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Can the States Afford To Educate Their Children?

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FOREWORD

AS THIS Foreword is written, forty-one of our state legislatures are about to convene. In all states educational issues occupy an important place in the legislative program. In nearly all of the states the legislature faces the problem of securing funds for public schools. In most states the response will be favorable; in others a short-sighted policy may prevail. In either event, the action taken by the state legislatures will profoundly affect educational, cultural, and material progress.

In no state will financial issues be decided once and for all. They will arise again and again. Ignorance of the facts will always give rise to the fiction that the states cannot afford to make adequate outlays for schools. This Bulletin contains facts which conclusively refute any such position. Indeed, the question raised in the title, "Can the States Afford to Educate Their Children?" might very well be worded, "Can the States Afford Not to Educate Their Children?"

The preceding issue of the *Research Bulletin* dealt with the question of ability to support schools in the nation as a whole. This Bulletin, giving data by states, reveals that no state in the Union may truthfully say that it cannot afford to buy first-rate schools.

After all, public education is a public purchase—a purchase made by the citizens of the state for the benefit of their children. In self-protection every state has chosen to buy some education for its future citizens. The amount and quality of education which the people buy is one of the best evidences obtainable of the general level of civilization and culture which they have reached. To bring this fact home to the public is one of the professional duties of educational workers.

J. W. CRABTREE, *Secretary,*
National Education Association.

Wealth, Income, and School Support

THE preceding issue of the Research Bulletin presented certain facts concerning the development of public schools and their cost viewed in the light of the nation's ability to pay.¹ Among the facts revealed were the following:

First, a minor fraction of the nation's economic power and capital is invested in public schools.

Second, the nation expends annually for each of a number of items considerably more than it expends for public education. It is doubtful whether any of these items is of greater significance to the general welfare than is public education.

Third, the nation's total tax bill requires a smaller portion of its income than is required in other important countries.

Fourth, public school costs constitute approximately one fourth of the total tax bill, federal, state, and local.

Fifth, the percent of the nation's income applied to public expenditures has remained practically stationary in recent years.

Sixth, the percent of the nation's total income, and of its total tax bill, allotted for public school expenditures, has changed little in recent years.

Seventh, there is no evidence that the nation's tax payments, including those for school support, are hindering its economic development. On the contrary, unusual prosperity and unparalleled industrial expansion have prevailed.

Eighth, expenditures for public education can be justified under a policy of constructive economy in public outlays.

To what extent are the preceding conclusions true for individual states? The applicability to particular states of some of the statements may be determined by using the figures presented in this Bulletin. Space limitations and unavailability of data make it impossible to present the figures necessary to determine

the applicability of all of the statements to individual states.

In addition to the data here presented for the states, a series of three selected and annotated bibliographies is included.

From the state's point of view, support of public education hinges on two major problems: obtaining revenue for schools and apportioning this revenue to the local units of school control. Accordingly two bibliographies on state sources of revenue and on apportionment of state aid to schools are appended. The third bibliography deals with a selected series of issues in state school administration which are closely connected with fiscal problems. These issues are: the county as a unit for school taxation, state regulation of teachers' salaries, state support of a teacher's retirement system, state school budgeting, and sources of information about economic resources and school costs. An introductory note to each of these bibliographies points out the relationship of the topic to the general problem of school finance.

The first two tables of this Bulletin give the yearly expenditures for public schools, the amount invested in school property, the annual income and the total value of all tangible property in the various states. Figures are also given for each state as to the total amount of saving deposits and the yearly expenditures for life insurance, building construction, automobiles, and certain luxuries.

The figures given are subject to various interpretations. The principal purpose of presenting them here is to offer a basis whereby the cost of education in each of the states may be viewed in relation to its economic resources and ability to pay for certain important forms of service. The mere statement of the amount expended by a state for schools has little significance in itself. To obtain a proper perspective, it is necessary to compare school expenditures with a state's total eco-

¹ "Can the Nation Afford to Educate Its Children?" *Research Bulletin of the National Education Association*, vol. VI, no. 3, November, 1928.

conomic resources, and with the amount which it expends for other important services. Then it is possible to tell whether a state looks upon the education of its children as a matter of relatively large or small importance.

There is need for clear thinking concerning school costs. If we were to accept the shallow thinking of some, we might believe that money expended for schools is an economic loss. To such thinkers the sole effect of school expenditures is to reduce the total amount of income which we have to spend. They would have us believe that the outcome of schooling is limited to the accommodation which parents receive from having their children "minded" five or six hours a day. If such attitudes were based on solid grounds, it would be sound economic policy to keep down school expenditures to the lowest possible minimum.

It is true that in any one year the amount expended for schools somewhat reduces what we have available for food, clothing, shelter, the automobile, and other essentials or non-essentials. Such a narrow view of the effect of school expenditures, however, fails to get at the heart of the matter. A broad vision of the influence of good education suggests that instead of constituting an economic loss, money expended in good schools partakes both of the nature of sound investment and of insurance protection.

Such expenditure is an investment in that it creates the intelligence upon which an efficient economic system must be based. Ignorant citizens make neither good producers nor good consumers. The economic superiority of the United States and the high standard of living which we are able to maintain are the result of efficient organization, intelligent cooperation by the rank and file of workers, and the use of labor-saving machinery. Each of these is dependent upon the maintenance of a high general level of social intelligence, which is one of the products of an efficient system of education.

It is doubtless such considerations which recently led president-elect Hoover to state that the principal factors in the recent in-

crease in productivity in the United States are human rather than material and to specify education as one of the major influences which has brought about gain in the economic efficiency of our citizenship.¹

Viewed in this light, money spent for education is an investment of the highest order. Our yearly national income now approaches ninety billion dollars. That this income is ninety billions, rather than fifty or sixty billions, is very largely due to human factors, special capabilities possessed by the nation's citizenry, which are the result of such agencies as good schools. These qualities have not been developed in a day nor a decade. To the extent that they are an outcome of schooling, they are the product of many decades. The creation of a superior culture in any direction is the work of many generations. The nation since its beginning has maintained educational facilities so that a relatively large percent of the population might have opportunities to develop their potentialities. The fruit of this devotion to education is now being harvested.

Our annual investment in schools is now about two and a quarter billion dollars. Due chiefly to the special aptitudes which the schools have assisted in creating, our income has been increased by ten, twenty, or more billions a year. If the schools have had even a small share in discovering and developing these special aptitudes, the investment made in them has been an exceedingly profitable one.

These facts, and even a very limited acceptance of Herbert Hoover's contention that the improved quantity and quality of school instruction has made a substantial contribution to our increasing "productive capacity," would seem to offer full justification for looking upon school costs as an investment which pays handsome dividends.

This conception of the place of schools and education in our economic system suggests the importance of protecting our human assets. It suggests that we look upon expenditures for education as payments to a depreciation or insurance fund which it is the sheerest

¹ See: "Can the Nation Afford to Educate Its Children?" *Research Bulletin*, National Education Association, November, 1928, page 284.

folly to neglect. The special human aptitudes which have been principally responsible for recent economic advance in the United States are of a perishable rather than a permanent quality. This all-important asset may be completely lost in one generation. Were it not for education, our whole complex civilization would disappear in a generation and we would return to savagery. To be sure, savagery is not the only alternative to our present highly organized civilization. We could return to the level of economic efficiency obtaining before 1900. But most of us would prefer not to do this. We would prefer to maintain recent gains and to advance still further. To do this we must maintain and improve our human assets. This can be done only by keeping our educational facilities in first class condition.

It is important, therefore, that the schools of today be not merely good schools, but very good schools. Anything less is likely to mean a depreciation in those human factors—those human assets—which are the prepotent cause of the recent advance of the United States to a position of economic leadership.

Money expended for good schools by a state, therefore, rather than constituting an economic loss, represents a most excellent investment. It also represents a replacement or insurance payment, which protects from depreciation our most valuable assets.

It is in the light of these considerations that the tables of this Bulletin should be examined. Does an analysis of the figures presented indicate that your state looks upon the maintenance of first-rate schools as a matter of major significance? Or, does the proportion of your

state's income devoted to educational support indicate that this function is considered a minor project? Has every reasonable effort been made to place the financing of your schools on a sound basis? Or, are some features of your state school system less effective than they should be, due to inadequate financial support? How does the bill paid by your state for schools compare with that paid for other important items? Is education receiving as large a share of your state's expenditures for public purposes as its importance justifies? It is in considering questions such as these that the tables of this Bulletin will be suggestive.

The tables are so arranged that a state's position in each table may be compared with that of other states. This arrangement does not mean to imply that uniformity among the states is necessarily desirable in the items with which the tables deal. It is probably highly desirable that some states should invest a higher percent of income in education than others. This will certainly be necessary if some states are not to offer their children a decidedly inferior educational opportunity. Some states have from five to six times as much wealth and income behind each child to be educated as other states.¹ This means that the less favored states must choose between two alternatives:

1. Offer their children educational opportunities decidedly inferior to those which some states offer.
2. Allot a higher percent of income to school support—that is, meet relatively high tax rates for schools.

¹ Norton, John K. *Ability of the States to Support Education*, National Education Association, Washington, D. C.

FROM GENERATION to generation we hand on our vast material equipment, our knowledge of how to run it, and our stock of intellectual and spiritual ideas. If we were to suppress our educational system for a single generation, the equipment would decay, the most of our people would die of starvation, and intellectually and spiritually we should slip back four thousand years in human progress.—Herbert Hoover.

It is of increasing importance that the less wealthy states choose the latter course. In our early history a state's natural resources was the principal factor determining its economic position. Its supply of natural resources determined its wealth. This is becoming less and less true. Human resources are rapidly replacing natural resources as the prepotent factor in determining a state's economic status. A state poor as to natural resources can compensate by building up an efficient citizenry. A state's natural resources cannot be changed, its human resources can. And an efficient school system is the agency which can do most to bring about the changes in a state's citizenry which mean progress.

Hence variation in the percent of income devoted to school support is to be expected. Some states will find it possible to keep their schools at a relatively high point of efficiency on a low tax rate. Some states will find a high tax rate necessary to achieve the same result. There is no particular amount or percent of income which can be suggested as the desirable one for a state to allot to education.

It is of the greatest importance that every state shall constantly examine its school system in order to remove weak spots and to bring it to the highest possible point of efficiency. Neither cost nor other obstacles should be allowed to prevent achievement of this result. If it can be attained with a low tax rate, well and good. If high tax rates and real sacrifice are necessary they should be accepted. The cost of poor schools in the long run is likely to be far greater than the cost of good schools. The question should not be: Can we afford good schools? Rather it should be: Can we afford not to have good schools?

In presenting figures on the items of the tables, it is not intended to suggest that expenditures for these particular items should be reduced, or that they should be taxed for school support.¹ The development of a modern taxation system is a separate problem which cannot be dealt with here. Some at-

tention has been given to this matter in former Bulletins.²

Rather, the purpose of the tables is to present the cost of education along with sufficient other data so that it may be seen in proper economic perspective. We hear much about education being our biggest and most important business. To what extent is this true in your state? Can a state which devotes a minor percent of its economic power to school support, and which annually expends more for several other items than it expends for education, contend that it looks upon the proper education of its citizenry as a matter of major importance? Do the data for your state given in this Bulletin indicate that it is financially impossible to make such school improvements as wise educational experience suggests? These are the questions we should ask ourselves.

