving science teaching in the schools through grants from the National Science Foundation, the National Aeronautics and Space Administration, the Atomic Energy Commission, and the Office of Education have provided unprecedented resources for improving school science programs.

Under the STEPS Program (Science Teaching for Excellence: Program Steps) launched over a year ago by the science staff of the Office of Education, pilot projects are now in progress in about 20 States, and the program is spreading to others. In this program local and State personnel work cooperatively over a period of several years to upgrade science programs by catalyzing the new resources into action programs at the grass-roots level. Currently, in several States, programs are going forward to upgrade junior high school and elementary school science teachers through local inservice institutes taught by capable high school teachers, many of whom have attended institutes sponsored by the National Science Foundation.

On June 25–29, 1962, the Office of Education invited State science supervisors to a conference on "Supervision for Quality Education in Science." The group reviewed the latest developments in science as they affect education, explored new emphases in selected special fields of science teaching, and developed guidelines for leadership in supervision. The conference not only afforded the opportunity for an exchange of valuable ideas, but aided in the clarification of the role and function of State science supervisors. A report will be released by the Office.

This past year science education programs have shown marked expansion and improvement, due in large part to financial assistance and State leadership made possible by the National Defense Education Act, title III. State science specialists have increased in number from 16 to 99 and are providing inservice teacher education in their areas through workshops, conferences, publications, and consultative services. Teachers are being brought into closer working relationships with research scientists, university scholars, and representatives of business, industry, and the professional scientific societies.

Both course offerings and student enrollments are increasing at all levels of science instruction in the schools. Not only have content and methods been carefully examined to insure sequential development, but schools have been stimulated to reprogram their offerings to challenge academically talented students. Through NDEA acquisition programs, new instructional equipment and materials have given impetus to K–12 programs and have modernized many science laboratories. Although substantial progress can be noted, a large portion of the elementary and secondary schools still lack adequate facilities for science instruction.

The various national curriculum study groups have expanded their programs both nationally and internationally and have begun to sharpen their evaluative procedures. As a result of feasibility studies conducted by the American Association for the Advancement of Science, a commission was appointed to plan the improvement of science

in the elementary and junior high schools. Experimental programs in elementary science are now being initiated as never before.

The Office of Education developed plans for a new national science youth organization implementing Public Law 85–875. In addition the Office cooperated with State departments of education in Texas and Massachusetts in conducting "science congresses" to promote annual statewide science-youth programs involving discussion groups, presentation of scientific papers, talks, exhibits, etc. All of these activities are directed toward increasing the opportunity for science education for interested youth.

Mathematics

During the past year the Office of Education has increased its emphasis on consultative work with State supervisors of mathematics. A total of 48 State departments of education were visited by the mathematics specialists from the Office of Education. Some of the specific purposes of these visits were: (*a*) to stimulate pilot projects in in-service education, (*b*) to assist the mathematics supervisor in planning his program, (*c*) to promote cooperation between State departments of education and institutions of higher education, (*d*) to encourage pilot projects in mathematics for the underachiever, and (*e*) to establish cooperative projects in mathematics and science.

In terms of advancement of knowledge and dissemination of information relative to mathematics education, continuing projects include: *Summary of Research Studies in Mathematics Education*, *Status of Junior High School Mathematics*, *Number of Mathematics Teachers*, and *Offerings and Enrollments in Mathematics and Science.* In addition, a new study was initiated, *Offerings and Enrollments in Mathematics and Science in Summer School.*

As for action programs for conservation of human resources, there is a mounting need for attention to the underachiever in mathematics. A new study on programs for the underachiever and a related conference on programs for the underachiever in mathematics have been planned. Another related study on the status of mathematics programs in large cities is also in the planning stage.

Mathematics received major emphasis in elementary schools throughout the country during the past year. Experimental centers, sponsored by the Federal Government and by private foundations, reflected increased attention to the structure and meaning of mathematics and to effective methods of teaching the subject.

Mathematics education is profiting through the efforts of mathematics specialists working in a supervisory capacity in State departments of education. Seventy-four such specialists are presently employed in 41 States, the District of Columbia, and Puerto Rico. Through the utilization of Federal matching funds on a dollar-for-

dollar basis, made possible by the National Defense Education Act, title III, these specialists are beginning to effect improvements in mathematics instruction and curriculum development in local schools throughout the country.

The title III acquisition program is also contributing to mathematics curriculum improvement projects in 48 States, the District of Columbia, and outlying possessions. This program has provided mathematics classrooms with multisensory aids, filmed and projectual material and equipment, reference books, and improved instructional facilities.

There exists a continuing need to further improve mathematics offerings, especially in the elementary school. The curriculum and teacher improvement programs previously referred to have been most effective in the secondary schools. A continued effort must be made to extend and expand the services offered by mathematics supervisory personnel. As more emphasis is placed on a modernized instructional program in mathematics, there will be a need for major improvement in the area of teacher preparatory and inservice educational programs. The phenomenal rate of growth of mathematical knowledge itself provides ample supporting evidence that all efforts being made to improve its teaching and learning must be continued.

During the year the Office called a meeting of State supervisors of mathematics for the purpose of considering ways to strengthen the leadership of the State supervisor of mathematics with respect to developing mathematics curriculums, strengthening inservice and preservice training in mathematics, supporting research in the teaching of mathematics, and evaluating State programs in mathematics.

GUIDANCE AND TESTING SERVICES

Identifying Talent

Talent is not always apparent to the casual or even the trained observer. High achievement, particularly if it is in keeping with adult expectations and evidenced through conforming behavior, is readily noted, but when talent is masked by indifference, social mores, or nonconformity, it may never be identified.

School and college personnel must recognize their responsibility for the determination of criteria for identifying talent and must establish systematic, continuing programs for recognizing high potential. Criteria will vary with the level of maturity of the student and should involve multiple elements. Variables such as mental ability, artistic ability, creativity, persistence, reading ability, motivation, aspirational levels, energy levels, individual value systems, patterns of conformity, and study skills may well be considered. To be useful in the development of criteria for identifying talent, how-

ever, an element must be subject to measurement by valid and reliable instruments such as tests, interview schedules, observational checklists, and records. With the help of established criteria and carefully designed programs, teachers and counselors can discover latent talent.

There is growing recognition of the importance of early identification of student potential and student needs. It is also recognized that serious student problems can best be prevented if corrective steps are begun in the earliest years of school experience. Such awareness is causing attention to be focused upon expanding and strengthening guidance services in elementary schools.

The Office has established committees and is developing a program for helping to stimulate and improve plans for the identification and nurture of talent in cooperation with State departments of education and colleges and universities.

States may apply for funds under provisions of the National Defense Education Act (title V, A) to improve and extend their guidance, counseling, and testing services. Reports from the States indicate that the NDEA program has been effective in helping students set their goals, plan their careers, and take advantage of educational opportunities. Many of these students were planning to drop out of high school or were not planning to go to college.

Reports from States also indicate, however, that while steady and substantial progress has been made since 1958, many thousands of potential college graduates still do not continue their education beyond high school. One recent study showed that in 1961, 37 percent of the students in the upper one-fifth of the graduating class failed to enter college.

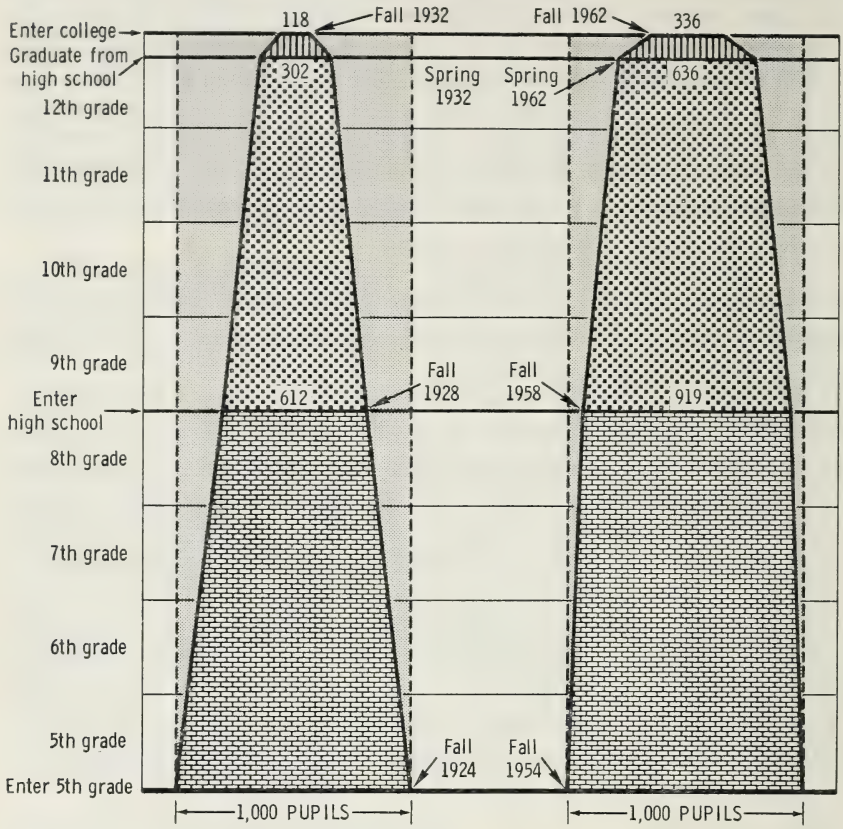
Testing Programs

The total number of tests administered during 1961–62 school year was 18,184,000, of which 6,436,000 were administered under NDEA. The number of secondary school students tested at least once under this program was approximately 77 percent of the secondary school enrollment in grades 7 to 12 inclusive. While testing is not an exclusive nor an infallible instrument for identifying talent, the contribution of the act toward the national effort in this direction is noteworthy.

Professional Personnel

The improvements in local guidance programs have been qualitative as well as quantitative. There has been a consistent move in the direction of upgrading State certification requirements for counselors. States report that secondary school students are receiving improved counseling services as a result of better qualified counselors and a more favorable counselor-student ratio. Most States have adopted as their

CHART 5.—APPROXIMATE RETENTION, FIFTH GRADE THROUGH COLLEGE ENTRANCE: UNITED STATES, 1924–32 AND 1954–62



Note: Data are for 48 States and the District of Columbia.

Source: U.S. Department of Health, Education, and Welfare, Office of Education, *Biennial Survey of Education in the United States.*

goal a ratio of one full-time counselor for each 300 students. In 1958, the national ratio for all high schools was 1 counselor to 750 students as compared with the current ratio of 1 to less than 550.

Prior to NDEA (1957–58) the equivalent of approximately 12,000 full-time secondary school counselors served a public secondary school population of more than 10 million students. At the current rate of expansion in guidance, counseling, and testing programs, it is estimated that the number of full-time equivalent counselors in public secondary schools will have increased from 21,800 during 1961–62 to an approximate 33,000 counselors by 1964. Notwithstanding these gains, however, there is still an urgent need for additional qualified counselors to meet the increasing enrollment and to provide counseling services at the recommended ratio of 1 to 300. The projected increase

in enrollment for 1964 will require about 51,000 counselors, leaving an anticipated shortage by that date of more than 18,000 full-time equivalent counselors. Statistics indicate that there is a current shortage of more than 20,000 guidance and counseling personnel at the public secondary school level, and 2,200 at the undergraduate college level.

Even though full- and part-time professional guidance personnel in State departments of education increased from 99 in 1958 to 256 during the 1961–62 school year, additional State supervisory personnel will be necessary to provide more adequate supervision of local guidance and testing programs. The most recent statistics indicate that in addition to approximately 9,000 counselors employed in schools which are not participating in the NDEA program, only 256 full- and part-time State supervisory personnel are dealing with approximately 26,000 persons engaged in scheduled guidance activities in 7,229 NDEA-approved programs.

Higher Education

ADMINISTRATIVE PROBLEMS AND SERVICES

One of the basic responsibilities of the Office of Education is to provide services designed to strengthen higher education at regional, State, and institutional levels. Through the dissemination of the results of its own research and data gathering, the Office multiplies the effectiveness of all who are responsible for institutions and agencies of higher education. The Office stimulates through direct services furnished in response to specific requests by national and State agencies and organizations, and by individual institutions, and encourages progress also. The following examples will serve to illustrate the scope and thrust of such activity and services.

Statewide Survey.—During 1962, the Office was asked by the Governor and State Legislature of Hawaii to conduct a comprehensive survey of higher education in that State, including the University of Hawaii and five private colleges, to afford a blueprint for progress. The report of the findings and recommendations growing out of this survey will be completed in November 1962 and submitted for action by executive offices of the State government, the legislature, and the board of regents of the university.

Information on State Legislation.—The annual *Survey of State Legislation Relating to Higher Education* is extensively used by both individuals and organizations desiring information on the status of higher education legislation in the several States and Territories. The current issue was completed in March 1962.

Clearinghouse of Studies on Higher Education.—Since 1958 the Office of education has compiled, analyzed, and interpreted data on

educational research and experiments related to programs reported by colleges and universities and utilized by similar institutions, management consultants, national and regional educational committees and commissions, State and local education systems, private industry, and individuals engaged in educational research. In a number of cases, institutions unable to send representatives to the Office of Education clearinghouse have invited the Office to send a consultant to them. The concerns of the institutions, as reflected in their inquiries, encompass problems concerned with learning and teaching practices, institutional management, student personnel services, and professional education. The interests of international agencies and of foreign universities are to establish working arrangements with a source of information in this country that can continuously inform them of current developments in higher education in the United States.

Through the *Reporter*, issued on a recurring basis, recently completed research on higher education is identified, listed, and annotated. Through the various issues of the *New Dimensions* series, trends in research on timely subjects are reported in considerable detail. The usefulness of this series is evidenced by the substantial number of copies requested by colleges and universities, national and regional education agencies, and philanthropic foundations; copies are also requested as resource materials for conferences.

Institutional Organization and Administration.—The Office published and disseminated a research report entitled *Organization and Administration of Institutions of Higher Education.* This book describes and analyzes the organizational patterns of 608 institutions. It deals also with issues, techniques, and procedures involved in achieving efficient internal organization and administration of institutions of higher education.

Assistance in Accreditation and Institutional Research Efforts.—Utilizing its substantial file of institutional self-surveys and related materials, the Office has given wide assistance to colleges conducting their own surveys for accreditation purposes.

Interinstitutional Cooperation.—Cooperative undertakings by groups of institutions of higher education have become increasingly significant in recent years. In 1962, the Office of Education published *Cooperative Projects Among Colleges and Universities*, a report identifying and describing a number of such interinstitutional projects currently in operation. This publication was used as a basic resource item at two national conferences on higher education.

Consultative services.—A substantial part of the work of the Division of Higher Education during fiscal 1962 was devoted to providing consultative services to State governing and coordinating boards of higher education, as in Oklahoma, Kentucky, Colorado, and a dozen

other States, to nonpublic higher education boards and related agencies, and to other governmental and nongovernmental organizations and officials. Similar services related to matters of administration, planning, finance, and curriculum were furnished to institutional higher education boards and officials.

Organization and Administration of 2-Year Colleges.—The most dramatic developments in the 2-year college movement continue to be the rapid increase in the number of public junior colleges, the increases in enrollments in 2-year institutions of all types, and the heightened emphasis on developing 2-year college campuses and facilities. In the past 5 years, of the 90 new institutions of higher education established in the United States, 69 are 2-year institutions: 15 established in 1956, 11 in 1957, 19 in 1958, 10 in 1959, and 14 in 1960. Less dramatic than the expansion of these colleges, but perhaps equally important, is the improvement in their administration. In 1962, the Office of Education assisted in several ways in the strengthening of 2-year college administration. Included in the annual *Survey of State Legislation Relating to Higher Education* was a listing of State legislation affecting 2-year colleges. During the year, the Office also completed the data-gathering phase of a study, *Patterns of State Support for 2-Year Colleges*, and assisted in organizing and conducting a conference of State directors of 2-year colleges. A report of the conference appeared in the Office publication, *State Directors of Junior Colleges and Coordinators of State Systems of 2-Year Colleges.*

Business Administration of Higher Education.—In 1961–62 colleges and universities spent approximately $7.2 billion for current operations and $1.2 billion for additions to the plant, a total of $8.4 billion. Although earmarked funds financed slightly more than one-third of the total expended for current operating purposes, such as auxiliary enterprises, organized research, and student assistance programs, there was considerable concern over the fact that no more than $4.8 billion came principally from student tuition, Government appropriations, and gifts. By 1970 the cost of operating the institutions of higher education may be expected to reach an annual total of $18.0 billion, with $15.5 billion required to finance current operations and $2.5 billion to finance capital additions. To help identify the magnitude of the economic problems of financing higher education and to examine the major issues involved, the Office prepared a publication entitled *Economics of Higher Education.*

Salary payments require about 60 percent of the total current operating expenditures of institutions of higher education. To note the significance of salary levels, the Office makes an annual study entitled *Higher Education Planning and Management Data.* The study has also furnished salary data for use in special areas, such as land-grant

colleges, State universities, junior colleges, and private colleges affiliated with religious denominations. Identification of sources of income and items of expenditure is obtained from a biennial study of income, expenditures, and property.

The *Casebook on Campus Planning and Institutional Development* reports the varied experiences of 10 institutions in building and expanding their campuses. This casebook was developed on the assumption that many higher education officials would be stimulated to do more effective planning by studying the experiences of others who had faced comparable problems.

A manual to assist those who have administrative responsibilities related to physical plant in making decisions regarding the rehabilitation, modernization, alteration, expansion, or abandonment of existing buildings is in preparation by the Office.

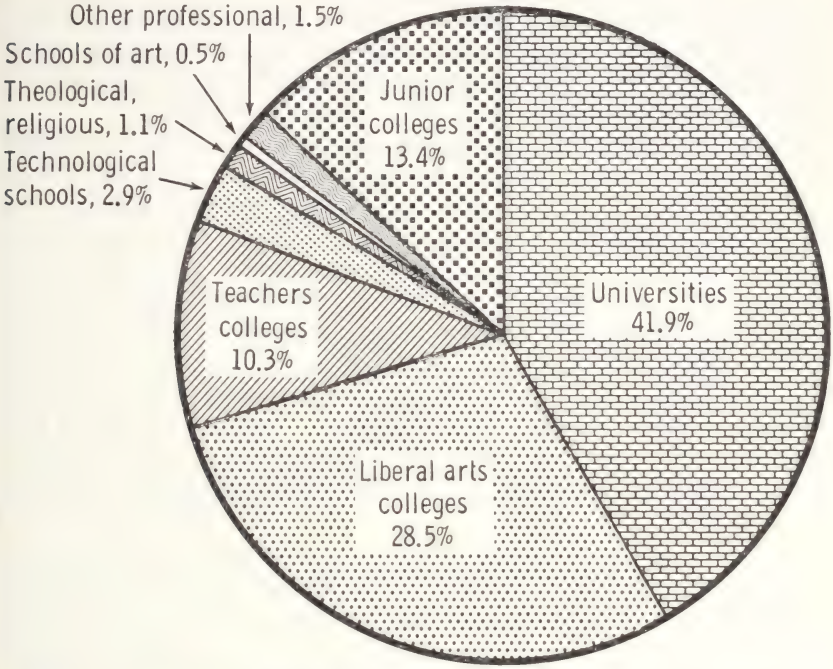
Urbanization and Higher Education.—The increasing urbanization of this country and the problems created thereby have caused the Office of Education to become deeply concerned with the effect of this social force on American education. During the year the Office of Education held a staff seminar based on a staff document setting forth the general characteristics, major problems, and noteworthy developments of higher education in urban settings. In addition to the rapidly increasing demand for higher education in the cities and the associated problems of physical and financial expansion, it seems that urban universities are finding it necessary to assume more and more responsibility for the social, cultural, and intellectual welfare of their communities.

Faculty Shortage.—The problem of increasing enrollments already described has lead to a critical shortage of qualified teaching personnel in several important instructional areas. To assist in the solution of this critical problem, this office has undertaken a study to provide for institutions of higher education reliable estimates, by major field, of the demand for instructional staff during the next decade. Recurring studies provide data on faculty salaries, fringe benefits, and working conditions. It is expected that the Office of Education status and projections reports on faculty personnel will be useful to graduate schools in developing programs for preparing college teachers, as well as to the college and university officials who select and appoint college teachers.

STUDENTS AND CURRICULUM

Student Services.—In the fall of 1961 there were 3,891,000 students enrolled in American institutions of higher education, 1,026,000 of them (26.4 percent) enrolled for the first time. It is well known that even more students will be enrolled in the next 5-year period. As

CHART 6.—PERCENTAGES OF DEGREE-CREDIT STUDENTS ENROLLED IN VARIOUS TYPES OF INSTITUTIONS OF HIGHER EDUCATION: UNITED STATES AND OUTLYING PARTS, FALL 1961



Source: U. S. Department of Health, Education, and Welfare, Office of Education, Survey of Opening (Fall) Enrollment in Higher Education, 1961.

enrollments increase, the problems related to meeting the diversified needs of a larger and more heterogeneous student population will multiply at an accelerating pace.

Several activities of the Office of Education have been devoted to the study and solution of these problems. Staff members at the request of institutions have consulted with them on problems relating to student financial assistance and the management of their student service programs; two studies were undertaken: one analyzing institutional expenditures for student services and the other devoted to the staffing and administration of student services. Preliminary findings from the first of these studies indicate that exclusive of housing and other auxiliary enterprises, publicly controlled institutions of higher education annually spend for student services an average of $38 per student. The comparable figure for privately controlled institutions is $46 per student.

Information Services.—The rapidly increasing number and quality of high school students planning to enter college has added to the

complex problems related to college admission and financial assistance and has demonstrated the need for improved and expanded information about post high school opportunities. Traditional patterns of selecting a college are no longer adequate for today's high school graduate facing the increasingly selective admissions competition. Rising college costs make the financing of higher education difficult for many students and their parents; for some, impossible.

Financial Assistance.—During the year the Division of Higher Education completed a national survey of institutional student financial assistance—scholarships, loans, and student employment financed by funds controlled by the colleges and universities. Based upon returns submitted by 1,677 institutions, the total volume of such assistance for the academic year 1959–60 was $211,011,345. Of this total, approximately $98.5 million was disbursed as compensation to students, $98.2 million in the form of scholarship grants, and $14.4 million as institutional student loans (not including loans under the National Defense Student Loan Program). As a byproduct of this study, the Office completed and published another directory of undergraduate student aid resources, *Financial Assistance for College Students: Undergraduate.*

On the invitation of the Rhode Island State Board of Education, the Office of Education completed an evaluation of the several State scholarship programs. The principal problems studied involved the rapid increase in scholarship costs, the need for and effectiveness of certain categorical scholarships, the administrative problems of multiple scholarship awards, standards for renewals, institutional transfer of scholarship students, and the administration of the financial needs test in setting stipends. Following the preparation of extensive statistical and documentary materials, consultation, and conferences with educational leaders and groups, a report of the findings and recommendations for the improvement of the scholarship programs was presented to the board and the administrative staff of the State department of education in January 1962. The board accepted the principal recommendations of the report and proceeded with their implementation.

Graduate Study.—A report, *Doctoral Study: Fellowships and Capacity of Graduate Schools*, documents the number, value, type, and major source of graduate fellowships recently awarded by major universities in all principal academic fields. The report also concerns the capacity of graduate schools for further expansion and the principal barriers to such expansion.

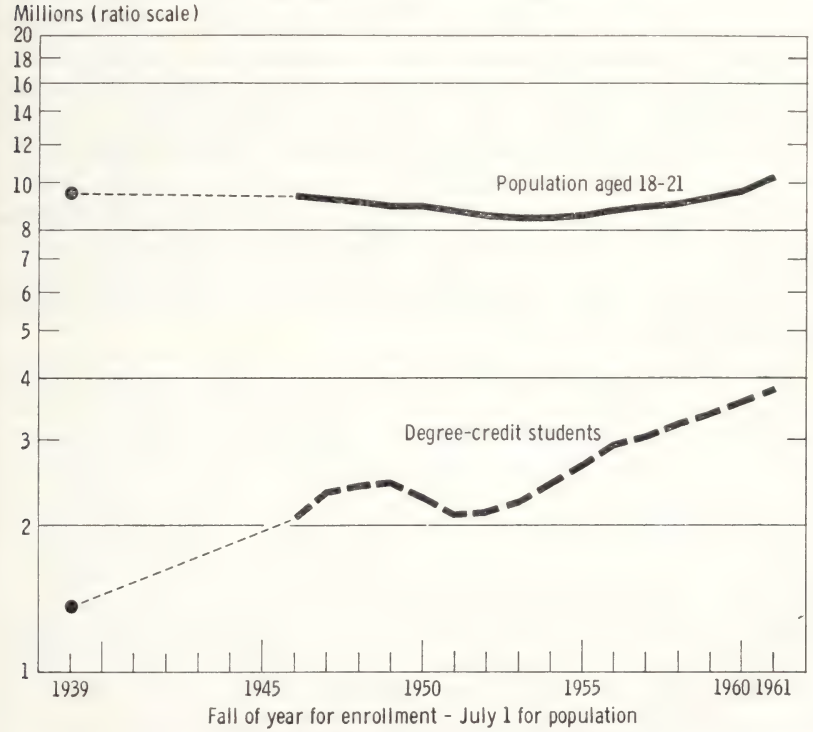
Two statistical reports have been prepared showing the number of students obtaining advanced graduate degrees from two major groups of institutions. The institutions are the 39 United States members

of the Association of Graduate Schools in the Association of American Universities and the 68 land-grant colleges and universities.

Summer Sessions.—A preliminary report of summer session programs in colleges and universities was prepared and distributed in April, in reply to numerous requests for summer-session data. Two publications, *Regular-Year Scholarship Programs of Institutions of Higher Education Applicable for Summer Session Study, 1960*, and *Travel Programs Sponsored by Institutions of Higher Education in Summer Sessions, 1960*, have been issued; three additional publications are in the final stages of preparation.

Teacher Education.—A major contribution has been made in the area of fifth-year programs of classroom teacher education: *Fifth-Year Programs of Classroom Teacher Education: A Survey Report*, will soon be off the press; meanwhile, three prepublication issues have been issued on the *Teacher Education Series*, "The Teaching Internship Program," "Fifth-Year Preservice Programs for Graduates of

CHART 7.—TOTAL DEGREE-CREDIT ENROLLMENT IN RELATION TO POPULATION AGED 18–21: UNITED STATES, FALL 1939 AND FALL 1946 THROUGH FALL 1961



Source: U.S. Department of Health, Education, and Welfare, Office of Education, Surveys of Opening (Fall) Enrollment in Higher Education.

Liberal Arts Colleges," and "Fifth-Year Programs of Classroom Teacher Education."

Toward the solution of problems in staffing higher education, the Office published a survey of placement services as a 2-part directory entitled *Placement Services for Personnel in Higher Education.* In addition to the directory it includes an analysis of the problems involved. It was used along with a parallel Office-developed working paper as basic material for a cooperatively sponsored professional conference.

Education for Public Service.—Following a series of meetings between the Commissioner of Education and the Chairman of the Civil Service Commission and their respective Washington and field staffs, a Committee on Education for Public Service was established within the Office of Education. This Commitee will collaborate with representatives of the Civil Service Commission on educational programs designed to strengthen and improve Government service through the Government Employees Training Act.

Public Administration.—A 1961 publication, *Graduate Study in Public Administration*, became during 1962 a standard reference source concerning all graduate programs in the field of public administration offered in the colleges and universities of the United States. Providing information never before available in a single volume, this new publication has been circulated widely throughout the United States and the countries of the free world. Upon special invitation, a related paper was presented by the author at the XIIth International Congress of the Administrative Sciences in Vienna in July 1962.

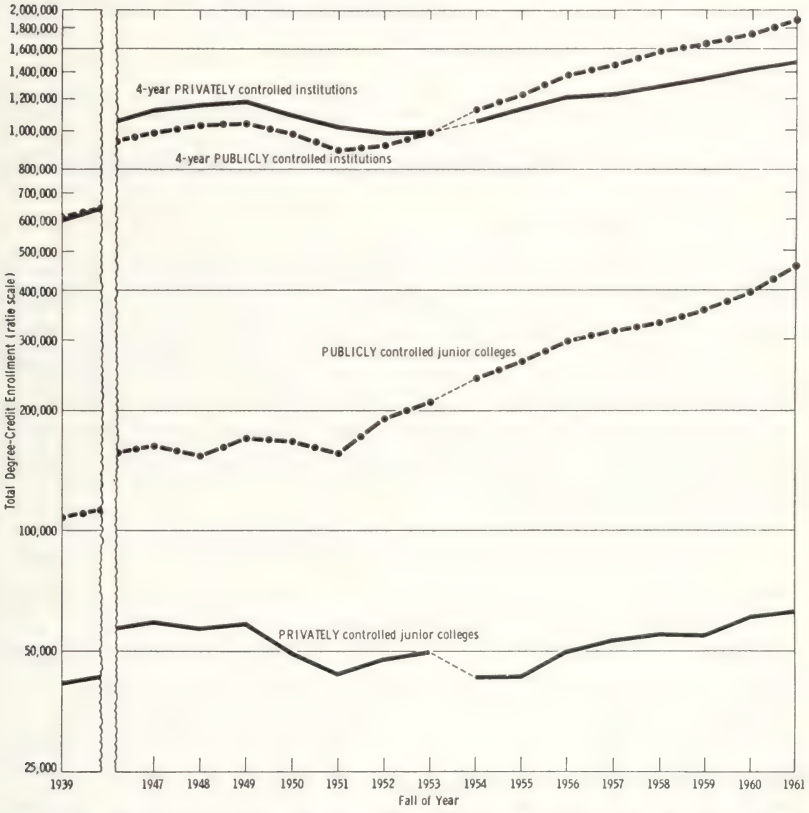
Degree Requirements in Mathematics.—The Office has undertaken a nationwide survey of mathematics requirements and programs for both baccalaureate and advanced degrees. Several articles have been published dealing with earned-degree trends in mathematics and the physical and biological sciences.

Organized Occupational Curriculums.—The Office completed during fiscal 1962 its fifth annual survey of *Organized Occupational Curriculums in Higher Education.* Such curriculums, primarily for the education of technician and semiprofessional workers, are becoming more and more a function of 2-year colleges. Whereas in 1955-56 2-year institutions provided only slightly more than half of the graduates and enrolled a somewhat larger portion of the students than did 4-year institutions, in 1959-60 organized occupational curriculum graduates from 2-year institutions outnumbered those from 4-year institutions by almost 2 to 1 (33,148 to 18,217) and the 2-year colleges enrolled close to 70 percent of the students (170,831 of 246,496) in these curriculums of at least one but less than 4 years in length.

Engineering Education.—The Office continued its annual study of engineering enrollments and degrees, leading to the publication *Engineering Enrollments and Degrees, 1961.* A report on transfers to schools or colleges of engineering was also published.

The Office also contributed to the preparation of a 3-volume publication, *Report on Education and Training of Professional Engineers*, prepared under the auspices of the Conference of Engineering Societies of Western Europe and the United States of America. It deals with systems of engineering education in the participating countries.

CHART 8.—TRENDS IN DEGREE-CREDIT ENROLLMENT FOR 4-YEAR INSTITUTIONS AND JUNIOR COLLEGES, BY TYPES OF INSTITUTIONAL CONTROL: UNITED STATES AND OUTLYING PARTS, FALL 1939 AND FALL 1947 THROUGH FALL 1961



Source: U.S. Department of Health, Education, and Welfare, Office of Education, Surveys of Opening (Fall) Enrollment in Higher Education.

Table 4.—*Earned degrees conferred by institutions of higher education: United States, 1869–70 to 1961–62*

Academic year	Earned degrees conferred			
	All degrees	Bachelor's and first professional	Master's except first professional	Doctor's
1869–70	9,372	9,371	0	1
1879–80	13,829	12,896	879	54
1889–90	16,703	15,539	1,015	149
1899–1900	29,375	27,410	1,583	382
1909–10	39,755	37,199	2,113	443
1919–20	53,516	48,622	4,279	615
1929–30	139,752	122,484	14,969	2,299
1939–40	216,521	186,500	26,731	3,290
1949–50	496,874	432,058	58,183	6,633
1951–52	401,203	329,986	63,534	7,683
1953–54	356,608	290,825	56,788	8,995
1955–56	376,973	308,812	59,258	8,903
1957–58	436,979	362,554	65,487	8,938
1959–60 [1]	476,704	392,440	74,435	9,829
1961–62 [2]	515,200	425,000	78,800	11,400

[1] Data for 50 States and the District of Columbia.
[2] Estimated.

NOTE: Unless otherwise indicated, data are for 48 States and the District of Columbia. More bachelor's degrees were conferred in 1949–50 than in any other year, since many veterans of World War II completed their education that year.

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Biennial Survey of Education in the United States,* and Circulars on *Earned Degrees Conferred by Higher Educational Institutions.*

LAND-GRANT INSTITUTIONS

The specific contribution of the Office to the Centennial Celebration of the establishment of the Land-Grant Colleges was a publication entitled, *Land-Grant Colleges and Universities 1862–1962.* Along with a reprinting of the first Morrill Act of 1862, and all subsequent legislation and amendments, as well as administrative rulings pertaining thereto, the bulletin presents a brief chronology of the development of each of the 68 institutions of higher education now constituting the "land-grant" system.

A survey of enrollment in agricultural curriculums in the land-grant colleges and universities for the 1961–62 academic year showed an increase of 3 percent in undergraduate enrollment and an increase of 2.5 percent in graduate enrollment over the previous year. For the first time in recent years the proportion of agricultural enrollment to total enrollment in these institutions did not decrease.

The Office has provided United States representation in the meetings of the Organization for Economic Cooperation and Development, including a study and discussion of the *Structure and Orientation of Intellectual Investments in Agriculture in Relation to Economic and Social Developments* in the 14 member countries.

FEDERAL PROGRAMS

In view of the Federal Government's extensive support of programs in higher education, it is important that the impact of its activities

in universities and colleges be clearly understood. Accordingly, the Commissioner of Education in February 1960 instituted a survey of Federal programs in higher education to consist of the following three parts: (a) A report on Federal programs in higher education and participating institutions, to be compiled on the basis of data from Federal agencies. (b) A study of the effects of Federal programs in 36 institutions of higher education. (Later contracted by the Office of Education to the Brookings Institution.) (c) Observations and recommendations on the Federal role in higher education based on the evidence of parts a and b as well as opinions of administrators of the programs.

A few of the preliminary findings of the director's report, which is nearing completion:

> Federally sponsored programs in higher education are designed generally to increase the Nation's productivity and potential in special fields such as agriculture, health, national security, science, engineering, and world affairs.
>
> Federal programs emphasize research and graduate education. Between 1955 and 1960 about 75 percent of all Federal income reported by colleges and universities was for research and development.
>
> Funds for Federal activities in higher education are largely concentrated within 100 institutions. In 1959, 100 institutions received more than 93 percent of all the funds for programs of research, graduate fellowships, and grants for facilities and equipment; 100 institutions received 88 percent of the funds for "education and training" programs. The 100 major participants, as measured by total Federal income in 1960, included 54 public and 46 private institutions.
>
> In general, faculty members and administrators participating in federally sponsored programs reported that in their opinion the Federal activity was appropriate, beneficial, and constructive; that its deficiencies arose primarily from its piecemeal nature; that most of the difficulties were being eliminated with experience; that its dangers lay more in the policies and standards of participating institutions than in any dictatorial tendencies on the part of Federal agencies and departments.

Educational Statistics

During fiscal year 1962 the Office of Education conducted two basic recurring surveys of State school systems: One, conducted biennially for those school years ending in an even number, reported detailed data on the organization, staffing, enrollment, and financing of public schools and basic information on the status of nonpublic schools; the other reported findings on the fall enrollment, teachers, and school-housing in the public schools.

Studies of local school systems provided data for reports on current expenditures per pupil, elementary and secondary school programs, teacher turnover, and the beginning public classroom teacher. The Office also developed projections of public and nonpublic ele-

mentary and secondary school enrollment, investigated the best possible methods for gathering meaningful statistics on school facilities, and provided advance estimates for college enrollments and resulting professional staff needs.

The Office continued its survey of nonpublic elementary and secondary schools resulting in a classified universe of the 4,000 secondary schools and a tentative group of some 13,000 elementary schools. From findings of these surveys, work was begun on a directory listing accredited and nonaccredited high schools.

A study of subject offerings and enrollments in private and parochial high schools was also launched. The data collected were largely comparable with similar information collected the previous year from a substantial sample of public secondary schools. In 1963 separate statistical reports will be prepared on the two levels of nonpublic schooling below college. At the same time, nationwide information on courses offered and the extent to which they are being utilized in both public and private schools will be available for the first time in 30 years.

The Office of Education conducts a broad and comprehensive program of statistical surveys in higher education. Needs are recognized both for prompt publication of data for immediate use and for analyses which require more preparation time. An example of a fast-moving survey, confined to only a few basic data items, is the annual survey of early fall enrollment. Data are collected as of late September and October, are reviewed and processed as received, and are published in early December. The publication gives for each of approximately 2,000 institutions the total enrollment of men and women students in work creditable toward bachelor's degrees and also the number of such students who are entering college for the first time. Both sets of figures are needed for establishing trends and projecting future changes.

Another effort to provide current data in higher education is the annual reporting of higher education data needed for institutional planning and management. Questionnaires were mailed to colleges and universities in July 1961 asking for information on student charges and staff and faculty salaries for the coming school year (1961–62). Institutional listings and summaries of the data were provided by type of institution, control, and region. This published report was supplied to administrative personnel in institutions of higher learning in September 1962.

New statistics prepared during the year included a projection of college enrollment which distinguished full-time enrollment for the first time and which analyzed the effect of increasing levels of education among parents on the college attendance rates of their children. Pro-

jections of earned degrees by major field of study were prepared for use in manpower studies stimulated by the Manpower Development and Training Act.

Other surveys included studies of engineering enrollments and degrees by field of concentration; graduate students enrolled for advanced degrees by field of study, years of study completed, and whether enrolled on a full-time or part-time basis; faculty and other professional staff by type of position; detailed financial statistics on receipts, expenditures, and property; junior-year enrollments in selected fields within the sciences, mathematics, and foreign languages; opening fall enrollment in degree-credit courses; data on organized occupational curriculums; and a detailed analysis of land-grant institutions, showing enrollment, degrees conferred, faculty, current-fund income and expenditures, and plant assets and obligations.

Sponsored Research

COOPERATIVE RESEARCH PROGRAM

During fiscal year 1962 the Cooperative Research Program assumed an expanded national role in pursuance of its charge to stimulate and support the study of problems facing American education. The Program's support for basic and applied research continues to provide a source of new knowledge and new applications of existing knowledge on an ever-increasing variety of topics at all levels. A study completed during this fiscal year, for example, revealed that up to 44 percent of some teachers' verbal behavior in the classroom was devoted to the control of pupils. Such behavior is believed to impede rather than facilitate learning. Although the researcher who conducted this study believes that little can be done to change the behavior of teachers who emphasize control, instruments now available could be used to screen out teacher training candidates who are likely to exhibit such behavior.

Research proposals in all areas continued to be received in increasing quantity and improved quality. Projects approved covered a wide range of topics and problems of import for education, as indicated by the following examples: Academic achievement of adult students; the technology of programed instruction; comprehension of rapid speech by the blind; dynamics of personality development during the college years; relationship of group counseling to academic performance; development of sensitivity to esthetic values; community attitudes toward educational change; financial analysis of college operations; cross-national study of educational attainment; retraining of unemployed workers.

During fiscal year 1962 the Cooperative Research Program paid increasing attention to the problem of reducing the tremendous time lag that occurs between the results of research and their application in the classroom. In addition to continuing to distribute brief descriptions, summaries, and monographs, the Program made arrangements with the Library of Congress to have final reports of projects microfilmed. Microfilmed copies of many reports are now available through the Library of Congress to interested individuals at a modest fee.

Two crucial areas requiring a concentration of research and development efforts were identified in this fiscal year: the teaching of English and the utilization of talent.

Project Talent

The purpose of this program of research and demonstration is to attack the deplorable condition which allows 70 percent of the talented young people in the United States to remain unidentified and dormant. Following research conferences, seminars, and research development contracts, basic and applied research and demonstration studies in this area are now underway with support from the Cooperative Research Program.

As a major effort in Project Talent 440,000 secondary school children throughout the country are being tested, studied, and followed through their school experiences. Some of the results now available indicate, for example, that when the same achievement tests are given to children in the ninth grade and twelfth grade, the upper 25 percent of the ninth-grade students score higher than the average twelfth graders. This of course has important implications for curriculum planning.

Illustrative of other studies in the utilization of talent are projects to determine the value of various problem-solving strategies and to follow up on the career patterns of college graduates. As a part of the latter program a research development conference was held to review and reassess research aimed at devising better tests to measure creativity, problem-solving ability, and underachievement.

Project English

English is basic to all other fields of study and important as well in the adult lives of all American citizens. Through research, improvement of teacher preparation, and dissemination of what is already known about effective teaching materials and practices, "Project English" is intended to support and extend the work already being done on the local and State levels by various professional organizations. It is not in any way an attempt by the Federal Government to control the content of the curriculum.

An increasingly important feature is the collaboration between staff members of departments of English in colleges and universities and their counterparts in colleges of education, State education departments, and elementary and secondary schools.

Curriculum Study Centers.—The purposes of these centers are (*a*) to redefine the nature and aims of the English curriculum at all levels, (*b*) to develop instructional methods and materials that will achieve specific aims, (*c*) to experiment with, evaluate, and revise these methods and materials, and (*d*) to disseminate information concerning the most promising methods and materials.

Six centers have been established. One, at the Carnegie Institute of Technology, will develop and test a curriculum for all college-bound students in grades 10, 11, and 12. A second, at Northwestern University, will work on a sequential curriculum for all students in grades 7 to 14, with special emphasis on composition. The third, at the University of Nebraska, will also stress composition, but will cover all grades from kindergarten through the first year of college. The fourth, at Hunter College, called "Gateway English" by its initiators, proposes to develop and try out English materials for children from culturally deprived urban environments. It will concentrate on teaching reading in grades 6 to 11 (with special emphasis on the junior high school years), but will devote some attention to speaking and listening. Another center, at the University of Minnesota, is to prepare and evaluate curricular materials for grades 7 to 12. The sixth, at the University of Oregon, will direct its efforts toward improving the curriculum in language, literature (including reading), and written and oral composition in grades 7 to 12. Each center has secured the cooperation of a number of elementary or secondary schools in its area. Its study will continue for approximately 5 years, after which it will make its reports available to all interested schools.

Basic and Applied Research.—Twelve research studies are under way in Project English. These deal with such important topics as the teaching of reading, the development of unfamiliar concepts, the implications of linguistics for the junior high school, the relationships between grammar and writing, the teaching of the blind and the deaf, and ways to alter nonstandard dialects.

Research Planning and Development.—A conference on needed research in the teaching of English, involving approximately 50 leaders of the profession, has made it possible to proceed more systematically than before in planning and conducting research. Another conference, on English for the culturally different, has focused attention on the special needs of substantial numbers of American students. A study of the relationship between the language of children and that in their textbooks has been completed. Under way are a study of the

state of knowledge in the teaching of composition and the preparation of a series of annotated bibliographies on research in the teaching of reading. From Project Talent, Project English is obtaining much statistical information available nowhere else. Finally, Project English authorized a detailed evaluation of the English institutes sponsored in the summer of 1962 by the Commission on English of the College Entrance Examination Board.

Project Social Studies

During the year the Office planned Project Social Studies, which will be launched in fiscal year 1963. This project is a substantial effort to improve the curriculums and teaching of the social sciences, elementary, secondary, and higher. Like Project English, this undertaking will endeavor to make a significant improvement in teaching in this critical curriculum area through research and through broad dissemination of information about effective teaching practices and materials.

NEW EDUCATIONAL MEDIA

Research

Of the 175 applications submitted for research grants on the educational uses of the new communications media during fiscal year 1962, the Advisory Committee on New Educational Media recommended for support 34 projects in 23 institutions of higher education, 3 nonprofit private agencies, and 1 State department of education. These projects were located in 11 States and the District of Columbia. The 34 grants bring the total number of approved projects since the program began to 184, of which 62 have been completed, 20 during fiscal 1961 and 42 during fiscal 1962. In addition to the research grants, four research contracts were negotiated during the fiscal year.

Of the $9.9 million obligated for research from the beginning of the title VII program of the National Defense Education Act through 1962, approximately $2.5 million was obligated for research grants and contracts during fiscal 1962. Approximately $950,000 was obligated for the newly approved projects; the remaining $1.55 million was available for continuing projects. A majority of the approved research grants focused on finding more effective ways of programing instructional materials in teacher education, the humanities, mathematics, and the social and physical sciences.

For the first time, the advisory committee in 1962 recommended the activation of title VII contract provisions for research, since it had become evident that certain selective studies of major research issues can be implemented more effectively through contracts than through a grant program based solely on a variety of investigator-initiated projects. As a result, two types of contractual activities were sup-

ported this year, in addition to the continuing research-grant program. These contracts represent the first of a series of contemplated research studies on the relationship of the educational media to fundamental issues in human learning.

The first contracts involved two studies on the feasibility of establishing regional centers for programmatic research on the role of new media in education. One study was conducted by Pennsylvania State University in cooperation with other universities throughout the country, the second by the Oregon State Department of Education in cooperation with other State departments of education.

Another contract research activity consisted of two long-term projects, one involving the relationship of media to the psychological process of transfer of learning and the other concerning the influence of educational media on the role of the school as a social organization. These contracts have been arranged with the Colorado State University Research Foundation and the University of Chicago, respectively.

Dissemination of Information

Slightly more than $2.2 million was obligated for the support, under contract, of dissemination activities during fiscal year 1962. Approximately $500,000 of this was for continuation costs of projects contracted for in previous years. During the past fiscal year, 32 contracts were negotiated with 28 institutions, agencies, and individuals in 15 States and territories, at a cost of almost $1.75 million. An estimated $350,000 in additional support will be needed during fiscal years 1963 and 1964; thus, it is estimated that these 32 contracts will require approximately $2.1 million for completion.

During fiscal 1962, a major emphasis under title VII activities was placed on studies and dissemination activities relating to the future of educational television in the United States. Early in the year a comprehensive document entitled, *Education: The Next Ten Years*, was published. This was a report of several task forces operating under the general direction of the Stanford Institute of Communication Research, which summarized the thinking of outstanding specialists in the United States as to the future of educational television in the United States during the next 10 years, including the Nation's needs for better educational television programing, resources and facilities, financing, and operating personnel.

In addition, major studies were initiated to explore problems of copyright, royalty, and compensation of teachers in the educational television field (through contract with the American Council on Education); to study in depth the personnel needs of educational television in the future, and to examine the nature of the personnel pool available for new stations (under contract with the National Associa-

tion of Educational Broadcasters); and to study the economics of educational television now and in the future (contract with Brandeis University, Boston). As part of a major survey conducted under contract by the National Association of Educational Broadcasters to ascertain the needs of education for new television channels in the future, a comprehensive report was issued complete with engineering maps and charts indicating areas where new channels would be needed in order to offer complete nationwide educational television coverage. These data are presently being further refined, with the use of electronic digital computer methods, to assist State and local authorities in planning for the use of Federal matching funds for new stations under Public Law 87–447.

During the year, a demonstration was conducted by the WGBH Educational Foundation (Boston) to show the use of FM radio networking to facilitate the conference technique of communicating among institutions of higher education. Many of the major universities in the northeast States shared in a series of conference activities on each campus via this unique educational FM network, established on a pilot basis for the demonstration.

For example, students participating in a nonwestern studies program at institutions in the Boston area have been able to listen to and ask questions of lecturers at Brandeis, Harvard, and the Massachusetts Institute of Technology. In one program of another series on "The Challenge of Higher Education," the presidents of MIT, Amherst, Pennsylvania State University, and Johns Hopkins were able from their own institutions to participate in a discussion moderated by James Killian of MIT.

A second major emphasis during fiscal year 1962 continued to be programs to make new-media materials more accessible and available to institutions of higher education, to school systems, and to teachers. In the television area, three pilot television materials libraries were established, one regional library for the Great Plains States at the University of Nebraska, another one for the New England States at the Eastern Educational Network in Boston, and a national library at the National Educational Television and Radio Center in Washington to work closely with the regional libraries and to serve States where no pilot regional library now exists. Before these pilot demonstration libraries were established, there was no mechanism by which the various stations could locate or exchange instructional television materials.

Also during fiscal 1962, the title VII program issued the first comprehensive catalog or annotated bibliography of programed instruction materials available for distribution during the 1962–63 school year. Prepared under contract by the Center for Programed In-

struction in New York City, the book listed over 122 courses or segments of courses in programed instruction form, complete with a sample of two or three pages of the program. Similarly, a series of status papers were issued under the Technological Development Project (National Education Association), including a catalog of teaching machines presently on the market and a critical analysis of systems of instruction used in the Armed Forces, industry, some institutions of higher education, and school systems.

Well underway during 1962 was the preparation of the country's first comprehensive "educational media index," a cross-reference directory of available educational media materials including films, filmstrips, slide sets, teaching machine materials, sets of charts, kinescopes, videotapes, voice recordings, etc. The directory is being prepared under the general supervision of the Educational Media Council, using latest automatic data storage and retrieval equipment, through a subcontract with a textbook publisher.

A third major emphasis during the year was a concern for improved teacher and professional education in the educational media field. With the help of title VII funds, the Florida State Department of Education has conducted a demonstration workshop in new media for methods teachers in the various teacher-training institutions in Florida. The Texas State Education Agency has continued its demonstration of teacher teams and institutes for the inservice training of teachers in that State. The University of Pittsburgh has conducted demonstration workshops in the use of the overhead projector in a new technique of teaching English composition in large group classes. Alameda State College in California is undertaking a series of seminars to establish content and pattern guidelines for the professional training of teachers and specialists in new media techniques.

A continuing emphasis under the program is the dissemination of information concerning research conducted not only under the title VII program but also by other research groups. A pilot project at Western Reserve University for classifying, storing, and retrieving research information in the field of education with the use of automatic data processing equipment, now includes abstracts of research undertaken since 1920.

Exhibits were used for the first time under the title VII program in 1962 with the partial support of a library exhibit at the Seattle World's Fair. Educational media resources of the school library of the future were demonstrated at this exhibit. A contract was also signed for an exhibit on programed instruction and teaching machines to be shown at major professional meetings and conventions throughout the United States in 1963.

Other contractual arrangements in 1962 involved a major new film series on communication theory and the educational media being prepared by Ohio State University; several guideline conferences, including one on new media in guidance and personnel work, in cooperation with the American Personnel and Guidance Association; a national conference on new media and extension education conducted through the University of Nebraska; a regional conference on educational television convened by the Western Interstate Commission on Higher Education.

The first in a series of advisory and assistance contracts was let in 1962. These are small contracts to help an institution, school system, or State department of education acquire consultant services and send staff members on observation tours in connection with the planning of unique programs using the new media. The first of these contracts provided for a survey of audience response systems, leading to the design of certain of the facilities for the University of Miami's new Communications Building. The second was a contract to Stephens College to assist in the design of physical facilities for their new Learning Center, to serve the whole campus with a coordinated media program. Reports of these advisory and assistance contracts will be published for the interest of others who have similar problems.

Educational Assistance Programs

The Office of Education has under way a program to increase its capacity as a center for information and analysis of Federal programs in education. Two major studies of Federal programs and funds in education have been completed. In addition to *A Survey of Federal Programs in Higher Education*, reported in the section on higher education, the Office has published *Federal Funds for Education: Fields, Levels, and Recipients, 1959 and 1960.* This publication reports for the first time the amounts of money involved in the educational programs of the various Federal departments and agencies and gives a detailed breakdown of the academic field and level to which the funds are directed. It also reports the numbers of students receiving assistance from those programs in which individual recipients can be identified.

New Federal Legislation

Legislation affecting education passed in fiscal year 1962 included the following:

Public Law 87–274 (Juvenile Delinquency and Youth Offenses Control Act), approved September 22, 1961, authorizes the Secretary of the Depart-

ment of Health, Education, and Welfare to make grants for a 3-year program of pilot projects and training programs. The Office of Education has the responsibility for evaluating and giving technical counsel on the education phase of applications for juvenile delinquency grants under this law.

Public Law 87–276 (Training of Teachers of the Deaf), approved September 22, 1961, administered by the Commissioner of Education, authorizes a 2-year program of grants to accredited public and nonprofit private educational institutions that are approved training centers for teachers of the deaf and for scholarships for qualified students.

Public Law 87–344, approved October 3, 1961, extended for two additional years Public Law 85–864 (National Defense Education Act of 1958) and Public Laws 815 and 874, 81st Congress as amended (school construction and payments to school districts in federally affected areas).

Public Law 87–415 (Manpower Development and Training Act) approved March 15, 1962, authorized the Secretary of the Department of Health, Education, and Welfare to enter into agreements with States under which State vocational educational agencies assist in providing retraining programs for unemployed workers possessing obsolete skills.

Public Law 87–447 (amending the Communications Act of 1934), approved May 1, 1962, authorized a 5-year program of grants on a matching basis to State and local agencies to help increase and improve educational television transmission facilities.

Federally Impacted Areas

Public Law 815.—Under Public Law 815, from fiscal 1951 through 1962, the Congress appropriated $1,081 million for school construction on Federal property and in districts with increased enrollment resulting from Federal activity. State and local sources added an estimated $670 million, making a total of approximately $1.8 billion to house more than 1.6 million children.

During fiscal year 1962, Federal funds were reserved in the amount of nearly $64 million for 211 school districts to construct 263 projects under Public Law 815. To these funds the school districts added $45 million. The total will be used to construct 3,027 classrooms and related facilities for 85,844 children. In addition, the Federal Government authorized construction during fiscal year 1962 for 20 projects located on Federal property which will provide 150 classrooms to house an estimated 4,625 children.

Public Law 874.—In fiscal year 1962, 4,065 school districts were found eligible for approximately $233 million in Federal funds for current operating expenses of schools authorized under Public Law 874. These funds were paid on account of 1.7 million federally connected children. The 4,065 eligible school districts receiving this assistance had an estimated attendance of 11,171,284 children, about one-third of all public elementary and secondary school children in the Nation. In addition, a little over $13 million was allocated to

Table 5.—*Grants and other financial assistance to States, administered by the U.S. Office of Education, fiscal year 1962* [1]

States and outlying parts of the United States	Total	Colleges for agriculture and the mechanic arts	Cooperative vocational education	Maintenance and operation of schools (Public Law 874)	School construction (Public Law 815)	Library services	Defense educational activities	Mentally retarded
Total	$398,036,000	[4] $14,519,000	$40,178,617	[2] $226,307,926	$42,084,492	$8,196,654	[3] $65,833,507	$915,804
Alabama	9,249,636	205,079	990,741	5,368,962	1,579,099	184,761	909,952	11,042
Alaska	8,667,002	144,506	105,085	6,573,061	1,694,182	40,000	105,268	4,900
Arizona	6,592,762	165,941	220,026	4,714,003	831,264	72,538	588,990	
Arkansas	5,487,674	175,585	727,818	1,250,882	379,047	140,200	2,801,142	13,000
California	49,273,741	453,113	2,208,211	34,127,084	8,855,911	250,030	3,335,692	43,700
Colorado	10,183,559	174,942	344,140	8,401,913	744,494	85,259	391,857	40,954
Connecticut	4,731,944	190,506	401,206	2,121,080	1,187,099	105,425	704,395	22,233
Delaware	1,323,575	148,891	193,501	694,462		62,005	224,716	
District of Columbia	348,393		130,480				217,913	
Florida	10,111,498	238,643	783,377	6,199,914	726,135	165,938	1,985,848	11,643
Georgia	9,730,897	218,553	1,081,943	5,189,019	1,011,844	212,827	1,980,911	35,800
Hawaii	9,978,681	[4] 3,927,606	184,230	4,448,245	952,988	54,606	411,006	
Idaho	2,481,514	153,292	245,250	1,655,960	364,082	74,029	−23,663	12,564
Illinois	9,551,831	340,833	1,762,663	3,991,894	380,899	231,168	2,811,424	32,950
Indiana	4,025,773	232,885	1,051,590	1,115,532	103,617	405,552	1,103,597	13,000
Iowa	3,387,133	194,935	837,088	839,694	34,673	167,096	1,299,835	13,812
Kansas	7,862,532	183,402	562,000	5,850,869	384,602	75,721	785,488	20,450
Kentucky	3,884,331	200,525	1,043,741	1,369,394		205,363	1,055,508	9,800
Louisiana	3,199,848	204,885	864,324	935,910	46,921	157,418	979,181	11,209
Maine	2,996,998	159,309	258,375	1,959,054	296,486	85,752	227,422	10,600
Maryland	11,639,456	201,771	487,335	8,442,404	1,226,706	173,999	1,096,241	11,000
Massachusetts	11,867,828	242,568	760,604	6,897,532	1,783,395	100,898	2,074,731	8,100
Michigan	9,692,811	295,851	1,481,963	1,894,389	1,480,415	244,534	4,261,859	33,800
Minnesota	3,217,555	208,010	925,875	476,446	216,902	173,045	1,181,877	35,400
Mississippi	3,881,011	183,392	910,428	1,472,551	689,394	173,202	440,644	11,400
Missouri	6,148,591	226,058	1,069,557	2,630,359	465,058	178,493	1,567,266	11,800
Montana	3,187,370	153,443	209,056	1,779,085	928,775	73,006	36,705	7,300
Nebraska	4,612,366	168,116	426,436	2,777,929	616,734	103,329	506,955	12,867
Nevada	2,599,947	145,683	187,272	1,454,329	575,445	51,500	175,118	10,600
New Hampshire	2,017,355	152,091	166,675	1,241,875	94,614	64,845	285,055	12,200

New Jersey	8,938,907	260,860	821,993	5,033,997	379,902	102,236	2,321,569	18,350
New Mexico	7,544,939	158,946	229,030	4,915,534	1,526,571	71,851	632,325	10,682
New York	15,054,677	474,331	2,533,312	6,047,882	462,970	280,484	5,167,210	88,488
North Carolina	9,066,815	230,766	1,575,466	2,643,686	962,365	310,305	3,332,827	11,400
North Dakota	2,462,995	152,599	300,483	824,356	535,294	66,348	573,315	10,600
Ohio	12,538,008	333,367	1,881,780	5,216,913	522,553	294,172	4,278,223	11,000
Oklahoma	10,327,971	186,383	647,009	7,289,031	611,861	134,745	1,424,342	34,600
Oregon	3,324,094	175,235	413,665	1,066,479	161,405	105,614	1,376,830	24,866
Pennsylvania	10,993,437	365,500	2,206,709	5,089,480	1,610	670,452	2,603,353	56,333
Rhode Island	2,760,116	157,122	168,172	1,909,874	205,413	84,548	226,087	8,900
South Carolina	6,583,910	187,465	758,009	3,596,961	734,615	250,039	1,056,821	
South Dakota	3,952,873	153,557	278,494	2,182,508	1,169,399	80,565	76,950	11,400
Tennessee	5,511,278	211,062	1,126,226	2,355,447	66,000	207,063	1,511,547	33,933
Texas	19,323,914	330,843	1,885,982	13,234,662	2,660,877	331,190	853,260	27,100
Utah	3,685,580	157,743	192,416	2,170,042	657,662	61,932	434,466	11,319
Vermont	736,501	147,767	187,793	37,568		63,550	299,823	
Virginia	18,675,273	219,028	1,041,996	14,588,827	1,050,776	212,929	1,542,117	19,600
Washington	11,870,037	196,841	603,848	8,766,325	851,770	128,774	1,299,512	22,967
West Virginia	1,920,531	177,063	594,047	128,996	9,256	152,796	847,773	10,600
Wisconsin	4,581,508	218,726	997,420	741,405	650,705	180,303	1,756,349	36,600
Wyoming	1,679,842	146,575	167,872	819,863	397,144	106,364	37,082	4,942
Guam	1,762,498		57,582	820,336	815,563	14,247	54,770	
Puerto Rico	1,730,009	186,807	843,307			162,226	537,669	
Virgin Islands	204,270		45,016	81,518		11,382	66,354	
Undistributed	10,872,405			10,872,405				

[1] On a checks-issued basis. Does not necessarily agree with allotments or expenditures for a given year.

[2] Includes in "Undistributed" payments made to Army $6,904,412; Navy $1,988,647; Air Force $1,979,515; and Veterans Administration —$169.

[3] Does not include amounts paid for loans and repayable advances or amounts paid to institutions under the National Defense Education Act, $115,514,723; or to jurisdictions other than States to assist Cuban refugees in educational pursuits, $5,195,011.

[4] Includes $3,775,000 special land-grant college aid paid under Public Law 86-624.

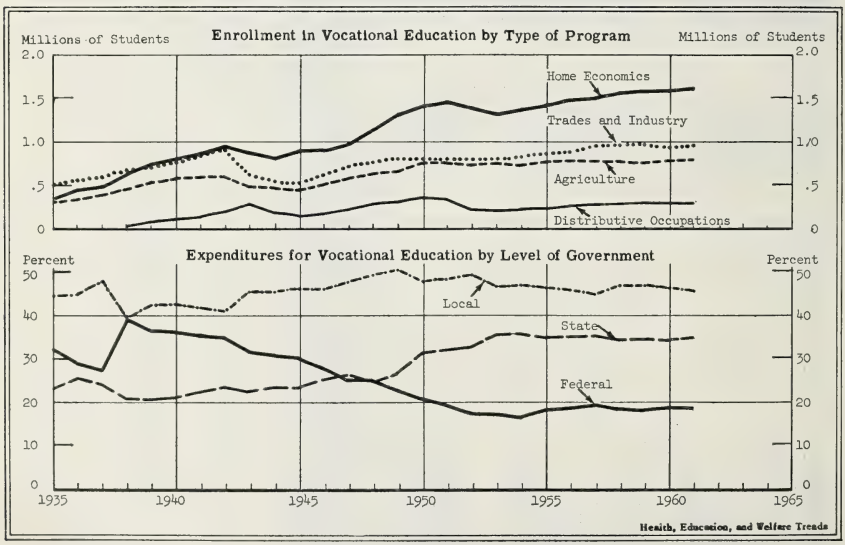
other Federal agencies to provide school services for 38,000 children residing on Federal property. A total of $247 million was appropriated for this program in fiscal year 1962. Over $1,426 million has been appropriated for this program since its enactment in 1950.

Vocational and Technical Education

The Federal Government and the States cooperate in the administration of programs of vocational education of less than college grade. The controlling purpose of vocational education is to fit persons for useful employment. Under authorization of the Smith-Hughes Act of 1917, the Vocational Education Act of 1946, usually referred to as the George-Barden Act, and supplementary legislation enacted since 1917, Federal funds are available for allotment to the States and insular and territorial possessions for vocational education in agriculture, distributive occupations, home economics, trades and industry, practical nursing, fisheries occupations, and for area vocational education programs for the training of highly skilled technicians.

The needs of two distinct groups of people are served by programs conducted under the provisions of the Federal acts: those who have entered upon, and those who are preparing to enter upon the work of various occupations in these fields. Vocational education programs provide training for young persons in regular day schools and for out-of-school youth and adults, both employed and temporarily

CHART 9.—VOCATIONAL EDUCATION ENROLLMENTS AND EXPENDITURES: UNITED STATES, 1935–65



Source: U.S. Department of Health, Education, and Welfare. *Health, Education, and Welfare Trends, 1962.*

unemployed. This Federal-State cooperative endeavor is based upon the fundamental ideas that vocational education is in the national interest and is essential to the national welfare, and that Federal funds are necessary to stimulate and assist the States in making adequate provisions for such training.

AREA VOCATIONAL EDUCATION

Recent studies pertaining to programs for the training of highly skilled technicians authorized by title VIII of the National Defense Education Act of 1958 emphasize the need not only for larger numbers of highly skilled technicians to support engineers and scientists, but also for technicians with an increasing knowledge of scientific and mathematical principles and their applications. Vocational educators have been concerned with improving the quality of instruction in these programs, and emphasis has been placed on the depth and rigor of the curriculums in the preparation, upgrading, and updating of technical personnel.

It is estimated that 50,000 persons were enrolled in preparatory programs and 100,000 in extension programs during fiscal year 1962, an increase of 150 percent since the area program began in 1959. Ten States report 70 new area schools in the planning stages, under construction, or already completed, and other States are expanding or improving their present facilities.

The number of extension enrollments each year and in the scope and extent of extension training in the total technical program is indicative of the rapid changes in industrial technology and the need of technical workers to keep pace with the rapid developments in their fields. The role of extension training programs in the industrial complex is illustrated through the recent experience of the aircraft industry with the changeover to missile production. Extension courses were developed to retrain technical workers for new jobs with a minimum disruption of employment and consequent effect on the local economic situation.

The first group of technicians was graduated from 2-year preparatory programs in June 1961. A report of the placement of these graduates indicates that the average wage rate for those who were placed in the technical field for which they were trained was $4,600 for graduates of 2-year post high school programs, and $4,200 for those graduated from high school technical programs.

The recruitment of instructors for courses in programs for the training of highly skilled technicians continued to pose serious problems to the States and local communities. Only a few communities have been successful in attracting qualified teacher personnel from industry whose background included engineering or technical institute education and advanced technical employment experience.

Progress has been made in the training of teachers of technician training courses. Some of the States report summer institutes to update the technical competencies of instructors; elsewhere, teacher training institutions offered industrial educational curriculums with an applied technology option.

The States and local communities conducted studies, frequently in cooperation with other interested agencies and groups, to determine the need for technicians, to define job clusters in technical occupations, and to evaluate students' interest in preparing for employment as highly skilled technicians.

TRADE AND INDUSTRIAL EDUCATION

Trade and industrial education programs were attended by slightly in excess of 1 million secondary school youth and adults during this past year. Reports from the States suggest that the number of employed adults seeking job upgrading and retraining opportunities in programs of vocational education is on the increase.

Occupational transition programs are being initiated at an accelerated rate. These are designed to retrain employed workers from dead-end type jobs for other occupational areas before unemployment becomes a reality. There are evidences of growth in these training programs.

Several States are in the process of developing statewide courses of study in some of the occupational categories in which trade preparatory training programs are offered. Summer workshops involving instructors, supervisors, and teacher-training personnel have been conducted for the purpose of developing courses of study. This activity is often supplemented by regional and area workshops and conferences in which the services of experts from industry are utilized to bring to the education group the latest techniques and industrial methods.

Rapid technological advances have caused a decided impact on enrollments in trade extension programs. Skilled workers must return to the school for training at regular intervals to keep up with the ever-changing demands of industry. Sizeable enrollment advances are occurring in many of the more complex occupational areas.

After a leveling-off period during recent years, enrollments in related classroom instruction for apprentice training have increased; trade and industrial educators, along with management, labor, and various government agencies, have provided the impetus to this movement. National studies indicate that the number of apprentices being trained should be several times the present rate to fill existing needs for skilled artisan replacements. Both management and labor have assisted educators in formulating programs of related instruction for

apprentices. Many schools conduct related instruction classes in excess of the minimum 144 hours of required extension instruction per year.

Placement potential in the service occupations far exceeds the number of persons currently in training. Air conditioning and refrigeration, to name but two areas, are in need of a substantial number of new workers each year. Many programs are being broadened to include training opportunities in service occupations currently in demand. Representatives of several industries have given generously of their time, talent, and equipment to vocational schools to help educators assure success in these programs.

The number of practical nurse education programs continues to increase. The national demands for more and better nursing services, as well as for other health services, has attracted the immediate attention of trade and industrial educators having a responsibility for program promotion and development. Many graduates of these programs are offered positions before they complete their courses of study.

DISTRIBUTIVE EDUCATION

Distributive education is a program of instruction in marketing, merchandising, and management. Availability of instruction is limited by provisions of the national vocational education acts to persons already employed in distributive occupations. Instruction, therefore, has been developed around four categories of need—employee updating, employee upgrading, career development, and operational management.

Current emphasis is being directed to the improvement of teacher-education programs, and to the encouragement of needed research. Conferences and publications have emphasized the activities which can be developed at State and local levels to improve preservice and inservice teacher education. States have been encouraged to place greater emphasis on the subject matter fields, including economics, marketing, and management, in the preparation of teachers. Research projects have been undertaken by State agencies and through the facilities of universities and colleges. One of the most encouraging developments has been the fact that many practical research projects conducted by local teacher coordinators have resulted in new approaches to teaching distributive subjects.

AGRICULTURAL EDUCATION

The character of agriculture has changed and is continuing to change rapidly. No longer does the term agriculture encompass only the actual producing of crops and livestock; it now includes many closely associated occupations.

Vocational education in agriculture must be sensitive to economic, social, and technological factors affecting farming. Changes that involve these factors include new methods of processing and distributing farm products; marked progress in the mechanization of farming, advances in the use of labor saving devices; applications of science to farming in the areas of plant growth, soil conservation, and the conservation of other natural resources; improvement in the breeding of livestock; widespread use of artificial insemination; use of hybrid varieties and strains of seed; utilization of fertilizers; use of herbicides, pesticides, and antibiotics; the application of improved farm management practices; and the availability and use of farm credit resources. These and other steps in more efficient farming have made it possible for 1 farmer today to feed himself and approximately 25 others, thus making it possible to produce the goods and services needed by the rapidly expanding population.

Agriculture is one of the primary areas of scientific research and discovery. In 1962, the amount spent for agricultural research was approximately $275 million of Federal and State funds. Approximately the same amount was spent by industry. The accumulation of research findings thus made possible would, however, be of little value if not communicated to farmers and put to use on their farms. Vocational agriculture programs have had, and should continue to have, an important role in helping farm youth and farmers understand and use the information made available by this extensive research.

There is a need for greater competence on the part of those who farm if they are to be successful in attaining an economic status comparable to that of persons engaged in other occupations. This requires an effective program for full-time day school students and a greatly expanded program through the public schools for upgrading young and adult farmers in extension programs. Even though the number of farms is declining, not enough students with 3 or more years of training in vocational agriculture are graduating each year and entering upon farming to replace the farmers who retire or otherwise leave this field of work.

OFFICE EDUCATION

The office education program is concerned with the second largest employment group in the United States—the more than 10 million persons who work in offices, or better than 15 percent of the employed. The primary goal of the program, to help meet national manpower needs by developing the maximum skill potential of those persons who will follow an office career, serves both the individual and society. The Office of Education for this purpose provides consultative service to States and encourages the development of office training.

HOME ECONOMICS EDUCATION

A long-range curriculum development project has been initiated to provide additional leadership and assist in the coordination of curriculum work done by States. The ultimate goal of the project is to identify the basic topics in home economics for the secondary schools and set up guides for curriculum organization. Home economics supervisors, teachers, teacher educators, college subject-matter specialists, and representatives of national organizations met with the Office of Education staff to plan this project.

Staff members have participated also in curriculum work of organized college groups in order to relate the secondary school curriculum to teacher-education programs.

TRAINING AND RETRAINING

Automation and technological advances, changing economic considerations, and other factors have created unemployment for many individuals and in somes cases have affected whole communities. The unemployment and concomitant manpower problems of workers whose skills become obsolete have attained national proportions, for they are often beyond the capacity of individual industries, local governments and school officials, or State governments to correct.

Only a few States had, prior to 1961, programs which could offer more than a token solution to the problem of providing training for unemployed and underemployed adults. Recognition of this situation led the Congress to provide training for these persons through passage of the Area Redevelopment Act in May 1961. The effectiveness and scope of the training provisions of this act were limited, however, to areas of chronic unemployment and also limited by financial considerations. The Manpower Development and Training Act of 1962 provides a broader program of training and authorizes comprehensive research and investigation into both current and future manpower requirements and resources.

Area Redevelopment Act

This act (Public Law 87–27) is designed to provide stimulus to the expansion of employment opportunities in areas of the United States designated by the Secretary of Commerce as redevelopment areas, i.e., areas suffering from substantial and persistent unemployment and underemployment.

Specifically, section 16 of the act provides for training and retraining of unemployed and underemployed persons who reside in redevelopment areas. Vocational training under the act is actually a joint venture in which the Department of Health, Education, and Welfare and the Department of Labor, working closely with State

and local officials, plan, organize, and finance training projects. The Office of Education is directly responsible for the administration of training funds, for providing adequate training facilities and services, and for assisting the States in conducting the training courses. Specialists in the Office assist the States and through them the local school districts in developing training proposals specially fitted to the training needs of individuals referred by the Department of Labor.

Since its passage, the Area Redevelopment Act has provided the means by which approximately 9,074 unemployed or underemployed persons have been trained for over 40 different types of occupations in 147 approved projects in 34 States and American Samoa.

Manpower Development and Training Act

Although no funds became available during fiscal 1962 for the administration of the Manpower Development and Training Act (Public Law 87–415), which was signed into law on March 15, 1962, many preparatory activities were undertaken by the Office of the Secretary, the Office of Education, and State boards for vocational education.

Programs in Higher Education

LAND-GRANT COLLEGES

Aid to land-grant colleges through the Division of Higher Education for the fiscal year 1962 amounted to $10,744,000, of which $7,140,000 was allocated to each State on a uniform quota. The remaining $3,604,000 was paid to the States in variable amounts based on a proportionate population formula. These are funds supplementing the original land-grant endowments of 1862, the income from which totaled more than $3.5 million in fiscal year 1962.

TEACHERS OF THE DEAF

On September 22, 1961, Public Law 87–276 was enacted to encourage and facilitate the training of a greater number of teachers of the deaf through grants-in-aid to approved institutions of higher education. By early 1962 the Advisory Committee on Training Teachers of the Deaf had been appointed and criteria and procedures established for the review, evaluation, and approval of applications for scholarships and training grants to colleges and universities. The institutions were notified in the spring so that students could begin their training in the fall of 1962.

Forty-three institutions of higher education were approved to provide this specialized training to 288 graduate and 159 undergraduate students. The scholarships include a cost-of-living stipend of $2,000

for graduate students, $1,600 for fourth-year undergraduate students, and tuition and fees paid by Federal grants to the institution. In addition, training grants were made available in varying amounts to the participating institutions, not only for strengthening existing programs but also for stimulating new ones. Scholarships awarded under this law are for a year of study.

National Defense Education Act

During the fiscal year 1962, the higher education programs under titles II, IV, V(B), and VI, of the National Defense Education Act (Public Law 85–864) continued at their maximum authorized levels.

Student Loans.—Since the inception of the student loan program in February 1959, about 350,000 students have received approximately $225 million in National Defense Student Loans. In 1962, loan funds supported under title II at 1,452 colleges and universities provided assistance to 190,000 qualified graduate or undergraduate students. The loans, which averaged about $470 each during this year, are long-term, carry a low rate of interest, and may be used to help defray the cost of tuition or books or to meet living expenses.

A recent survey of those who have obtained loans under this title showed that over 90 percent were enabled by their loans to start, or continue, their education on a full-time basis. Five out of seven of the borrowers were members of families with annual incomes of $6,000 or less. More than 60 percent planned to teach. About one-fourth of the borrowers now repaying loans received under this program are currently teaching in elementary or secondary schools.

Funds available for title II loans during the 1961–62 academic year totaled $99.2 million, from the following sources:

	Million
Appropriation	$73.8
Contribution by institutions	8.2
Amount committed or obligated as of 6/30/61	14.2
Repayments by borrowers	3.0

From separate funds, allocations totaling $955,772 were made during the year to 171 institutions in the United States for loans to approximately 1,200 Cuban refugee students.

Graduate Fellowships.—The aim of title IV is to increase the number of well-trained college and university teachers by providing graduate fellowships, by assisting institutions to expand and improve graduate-level programs, and by broadening the geographic distribution of facilities for education at the doctoral level. During 1962, 1,500 additional fellowships were awarded for study beginning in 1962-63, bringing the total number of active fellowships to 4,113 for the year, at a total cost of $21,371,800. Funds under this program are

about equally divided between stipends and allowances for the fellows and grants to institutions to cover the costs of the program in which the fellows are enrolled.

During the 4 years ending June 30, 1962, the title IV program approved 849 new or expanded doctoral programs and awarded 5,500 fellowships, at a total cost of $59,103,300, in the following fields: science and engineering (41 percent), humanities (25 percent), social science (26 percent), and education (8 percent).

Counseling and Guidance Institutes.—Title V(B) authorizes the operation of short-term and regular-session institutes by colleges and universities to improve the competencies of secondary school personnel engaged in counseling and guidance and of secondary school teachers preparing to become counselors. During the summer of 1962, 1,959 counselors and teachers preparing to be counselors attended 66 summer institutes, and 633 will have attended 21 regular-session institutes during the 1962–63 academic year, at a total cost of $7,062,000. The Counseling and Guidance Institute Program continues to place increased emphasis on year-long training for regular enrollees and to arrange short-term, special-purpose institutes for those needing training in new techniques and for those who have not yet fully met the certification requirements. The cost of the program for the first 4 years was $22,406,000.

Language Programs.—The Language Development Program (title VI) is designed to strengthen instruction in modern foreign languages at all levels of education through four allied operations: language institutes, language fellowships, language and area centers, and language research. A total of $44,670,000 was appropriated for the first 4 years of the program's operation.

Language institutes are conducted by institutions of higher education, under contract with the Office, to provide advanced training for teachers and prospective teachers of modern foreign languages in elementary and secondary schools. The training emphasizes the use of new instructional methods and materials. During the summer of 1962, 4,368 teachers attended 80 summer institutes, and during the academic year 1962–63, 119 attended five regular-session language institutes. Some 490 teachers who had previously participated in an NDEA language institute in the United States attended second-level institutes held during summer 1962 in Puerto Rico, Germany, France, Russia, Mexico, Argentina, and Ecuador at a total cost of $7,250,000.

Federal support of a total of 53 language and area centers amounted to $2,080,000 in fiscal year 1962 funds. These centers are conducted, on a matching fund basis, by 33 institutions of higher education for the study of 52 "uncommon" languages and of the culture and economy of the areas in which the languages are spoken. In order to strengthen

President Kennedy's "Alliance for Progress," support in 1962 was extended to five new centers for Latin American studies.

Many modern foreign languages not commonly taught in the United States have been listed by the Commissioner of Education as needed by the Federal Government or by business, industry, or education. Graduate students of these languages are eligible to apply for fellowships under title VI. During the year, fellowships for the study of 55 of these "neglected" languages were awarded to 1,040 graduate students; 417 of the awards were extensions of existing fellowships.

A total of 190 fellowships were awarded in Spanish, Portuguese, and the Amerindian languages in support of the special emphasis on Latin-American studies. In April 1962, 34 postdoctoral fellowships were awarded for intensive study of Portuguese, Spanish, and Sub-Sahara African languages during the ensuing summer. The total cost of this program for fiscal year 1962 was nearly $4 million.

Under the language research program, individuals and organizations working under contract with the Office develop specialized instructional materials (basic courses, grammars, readers, and dictionaries), primarily for the neglected languages, devise new methods of language instruction, and conduct surveys and investigations of language needs and resources. The various projects conducted under this program involve more than 100 modern foreign languages. During the year, 42 contracts involving 34 new projects were negotiated at a total cost of $740,873. An additional $1.25 million was obligated to continue 161 projects begun during preceding years.

Library Services

The factors affecting library development in the 1960's are increased demands resulting from population growth, enlarged school enrollments, stress on research and developmental activities by commerce, industry, and government in the face of rising costs of library materials, the shortage of trained librarians, and the emerging area of automated information storage and retrieval. The impact of the population explosion and its effect on libraries was surveyed in *The Future of Library Service, Demographic Aspects and Implications*, a staff-edited publication which appeared under the imprint of the University of Illinois.