If a state really believes that education is a function of major importance it will see that early in the process of budgeting its income for various purposes, both public and private, sufficient financial support is allotted to schools. This will mean the rebuilding of the fiscal system in many states. It may be necessary to replace an obsolete, unfair scheme for raising revenue by one which is up to date and equitable. But this is not an insuperable thing to accomplish. It has already been accomplished by some states.

If difficulty is encountered in your state in securing the revenue necessary to desirable educational reorganization, is it due to lack of resources to tax, or a lack of willingness to pay the price? In short, does your state look upon education as a matter of first importance or of minor importance? It is to shed light on this question that the tables presented in this Bulletin were prepared.

State School Costs and Income

Table 1 gives figures for each state as to public school expenditures and income of the people of the state. The nation's yearly income was \$84,150,000,000 in 1926 and it ex-

¹ The various points of view on taxation problems may be obtained by consulting references in section 1 of the bibliography.

² "Major Issues in School Finance," *Research Bulletin of the National Education Association*. Vol. VI, No. 1, January, 1927, page 42.

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TABLE 1.—STATE SCHOOL EXPENDITURES AND INCOME IN 1926

States	Expended in 1925-26 for public elementary and secondary schools	Receipts of tax-supported universities, colleges and teacher training institutions	Total cost of public schools—elementary, secondary and collegiate	Estimated income 1926	Percent school cost is of income	Index of percentage relationship of school costs to income
1	2	3	4	5	6	7
United States.....	\$2,026,308,190	\$228,943,137	\$2,255,251,327	\$84,150,000,000	2.68	100.0
Alabama.....	17,351,483	2,831,833	20,183,316	917,235,000	2.20	82.1
Arizona.....	8,506,677	1,806,121	10,312,798	294,525,000	3.50	130.6
Arkansas.....	13,965,866	1,704,518	15,670,384	723,690,000	2.17	81.0
California.....	136,988,396	14,228,863	151,217,259	3,929,805,000	3.85	143.7
Colorado.....	26,549,547	4,075,604	30,625,151	816,255,000	3.75	139.9
Connecticut.....	32,942,897	1,681,463	34,624,360	1,329,570,000	2.60	97.0
Delaware.....	3,668,801	537,445	4,206,246	193,545,000	2.17	81.0
Dist. of Columbia.....	9,384,140	274,474	9,658,614	546,975,000	1.77	66.0
Florida.....	30,089,478	2,806,312	32,895,790	504,900,000	6.52	243.3
Georgia.....	17,357,622	3,340,561	20,698,183	1,287,495,000	1.61	60.1
Idaho.....	9,022,507	2,100,298	11,122,805	319,770,000	3.48	129.9
Illinois.....	138,933,835	8,641,030	147,574,865	6,386,985,000	2.31	86.2
Indiana.....	61,323,144	6,915,685	68,238,829	2,128,995,000	3.21	119.8
Iowa.....	57,288,245	10,193,926	67,482,171	1,725,075,000	3.91	145.9
Kansas.....	35,603,036	5,888,018	41,491,054	1,304,325,000	3.18	118.7
Kentucky.....	17,599,363	4,042,290	21,641,653	1,169,685,000	1.85	69.0
Louisiana.....	19,784,737	3,329,209	23,113,946	950,895,000	2.43	90.7
Maine.....	10,289,212	1,293,324	11,582,536	563,805,000	2.05	76.5
Maryland.....	21,770,107	4,806,994	26,577,101	1,262,250,000	2.11	78.7
Massachusetts.....	77,374,006	3,039,290	80,413,296	4,140,180,000	1.94	72.4
Michigan.....	99,447,319	14,031,158	113,478,477	3,290,265,000	3.45	128.7
Minnesota.....	51,929,667	9,326,829	61,256,496	1,699,830,000	3.60	134.3
Mississippi.....	12,599,596	3,087,476	15,687,072	647,955,000	2.42	90.3
Missouri.....	53,217,104	6,381,320	59,598,424	2,389,860,000	2.49	92.9
Montana.....	11,566,647	1,664,019	13,230,666	420,750,000	3.14	117.2
Nebraska.....	29,348,812	4,916,037	34,264,849	917,235,000	3.74	139.6
Nevada.....	1,957,816	648,585	2,606,401	84,150,000	3.10	115.7
New Hampshire.....	6,905,290	1,655,658	8,560,948	353,430,000	2.42	90.3
New Jersey.....	92,999,240	3,780,255	96,779,495	3,079,890,000	3.14	117.2
New Mexico.....	5,253,899	1,084,829	6,338,728	210,375,000	3.01	112.3
New York.....	247,449,799	10,915,234	258,365,033	12,243,825,000	2.11	78.7
North Carolina.....	34,691,669	6,502,523	41,194,192	1,152,855,000	3.57	133.2
North Dakota.....	14,355,347	2,720,037	17,075,384	387,090,000	4.41	164.6
Ohio.....	127,950,815	12,558,369	140,509,184	5,057,415,000	2.78	103.7
Oklahoma.....	29,067,827	5,229,271	34,297,098	1,304,325,000	2.63	98.1
Oregon.....	18,949,947	3,755,717	22,705,664	698,445,000	3.25	121.3
Pennsylvania.....	169,643,289	8,073,966	177,717,255	7,817,535,000	2.27	84.7
Rhode Island.....	10,300,469	958,884	11,259,353	605,880,000	1.86	69.4
South Carolina.....	16,097,019	3,100,955	19,197,974	748,935,000	2.56	95.5
South Dakota.....	15,135,719	3,036,949	18,172,668	454,410,000	4.00	149.3
Tennessee.....	20,501,486	2,880,895	23,382,381	1,018,215,000	2.30	85.8
Texas.....	65,238,638	10,858,587	76,097,225	3,046,230,000	2.50	93.3
Utah.....	10,012,894	1,345,270	11,358,164	311,355,000	3.65	136.2
Vermont.....	4,525,831	722,778	5,248,609	244,035,000	2.15	80.2
Virginia.....	21,823,215	6,561,651	28,384,866	1,186,515,000	2.39	89.2
Washington.....	30,727,980	5,134,342	35,862,322	1,211,760,000	2.96	110.4
West Virginia.....	26,235,479	3,810,477	30,045,956	908,820,000	3.31	123.5
Wisconsin.....	45,744,025	9,544,496	55,288,521	1,952,280,000	2.83	105.6
Wyoming.....	6,838,253	1,119,312	7,957,565	210,375,000	3.78	141.0

Read table thus: In 1926 the current income of Alabama is estimated at \$917,235,000. Expenditures for public elementary and secondary schools in Alabama in 1926 were \$17,351,483; for public colleges, etc., Alabama expended \$2,831,833; making a total of \$20,183,316 expended for all public schools in Alabama, or 2.20 percent of the current income of that state. In the nation as a whole, the corresponding percent was 2.68 percent. If this last percent is given the value 100 as in column 7, then the percent for Alabama (2.20) has the value 82.1. Similarly interpret figures for other states.

Sources of data: Figures of columns 2, 3, and 4 from U. S. Bureau of Education, Bulletin 1927, Nos. 30, 39, and 40. The total cost of education as given in column 4 omit, because of lack of data, expenditures of certain institutions, for example, institutions for the deaf, blind, and feeble-minded, etc. Also note that figures representing the collegiate costs are receipts rather than expenditures. In this Bulletin these figures have been treated as expenditures.

The figure as to the national total income is an average of the estimates of the National Industrial Conference Board and the National Bureau of Economic Research. This total was distributed among the states of the union on the basis of the average of the total national income found in each state in the years 1919 and 1920 as estimated by the National Bureau of Economic Research.

pended \$2,255,251,327 for public education. We expended 2.68 percent of our income for public education in 1926. The corresponding percents for the various states vary from 6.52 to 1.61. The high percent for Florida needs interpretation for two reasons. First, the method of estimating possibly arrives at a smaller income for this state than is actually the case. Second, the cost of education in this state has been increased by the emergency expenditures necessary to replace the buildings destroyed in the hurricane. An unusually large proportion of the school expenditures in this state in 1926 was for buildings,¹ most of which represent a permanent investment. The expenditures for education in Florida, therefore, are not comparable to those in some states. Special interpretations of the figures for other states could be made if space permitted.

The last two columns of the table allow a state to compare itself with other states as to the percent of income expended for public education. Selecting Alabama as an example, the table indicates that Alabama expends 2.20 percent, while the nation as a whole expends 2.68 percent of its income for education. That is, Alabama expends a smaller percent of its income for school support than does the nation as a whole.

The table reveals that school costs in every state in the union constitute a minor fraction of the income possessed. Chart I graphically presents the situation.

State Wealth and Value of School Property

Table 2 gives figures as to value of public school property and value of all tangible property in the various states. The nation's tangible property is at present valued at approximately \$375,000,000,000, its school property at \$5,391,127,353. The nation has 1.44 percent of its tangible property, or wealth, invested in public school plants. The corresponding percents for the various states range from 2.11 to .94 of one percent.

The figures in column 5 of Table 2 make

it possible to compare the states as to percent of wealth invested in school property. Taking Connecticut, as an example, the table indicates that 1.40 percent of the tangible property of this state is school property, while the corresponding percent for the nation as a whole is 1.44. Connecticut, according to Column 7 of Table 2, has slightly less, or 97.2 percent as much of its total wealth invested in school property as the country as a whole. Chart II graphically presents the situation.

Value of school property and savings deposits. Table 2 also presents figures as to the value of savings deposits in the various states. The total value of the sites, buildings, and physical equipment of the public schools of the country—elementary, secondary, and collegiate—is \$5,391,127,353, which is 20.66 percent of the \$26,090,907,000 on deposit in the nation's savings accounts. For every dollar invested in public school property we have five dollars on deposit in savings accounts.

In all but two states savings deposits are more than the value of school property. The ratio of investment in school property to savings accounts varies widely. Vermont and Rhode Island have more than twelve times as much in savings accounts as is invested in public school property. In New Mexico, on the other hand, school property is valued at a higher figure than the amount in savings deposits. These differences are due to influences affecting the two variables concerned. Some states are more generous than others in their provision for education. The cost of education per pupil is generally more in sparsely than in thickly settled states. The factors affecting the proportion of a state's income deposited in savings accounts also vary in different states.