The increasing cost of library materials was brought to the public's attention in an Office publication, *The Cost of Library Materials: Price Trends of Publications*, which indicated that, while between 1947–49 and 1961 the cost of the average book increased by 62 percent and the average periodical subscription by 55.5 percent, during the same period consumer prices rose by only 27.8 percent.

While there are now about 60,000 librarians serving in public school, college and university, and special libraries, it is estimated that there were about 7,000 openings in 1960–61. Since library schools graduated 2,370 students, they filled only about 1 out of every 3 vacancies, although the number of schools and the number of degrees have substantially increased during the last decade.

An advisory panel of the National Science Foundation and the President's Committee on Scientists and Engineers prepared a report on scientific, technical, and other highly trained manpower. Its recommendations crystallized into a special survey of a large sample of persons recorded in the 1960 census as college graduates, to determine the relationship between training and subsequent occupation and to provide information on demographic, economic, social, and professional characteristics. Several Government agencies, including the Office of Education, are supporting this "Post Censal Study of Professional and Technical Manpower," which includes public and school librarians.

The Office is engaged in the collection and dissemination of current data and trend analyses on library resources, services, personnel, and finances. In this connection the Office published *Statistics of Libraries: An Annotated Bibliography.* The dissemination of ongoing library science research throughout the country is carried on through the occasional publication, *Library Research in Progress.*

Public Libraries.—In the past year the Nation's public libraries have made a positive advance in the acquisition and use of resources and the provision of services. However, many libraries still have not attained the standards of minimum adequacy set forth by their national association. In 1961, according to State reports, 18 million persons did not have access to public library service, and 110 million had access only to limited service.

Of the 8,190 public library systems in the country, the 825 largest, serving population groups of over 35,000 (65 percent of the total population), were surveyed. During the year they added 10.5 million items to their holdings of 130.5 million volumes and circulated nearly 455 million volumes. Employing 35,500 staff members, one-third professionals, they reported operating expenditures in excess of $194 million and capital outlay amounting to nearly $35 million. However, these resources indicate the availability of only 1.17 volumes per capita. To provide minimum adequate service as defined by the American Library Association, 19 percent of these libraries would have to expand their collections, 22 percent would have to increase their staff, and 42 percent would require larger operating expenditures.

Rural Services.—The Library Services Act (Public Law 84–597), passed in 1956 and extended by Congress until 1966, authorizes an appropriation of $7.5 million annually for grants to the States for

the extension of public library services to rural areas. This amount was appropriated by Congress for fiscal 1962. All of the States plus Guam, Puerto Rico, and the Virgin Islands are now participating under the Act.

Statistics compiled from 5-year summary reports submitted by the States clearly show the progress made under the Library Services Act. Thirty-six million rural people now have either new or improved public library services available to them, two million for the first time because of county and regional library development.

Highlighting the partnership aspect of the act is the fact that, in most cases, State and local governments are continuing their efforts to support good libraries. During the first 5-year period, State appropriations for the development of rural public library service increased 75 percent, local funds 60 percent. The 115 field consultants added under State plans have been a factor in making possible the progress described in the State reports.

The many positive achievements of the program should not overshadow the size of the job yet to be done. Preliminary data for 1961 indicate that more than 16 million rural residents had no access to local public library service, and that an additional 49 million rural people had only inadequate service. Moreover, because libraries in communities of over 10,000 population are ineligible for benefits under the Act, these communities have had little incentive to extend their library services. As a result, some States have undertaken less promising, but legally eligible, projects.

Stress continues to be placed on analysis of progress under the act with as much effort as possible being made to help each participating State develop the best possible plan of library development.

A progress report of the participating States and Territories for the first 5 years of the act was completed and will be published under title, *State Plans Under the Library Services Act: Supplement 3.*

School Libraries.—An important contribution of the Office to the development of school library service to education during 1962 was a 3-day conference, requested by the State school library supervisors to discuss such questions as how modern instructional programs and methods can be served best by the school library; what competencies school libraries and teachers need to administer and use the instructional materials center for the achievement of educational aims; what professional tools should be developed to give assistance in the selection and organization of all types of printed and audiovisual materials; and what changes in the preservice and inservice education of librarians and teachers are necessary to provide for the instructional materials concept.

State programs for the implementation of the 1960 standards for school libraries published by the American Library Association have

stimulated the formulation of new or revised regional and State school standards. The Office has undertaken a compilation, summary, and analysis of these standards for publication.

All data for the survey, *Statistics of Public School Libraries, 1960–61*, were collected and are in the process of tabulation and analysis. This survey, when completed, will update the 1953–54 comprehensive information on school libraries in the United States.

College and University Libraries.—Some libraries of institutions of higher education have collections that are among the most outstanding in the Nation. Almost 2,000 of these libraries now have a total of nearly 180 million volumes. They employ approximately 9,700 librarians and an equal number of subprofessional and clerical employees. Their total operating expenditures reach $159 million. While 9 of the largest institutions have collections of almost 30 million and a staff of over 1,000 librarians, over half of all academic libraries in 1959–60 did not measure up to the minimum staff requirements set by ALA and 1,200 libraries failed to meet the minimum requirements for adequate collections. While noticeable improvements were made over the previous year, the ever-growing enrollments and increasing cost of library materials prevent many of these libraries from providing the services considered to be essential as supplements to modern teaching methods. An analysis of management and salary data was completed which should prove of value to academic administrators and librarians.

Special Libraries.—For the first time the Office embarked on a new program to provide information, conduct surveys, and render consultant service to special libraries, which contribute substantially to the Nation's research efforts. It is estimated that there are approximately 10,000 of these libraries and information centers which employ as many as 8,000 librarians serving Federal, State, and local government agencies, commercial and industrial organizations, and private organizations and associations. Their total annual expenditures are almost $60 million. These libraries, which have unique collections in specialized areas of many fields of knowledge, make their resources available on request to other libraries and to the research community. The statistical coverage of this group of libraries will make it possible to report in the future on the Nation's total effort in librarianship.

International Education

Education today has become the third arm of international relations. The traditional first arm has been diplomacy backed up by force. After World War II, when it became obvious that the use

of force to achieve international objectives might destroy mankind, there was a search for peaceful means for the achievement of international goals, thus economics became the second arm of international relations, and large sums were invested in commercial enterprises.

Recently, economists such as Schultz and Harbison in the United States and Vaizey in England have said that the development of human resources is the foundation of economic development. This doctrine has long been fundamental to the Communist theory of economic, political, and social development and was borrowed by them from Jefferson and other 18th century intellectual leaders. One result of the fact that the Communist world has long understood the connection between human and economic development is that they have planned ahead, and their education mechanism has produced exportable surpluses of experts in many fields, including public health and the teaching of English, in which the United States has a deficit of personnel.

The development of education as the third arm has had many effects on education in America. The Bureau of International Education is deeply involved in some of these matters.

First, the nature and goals of comparative education as a discipline are changing from "photographic" studies of education as it exists in other countries, to analytic and truly comparative studies required for effective cooperation in educational development between the United States, the United Nations, and the emerging new nations.

American education is Western European in origin, and concentrates on North America and Western Europe. But political power is shifting toward four other major cultural groupings: the Slavic, Far Eastern, Indian, and Arabic worlds. There are other important ethnic and political areas, such as Latin America, about which most Americans are not sufficiently informed. The Office of Education is increasingly involved in helping American States and local communities develop a broader, more realistic educational introduction to the modern world.

Many public and private agencies are active in international education. The Office has helped to develop an effective working partnership with other Federal agencies, thus reducing duplication of effort and increasing the effectiveness of existing programs.

Since World War II, 45 nations have become independent and are seeking to attain almost immediately through education those standards of living which other nations required decades or centuries to achieve. In these countries, illiteracy rates range from 25 to 95 percent. Where education has been available to a privileged few, it is now demanded as the right of all. Thousands of teachers must be trained and thousands of classrooms must be built. New curriculums

and textbooks must be developed which contribute directly to economic, social, and political growth. Existing universities and related institutions must be strengthened and new ones established.

During 1961–62, over 72,000 foreign students and others seeking further training and practical experience came to the United States. Foreign faculty members and research scholars at our universities numbered 5,530, and 8,497 doctors of medicine served as interns and resident physicians in our hospitals.

The Agency for International Development brought approximately 6,500 participants to the United States for training in many fields and arranged for another 2,000 to be trained in other than their own countries. Under the Fulbright-Hays Act, the Department of State's Bureau of Educational and Cultural Affairs brought 4,800 foreign students, teachers, professors, research scholars, leaders, and specialists in different fields to the United States.

Educational Exchange and Technical Services

The Office of Education in 1962 continued to work cooperatively with the Department of State's Bureau of Educational and Cultural Affairs, in administering the Teacher Exchange and the International Teacher Development Programs, and with its Agency for International Development, in arranging for the orientation and placement of participants under the Technical Assistance Training Program. The Office has worked with many public and private agencies, participating in conferences of numerous organizations and advising on the problems and status of the various international educational programs. It worked with the Chief State School Officers and the Conference of Governors to remove obstacles to teacher exchange and to provide a wider participation in these projects. Further, it assisted a growing number of educators from other lands who did not hold grants under any program administered by the Office by providing program planning services, counsel, and publications about various phases of American education.

TEACHER EXCHANGE PROGRAM

The Teacher Exchange Program showed an increase from 624 in 1961 to 718 exchanges in 1962, as follows: teacher interchanges by which two teachers exchange positions, 152 pairs (304 teachers); U.S. teachers assigned abroad on a one-way basis, 167; foreign teachers placed in the United States on a one-way assignment, 54; summer seminars overseas for United States teachers, 173. A seminar was held in Italy and the Netherlands for 20 American school administrators in which the respective systems of education were compared at all levels. Eight summer seminars were conducted for groups of

Spanish teachers in Spain and Colombia; teachers of French in France; teachers of German in Germany; teachers of the classics in Italy; teachers of history in appropriate fields in Brazil, France, and India.

Teacher interchanges in many different subject fields at the elementary and secondary levels continued with Great Britain, Canada, Australia, and New Zealand. Foreign language exchanges predominated with other European and Latin American countries and gave impetus to the movement for an earlier beginning of foreign language study. The majority of U.S. teachers abroad on a one-way basis taught English as a foreign language, although many in Africa and the British West Indies were teaching in other fields. The interchange of teachers with the United Kingdom remained the largest single project in 1962.

TEACHER DEVELOPMENT PROGRAM

The International Teacher Development Program brought 516 teachers and school administrators to the United States for training and for visits to schools in 1961–62. Representatives from 65 countries and dependencies took part in the program, and 16 colleges and universities cooperated with the Office of Education in arranging special seminars. Seventeen groups of teachers, teacher trainers, and school administrators were interested in the following fields: four groups in the teaching of English as a second language; three groups in American civilization; two groups each in elementary education, secondary education, and administration and supervision; one group in science education; one group in history teaching.

Two workshops in elementary, secondary, and vocational education were held at the University of Puerto Rico for 108 educators from South and Central America.

TECHNICAL ASSISTANCE TRAINING PROGRAM

The Office of Education supervised programs for 796 participants from 53 countries during 1961–62, including participants from ministries of education or similar offices who came on short, itinerary-type programs. There were also many long-term academic placements, and degrees were awarded to 155 participants, of whom 96 came from the Near East-African Area, 43 from the Far East, 15 from Latin America, and one from Europe. Countries with the largest number of representatives were Vietnam (82), Turkey (69), the Congo (64), Sudan (48), Ethiopia (41), Iraq (35), Philippines (32), Tunisia (28), Somalia (24), and Thailand (23). Training was arranged for educators in approximately 60 different fields of education, involving approximately 150 training centers located in almost every State, the District of Columbia, and Puerto Rico. It is estimated that 950

educators will have programs arranged by the Office in 1962–63. The greatest increase in number of participants is expected from Africa.

NONGRANT VISITOR PROGRAMS

The number of nongrant visitors continued to increase in 1962, reaching a total of 909 compared to 618 in 1961 and 254 five years ago. Several factors contribute to this steady growth: increased expenditures by foreign governments and institutions for educational missions to the United States; increased travel with personal funds; and an increase in group travel (for example, a group of 150 German teachers, another group of 40 Swiss teachers). Another factor is the growing awareness abroad of the services provided by the Office of Education. Numerous visitors to the Office in 1962 were referred by friends who had received program assistance from the Office. To meet the increasing requirements of the nongrant visitor program a Facilitative Services Unit was established within the Bureau of International Education.

INTERNATIONAL ASSIGNMENTS FOR SPECIALISTS

The improvement of national programs of education is a major objective in programs of technical assistance to countries in the underdeveloped areas of the world. Programs of this nature conducted by AID (the Agency for International Development of the State Department) and by UNESCO (United Nations Educational, Scientific, and Cultural Organization) require a continuing overseas staff of approximately 900 education advisors. The Office of Education assists in recruiting education specialists for both programs.

The Office also provides professional backstopping services to education advisors abroad and periodically forwards to the various AID missions overseas packets of education materials.

CLEARINGHOUSE ON EDUCATIONAL EXCHANGE

The Office provided for the Department of State 118 statistical tabulations on Government-sponsored grantees entering and leaving this country during the year, a service it has given annually since 1952. The statistical studies include such information on grantees as country or State of origin and of destination, fields of specialization, age groupings, and veterans' status. These studies show that 4,800 foreign nationals from some 86 countries associated with Americans in all 50 States and territories. They had an opportunity to understand America as it really is, while engaged in study, teaching, research, and other projects in over 180 specialized fields of study. The fields attracting the highest numbers of individuals were: Medicine, American civilization and literature, economics, law, secondary education, teaching of English as a second language, business administration, mathematics, youth activities and organization, and physics.

Over 1,500 of these grantees attended some 400 different institutions of higher learning. The universities in which most grantees were placed: California, Columbia, Cornell, Harvard, Illinois, Kansas, Michigan, Pennsylvania, Wisconsin, and Yale.

The 2,000 Americans who went abroad during the year also had an opportunity to gain a deeper understanding of the problems, needs, and hopes of other peoples. They came from the 50 States and Territories and went to more than 60 countries to study, lecture, or conduct research in some 150 specialized fields, chiefly the following: Romance languages and literature, music, teaching English as a second language, Germanic languages and literature, English language and literature, elementary education, art, political science and international relations, secondary education, and American literature.

In addition to providing the above types of statistical information, the Office prepared records giving the name, address, category, specialty, occupation, and institution of placement of every foreign grantee entering this country under the international educational exchange programs.

CREDENTIAL EVALUATION

University admissions offices, boards of certification and licensure, State departments of education, and other agencies and institutions called upon the Office to interpret over 6,000 individual cases of foreign academic credentials, an increase of approximately 13 percent over the previous year. Office specialists participated in national meetings of the American Association of Collegiate Registrars and Admissions Officers and the National Association of Foreign Student Advisers. The Office maintained and strengthened its close association with the work of the Council on Evaluation of Foreign Student Credentials in promoting studies of foreign education and in developing placement recommendations for persons educated in other countries.

International Studies

Comparative education studies completed or underway in fiscal 1962 were designed to contribute to a better knowledge and understanding of foreign educational systems and developments. There have been increasing demands from educational institutions, Government agencies, and other organizations and individuals for this kind of information, as their educational programs and interests in other countries expand, and as growing numbers of persons with foreign educational preparation seek admission to institutions or professional employment and licensing in the United States.

Major studies published in the fiscal year 1962 included *Higher Education in the Philippines*, *School Reform in Sweden*, *Education*

and the Development of Human Technology, and *The Peoples Friendship University in the U.S.S.R.* Others issued during the year were concerned with certain aspects of education in Argentina, Bolivia, Morocco, India, Yugoslavia, the Caribbean area, Western Hemisphere countries, and with educational grants overseas by American foundations. Other studies underway and at various stages of completion in fiscal year 1962 dealt with ministries of education around the world (issued in August 1962) and with education in the following countries or regions: Argentina, Ceylon, Colombia, Communist China, Cuba, Czechoslovakia, Ecuador, France, Hungary, Indonesia, Iran, Ireland, Latin America, New Zealand, Peru, Poland, Rumania, Scotland, Southeast Asia, Uganda, Uruguay, USSR, Yugoslavia.

Under contracts negotiated pursuant to Public Law 480 (the Agricultural Trade Development and Assistance Act of 1954), the first reports on the scanning, translation, and annotating of foreign materials were received from Burma, Colombia, and Poland.

In May 1962, the Office of Education and the Comparative Education Society jointly sponsored the annual Eastern Regional Conference of the Society at the Office. The program dealt with the general theme "Education and National Development." Areas covered were Africa, Latin America, and Communist China. The use of films in teaching comparative education, as exemplified by a film on Yugoslav education, was also a program topic.

During the year, comparative education specialists served as educational advisers on official trips, one going to Africa and another accompanying a congressional delegation to the Soviet Union.

EDUCATIONAL MATERIALS LABORATORY

The Educational Materials Laboratory is maintained to display books and materials available for school programs in the United States, and foreign textbooks and other educational material. Represented among its 12,000 items are books, periodicals, charts, films, filmstrips, tapes, and discs. Emphasis is given to the collection of textbooks used by elementary and secondary pupils in the United States, supplementary reading books, and publications related to teacher education. Teachers and librarians accounted for 3,900 visits to the Laboratory last year, more than doubling the figure for the previous year. As the number of visitors has increased, the proportion of U.S. educators has grown from approximately one-third to one-half the total.

Interpretative services in connection with these materials was provided to foreign educators studying in this country, to U.S. technicians serving in education missions abroad, to teachers in American schools overseas, to Office of Education specialists, to educators in

U.S. schools, and to both American and foreign research workers. The Laboratory received an increased number of requests for advice on the organization and maintenance of materials centers in the United States.

The *Educational Materials Laboratory Report* provides information on the nature and availability of publications held in the Laboratory.

Food and Drug Administration

Introduction

A Listing of some of the year's accomplishments, regulatory problems, and issues up for decision demonstrated that consumer protection was dynamically on the move in 1962:

- AMA-FDA Congress on Medical Quackery Held
- First Seizures of Unlabeled Hazardous Household Substances Made
- Campaign on Packaging Violations Intensified
- Drug Counterfeiting Ring Ended
- Bootleggers of Dangerous Drugs Jailed
- Incubator Reject Egg Handlers Sentenced
- Physicians' Samples Abuses Curbed
- Scheduled Hearings for Whole Fish Flour Standards Postponed
- President Sends Message to Congress on Consumer Protection
- Overhaul of Special Dietary Regulations Proposed
- False Promotions via Books, "Doorbell Doctors," Radio Spielers Attacked
- Fake Medical Devices Seized—Others Destroyed by Owners
- FDA Doctor Prevents Sale of Baby-Deforming Drug
- Controls on Investigational Drugs to be Tightened
- FDA Scientists Explore New Fields of Consumer Protection
- Kefauver-Harris Drug Amendments Enacted

From this sample of headlines similar to those that have been appearing in the daily press throughout the year, it is evident that 1962 was a banner year for consumers through major enforcement accomplishments. However, it is also apparent that consumer protection is still inadequate and almost unbelievably complex in its ramifications.

Consumers may take a considerable measure of encouragement from the accelerated pace at which both the executive and legislative branches of the Government were moving to strengthen consumer protection during 1962. Of special interest in this connection was President Kennedy's message to Congress on consumer protection delivered on March 15, 1962—the first such message ever devoted exclusively to consumer problems.

The President's message cited four basic consumer rights:

1. The right to safety
2. The right to be informed
3. The right to choose
4. The right to be heard

The Federal Food, Drug, and Cosmetic Act and the Federal Hazardous Substances Labeling Act are founded on these basic rights. The consumer is a principal beneficiary of these laws. This report is an account of the stewardship entrusted to the Food and Drug Administration to protect consumers through enforcing these laws.

1. *The right to safety.*—The benefits to consumers from miraculous new drugs and chemical aids to food production and processing are now largely taken for granted. But any tendency to take for granted that these products are without potential danger was brought to a nerve-jangling halt in the early summer of 1962. Complacency vanished like mist before the breeze as the story unfolded of the narrow escape by American families from the tragedy of grotesque deformities in babies caused in European countries by a sleeping pill containing the drug thalidomide. During the late winter and spring it had become increasingly certain that thalidomide was responsible for thousands of such deformities in countries around the world where it had been marketed for several years.

This drug did not reach the market in this country because of the safety clearance requirements in the Federal Food, Drug, and Cosmetic Act, and because of the stern refusal of an FDA medical officer to clear the drug on what she believed to be inadequate safety evidence provided by the manufacturer. The President conferred a Distinguished Federal Civilian Service Award on the medical officer, Dr. Frances Kelsey, with the following citation:

> Her exceptional judgment in evaluating a new drug for safety for human use has prevented a major tragedy of birth deformities in the United States.
>
> Through high ability and steadfast confidence in her professional decision she has made an outstanding contribution to the protection of the health of the American people.

Thalidomide had been widely distributed to doctors in the United States under provisions in the law allowing distribution for investi-

gational use to determine safety and usefulness of new drugs. As the extent of the investigational distribution was learned, it became apparent that tightening of controls over such distribution of uncleared drugs was necessary. Proposed new regulations were issued. Congress quickened its pace on drug legislation before it, as statutory gaps in consumer protection came to be interpreted by the public in terms such as the possibility of deformed babies, and public clamor arose for strengthening the law in every respect necessary to close these gaps. Newspapers day after day headlined developments in the thalidomide episode and reported legislative progress toward strengthened drug provisions in the law.

The importance of premarketing safety clearance of new drugs had been indelibly stamped on the minds of American consumers.

Despite safety clearance requirements, large-scale use of a drug after release sometimes results in discovery of side effects not observed during the premarketing investigations. And a breakdown in factory control procedures may result in the marketing of off-strength, contaminated, or mislabeled drugs.

Altogether 67 defective or mislabeled drugs had to be recalled from the market during the year, some of them after injuries occurred. Until passage of the Drug Amendments of 1962, FDA had no authority to require manufacturers to report such injuries, nor could FDA inspectors require manufacturers to permit a check of complaint files. Previous approval of new drugs could be revoked only when there was new evidence on which to establish that the drug was unsafe.

It is self-evident that the safety rules for pesticides, food additives, and color additives are just as important as those for new drugs. Agricultural chemicals have revolutionized the farmer's production methods in horticulture and animal husbandry. Technological advances in food processing, packaging, and distribution have brought a tremendous and ever-increasing variety and volume of convenience foods whose main or entire preparation is on the factory processing line instead of in the home kitchen.

Over 45,000 chemical formulations are available to the operators of 3.8 million farms today for more effective production of crops. There are an estimated 2,200 chemicals used in foods and food packaging, produced by approximately 6,500 manufacturers. In turn, these chemicals are used by 73,000 manufacturers, processors, and packers of food. Approximately 15,000 establishments manufacture and distribute drugs.

The necessary checking on how new products are controlled after they get into commercial production has multiplied the workload of FDA's inspectional and analytical staffs, and has posed many research problems.

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Chart 1.—RETAIL SALES OF FOOD IN THE UNITED STATES, CALENDAR YEARS 1952–61

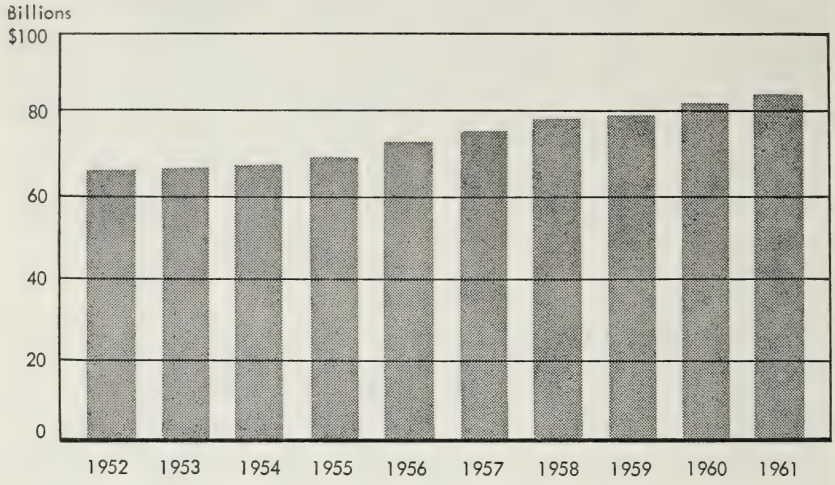
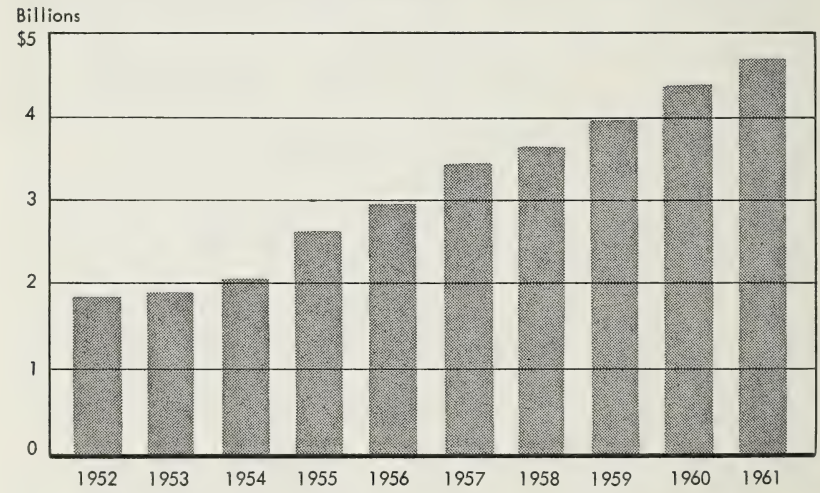


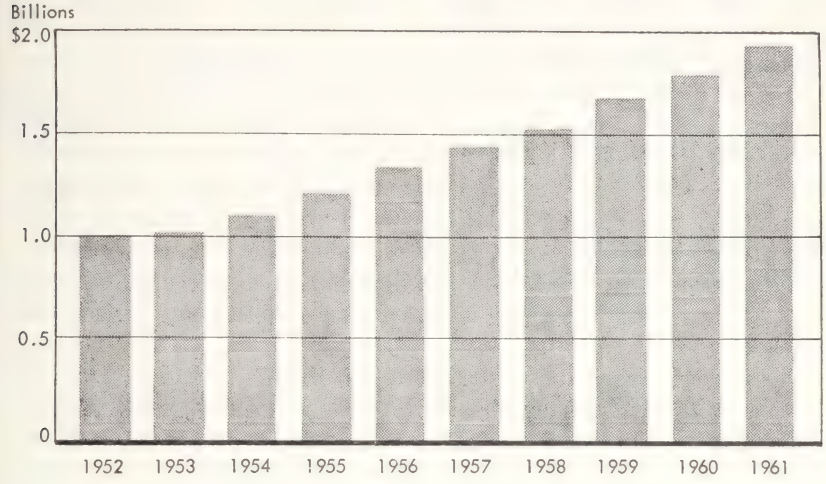
Chart 2.—RETAIL SALES OF DRUGS IN THE UNITED STATES, CALENDAR YEARS 1952–61



2. *The right to be informed.*—Major laws enforced by FDA seek to secure this right by affirmatively requiring that information needed by consumers for intelligent purchase and use be prominently and truthfully stated on product labeling. False and misleading labeling is specifically prohibited. Enforcement of these requirements has received increasing emphasis as FDA resources have grown, and reached an all-time high in 1962.

However, enforcement efforts to bring about honest and informative product labels are insufficient of themselves. Equally or perhaps

Chart 3.—RETAIL SALES OF COSMETICS IN THE UNITED STATES, CALENDAR YEARS 1952–61



more important is the combatting of misinformation. Prospective consumers of foods, drugs, and cosmetics are constantly barraged with misinformation through channels often deliberately calculated to be outside the reach of the law and within the constitutional protection accorded to freedom of speech and press. Such misinformation is peddled in books, magazines, newspapers, radio–TV and live lectures by self-styled experts, and by door-to-door salesmen operating within the sanctity of the home. Such misinformation may be presented in the guise of health suggestions, medical advice, nutrition advice, weight reducing tips, advice to the elderly, and so on.

There is no field in which misinformation is more vicious or more dangerous than that of medical quackery.

Quackery is big business. Its cost to the Nation in lives, injuries, and money are not precisely known, but it is reliably estimated that consumers spend needlessly more than a billion dollars a year on falsely represented drugs, foods, and cosmetics.

The first National Congress on Medical and Nutritional Quackery, sponsored by the American Medical Association and the Food and Drug Administration, was held in Washington in October 1961. It gave 650 representatives of more than 200 organizations an opportunity to take an overall look at the growing problem of quackery.

A follow-up meeting was held in Chicago in March 1962 to appraise the results of the Congress. It was agreed that the Congress had accomplished its main objectives. These were to strengthen existing liaison among various Government enforcement agencies and public service groups, and to stimulate widespread public awareness of the threat posed by the rackets in quackery.

Many articles on the quackery problem have appeared in nationally distributed magazines and more are in preparation. Many State and local organizations have held meetings similar to the FDA–AMA meeting to bring further public attention to the problem of quackery.

Dietary products, vitamins and minerals, and so-called health foods represent another major area of exploitation of the consumer through misinformation. In June FDA published proposals for a major overhaul of the special dietary food regulations governing the labeling of such products. These regulations were first promulgated in 1941. The proposals are designed to give consumers the benefit of advances in the science of nutrition since that time, and are aimed at eliminating the false and misleading claims which constitute "nutritional quackery."

The Federal Hazardous Substances Labeling Act requires consumer protection information on labels of hazardous household articles, such as cleaning agents, paint removers, and polishes. After enforcement began on February 1, 1962, seizures were made of corrosive and highly toxic products which did not contain the warning information required by law. As the labels of hazardous substances are brought into compliance with the new law and its regulations, accidental injuries, especially to children, should be materially reduced. If the law is to accomplish its purpose, however, consumers must be educated to read and heed the label cautions and directions.

FDA participation in the first observance of National Poison Prevention Week focused public attention on the consumer protection objectives of this new law.

To carry out the consumer education responsibilities of the Department in line with the President's message, the Secretary has designated a Special Assistant to the Secretary for Consumer Protection, and announced the formation of a Departmental Committee for Consumer Protection. The Special Assistant was selected from the FDA staff.

Within FDA, a Consumer Education Branch was established in the Division of Public Information, to develop further FDA's consumer education programs for adults and students, and to respond to consumer inquiries. A new "Consumer Memo" series was initiated as a medium for explaining matters of special interest, such as pesticides, food additives, food standards, and labeling.

3. *The right to choose.*—This is inseparably bound to the right to be informed. To exercise a truly free choice, the consumer must have accurate information about the product to be selected. In the supermarket she is frequently seriously confused in her choice when she is confronted with exaggerated claims for competing products.

But the consumer also must be free of false notions about other similar products available. The consumer who believes that crops

raised with the aid of chemical fertilizers and other properly used agricultural chemicals are nutritionally inferior or dangerous cannot exercise her right of choice; nor can the consumer who believes that a vitamin-mineral preparation containing nutritionally insignificant amounts of 57 ingredients in a shotgun mixture is superior because of them.

Further, a free choice cannot be exercised between two products which are in fact very different in acceptability if the determining factors cannot be detected or measured by the consumer.

If one drug is up to strength, the other inferior; if one food is clean, the other produced under insanitary conditions; if one product is pure, the other contaminated—the consumer is not ordinarily able to distinguish between them, yet one is acceptable and the other would not be so if a free choice could be exercised.

The consumer thus must rely on law enforcement to eliminate insofar as possible the type of product variability which in effect deprives one of the freedom of choice. Programs to assure cleanliness and wholesomeness of foods and safety and integrity of composition of all regulated products serve this consumer interest.

But there are other areas in which the exercise of the right to choose depends upon the presence of certain information on the product label. This is more fully discussed under item 2 above. In 1962, 85 seizures were made of products so labeled that important consumer information was hard to find, hard to read, or partly or entirely absent.

4. *The right to be heard.*—FDA encourages consumer participation in the administrative process to the fullest extent possible, just as similar participation by industry, scientific groups, and other interested parties is encouraged. Consumer participation is especially invited in the setting of food standards, for example, and in the formulation of labeling regulations as in the case of special dietary foods.

The Consumer Memo series mentioned earlier will carry information about food standards to enable consumers better to understand controversial issues and to provide authoritative and meaningful comment. Consumer correspondence also provides a pulse by which to observe opinion on matters of current interest.

FDA's Consumer Consultant Program, with consultants in each of its 18 Districts, serves as a channel through which consumers can express their views about additional areas of protection they need, or about FDA programs and policies. Numerous consumer conferences were held throughout the country during the year for forum discussions directly with consumers. As stated in the President's message, this program will be expanded. A Public Service Advisory Committee of consumer leaders has been established to serve as a source of consumer opinion on important matters.

Administrative Progress

The enforcement appropriation for fiscal year 1963 is $28,280,000. This compares with $23 million for fiscal year 1962, representing a net increase of $5,280,000. This provides for an increase of 542 positions, bringing the authorized enforcement staff to 3,012. This does not include employees assigned to certification services and pesticide petitions, which are financed on a self-supporting fee basis.

Of the increases in personnel, 342 will be assigned to the field to bring the field staff to 1,860. The field increases of 1962 and 1963 should permit inspections of the regulated firms at an average of about once in every 4 years. The goal is to inspect most establishments at least once a year.

Of the 647 man-years for inspectional work in the fiscal year 1963, 431 (or 67 percent) will be assigned inspections involving health, 165 (or 25 percent) to sanitation inspections, and 51 (or 8 percent) to work involving economic cheats, largely misbranded and substandard foods.

The 1963 budget provides manpower for FDA to undertake an inventory of these establishments, using a new integrated automatic data processing system for headquarters and field use. This system is designed to supply information for use in appraising FDA's work obligation and regulatory accomplishment, and for planning immediate and long-range needs and activities. In 1962 all establishment inspection data were prepared for computer input and processing.

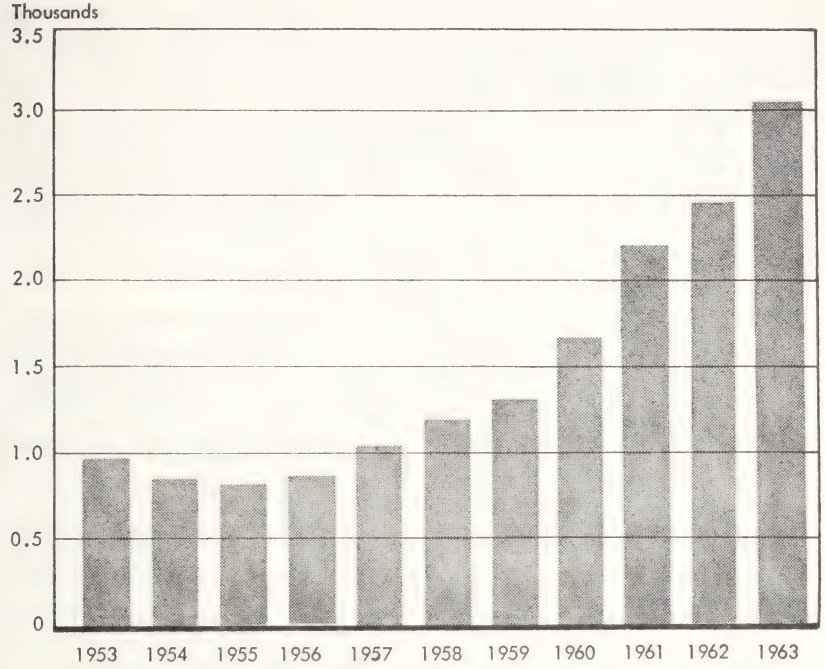
Under the increased appropriations several other important programs will receive substantial increases in both manpower and equipment. The program to protect consumers of fresh fruits and vegetables against harmful residues of agricultural poisons will be strengthened by 190 new positions to permit the sampling and examination of a higher percentage of shipments for residues. Other food programs will be accelerated by 96 new personnel for food research, food additives, and food standards work.

Drug protection will be stepped up by the addition of 126 positions. These new employees will be assigned to new drugs and efforts to combat the illegal sale of prescription drugs and traffic in counterfeit drugs.

Twenty new positions have been assigned to the coverage of imports offered for entry. The total retail value of these imports is approximately $6 billion dollars a year. The relatively small percentage of coverage has been inadequate to assure that foods, drugs, and cosmetics produced under the regulations of other countries meet the requirements set for domestically produced goods.

All other staff increases will be used to improve FDA's Washington and field management functions, its information services, coopera-

Chart 4.—BUDGETED POSITIONS FOR FOOD AND DRUG ADMINISTRATION ENFORCEMENT OPERATIONS (EXCLUDING FEE-SUPPORTED CERTIFICATION SERVICES), FISCAL YEARS 1953–63



tion with State and local agencies, scientific research on cosmetics and animal feeds, processing of regulatory actions, and the staffing of a new pharmacological animal laboratory building.

In nonstaff areas, the 1963 budget will permit FDA to start renovating the four remaining district offices and laboratory facilities yet to be expanded and modernized under the program begun several years ago. It will also permit substantial steps to be taken in the program of replacing and modernizing scientific equipment.

A study of State and local food and drug programs will be made with $300,000 of the appropriation. This will be undertaken by a private research group under contract. The main objective of this study, in which State and local governments will cooperate, is to find out where coordination of Federal and State and local activities can be expanded and improved.

FDA has had an organizational unit devoted to cooperation in Federal, State, and local food and drug enforcement programs since 1914. More than half the States have food, drug, and cosmetic laws paralleling the Federal law before enactment of the Drug Amendments of 1962, and most of the others have similar laws in one or two of these areas but not in all.

Additional FDA personnel have been added to provide closer coordination of Federal-State activities in each of the past several years. Many joint inspections are made, with actions taken by the organization that could handle the problem most effectively. Joint training programs in inspectional and analytical procedures, and exchange of information on programs and methods are all contributing to better consumer protection.

Some of the areas in which joint activities were most productive recently were in sanitation programs; the breaking up of rackets, such as traffic in incubator reject eggs, and counterfeit drugs; activities against illegal sales of dangerous drugs; the removal of stilbestrol-treated poultry from consumer markets; food poisoning investigations; and monitoring recalls of dangerous drugs.

FDA's total employment almost doubled between the fiscal years 1958 and 1962. Attending such rapid growth are a variety of problems in recruitment, placement, position classification, employee-management relations, and training. Special emphasis has been given to recruitment of promising college graduates who may be able to fill key positions in the future.

The training programs have been developed not only to orient and teach necessary specialized techniques to new employees, but also to help those already on the rolls to keep abreast of new techniques and to make effective use of new and often intricate apparatus. Training programs have been developed for scientists, inspectors, supervisors, administrators, and clerical employees. Some of these programs were extended to State employees with similar new responsibilities requiring specialized training. These training classes were attended by 3,000 personnel.

Organizational changes were put into effect in 1962 to facilitate operations in enforcement, administrative management, and consumer and industry education functions.

The handicap of operating the headquarters staff in five scattered permanent and temporary buildings in Washington will be alleviated when the new FDA building is ready for occupancy. Actual construction began in January 1961 and is expected to be completed in March 1963, followed by installation of equipment. The building may be occupied in the late fall of 1963.

A contract has been awarded for the construction of a new animal laboratory building at Beltsville, Md. This facility will permit FDA to make basic tests under optimum conditions to determine the toxicity of food and color additives and other substances in foods, drugs, and cosmetics. This fundamental work is now being conducted in crowded and antiquated facilities in Washington.