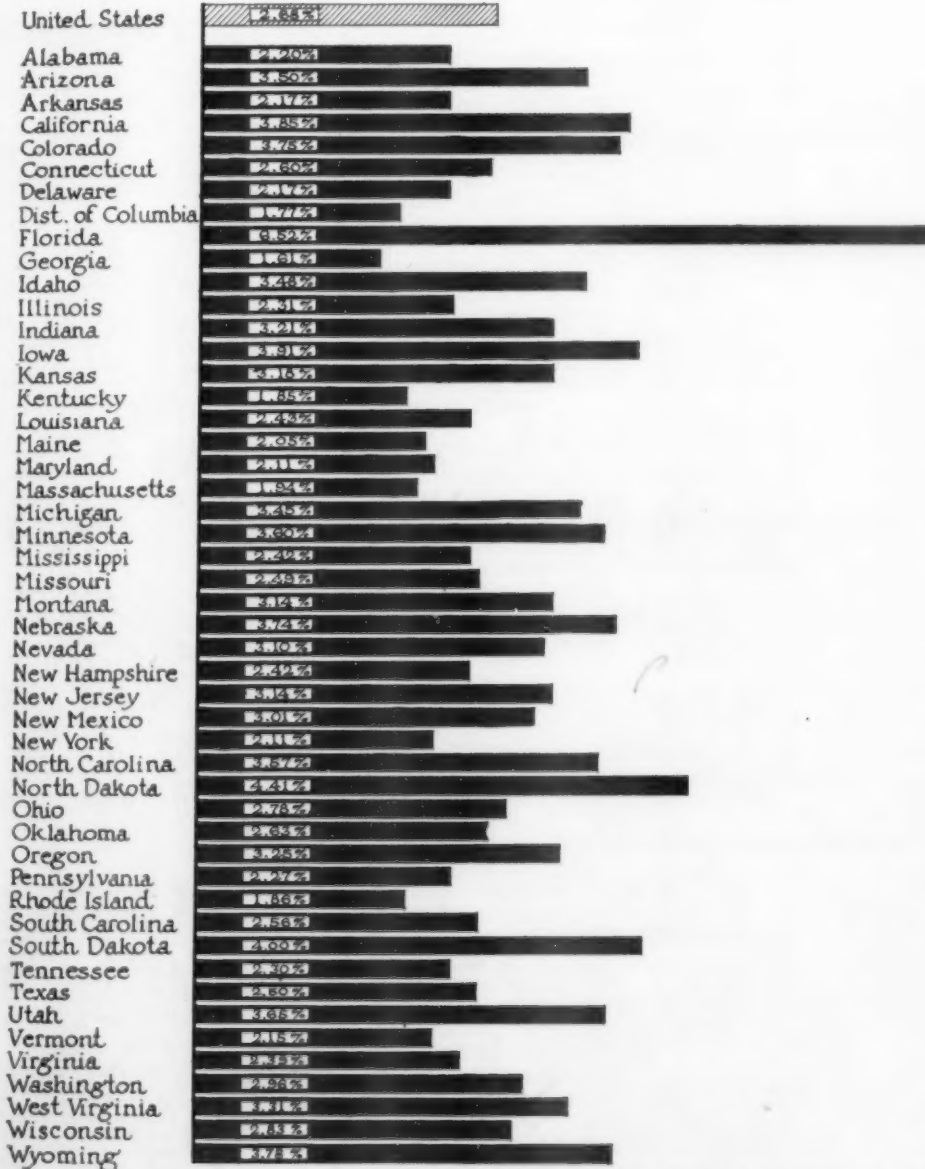
State Investments in Life Insurance, Building Construction and Public Education

Table 3 gives figures by states as to their annual bills for life insurance, building construction, and for public schools. In 1926 we invested \$2,624,000,000 in life insurance

¹ In 1926, 48.2 percent of Florida's expenditures for public elementary and secondary education was for buildings and sites, whereas the corresponding percent in the United States as a whole was 20.3.

CHART I

PERCENT OF INCOME EXPENDED FOR PUBLIC SCHOOLS BY THE VARIOUS STATES IN 1926



Research Division, National Education Assn.

Calculations based on figures of the National Industrial Conference Board, the National Bureau of Economic Research, and the U.S. Bureau of Education.

TABLE 2.—VALUE OF SCHOOL PROPERTY, WEALTH AND SAVING DEPOSITS BY STATES

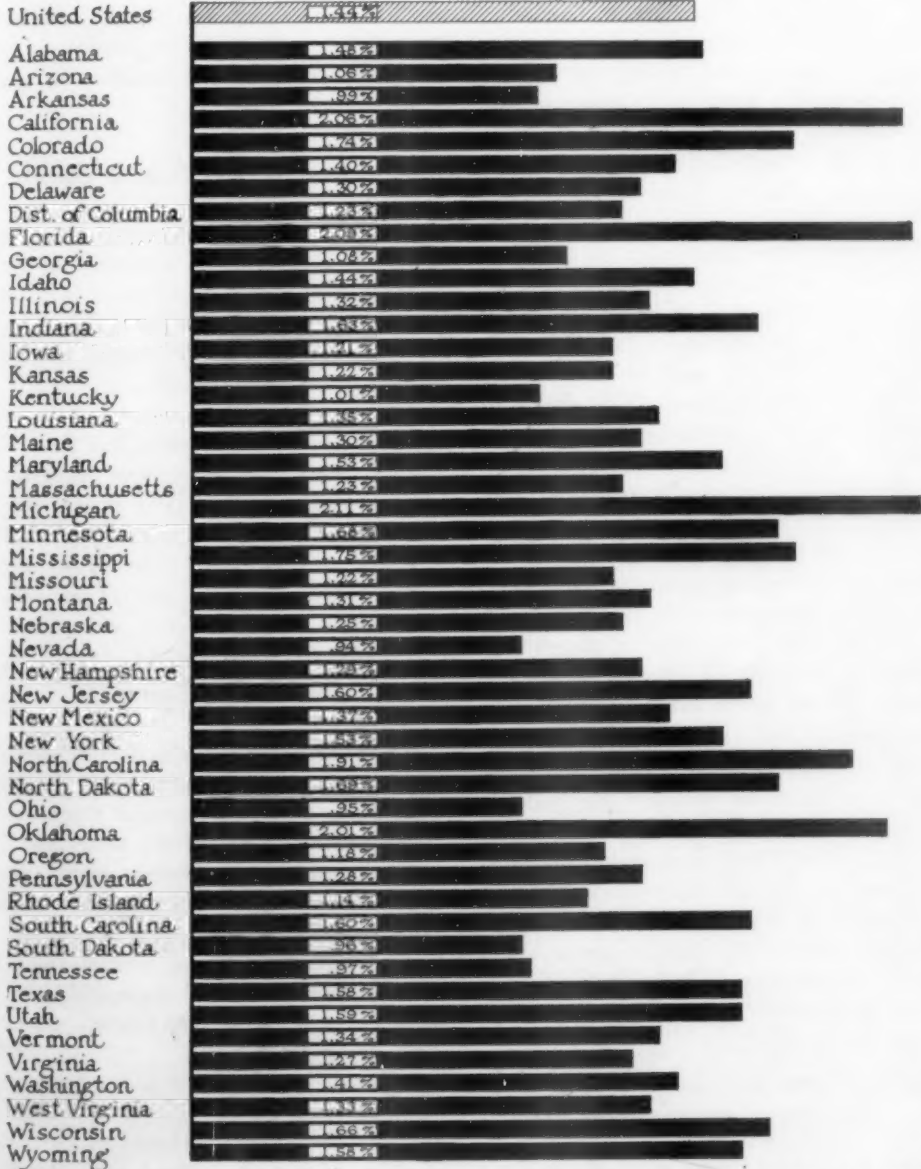
States	Value of public school property, elementary and collegiate	Wealth (value of all tangible property)	Total saving deposits	Percent value of school property is of		Index of percentage relationship of value of school property and	
				Wealth	Saving deposits	Wealth	Saving deposits
1	2	3	4	5	6	7	8
United States.....	\$5,391,127,353	\$375,000,000,000	\$26,090,907,000	1.44	20.66	100.0	100.0
Alabama.....	52,932,511	3,577,500,000	105,650,000	1.48	50.10	102.8	242.5
Arizona.....	16,539,810	1,567,500,000	27,337,000	1.06	60.50	73.6	292.8
Arkansas.....	30,600,023	3,097,500,000	73,123,000	.99	41.85	68.8	202.6
California.....	369,569,367	17,910,000,000	1,768,135,000	2.06	20.90	143.1	101.2
Colorado.....	66,902,022	3,847,500,000	108,942,000	1.74	61.41	120.8	297.2
Connecticut.....	88,446,580	6,296,250,000	795,605,000	1.40	11.12	97.2	53.8
Delaware.....	9,704,534	746,250,000	56,948,000	1.30	17.04	90.3	82.5
Dist. of Columbia.....	24,919,000	2,021,250,000	88,773,000	1.23	28.07	85.4	135.9
Florida.....	60,763,152	2,906,250,000	163,287,000	2.09	37.21	145.1	180.1
Georgia.....	50,318,325	4,642,500,000	139,814,000	1.08	35.99	75.0	174.2
Idaho.....	26,366,766	1,826,250,000	29,739,000	1.44	88.66	100.0	429.1
Illinois.....	348,894,066	26,490,000,000	1,456,440,000	1.32	23.96	91.7	116.0
Indiana.....	171,474,173	10,522,500,000	404,509,000	1.63	42.39	113.2	205.2
Iowa.....	152,053,401	12,525,000,000	486,357,000	1.21	31.26	84.0	151.3
Kansas.....	90,826,485	7,462,500,000	122,431,000	1.22	74.19	84.7	359.1
Kentucky.....	42,927,165	4,267,500,000	191,669,000	1.01	22.40	70.1	108.4
Louisiana.....	54,802,427	4,072,500,000	129,399,000	1.35	42.35	93.8	205.0
Maine.....	31,107,316	2,392,500,000	297,992,000	1.30	10.44	90.3	50.5
Maryland.....	72,575,287	4,755,000,000	435,658,000	1.53	16.66	106.3	80.6
Massachusetts.....	190,106,803	15,468,750,000	2,439,613,000	1.23	7.79	85.4	37.7
Michigan.....	287,074,486	13,590,000,000	1,093,895,000	2.11	26.24	146.5	127.0
Minnesota.....	170,921,653	10,185,000,000	525,754,000	1.68	32.51	116.7	157.4
Mississippi.....	45,353,647	2,595,000,000	97,439,000	1.75	46.55	121.5	225.3
Missouri.....	144,973,481	11,895,000,000	326,585,000	1.22	44.39	84.7	214.9
Montana.....	34,682,997	2,647,500,000	53,041,000	1.31	55.02	91.0	266.3
Nebraska.....	79,366,009	6,337,500,000	199,453,000	1.25	39.79	86.8	192.6
Nevada.....	6,085,782	645,000,000	20,250,000	.94	30.05	65.3	145.5
New Hampshire.....	21,120,312	1,638,750,000	213,782,000	1.29	9.88	89.6	47.8
New Jersey.....	224,700,007	14,055,000,000	1,237,520,000	1.60	18.16	111.1	87.9
New Mexico.....	13,959,524	1,016,250,000	8,486,000	1.37	164.50	95.1	796.2
New York.....	673,744,731	44,130,000,000	6,474,741,000	1.53	10.41	106.3	50.4
North Carolina.....	103,643,195	5,415,000,000	156,737,000	1.91	66.13	132.6	320.1
North Dakota.....	49,831,444	2,940,000,000	80,438,000	1.69	61.95	117.4	299.9
Ohio.....	208,850,468	22,031,250,000	1,275,672,000	.95	16.37	66.0	79.2
Oklahoma.....	95,630,626	4,758,750,000	95,054,000	2.01	100.61	139.6	487.0
Oregon.....	48,059,330	4,076,250,000	115,747,000	1.18	41.52	81.9	201.0
Pennsylvania.....	441,357,416	34,357,500,000	2,516,497,000	1.28	17.54	88.9	84.9
Rhode Island.....	26,181,959	2,291,250,000	351,332,000	1.14	7.45	79.2	36.1
South Carolina.....	45,767,220	2,865,000,000	92,139,000	1.60	49.67	111.1	240.4
South Dakota.....	33,512,742	3,483,750,000	65,787,000	.96	50.94	66.7	246.6
Tennessee.....	48,865,443	5,040,000,000	171,953,000	.97	28.42	67.4	137.6
Texas.....	185,273,836	11,737,500,000	185,845,000	1.58	99.69	109.7	482.5
Utah.....	29,106,363	1,830,000,000	66,816,000	1.59	43.56	110.4	210.8
Vermont.....	13,452,780	1,005,000,000	193,182,000	1.34	6.96	93.1	33.7
Virginia.....	73,814,042	5,827,500,000	243,831,000	1.27	30.27	88.2	146.5
Washington.....	86,082,576	6,105,000,000	199,897,000	1.41	43.06	97.9	208.4
West Virginia.....	74,033,262	5,372,500,000	163,748,000	1.33	45.21	92.4	218.8
Wisconsin.....	155,433,932	9,371,250,000	511,757,000	1.66	30.37	115.3	147.0
Wyoming.....	18,418,877	1,162,500,000	22,108,000	1.58	83.31	109.7	403.2