Food, Drug, and Cosmetic Act

ON THE FOOD FRONT

Radioactivity in Foods

With the resumption of nuclear testing by the Soviets in September 1961, the installation of radiological equipment in 10 districts was stepped up and additional equipment was purchased. The district laboratories became operational in the latter part of 1961 and the number of samples of food examined for strontium 90 was tripled. Prior to the resumption of nuclear testing there was a trend toward lower strontium 90 value for food when compared with prior years. This trend has now been reversed but the values are still low.

A pilot program to determine the strontium 90 content in a typical "moderate income plan" diet for boys from 16 to 19 years old, who consume more than any other age group, was started in May 1961 in the Washington, D.C., area with quarterly samplings. The amounts of strontium intake from the total diet, including milk, are not considered high enough to warrant any action by the Government or any change in consumer dietary patterns. This study was expanded late in the fiscal year to include Atlanta, Minneapolis, St. Louis, and San Francisco.

Samples for cesium 137 are analyzed in the Washington laboratories, also with no unsafe levels encountered. Research and studies are conducted in the Washington laboratories to develop methods of radiological detection, identification, and decontamination. FDA has a total of 116 positions for radioactivity work in Washington and the 18 field districts.

Chemicals in Foods

Food Additives.—Surveillance of food additives used in food processing is one of the essential elements of food establishment inspections. Attention is given not only to whether additives being used are permissible but also whether they are being used at safe levels. Laboratory analyses of some foods are conducted to check these levels. Inspections are also made at plants manufacturing regulated additives for assurance that the additives used by food processors meet labeled specifications.

The first seizure of a food containing mineral oil under the Food Additives Amendment involved a consignment of biscuits containing up to 6,700 parts per million. Inspection of the manufacturer showed the biscuits were being brushed with a mixture of mineral and soybean oil to prevent them from sticking together in the package. A consignment of the biscuits was seized at the warehouse of a market chain.

Later, 140 gallons of extra heavy mineral oil labeled for both food

and drug use were seized under the Food Additives Amendment. The label of the product stated: "excellent for use as a nonfattening oil in salads" but nutritionists have found that mineral oil inhibits the absorption of fat-soluble vitamins, particularly A and D. For this reason it should not be consumed at mealtime.

Most of the manufacturers of stilbestrol pellets for artificial caponization of chickens voluntarily discontinued their production late in 1959, after tests by improved methods had shown residues in the liver, skin, and kidneys of treated birds. Since this compound had been found to induce cancer in test animals under certain conditions, any use of it which results in a residue in any human food product is illegal under the Food Additives Amendment. In December 1961 the New Drug Applications of the firms which refused to discontinue voluntarily the manufacture of the pellets were revoked. Two firms are contesting FDA's authority to revoke the previous safety clearance of the drug for this purpose.

As a result of Federal, State, and local surveillance, more than 25,000 pounds of stilbestrol-treated dressed poultry and 3,000 live chickens were destroyed by New York City officials. Philadelphia health officials condemned and destroyed poultry containing stilbestrol at 15 locations in their city. Federal seizure was made of 6,880 pounds of frozen chickens and chicken livers and necks.

A meat seasoning containing niacin and polyvinylpyrrolidone, a stabilizer, was seized because these additives had not been cleared as safe for use in such a product. The amount of niacin in the product was far greater than would be used in a food supplement; when too much is consumed, severe flushing of the face may result. Although labeled as a seasoning, the product would act as a preservative and color fixative thus preventing the detection of aging or spoiling ground meat. Several other chemicals used in the product were undeclared preservatives.

Among the other foods seized for nonpermitted or above-the-limit additives were imitation vanilla containing coumarin, flour and nonfat dry milk containing inorganic bromide residue from fumigants used, and vitamin preparations and goat milk with excessive folic acid. Pesticides were found in three seized processed products—wheat bran, butter, and fish oil (see Pesticides in this section). It is believed that the three chlorinated hydrocarbons found in the fish oil were derived from contaminated sea water.

Faulty processing equipment and careless handling resulted in a number of seizures of chemically contaminated foods. A chemical flavor in canned fruit cocktail was traced to kerosene reaching the air jets of the filling machines as the result of pressure drops in a high pressure tank one night during recurring power failures. The manu-

facturer recalled outstanding stocks in possession of a food chain. Lead contamination of puffed cereals resulted from continuing use of worn lead gaskets in the "popping guns." More than $8,000 worth of contaminated feed had to be destroyed because a truck normally used to haul fuel oil was used to haul molasses for the feed without being cleaned before such use. The accidental substitution of a poisonous chemical for a safe one in a dip for peeled potatoes is discussed under Food Poisoning.

Pesticides.—There is increased public awareness of the potential danger that produce in the market place may bear toxic residues from agricultural poisons. These are a necessity in modern agriculture to protect crops from insects, mold, and weeds, and in other ways to aid production and prevent spoilage during transportation and marketing.

After FDA sets limits or tolerances for the amounts of such poisons that may safely remain on raw agricultural products, it must enforce these tolerances. This is done through surveillance of the practices of growers, by collecting and analyzing samples for regulatory action if required, and by assisting other groups in teaching growers the importance of following recommended application practices. An essential element in the pesticide program is the development of better, faster methods of detecting and measuring pesticide residues. Progress in this area is reported under Scientific Investigations.

It is estimated that there are 2½ million interstate shipments of raw agricultural commodities a year. In 1962, samples collected totaled 6,978, a marked increase over the 3,148 samples collected in 1961, but still not adequate to make sure that safety rules are being followed. FDA will have a sufficient staff before the end of the fiscal year 1963 to reach a sampling level of 25,000, or 1 percent of shipments, to enable a more accurate appraisal of the problem.

The heavy volume of perishable, seasonal products which move rapidly to the market after round-the-clock harvesting represents a crash program for the inspectors checking pesticide residues. A number of the districts have made effective use of trailer laboratories located in the growing areas, to eliminate transportation of samples to district headquarters laboratories sometimes located several hundred miles away. On-the-spot determination of pesticide residues, with analysis completed before the product reaches its destination, provides more effective enforcement, and also assists local agencies in coping with that part of the problem which is within their responsibility. FDA has continued the practice of notifying both growers and State officials when its analyses of samples show nonpermitted or excess residues on crops.

Twenty-seven seizures totaling 1,903 tons were made of raw agricultural commodities containing illegal residues. Corresponding figures for the previous year were 16 seizures totaling 483 tons.

The largest seizure involved a 748-ton warehouse lot of wheat that had been treated with DDT, lindane, and aldrin during a 3-year storage period, to keep down insect infestation. There is no tolerance for residues of any of these chemicals on wheat.

Ten carloads of wheat and one of barley, totaling 581 tons, were seized because of contamination with seed grain that had been treated with poisonous mercurial fungicides. Fifty-six tons of milo maize were also seized because of contamination with mercury.

Four other seizures of milo maize and milo sorghum followed reports of deaths of several animals consuming the products. Bags of captan and heptachlor for seed treatment had been shipped to a feed dealer in the same car with milo. Apparently some of these bags broke and contaminated the milo. In other cases it appeared that the intact bags were dumped into the feed troughs and were chewed by the animals. Among the other foods and feeds seized for pesticide violations were soybeans with residues of thiram, dried red beans with dieldrin, three lots of alfalfa meal with DDT, three lots of lettuce with DDT (one also containing toxaphene), and two lots of cabbage with residues of endrin.

Severe drouth conditions in the Dakotas were followed by an extremely heavy infestation of grasshoppers. Many roadside areas and marginal croplands were heavily sprayed with dieldrin or aldrin, or both. The drouth also created a serious hay shortage and some farmers allowed their cattle to graze on the heavily sprayed areas.

The situation presented a potential danger of contamination of milk produced from animal grazing on treated lands. A shipment of butter from a creamery in the area was seized because it contained dieldrin. No other Federal seizures of dairy products containing pesticides were made.

A general improvement in pesticide practices of growers has been observed, resulting in part from activities of State officials in quarantining milk with chlorinated hydrocarbons derived from the use of trash feeds, such as packinghouse wastes.

Other Harmful Contaminants

The last report discussed the seizure of 47 carloads—a total of 2,322 tons—of soybeans contaminated with poisonous crotalaria seeds as a result of the growing of crotalaria plants to improve sandy soils. Only 1 carload, containing 53 tons, was located and seized in 1962. It originated in Mississippi; the contaminated lots found the previous year had been grown in four other States.

Iron fragments that flaked off from rusty machinery into bread crumbs caused one seizure. Another involved iron fragments in cracker meal resulting from the partial disintegration of a mesh conveyor belt when the chain pulling it broke.

A cheese spread was seized because it contained sharp, pointed crystals of lactose monohydrate. The crystals were capable of causing injury. Also seized for potential injury to health were ready-to-freeze confectionery pops on plastic sticks capable of harming child consumers. Five seizures of foods for the illegal use of color additives are discussed under Cosmetics and Colors.

Food Poisoning.—Forty outbreaks of suspected food poisoning involving more than 1,300 persons were investigated during the year to determine whether bacteriological contamination was the cause. Samples of the suspect food involved or from the same lots or dealers were obtained in 12 cases. With two exceptions, the lots remaining on the market were found to be normal. Canned tomatoes involved in one outbreak were shown to be decomposed, and seized. Hollandaise sauce found to be contaminated with salmonella, as mentioned in the report of the preceding year, was responsible for a number of illnesses. The firm discontinued production and the product was removed from the market by recall and seizure.

A majority of the incidents investigated, which involved a large number of individuals, resulted from insanitary handling or from lack of proper refrigeration during preparation or serving of the food.

In a few of these cases, where the suspect food was available for examination, staphylococci in large numbers were identified either by FDA laboratories or by State or local laboratories. In other cases the foods had been consumed or destroyed but the epidemiological evidence implicated staph as the probable causative agent. In one outbreak, involving questionable handling procedures, turkey salad appeared responsible for the serious illness of 176 individuals, and the time of onset and symptoms were suggestive of *Clostridium perfringens* food poisoning.

A California family became ill twice in a few weeks after eating a meal which included commercially frozen potato patties, and one member had to be hospitalized in the second incident. The hospital reported the incident to the county health department which in turn referred the facts to the State health officials which relayed them to FDA. No packages of the suspect patties remained in the family's home freezer, but samples drawn from the retail supplier showed coagulase-positive staphylococci present in quantities sufficent to account for the illnesses, and also contamination with *E. coli.*

An establishment inspection of the commercial freezer, one of the largest potato processors in Seattle district territory, showed the need for improved bacterial and sanitation control of operations. After seizure of a shipment of contaminated patties, the firm initiated a nationwide recall voluntarily destroying an estimated $211,220 worth

of returned goods, and began capital and procedural improvements costing nearly a quarter million dollars.

Restaurant operators were warned in January to stop using a peeled potato bleach because of contamination of some lots by sodium fluosilicate, a deadly poison. The manufacturer had accidentally substituted this ingredient for sodium bisulfite normally used in the antioxidant compound. Illnesses after eating french fried potatoes in restaurants were reported in two States, but there were no fatalities because the bleach is used in very dilute concentrations. Seizure was made of one lot, and a public warning was issued. The manufacturer recalled all outstanding lots from widely scattered areas.

Potential injury was forestalled when an exterminator company was enjoined to stop using rodenticide "1080" in any way that could result in contamination of stored food. The firm, which provides exterminator services for food warehouses and mills, was charged in the complaint for injunction with causing the rodenticide to be placed in food plants in uncovered bait traps in close proximity to foods.

To Keep Food Clean

With some notable exceptions, continued sanitary improvement was found in most plants.

Increased pressure was put on warehouses, wholesale groceries, and their owners and managers to maintain sanitary storage. Thirty-five criminal prosecution actions were brought against 71 firms and individuals for storage under insanitary conditions resulting in potential filth contamination. Penalties in 36 convictions for such violations during the year ranged from nominal fines with probationary periods to $6,250 assessed against a firm and two of its officers. Many of the criminal actions have resulted in corrective measures to provide better protection for the stored food.

Sixty-one other prosecutions were filed against manufacturers or shippers of unfit food, and 49 cases terminated during the year were based on preparation of food under insanitary conditions or use of unfit ingredients.

Approximately half of the food seizures and more than 80 percent of the prosecutions of violative shippers and storers of food involved charges of filth and decomposition. The lower percentage of filth seizures as compared to recent years may be attributed in part to the increased attention devoted to detecting economic cheats, such as short weight and labeling violations.

Seizure actions on filth charges dropped from 516 in the fiscal year 1961 to 426 in 1962 and the total volume seized from 8,109 to 7,542 tons. In more than 40 percent of the filth cases the food had become unfit after interstate shipment.

Table 1.—*Actions on foods during the fiscal year 1962*

Projects	Seizures	Criminal prosecutions instituted	Injunction petitions
Total	867	117	13
Beverages and beverage materials	33	1	1
Bakery, ready to eat cereal, and macaroni products	84	18	1
Cereals, grain products, and feeds:			
Human use	140	22	5
Animal use	9	1	
Chocolates, sugars, and related products	67	5	1
Dairy products:			
Butter and churning cream	10	5	
Cheese and other dairy products	26		1
Eggs and egg products	14	2	
Flavors, spices, and condiments	38	1	
Fruits and fruit products	61	5	
Meat, meat products and poultry	6		
Nuts and nut products	78	9	1
Oils, fats, and oleomargarine	6	2	
Seafood	46	1	
Vegetables and vegetable products	92	6	2
Miscellaneous foods (mixed lots)	7	2	
Warehouse foods	106	34	
Foods for special dietary uses [1]	42	2	1
Miscellaneous chemicals (food adjuncts)	2	1	

[1] Includes vitamin products intended as food supplements.

Voluntary destruction or conversion to nonfood use by owners of filthy and decomposed foods totaled 4,626 tons in 1962. These actions were taken under the observation of Federal or local inspectors after the goods were found during inspections to be subject to seizure if distributed.

There has been widespread use of field bacteriology during inspections of food processing plants where bacteriological contamination is a real possibility. Crabmeat, dressed shrimp, nut meats, and other foods partly prepared by hand, and frozen precooked food are particularly susceptible to such contamination, which may lead to food poisoning outbreaks. One Texas crab packer was sentenced to 3 months in jail and fined because he shipped crabmeat contaminated with *E. coli*. A State health official had traced a food poisoning outbreak to crabmeat from this firm. Two other criminal proceedings terminated by fines were based on *E. coli* found in pecans shelled under insanitary conditions.

After injunction of a bakery in Atlanta the other bakeries in the Southeast reevaluated their flour-handling equipment, housekeeping practices and other sanitation programs, and accelerated those that were lagging. In 14 criminal actions terminated during the year bakeries and their officers or managers were fined for operating under insanitary conditions. One manager was fined $2,000 for a second offense. The firm moved its plant after the first violation to rid the bakery of rodent contamination, but permitted insects at the new location to become progressively worse despite FDA inspectors' warnings.

There has been encouraging improvement in sanitation in the grain industry in recent years. Close cooperation with State officials continues to foster such improvement. Industry groups have shown their interest by making more requests for FDA speakers at their meetings and for more literature on grain sanitation.

Seizures of rodent-contaminated bulk wheat increased from 53 actions against 2,249 tons in 1961 to 74 actions against 3,820 tons in 1962. An additional 323 tons of insect-infested wheat were seized in 4 actions. Five injunctions were requested of the courts to prevent shipment of unfit wheat and barley from elevators and other storage facilities where adequate ventilation was not maintained. Three were granted and two, forwarded to the Department of Justice near the end of the year, are awaiting action.

A serious situation with respect to rodent and insect filth in several rice mills in the southeastern region of Louisiana resulted from inadequate storage facilities for rough rice, infrequent cleaning of equipment, and improper storage of milled rice. Approximately 237 tons shipped from this area to Alabama were seized, and criminal prosecutions are pending against three shippers.

Incubator rejects are still being diverted to food use, but persons engaged in this illegal practice have gone further underground. Fifty-four tons of decomposed frozen eggs in 30-pound cans and a truckload of 600 cases of reject shell eggs were seized in 14 actions.

A west coast egg dealer was sentenced to 6 months in jail and assessed court costs of more than $5,600 for shipping rotten eggs. The judge said that the defendant "has been getting away with the use of contaminated putrid eggs for a number of years." The first case against a hatchery in connection with the incubator reject program was terminated with a fine. Companion cases against two dealers in incubator rejects are still pending. They have filed motions to dismiss on the grounds of illegal search and seizure and because standards for decomposition have not been issued.

State officials are cooperating increasingly in tracking down incubator rejects shipments and securing the evidence necessary to convict conspirators in the racket.

The increased surveillance of the New England fishing industry began in 1961 to protect consumers from decomposed fish. The number of violative lots still being encountered points to the need to continue the stepped-up program. In addition to decomposed fish, the amount of parasitized fish encountered has also increased. This problem is especially troublesome in ocean perch (red fish). Twenty-four percent of the lots of imported whitefish examined had to be detained because of the presence of cysts.

Two prosecution cases based on preparation of food oil under insanitary conditions were terminated with fines. Two new prosecu-

tions were filed against other firms and individuals, and several others are being prepared for filing.

The breakdown of controls formerly exercised in parts of the Near East resulted in detention of more than 3.6 million pounds of dates because of insect infestation. Educational work was undertaken to tell the foreign control officials why the dates were refused entry and what steps would be required to bring the dried fruit into compliance.

Pocketbook Protection

Total seizures to protect consumers from economic violations reached 350 in 1962 in comparison with 92 in 1961.

The intensified program against short-weight and inconspicuously labeled foods that was started late in the 1961 fiscal year was continued in full force throughout 1962. More than 70 different foods and beverages were seized in 183 actions because of short-weight or volume. One puffed cereal product ranged up to 15 percent short-weight. The manufacturer started to use an "improved" puffing process which increased the volume beyond the capacity of the carton to hold the stated weight of the old product, but the weight declaration for the new, lighter product was not changed.

The Food, Drug, and Cosmetic Act gives the consumer "the right to choose," by requiring certain information that will assist in intelligent purchasing to appear prominently on the label in understandable terms. There was a sharp increase in the number of seizures charging failure of mandatory labeling to appear conspicuously on the label. Eighty-five seizures were made because this information was hard to find, hard to read, or was partly or entirely missing.

Common causes of "hidden" labeling were the use on transparent bags of printing ink the same color as the product in the background, and other packaging features which did not provide adequate printing contrast. In some cases the type was too small or too blurred to be easily read. Promotional items, gifts, "2-cents off" stickers, etc., were sometimes attached to the original package in such a way as to cover mandatory labeling.

The press focused public attention on FDA reports of seizure of well-known and popular packaged 5-cent candies short-weighted to maintain the customary cost. It also publicized other "pickpocket packaging" and labeling of items displayed to attract selection by customers. Some were soaps, scouring powders, paper goods, and other items not subject to the Food, Drug, and Cosmetic Act.

However, foods, drugs, and cosmetics are also sometimes involved in extravagant and misleading promotions via the labeling and then may be subject to control under the Food, Drug, and Cosmetic Act. An example encountered during the year was instant coffee labeled

"Giant Economy Size," which actually cost more per ounce than the same product in smaller containers. It was seized on charges of false and misleading labeling.

Court actions were also taken against foods that were below official standards, or did not have the composition claimed on their labels. The 1961 report discussed an episode in which the "pure orange juice" was adulterated with sugar and water by surreptitious operations in the warehouse and factory. In September 1961, the president of the firm was fined $1,000 for perjury in the trial reported last year and received a suspended 5-year jail sentence. The previous sentence had been a 6-month jail term for this defendant and fines totaling $20,000 for the firm and its principals. Both sentences are on appeal.

After a 9-day trial, a chain store and one of its employees were convicted of shipping enriched bread deficient in enrichment, and were fined $5,500 and $2,000 costs. The court instructed the jury to disregard charges of failure to declare the minimum daily requirements statements called for by the regulations, since he did not agree that enriched bread could be considered a dietary food.

Among the other substandard items seized were noodles containing less egg solids than the quantity fixed by standards, "early June" peas prepared from soaked dried peas, low-fat butter, canned peaches and other fruits not packed in heavy sirup as labeled, canned beans with excess fibers, artifically colored canned cauliflower, strawberry preserves containing cherries in lieu of strawberries, and an avocado salad dressing that did not meet the official specifications for salad dressing.

Charges that foods did not meet their labeled composition were made in seizures of low-quality salmon deceptively labeled as the pink variety, grouper fillets labeled "red snapper," broken pieces of shrimp instead of the whole shrimp promised by the label, an artificially colored product declared to be paprika, cheese with artificial holes sold under a "swiss" label, imitation lemon-flavored crystals palmed off as dehydrated lemon juice, grapefruit juice with a sodium compound added to make it appear to be the juice of mature fruit, and frozen orange juice concentrate adulterated with sugar and water.

FOODS FOR SPECIAL DIETARY PURPOSES

Of about 100 seizures of vitamin products and other foods for special dietary uses, 16 were substandard in labeled potency, 6 failed to bear the special labeling required of such products, and 2 were contaminated with filth. Sixteen seizures were based on folic acid content in excess of 0.4 milligram of folic acid per daily dose and not labeled for sale upon prescription only.

The principal violation of the labeling requirements of foods for special dietary uses involved low calorie claims for foods not entitled to such designation. Recently published proposals for revised regu-

lations for special dietary foods contain specific provisions aimed at curbing abuses in labeling foods for use in weight-control diets.

The remaining seizures were based on false and misleading claims for the cure or prevention of disease. Some of the most significant are discussed below.

Nutritional Quackery

An estimated $500 million is wasted by the public each year on unneeded vitamins and faddist food products. Most of them are foisted upon the public by false representations that sound health is impossible without the addition to the diet of the special item promoted. Usually the myth is propounded that our soils are depleted because of years of intensive cultivation, and our food supply is poor because of modern commercial methods of production and processing. Contrary to this propaganda, the fact is that the American food supply is unsurpassed in quality and nutritional value. A balanced diet of foods available throughout the land supplies all of the average individual's nutritional needs.

The problem of enforcing the law against nutritional quackery is greatly increased by lack of knowledge on the part of the public of the true facts of nutrition. Reference is made earlier in this report to the first meeting of the National Congress on Medical Quackery sponsored by the AMA and FDA. In March these organizations and the National Better Business Bureau were joined by the Association of Colleges of Pharmacy in efforts to issue and distribute informative public statements to combat nutritional quackery.

Seizure, injunction, and criminal prosecution actions were completed during the year against several purveyors of sea water and sea salt who made use of the writings of Dr. George W. Crane, a nationally syndicated medical newspaper columnist. In his columns, which were widely reprinted by sellers of sea-water products, he extolled the virtues of minerals derived from sea water for practically every serious disease of mankind, including cancer, but with special emphasis on arthritis and other afflictions of the aged. In comparison with ordinary table salt, any usable quantity of ocean water would supply insignificant quantities of needed mineral nutrients, in addition to the fact that none of the serious diseases for which claims were made are caused by mineral deficiencies in the diet.

Several seizure actions were instituted during the year against Nutri-Bio, a vitamin-mineral supplement nationally promoted through door-to-door peddling by approximately 75,000 distributors. In the privacy of the prospects' homes many of the peddlers made claims for cancer, heart trouble, diabetes, tuberculosis, and other serious diseases. They also recommended the supplement for persons showing lack of normal intelligence, for "radiant living," and for preven-

tion of "premature death." Many of these claims were incorporated in a book written by Bob Cummings, a movie and TV actor who was designated by the Nutri-Bio corporation as executive vice-president in charge of research. The book was also displayed to sell the supplement in some cases. Other promotional material charged to contain misleading claims included sales manuals, sales and recruiting kits, leaflets, reprints of magazine articles, records, and filmstrips. The area salesman in Chicago alone destroyed 50 tons of books and literature after FDA charged that this material contained false claims.

Criminal and injunction actions were completed against Dr. Royal Lee, a nonpracticing dentist who recommended more than 115 so-called nutritional products for more than 500 different diseases and conditions. The recommendations were made in articles in a "Therapeutic Food Manual" and in other writings of Dr. Lee. These products were administered primarily by practitioners whose licenses did not permit the use of drugs, but who nevertheless prescribed the articles for incurable and fatal diseases, as well as for many conditions which could have been cured or alleviated by proper treatment. Also enjoined were the two related corporations, Vitamin Products Co., Inc., headed by Dr. Lee, and the Lee Foundation for Nutritional Research, a nonprofit foundation set up by Dr. Lee for "research" and sales of the literature promoting his products. In the criminal action the Vitamin Products Co., Inc., was fined $7,000, and Dr. Lee received a suspended 1-year prison sentence.

Another major promotional effort that ran afoul of the law during the year involved safflower oil for weight reduction and for lowering of blood cholesterol, associated by the public with prevention of heart disease. A best-seller book "Calories Don't Count" written by a physician and stockholder in Cove Vitamin and Pharmaceutical Inc., was used to promote sales of the product and was charged to be misbranding labeling. In addition to misleading weight control claims, the seizures were based on false and misleading claims in the book and other labeling for lowering the cholesterol level of the blood, for treating arteriosclerosis and heartburn, for improving the complexion, for increasing resistance to colds and sinus trouble and promoting health, and for increasing sexual drive. The firm denied the Government's charges, but later withdrew from its contest of the case. The firm then ordered a recall of all outstanding capsules. There were also seizures of other safflower oil products during the year.

Nature Food Centres, a corporation selling "natural and organic" foods, and two of its officers were convicted for shipments of food products represented for the treatment of many serious diseases. One of the defendants during public lectures in Philadelphia and Chicago, in an effort to promote sales of the products, represented them to be

effective for the treatment of conditions ranging from heart diseases and hepatitis to mental sluggishness, impotency, and colds. Fines of $5,000 for each individual and $10,000 for the firm represented the highest total fines assessed during the year.

Royal jelly, a substance secreted by bees to feed the queen bee, has been promoted as a "miracle" ingredient to increase sexual vitality, extend the life span, normalize the growth of underdeveloped children, cope with the ailments of old age, improve memory, stimulate the appetite, etc. A vigorously contested trial of the seizure of a shipment of royal jelly, Jenasol RJ Formula, in 1962 gave FDA its first court victory to establish such claims as unfounded. Following the decision in favor of the Government, the court granted its request for an injunction to prevent further misbranding of royal jelly by the firm. Numerous other actions against royal jelly products have been won by default.

In another case involving the product of bees, the Government seized 1½ tons of honey misbranded with misleading claims for the treatment of waning virility, arthritis, weak heart, and as a cure for premature death. Lelord Kordel, a "health food" lecturer, is president of the distributing firm. The honey did not differ from ordinary honey.

One product misbranded by false and misleading claims for losing or gaining weight and for figure control had been extolled by Jack LaLanne in a nationally televised calisthenics show.

Carrot juice and beet juice were seized on the basis of labeling claiming effectiveness for cancer, cardiac conditions, rheumatism, anemia, infectious diseases, etc. Garlic tablets were seized because of misleading claims for reduction of high blood pressure.

Forty-three of a mail-order distributor's line of vitamin, mineral, and other food supplements were seized because of misbrandings in the course of national radio broadcasts by Carlton Fredericks, a self-styled nutrition expert. He recommended the products for such conditions as circulatory and respiratory diseases, club feet, multiple sclerosis, sexual frigidity, cerebral palsy, tooth decay, grey hair, strokes, and many others. The Government also charged as false and misleading the broadcaster's claim that he is "America's Foremost Nutritionist." This statement appeared on the front cover of his diet book entitled "Eat, Live and Be Merry" which was seized in a "health food" store where it was displayed beside the supplements.

In June 1962 a major overhaul in the special dietary food regulations was proposed as a step toward curbing nutritional quackery. These regulations spell out the specific labeling information deemed necessary to facilitate intelligent purchase and use. The new proposals would replace regulations in effect since 1941 and made obsolete by scientific progress in the field.

An organized attempt to block the proposed changes by those wanting "health foods" to remain in status quo resulted in a deluge of protests to Congress and the Department. Thousands signed postcards furnished by organizations opposed to the regulations. Many of those who filled out the cards obviously misunderstood the proposals. They had been led to believe that the regulations would require prescriptions for vitamin and mineral products, put "health food" stores out of business, and interfere with the sale of nutritional products from natural sources.

On the contrary, the proposed regulations are an attempt to give consumers the advantages of 1962 knowledge of nutrition and are not intended to prevent the sale of any useful, honestly represented product. They aim at providing the public with labeling facts needed for intelligent purchase, and at curbing "shot-gun" formulas containing 50 to 75 ingredients of which only a handful have been proved to offer nutritional benefits. The time for receiving comments was extended for 2 additional months, making the final date mid-October.

DRUGS AND DEVICES

Recalls.—Sixty-seven defective or misbranded drugs were recalled by manufacturers during the year, either on their own initiative or at the request of FDA. Thirty-seven were defective because of such failures as low potency, nonsterility, high moisture, off-taste or odor, lack of stability, poor consistency, use of a delisted color, and internal pressure causing bottles to break.

Seven of the recalls were made because of labeling errors, two of which caused injuries. One was an analgesic containing alcohol, menthol, and methyl-salicylate which was labeled as an eyewash and resulted in a severe eye injury. The other was turpentine labeled as castor oil. Although the firm knew of the mixup shortly after distribution, it made only feeble efforts to recall. FDA did not know of the error until an injury complaint was received.

The suspension of applications for new drugs which caused adverse reactions is discussed under New Drugs. Recalls were conducted for outstanding stocks of each of these products. In another adverse reaction case, the firm issued a recall letter to 250,000 physicians, wholesalers, and direct account pharmacies but called for a hearing when FDA recommended that it request a suspension of its application. (This hearing resulted in the suspension after the close of the fiscal year.) Three other recalls involved new drugs not covered by effective applications.

Injuries caused the recall of soda mint tablets and a tuberculosis drug both of which were contaminated by stilbestrol. Cross-contamination had resulted from failure to clean processing equipment

thoroughly before starting the manufacture of another drug. Another recall was made of a penicillin product contaminated with sulfonamides.

Antibiotics seized included two intermammary infusions which left penicillin in the milk of the treated cows, and antibiotic sensitivity discs for which certification had been suspended pending correction of objectionable control procedures. In another case, FDA requested the manufacturer to recall penicillin shipments when an FDA inspector discovered during a factory inspection that samples submitted for certification were not representative of the batch.

After continued promotion of a drug seized for false and misleading claims to cure acne, the Commissioner made a finding that the labeling was "in a material respect misleading to the injury or damage of the purchaser or consumer." This finding, under which multiple seizures can be made, brought agreement by the firm to recall shipments.

One veterinary preparation, an iron injection manufactured to the prescription of a veterinarian, was recalled when 168 steers of the 172 injected died.

Illegal Sales of Prescription Drugs

Illegal sale of dangerous drugs and their diversion into bootleg channels continue to be a serious problem. Most frequently involved are the amphetamine drugs. Abusive use of these drugs may cause highway deaths, mental and physical deterioration, juvenile delinquency, and crime.

Barbiturates now rank second as the drugs most often involved in both bootleg and unauthorized pharmacy sales. Tranquilizers and hormone preparations are also found among the drugs being sold without prescription or without authorization for a refill of an original prescription.

Of 136 criminal cases terminated during the year on charges of illegal sales, 40 involved unlicensed outlets, such as truckstops, cafes, and peddlers, some of whom sold in wholesale quantities. Ninety-four actions were based on sales by drugstores or licensed pharmacists without prescription. Two physicians were prosecuted for sales without a bona fide doctor-patient relationship.

Fifteen unlicensed individuals and five pharmacists were required to serve prison sentences ranging from 1 day to 2½ years. Twenty-eight others received jail sentences which were suspended on condition that illegal sales be discontinued. New criminal cases started during the year numbered 150. Particular attention was given to investigations to learn where these dangerous drugs are first diverted out of legitimate channels to bootleg channels of distribution.

One couple was prosecuted in three Federal courts for participation in a ring engaged in illegal peddling of amphetamines to truck stops and filling stations in the Southeastern States. The two were fined a total of $21,000 in the three cases. The husband was sentenced to a total of 4 years in jail (later reduced to 2 years) and the wife to 1 year plus 1 additional year suspended.

A 2½-year jail sentence was assessed against an individual who supplied this couple and other large bootleg peddlers. The case was based on the purchase and illegal distribution of about 6 million tablets and capsules of drugs, largely amphetamines. In passing sentence, the Federal judge called attention to the fact that the defendant had attempted to buy additional large quantities of the drug after his arrest.

Three "goof ball" peddlers were arrested for sales of barbiturates and amphetamine in the Newark area. A fourth criminal information was filed against a man already in jail on another charge. Most of the sales by the gang were to teenagers. A number of injuries requiring hospitalization were associated with this distribution.

A Maine physician pleaded guilty to selling large quantities of barbiturates and amphetamines outside of his legitimate practice. He was fined $5,000 and received a 6-month suspended jail sentence. Other doctors and a hospital had complained to FDA that this physician was selling amphetamine by mail to patients under care of other physicians. FDA inspectors who posed as patients were not given physical examinations but were able to buy the drugs in peanut butter and coffee jars even after they told him they were reselling the drugs.

An Arkansas physician was fined $1,000 and placed on probation after his arrest in a tourist cabin while attempting to sell 200,000 amphetamine tablets to FDA inspectors posing as drug peddlers.

Seizure was also made of amphetamines in possession of a Pennsylvania physician who had sold an FDA inspector 10,000 tablets and had some 12,000 when the U.S. marshal made the seizure.

In another case, an unlicensed, self-styled naturopath was sentenced to 2 years in jail for selling barbiturates and tranquilizers in the guise of a practicing physician. The jury found him guilty on 12 counts charging illegal sales.

State enforcement agencies have been increasingly active in attacking the problem of illegal sales of dangerous drugs. Some of these agencies have laws permitting them to take action on the basis of illegal possession of drugs, thus they are not required to obtain evidence of traffic in them. Their inspectors have also given effective assistance to FDA inspectors in obtaining the proof needed for Federal prosecutions.

Safety Controls

The 1961 report discussed new regulations that will require manufacturers to provide the medical and pharmaceutical professions with more information in the labeling of prescription drugs. It also outlined changes in the new-drug regulations which require the manufacturer to submit more samples of new drugs and their ingredients and information concerning tests run so that FDA may check the firm's control procedures. The marketing of a new drug may be held up until FDA has made a complete factory inspection.

Twenty-five drugs were seized because they did not have new-drug clearance, in comparison with 11 in 1961. An injunction and a criminal prosecution case based on cancer "cures" shipped without effective new-drug applications are discussed under Medical Quackery.

One firm enjoined from shipping new drugs without safety clearance had not even been attempting to submit applications for such clearance. A previous new-drug application granted under another firm name had been suspended after investigations disclosed significant variations from claimed procedures. In discussing the probation report filed before a permanent injunction was granted, the judge made the following comment "* * * there isn't really very much in the report to commend the defendant favorably to this court and, in fact, some of the interested agencies have described and characterized the defendant as a con-man, you might say, in the food and drug business * * *."

The 1960 report told of the conviction of the operator of a drug testing laboratory for giving faked data on drug analyses made for small drug manufacturers. He was fined, given a 1-year suspended jail sentence, and placed on probation for 3 years under strict supervision of FDA. When it was found that he was continuing to fake his reports of analyses, he was brought back to court for violation of his probation. He was found guilty after a 3-day trial in the fall of 1961 and was sentenced to 6 months in jail, fined $2,000, and his probation period was extended to a total of 5 years. The court later vacated the jail sentence on a plea that the defendant was showing signs of mental illness.

Thirty-six drugs (excluding dietary products, devices, and medicated feeds, which are discussed separately) were seized because they were below labeled composition, or failed to meet official standards.

New regulations became effective in February 1961 requiring prescription drugs to bear lot control numbers. The first seizure for violation of these requirements was made in November of shipments of reserpine and a sulfonamide from which the control numbers had been scraped off from the labels while the drugs were in original manufacturers' packages. These lot control numbers are needed by both

the manufacturer and FDA to pinpoint the affected lots if something is found wrong with the drug.

Counterfeit Drugs

Two surveys of the extent of drug counterfeits on the market were made in the summer of 1961. No counterfeits were found in a 1,300 sample survey of those drugs believed likely candidates for counterfeiting but not previously known to be counterfeited. These are drugs of relatively high cost used over long periods of time for chronic ailments, and purchased in large quantities by retail druggists.

The second survey covered 300 drugstores known to have done business with a leader of the counterfeit ring who had been indicted for distributing counterfeit drugs. Thirty-two of these stores were found to have counterfeit drugs in their possession.

In February 1962 this ringleader and his son whom he employed pleaded guilty in Federal court in Texas. The father was sentenced to jail for 6 months and fined $1,000. Payment of the fine was suspended, and he was placed on probation for 5 years. The son was placed on a similar probation after a 1-year jail sentence and $1,000 fine had been suspended. Both face prosecutions in Federal courts in Louisiana and New Jersey for participation in the counterfeit drug racket. A number of criminal prosecutions were filed for the dispensing of counterfeit drugs. One of these cases has been terminated with a $3,000 fine.

Apparently these criminal actions and seizures of counterfeit drugs, which were largely effected before the prosecutions, have virtually stopped the counterfeit racket, at least temporarily.

Repacked Physicians' Samples

About 40 seizures of drugs valued at more than $1 million were made during the year in a program to curb dangerous abuses in the collection and selling of discarded physicians' samples. Most of these cases involved repacking, usually by the dealers whose stocks were seized.

In the repacking cases, the Government charged that the drugs were misbranded because of the absence of all or part of the labeling required to maintain the integrity and safety of drugs. Information lost in the repackaging operation included the common or usual name of the drug and each active ingredient, adequate directions for use, lot or control numbers, expiration dates for drugs with a limited shelf life, the statement "Caution: To be dispensed only by or on prescription of a physician," and the name and address of the manufacturer.

Mixups encountered in the repacked samples illustrate the extremely hazardous nature of such operations. In two instances the repacked bottles bore names of drugs different from those they con-

tained. In another case there were two different strengths of the same drug actually in one bottle. Outdated antibiotics and overage drugs were encountered, as were new drugs still in investigational status. In several instances drugs were found in completely unlabeled bottles.

Retail drugstores have for the most part cooperated with FDA in its efforts to correct the physicians' sample situation.

Medical Quackery

Sixty-six seizures and seven criminal cases were filed charging false and misleading curative claims for drugs.

Actions were taken against the promoters of several worthless cancer cures. A jury found a firm and its secretary-treasurer guilty of promoting Millrue, a product labeled as an "iron tonic," for cancer, arthritis, diabetes, ulcers, high blood pressure, and other serious diseases. The court assessed a total fine of $7,500 and sentenced the secretary-treasurer to 6 years in prison, to be followed by 3 years of supervised probation. He had been convicted on similar charges in 1958. This is the maximum jail sentence the law provides for a second-offense violation on a two-count information. Millrue was distributed by agents and "health food" stores, and was advertised in a "health" magazine. The defendant personally filled mail orders induced by these ads and although he had no medical training, he also engaged in consultations with prospective customers during which he "diagnosed" their ailments as cancer or diabetes and recommended the use of his tonic.

Another cancer "cure," KC-555, was banned by a Federal court injunction on the grounds that it was shipped as a drug without a prior showing of safety. It was an African-grown herb juice to be mixed with wine, and was labeled in part "it is used as an adjunctive treatment in malignant diseases, and as a stimulant when you feel run-down or listless."

The Laetrile cancer remedy was exposed as worthless in California medical circles more than 9 years ago. When recent Federal investigations showed interstate traffic in a number of drugs not cleared for safety, criminal prosecution was filed against Ernst T. Krebs, Jr. and the "John Beard Memorial Foundation" he directed. In March they were fined, and Krebs was placed under probation for 3 years, with conditions strikingly similar to those of injunction decrees.

The last report discussed an attempt to revive the worthless Koch cancer injection and the suspended jail sentence and probation issued to stop the sale of the treatment at a clinic in Texas. When FDA learned that the clinic operator was still shipping the treatment, FDA inspectors and a deputy marshal found 12 hypodermic syringes under a sofa in the operator's living room, together with correspondence

which showed that he had never stopped his activities. He was sent to jail for 2 months for violating the terms of his probation.

There are millions of arthritics in this country who will grasp at any straw in the hope of relief from pain. Many are led to believe in so-called cures for arthritis because of remissions which naturally occur in the disease. This sets the stage for unscrupulous promotion of worthless remedies. Numerous seizures were made of such products, and in June a mail-order firm, the manufacturer, Specifics Drug Co., and individuals associated with them in the distribution of Specifex Adrenal Hormone Cream were permanently enjoined from interstate shipment of the ointment. Mail-order sales had soared on a nationwide scale in recent years because of false claims of curing rheumatism, arthritis, fibrositis pains, and for other pain-associated conditions. One of the statements made in promotional literature was "Rush by Return Mail * * * Works Like a Shot."

Seizures of more than $185,000 worth of Acnotabs, promoted as "medical science's latest discovery" for treating acne (pimples) in teenagers, followed the Commissioner's multiple seizure findings mentioned under Recalls. While a contested seizure was awaiting trial the firm continued to promote the tablets with such misleading claims as "Remarkable new tablets work internally as no lotion, no ointment possibly can! Pimples clear up beautifully—AND YOU DON'T GIVE UP SWEETS!" After the multiple seizure findings the company recalled many outstanding shipments to avoid further seizures until the first seizure was tried in court. (The Government was upheld in this action after the close of the fiscal year.)

Seizure of a coated chewing gum containing essential oils and a small quantity of benzocaine was made on charges of misleading claims that the gum would aid the appetite and aid in reducing. The labeling of the gum claimed "Eat What You Want—Yet Lose up to 3–5–9 Pounds a Week," and included menus suggesting a restricted daily intake of about 1,200 calories. The claimant contested the seizure and the district judge ruled that the Government did not sustain its burden of proof. The Government lost an appeal in which it contended that the claimant's own evidence did not substantiate the labeling claims.

Medicated Feeds

Figures are not available as to what proportion of the 42 million tons of animal feed manufactured in 1961 was medicated, but the volume was immense and it is increasing year by year. The addition of antibiotics, hormones, arsenicals, and other drugs to feeds has revolutionized livestock and poultry production and brought many important benefits. Production costs have been reduced, output increased, and animal diseases brought under more effective control.

This, in turn, is reflected in what the consumer pays for poultry, meat, eggs, and dairy products.

But the use of drugs in feeds also has presented potential health hazards that have conferred tremendous new responsibilities on FDA. The agency must refuse to sanction the use of any feed additive that would injure either the animals fed or the people consuming food derived from them. Directions for use must be adequate to result in safe use if they are followed.

The feed mixer must demonstrate that the manufacturing procedures he will use will assure uniformity and labeled potency of the feed before his new-drug application for permission to manufacture and market the medicated feed will be cleared. Inspection is necessary to check on processing procedures or to catch misuse of medicated feeds. Laboratory analysis of samples of the finished feed is a necessary final step and represents another heavy workload for FDA.

Twenty-eight lots of medicated feeds were seized in 1962, compared with five in 1961. Five criminal actions and one injunction were filed in 1962—one criminal case in 1961.

In five of the seizures the manufacturer had not obtained safety clearance to mix the drug in his feed. In eight other seizures noncertified antibiotics had been incorporated in violation of regulations.

In nearly half of the seizures the feeds were either above or below the strength declared on the label. The gravity of overdosage was demonstrated by a turkey feed that killed more than 700 turkeys. It contained about twice the labeled amount of drugs added for treating poultry diseases and stimulating growth. The firm was fined and permanently enjoined from further shipments.

In three seizures the Government charged false and misleading veterinary claims.

New Drugs

There were 693 new drug applications received during the fiscal year; 282 for human and 411 for veterinary drugs. Within the same period 273 applications became effective; 109 for human and 164 for veterinary drugs. A total of 1,110 communications on effective applications for human drugs and 2,387 for veterinary drugs was also handled including many formal supplements. Of the supplements, 760 were made effective for human and 427 for veterinary drugs.

Safety clearances previously granted for five drugs for human use were suspended on the basis that clinical experience since the applications became effective showed that they were unsafe for use. Since some of these drugs were included in different products, the suspensions applied to 10 applications. All products were promptly removed from the market. The drugs concerned were: (*1*) *zoxazolamine*, used for

relaxing skeletal muscle spasm and also for increasing excretion of uric acid in gout. It was found to cause severe liver damage in some instances. (*2*) *amphenidone*, a mild tranquilizing agent for the relief of anxiety and tension. Agranulocytosis, a serious blood condition, was encountered in some patients. (*3*) *triparanol*, used to lower blood cholesterol. Evidence developed associating it with cataract formation, loss of hair, and certain skin conditions. (*4*) *etryptamine acetate*, for relief of mental depression in psychiatric conditions. Agranulocytosis was also encountered with this drug. (*5*) *thihexinol methylbromide*, an atropinelike drug used for the treatment of diarrhea. Atropinelike side reactions occurred in infants, and the labeling claims went beyond those authorized in the original safety clearance.

Approximately 6 months prior to the suspension of the application for triparanol, the distributor, in collaboration with the Food and Drug Administration, issued a letter to physicians informing them of toxic effects which had been encountered with the product. At that time the evidence was not deemed legally sufficient for suspension of the safety clearance. Additional information, resulting in part from this publicity and from continuing investigations, made it evident that the product should no longer be marketed.

Also in collaboration with the Food and Drug Administration, distributors of two drugs, triacetyloleandomycin and erythromycin estolate, issued letters to physicians calling attention to liver injuries resulting from use of the drugs in investigative studies and in general practice after the drug was cleared for distribution. The letters enclosed revised package inserts which referred to the above effects. One product containing triacetyloleandomycin in combination with other drugs was seized on charges that its labeling included claims extending beyond those provided for in the effective new drug application.

As discussed in the Introduction, an application was prevented from becoming effective for a sedative and hypnotic, thalidomide. This drug was marketed in other countries and was later shown to cause serious malformations of the fetus when used in early pregnancy.

New regulations, discussed in the 1961 report, requiring applicants to submit specific samples with applications, have permitted the testing of the adequacy of the manufacturers' methods in district laboratories on approximately 40 applications. The authority in the regulations to verify by factory inspection the adequacy of a manufacturer's facilities and controls has been used to advantage in evaluating approximately 20 applications.

Significant drugs on which favorable action was taken during the fiscal year include one for dilating the coronary arteries (dipyridamole); an intravenous blood-pressure-elevating agent for the treatment of shock (angiotensin); one for lowering the blood pressure

(mebutamate); another potent diuretic which also helps to lower blood pressure (polythiazide); a drug for the palliative treatment of some types of cancer (5-fluorouracil); an anti-infective sulfonamide (sulfamethoxazole); one for the control of itching (cyproheptadine); two anti-inflammatory steroids for topical use (fluandrenolone and fluocinolone); a tissue-building steroid (stanozolol); and an androgenic steroid for treating inoperable cancer of the breast (dromostanolone propionate); a diagnostic agent for testing function of the pituitary gland (methopyropone); two drugs for relaxing smooth muscles and which aid in the treatment of peptic ulcer (clidinium bromide and glycopyrollate); a mild tranquilizing agent (hydroxyphenamate); an agent for the control of nausea and vomiting (thiethylperazine); a drug for the treatment of vascular headache (methoxyflurane); an oral contraceptive agent (norethindrone and ethinyl estradiol); two drugs for the control of cough (pipazethate and levo–propoxyphene 2-napsylate); a progestational agent for the treatment of menstrual abnormalities (isopregnenone); some oral enzyme agents recommended for the treatment of inflammations and injuries; and some radiopaque compounds for use in X-ray examinations.

Devices

Of 57 devices seized, 40 were charged to be misbranded and 17 to be defective. The latter included 14 shipments of rubber prophylactics with holes, two of clinical thermometers that did not register accurately, and an automatic metering infusion set that did not deliver the flow at the rate indicated on the meter.

Shipments of seven types of worthless devices to health practitioners throughout the country by Electronic Instrument, Inc. (Ohio) were permanently banned by an injunction order in April 1962. The electronic and diagnostic devices were accompanied by literature containing claims for treating disease conditions of the brains, tonsils, prostate, spinal cord, trachea, lungs, kidneys, stomach, heart, liver, and numerous other diseases. Some are supposed to measure electrical frequencies emanating from the body, although such frequencies do not exist, and then match them with high-frequency electrical currents which give the patient nothing but a tingling sensation.

Thousands of the instruments, costing up to $1,000 each, have been distributed to practitioners over the years, and a number have been seized—eight in three actions shortly before the injunction order. The use of these devices by health practitioners can in no way help patients, and great harm may be done by reliance upon them.

Fred J. Hart, president of the Electronic Medical Foundation (California), who was permanently enjoined in 1958 from distributing

13 misbranded diagnostic and treatment devices based on "emanations" supposedly given by a drop of blood, was prosecuted during the year for criminal contempt of the injunction. He was fined just after the close of the year. The action was based on delivery of one of the banned devices, Short Wave Oscillotron, to an out-of-State practitioner in July 1961. The foundation he headed, which was dissolved just before the contempt case decision, was set up many years ago as the College of Electronic Medicine by the late Dr. Albert Abrams, inventor of many of the electro-medical theories involved in previous FDA device actions.

Another injunction ordering the Ellis Research Laboratories and Robert W. Ellis, president, to stop misbranding a diagnostic electrical device, Micro-Dynameter, brought an appellate court finding that the device was not safe even in the hands of a licensed practitioner. The FDA Commissioner called the machine "a peril to public health because it cannot correctly diagnose any disease." On June 11, 1962, the Supreme Court refused to review the actions of the lower court.

Over 5,000 of the devices had been sold, for as much as $875 each, with promotion through about 50 items of misbranding labeling, including hard-cover books, pamphlets, case histories, and alleged scientific research reports. The first seizure, effected in 1954, charged that false and misleading claims were made for cancer, tuberculosis, tooth decay, and 30 other diseases and conditions.

After the Supreme Court refused to review the case, a nationwide seizure campaign was immediately instituted in an effort to take the device out of the offices of health practitioners. Publicity given to the injunction and seizure campaign by the press, State enforcement agencies, and practitioners' associations, brought many offers by practitioners to destroy their machines, thus making seizure actions unnecessary. Other practitioners, and some of their patients, have vigorously protested the seizures.

Another type of device seized was massaging instruments for beautifying the face and figure, toning flabby muscles, removing "dowager's hump" and double chin, reducing weight, relieving tension, curing fallen arches, and improving skin texture. Adolphus Hohensee, a "health lecturer" promoting a massage device for such diseases as cancer, was arrested by New York City authorities when he protested seizure of the device and precipitated a disturbance among his students.

Various types of "air purifiers," ranging from vacuum cleaners to devices to force air through canisters of activated charcoal, were charged with making false and misleading claims for relief from hay fever, sinus, and asthma allergies; killing air-borne bac-

teria; counteracting substances in tobacco smoke to protect the smoker from lung cancer; banishing irritation of nose and throat membranes; and preventing infections and parasitic diseases. A Federal court decree filed in the District of Columbia against continued misbranding of Puritron devices drastically limits the claims which may be made for health benefits from household air purifiers.

Other devices seized included lamps for the treatment of aches, pains, and skin problems; juice extractors claimed to produce juices beneficial for cancer, arthritis, colds, ulcers, etc.; quartz broilers to prepare healthier foods, protect against heart disease by destroying cholesterol in food prepared in them, and permit one to live longer; a bust developer; and a number of other devices with serious claims.

Three types of devices were charged to be potentially dangerous as well as worthless. An injunction decree was issued against Mercier Radioactive Devices that were dangerous to both the practitioner and the patient because of leakage of radioactive materials. The device supposedly radiated blood drawn from the patient, and the blood was to be re-injected to "increase the energy quantum in the blood plasma."

An ultrasonic device was seized in possession of a masseur not licensed to use it. Such devices may cause injuries when used by the ignorant or unskilled.

Also seized were electric toothbrushes and gum massagers that might cause severe or fatal shock after immersion in water. Contrary to labeling claims, the motor and cord units were not sealed. The Government also took exception to the claim that it offered "the best in a complete home dental treatment."

COSMETICS AND COLORS

Nearly 32,000 bottles of hair dressing were seized in 13 actions against a cosmetic counterfeiting operation. The counterfeiter had recently been sentenced on a currency counterfeiting charge. The counterfeit cosmetics could be easily detected because the dressing, containers, and labels all differed from the genuine. The product itself contained coal-tar colors not present in the imitated product, and the container and labels differed in several respects. For example, light would pass through the counterfeit label, whereas the genuine label is lightproof.

Another seizure removed approximately 17,000 plastic tubes of deodorant from the market on charges of inconspicuous labeling. The product was distributed through orders taken by door-to-door salesmen. The labeling, in small print, was formed in the plastic container and was the same color as the background. It was placed

on the plastic plunger by which the deodorant stick is pushed up out of the container as it is used. This made it progressively less readable as the product was used up.

Inconspicuous labeling was also charged in the seizure of a spray perfume. A window placard explained the symbols used for different scents of "Famous Name Perfumes," but only the symbols were used on the individual cartons, which did not bear the name of the manufacturer, packer, or distributor.

Two shipments of eyeliner pencils, eye shadow, and mascara of various shades were seized because of use of synthetic organic colors that had not been provisionally listed for cosmetic use. One line had been manufactured in Paris; the other lot was of domestic origin. Another eye cosmetic containing a nonpermitted dye was recalled from sales distribution.

Foods seized because they contained unpermitted colors included two shipments of a cake mix containing the delisted FD & C Red No. 1, popcorn oil containing the delisted FD & C Yellow No. 4, imported bottled cherries in cherry liqueur containing an isomer of FD & C Red No. 2 not covered by a regulation or exemption, and imported red plums containing a noncertified coal-tar color.

CERTIFICATION SERVICES

Color Additives.—All color additives used in foods, drugs, and cosmetics (except hair dyes) must be listed for such use pursuant to the Color Additives Law of 1960. Synthetic organic colors used must be from batches certified by FDA as safe for such use. In 1962, 5,798 batches representing over 4,088 tons were certified, and 37 batches representing 9 tons were rejected.

Insulin.—All batches of insulin must be tested and certified by FDA before distribution. Examination of 362 samples resulted in the certification of 294 batches of insulin drugs and 60 batches of material for use in making insulin-containing drugs. One batch of protamine zinc insulin was rejected because it contained excess protamine. The request of approval of one trial mixture of isophane insulin was withdrawn because the composition of the materials was questionable. Four batches of 20-unit insulin were found suitable for use at the labeled strength, but were not of a strength listed as certifiable under the FDC regulations. Two batches of insulin held in cold storage from 5 to 8 years by the Office of Defense Mobilization were found to have retained 88 percent of the labeled potency. These batches are usable in an emergency if no better product is available, but certification ceased to be effective when the expiration date had passed.

Antibiotics.—The predistribution testing and certification of certain antibiotics also were provided for by amendments to the act,

before the Drug Amendments of 1962 included all antibiotics for human use under the certification provisions. Examinations were made of 15,539 batches of penicillin, streptomycin, dihydrostreptomycin, chlortetracyline, tetracycline, chloramphenicol, bacitracin, sensitivity discs, amphotericin, erythromycin, neomycin, novobiocin, nystatin, triacetyloleandomycin, and polymyxin. The last seven antibiotics mentioned were not subject to certification but were submitted for testing to determine their suitability for use in combination with certifiable antibiotics.

Of the samples tested, 183 were unsatisfactory because of failure to meet the following standards: potency and purity (110), moisture (22), pyrogens (18), sterility (13), pH (9), heat stability (4), uniformity (2), resuspension difficulties (2), short volume (1), crystallinity (1), and solubility (1). The rejection rate is deemed significant in view of the fact that the batches rejected had undergone rigorous testing by the manufacturer in anticipation of Government tests before samples were submitted.

Six hundred and four sensitivity discs were certified and 32 were rejected. Other Government agencies submitted 1,066 batches of antibiotic preparations for potency testing before extending their expiration dates, and 1,559 official and investigational samples of drugs, medicated feeds, and food for human use were examined.

Federal Hazardous Substances Labeling Act

The Federal Hazardous Substances Labeling Act requires consumer protection information on labels of hazardous household products such as cleaning agents, paint removers, and polishes. Enforcement of the act began on February 1, 1962. Thirteen products were seized and removed from consumer channels because they were devoid of the labeling required by the act or the regulations. Included were soldering materials (5); turpentine (3); carbon tetrachloride (2); a lacquer; lacquer thinner; and a sanding sealer.

The first seizure made under the new law involved soldering salts, which had been linked to the death of a child. The father, a repairman for electronic equipment, had a workshop in the family kitchen and had transferred soldering salts from the original container to a soda pop bottle. While standing, it had absorbed moisture from the air and had become a clear, sirupy liquid. The child found the innocent looking pop bottle and took a swallow. The corrosive solution burned out the child's esophagus and stomach, and he died despite an emergency operation. The salts as shipped did not bear any warning labeling. The father of the child said that if the product had had such a warning, he would have been more careful with it.

Enforcement of Other Acts

A total of 119,551,434 pounds of tea was examined under the Tea Importation Act, an increase of about 12,000,000 pounds above last year's imports. Rejections amounted to 164,748 pounds for failure to measure up to the standards set by the U.S. Board of Tea Experts. Eight rejections were appealed to the U.S. Board of Tea Appeals, but the decision of the FDA examiner was upheld in all cases.

No actions were taken under the Filled Milk Act. Three permits were issued for importation of milk—two from Canada and one from New Zealand—under the Import Milk Act.

Civil Defense

The civil defense work of FDA, financed by funds appropriated for the Office of Defense Mobilization, centers around radiological, biological, and chemical warfare agents that may contaminate foods and drugs in the event of enemy attack.

The main emphasis has been on training FDA employees; other food and drug officials at Federal, State, and local levels; and industry officials in the recognition and the solving of problems that may arise from enemy use of such agents. Six different courses for these officials were presented in 37 classes attended by 1,530 people. These courses dealt with such matters as the effects of these warfare agents on foods and drugs, monitoring and testing techniques, and methods of decontamination or destruction of contaminated products. The industry course is directed toward problems which must be solved by a particular industry in case of attack.

FDA also conducts research to help deal with the effects of biological warfare agents on foods. Studies were made concerning two such potential agents in staple foods. Although incomplete, they have demonstrated that the relatively fragile *P. tularensis* survived up to 6 months in some food. As expected, *B. anthracis* survived well. Studies of decontamination of six staple food commodities and of the heat stability of *S. aureus enterotoxin* were started.

New Court Interpretations

The 1961 Annual Report discussed a case involving chocolate mints in a package with hollow ends and dividers, charged to be deceptive. At that time the Court of Appeals had remanded the case to the district court with the instruction that deceptive packaging could be justified only by findings that the effectiveness of the package to protect the product outweighs the deceptive quality. The district court again ruled that the candy was not misbranded, and that the usefulness of the package both from the standpoint of protecting the contents

and of economy of manufacture, outweighs its deceptive quality. The Government again appealed to the Court of Appeals for the Third Circuit on the grounds that the decision was contrary to the weight of the evidence. The appellate court upheld the decision of the district court, in an opinion filed in April 1962. This is the fourth contested deceptive packaging case, and the courts have in every instance ruled against the Government. However, the case provides useful guidelines for future cases.

In several seizure cases involving physicians' samples of drugs, the labels of which bore legends such as "professional sample," "Physician sample," and "physician sample not to be sold," district courts have held that such samples in the original containers were not misbranded, even though they were no longer to be used as physicians' samples, but were to be sold to the public on prescription. These decisions are being appealed.

A defendant charged with contempt of an injunction prohibiting claims for treatment for obesity and depression of appetite for a phenylpropanolamine hydrochloride drug preparation defended on the grounds there was no intent to violate the temporary restraining order and preliminary injunction. The court in finding the defendant guilty of contempt held that intent is not an element of the offense in a contempt of injunction under the act.

A judge in the U.S. District Court for Pennsylvania, in a seizure contest involving high mold counts in tomato catsup, reaffirmed a number of earlier decisions that the act does not require a food substance to be unfit or injurious to health in order to be filthy or decomposed within the meaning of the statutory definition.

The Government lost a seizure action involving "Nut Caramels" in which misbranding was charged because the net weight and ingredient statement were printed on the label in a silver color against a noncontrasting background and the only nut ingredient was peanuts which was declared in the allegedly inconspicuous ingredient statement. In its opinion the district court found that the evidence established the net weight and ingredient statements were easily readable by the average person at a distance of 29 inches, and that there was a lack of evidence that the ordinary consumer was misled by the name of the product. The court further remarked that any person allergic to nuts of any kind was put on notice by the word "nut" in the product name which was many times more visible than the word in the ingredient statement.

The author of a book which was seized as labeling along with a stock of vitamins and minerals petitioned to intervene. The Government opposed intervention on the grounds that the action was *in rem* and the author did not own either the books or the product. The district

court ruled in favor of the author holding that FDA's press release gave the action an *in personam* nature.

The Court of Appeals for the Seventh Circuit affirmed a lower court's issue of an injunction prohibiting the interstate disposition of a costly diagnostic and therapeutic device which was of no value. In upholding the allegation of misbranding of the device, the appellate court held that it was dangerous even in the hands of a practitioner because of its worthlessness for any diagnostic or therapeutic use. The case was appealed to the U.S. Supreme Court which denied certiorari.

A district court jury in Texas returned a verdict in favor of the Government in an action intended to restrain an exterminating company from placing a highly toxic rodenticide (1080) near stored food products of interstate origin in a food warehouse in such a way as to make contamination possible. The Government alleged that such careless placement of the rodenticide was an act which resulted in the food becoming adulterated because it may be rendered injurious to health.

Changes in the Law and Regulations

Enactment of the Drug Amendments of 1962 (Public Law 87–781) came after the close of the fiscal year, on October 10, 1962, but various amendments to strengthen the drug law were under active consideration throughout the Second Session of the Eighty-Seventh Congress.

These drug amendments, designed to assure a greater degree of safety, effectiveness, and reliability in prescription drugs, are a milestone in the protection of public health.

Drug manufacturers will be required to conduct their establishments in conformity with good manufacturing practices, using quality controls that will rule out inadequate facilities and poorly trained operators, to assure that drugs have the identity and strength and meet the quality and purity characteristics they are represented or purport to possess.

Firms wishing to market new drugs will be required to establish not only the safety of the drugs but also must produce substantial evidence of their effectiveness in accomplishing the purposes claimed in their labeling. Government approval must be affirmative rather than by failure to disapprove, and 180 days, in contrast to 60 days, are allowed for initial consideration of the application.

Previously cleared new drugs may be ordered off the market immediately if new information indicates an imminent danger to health. And, any prior approval may be withdrawn, after a hearing accorded to the manufacturer, in any case where tests or experience shows the drug unsafe, or new evidence shows that the drug has not been shown to be safe, or will not be effective for its intended uses.

New requirements confer statutory authority on the Secretary to regulate the testing of experimental drugs on humans.

All antibiotics for use by man will be subjected to the batch-by-batch testing previously required for only five antibiotics and their derivatives.

The new law grants FDA more effective factory inspection authority with respect to firms manufacturing prescription drugs and consulting laboratories, and requires biennial inspections of drug factories. It also requires every drug manufacturer to register with FDA once a year.

Other amendments will lead to simpler nonproprietary names for drugs, to appear in type at least half as large as the brand name when it appears on the label and in labeling and advertising. Prescription drug advertisements must also contain a brief summary of information as to adverse side effects of the drug and warnings of when it should not be administered as well as the formula and a statement about conditions for which it is effective.

The new law took effect on approval of the President on October 10, 1962, except for certain requirements to go into effect on May 1, 1963, and transitional provisions for drugs on the market at the time the amendments were enacted.

REGULATIONS

Drugs.—A revision of the labeling regulations effective June 3, 1962, requires packages of prescription drugs and devices to contain adequate information for their professional use, including all relevant information concerning any adverse effects. This "package insert" requirement, following the recent regulation requiring "full disclosure" information in prescription product promotional literature, is part of a program to require manufacturers to make readily available to physicians complete and accurate information on the dangers, as well as the usefulness, of prescription products. The regulation applies to all prescription drugs and devices excepting those for which the uses are commonly known. Lists of drugs entitled to this exemption were published in the Federal Registers of December 29, 1961, and June 8, 1962.

A statement of policy was issued requiring preparations of phenindione, a drug used as an anticoagulant, to bear warning statements on the label and in other labeling to disclose that certain blood disorders, liver damage, and sensitivity reactions have been associated with its use. Drug manufacturers have revised the labeling of these drugs to include the recommended warnings.

A proposal was published to convert anthelmintic drugs containing piperazine from prescription to over-the-counter sale. Comments on

the proposal showed a difference of opinion among medical experts as to the ability of the layman safely to diagnose and treat pinworms and roundworms without medical supervision. In view of these comments, a final order was published on April 18, 1962, denying the petition.

A proposed statement of policy was published on preparations for the treatment of pernicious anemia. Comment was invited on the proposal that would require oral preparations intended for use in pernicious anemia, particularly intrinsic factor with vitamin B_{12}, to be labeled with the caution that the article may not be a reliable substitute for treatment by the injection of vitamin B_{12} and that periodic examinations and laboratory studies of pernicious anemia patients are essential. The proposal would also limit intrinsic factor preparations to prescription sale as drugs. A final order has not yet issued.

A statement of policy was issued explaining the conditions under which a statement of usual dosage will not be required on prescription drug labels, i.e., when the label does not have sufficient space for an informative dosage statement but the information is contained in a package insert.

The policy statement limiting preparations of potassium permanganate to prescription sale was amended to allow the sale without prescription of certain preparations solely for veterinary use.

During the year, the antibiotic regulations were amended 334 times and 14 new monographs added.

The thalidomide incident focused public attention on the need for strengthened controls over new drugs during investigational trials. On August 10, 1962, new regulations were proposed to keep FDA fully informed of the initiation and progress of clinical studies. Adequate studies on animals and other appropriate preclinical studies to assure safety to humans administered the drug in clinical trials would be required. The manufacturer would also be required to furnish FDA with the names and qualifications of the investigators and to make the reports of such investigators available to FDA on request.

Until October 10, 1962, the first information about new-drug safety studies might have come to FDA with the new-drug application after the studies had been completed. In the case of thalidomide, more than 1,200 investigators had been furnished 2.5 million tablets of the drug for use while safety data were being evaluated by FDA. Affected persons were permitted 60 days for comment on the proposed regulations.

Food Additives.—The past fiscal year saw an increased activity in regulations writing. This was true in all areas of responsibility—human food, animal feed, and packaging materials. Whereas regulations applying to only 60 human food additives were issued in the 1961 fiscal year, more than three times as many additives were made

subjects of regulations in 1962. New regulations involving human foods totaled 33, and 48 amendments were made to the existing regulations. Twelve new animal feed regulations and 22 new amendments were issued in 1962, involving 38 new feed additives.

It was in the area of indirect additives that new regulations provided a significantly large number. Thirty-three new regulations and 19 amendments involved 1,606 additives. Previous to the 1962 fiscal year, 457 indirect additives were covered. The petitions must not only present adequate proof of safety, but also must furnish acceptable analytical procedures for enforcement use.

Legislation was enacted which provided for further extensions of the effective date of the amendment to June 30, 1964. In fiscal 1962, 1,253 indirect additives and 797 direct additives were made subjects of extension orders. Flavors accounted for the majority of the extended additives. One important aspect of current extension orders is the responsibility of the petitioners to furnish progress reports of their investigations.

The subject matter of new regulations involved such diverse products as boiler water additives, modified hop extract, paraformaldehyde to control microbial or fungal growth in maple tree tapholes, fatty acids, sodium lauryl sulfate as an emulsifier, animal glue, surface lubricants on metallic articles, and silicon dioxide in certain animal feeds and feed components.

Color Additives.—The Color Additive Amendments of July 12, 1960, provide for listing of safe color additives. They also provide that for 2½ years after enactment established color additives may be listed provisionally, if consistent with the public health, before a permanent listing is issued. A number of color additives were provisionally listed in 1960. Additions to the provisional list were made in August 1961 and June 1962. D & C Orange Nos. 3 and 4 were added to the provisionally listed lipstick colors, and D & C Red No. 12 was added to the colors provisionally listed for drug use. A number of vegetable colors for foods were also added to the provisional list.

Four petitions for permanent listing were received in 1962, of which three—D & C Green No. 6 to color polyethylene terephthalate sutures, iron oxides to color drugs, and annato extracts to color foods and drugs—were filed, but regulations have not yet issued.

The Food and Drug Administration continued its study of the toxicity of the FD&C colors now being certified. Various studies by industry groups were planned or underway for a number of the colors formerly listed under the coal-tar color provisions of the law and for some inorganic pigments and vegetable colors.

Pesticides.—One hundred fifty-nine pesticide tolerances or exemptions were established for raw agricultural commodities involving 27 pesticide chemicals; 5 of these had no previous tolerances.

Eighty-five inert ingredients used in pesticide formulations (from a list of several hundred) were exempted from the requirement of a tolerance when used in accordance with good agricultural practice. Forty-three temporary tolerances were established for raw agricultural commodities, involving 7 different pesticide chemicals, to permit marketing of crops experimentally treated with pesticides in accordance with permits granted by the U.S. Department of Agriculture.

On June 30, 1962, there were 2,450 tolerances or exemptions and 8 declarations of general recognition of safety on a total of 127 pesticide chemicals in addition to exemptions for the 85 inert ingredients of pesticide formulations used in the production of food crops. Six petitions for pesticide tolerances were denied filing because of inadequacies.

Food Standards.—A number of food standards actions were concerned with identity standards for various cheeses. A tentative order embodying findings of fact based on the record of the hearing on mozzarella, scamorza, and related cheeses was published.

The standards for swiss cheese and the American-type cheeses—cheddar, colby, washed curd, and granular—were amended to provide for the making of these cheeses from milk treated with limited amounts of hydrogen peroxide and catalase. Amendments were made of the standards of swiss cheese and the Italian-type cheeses—provolone, caciocavallo siciliano, romano, and asiago—to permit them to be made from milk bleached with benzoyl peroxide and to prescribe a label statement showing the cheese to have been made from bleached milk. The standards for blue cheese and gorgonzola cheese, which since 1950 have permitted bleaching with benzoyl peroxide, were amended to require label declaration.

A standard for muenster cheese for manufacturing was promulgated, and the standards for 10 processed cheese products were amended to permit muenster cheese for manufacturing to be used in the processed products. The standard for cream cheese was amended to add guar gum to the optional vegetable gums permitted, and proposed amendments of the standards for cottage cheese and creamed cottage cheese were published.

A standard of identity for peanut butter was published, but objections were filed requiring the order to be stayed until a public hearing is held.

The bread standards were amended to provide for the use of l-cysteine and for hydroxylated lecithin to facilitate processing in the bakery. The standard applicable to enriched self-rising cornmeal was amended to increase the level permitted for calcium. New standards were established for enriched vegetable macaroni and noodle products.

Also, a new standard was set for artificially sweetened canned pineapple. The standard for evaporated milk was amended to permit the adding of small amounts of carrageenan or salts of carrageenan to improve its stability. The ice cream standard was amended to change from 1.5 to 2.5 the factor used in allowing for sugar in chocolate-flavored ice cream.

A manufacturer who proposed to make a powdered fish product by grinding up whole fish, including heads, tails, fins, entrails, and intestinal contents, was told informally by FDA that the law prohibits such a product because of the incorporation of filth in the food. The manufacturer sent in a proposed standard for whole fish flour and it was published for comment. Following receipt of some 2,000 letters concurring in FDA's view that consumers generally would regard the whole fish product as filthy, an order was issued for fish flour made from cleaned fish only. The proponents of whole fish flour demanded a public hearing and a date was set for it. The proponents later requested a postponement to get more evidence that whole fish flour is, in fact, safe for use.

Hazardous Substances.—The Federal Hazardous Substances Labeling Act was enacted in July 1960 and all its provisions became fully effective on February 1, 1962.

Because the affected industries could not meet all the requirements of the final regulations pertaining to the placement and conspicuousness of the warning statements by that date, the effective date for these requirements was extended to August 1, 1962, and further extended to February 1, 1963.

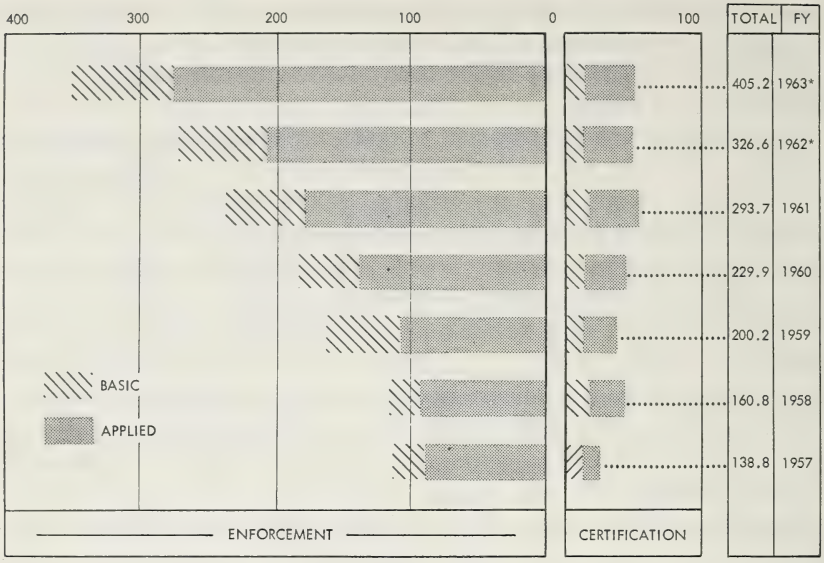
Administration of this law provides for exemptions from the labeling required by it. The Commissioner has received over 100 requests to exempt certain products from such requirements. Forty-six requests have been granted, and the exemptions were published in the Federal Register. Twenty-six of the requests have been denied because they were not in the interest of the public safety.

Scientific Investigations

A vigorous, well-organized program of scientific investigation is indispensable to FDA's enforcement activities. The domain of the regulated industries is scientifically complex, and it is expanding at an accelerated pace. In the course of this expansion, scientific problems involved in law enforcement have become increasingly complicated. The function of research in FDA is to provide the scientific information and techniques which are needed for the intelligent, effective administration of the law.

Scientific investigations are performed in both the field and headquarters laboratories. Responsibility for conceiving, designing, de-

Chart 5.—TIME (IN MAN-YEARS) SPENT ON FDA RESEARCH FOR ENFORCEMENT AND CERTIFICATION, FISCAL YEARS 1957–63



*Based on estimated reports

veloping, and executing research studies is assigned primarily to the seven scientific divisions comprising the Bureau of Biological and Physical Sciences. These divisions are furnished with professional staffs and scientific instruments necessary for conducting research in chemistry, radiochemistry, biochemistry, bacteriology, analytical microscopy, pharmacology, and related disciplines.

One of the most significant achievements of modern technology has been the discovery of powerful new chemicals which are valuable as drugs, food additives, or pesticides. However, misuse of these biologically potent substances may contaminate food and drug products, and thus endanger the health of the public. In devising sensitive, specific analytical methods to determine such contaminants in low concentrations, FDA research protects the consumer in two ways. It affords a means to detect contaminated products by reliable tests, so that they may be removed from commerce. It also provides the manufacturer with a control procedure whereby he can check the integrity of his product, rejecting those which he finds contaminated.

During the past year, a drug product for the treatment of tuberculosis was shown to be adulterated with traces of diethylstilbestrol. The quantities of this potent estrogen in the product were about one-millionth of an ounce per tablet. But this minute concentration was sufficient to cause symptoms of sexual precocity in the infant girls treated with the antitubercular drug.

Inspection of the plant where the drug originated revealed that the manufacturer neglected to clean his machinery after processing high potency products. By means of specially designed ultraviolet irradiation tests, FDA examined a series of products fabricated immediately after diethylstilbestrol preparations. Many of them were contaminated with significant proportions of diethylstilbestrol. A similar set of drugs following penicillin products in the manufacturing schedule were found to be adulterated with this antibiotic. Other products from the same manufacturing plant and the products of other laboratories are being examined systematically by appropriate analytical methods, devised as needed, for evidence of such cross-contamination by dangerous drug substances.

Antibiotics, in addition to their well-known clinical uses, are widely used in drugs for the treatment of mastitis, and in animal feeds. After the infusion of mastitis preparations into the udder, the milk of the diseased cows is discarded until the fluid is free of antibiotics. Even in low concentrations, antibiotics may be toxic to sensitive individuals. A study of several mastitis preparations administered to cows disclosed that three of the drugs caused persistence of penicillin in the milk beyond the prescribed withholding period. Certification of these products has been suspended. Similar investigations are in progress to determine whether the use of antibiotics in chicken feeds leads to residues of the drugs in eggs.

New instrumental techniques have proved invaluable for the identification, detection, and determination of pesticides and food additive residues. A special extraction cell devised in FDA laboratories measures the potential concentrations of food additives substances extractable from packaging materials. Spectrophotofluorometric and phosphorimetric techniques are being developed for the determination of polynuclear hydrocarbons in petroleum products. The newly constructed "electron capture" detector for the gas chromatograph is sensitive to a nanogram (one-thousandth of a millionth of a gram) of the common chlorinated pesticides. It can be adapted also for the measurement of organo-phosphate pesticides and other trace contaminants in food. The utility of microcoulometric gas chromatography for the analysis of chlorinated pesticides has been established.

Gas chromatography seems to have unlimited potentialities for the solution of analytical problems in the field of food adulteration. The adulteration of butter with small quantities of vegetable oil or the substitution of cheaper oils for peanut oil can be demonstrated clearly by means of gas chromatography. Adulteration of cottonseed oil with soybean oil also can be detected by this means. It may even be possible to differentiate between refined olive oil and the material extracted by solvents from olive pits and pomace.

Other researches employing gas chromatography have been initiated for the study of food constituents. Volatile amines and fatty acids which are characteristic components of decomposed foods can be separated and identified in the gas chromatograph. The chick edema factors may be isolated and measured by a combination of chromatographic techniques which are being incorporated into a physiochemical method for detecting these toxic substances. Related studies in industry laboratories and FDA indicate that the chick edema factors which caused large losses of birds in the broiler industry are chlorinated aromatic substances. Their origin and their pathway into chicken feeds are still under investigation.

Column chromatographic procedures have been employed for the determination of synthetic organic colors in foods. Even bakery goods, which form an intractable combination with many dyes, can be analyzed by the newly devised procedure. The food is ground to a paste with water, and mixed with a porous bulking material. The entire mass is then packed into a suitable tube. Organic solvents containing selective resins are percolated through the mass to strip the color from the food particles, and the fluid emerging from the bottom of the tube contains the dyes. By the use of appropriate resins and solvents many of the stable synthetic dyes can be recovered almost quantitatively from foods.

The tendency of organic dyes to decompose in a variety of physical and biological systems has been investigated, and the toxicity of some of the products has been measured by long-term feeding experiments. Studies on the metabolites of FD&C Red No. 1 and related azo dyes indicate that bases oxidized to aminobenzoic acid derivatives may be toxic dye constituents.

Similar long-term pharmacological investigations have been conducted for various flavoring substances and for pesticides. There is a need for analytical procedures which yield reliable toxicity data more rapidly than the classical methods of pharmacology. Two promising approaches to such procedures are the injection of chemicals into chick embryos and the tissue culture technique.

In the chick embryo procedure, chemicals are injected directly into the yolk sac of fertile eggs, and the treated eggs are incubated together with untreated eggs as controls. Toxicity is then measured by: (1) interference with embryonic development; (2) percentage of hatch; and (3) secondary effects after hatching, such as weight retardation or abnormal tissue development. In the tissue culture technique, toxicity is indicated by the deleterious influence of the chemical when introduced into the environment of cell cultures derived from liver, kidney, or other tissues. Certain arsenicals and alcohols have proved as toxic when tested by these rapid methods as in the long-term studies.