Read table thus: In 1926 the value of all tangible property in Alabama is estimated at \$3,577,500,000. The value of public school buildings, elementary, secondary, and collegiate, in Alabama in 1926 was \$52,932,511, or 1.48 percent as much as the value of all tangible property. In the nation as a whole, the corresponding percent was 1.44. If this last percent is given the value 100, as in column 7, then the percent for Alabama (1.48) has the value 102.8. In 1926 the total savings deposits in Alabama were \$105,650,000. The value of public school property in Alabama in 1926 was 50.10 percent of this amount. In the nation as a whole, value of school property was 20.66 percent of the total savings deposits. If this percent is given the value 100, as in column 8, then the percent for Alabama (50.10) has the value of 242.5. Similarly interpret data for other states.

Sources of data: The figures of column 2 are from the U. S. Bureau of Education, Bulletin 1927, Nos. 30, 39, and 40. Figures as to wealth are estimates. In arriving at the national total the following were used: The figure of the National Industrial Conference Board for national wealth of the United States in 1925. *Conference Board Bulletin*, No. 5, May, 1927, p. 34, and the estimate of the Department of Commerce of the amount of annual savings in the United States *Commerce Yearbook 1928*, p. 22, 653. Figures of column 4 are from the *Savings Deposits and Depositors, 1912, 1917, 1922, 1927*, issued by The American Bankers Association.

CHART II

PERCENT VALUE OF SCHOOL PROPERTY IN THE VARIOUS STATES IS OF VALUE OF ALL PROPERTY



Research Division, National Education Assn.

Calculations based on figures of the U.S. Department of Commerce, and the U.S. Bureau of Education.

and \$2,255,251,327 in public schools. Our school bill is 85.95 percent of our insurance bill. The corresponding percent in different states varies widely.

Investments in life insurance and in public education are two of the most important forms of insurance a civilized nation can maintain. They protect the future of the individual and of the nation and are important factors in increasing capital. It is interesting to study in Table 3 the amount which the various states expend for these two important national services.

School Costs and Payments for Building Construction. Money invested in building construction is another important form of national savings since practically all buildings constructed continue to exist for a considerable period of years. In recent years the United States has expended approximately three times as much for new buildings as for all types of school support. The ability of the nation to find such large sums for the erection of new buildings is further evidence of its increasing economic strength. It has been suggested that we have reached a new plane of construction demand "and that the higher level represented in the last three years is more or less permanent."¹ In short, building is taking place not only in response to population growth, but in response to demands for better homes, better office buildings, and better equipped factories.

Table 3 shows that the United States annually expends \$6,787,000,000 for building construction and \$2,255,251,327 for public education. In all but three of the states in the Union the annual expenditure for new buildings is larger than that for public schools. The ratio varies widely due to special conditions in different states which affect either or both of the variables concerned.

Expenditures for Schools and for Passenger Automobiles

Table 4 presents figures as to the nation's annual bill for public schools and for passenger automobiles. The purchase and opera-

tion of passenger automobiles cost the nation approximately twelve billion dollars annually, as compared with two and a quarter billion for schools. The ratio of school to automobile costs varies in different states, but in every state the amount expended for automobiles is several times that paid for schools. Most states expend from four to six dollars for the purchase and operation of automobiles for each dollar expended for public education. Chart III presents the situation in graphic form.

Luxuries and School Costs

Table 5 estimates the yearly expenditures of the various states for a number of articles in the luxury class. We expend over six billion dollars annually for the articles listed in the table. This is approximately three times the cost of all public schools.

The ratio between the school and the luxury bill varies in different states, but there is not a state which does not expend more for the articles indicated in the table than it does for all public schools. Chart IV graphically depicts the percent which school costs in each state is of expenditures for certain luxuries.

Tax Collections and School Costs in the United States

Confusion often arises as to the proportion of tax money expended for public education. This comes from the fact that three types of governmental units, federal, state, and local, collect taxes. Approximately eighty percent of school revenue comes from taxes levied by local jurisdictions. In some states the support of schools is almost wholly from local taxes, whereas other governmental costs may be divided between the federal, state, and local government.

Table 6 gives figures as to the total tax bill by states for 1926, the last year for which figures are available, and indicates the percent of this which is for school support. Chart V indicates for each state the percent public school costs is of total tax collections.

¹ "Are We on a New Plane of Construction Demand?" *Engineering News-Record*, August 27, 1925, p. 367.

**TABLE 3.—THE STATES' ANNUAL BILLS FOR SCHOOLS, LIFE INSURANCE
AND BUILDING CONSTRUCTION**
(School buildings included in building costs)

States	Cost of public education, ele- mentary, second- ary and collegiate, in 1926	Expenditures for life insurance in 1926	Percent cost of schools in of expendi- tures for life insur- ance	Expenditures for building construction	Percent cost of schools in of expendi- tures for building construction	Index of percentage relationship of school expenditures to	
						Payments for life in- surance	Expendi- tures for building construction
1	2	3	4	5	6	7	8
United States.....	\$2,255,251,327	\$2,624,000,000	85.95	\$6,787,000,000	33.23	100.0	100.0
Alabama.....	20,183,316	25,190,400	80.12	76,627,400	26.34	93.2	79.3
Arizona.....	10,312,798	4,198,400	245.64	16,876,452*	61.11	285.8	183.9
Arkansas.....	15,670,384	16,268,800	96.32	34,957,900	44.83	112.1	135.0
California.....	151,217,259	120,441,600	125.55	276,185,202*	54.75	146.1	164.8
Colorado.....	30,625,151	21,254,400	144.09	33,752,904*	90.73	167.6	273.0
Connecticut.....	34,624,360	48,806,400	70.94	100,732,400	34.37	82.5	103.4
Delaware.....	4,206,246	7,084,800	59.37	10,615,600	39.62	69.1	119.2
Dist. of Columbia.....	9,658,614	17,056,000	56.63	72,147,100	13.39	65.9	40.3
Florida.....	32,895,790	22,828,800	144.10	120,901,900	27.21	167.7	81.9
Georgia.....	20,698,183	34,899,200	59.31	67,213,500	30.79	69.1	92.7
Idaho.....	11,122,805	5,248,000	211.94	16,876,452*	65.91	246.6	198.4
Illinois.....	147,574,865	210,182,400	70.21	776,153,300	19.01	81.7	57.2
Indiana.....	68,238,829	62,188,800	109.73	140,357,300	48.62	127.7	146.3
Iowa.....	67,482,171	45,132,800	149.52	45,696,100	147.68	174.0	444.4
Kansas.....	41,491,054	28,601,600	145.07	50,042,100	82.91	168.8	249.5
Kentucky.....	21,641,653	33,849,600	63.93	75,988,800	28.48	74.4	85.7
Louisiana.....	23,113,946	24,665,600	93.71	59,468,300	38.87	109.0	117.0
Maine.....	11,582,536	16,006,400	72.36	17,689,700	65.48	84.2	197.1
Maryland.....	26,577,101	42,771,200	62.14	96,140,500	27.64	72.3	83.2
Massachusetts.....	80,413,296	131,987,200	60.93	238,196,600	33.76	70.1	101.6
Michigan.....	113,478,477	90,790,400	124.99	367,172,200	30.91	145.4	93.0
Minnesota.....	61,256,496	49,068,800	124.84	62,171,100	98.53	145.3	296.5
Mississippi.....	15,687,072	15,219,200	103.07	36,058,000	43.51	119.9	130.9
Missouri.....	59,598,424	87,379,200	68.21	170,278,200	35.00	79.4	105.3
Montana.....	13,230,666	9,971,200	132.69	19,911,454*	66.45	154.4	200.0
Nebraska.....	34,264,849	24,140,800	141.94	34,510,300	99.29	165.2	298.8
Nevada.....	2,606,401	1,049,600	248.32	1,747,425*	149.16	288.9	448.9
New Hampshire.....	8,560,948	10,233,600	83.66	8,690,400	98.51	97.3	296.5
New Jersey.....	96,779,495	103,385,600	93.61	350,832,400	27.59	108.9	83.0
New Mexico.....	6,338,728	2,361,600	268.41	8,507,203*	74.51	312.3	224.2
New York.....	258,365,033	508,006,400	50.86	1,401,006,000	18.44	59.2	55.5
North Carolina.....	41,194,192	35,686,400	115.43	85,063,400	48.43	134.3	145.8
North Dakota.....	17,075,384	7,347,200	232.41	10,243,100	166.70	270.4	501.7
Ohio.....	140,509,184	169,772,800	82.76	455,261,600	30.86	96.3	92.9
Oklahoma.....	34,297,098	24,928,000	137.58	89,950,000	38.13	160.1	114.8
Oregon.....	22,705,664	17,843,200	127.25	37,155,785*	61.11	148.1	183.9
Pennsylvania.....	177,717,255	251,641,600	70.62	588,471,900	30.20	87.2	90.9
Rhode Island.....	11,259,353	22,041,600	51.08	39,912,500	28.21	59.4	84.9
South Carolina.....	19,197,974	17,843,200	107.59	49,234,500	38.99	125.2	117.3
South Dakota.....	18,172,668	8,134,400	223.41	8,712,500	208.58	259.9	627.7
Tennessee.....	23,382,381	34,636,800	67.51	81,264,400	28.77	78.6	86.6
Texas.....	76,097,225	53,529,600	142.16	219,105,000*	34.73	165.4	104.5
Utah.....	11,358,164	8,396,800	135.27	13,289,631*	85.47	157.4	257.2
Vermont.....	5,248,609	7,609,600	68.97	7,545,700	69.56	80.3	209.3
Virginia.....	28,384,866	34,112,000	83.21	65,643,800	43.24	96.8	130.1
Washington.....	35,862,322	31,225,600	114.85	52,008,902*	68.95	133.6	207.5
West Virginia.....	30,045,956	22,828,800	131.61	47,620,400	63.09	153.1	189.9
Wisconsin.....	55,288,521	53,792,000	102.78	141,379,200	39.11	119.6	117.7
Wyoming.....	7,957,565	2,361,600	336.96	7,633,490*	104.25	392.1	313.7

Read table thus: In 1926, there was \$20,183,316 paid as life insurance premiums in the state of Alabama. Expenditures for public elementary, secondary, and collegiate schools in Alabama in 1926 were 80.12 percent as much as was paid for life insurance in that state. In the nation as a whole, expenditures for public schools were 85.95 percent of the amount paid in life insurance premiums. If this last percent is given the value 100, as in column 7, then the percent for Alabama (80.12) has the value 93.2. Similarly interpret data for other columns and other states.