A luminescent micro-organism has been employed as a biological indicator to detect minute quantities of radioactivity. Standardized colonies of the luminescent organism are cultured, and their production of light energy is measured. Ionizing radiation emitted by radioactive isotopes damages the organism, resulting in diminished light output. Accurate systems have been devised to measure the light emitted. Correlation of quenching effects with known concentrations of radioactive isotopes would indicate that this microbiological method is reliable.

Research on the toxin responsible for staphylococcus food poisoning has progressed. Media for the production of the enterotoxin as well as analytical methods have been improved to such an extent that pure toxic staphylococcus cultures can be detected without preliminary concentration. Enterotoxin A (the new designation of the food poisoning type) is being purified in order that extremely sensitive serological techniques may be applied to the detection of trace amounts of enterotoxin in foods. These findings will be employed in studying the staphylococcal types isolated from over 3,000 samples of raw milk collected throughout the country.

A new investigation on toxic molds has been undertaken, following reports this year from England that peanuts infested with *Aspergillus flavus* had proved fatal to turkeys and ducklings. Toxic strains of this mold have been obtained, and have been cultured to produce material for chemical and biological studies. Peanut products and grains will be examined systematically afterwards for the occurrence of toxic *Aspergillus flavus* contamination.

Research continues on the adverse nutritional effects of overheated fats. Among the side products obtained when fats are continually heated is a group of unnatural fatty acids consisting of branched and ring compounds, dimers, and polymers in contrast to the normal monomer linear chain compounds. On feeding these substances to test animals, it has been clearly demonstrated that fatty materials containing branched and ring compounds or dimers are low in nutritive values and lead to retarded growth. In high concentrations these abnormal fatty acids are markedly toxic to rats.

A new investigation on nutritionally important trace elements is studying the transfer of minerals across cell membranes and the role of enzymes in this process. Since the concentrations of these elements in the body tissues are extremely low, sensitive methods of analysis are required. Neutron activation techniques have been considered for this purpose. In this technique the element sought is rendered radioactive by neutron bombardment, and the resulting isotope is measured by means of radioactivity counters.

The availability to the body of vitamins or other nutritional ingredients administered as drugs is a recurrent problem. It has been stated that some tablets which contain the proper quantities of the labeled active ingredients may not release the substances to the organism because the tablet does not disintegrate, or for other reasons. Studies have shown that several vitamin tablets which did not appear to disintegrate, nevertheless released the vitamin to test animals. Similar observations have been reported for other drug preparations. It is apparent that the accepted tests for tablet disintegration will require modification.

Application of new techniques to the analysis of pharmaceutical preparations has revealed that some compounds previously thought to be pure may be materially contaminated with closely related substances. The presence of foreign steroids in adrenocorticoids and of ergotaminine in ergotamine are two examples of significant impurities detected by paper chromatography. The initial phase of an investigation to study the purity of pharmaceuticals concentrated on compounds whose synthesis favors the formation of isomers.

A project to record the infrared, ultraviolet, and visible spectra of Reference Standard drugs has been completed. These spectra will be published soon as an aid in the regulatory identification of drugs. Spectra of other drug substances of significance to enforcement work also will be measured.

In addition to these and many other scientific investigations in the Bureau of Biological and Physical Sciences, research was conducted to devise analytical methods utilizing new instrumental techniques and improved biological procedures.

Hospitals reporting to the Bureau of Medicine on adverse drug reactions increased from 35 to 44 during the year. They submitted 2,745 reports of which more than 700 were considered significant enough to be reported in considerable detail. The value of these case reports is increasingly evident. Some have led to labeling changes to prevent recurrences of adverse reactions.

Enforcement Statistics

The year's activities included 43,913 inspections of factories, warehouses, and pesticide practices; 4,150 of public eating places to check on the notification of the serving of oleomargarine; 117 inspections involving illegal sales of prescription drugs; and 99 of spieler and lecture activities. Of 62,712 domestic samples collected, 43,047 were foods, 16,954 drugs and devices, 480 cosmetics, 1,356 color additives, 835 hazardous household substances, and 40 miscellaneous.

In the 274 criminal actions terminated (or terminated for some defendants) in the Federal courts during 1962, fines assessed totaled $280,502. One case was dismissed because the firm had gone out of business. Jail sentences ranging from 1 day to 6 years were imposed in 47 cases involving 55 defendants. Twenty-four individuals were required to serve imposed sentences, averaging 9 months; sentences were suspended for 31 on condition that violative practices be discontinued. The highest combined fine of the year was $20,000 imposed on a distributor of "health foods" and two officers of the firm. Records of actions terminated in the courts were published in 903 notices of judgment.

Table 2.—*Number of samples on which criminal prosecutions and seizures were based and number of court actions instituted during the fiscal year 1962*

Item	Total		Criminal prosecutions instituted		Seizures accomplished		Injunctions requested
	Violative samples	Actions	Violative samples[1]	Actions	Violative samples	Actions	
Total	4,063	1,612	1,661	314	2,402	1,273	25
Foods	1,794	997	492	117	1,302	867	13
Drugs and devices	2,211	583	1,169	197	1,042	374	12
Cosmetics (colors)	38	19			38	19	
Hazardous household substances	20	13			20	13	

[1] The number of samples on which the actions are based always exceeds the number of actions; in seizures a variety of articles may be contained in a single shipment, while in criminal actions each sample usually represents a single shipment which forms one count of action.

Table 3.—*Import samples collected, examinations made, and lots detained during the fiscal year 1962*

Item	Samples collected	Examinations made	Lots detained
Total	14,541	21,810	6,588
Foods	11,266	20,462	3,286
Drugs and devices	3,050	1,054	3,194
Cosmetics, colors, miscellaneous	225	294	108

Conclusion

This report records what the Food and Drug Administration has been doing to protect consumers in an ever-changing environment over which they have little control. The highlights, listed at the beginning of the report, show progress in both health and economic protection. But the coverage is still inadequate to appraise and act on all of the problems existing in food, drug, device, and cosmetic areas.

The consumer is receiving increased recognition and will receive

added protection in the year to come through new tools to meet the ever-growing responsibilities of the Food and Drug Administration—more staff, better facilities, and new laws aimed at making drugs safer and more effective.

Studies are continuously being made to assure the most efficient use of these tools. Recommendations of the Second Citizens Advisory Committee to this end have been under consideration since they were received late in October 1962.

Office of Vocational Rehabilitation

More than 100,000 disabled persons were rehabilitated successfully to productive employment in 1962 through the public program of vocational rehabilitation. The total—102,377—was the largest ever reached in 1 year in the 42-year-old State and Federal partnership in rehabilitation and was 11 percent greater than the previous year and about 85 percent more than in 1954, the year in which new Federal legislation gave the public program renewed incentives and a sound basis for expansion.

The public program of rehabilitation is built around the vocational rehabilitation agencies in each of the States, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands. In 36 of these jurisdictions there are, in addition to general rehabilitation agencies, separate agencies that provide rehabilitation services for blind persons.

All the State agencies are joined in a partnership with the Federal Government through the Office of Vocational Rehabilitation, which provides national leadership for the program and administers several systems of grants for various rehabilitation purposes.

The 90 State agencies—which provide the actual rehabilitation services—reported to the Office of Vocational Rehabilitation at the end of the 1962 fiscal period [1] a total of 102,377 disabled persons rehabilitated during the year.

It was a significant figure in several respects.

Halfway to a Long-Time Goal

The year's work had great importance to those who, in the nature of their interests and responsibilities in the public program, have especial concern for its progress on a nationwide basis.

For, in passing the 100,000 mark, the public rehabilitation effort has

[1] Unless otherwise indicated, all subsequent references to 1962 will be to the fiscal year, that is, to the period between July 1, 1961, and June 30, 1962.

climbed halfway to a national goal that was set with the enactment of the 1954 legislation.

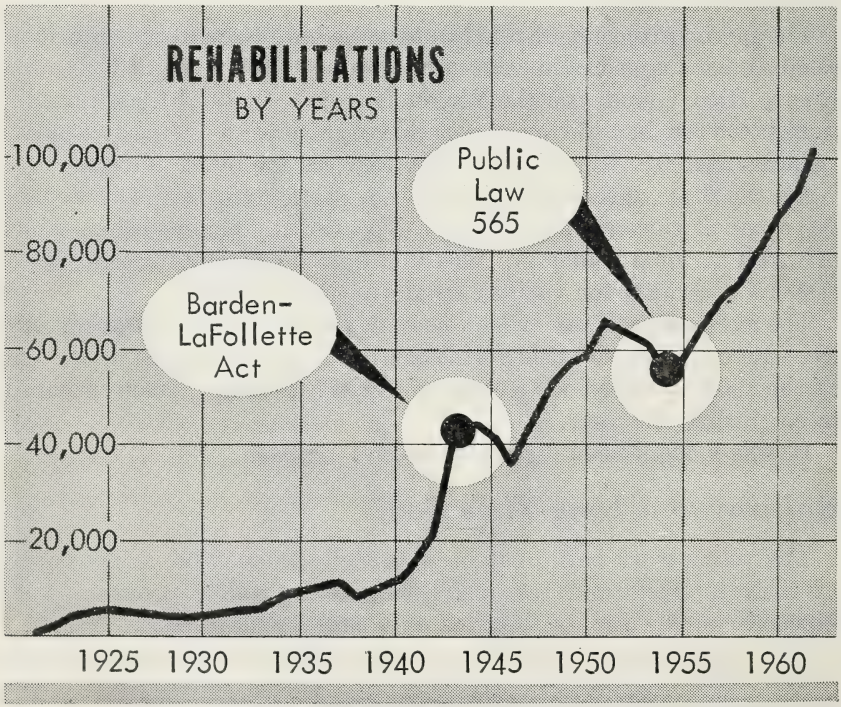
The year's work also brought recognition from the President, who, for the first time, announced the results and assured the country that "we are making a determined national effort" to reach the 200,000 mark in numbers of people rehabilitated annually.

As well as can be estimated, there are more than 2.5 million disabled persons in the United States who could benefit from services available through their State vocational rehabilitation agencies. Moreover, an estimated 207,000 or more persons come to need rehabilitation services each year from disabilities arising out of disease, injuries, or congenital conditions.

The Steady Climb Since 1954

The climb of the public program toward its 1962 achievement is shown in chart 1. The first ascent began with the entrance of the United States into World War II. In 1943, manpower shortages dic-

CHART 1.—REHABILITATIONS BY YEARS



tated a necessity for bringing more disabled persons into the war effort, and the Barden-LaFollette Act provided a liberalization of services for the disabled, gave the Federal Government greater financial participation in State programs, made specific reference to vocational rehabilitation of the blind, and, for the first time, made persons with mental handicaps eligible for rehabilitation services for which the Federal Government paid part of the cost.

After a swift climb during the war years the inevitable readjustments of the postwar period brought a short decline in the totals of rehabilitated people, and a reassessment of the program was undertaken to smooth the transition from the emergency manpower requirements to the longer-range objectives of peacetime. But a new philosophy of rehabilitation was gaining ground, and there was widespread feeling that the State-Federal partnership needed a new legal base to support some new concepts.

In 1954, enactment of Public Law 565 gave the program a fresh start on a basis suited more to the needs that were outlined to the Congress in lengthy hearings. A new system of Federal grants to States was inaugurated in support of their basic rehabilitation activities. Authorization was given for Federal support of research and demonstration projects in rehabilitation, as well as for support of projects in educational institutions throughout the country that could offer instruction in several disciplines required for a new concept of the public program.

The framework that was built under the new law had several direct consequences. Substantial increases were successively recorded in the number of persons rehabilitated into successful employment; there was elevation in the quality of services; and the public program was greatly broadened in scope and direction. All these effects were highly apparent in 1962.

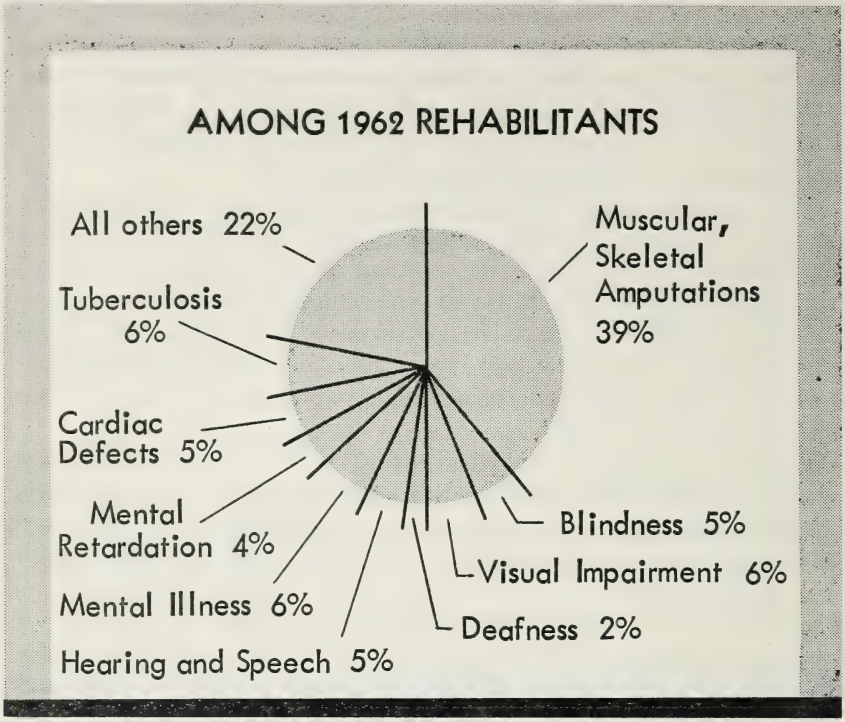
For several years there has been a fairly consistent pattern in many of the statistics of the program.

The principal causes of disability among those who were rehabilitated in 1962, for instance, were orthopedic troubles—amputations, limb impairments, muscular and skeletal difficulties—accounting for 39 percent of the total. This figure has hovered around 40 percent for several years, and before the past few years generally was well above 50 percent.

As can be seen on chart 2, the disabilities of blindness and impaired vision were 11 percent of the 1962 rehabilitants; deafness, impaired hearing, and speech difficulties ran 7 percent; mental troubles, 10 percent, and others as shown.

There were also some small changes in the numbers who entered several broad categories of employment after their services were com-

CHART 2.—PRINCIPAL CAUSES OF DISABILITY AMONG 1962 REHABILITANTS



pleted. As can be seen from chart 3, those who became skilled and semiskilled workers were 26 percent of the total; unskilled workers were 6 percent; clerical and sales people, 16 percent. All these were down slightly from the previous year. Those who entered the service trades, or became family workers, or professional or managerial workers were up slightly. Agricultural workers remained at the same level.

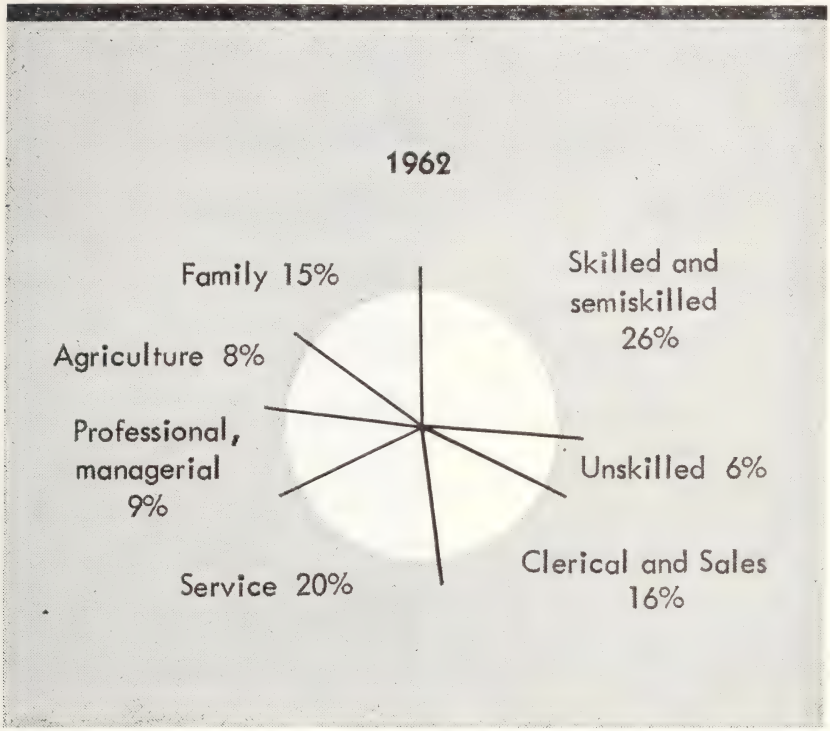
Too, the economic value of the program to the Nation increased in proportion to the high level of activity that set the new record in rehabilitated persons in 1962.

For instance, some 74,000 of those rehabilitated in 1962 were unemployed when they began to receive rehabilitation services. Those who had been working at the time they were accepted for services were earning at a rate estimated to be about $44 million a year, and generally they were in unsuitable or part-time work.

The entire group is estimated to earn, in its first full year of employment after rehabilitation, at the rate of $211 million, or 5 times the group's income rate when their services began.

Another measurement of the economic value of the public program is in the number of persons who were removed from public assistance rolls through their rehabilitation into employment.

CHART 3.—MAJOR OCCUPATIONS OF REHABILITATED PERSONS IN 1962



About 18,000 of those who were rehabilitated in 1962 were receiving public support at some time during the course of their service. Their support was at an estimated rate of $18 million a year. The conversion of these persons from tax consumers to productive citizens cost about $18 million in a one-time outlay, thus saving many millions of dollars in Federal and State assistance funds.

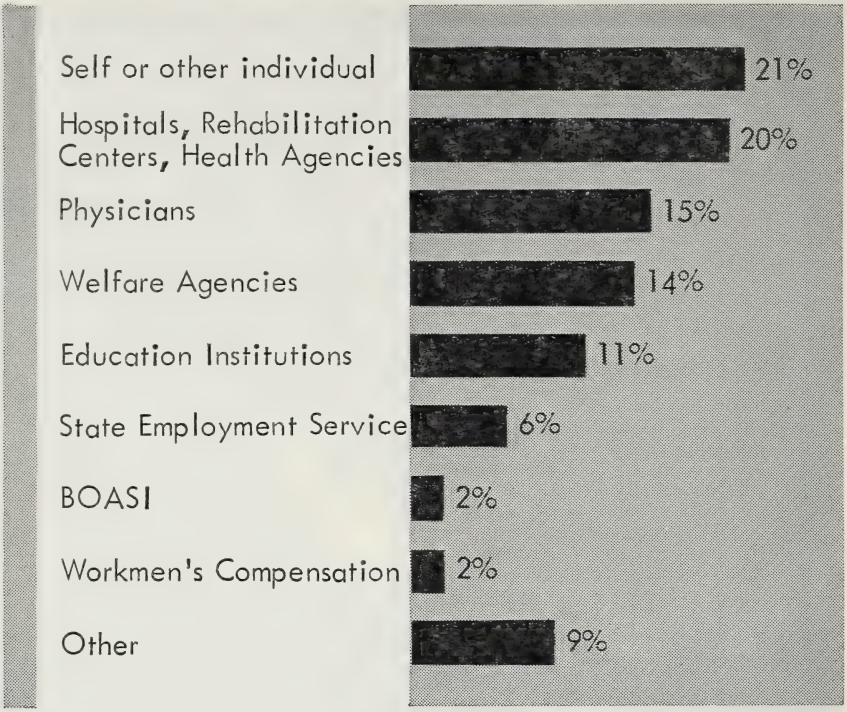
A third way of looking at the national aspects of vocational rehabilitation is in the payments that persons who were rehabilitated into employment in 1962 are estimated to make to the Federal Government in income taxes during the remainder of their working lives.

For every Federal dollar that was expended for their rehabilitation these persons will pay an estimated minimum of $7—and perhaps more—in Federal income taxes, in addition to taxes they pay to State and local jurisdictions.

Seeking Out the Disabled

One of the more beneficial factors in the 1954 legislation was the mandate it gave to those working in and for the program to dis-

CHART 4.—SOURCES OF REFERRALS OF 1962 REHABILITANTS



seminate information about the availability of rehabilitation services and to encourage and persuade disabled persons to make use of them.

As the program has become more widely known over the country in the past half dozen years, the sources of referrals of disabled persons to State rehabilitation agencies have become wider and more varied.

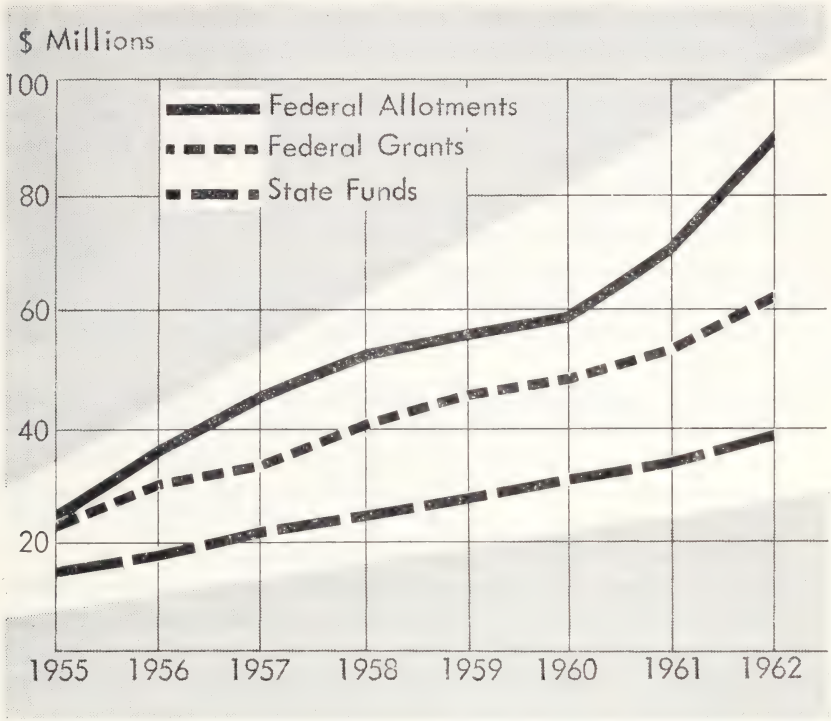
Self-referrals and those coming from families and friends are the most numerous. Not far behind is the number coming from hospitals, rehabilitation centers, and health agencies, followed by the considerable volume from physicians and welfare agencies. Other sources are shown in chart 4.

The Growing Funds for State Programs

The fiscal foundation under the State–Federal partnership in rehabilitation is in several parts. The largest section is that of Federal grants to the States in support of their basic programs of services to disabled people.

The mechanics of the fiscal arrangements include a statutory allotment formula which takes into account a State's population, per capita income, and other factors. The allotments are matched by the States at rates related to their per capita income. The amount of its

CHART 5.—FUNDS FOR STATE VOCATIONAL REHABILITATION PROGRAMS



allotment which a State receives is conditioned upon the amount of matching funds it makes available. Nationally, this proportion works out to about three Federal dollars for every two State dollars.

The amounts made available for the Federal allotments have grown substantially, as shown in chart 5. In the past 2 years the climb has been especially rapid, with a top of $90 million in 1962.

The chart reveals, too, that the total of Federal funds actually granted to the States from their allotments has also risen but not nearly as sharply as it could have, had the States made more of their own funds available. The actual total of Federal grants made to States in 1962 for basic support of their program was $62.95 million, matched by a total of about $39.5 million in State money.

Nevertheless, some States have excellent records in obtaining their full Federal allotments. In 1962, Arkansas, Delaware, Georgia, New York, Pennsylvania, Rhode Island, and West Virginia, as well as the District of Columbia and Guam, obtained 100 percent of their allotments. Kentucky, Massachusetts, and Nevada were in the 90-to-100 percent range. Although the rest obtained smaller amounts there have been impressive increases in almost all the States.

A New Look at Rehabilitation

An entirely new perspective on vocational rehabilitation and the uses of the public program began with the 1954 legislation. The basic premise was the same—to prepare people for work and get them into suitable jobs. But those in the State and Federal Governments who shared responsibility for broad direction of the program had a new vista of the future.

The sciences were offering an immense array of tools for dealing with disease, injuries, congenital defects, and mental disorders. There was emerging a new image of the disabled person. His projection as one to receive whatever benefits could accrue from standardized treatment of his condition and training for an unrealistic employment goal was fading.

In its place was the image of a disabled person, through accurate diagnosis of his disability and appropriate treatment for better physical and mental functioning, becoming able to undergo vocational training designed to complete his stature as a whole human being, with personality focused on a new kind of life, able to meet his responsibilities as an independent, productive citizen.

There was space in the new rehabilitation structure for development of areas of service to give expression to this concept and to the hard realization that rehabilitation is a fixed part of the Nation's health program, requiring its own set of principles—expandable, highly adaptable to individual cases, and widely available.

With this kind of thought, rehabilitation was being prepared to become a science in itself, requiring its own specialized techniques and processes and broader areas of services that were almost unthought-of before the 1954 legislation made them possible.

Research—Window on Progress

The new image evoked more widely and more intensively psychologist and psychiatrist, social worker, vocational specialist, and practitioners of physical and occupational therapies to treat and condition and equip the disabled person to meet the obligations of full citizenship.

Those who framed and enacted the 1954 legislation recognized the coming responsibilities of a revitalized program and provided a way to meet many of them in a system of grants for research and demonstration so that rehabilitation would keep pace with the times.

The Mechanics of Research

Almost 600 research or demonstration projects have been completed, are in being, or are approved for operation since the 1954 legislation

provided the authority and means. Some 200 have been finished. The research and demonstration programs represent a Federal investment of some $36 million through 1962. The sharp advance in Federal funds is shown in chart 6.

Projects are submitted by colleges and universities, medical schools, hospitals, rehabilitation centers, a broad range of private groups, and State rehabilitation agencies. They are considered by a statutory National Advisory Council on Vocational Rehabilitation, which makes recommendations to the Director of the Office of Vocational Rehabilitation.

Amounts of grants are in the discretion of the Council and Director, and the basic criteria of a project's value lie in its promise of solution of common problems and improvement of services.

As in all research of this nature, there are two parts to the total endeavor. One is the development of knowledge; the other, its validation and translation into action.

The Program Begins To Move

In 1958 the Office of Vocational Rehabilitation launched a series of selected demonstrations to put to use new knowledge gained from research into some of the more severe forms of disability. Priority of support was given for projects in which the knowledge and practices could be applied on a broad geographical basis.

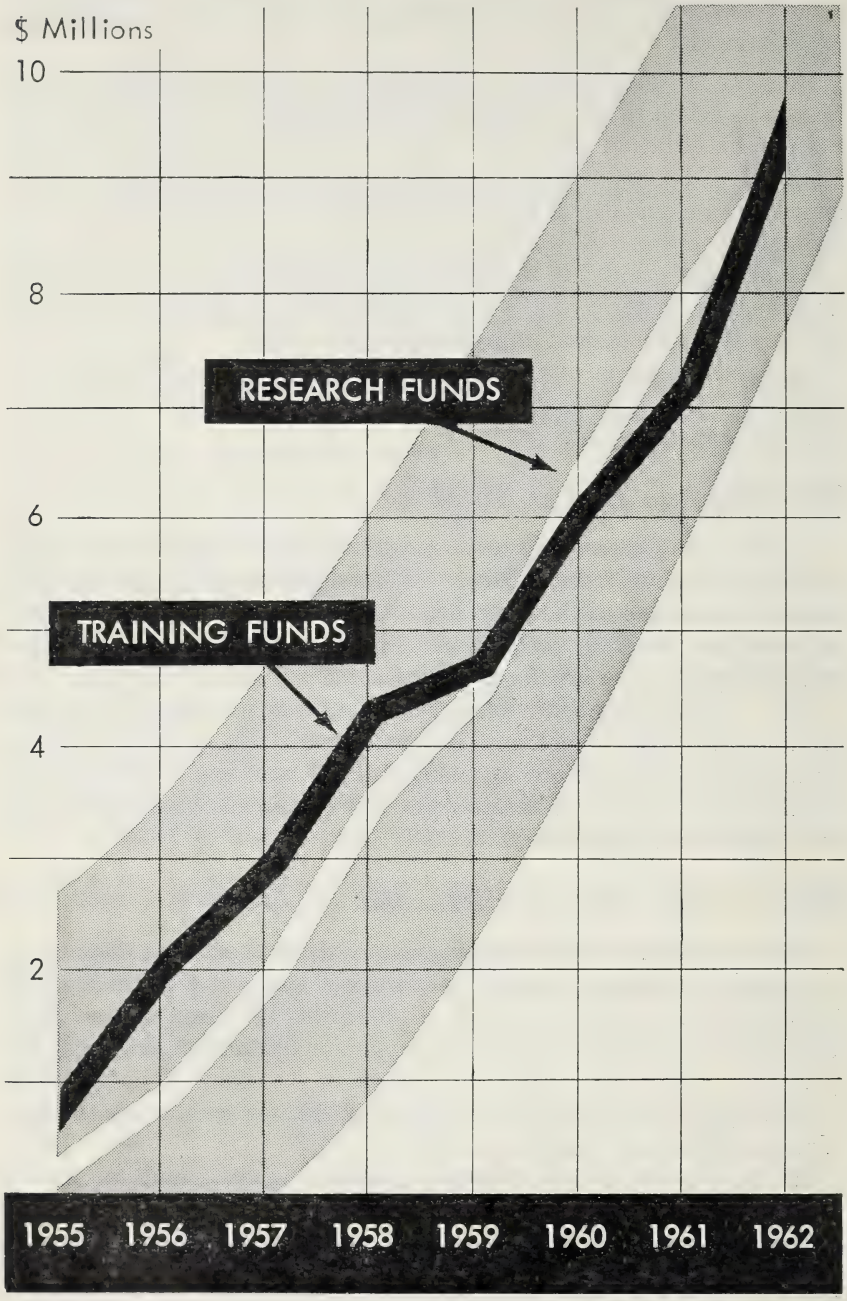
The selected categories were mental retardation, mental and personality disorders, visual impairment, chronic illness, cerebral palsy, epilepsy, and the problems of older disabled workers. All these were regarded as areas in which new knowledge and practices could have widespread and rapid effect.

Help for the Mentally Retarded

One of the outstanding achievements of these selected demonstrations is in the area of mental retardation. Out of a grant made in 1955 to the Association for Help of Retarded Children in New York City for development of new techniques for evaluation, training, and placement, there has grown a network of 34 occupational training workshops for the mentally retarded in 27 States, each using the New York project as a prototype.

In these places a retarded young person is evaluated for mental capacity, ability to adjust to direction and to work situations, and related factors. If there are positive answers, then training is provided for a suitable employment. Scores of retarded young people have been evaluated and trained in these centers and have found work—many in competitive jobs, others in sheltered employment.

CHART 6.—FEDERAL FUNDS EXPENDED FOR RESEARCH AND TRAINING IN VOCATIONAL REHABILITATION



The training encompasses such elementary steps as learning to make change, use a phone, travel by bus to and from work, and eventually proceeds to the teaching of a skill—usually in a repetitive process.

Results in these centers have shown that there can be substantial help for the retarded. The public attitude is changing rapidly, and new points of attack are being developed.

One of them is designed to close the gaps that often occur in the lives of mentally retarded youths as they enter the period where educational and vocational processes begin to merge. This endeavor involves interaction between the State rehabilitation agencies and the educational system, and it is growing rapidly.

There are excellent examples in places such as Georgia, whose Division of Vocational Rehabilitation has a demonstration project in operation to assist the State's secondary schools in coordinating educational, rehabilitation, and community resources, so that the skills of retarded children can be developed and a degree of maturity attained prior to entrance into the labor market. The Minneapolis school systems and the Jewish Vocational Service of Milwaukee have projects to demonstrate the practicality of integrating academic courses with job experience for retarded youths in their last year of high school. Detroit's school system is demonstrating an intensive coordination of school facilities with vocational rehabilitation resources to meet problems of handicapped youths with emphasis on those who are mentally retarded. And on the college level, the Universities of Alabama and Colorado are developing similar systems for use in local school systems to train both educable youths and those whose capacity is below that level.

There are research projects in various phases of rehabilitating the mentally retarded. They include such studies as investigation of job factors, personal characteristics, and educational experience of adult retardates in relation to their vocational and social adjustment; a study of employer, parental, and retarded adult attitudes toward employability; and similar projects to increase the volume of knowledge about retardation.

By such means the public program is being prepared to take an even greater part in meeting the vocational problems among the estimated 5 million mildly retarded children, adolescents, and adults in our society.

They present a host of problems—to themselves, their families, and their communities. The modern approach is to the whole life cycle, from pregnancy onward. In that segment relating to vocational preparation and employment for the retarded the public program will continue to have an important part.

More Aid for the Mentally Ill

Since 1943, when the Barden-LaFollette Act provided authority for mental illness to be included as a disability within the range of the public program of vocational rehabilitation, the State rehabilitation agencies have made substantial moves toward helping mentally ill persons to regain normal lives.

The effort was helped greatly by the funds and the new opportunities to expand services for the mentally ill that came with the new legislation in 1954.

There was authority under the new law for State rehabilitation agencies to extend and improve their services and facilities, with the Federal Government providing 75 percent of the cost of approved projects. Such projects have a maximum duration of 3 years on this basis, after which the States are expected to absorb them into their regular programs.

Through 1962 there have been 58 such projects involving the mentally ill. Some are for establishment of rehabilitation units in State mental hospitals or for adding trained staff so as to emphasize psychiatric rehabilitation, and others are for creating "halfway houses," to help discharged mental patients to adjust to community life.

Since 1956, when the program for the mentally ill began to pick up speed, some 35,500 such persons have been rehabilitated into employment. About 8,850 of this number were in the 1962 total of rehabilitations, an increase of about 28 percent over the previous year.

About $3 million of the total of $36 million in Federal funds invested in the rehabilitation research program has been awarded for 54 projects concerned with rehabilitation of the mentally ill, probing into new ways of evaluating, training, and placing persons who have been emotionally disturbed in employment.

Better Sight for Better Jobs

Demonstration projects in rehabilitation work for those with impaired vision take a most practical course. In 19 places in 18 States there are optical aids clinics, where persons with low visual acuity may be fitted with devices that increase their visual perception to the point where they have better opportunities for jobs.

Five of the clinics are in universities, eight are in hospitals, five in agencies for the blind, and one is in a State rehabilitation agency. Most of the clinics operate 1 day a week, and most of them have a social worker and a counselor experienced in the problems occasioned by visual loss.

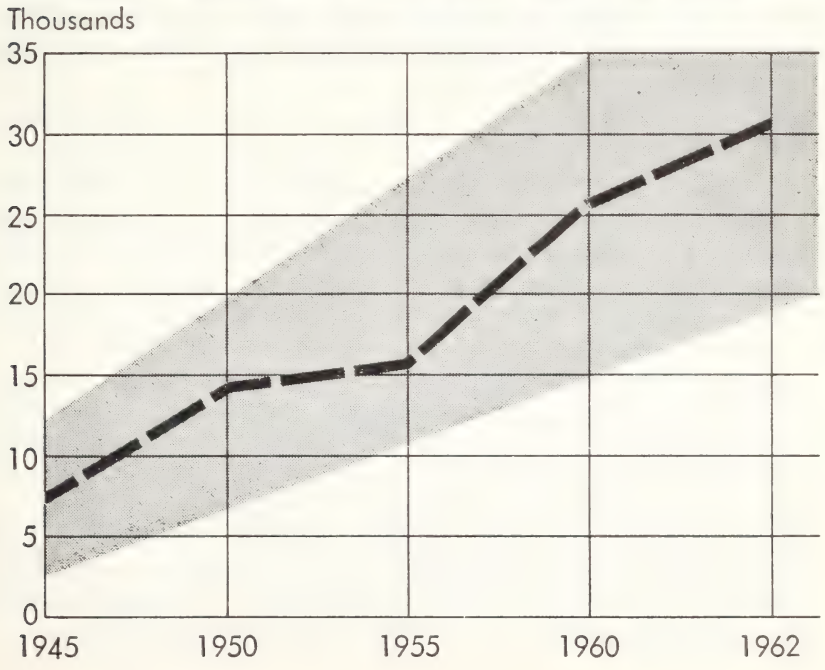
The Rehabilitation Complexities of Older Persons

The growing proportion of older persons in the population has a great many implications for the public program of vocational rehabilitation, for the actual number, as well as the proportion, will grow to staggering size, as new drugs, better medical and surgical practices, increased leisure, and other factors contribute to the longevity of our citizens.

According to the 1960 census, almost 53 million of our citizens are 45 or more years old, including 16.5 million who have reached 65 years or more. There is an estimate of chronic illness showing that 5 million of those persons above 45 years have been disabled for at least 3 months by such illnesses as heart and other cardiovascular disorders, arthritis, rheumatism, genito-urinary troubles, or by impairments of limbs, sight, or hearing.

A further projection is that 1.5 million of those over 45 years—including 115,000 who are 65 or more—could probably be rehabilitated into employment. The remaining 3.5 million might not be rehabilitated into employment, but, with appropriate services, could be returned to varying degrees of self-care and nondependence on family or on institutional care. Chart 7 shows the actual results over the past 17 years.

CHART 7.—PERSONS OF 45 YEARS OR MORE REHABILITATED, 1945–62



This cluster of problems is receiving a concentration of attention in the public program. A rapidly growing number of research and demonstration projects is concerned with the complexities of this phase of rehabilitation.

A glowing accomplishment arose out of an early project in New York City, in which the personnel undertook to show that disabled persons of 60 years or more who have been generally regarded as past employment age could be retrained successfully and placed in jobs.

At the close of the 4-year period of OVR support, 498 of 835 participants in the project had been placed; about 200 of them in competitive employment, including one more than 80 years old.

The results of the project led 10 additional groups to establish similar ones in Missouri, Minnesota, Wisconsin, Florida, Texas, Pennsylvania, and the Virgin Islands, all of them helping older disabled men to a new independence.

One of the endeavors in this phase of research is to discover ways to assist older people who are confined to nursing homes and similar institutions to become more nearly self-sufficient.

The University of Michigan, the Illinois Public Aid Commission, Highland View Hospital in Cleveland, and the Utah rehabilitation agency are developing training techniques and methods that will aid chronically ill persons in nursing homes to reach a state of nondependence on facilities or families; and Our Lady of Fatima Hospital in North Providence, R.I., has shown that it is possible to rehabilitate older disabled workers into gainful employment through a comprehensive program of diagnosis and therapeutic services that it has developed.

The Disabled Worker

A phase of rehabilitation for the disabled worker that began with disability insurance provisions of the social security laws has greatly broadened the program's scope of activities on behalf of the aging. The social security amendments make provisions for the payment of insurance benefits to those who become disabled to the extent that they can no longer engage in substantial gainful activity.

Under this legislation, most State rehabilitation agencies have contracted to make initial determinations among applicants for the benefits allowable from the Bureau of Old-Age and Survivors Insurance, to find if they are disabled within the meaning of the law and to assess their capacities for rehabilitation into employment.

There were two immediate effects. A much heavier load was placed on the evaluating machinery of the State agencies; but there was also a considerable increase in the number of identifiable persons whose disabilities made them feasible for rehabilitation services.

There were, for instance, almost 520,000 applicants for OASDI benefits during 1962. The States' screening operations among this group gave a total of more than 53,000 who were judged to have some potential for rehabilitation. Not nearly all of them were finally accepted for services, but, from the total of those cases who entered the rehabilitation process during 1962 and those from previous periods, some 7,270 persons were rehabilitated into employment during the year, and about 15,000 remained on State rehabilitation rolls for more services.

More than half of these persons were 50 years old or more. About 42 percent had limb loss or injuries or other orthopedic impairments, and the others ranged through disabilities of many kinds.

In an effort to give this effort more positive results there are now three demonstration projects—at Tulane University's School of Medicine, The Ohio Rehabilitation Center at Columbus, and the Sister Kenny Institute in Minneapolis—to carry on a coordinated study of OASDI applicants.

From studies of groups of applicants selected at random, the project supervisors are endeavoring to find new and more suitable ways to determine the extent and degree of disability, ability to perform work under limitations of individual handicaps, the indicated treatment, and the prospects for improvement and for eventual employment through rehabilitation practices.

A preliminary report on one of the projects shows that more than 58 percent of those who were evaluated had possibilities for rehabilitation, and another had a 65-percent ratio, considerable increases from the prior level. With refinement of the newer processes even greater percentages may be expected. Most of those involved in the studies are severely disabled people, and the costs of effective rehabilitation services for them will be high.

The Severely Disabled Worker

It frequently happens that severe disabilities are found among the disabled persons receiving monthly disability cash benefits under OASDI provisions.

A new avenue of rehabilitation was opened for such persons in several States in 1961. A type of grant was established by the Office of Vocational Rehabilitation to aid States in meeting unusually high costs of medical or surgical services, or long-term hospital care for gravely disabled persons, if the costs are above the means of the agency. If there is inability to provide the required services in their own areas, States are enabled to purchase the required services where they are available.

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Eleven States—Massachusetts, Pennsylvania, West Virginia, Michigan, Texas, Iowa, Arkansas, Nebraska, Utah, California, and Illinois—have so far availed themselves of this new provision and are thus rounding out their abilities to help all eligible disabled workers regain their economic equilibrium.

Living Without Sight

Two basic considerations—both of them intensely practical—shape the activities of the public program of vocational rehabilitation in helping blind persons. The first is preparation of blind persons to perform the ordinary activities of modern life with a minimum of assistance. The second is to prepare them for employment and otherwise make them self-sufficient.

The problems of blind persons are manifest. Because blindness is one of the most conspicuous of disabilities and because blind persons trying to get about arouse emotionalism in the public mind, a great deal is done for them, publicly and privately. Universal sympathy for blind persons has placed activities in their behalf on an international scale. A great deal of experimentation, research, and demonstration is carried on in many countries.

This was the thought behind a joint project of the Office of Vocational Rehabilitation and the American Foundation for the Blind to sponsor an International Congress on Technology and Blindness. It was attended by specialists from many countries.

The delegates to the Congress exchanged information and views on all aspects of blindness. There was particular interest in the work of a group of scientists at Massachusetts Institute of Technology who are engaged in conceiving and developing electronic and mechanical devices to assist blind persons to go about without guides and devices to translate the printed word into some form of communication that blind persons can understand without the use of an intermediary. One of the early things they considered, for instance, was a typewriter that would simultaneously produce Braille and typescript, as a means of simplifying communication for those without sight.

In some immediate aspects of developing increased mobility for blind persons, the Office of Vocational Rehabilitation has provided support for the training of instructors in the known principles of mobility. Short-term courses have been held in conjunction with the American Association of Instructors of the Blind. Long-term courses are in progress at the graduate schools of Boston University and Western Michigan University, and graduates of these courses began to go into the field in 1961.

An interesting phase of providing additional employment for the blind is conducted at Georgetown University in Washington, D.C.

Several young blind persons have been given a fluency in the Russian language, which enable them to teach others and to serve as translators and interpreters. In the 1962 term, additional blind students are pursuing the same course in the German language. These activities help to fill a great need in this field and enable a growing number of blind persons to live independently and with added usefulness to society.

One of the widest single sources of employment for blind persons is the growing number of vending stands they operate in Government establishments, private office buildings, national parks, and similar places. The stands are operated under the general supervision of State rehabilitation agencies and the provisions of the Randolph-Sheppard Act of 1936, which is administered by the Office of Vocational Rehabilitation. There were 2,257 such stands operated during 1962. They did a gross business of more than $4.5 million and returned an average profit of $4,140 to 2,425 operators.

The Tragedy of the Deaf-Blind

One of the most completely tragic forms of disability is the person who congenitally is both deaf and blind.

Historically, these persons have been an enigma in rehabilitation. Except in such rare instances as represented by Helen Keller and the lesser-known Robert Smithdas, there has seemed to be little that could be done for them. An inspired group brought together in 1956 by the Industrial Home for the Blind of Brooklyn, however, attacked this most difficult problem with the aid of a grant from the Office of Vocational Rehabilitation.

In a monumental publication issued in 1958, this group provided a comprehensive manual of instruction for dealing with disability. The manual was a realistic appraisal of the situation in which outstanding authorities participated. Greater utilization of the sense of touch was the lever the group advocated to open the minds of these persons, and methods were outlined to reach the understanding of persons who are without use of 2 of the primary senses.

The process has been refined and improved, and confidence has been gained that these persons can be rehabilitated in some degree. In 1962 the Office of Vocational Rehabilitation made another grant which will enable the Industrial Home for the Blind to establish a regional center for instruction of persons who will in turn go forth to become educators in the new service.

The center will prepare people to serve in 15 States in the eastern part of the country, and it is expected that they will eventually reach a good part of an estimated 800 deaf-blind persons over the area.

From there the work will spread to the rest of the country and probably much of the world.

The World Without Sound

Deafness, one of the more inconspicuous disabilities, has not until recent years received the concentrated attention it should have. The problems of the deaf are now undergoing hard study, stimulated by a concentrated effort in many circles to provide greater public understanding of the isolation in which these people live.

Deafness and hearing impairments are among the areas of disability in which the public program of vocational rehabilitation can cooperate with other parts of the nationwide health and education structure to counteract, during the younger years of such disabled persons, some of the effects of their hearing handicaps.

In this kind of operation the child with hearing difficulties can be treated and conditioned during his more formative years, so that by the time of preparation for a vocation he will be in much better position for the public program of vocational rehabilitation to help him.

A considerable volume of research is being performed in the general areas of education of those with hearing problems. Two projects in particular tie into the transitional period for the deaf. Both are under direction of the Clarke School for the Deaf in Massachusetts. One, now reaching the completion stage, is investigating the effects of deafness on the learning process and the relation of learning deficiencies to the vocational and social adjustment of the deaf. The second, just starting, is studying the effects of school experience on the intellectual capacity and personal adjustment of deaf adolescents in preparation for adult vocational life.

Another source of great help was the recent initiation of a grant system by the Office of Education for the training of teachers of the deaf by several qualified institutions. The program started in the fall of 1962, and, at the end of the course, some 400 teachers are expected to enter the field. This is a conspicuous example of interagency cooperation to meet disability problems.

A significant action on behalf of the hard-of-hearing population is taking place currently through a joint effort of the Office of Vocational Rehabilitation and the American Hearing Society. In a demonstration project in the Cleveland area, hearing service centers are being established on the outskirts of the city, which have liaison with central services in Cleveland.

If hearing difficulties of a person in the satellite centers cannot be handled there, then the person can be referred to the metropolitan service. Through a spread of this approach, the established hearing

facilities of the Nation's cities can be expected to reach a considerably larger proportion of rural residents.

One of the more favorable aspects in working with the deaf is their high degree of mobility. A restriction on this, however, is the disposition of some traffic agencies and officials to restrict deaf persons in the operation of motor vehicles.

Statistics show conclusively that deafness is not a serious obstacle to safe driving. The deaf driver compensates by greater visual alertness, and there is no added danger to the public from this source.

Early in 1962 a National Symposium on the Deaf Driver was held in Denver, with the aid of a grant from the Office of Vocational Rehabilitation. Nationally known experts in traffic safety and law enforcement were present, and there was considerable agreement on ways to give greater protection for the rights of deaf drivers.

Training for a Complex Program

There was general recognition when the new vocational rehabilitation legislation was enacted in 1954 that the anticipated growth of the public program would necessitate training of new personnel in the several disciplines that were becoming a part of the nationwide rehabilitation effort.

Many of the complexities of the coming years were beginning to reveal themselves. The concept of help for disabled persons in reaching full potentialities for physical, mental, social, educational, and economic welfare through a selective series of services was gaining ground. It presented the strongest indications of need for an extensive training program.

The 1954 legislation provided a modest start for an immediate training program. In 1955 there was $900,000 available to provide support for 77 teaching programs, 201 traineeships for students, and 16 short-term courses in several subjects.

Each year has seen an increase. In 1962, with an appropriation of $9.8 million, grants were made for 420 teaching programs and more than 2,100 traineeships and research fellowships. The climb of Federal grants for training is shown in chart 6.

In allocating available training funds among the professional fields, the Office of Vocational Rehabilitation attempts to achieve a suitable balance related to the more acute personnel shortages, to geographical distribution, and schools' abilities to offer the kind of training needed to improve the work of State agency and other rehabilitation personnel.

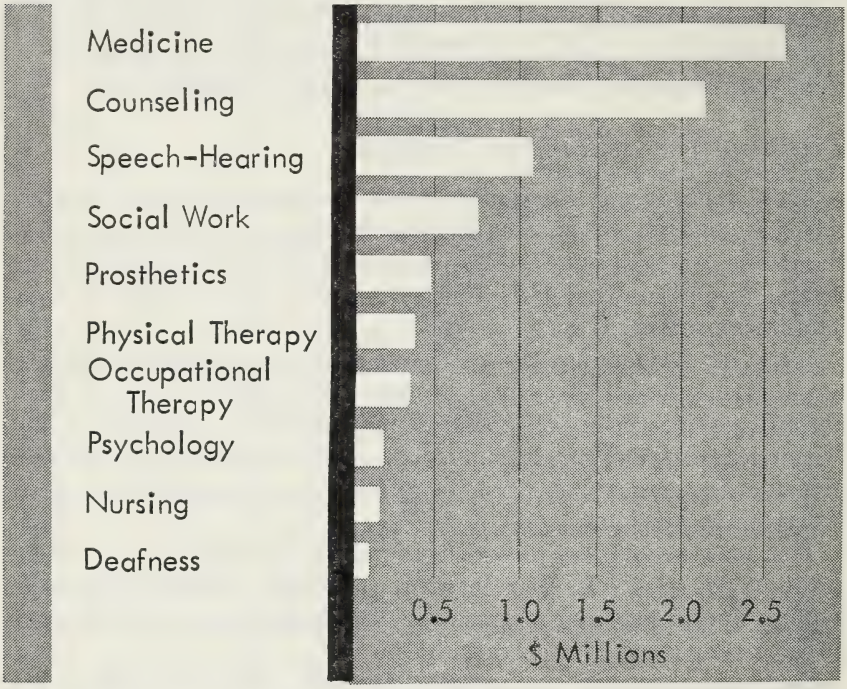
In addition to these considerations, the training program offers encouragement to schools that have or will develop curricula to train specialists in rehabilitation of the blind, the deaf, the mentally re-

tarded, and the emotionally disturbed. There is also support for training that is interdisciplinary in nature, and pilot projects in collaborative practices are encouraged.

Rehabilitation Medicine—A New Specialty

As will be seen from chart 8, a large proportion of training funds is expended in grants for the teaching of medicine.

CHART 8.—1962 TRAINING GRANTS IN AREAS OF SHORTAGES OF PERSONNEL IN VOCATIONAL REHABILITATION



This is purely a reflection of an acute shortage of physicians qualified in the specialty of physical medicine and rehabilitation, one of the newer fields in medicine. The emphasis placed on this discipline is an expression of hope for two results: that there will be an increasing amount of rehabilitation content in the training of medical students and that more practicing physicians will become knowledgeable about rehabilitation concepts and practices.

These hopes have reached new heights in 1962. Teaching grants to schools of medicine went to 53 of the Nation's 89 approved schools of medicine and osteopathy—almost a third more than in 1961 and a marked increase over 1956, the first year of such grants, when 6 schools received awards.

Similar advances are recorded in residency training programs for physicians. In 1955, four physicians received stipends for their residency study in physical medicine and rehabilitation. By 1962, this number had grown to 129, with 24 others pursuing training on a part-time basis.

The Rehabilitation Counselor

The rehabilitation counselor has emerged as the key worker in the public program. It is the counselor who first hears the story of the disabled person and who makes many evaluations and decisions of consequence. The counselor is liaison between the realities of the public program and the individual needs of the disabled person and is a person of growing stature in private and public operations in rehabilitation. The counselor guides the client through the growing complexities and the many technical and social considerations that are involved in the rehabilitation process, balancing its operations with the personal problems of the disabled person and, in many cases, his family.

Consequently, the counselor must have a knowledge of social work, of psychology, of public health and welfare procedures, of medical, surgical, and hospital practices in relation to physical and mental restoration, and of employment practices, especially in his own area. This last factor carries a special responsibility, for it is upon the success of the counselor in matching the abilities of the disabled person with work opportunities that the ultimate success of the public program depends.

There is another growing responsibility in the training program for counselors, brought about by a necessity for specialization. The enlarged category of disabilities with which the public program is concerned—mental illness and retardation are conspicuous among them—is stimulating the provision of training for counselors in the special implications of certain disabilities.

State agencies are placing special counselors in mental hospitals, in rehabilitation centers, sheltered workshops, and a variety of special programs, where they work with the medical profession, social workers, specialists in mental troubles, and vocational experts to evaluate and prepare disabled persons for the prospect of employment.

These are some of the considerations that impel the Office of Vocational Rehabilitation to encourage educational institutions to establish or broaden curricula for counselor training. Its efforts have given rise to two results. One is that the total of training grant awards for counseling is second only to those for medicine. The second is that the number of grants in support of counselor training has risen from 25 in 1955 to 34 in 1962, but with the number of traineeships making the startling gain from 53 to 639 in that period.

Even so, the growing number of persons attracted to counseling as a vocation is not meeting the requirements of the public program. The rate of graduation from these courses is about 250 a year, and the estimated need is two to three times that number.

The potential employers of counselors—State agencies, clinics, hospitals, rehabilitation centers, and others—recognize the need for well-trained counselors, and the salary scale is coming into line with the extent of training and the capacities of graduates of counseling courses.

Meeting Other Shortages

There are serious shortages in other disciplines that are allied to the public program of vocational rehabilitation. One of them is the number of trained persons in the field of speech and hearing.

An estimated 8 to 9 million of our people have speech and hearing difficulties. Currently there are about 10,000 clinicians to serve them, half the number needed to provide an adequate volume of services. Here again is a situation in which the Office of Vocational Rehabilitation's training program has made great advances through grants in this area over the past 3 years.

Since the training program began to emphasize courses in speech and hearing therapy in 1959, the number of grants for this purpose has multiplied three times; the total amount of awards has increased almost three times; and the number of trainees has increased three times. Yet to come close to the need for personnel in this field the number of graduates for this discipline must grow six times over the number of those who finished their courses in 1962.

There are grave shortages in physical therapy, occupational therapy, in psychologists, in prosthetists, in social workers.

In occupational therapy the estimated need is for 16,000, the number in practice is about 6,000, and there are about 500 graduates each year.

The shortage of physical therapists is acute. The present number of 8,400 in practice should be one-third more. Enrollments in approved courses are far below capacity. In consequence the Office of Vocational Rehabilitation has initiated a system of undergraduate trainee grants to attract students, and in 1962 all but 4 of 40 approved schools had such projects in operation.

The Rehabilitation Team

Since orthopedic impairments constitute the major disability among persons seeking rehabilitation services, the facilities for training prosthetists (specialists in the design and fitting of artificial limbs and

other assistive devices) and orthotists (specialists in the making and fitting of braces) are of significant interest in the program.

It was a constant preponderance of orthopedic cases on the rolls of State rehabilitation agencies that led to development of "team" therapy for physical restoration.

For a decade practitioners of several disciplines that since have grown into integration with the rehabilitation program attended college courses that provided instruction in orthopedic practices. In 1957, the Office of Vocational Rehabilitation began to make grants to several universities where such courses were given, so as to extend knowledge of orthopedic practices. There immediately arose the feeling that, if all these disciplines could be brought together in rehabilitation centers and hospitals, their combined effect would speed up the rehabilitation process immeasurably.

It became evident to workers in the public program several years ago that the impact of disability of the individual had wide ramifications. Loss of income, strains on family relationships, physical shock, mental depression—these and other matters had great bearing on the success of rehabilitation services. So there were added to the team the physical therapist to restore physical functions and teach the uses of prostheses; the occupational therapist to test, evaluate, and restore manipulative abilities; the psychologist and psychiatrist to examine and improve the mental state; and the social worker to help with the inevitable personal problems that arose.

The growth of this concept has brought greater demand for orthopedic specialists. They are needed in the growing number of rehabilitation centers that are being established or expanded, in hospitals that are getting into rehabilitation work, and in clinics and other institutions where they can help the orthopedically disabled regain or improve their bodily functions.

In 1962 almost 1,400 people associated with rehabilitation were enrolled in 78 short-term courses that had OVR support, to become acquainted with orthopedic and orthotic principles. At the same time, several universities and other groups were delving deeper into research designed to enrich all the services that are available for orthopedically handicapped persons.

The Social Worker in Rehabilitation

In the modern concept of rehabilitation there is no room for neglect of the implications that disability has on the individual lives of those who are vocationally and socially handicapped.

The social worker has been called into the rehabilitation scheme to provide skilled assistance in helping to relieve the anxieties that arise with disability—to relate the disabled person to his situation, to his

family, and to the community, and to resolve any difficulties that are created or intensified.

The social worker also has a place in the broader aspects of State and community rehabilitation programs, in activities that help to sell the rehabiltation program itself to the community, and to organize the resources of the area for meeting its rehabilitation problems.

Social work in rehabilitation requires, of course, a special knowledge of the public and voluntary programs for helping the disabled. In recognition of this, the Office of Vocational Rehabilitation makes teaching grants to accredited schools of social work. In 1962, 34 of 56 accredited schools were awarded such grants, and 40 schools had traineeship grant awards for 169 students.

This amout of training is far below the level that will produce an adequate number of social workers for the program, for at least 1,500 graduates are needed each year for vacancies in health and rehabilitation work.

The Rehabilitation Facility

In the rapid expansion of the public program of vocational rehabilitation and the evolution of new concepts of disability, of a new image of the disabled, and the purposes and uses of the program, there developed naturally a new concept of rehabilitation facilities.

A facility, in the usual language of the public program, is an inclusive term embracing many kinds of places where rehabilitation services are available. New kinds of facilities come into being for many reasons, and, over the years other kinds have faded away.

In the beginning, rehabilitation facilities were almost always medical in nature. But, as physical restoration grew in accomplishment, there came a natural query about work for those who became employable.

The answer is in facilities that are now available. There was organization of centers which specialized in vocational services, and this led to development of vocational counseling, of work evaluation of the disabled, and other special vocational services.

Yet there was need for another kind of facility, and there evolved the psycho-social center. It was concerned with the increasingly baffling problems of motivation, where mental and emotional problems of many persons lowered their probabilities for employment.

It became obvious, too, that all disabled persons cannot be placed in private, competitive employment after physical or mental restoration. Many persons are revealed as having little possibilities for open jobs. Others need specific training, work experience, and personal adjustment. So many new sheltered workshops came into being, and they are of two principal types.

One provides work experience and adjustment leading to private

employment. The second deals with disabled persons who, for any of a variety of reasons, need long-term jobs doing work compatible with their condition, in terms of physical capacity and daily hours. There are, too, workshops that provide services of both kinds. Some are created and maintained by private or community groups—for which Government financial aid is available—and others by State rehabilitation agencies.

Another kind of facility that is growing in usefulness is the halfway house. This kind of facility is an adjunct to rehabilitation of the mentally ill. Halfway houses are built around a homelike atmosphere where selected patients who are discharged from mental hospitals may spend a transitional period between institutional care and life in the community.

Still another type is the evaluation center, which specializes in highly intensive rehabilitation diagnoses and evaluations, to chart courses in individual cases for the reaching of specific goals through the variety of services available.

Many hospitals are creating rehabilitation facilities as part of their services. Not all attempt to be comprehensive but are especially concerned with getting indicated rehabilitation measures started as early as possible.

With the broadened scope of the public program there has risen a good measure of response from State rehabilitation agencies—and from private and community sources, too—in building a variety of large rehabilitation centers.

These also vary in types and purposes. Some centers serve persons with one type of disability. Others work among larger categories of handicaps, and many offer a virtually complete series of services to persons with most types of disabilities. Some are operated by State rehabilitation agencies, using portions of their basic grants in combination with their own funds. Others may be created with the help of funds that are available through the Medical Facilities Survey and Construction Act, enacted in 1954. This legislation was an amendment of the Hill-Burton hospital construction legislation of an earlier date and allowed Federal funds to be granted to aid the construction of rehabilitation facilities. Thirty-nine new facilities of various kinds, sizes, and types were established or expanded in 1962 with the aid of Hill-Burton grants. Their total cost was $26.8 million, of which the Federal contribution was approximately one-third.

There are large rehabilitation centers operated by six States—Pennsylvania, Virginia, Iowa, West Virginia, Georgia, and Arkansas, as well as one in Puerto Rico. But there are other large centers—notably in Mobile, Ala.; the Institute of Physical Medicine and Rehabilitation in New York City; the Rehabilitation Center of Minneapolis; the Goodwill Industries in Omaha, Cincinnati, and the District of

Columbia; the National Orthopaedic and Rehabilitation Hospital in Arlington, Va.; and the Carruth Center in Dallas, among others—where rehabilitation is practiced according to modern concepts and practices, with the preponderance of construction and operating funds arising in private sources, but with Federal aid in most cases.

The role of the large rehabilitation center is essentially to provide an appropriate setting where specialized staffs can apply modern techniques and provide adequate services to more people, rapidly and conveniently.

This role is reaching greater fulfillment with new kinds of activities. New York University and The University of Minnesota received grants from the Office of Vocational Rehabilitation to create rehabilitation research training centers within the clinical settings they afford. Similar regional centers may be established soon.

The objective is to combine, in schools of medicine where physical medicine and rehabilitation can be taught, their resources for research and training and develop new methods of rehabilitation under the most favorable circumstances.

Rehabilitation Around the World

A general awakening to the needs and possibilities for rehabilitation of the disabled has been noted in many countries in the past few years, particularly in new nations that have arisen as political entities, and some older countries that have recognized need for more attention to health and rehabilitation.

In some of these countries rehabilitation research and activities had begun in 1960, and others stood ready to begin but lacked funds and guidance. In that year the Office of Vocational Rehabilitation was given authority to spend more than $900,000 in counterpart funds in several countries to establish research resources for investigation of rehabilitation problems pertinent to their own needs, with the probability of international interest as well.

The counterpart funds are available for international research under provisions of Public Law 480—the Agricultural Trade Development and Assistance Act. Surplus commodities sold by the United States to certain countries build up these foreign currency credits, which are expendable within their borders for beneficial purposes, with approval of the U.S. Congress.

Counterpart funds for international research are now available in India, Israel, Pakistan, UAR-Egypt, Brazil, Burma, Poland, Yugoslavia, Indonesia, and Syria.

The Office of Vocational Rehabilitation has approved 26 research projects in these countries—11 in Israel, 9 in India, 3 in Brazil, and 1 each in UAR-Egypt, Burma, and Pakistan. Others are being prepared.

The legislation also provides the way for an exchange of scientists between the United States and various countries which are capable in disciplines related to rehabilitation.

Arrangements have been made under which 18 surgeons from some of the outstanding medical schools of the United States will perform research in plastic surgery with victims of leprosy at the Christian Medical College in Vellore, India. Six have gone to India in the past 10 months, each for a 2-month period. Many of the techniques they have perfected for these people have been used successfully in the United States in treating similar disabling conditions arising from disease or accidents.

In the other direction, two Indian experts in cerebral palsy are to perform research in two U.S. rehabilitation centers, and plans are in the making for exchanges of other experts with other countries.

Programs of study, consultation, and observation were arranged by OVR for 110 individuals from 42 countries interested in rehabilitation of the disabled who were brought to the United States by the Agency for International Development, the United Nations, World Health Organization, the Department of State, by voluntary agencies and foundations, or were sent by their own governments. Among these were officials from newly independent countries such as the Congo, Senegal, and Somalia and administrators and specialists from Malaya, Ceylon, and Turkey, where programs for the disabled are being established or expanded, who came to study program administration and operation.

The Hard Fight Against Dependency

The public program of vocational rehabilitation has been a crusade in many respects, and a great deal of the spirit of the crusader, as well as the pioneer, remains in the program. The movement toward an ultimate goal of 200,000 rehabilitations of the disabled each year into employment and other satisfactions of life requires an even greater amount of imagination, of expediency, and determination to encompass all the complexities inherent in the kind of rehabilitation structure that is being built.

There are, in reality, three facets of the vocational rehabilitation program. One is the humanitarian side, concerned with the personal problems of the individual. The second is the economic worth of vocational rehabilitation. And the third is the inroad that the program is making into the haunts of dependency.

The humanitarian side of the program is obvious. There is great warmth in the knowledge that more than 600,000 disabled persons have been helped to overcome their handicaps in the past 8 years and are pursuing their own forms of happiness in their own ways.

It is when we look at rehabilitation measures as a defense against

the further encroachment of dependency on human dignity, as well as on the public purse, that the course of rehabilitation becomes more clearly marked.

Already the Congress has moved to realine the relationship between public welfare and vocational rehabilitation agencies so that the developing facilities of the rehabilitation program can be used to reduce the costs of public assistance and its eroding effects on the human spirit.

President Kennedy summed up the aims of new public welfare amendments when he signed the measure in July 1962. He said:

"This measure embodies a new approach—stressing services in addition to support, rehabilitation instead of relief, and training instead of prolonged dependency. This important legislation will assist our States and local public welfare agencies to redirect the incentives and services they offer to needy families and children and to aged and disabled people. Our objective is to prevent and reduce dependency and to encourage self-care and self-support—to maintain family life where it is adequate and to restore it where it is deficient."

This new legislation underlines an unprecedented challenge to those concerned with vocational rehabilitation—both public and private agencies—to serve disabled persons who get public assistance and to serve them well. Several hundred thousand adults with physical or mental disabilities get public assistance. How many of them could be restored to employment cannot be foretold. But a large number of referrals to State rehabilitation programs come from public welfare sources, and a considerable part of rehabilitation energy will go toward services for them.

There is another facet of dependency that arises from disability. Most of those who are acquainted with rehabilitation matters know that disability often involves a whole family and its relationships.

For a long time there have been cooperative agreements in every State between their welfare and rehabilitation agencies, so that, where disability strikes hard at families to bring dismaying financial circumstances, there will not be unrelieved suffering.

This relationship between welfare and rehabilitation activities has come under renewed scrutiny in recent years. Now, greater emphasis is being placed on cooperative measures designed to strengthen this relationship—to reduce family frustrations, to provide food, clothing, and shelter where these are lacking, to hold families together, and to counsel the members in living with a disability in the family while the rehabilitation process is going on with a disabled member.

This is a necessary direction for the program to take. It requires service out of the normal range of the rehabilitation program. Intensive social services that can be performed best by State welfare agencies come into play here, so that a climate can be maintained for the disabled person that is conducive to rapid restoration of physical abilities and a return to work.

Table 1.—*Number of referrals and cases, by agency, fiscal year 1962*

Agency [1]	Referrals				Cases				
	During fiscal year			Remaining at end of year [3]	During fiscal year				Remaining at end of year [6]
						Closed from active load			
	Total	Accepted for services	Not accepted for services [2]		Total active load (receiving services)	Rehabilitated	*After* rehabilitation plan initiated [4]	*Before* rehabilitation plan initiated [5]	
United States, total	439,401	148,763	150,903	139,735	345,635	102,377	14,524	20,649	208,085
Alabama	7,176	4,022	937	2,217	9,901	3,059	427	601	5,814
Alaska	371	139	70	162	342	77	19	13	227
Arizona:									
General	1,854	588	548	718	1,350	405	99	91	755
Blind	134	60	45	29	186	32	11	3	140
Arkansas	7,840	2,979	3,240	1,621	5,806	2,500	226	124	2,956
California	29,980	7,594	17,202	5,184	17,331	2,670	1,249	2,927	10,485
Colorado	4,534	1,884	1,261	1,389	4,299	1,243	517	223	2,316
Connecticut:									
General	3,018	1,561	621	836	4,211	907	211	307	2,786
Blind	179	86	62	31	212	58	21	0	133
Delaware:									
General	1,116	554	351	211	1,242	527	20	61	634
Blind	50	24	20	6	48	18	6	3	21
District of Columbia	4,011	1,288	1,873	850	2,915	847	261	228	1,579
Florida:									
General	20,175	6,009	8,918	5,248	11,303	4,000	611	613	6,079
Blind	4,338	491	2,500	1,347	1,183	301	61	42	779
Georgia	22,776	7,485	5,874	9,417	13,596	6,105	424	484	6,583
Guam	96	33	32	31	77	13	5	13	46
Hawaii:									
General	2,043	528	863	652	1,134	240	76	51	767
Blind	29	10	6	13	48	4	2	2	40
Idaho:									
General	2,003	470	931	602	1,029	385	49	7	588
Blind	38	20	14	4	57	15	3	3	36
Illinois	11,608	6,193	3,132	2,283	15,310	3,926	978	1,370	9,036
Indiana:									
General	3,666	1,945	904	817	4,809	1,434	138	186	3,051
Blind	141	39	38	64	185	31	18	17	119
Iowa:									
General	6,237	1,789	1,756	2,692	4,285	1,293	185	175	2,632
Blind	189	79	39	71	230	50	3	7	170
Kansas:									
General	3,609	1,523	883	1,203	3,415	1,087	130	237	1,961
Blind	389	122	110	157	304	85	11	13	195
Kentucky	7,171	2,103	2,726	2,342	4,370	1,776	120	248	2,226
Louisana:									
General	5,370	3,124	1,208	1,038	8,750	2,037	318	591	5,804
Blind	825	187	210	428	713	122	8	13	570
Maine:									
General	2,026	486	644	896	1,221	360	48	88	725
Blind	246	131	81	34	303	72	22	52	157
Maryland	6,628	2,638	1,909	2,081	6,361	1,691	342	696	3,632
Massachusetts:									
General	11,128	2,496	4,479	4,153	5,809	1,661	214	537	3,397
Blind	309	141	28	140	428	88	26	20	294
Michigan:									
General	9,970	4,074	2,270	3,626	10,258	3,181	487	169	6,421
Blind	342	165	76	101	454	81	35	31	307
Minnesota:									
General	6,944	2,048	2,607	2,289	5,964	1,377	314	164	4,109
Blind	1,108	192	403	513	507	99	32	21	355
Mississippi:									
General	3,562	1,695	774	1,093	3,772	1,392	96	145	2,139
Blind	1,118	347	538	233	953	283	82	42	546
Missouri:									
General	8,682	2,852	3,078	2,752	5,924	1,930	235	234	3,525
Blind	760	183	294	283	522	187	26	30	279
Montana:									
General	2,401	921	777	703	2,012	456	40	92	1,424
Blind	414	36	286	92	87	24	3	0	60
Nebraska:									
General	1,663	795	267	601	2,554	634	64	112	1,744
Blind	242	63	115	64	152	57	8	5	82
Nevada:									
General	764	235	457	72	393	120	62	46	165
Blind	50	21	5	24	56	16	2	3	35

See footnotes at end of table.

Table 1.—*Number of referrals and cases, by agency, fiscal year 1962*—Con.

Agency [1]	Referrals				Cases				
	During fiscal year			Remaining at end of year [3]	During fiscal year				
					Total active load (receiving services)	Closed from active load			Remaining at end of year [6]
	Total	Accepted for services	Not accepted for services [2]			Rehabilitated	*After* rehabilitation plan initiated [4]	*Before* rehabilitation plan initiated [5]	
New Hampshire:									
General	626	353	181	92	789	198	88	19	484
Blind	73	29	4	40	76	15	2	6	53
New Jersey:									
General	7,706	2,963	2,198	2,545	5,872	1,888	252	253	3,479
Blind	930	203	323	404	541	143	33	9	356
New Mexico:									
General	1,345	328	569	448	668	286	43	17	322
Blind	214	45	66	103	127	35	5	7	80
New York:									
General	31,745	10,571	10,226	10,948	23,355	7,008	733	1,493	14,121
Blind	1,418	525	266	627	1,154	332	47	73	702
North Carolina:									
General	11,311	6,303	3,360	1,648	15,435	5,647	450	542	8,796
Blind	1,588	640	602	346	1,549	455	17	103	974
North Dakota	1,899	495	478	926	1,336	372	40	72	852
Ohio:									
General	9,891	3,916	3,068	2,907	8,452	2,391	281	620	5,160
Blind	936	425	213	298	1,153	201	61	101	790
Oklahoma	7,292	3,091	1,944	2,257	8,886	1,913	161	512	6,300
Oregon:									
General	6,032	1,200	2,603	2,229	2,698	670	186	214	1,628
Blind	245	58	116	71	156	40	6	8	102
Pennsylvania:									
General	37,139	12,760	10,867	13,512	27,578	9,060	1,215	800	16,503
Blind	2,020	309	668	1,043	998	251	26	41	680
Puerto Rico	9,900	1,653	1,967	6,280	5,702	1,226	116	282	4,078
Rhode Island:									
General	3,891	1,329	653	1,909	2,891	871	158	20	1,842
Blind	129	100	9	20	289	59	16	20	194
South Carolina:									
General	12,193	4,144	5,079	2,970	8,196	2,380	169	309	5,338
Blind	402	162	168	72	375	113	10	19	233
South Dakota:									
General	1,272	357	229	686	1,033	276	45	6	706
Blind	513	49	216	248	121	27	5	2	87
Tennessee:									
General	9,690	3,253	2,966	3,471	7,540	2,612	276	269	4,383
Blind	1,211	334	400	477	868	302	23	37	506
Texas:									
General	14,352	4,457	6,686	3,209	11,754	2,931	748	1,164	6,911
Blind	1,235	390	526	319	849	378	18	26	427
Utah	1,963	851	556	556	2,318	581	87	38	1,612
Vermont:									
General	1,263	283	170	810	828	226	53	31	518
Blind	56	21	27	8	50	18	4	2	26
Virginia:									
General	16,122	4,384	7,343	4,395	9,436	3,517	219	646	5,054
Blind	704	138	198	368	299	107	11	6	175
Virgin Islands	102	27	0	75	86	31	0	0	55
Washington:									
General	5,092	1,536	2,221	1,335	4,052	1,100	217	354	2,381
Blind	302	117	109	76	283	68	17	13	185
West Virginia	17,155	5,451	4,063	7,641	13,477	3,710	69	1,283	8,415
Wisconsin:									
General	9,480	2,846	3,914	2,720	7,367	1,811	226	74	5,256
Blind	153	86	31	36	236	53	14	8	161
Wyoming	488	133	158	197	391	119	32	4	236

[1] In States with 2 agencies, the State division of vocational rehabilitation is designated as "general," and the agency under the State commission or other agency for the blind is designated as "blind."

[2] Services declined, services not needed, individual not eligible, individual needing services other than vocational rehabilitation, referred to other agencies, migratory shifting of the individual, etc.

[3] Eligibility for rehabilitation not yet determined.

[4] Closed after rehabilitation plan was initiated; received rehabilitation service but never reached the point of employment because of personal factors, illness, aggravated disability, etc.

[5] Closed prior to initiation of rehabilitation plan because of indifference of individual, increase in degree of disability, loss of contact, etc.

[6] In process of rehabilitation on June 30, 1962.

Table 2.—*Vocational rehabilitation grants, 1962, State divisions of vocational rehabilitation*

State or territory	Support grants	Extension and improvement grants	Total
Total	$56,503,310	$904,655	$57,407,965
Alabama	2,578,524	21,117	2,599,641
Alaska	129,912		129,912
Arizona	456,770	8,549	465,319
Arkansas	1,832,540	14,500	1,847,040
California	3,135,950	128,537	3,264,487
Colorado	785,506	14,256	799,762
Connecticut	330,549	16,521	347,070
Delaware	134,341	5,000	139,341
District of Columbia	223,802	6,179	229,981
Florida	1,877,901		1,877,901
Georgia	3,363,693	32,025	3,395,718
Guam	76,761	5,000	81,761
Hawaii	207,125	5,094	212,219
Idaho	191,116		191,116
Illinois	2,360,002	77,260	2,437,262
Indiana	559,477	12,921	572,398
Iowa	785,574	17,064	802,638
Kansas	648,165	13,600	661,765
Kentucky	735,226	24,710	759,936
Louisiana	1,703,771		1,703,771
Maine	252,054	7,900	259,954
Maryland	715,125		715,125
Massachusetts	1,122,039	33,522	1,155,561
Michigan	1,370,650	63,644	1,434,294
Minnesota	1,065,596	27,784	1,093,380
Mississippi	789,707		789,707
Missouri	995,078	28,099	1,023,177
Montana	275,223	5,499	280,722
Nebraska	284,338	7,644	291,982
Nevada	60,468		60,468
New Hampshire	116,445		116,445
New Jersey	1,039,797	39,102	1,078,899
New Mexico	211,386	7,245	218,631
New York	4,220,173	11,250	4,231,423
North Carolina	1,955,857	37,003	1,992,860
North Dakota	390,939	5,142	396,081
Ohio	1,213,735	63,178	1,276,913
Oklahoma	1,454,710	18,920	1,473,630
Oregon	565,652	12,270	577,922
Pennsylvania	4,934,167	16,987	4,951,154
Puerto Rico	1,004,298		1,004,298
Rhode Island	364,055	5,738	369,793
South Carolina	1,300,780		1,300,780
South Dakota	249,991	4,425	254,416
Tennessee	1,480,909		1,480,909
Texas	1,605,449	77,990	1,683,439
Utah	283,481	6,570	290,051
Vermont	198,263	2,351	200,614
Virginia	1,420,517		1,420,517
Virgin Islands	25,193		25,193
Washington	771,091		771,091
West Virginia	1,429,335	15,059	1,444,394
Wisconsin	1,111,345		1,111,345
Wyoming	108,759	5,000	113,759

Table 3.—*Vocational rehabilitation grants, 1962, State commissions or agencies for the blind*

State or territory	Support grants	Extension and improvement grants	Total
Total	$6,446,690	$153,617	$6,600,307
Arizona	91,730	2,140	93,870
Connecticut	69,703	4,133	73,836
Delaware	34,665		34,665
Florida	499,654		499,654
Hawaii	50,000		50,000
Idaho	34,906		34,906
Indiana	61,241		61,241
Iowa	190,589	5,326	195,915
Kansas	214,000	1,950	215,950
Louisiana	175,000		175,000
Maine	94,944		94,944
Massachusetts	214,843	4,500	219,343
Michigan	120,619		120,619
Minnesota	223,062		223,062
Mississippi	386,734		386,734
Missouri	247,266		247,266
Montana	46,222		46,222
Nebraska	70,782	3,822	74,604
Nevada	21,752		21,752
New Hampshire	30,757		30,757
New Jersey	191,632		191,632
New Mexico	55,303		55,303
New York	567,762	22,222	589,984
North Carolina	587,597		587,597
Ohio	349,245	8,595	357,840
Oregon	106,381		106,381
Pennsylvania	404,995	66,482	471,477
Rhode Island	81,927		81,927
South Carolina	92,131		92,131
South Dakota	66,558	1,106	67,664
Tennessee	379,181		379,181
Texas	295,265		295,265
Vermont	47,787	500	48,287
Virginia	125,000	9,656	134,656
Washington	122,806	23,185	145,991
Wisconsin	94,651		94,651

Saint Elizabeths Hospital

Psychiatry as a specialty of medicine continues to evolute rapidly. New ideas, some of them rediscovered from past experience, are being proposed in the care of patients. Research into the causes of mental disorder is progressing rapidly, as is the training of much-needed personnel. In all these fields Saint Elizabeths is active and is endeavoring in every way possible to further its traditional position of leadership. Much of the care of the mentally ill takes place in the community at the hands of private practitioners, but there still is a need of mental hospitals, and presumably there always will be. In the treatment of mental illness the social concepts are gaining strength. There is a greater use of community resources such as foster homes, nursing homes, halfway houses, and outpatient clinics.