Sources of data: The figures of column 2 are from the U. S. Bureau of Education, Bulletin, 1927, Nos. 30, 39, and 40. The figure representing the collegiate costs are receipts rather than expenditures. Expenditures for these institutions are not available. The national total for expenditures for life insurance in 1926 as given in column 3 is from *Commerce Yearbook 1928*, page 652. This total was distributed among the states according to the percentage distribution as calculated from figures of *Insurance Yearbook 1927*, The Spectator Co., p. A 398-9. The figures of column 5 are from *The Graphic Review*, Supplement Fourth Quarter, January, 1928. Those followed by an asterisk are estimated, using the estimate of the National Bureau of Economic Research as to the percent of the total volume of construction in these states as given in *Income in the Various States*, page 70. The figures given as to cost of building construction in the United States include cost of school buildings which is over \$400,000,000 a year for public elementary and secondary schools. The percent which the cost of public education is of the cost of building construction will be slightly increased if the cost of school buildings was deducted from construction cost of all buildings.

TABLE 4.—THE STATES' ANNUAL BILLS FOR SCHOOLS AND PASSENGER AUTOMOBILES

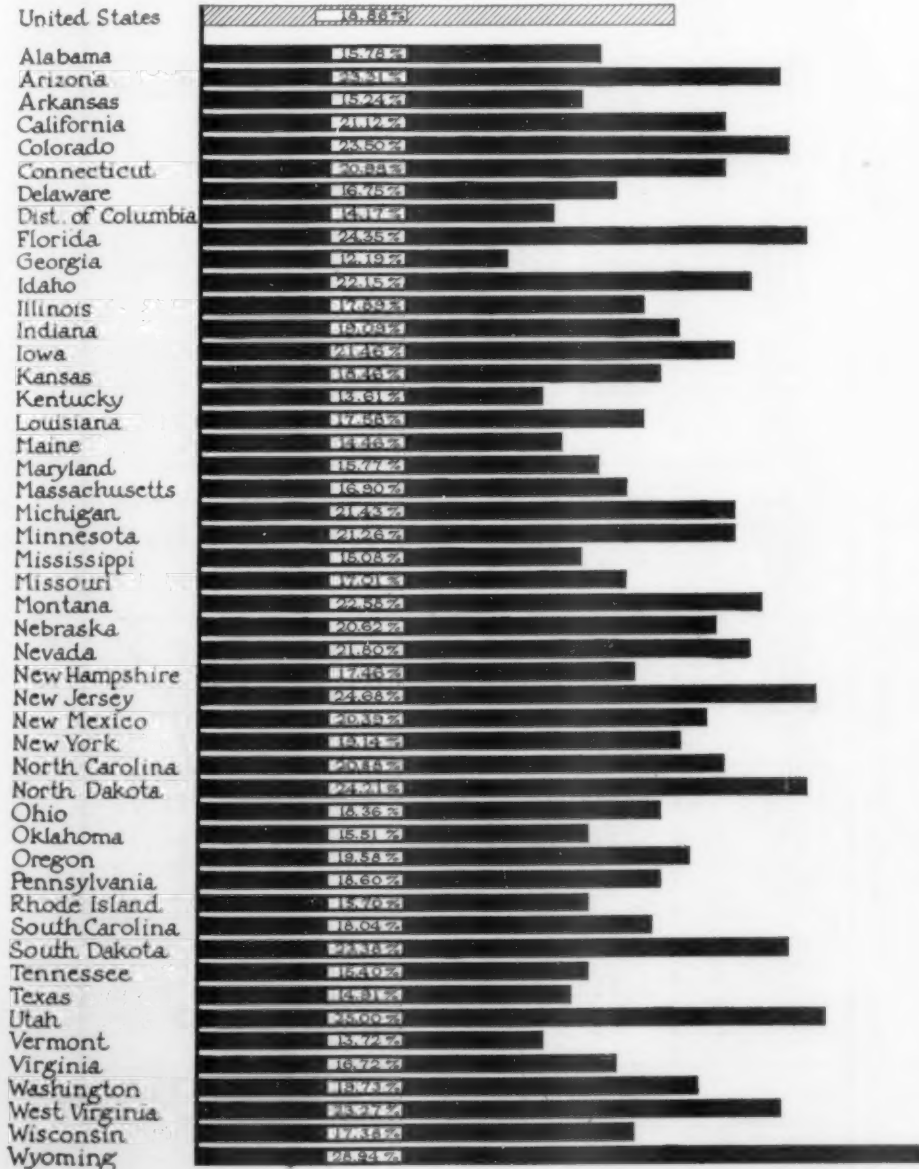
States	Cost of public schools, elementary, secondary and collegiate in 1926	Expenditures for passenger automobiles in 1927	Percent cost of schools is of expenditures for passenger automobiles	Index of percentage relationship of school costs to expenditures for passenger automobiles
1	2	3	4	5
United States.....	\$2,255,251,327	\$11,955,907,443	18.86	100.0
Alabama.....	20,183,316	127,928,210	15.78	83.7
Arizona.....	10,312,798	44,236,858	23.31	123.6
Arkansas.....	15,670,384	102,820,804	15.24	80.8
California.....	151,217,259	716,158,856	21.12	112.0
Colorado.....	30,625,151	130,319,391	23.50	124.6
Connecticut.....	34,624,360	164,991,523	20.99	111.3
Delaware.....	4,206,246	25,107,406	16.75	88.8
Dist. of Columbia.....	9,658,614	68,148,672	14.17	75.1
Florida.....	32,895,790	135,101,754	24.35	129.1
Georgia.....	20,698,183	169,773,886	12.19	64.6
Idaho.....	11,122,805	50,214,811	22.15	117.4
Illinois.....	147,574,865	824,957,614	17.89	94.9
Indiana.....	68,238,829	357,481,633	19.09	101.2
Iowa.....	67,482,171	314,440,366	21.46	113.8
Kansas.....	41,491,054	224,771,060	18.46	97.9
Kentucky.....	21,641,653	159,013,569	13.61	72.2
Louisiana.....	23,113,946	131,514,982	17.58	93.2
Maine.....	11,582,536	80,104,580	14.46	76.7
Maryland.....	26,577,101	168,578,295	15.77	83.6
Massachusetts.....	80,413,296	475,845,116	16.90	89.6
Michigan.....	113,478,477	529,646,700	21.43	113.6
Minnesota.....	61,256,496	288,137,369	21.26	112.7
Mississippi.....	15,687,072	104,016,395	15.08	80.0
Missouri.....	59,598,424	350,308,088	17.01	90.2
Montana.....	13,230,666	58,583,946	22.58	119.7
Nebraska.....	34,264,849	166,187,113	20.62	109.3
Nevada.....	2,606,401	11,955,907	21.80	115.6
New Hampshire.....	8,560,948	49,019,221	17.46	92.6
New Jersey.....	96,779,495	392,153,764	24.68	130.9
New Mexico.....	6,338,728	31,085,359	20.39	108.1
New York.....	258,365,033	1,349,821,950	19.14	101.5
North Carolina.....	41,194,192	197,272,473	20.88	110.7
North Dakota.....	17,075,384	70,539,854	24.21	128.4
Ohio.....	140,509,184	765,178,076	18.36	97.3
Oklahoma.....	34,297,098	221,184,288	15.51	82.2
Oregon.....	22,705,664	115,972,302	19.58	103.8
Pennsylvania.....	177,717,255	955,277,005	18.60	98.6
Rhode Island.....	11,259,353	71,735,445	15.70	83.2
South Carolina.....	19,197,974	106,407,576	18.04	95.7
South Dakota.....	18,172,668	77,713,398	23.38	124.0
Tennessee.....	23,382,381	151,840,025	15.40	81.7
Texas.....	76,097,225	510,517,248	14.91	79.1
Utah.....	11,358,164	45,432,448	25.00	132.6
Vermont.....	5,248,609	38,258,904	13.72	72.7
Virginia.....	28,384,866	169,773,885	16.72	88.7
Washington.....	35,862,322	181,729,793	19.73	104.6
West Virginia.....	30,045,956	129,123,800	23.27	123.4
Wisconsin.....	55,288,521	318,027,138	17.38	92.2
Wyoming.....	7,957,565	27,498,587	28.94	153.4

Read table thus: In 1926 the expenditure for passenger automobiles in Alabama is estimated at \$127,928,210. Expenditures for public education—elementary, secondary, and collegiate—in Alabama in 1926 were \$20,183,316 or 15.78 percent as much as is expended for passenger automobiles. In the nation as a whole the corresponding percent is 18.86. If this last percent is given the value 100, as in column 5, then the percent for Alabama (15.78) has the value 83.7. Similarly interpret data for other columns and other states.

Source of data: The figures of column 2 are from U. S. Bureau of Education, Bulletin, 1927, Nos. 30, 39, and 40. Figures representing the collegiate cost are receipts rather than expenditures. Expenditures for these institutions are not available. Figures as to expenditures for automobiles are estimated from figures of the National Automobile Chamber of Commerce and the American Automobile Association. Expenditures for new automobiles and costs of operation and maintenance for all passenger automobiles are included in the figures given.

CHART III

PERCENT PUBLIC SCHOOL EXPENDITURES IN THE VARIOUS STATES IS OF EXPENDITURES FOR PASSENGER AUTOMOBILES



Research Division, National Education Assn.

Calculations based on figures of the National Automobile Chamber of Commerce the American Automobile Association and the U.S. Bureau of Education.

TABLE 5.—THE STATES' ANNUAL BILL FOR CERTAIN LUXURIES

States	1	2	3	4	5	6	7	8	9
		Tobacco	Soft drinks, ice cream, candy and chewing gum	Theaters, movies and similar amusements	Jewelry, perfumes and cosmetics	Sporting goods, toys, etc.	Estimated total expenditures for luxuries (columns 2 to 6)	Percent cost of schools is of expenditures of certain luxuries	Index of percent relationship of school costs to cost of certain luxuries
United States.....		\$2,087,110,000	\$1,803,480,000	\$1,055,420,000	\$806,820,000	\$487,030,000	\$6,239,860,000	36.14	100.0
Alabama.....		17,531,724	15,149,232	8,865,528	6,777,288	4,091,052	52,414,824	38.51	106.6
Arizona.....		6,052,619	5,230,092	3,060,718	2,339,778	1,412,387	18,095,594	56.99	157.7
Arkansas.....		13,566,215	11,722,620	8,860,230	5,244,330	3,165,695	40,559,090	38.64	106.9
California.....		126,896,288	109,651,584	64,169,536	49,054,656	29,611,424	379,383,488	39.86	110.3
Colorado.....		18,783,990	16,231,320	9,498,780	7,261,380	4,383,270	56,158,740	54.53	150.9
Connecticut.....		32,976,338	28,494,984	16,675,636	12,747,756	7,695,074	98,589,788	35.12	97.2
Delaware.....		3,756,798	3,246,264	1,899,756	1,452,276	876,654	11,231,748	37.45	103.6
Dist. of Col.....		16,279,458	14,067,144	8,232,276	6,293,196	3,798,834	48,670,908	19.84	54.9
Florida.....		14,818,481	12,804,708	7,493,482	5,728,422	3,457,913	44,303,006	74.25	205.5
Georgia.....		24,419,187	21,100,716	12,348,414	9,439,794	5,698,251	73,006,362	28.35	78.4
Idaho.....		6,678,752	5,771,136	3,377,344	2,581,824	1,558,496	19,967,552	55.70	154.1
Illinois.....		176,360,795	152,394,060	89,182,990	68,176,290	41,154,035	527,268,170	27.99	77.4
Indiana.....		50,508,062	43,644,216	25,541,164	19,525,044	11,786,126	151,004,612	45.19	125.0
Iowa.....		45,916,420	39,676,560	23,219,240	17,750,040	10,714,660	137,276,920	49.16	136.0
Kansas.....		27,132,430	23,445,240	13,720,460	10,488,660	6,331,390	81,118,180	51.15	141.5
Kentucky.....		23,166,921	20,018,628	11,715,162	8,955,702	5,406,033	69,262,446	31.25	86.5
Louisiana.....		21,497,233	18,575,844	10,818,826	8,300,826	5,160,344	64,262,358	35.65	90.5
Maine.....		11,896,527	10,279,836	6,015,894	4,598,874	2,771,071	35,547,208	32.57	90.1
Maryland.....		28,802,118	24,888,024	14,564,794	11,133,116	6,771,014	86,110,068	30.86	85.1
Massachusetts.....		102,089,679	88,190,172	51,610,038	39,455,498	23,815,767	305,129,154	26.35	72.9
Michigan.....		82,023,423	70,876,764	41,478,006	31,708,026	19,140,279	245,226,498	46.27	128.0
Minnesota.....		42,577,044	36,790,992	21,530,568	16,459,128	9,935,412	127,293,144	48.12	133.1
Mississippi.....		11,061,683	9,558,444	5,593,726	4,276,146	2,581,259	33,071,258	47.43	131.2
Missouri.....		61,361,034	53,022,312	31,029,348	23,720,508	14,318,682	183,451,884	32.49	89.9
Montana.....		9,183,284	7,935,312	4,643,848	3,550,008	2,142,932	27,455,384	48.19	133.3
Nebraska.....		24,210,476	20,920,368	12,242,872	9,359,112	5,649,548	72,382,376	47.34	131.0
Nevada.....		2,087,110	1,803,480	1,055,420	806,820	487,030	6,239,860	41.77	115.6
New Hampshire.....		7,513,596	6,492,528	3,799,512	2,904,552	1,753,308	22,463,496	38.11	105.5
New Jersey.....		68,665,919	59,334,478	34,723,318	26,544,378	16,023,287	205,291,394	47.14	130.4
New Mexico.....		3,548,087	3,065,916	1,794,214	1,371,594	827,951	10,607,762	59.76	165.4

TABLE 5.—THE STATES' ANNUAL BILL FOR CERTAIN LUXURIES—Continued

States	1	2	3	4	5	6	7	8	9
		Tobacco	Soft drinks, ice cream, candy and chewing gum	Theaters, movies and amusements	Jewelry, perfumes and cosmetics	Sporting goods, toys, etc.	Estimated total expenditures for luxuries (columns 2 to 6)	Percent cost of schools is of expenditures of certain luxuries	Index of percent relating to cost of certain luxuries
New York.....		354,599,989	306,411,252	179,315,858	137,078,718	82,746,397	1,060,152,214	24.37	67.4
North Carolina.....		21,497,233	18,575,844	10,870,826	8,310,826	5,016,409	64,270,558	64.09	177.3
North Dakota.....		8,557,131	7,394,268	4,327,222	3,307,962	1,996,423	25,583,426	66.74	184.7
Ohio.....		125,226,600	108,208,800	63,325,200	48,409,200	29,221,800	374,391,600	37.53	103.8
Oklahoma.....		22,123,366	19,116,888	11,187,452	8,552,292	5,162,518	66,142,516	51.85	143.5
Oregon.....		19,410,123	16,772,364	9,815,406	7,503,426	4,529,379	58,030,698	39.13	108.3
Pennsylvania.....		187,213,767	161,772,156	94,671,174	72,371,754	43,686,591	559,715,442	31.75	87.9
Rhode Island.....		13,566,215	11,722,620	6,860,230	5,744,330	3,165,695	40,559,090	27.76	76.8
South Carolina.....		12,731,371	11,001,228	6,438,062	4,921,602	2,970,883	38,063,146	50.44	139.6
South Dakota.....		10,644,261	9,197,748	5,382,642	4,114,782	2,483,853	31,823,286	57.10	158.0
Tennessee.....		23,375,632	20,108,976	11,820,704	9,036,384	5,454,736	60,886,432	33.46	92.6
Texas.....		67,652,835	58,096,440	32,490,316	29,087,410	14,804,413	199,305,730	39.99	116.6
Utah.....		7,732,307	6,672,876	3,908,054	2,985,234	1,806,613	23,087,482	49.20	131.6
Vermont.....		4,860,353	4,148,004	2,427,466	1,885,680	1,170,169	14,351,678	36.57	101.2
Virginia.....		25,045,320	21,641,760	12,665,040	9,681,840	5,844,360	74,878,320	37.91	104.9
Washington.....		32,350,205	27,953,940	16,359,010	12,505,710	7,548,965	96,717,830	37.08	102.6
West Virginia.....		21,288,522	18,395,496	10,765,284	8,229,564	4,967,706	63,646,572	47.21	130.6
Wisconsin.....		47,586,108	41,119,344	24,063,576	18,395,496	11,104,284	142,268,808	38.86	107.5
Wyoming.....		4,382,931	3,787,308	2,216,382	1,694,322	1,022,763	13,103,706	60.73	168.0

Read table thus: In 1926, the expenditures for tobacco in Alabama are estimated at \$17,531,724; expenditures for soft drinks, ice cream, candy, and chewing gum are estimated at \$15,149,232; and theaters, movies, and similar amusements at \$8,865,528; etc. The total expenditures for the above luxuries in Alabama are estimated at \$52,414,824. Expenditures for public schools in Alabama were 38.51 percent of this amount. In the nation as a whole, the corresponding percent was 36.14. If this last percent is given the value 100, as in column 9, then the percent for Alabama (38.51) has the value 106.6. Similarly interpret data for other states.

Source of data: The figures given for the United States are estimates based principally on figures of the U. S. Treasury Department. The total national expenditure for these articles was distributed among the states on the basis of an average of the percentage of the national totals of the following items found in each state: Value of tangible wealth, average annual current income, taxes paid in connection with admission to theaters, and taxes paid in connection with the purchase of jewelry. The amounts given for each state should be looked upon as approximations rather than exact estimates. The fact that the taxes collected on luxuries are in many cases paid at the place of manufacture rather than at the place of purchase, makes it impossible to estimate exactly the amount expended in each state for each item in the luxury list given above.

TABLE 6.—THE STATES' BILLS FOR SCHOOLS AND FOR OTHER GOVERNMENTAL COSTS

States	Cost of public schools, elementary and secondary, and college in 1926	Taxes collected in 1926 by				Percent cost of schools is of tax collections of			
		Federal government	State government	Local government	Federal, state and local governments	Federal government	State and local governments	Federal, state and local governments	
		3	4	5	6	7	8	9	
United States.....	\$2,255,251,327	\$3,207,000,000	\$1,264,285,840	\$4,083,793,000	\$8,555,078,840	70.32	42.17		26.36
Alabama.....	20,183,316	20,845,500	12,866,872	24,097,000	57,809,372	96.82	54.60		34.91
Arizona.....	10,312,798	3,848,400	6,116,527	15,469,000	25,433,927	267.98	47.78		40.55
Arkansas.....	15,670,384	13,469,400	16,142,458	17,202,000	46,813,858	116.34	47.00		33.47
California.....	151,217,259	146,880,600	70,576,521	258,070,000	475,527,121	102.95	46.01		31.80
Colorado.....	30,625,151	18,921,300	10,681,187	43,153,000	72,755,487	161.86	56.89		42.09
Connecticut.....	34,624,360	40,728,900	23,774,814	56,697,000	121,200,714	85.01	43.03		28.57
Delaware.....	4,206,246	12,186,600	6,358,508	4,823,000	23,368,108	34.52	37.62		18.00
Dist. of Col.....	9,638,614	18,600,600		21,730,000	40,330,600	51.93	44.45		23.95
Florida.....	32,895,790	46,501,500	24,025,196	61,635,000	132,181,696	70.74	38.39		24.89
Georgia.....	20,698,183	28,221,500	17,445,063	34,895,000	80,561,663	73.34	39.55		25.69
Idaho.....	11,122,805	3,848,400	4,170,848	18,462,000	26,481,248	289.02	49.14		42.00
Illinois.....	147,574,895	237,318,000	67,504,437	267,473,000	566,525,742	121.38	44.86		26.06
Indiana.....	68,438,825	51,953,400	32,504,357	101,183,000	201,183,757	152.18	55.11		38.91
Iowa.....	67,487,171	24,693,900	26,993,580	91,948,000	148,635,480	223.27	56.74		35.98
Kansas.....	41,491,654	25,014,600	17,743,847	73,603,000	116,867,447	165.87	48.42		35.66
Kentucky.....	21,641,653	37,201,200	20,782,305	42,869,000	100,852,505	58.17	34.00		21.46
Louisiana.....	23,113,946	24,373,200	20,719,559	50,334,000	95,426,759	94.83	32.53		24.22
Maine.....	11,582,536	12,828,000	12,760,597	22,161,000	47,749,597	90.29	33.17		24.26
Maryland.....	26,577,101	35,918,400	15,888,768	43,262,000	95,069,168	73.99	44.93		27.96
Massachusetts.....	80,413,296	131,487,000	42,332,217	231,173,000	404,992,217	61.16	29.40		19.86
Michigan.....	113,478,477	232,507,500	63,296,117	182,152,000	477,955,617	48.81	46.23		23.74
Minnesota.....	61,256,496	44,226,600	41,926,363	104,126,000	190,308,963	138.41	41.94		32.19
Mississippi.....	15,687,072	12,186,600	11,991,434	46,841,000	71,019,034	128.72	26.66		22.09
Missouri.....	59,598,424	80,495,700	29,954,936	96,657,000	207,107,636	74.04	47.07		28.78
Montana.....	13,230,666	11,865,900	4,660,540	22,916,000	39,442,440	111.50	47.98		33.54
Nebraska.....	34,264,849	13,469,400	11,876,823	48,510,000	73,856,223	254.39	56.74		46.39
Nevada.....	2,606,401	962,100	1,853,304	4,618,000	7,437,404	270.91	40.28		35.06
New Hampshire.....	8,560,948	6,093,300	5,843,695	15,435,000	27,371,995	140.50	40.23		31.28
New Jersey.....	96,779,495	122,828,100	56,511,555	200,718,000	380,057,655	78.79	37.62		25.46
New Mexico.....	6,338,428	2,565,600	2,814,481	8,026,000	13,406,081	247.07	58.47		47.28