The role of public education is an important one; the understanding and tolerance of the community have increased markedly, thanks to the attempts of various agencies to bring about a greater public understanding of the nature of mental disorder. At present some debate is underway as to the relative merits of the small and the large mental hospitals, and it is being urged that no hospitals of over 1,000 beds be maintained or established. The fact is, however, that some hospitals, Saint Elizabeths among them, are considerably larger than that allegedly ideal maximum. It has been suggested, too, that large hospitals be broken down into smaller units. There is much of value in the smaller units, but it should not be forgotten that structure in an organization is necessary and that the various parts cannot be allowed to go their separate ways without control or coordination. The trend is toward reducing, rather than increasing, the population of mental hospitals by more intensive early treatment, by establishing new hospitals, and by sending more patients back to the community for care there rather than keeping them in the institutions. Saint Elizabeths

has not been unmindful of this tendency and actually during the year reduced its resident population by 160 in spite of the highest admission rate since 1945.

For the first time in 17 years the admissions to the hospital exceeded 2,000, the actual number being 2,024. During the same period 1,649 patients were discharged, or 81 percent as many as were received. Somewhat more voluntary patients were admitted informally, namely, 251. This rate of only 12.3 percent is far below what it should be. Through an arrangement with the District of Columbia Health Department, voluntary patients may now be admitted at any time, including weekends and evenings. An increase in the voluntary admissions is much to be desired, especially in view of the fact that the commitment laws of the District of Columbia continued to be among the most legalistic, cumbersome, and traumatic to the patient of any jurisdiction in the United States. It is encouraging to note that a bill has been introduced in the Congress which would moderate some of the inequities and undesirable features of the present commitment laws.

The aged continue to be a serious problem, as does the chronicity of a considerable number of the patients. At the close of the fiscal year, 63 percent of the patients in the hospital had been in residence for 5 years or more. The difficult problems of the care of the chronically mentally ill and of the aged are receiving much attention and hopefully some satisfactory arrangement can be worked out. Desirable as it is to reduce the population of mental hospitals, it should not escape attention, as it sometimes seems to do, that the aged and the chronically mentally ill are sick persons and are entitled to suitable medical care. They should not be relegated to some modern equivalent of the oldtime "poor farm."

The principal problems of the hospital continue to be overcrowding and understaffing. During the year, thanks to an increased appropriation by the Congress, there were over 233 net additions to the hospital personnel. Ten physicians were among these, as were 23 graduate nurses, an encouraging state of affairs. There are many needs, however, in all the activities of the hospital. A survey recently made would indicate that instead of the present 3,515, the hospital should ideally have a total personnel of as many as 8,200. An active recruiting program has been underway during the past year in all fields, with particular emphasis on the ward personnel. Under Civil Service rules physicians now receive salaries at the "top of the grade," but it is highly doubtful whether the salaries are yet on a really competitive basis with the States or with private practice. It should be pointed out, indeed, that one Government agency is permitted by law to pay a 15-percent premium to diplomates of speciality boards.

A bill has finally been proposed which would extend this provision to Saint Elizabeths Hospital; such legislation has not yet been enacted.

The general health of the hospital population has been good, thanks to the continuing efficient efforts of the physicians, nurses, dietitians, sanitarians, and the rest of the hospital personnel. All the accepted types of treatment are being utilized, among them individual and group psychotherapy, milieu therapy, drug therapy, electroshock, habit training, and various methods of resocializing the patients. One habit-training program was developed during the year very successfully, but there have been others as well, both recently and in the past. One project was that of interesting a group of patients in repairing toys which might be given to the needy children at the District of Columbia Village or other institutions. Much has been done in recreation, and in the John Howard Pavilion a "Gavel Club" was organized. The rehabilitation activities have been extended and amplified, and the number of patients released to the community, many of them on a self-supporting basis, is most gratifying. In a number of areas remotivation programs have been undertaken very successfully. The number of open wards has been increased; self-government activities have been encouraged; and in every way an effort has been made to create a permissive, encouraging, and optimistic atmosphere among the patients. A special program has been set up to deal with the young adults, children, and adolescents. There are in the hospital 5 children under 12, 46 adolescents (13 to 18), and 6 young adults (19 years of age or slightly older). In an institution designed primarily for adults, these patients have not benefited to the full from the programs which were available, but it is now expected that much more can be done for them in the line of education and training.

One problem which has caused much concern at the hospital is the continued very free use by the patients of petitions for writs of habeas corpus. The right to file such writs is, of course, guaranteed by the Constitution, but some of the petitions are repeated frequently and are quite obviously frivolous. During the year, for example, 187 orders to show cause were served on the hospital, and 169 orders to produce the patient in court on a writ of habeas corpus. Only eight releases were granted, a fact which in itself suggests that most of the writs had little if any basis. Since every hearing calls for the presence of a physician and sometimes of several, the drain on the physicians' time is inordinate. During the year, in fact, 1,084 hours were spent in court by the doctors. The hospital has suggested formally to the court that arrangements be made to hold the hearings at the hospital. This would save much time, both on the part of the judges and of the physicians. Some administrative improvements have been made in

the court, thanks to the interest of the chief judge, but much improvement is yet possible.

In the field of public education the hospital has taken its part. In May "Mental Health Week" was held, with suitable community arrangements in the line of lectures and sermons, a public dramatic production, and an "open house." The total number of visitors on the two latter occasions was about 3,000. A program was prepared and distributed to approximately 450 radio stations. In addition, State and county hospitals and mental health associations have requested the transcriptions for their libraries. This is a series of 5-minute talks, and the reception seems to have been very favorable. Indeed, considerably over 300 stations have indicated their desire for an extension of the program. The Information Officer has been very active; 10 feature articles appeared in the local papers, plus many news items, and a TV presentation of the activities of the hospital is being prepared. A publication known as the "Saint Elizabeths Reporter," designed primarily for hospital personnel, was established during the year. As usual the hospital has been visited by many professional persons, physicians, social workers, and others from many foreign countries, 23 nations being represented this year. It is always a source of satisfaction and stimulation to have such visitors. Many Government agencies, and those of the District Government, have cooperated with the hospital and to them thanks are extended. The same is true of various private groups and individuals, notably volunteers. These groups are altogether too numerous to mention, but the value to the patients, to the hospital, and to the public's understanding is inestimable.

The program of training has been not only continued but expanded during the year. The accreditation by the Joint Commission has been renewed. A third-year chaplaincy residency has been set up, as has a residency in psychodrama. Training is given at the hospital in these fields among others: internships (the only public mental hospital in the United States so approved), residencies in psychiatry, pathology, surgery, radiology, physical medicine, psychology, occupational therapy, psyhcodrama, and field training in social work and recreational therapy. Some of these activities will be detailed below. Forty percent of the costs of training are now borne by the Federal Government. This in itself is a recognition of the national importance of the hospital.

Research activities of the hospital have been very considerably extended. The joint project between the National Institute of Mental Health and the hospital, known as the Clinical Neuropharmacology Research Center, has been in operation for 5 years with most gratifying results. In addition, a behavioral studies program operated

largely with hospital funds is in successful operation. In that program some criminological studies have been undertaken during the past year, as well as some researches in experimental psychology. It is proposed to set up a third division (the others being the Medical and the Administrative Divisions) in the hospital to be known as the Behavioral and Clinical Studies Division, but final approval has not yet been given by the Department on that proposal.

Psychiatric Services

Brief comments relative to the clinical activities of the hospital follow herewith. There are four admission services, each under a clinical director: Dix Pavilion for civil patients under 64, the Geriatric Service for patients over 64, the John Howard Pavilion for male prisoner patients, and the William A. White Service, which is basically a research service operated jointly with the National Institute of Mental Health. The other wards and services of the hospital are divided between two clinical directors. The general supervision of the activities of the clinical directors is vested in the first assistant physician.

MEDICAL AND SURGICAL BRANCH

This Branch, although not an admission service, plays an extremely important part in the operation of the hospital. It furnishes specialized medical and surgical services to the patients of the hospital, both of an inpatient and outpatient nature. The present main building of this Branch, the so-called Medical and Surgical Building with a capacity of 179 patients, is over 30 years old and with the advancing techniques and activities of medicine is, at present, highly inadequate. A recent study was made by a firm of hospital consultants, and it is hoped that in the very near future funds may be forthcoming for plans for a building to replace or supplement the present building. Considerable improvement of the operating rooms has been undertaken during the past year. A neurology service has been added, and the dental services have been much expanded. During the year 2,222 inpatients were cared for in the Branch (a total of 186,386 patient-days), and 62,000 patients received outpatient care. In the podiatry clinic, 4,350 patients were seen; and in the dental service there was an increase of 1,500 over the preceding year, a total number of 4,528 patients receiving care. A speech and audiology clinic has been added recently; much research work is planned in this interesting but somewhat neglected field. The staff has been increased in the Medical and Surgical Branch, and care of a high order is being given to the patients who come under its attention. Much better service can be rendered, however, when the new building becomes a reality.

NURSING BRANCH

The basic responsibility for the ward care of patients is vested in this Branch, which is effectively discharging this duty. There has been an increase in the number of registered nurses during the year and an increase of 84 in the total personnel. Much training is done in this Branch, both of affiliates and of postgraduate students, the latter coming from Catholic University and Howard University. An inservice training program is carried on, and the employee development program is being expanded.

CLINICAL TRAINING BRANCH

This Branch has the general supervision especially of the psychiatric resident training program but also coordinates the various other training programs which are carried on. One of its functions is the supervision of the Psychotherapy Section, in which we find not only many group and individual psychotherapeutic activities but also dance therapy and psychodrama. This latter form of group psychotherapy was introduced in Saint Elizabeths Hospital over 20 years ago. More recently this hospital, the first public institution to introduce psychodrama, was the first to establish an approved training program.

PSYCHOLOGY BRANCH

This Branch operates in close connection with the various ward services in performing tests, in counseling, in participating in staff conferences, in doing psychotherapy, and in training psychologists. There has been an increased use of psychology on the wards, and a reorganization of the Branch has divided the hospital into five areas for purposes of more efficient service. During the year there was an increase of 51 percent in the patients referred to the Psychology Branch, and nearly 5,000 tests were performed on 1386 persons, mostly but not entirely patients. The speech pathology and audiology activities referred to under the Medical and Surgical Branch are attached primarily to the Psychology Department. During the year 711 audiometric tests were carried out. The psychology staff has been active in lectures and seminars, as well as in training. There have been two residents, nine interns, six field work students and volunteers, and three externs in speech pathology during the year.

RECREATIONAL THERAPY BRANCH

This Branch has been considerably expanded both as to staff and activities. It is active in the school program mentioned above and has engaged in various recreational activities such as dramatics, social activities, writing and speaking, music, and dance.

OCCUPATIONAL THERAPY BRANCH

The activities of the Branch have been numerous, one of those being the educational rehabilitation program, involving 213 patients. There has also been an educational program for the maintenance employees. This has proved very helpful in orienting the maintenance personnel in the proper concepts and methods for working with mental patients, many of whom work with the maintenance areas. The industrial therapy activities carried out under this Branch have to do particularly with the placement of patients in activities which may be helpful to them in securing livelihood after they leave the hospital. The Branch also trains occupational therapy interns.

VOLUNTEER BRANCH

The development of this Branch has been most gratifying from many points of view. During the year an average of 864 volunteers have worked each month, giving a total of 40,000 hours of service. Some of these activities have been carried on through organizations and others by individuals, in many fields of contact with the patient. The value of volunteer service to the community, as well as to the patients, should not be underestimated; these workers carry back to their associates and friends a much sounder conception of a mental hospital than was formerly entertained by their associates.

SOCIAL SERVICE BRANCH

The staff of this Branch has been increased during the year from 25 to 32. A total of 1,817 patients was serviced and 28,500 interviews carried on. The Branch has been very helpful in finding placements for patients; 98, for example, were placed in foster homes and others in the D.C. Village, or referred to the Mental Health Clinic or the Public Assistance Division of the District. Another service was in relocating some of the Indian patients who were referred back to State hospitals in their own States.

BIOMETRICS BRANCH

This Branch has been extremely active and useful during the year. The hospital has been recognized as one of the model reporting areas, being the 29th jurisdiction thus to be recognized. The bills to the District for the care of patients are now being prepared by this Branch. A thoroughgoing statistical system is being set up, and eventually there is every reason to believe that we shall know much more about the facts of the hospital care of mental disorder than has been known in the past.

MEDICAL RECORDS BRANCH

The Medical Records Branch not only files and reviews records but now abstracts them for other hospitals on appropriate request. The need of medical records is sometimes overlooked by physicians, but there is no question about the value of them for reference purposes, studies, and further knowledge concerning patients.

LABORATORY BRANCH

The demands on this Branch continue to increase, but they have been met very well, thanks to a considerable increase in automation. No less than 264,000 tests were carried on during the year, this amounting to almost 30-percent increase. Autopsies came to 45.1 percent of the deaths.

A residency in pathology has been approved, and there are two residents in this program. An isotope laboratory is in operation, and it is planned to do cytological investigations routinely on female patients who are admitted to the hospital, this method being valuable in giving early evidence of cancer of the uterine cervix.

SANITARY ENGINEERING BRANCH

This Branch has operated most effectively on a hospitalwide basis, not only as to insect and rodent control but to food preparation and serving and general housekeeping.

CHAPLAINS BRANCH

This Branch operates under the auspices of the three major faiths, namely, Jewish, Protestant, and Roman Catholic. The patients of all these faiths are served as to worship and pastoral counseling, each new patient being seen very shortly after admission by a clergyman of his own faith. The senior Protestant chaplain reports a considerable increase in the worship services, including two services in the chapel on Sunday mornings, and an increase in the training program with the addition of a third year of clinical pastoral training residency. There were 11 full-time trainees plus 58 part-time trainees during the year including seminarians and community clergy. During the year the members of the Protestant Branch gave no less than 305 addresses and lectures. The senior Protestant chaplain was elected president of the Association of Mental Hospital Chaplains during the year. A director of chaplain studies was added to the staff, who will make studies concerning the various relationships of religion to mental health in a hospital setting.

The Roman Catholic program has likewise been increased, especially as to training. There were six full-time interns during part of the year, and four of them remained all of the year. In addition, seminarians from a number of seminaries have received instruction,

and of the community clergy approximately 79 have received instruction in this section. During the year the senior Catholic chaplain celebrated his 25th Jubilee as a priest.

The Jewish program deals with a much smaller group of patients, but much attention has been given to the worship and festival aspects of their religion. In this field the volunteers have been of inestimable value.

LIBRARY SERVICES

The Services are divided into services to the medical staff and to patients, both of these activities being under the supervision of trained medical librarians. The Medical Library gives service to the medical staff and to other staff members of the hospital in the line of references, bibilographies, and of providing books. The collection of Saint Elizabeths is an excellent one, totaling now about 19,000 volumes with a total of accessions during the year of 1,314. There were 314 periodicals subscribed to. It is unfortunate that some of the other libraries in the area are actually cutting their services, so that interlibrary loans are becoming somewhat more difficult to manage. Space is at a premium, but there will be some relief when the new wings of the Administration Building are completed.

The Patients' Library now numbers 68,000 volumes, with a gain during the year of almost 2,800, much of the latter by gifts. In addition to having the central reading room and storage of books, the patients' librarian keeps active a considerable number of ward libraries and maintains active circulation of books among the wards. The library is also involved in bookbinding, shorthand, and other classes with the assistance of volunteers.

Office of Personnel

During the year the Office of Personnel was made directly responsible to the Office of the Superintendent, partly as a result of the report of the Civil Service Commission inspectors who carried out inspection in the spring. A very active program of recruiting was carried on during the year, somewhat to the disadvantage of some of the other programs. The number of disciplinary actions is increasing substantially, and the requests, not to say demands, from various credit stores occupy a great deal of the attention of the Office. There are now 3,511 positions in the hospital which are filled. One hundred and nineteen summer students were recruited, this being a part of the campaign to interest more young people in possibly entering Government service. The employee development and training program has been substantially expanded during the year. Space is

crowded, but some relief is expected when the wings of the Administration Building are completed.

Division of Administration

The various branches of this Division are essential to the proper operation of the hospital, and during the year they have functioned very effectively. The activities include such things as purchasing, warehousing, the dietary department (which prepared over 7 million meals during the year), registrar's office, maintenance office, laundry, garage, grounds, sewing room, payroll, and patients' funds. The Division has been greatly aided during the year by the services on a part-time basis of a lawyer detailed by the General Counsel's Office of the Department. A new section on managament analysis was set up during the year. Construction underway involves the wings of the Administration Building, the Continued Treatment-9 Building due for occupancy about April 1963. Plans for a Rehabilitation Building are being developed. The Anacostia Freeway is being constructed on the hospital grounds; this resulted in the loss of about 15 acres to the hospital.

Needs of the Hospital

The future of the hospital should be clarified at an early moment. It seems clear to all who are familiar with the history of the hospital, its international reputation, and the consistent support which has been given to it by Congress that the founders intended that there should be a national institution to set the pace for the various States in the lines of patient care, training, and research. Saint Elizabeths is in a unique position to do this, yet there are certain forces which appear to be interested in downgrading the institution to that of a District hospital. The hospital has exerted leadership through more than a century, and at this moment, when mental health is securing so much public attention, it would be little short of a tragedy not to emphasize the national goal of an institution, the example of which State and local institutions do not resent. The program already underway of replacing antiquated facilities with new should be continued, and it is to be expected that the advancing needs of psychiatry and the correlative advancing needs of personnel and equipment will be recognized by the Bureau of the Budget and by the Congress. The organic act passed in 1855 set forth the aims of the hospital as the "most humane care and the most enlightened curative treatment" of the mentally ill. Toward these aims the hospital has always striven and will continue to do so in the future.

Table 1.—*Patients, admissions, and discharges, fiscal years 1935–62*

Fiscal year	Average number of patients		Admissions	Discharges	Discharges as percent of admissions	Deaths
	On rolls	In hospital				
1935–39	5,624	----	987	474	48	296
1940–44	6,849	----	1,885	1,295	69	387
1945–49	6,832	----	1,815	1,477	81	431
1950–54	7,175	6,896	1,481	920	62	440
1955–59	7,458	7,039	1,501	951	63	524
1950	6,897	6,587	1,648	960	58	495
1951	7,053	6,783	1,412	928	66	424
1952	7,172	6,915	1,438	814	57	431
1953	7,361	7,079	1,524	977	64	436
1954	7,392	7,117	1,385	921	66	416
1955	7,461	7,216	1,349	748	55	502
1956	7,438	7,120	1,327	884	67	600
1957	7,413	6,994	1,615	1,014	63	507
1958	7,466	6,965	1,605	1,076	67	532
1959	7,512	6,900	1,607	1,034	64	479
1960	7,691	6,983	1,894	1,101	58	504
1961	7,933	6,976	1,981	1,395	70	440
1962	7,940	6,838	[1] 2,024	[1] 1,649	81	484

[1] Differs slightly from comparable numbers for earlier years in that the earlier figures include "paper" discharges and readmissions made in order to change legal categories.

Table 2.—*Patients on the rolls, by status and by sex, time since admission, ethnic group, and age, June 30, 1962*

Sex, time since admission, ethnic group, and age	Patients on rolls, total	Resident patients [1]			On vacation	On convalescent leave	On unauthorized leave
		Total	In hospital	On temporary visit			
Total	7,883	6,894	6,617	277	83	837	69
Males	3,987	3,587	3,446	141	34	314	52
Females	3,896	3,307	3,171	136	49	523	17
Time since admissions							
Less than 6 months	773	686	625	61	5	74	8
6–11 months	474	326	311	15	6	133	9
1 year	780	562	529	33	18	187	13
2 years	587	439	406	33	13	120	15
3–4 years	719	576	539	37	19	111	13
5–9 years	980	866	824	42	9	100	5
10–19 years	1,574	1,483	1,439	44	10	76	5
20 years and over	1,996	1,956	1,944	12	3	36	1
Median time since admission (years)	8	10	11	3	3	2	2
Ethnic group							
White	4,160	3,765	3,618	147	43	322	30
Nonwhite	3,723	3,129	2,999	130	40	515	39
Age (years)							
Less than 15	15	11	10	1	0	4	0
15–17	36	24	22	2	0	11	1
18–24	267	219	194	25	3	42	3
25–34	854	650	587	63	16	160	28
35–44	1,304	1,039	958	81	21	227	17
45–54	1,508	1,284	1,223	61	20	193	11
55–64	1,623	1,470	1,445	25	12	136	5
65–74	1,172	1,119	1,106	13	7	42	4
75–84	831	807	801	6	4	20	0
85 and over	273	271	271	0	0	2	0
Median age	55	56	57	41	46	44	36

[1] Resident patient status should not be confused with the D.C. resident legal category. The former is defined as patients in the hospital plus those on temporary visit.

Table 3.—*Movement of patients on the rolls, by sex, time since admission, ethnic group, and age, fiscal year 1962*

Sex, time since admission, ethnic group, and age	Patients on rolls June 30, 1961	Admissions	Discharges	Deaths	Patients on rolls June 30, 1962
Total	7,992	2,024	1,649	484	7,883
Males	4,047	1,129	962	233	3,981
Females	3,945	895	687	251	3,902
Time from admission to June 30, 1962					
Less than 6 months		1,080	290	19	773
6–11 months		944	402	65	474
1 year			472	77	780
2 years			165	50	587
3–4 years			117	52	719
5–9 years			86	71	980
10–19 years			72	64	1,574
20 years and over			45	86	1,996
Ethnic group					
White	4,244	1,036	836	284	4,160
Nonwhite	3,748	988	813	200	3,723
Age (years) [1]					
Less than 15	16	12	20	0	15
15–24	280	235	150	3	303
25–34	873	446	393	5	854
35–44	1,345	434	447	19	1,304
45–54	1,610	303	323	29	1,508
55–64	1,608	192	171	69	1,623
65–74	1,197	175	104	109	1,172
75–84	799	158	35	155	831
85 and over	264	69	6	95	273
Median age	54	42	41	75	55

[1] For individual age groups, the number of patients at the beginning of the year plus admissions minus discharges and deaths do not equal the number of patients at the end of the year. This is because some patients age from one group into the next during the year. For example, 7 patients who were less than 15 years of age on June 30, 1961, became 15 years old by June 30, 1962.

Table 4.—*Patients on the rolls by status and legal category, June 30, 1962*

Legal category	Patients on rolls, total	Resident patients [1]			On vacation	On convalescent leave	On unauthorized leave
		Total	In hospital	On temporary vist			
Total	7,883	6,894	6,617	277	83	837	69
Reimbursable	6,228	5,378	5,144	234	77	741	32
D.C. resident	5,382	4,714	4,534	180	58	587	23
D.C. voluntary	310	187	158	29	11	106	6
Veterans' Administration	411	364	341	23	5	39	3
U.S. Nationals from aboard	59	55	54	1	1	3	0
U.S. Soldiers Home	41	35	34	1	0	6	0
Indians (PHS)	21	21	21	0	0	0	0
Other reimbursable	4	2	2	0	2	0	0
Nonreimbursable	1,655	1,516	1,473	43	6	96	37
Total, excluding prisoners	803	757	731	26	4	42	0
D.C. nonresident	313	275	261	14	2	36	0
Military	252	250	248	2	0	2	0
Virgin Islands	134	132	132	0	1	1	0
Federal reservation	36	33	26	7	1	2	0
Public Health Service	17	17	16	1	0	0	0
Coast Guard	14	14	14	0	0	0	0
Canal zone	15	15	15	0	0	0	0
Other, excluding prisoners	22	21	19	2	0	1	0
Prisoners	852	759	742	17	2	54	37
D.C. total	782	689	672	17	2	54	37
For examination	87	81	81	0	0	2	4
Mentally incompetent	248	238	235	3	0	6	4
Not guilty by reason of insanity	296	240	233	7	2	32	22
Under sentence	90	89	89	0	0	0	1
Sex psychopath	61	41	34	7	0	14	6
U.S. prisoners	49	49	49	0	0	0	0
Military prisoners	21	21	21	0	0	0	0

[1] Resident patient status should not be confused with D.C. resident legal category. The former is defined as patients in the hospital plus those on temporary visit.

Table 5.—*Movement of patients on the rolls by legal category, fiscal year 1962*

Legal category	Patients on rolls, June 30, 1961	Admissions	Discharges	Deaths	Net changes in legal category	Patients on rolls, June 30, 1962
Total	7,992	2,024	1,649	484		7,883
Reimbursable	6,265	1,432	948	432	−89	6,228
D.C. Resident	5,464	1,213	618	401	−276	5,382
D.C. voluntary	292	192	227	10	+63	310
Veterans' Administration	406	12	58	16	+67	411
U.S. Nationals from abroad	(1)	3	1	1	+58	59
U.S. Soldiers Home	51	7	15	3	+1	41
Indians (PHS)	45	0	23	1	0	21
Other reimbursable	7	5	6	0	−2	4
Nonreimbursable	1,727	592	701	52	+89	1,655
Total, excluding prisoners	889	186	385	38	+151	803
D.C. nonresident	313	0	248	14	+262	313
Military	272	0	7	12	−1	252
Virgin Islands	138	4	3	5	0	134
Canadian insane	51	0	0	0	−51	(1)
Federal reservations	37	83	75	3	−6	36
Public Health Service	28	2	12	2	+1	17
Coast Guard	14	0	0	0	0	14
Canal Zone	16	0	0	1	0	15
Foreign Service (Employees)	10	0	4	0	−6	(1)
Other, excluding prisoners	10	97	36	1	−48	22
Prisoners	838	406	316	14	−62	852
D.C. total	786	364	295	13	−60	782
For examination	342	188	146	2	0	87
Mentally incompetent		53	91	9		248
Not guilty by reason of insanity	229	79	23	1	+12	296
Under sentence	151	39	27	1	−72	90
Sex psychopath	64	5	8	0	0	61
U.S. prisoners	30	42	21	0	−2	49
Military prisoners	22	0	0	1	0	21

[1] Two categories, Canadian Insane and Foreign Service (Employees), were discontinued effective November 1961 and January 1962 respectively. Patients in these categories were transferred to the new Category U.S. Nationals from Abroad.

Table 6.—*Discharges by status from which discharged and by condition, environment, and employment, fiscal year 1962*

Legal category	Total	From resident patient status [1]			From vacation	From convalescent leave	From unauthorized leave
		Total	Direct from hospital	From temporary visit			
Total	1,649	954	926	28	35	572	88
Condition or type							
Medical discharges	973	361	342	19	31	533	48
Condition on discharge:							
Recovered	60	19	17	2	1	40	0
Socially recovered	604	143	131	12	24	413	24
Improved	233	138	133	5	5	77	13
Unimproved	68	53	53	0	1	3	11
No mental disorder	8	8	8	0	0	0	0
Administrative discharges	676	593	584	9	4	39	40
Type of discharge:							
Against medical advice	72	57	56	1	0	1	14
To legal or police authorities	224	224	224	0	0	0	0
To home State or country	80	77	77	0	0	2	1
To VA hospital	37	36	36	0	0	1	0
Expiration of limited stay, court order, for admission to private hospital, etc	263	199	191	8	4	35	25
Environment							
Lives alone	194	78	74	4	4	95	17
With spouse	265	109	103	6	6	144	6
With relatives (not spouse)	426	217	202	15	13	184	12
With others	63	32	31	1	0	31	0
In foster-care home	10	0	0	0	0	10	0
In D.C. Village	34	3	3	0	0	31	0
In other home for aged, nursing, or convalescent home	19	14	14	0	0	4	1
In inpatient psychiatric institution	184	167	167	0	2	10	5
In penal institution	235	234	234	0	0	1	0
In other institution	54	38	38	0	1	14	1
Unknown environment	165	62	60	2	9	48	46
Employment							
Full time	244	67	62	5	7	167	3
Part time or intermittent	40	14	14	0	0	25	1
Not employed	1,079	757	738	19	13	277	32
Unknown employment	286	116	112	4	15	103	52

[1] Resident patient status should not be confused with D.C. resident legal category. The former is defined as patients in the hospital plus those on temporary visit.

American Printing House for the Blind

As the Official schoolbook printery for the blind in the United States, one of the principal functions of the American Printing House for the Blind, in Louisville, Ky., is the provision of special educational books and supplies for the blind school children throughout the country through the Federal act "To Promote the Education of the Blind." This act, originally passed in 1879, authorizes an annual appropriation to the Printing House for this purpose. Allocations of books and materials are made on a per capita basis. Only those pupils may be registered whose vision comes within the accepted definition of blindness as follows: "Central visual acuity of 20/200 or less in the better eye with correcting glasses, or a peripheral field so contracted that the widest diameter of such field subtends an angular distance no greater than 20 degrees."

The Printing House maintains large catalogs of Braille books, Talking Books, recorded tapes, Braille music publications, large-type texts, and tangible apparatus. A rich collection of educational material is thereby provided for the kindergarten through the high school grades. A total of 7,706 blind pupils was enrolled through public educational institutions for the blind and 8,267 through State departments of education—a total of 15,973 blind pupils being served by the Printing House—for the fiscal year ending June 30, 1962.

During the 1962 fiscal year, Braille books, educational periodicals, and music made up approximately 49.8 percent of the materials required by the schools: Braille slates, Braillewriters, maps, and other mechanical devices about 15.7 percent; Talking Books about 2.5 percent; recorded educational tapes about 0.5 percent; and large-type books about 29 percent. Approximately 2.5 percent was used for miscellaneous items.

Gallaudet College

Gallaudet College, established in 1857, is the only institution of higher learning in the world devoted exclusively to the education of the deaf. It is accredited by the Middle States Association of Colleges and Secondary Schools. Public Law 420, 83d Congress, approved June 18, 1954, clearly defines its status as a college, its relationship with the Federal Government and its responsibility to provide education and training to deaf persons and otherwise to further the education of the deaf.

The college's principal activity is a 4-year undergraduate course of studies leading to the B.A. and B.S. degrees. In addition, Gallaudet offers a 1-year college preparatory course. Deaf children of nursery age are taught in the Hearing and Speech Center. Elementary and secondary education for deaf children of the District of Columbia and adjacent States is provided by the Kendall School, a laboratory school serving the college's Department of Education. This department, established in 1891, trains graduate students, both deaf and hearing, for positions as teachers and administrators in schools from 48 States, the District of Columbia, and 9 foreign countries. Enrollment in the Kendall School was 92, of which 80 came from the District of Columbia.

The editorial offices of "dsh Abstracts" and of the "American Annals of the Deaf" are on the Gallaudet campus.

Howard University

Howard University, located in the District of Columbia, was chartered by an act of Congress, dated March 2, 1867. The university consists of 10 schools and colleges, offering programs of higher education on the undergraduate, graduate and professional levels. Undergraduate students are registered in the college of liberal arts; graduate students seeking the master's and doctor of philosophy degrees are registered in the graduate school; professional students are registered in the colleges of medicine, dentistry, pharmacy, fine arts (including the school of music and the departments of art and drama) and the schools of engineering and architecture, social work, law, and religion. (The school of religion receives no support from Federal funds.)

The educational program of the university is conducted in keeping with the democratic purposes of land-grant colleges and State universities, with the low tuition fees and living costs which characterize these institutions, and with an educational program resting upon and permeated by the content and spirit of a general or liberal education. The university admits students of both sexes, from every race, creed, and national origin, but it accepts and undertakes to discharge a special responsibility for the admission and training of Negro students.

ENROLLMENT OF STUDENTS

During the school year 1961–62, the university served a total of 8,704 students as follows: 6,338 during the regular academic year and 2,366 in the summer session of 1961. The total net enrollment, excluding all duplicates, was 7,118 distributed in the 10 schools and colleges as follows: liberal arts, 3,552; graduate school, 805; engineering and architecture, 778; fine arts, 375; social work, 126; medicine, 377; dentistry, 726; pharmacy, 177; law, 128; and religion, 74. The enroll-

ment of Negro professional students at Howard continues to be greater than in all the public-supported universities in all the Southern States.

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

Of the total of 6,699 students seeking degrees, 5,762 or 86 percent came from the States and the District of Columbia, while 937 students or 14 percent came from outside the continental United States including 2 possessions of the United States, 58 foreign countries, and 13 island possessions of the British, French, and Dutch West Indies. The percentage of foreign student enrollment to the total student enrollment at the university continues to be the highest in any American university.

The students from the United States were distributed as follows: New England States, 2 percent; Middle Atlantic States, 17 percent; East North Central States, 6 percent; West North Central States, 2 percent; Mountain States, 0.5 percent; South Atlantic States, 58 percent; East South Central States, 7.5 percent; West South Central States, 6 percent; and Pacific States, 1 percent.

The 937 students from outside the continental United States came from 58 foreign countries including Greenland, Canada, and Mexico, 5 countries in the Caribbean area, 3 countries in South America, 9 countries in Europe, 17 countries in Africa, 12 countries in the Near and Middle East, and 9 countries in the Far East. In addition, there were students from Puerto Rico, the Virgin Islands, and 13 of the British, French, and Dutch possessions in the West Indies.

VETERANS

During the 1961–62 school year, the student enrollment included 291 veterans and dependents of deceased veterans receiving allowances from the Veterans' Administration. One hundred eighty-nine of them were enrolled in the four undergraduate divisions of the university, and 102 were enrolled in the graduate and advanced professional schools. The number of enrolled veterans is steadily decreasing, and unless there is new legislation providing benefits for "peacetime veterans," there will be few veterans who have educational benefits still available to them after the 1962–63 school year.

ARMY AND AIR FORCE ROTC

Army ROTC.—There were 610 students enrolled in Army ROTC during the 1961–62 school year. Of this number, 284 were in the first-year course, 245 were in the second year, 44 were in the third year, and 37 were in the fourth year. There were 33 students commissioned as reserve officers in the Army during the year.

Air Force ROTC.—A total of 537 students was enrolled in Air Force ROTC. Of this number, 303 were in the first-year course, 201 were in the second year, 19 were in the third year, and 14 were in the

fourth year. During the year, 8 students were commissioned as reserve officers in the Air Force.

THE FACULTY

There were 801 teachers serving the university during the school year. Of this number, there were 431 full-time teachers, while 370 were part-time. The full-time equivalent of the teaching staff was 533.6. Of this full-time equivalent, 472.7 were teaching in the rank of instructor and above.

The university continues, as always, to seek for its faculty the most able persons who are selected on the basis of their competence and character, without regard to sex, race, color, creed, or national origin. It is to be noted, however, that the Howard University faculty has always included the largest group of Negro teachers and scholars at the university level found anywhere in the United States. Indeed, many of the most outstanding Negroes in public life have served at Howard University at some time during the course of their careers. Among such persons were the founder and operator of the first blood plasma bank, a governor of an American possession, an under secretary of the United Nations, and a member of the United States Court of Appeals.

The faculty continues to remain active in making a valuable contribution to education and the advancement of knowledge through significant research and scholarly publications.

GRADUATES

During the 1961–62 school year, there were 731 graduates from the 10 schools and colleges. These graduates came from 36 States, the District of Columbia, Puerto Rico, the Virgin Islands, 22 foreign countries, and 7 island possessions of the British, French, and Dutch West Indies. The 22 foreign countries included Greenland, Haiti, Cuba, British Guiana, Panama, 4 countries in Europe, 4 countries in Africa, 3 countries in the Middle East, and 6 countries in the Far East.

The 731 graduates were distributed among the 10 schools and colleges as follows: liberal arts, 311; engineering and architecture, 93; fine arts, 19; the graduate school, 68; social work, 43; medicine, 72; dentistry, 57; dental hygiene, 11; pharmacy, 28; law, 19; and religion, 10. In addition, honorary degrees were conferred upon three persons.

From the date of its establishment in 1867, Howard has graduated 23,174 persons. The great majority of these graduates have been Negroes. Throughout its 95-year history, Howard has been a pioneer in providing Negroes with educational opportunities which were either not available or offered in only a limited amount elsewhere. Among institutions in which Negro students are in a majority, the university

still stands as the only one affording a complex system of undergraduate, graduate, and professional training.

The largest number of graduates has entered the field of teaching, especially in the Southern States. In the field of medicine, there have been 3,239 graduates; 2,547 graduates have gone into dentistry and dental hygiene; 2,452 have entered the field of law; 822 have entered the ministry; 954 have gone into the fields of engineering and architecture; and 571 graduates have gone into social work. Numerous graduates of the university have been engaged in government activities, not only in the United States but also in many countries abroad.

PUBLIC SERVICE AT HOME AND OVERSEAS

Throughout the history of Howard, teachers and students have rendered valuable and distinguished service to government in the United States and overseas. This we view as being intimately related to the functions of a university—teaching, research, and public service.

During the 1961–62 school year, the university systematically undertook programs to aid in the improvement and development of the local community. As an illustration of this, the Vice-President for Special Projects provided leadership in the establishment of an interdisciplinary program involving social work, sociology, religion, psychology, medicine, government, law, and other departments, which, together with the churches in the 49th census tract in Washington, are giving guidance and assistance to the people in that area in solving their most pressing social, economic, and cultural problems. A more limited program has also been initiated along similar lines in a second neighborhood area in the community.

Early in the summer of 1962, Howard undertook an extensive Peace Corps training project which involved the training of volunteers going to Niger, Senegal, Togo, Sierra Leone, and Cyprus. In providing training for programs in five countries simultaneously, Howard had a greater number and variety of Peace Corps training programs at one time than any other institution in the country.

Many members of the faculties gave significant public service as individuals. A professor of law was on leave of absence to serve as chairman of the Public Utilities Commission of the District of Columbia, a professor of sociology was appointed to the Advisory Board of the National Capital Transportation Agency, an associate professor of government was appointed to the District of Columbia Board of Elections, and a professor of preventive medicine and public health was presented a "community service award" by the Health and Welfare Council of the National Capital Area. These examples are illustrative of the service being given by many other members of the staff.

In 1961–62 as in the past, there were teachers from Howard working and studying abroad. An associate professor of government, with the aid of a Rockefeller grant, was engaged in studying guerilla warfare in Laos and Viet Nam; a professor of English was working for the United States Information Agency in West Germany; the librarian of the university served as an adviser at the library of the University of Rangoon in Burma; the director of recording was on leave to serve as registrar in the establishment of a new educational institution in Sukka, Nigeria; and a professor of anatomy was working in India on the staff of the Agency for International Development.

Members of the staff were studying and teaching abroad, including one in Japan and another in Italy. There were many students traveling and studying in other countries, including 18 members of the university choir who participated in a choral workshop in Puerto Rico.

It is readily recognizable, therefore, that students and members of the staff are continuing the Howard tradition of significant service to people both at home and elsewhere.

THE BUILDING PROGRAM

During the school year 1961–62, construction proceeded on the new home economics building, which was expected to be ready for use in the fall of 1962. Work was begun on the construction of a new building providing for the physical education programs for men. The new physical education building will contain about 113,000 square feet and will include the following general categories of space: a gymnasium area for 2,500 spectators; a gymnasium for regular program work; two special exercise rooms; a standard intercollegiate-size swimming pool with seating for approximately 400 spectators; classrooms and offices; locker space and shower rooms; and equipment storage and other related spaces.

Plans and specifications were in preparation for the construction of a proposed new classroom building for the college of liberal arts and a new women's residence hall. Construction is expected to begin near the end of this school year. In addition, the university leased a facility to serve as a warehouse service building.

The university began a program of intensive study of its educational and physical plant needs for a number of decades in the future. The present master development program was completed in 1951. Its basis, however, rests essentially on a program which was designed in 1931. In view of the severe limitations placed upon its growth by the present limited campus, the university is endeavoring to make an even more intensive use of its present land resources, as well as exploring ways of expanding its campus area.

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