TABLE 6.—THE STATES' BILLS FOR SCHOOLS AND FOR OTHER GOVERNMENTAL COSTS—Continued

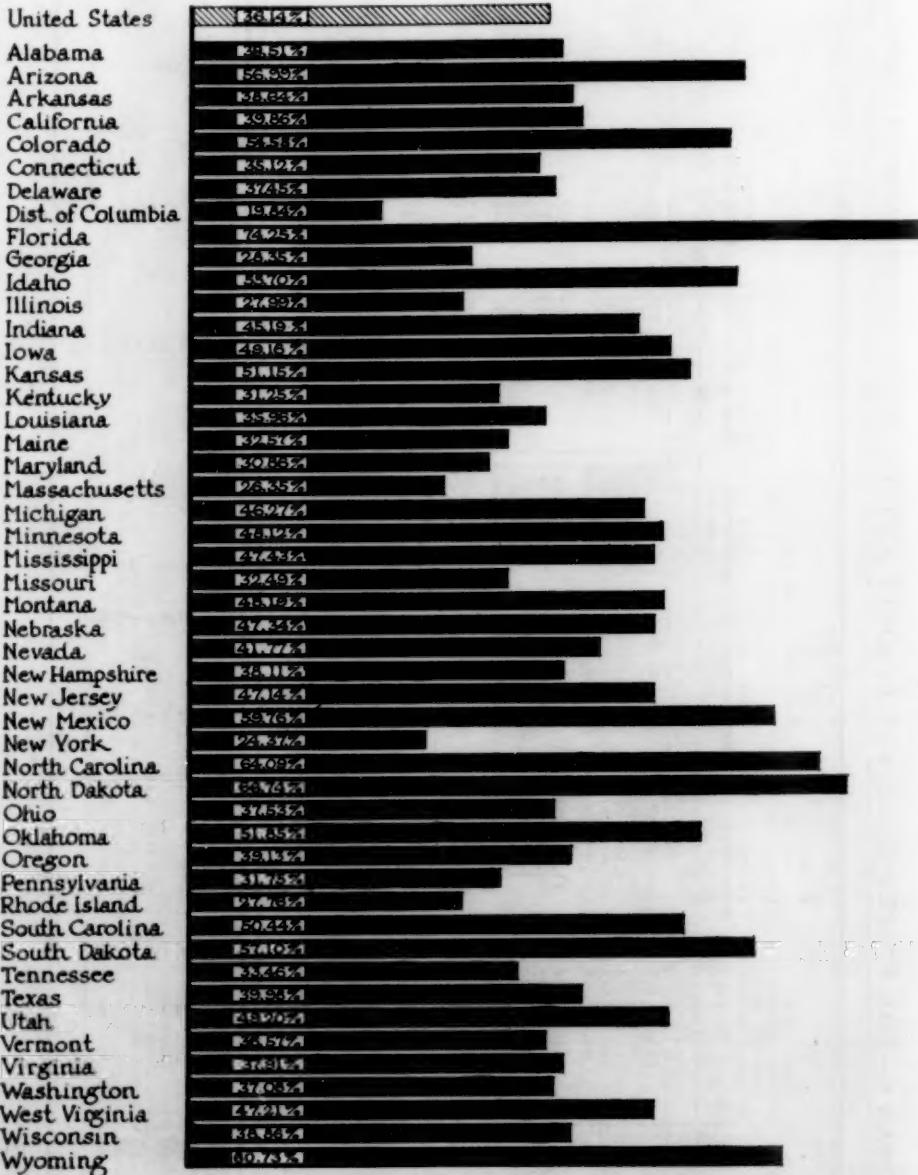
States	Cost of public schools, elementary, secondary and collegiate in 1926	Taxes collected in 1926 by				Percent cost of schools is of tax collections of		
		Federal government	State government	Local government	Federal, state and local governments	Federal government	State and local governments	Federal, state and local governments
1	2	3	4	5	6	7	8	9
New York.....	238,365,033	742,741,200	166,600,650	584,102,000	1,493,443,850	34.79	34.42	17.30
North Carolina.....	17,073,322	194,023,500	23,659,212	55,288,000	272,970,712	21.23	21.18	15.09
North Dakota.....	17,073,322	34,734,796	37,229,896	37,229,896	119,273,914	409.57	51.65	45.86
Oklahoma.....	140,509,184	177,026,100	34,635,000	263,992,000	475,671,430	79.37	47.05	29.54
Oklahoma.....	34,297,098	27,900,900	19,042,500	60,918,000	107,861,400	122.92	42.89	31.80
Oregon.....	22,705,664	11,224,500	17,077,365	41,775,000	70,076,865	202.29	38.58	32.40
Pennsylvania.....	177,717,255	282,216,000	99,822,824	318,581,000	700,619,824	62.97	42.48	25.37
Rhode Island.....	11,259,353	19,242,000	7,933,937	22,555,000	49,730,937	58.51	36.93	22.64
South Carolina.....	19,197,974	13,148,700	13,813,460	25,952,000	52,914,160	146.01	48.28	36.28
South Dakota.....	18,172,668	4,169,100	9,093,192	29,976,000	43,238,292	435.89	46.51	42.03
Tennessee.....	23,382,381	27,900,900	16,816,136	39,548,000	84,265,036	83.81	41.48	27.75
Texas.....	76,097,225	65,102,100	55,791,881	101,411,000	222,304,981	116.89	48.41	34.23
Utah.....	11,358,164	6,093,300	7,707,906	14,610,000	28,411,206	186.40	50.89	39.98
Vermont.....	5,248,609	4,810,500	5,119,280	10,251,000	20,180,780	109.11	34.15	26.01
Virginia.....	28,384,866	68,950,500	25,223,149	37,860,000	132,033,649	41.17	45.00	21.50
Washington.....	35,862,322	20,524,800	23,958,705	57,468,000	101,951,505	174.73	44.04	35.18
West Virginia.....	30,045,956	22,449,000	15,532,282	46,777,000	84,758,282	133.84	48.22	35.45
Wisconsin.....	55,288,521	50,670,600	31,730,324	117,402,000	199,802,924	109.11	37.07	27.67
Wyoming.....	7,957,565	2,565,600	3,145,775	9,872,000	15,583,375	310.16	61.13	51.06

Read table thus: In 1926, there was \$20,845,500 taxes collected by the federal government in the state of Alabama; \$12,866,872 was collected in taxes by the state government; \$24,097,000 was collected in taxes by the local government; making a total of \$57,809,372. Expenditures for public schools in Alabama in 1926 were 96.82 percent of the taxes collected by the federal government; 54.60 percent of the taxes collected by the state and local governments; and 34.91 percent of the taxes collected by federal, state and local governments. Similarly read figures for other states.

Sources of data: The figures of column 2 are from U. S. Bureau of Education, Bulletin, 1927, Nos. 30, 39 and 40. Figures representing the collegiate cost are receipts rather than expenditures. Expenditures for these institutions are not available. In this table it is assumed that all school expenditures are paid from tax revenue. This is not strictly correct. A small percentage of school money comes from other sources than tax collections. A full evaluation of this fact, however, would not radically revise the relationships of the major items given in this table as to the national total. The federal taxes collected are those of the National Industrial Conference Board as given in Table 28, p. 76 of *Cost of Government in the United States*. The total expenditures are those of the Federal Bureau of Investigation as given in Table 32, p. 83 of *Cost of Government in the United States*. The figures of column 4 are the sums of columns 3, 4, 5, and 6 of table 3, p. 64-5 of *Federal Statistics of States, 1926*, U. S. Department of Commerce, Bureau of Census. Figures of column 5 from *Cost of Government in the United States*, Table 34, p. 94-5. Figures of column 6 are the sums of columns 3, 4, and 5.

CHART IV

PERCENT PUBLIC SCHOOL COSTS IN THE VARIOUS STATES IS OF EXPENDITURES FOR LUXURIES

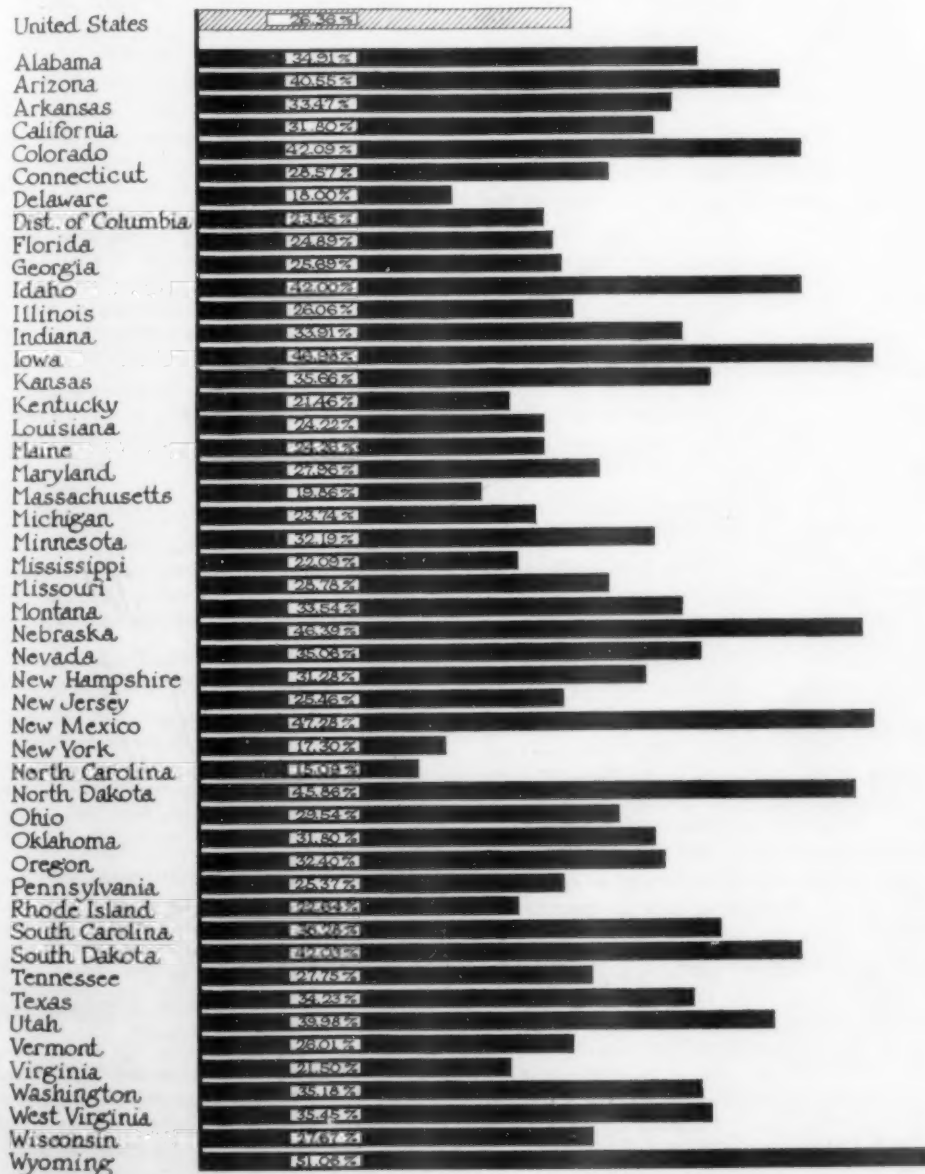


Research Division, National Education Assn.

Calculated from figures of the U.S. Bureau of Education and estimates based principally on figures of the U.S. Treasury Department.

CHART V

PERCENT PUBLIC SCHOOL COSTS IN THE VARIOUS STATES IS OF TOTAL TAX COLLECTIONS IN 1926



Research Division, National Education Ass'n.

Calculations based on figures of the National Industrial Conference Board, the Department of Commerce, and the U.S. Bureau of Education.

Selected Bibliographies

The following bibliographies are by no means exhaustive but are the result of a selective sampling of the literature of:

- I. State school revenues
- II. Apportionment of state aid to schools
- III. Fiscal aspects of certain state administrative problems.

The bibliographies include a few of the older basic studies in each field, some of the most recent and important publications, and one or two bibliographical guides which, if consulted, will open up further material for study.

I. State Revenues for Public Education

State school revenue problems involve issues centering around taxation, legislative appropriations, and the state permanent school funds. Each of these topics is represented in the bibliography below. The material included is of several types. Textbooks on public finance, theoretical discussions of taxation, descriptions of some of the newer types of taxation, and reports of state school and financial surveys are all represented.

1. ADAMS, JESSE E. *A Study in the Equalization of Educational Opportunities in Kentucky*. Bulletin of the University of Kentucky, Vol. 20, No. 9, September, 1928. College of Education, Bureau of School Service, University of Kentucky, Lexington, Ky. 268 p.

In p. 250-54 taxes of various types are briefly discussed as possible sources of revenue for Kentucky.

2. ALEXANDER, CARTER. *Bibliography on Educational Finance*. Vol. IV of the Educational Finance Inquiry Commission, American Council on Education. Macmillan Co., New York City, 1924. 257 p.

Annotated, classified and indexed. Sections on "Revenues" and "Taxation" will be found in p. 111-119 and p. 223-33.

3. BRUCE, ANDREW A. "State Socialism and the School Land Grants," *Harvard Law Review* 33:401-19; January, 1920.

Denies right of western states to use funds from public school land grants for other than

school purposes. Particular reference is made to funds of North and South Dakota.

4. BRUCE, WILLIAM G. "American School Tax Problem," *American School Board Journal* 64:42-4, February, 1922; 37-8, 129, March, 1922; 41-2, April, 1922; 53-5, May, 1922; 47-8, June, 1922; 65:49-50, 144, July, 1922; 45-6, August, 1922; 49-50, 136, September, 1922.

A series of eight articles on taxation for school support under the subtitles: "Shall Revenues for Schools Be Increased?"; "Some Uneconomical and Illogical Revenue Proposals"; "What Are the New and Feasible Sources of Revenue"; "Some of the World-tested Methods of Exacting Public Revenue"; "Can Teachers' Salaries Be Reduced?"; "State School Funds How Created and Distributed"; "The Tax Ability of Districts and Inequalities in Distribution."

5. BRUCE, WILLIAM G. "State Taxation and School Support," *American School Board Journal* 69:43-4, November, 1924; 39-40, December, 1924.

The widening scope of responsibility of the schools and their need for increased funds, the share of the state in contributing support, and the failure of the property tax as a source of school revenue are discussed. Proposes the income tax as a substitute for the property tax.

6. BULLOCK, CHARLES J. *Selected Readings in Public Finance*. Ginn and Co., Boston, 1924. 982 p.

Selections dealing with public revenues from all sources, public expenditures and public debts are brought together in this volume. Chapters VIII to XXI deal with theory of taxation and special taxes as sources of revenue.

7. CAVINS, LORIMER V., and BOWMAN, EDGAR I. *The Financing of Education in West Virginia*. Under the direction of George M. Ford, State Superintendent of Free Schools, Charleston, West Virginia, 1926. 94 p.

See chapter VI, p. 78-84 on "Present Method of Raising School Revenue."

8. CHAMBER OF COMMERCE OF THE UNITED STATES. FINANCE DEPARTMENT. *Fiscal Problems of States*. Chamber of Commerce of the United States, Washington, D. C., 1928. 47 p.

Prepared for the guidance of committees on state and local taxation. Quotes data from U. S. Census Bureau and National Industrial Conference Board and summarizes in convenient form fiscal problems of state governments.

9. COMSTOCK, A. P. *State Taxation of Personal Incomes*. Columbia University Press, 1921. 247 p.

Traces the historical development of the income tax and describes the income tax provisions of thirteen states. Modern income tax methods and results are also considered. Concludes that "state income taxes are coming,—pushed to the front by the ever-increasing dissatisfaction with general property taxes, by the lure of a large yield, and by the willingness to experiment which the financial changes of the war have brought about."

10. CUBBERLEY, ELLWOOD P. *State School Administration*. Houghton Mifflin Co., Boston, Mass., 1927. 773 p.

Chapter XVI, p. 407-449 deals with "Funds and Taxation" for school support.

11. DAVIS, J. W. "Income vs. Property Tax as a Source of School Revenue." *American School Board Journal* 77:39-41, November, 1928; 43-4, 116, 118, December, 1928.

Two articles. The first outlines some of the fundamentals of taxation theory and discusses the reasons for the failure of the property tax. The second article proposes the income tax as a source of state revenue discussing principles of its administration and setting forth arguments in favor of its adoption.

12. DAWSON, HOWARD A. *Financial Support of Education in Arkansas*. State Department of Education, Little Rock, Arkansas, 1926. 75 p.

Sources of revenue of Arkansas schools prior to 1927 legislation are named in p. 531-33.

13. GENERAL EDUCATION BOARD. *Public Education in Indiana*. General Education Board, 61 Broadway, New York City, 1923. 304 p.

State and local sources of school support are set forth in p. 175-85. Earlier surveys using similar technics have been made by the General Education Board in North Carolina, Delaware, and Kentucky.

14. HAIG, ROBERT MURRAY. "Tax Problem in Relation to the Financing of Public Education." *Proceedings* 61:933-8; 1923. National Education Association, Washington, D. C.

Expresses the belief that the economic resources of the country are and will be sufficient to meet the growing needs of the educational program. Discusses taxation principles, emphasizes the importance of the school tax problem and urges the cooperation of schoolmen with "practical tax men" in formulating programs for tax reform.

15. ILLINOIS STATE TEACHERS ASSOCIATION, DEPARTMENT OF RESEARCH AND STATISTICS. "State School Fund Crisis in Illinois." *Illinois Teacher* 17:34-39, 60; October, 1926.

Presents data on educational inequalities in Illinois and urges an increased state school fund. Calls attention to the fact that the "authority of the state has full control over the system of taxation."

16. INDIANA RURAL EDUCATION SURVEY COMMITTEE. *Report*. State of Indiana, Indianapolis, Indiana, March, 1926. 130 p. (Copies may be obtained by addressing H. N. Sherwood, State Superintendent of Schools, Room 227, State House, Indianapolis, Indiana.)

Information concerning existing and possible sources of school revenue in Indiana is presented in p. 58-65.

17. JENSEN, JENS P. *Problems of Public Finance*. Thomas Y. Crowell Co., New York City, 1924. 606 p.

Deals with problems arising in connection with the fiscal activities of the state and the various solutions which have been offered. See especially Part II, "Public Revenues," p. 101-462.

18. KANSAS STATE SCHOOL CODE COMMISSION. *Report*, Volume I, "Some Problems Confronting the School Code Commission Together with Supporting Data." State of Kansas, Topeka, Kansas, June, 1928. 88 p.

Volumes II and III of this report are in progress. The following sections of Volume I present information as to sources of revenue in Kansas and other states and suggestions for revision of the tax system of Kansas: "Trend of the Tax Burden," p. 15-18; "How Some Other States Support, in Part, their Schools," p. 32-34; "State Corporation Taxes Used Wholly, or in Part, for School Purposes," p. 34-5; "State Inheritance Taxes Used Wholly, or in Part, for School Purposes," p. 35; "Sources of Public Revenue for Kansas," p. 35-40.

19. LEE, CHARLES A. *Facts Concerning Public Education in Missouri*. Report of the Missouri School Survey. State of Missouri, Jefferson City, Mo., 1924. 139 p.

Sources of school money are named in p. 28-31.

20. LELAND, S. E. *Classified Property Tax in the United States*. Houghton Mifflin Co., Boston, 1928. 492 p.

Sketches the history of the movement for the classification of property for taxation purposes and discusses its theoretical justification and arguments for and against. The application of the classification principle to the taxation of land and to the taxation of intangible property are separately considered. Comprehensive and partial systems of classification in effect in the states are described. Concludes that "the classified property tax has in every case

been a distinct improvement over the old general property tax."

21. LUTZ, HARLEY L. *Public Finance*. D. Appleton and Co., New York City, 1924. 681 p.

Sets forth theory and problems of public finance and seeks to translate these into concrete terms based on actual fiscal experience of states. Part IV, p. 239-490 deals with "Taxation."

22. MARTIN, JAMES W. "The Administration of Gasoline Taxes in the United States." *National Municipal Review* 13: supplement, 587-600; October, 1924. National Municipal League, 261 Broadway, New York City.

An investigation of the administrative provisions of laws governing the levying of gasoline taxes in the various states and the experience of states in carrying out these provisions.

23. MARTIN, JAMES W. "The Gasoline Tax." *Bulletin of the National Tax Association* 9: 73-87; December, 1923.

The status of the gasoline tax in the United States and provisions of state laws governing its distribution and its use are described.

24. MORRISON, HENRY C. *The Financing of Public Schools in the State of Illinois*. Vol. IX of the Educational Finance Inquiry Commission, American Council on Education. Macmillan Co., New York City, 1924. 162 p.

One of four volumes devoted to the study of Illinois' system of educational finance. Offers a summary and interpretation of material and findings presented in more detail in other three volumes. Discusses the local property tax as a source of school revenue in Illinois and urges reform of the tax system as a prerequisite to equalization of educational opportunity.

25. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "Major Issues in School Finance," Part II. *Research Bulletin* 5: 1-63; January, 1927. Washington, D. C. 63 p.

Defects in state tax systems and remedies for these defects are considered in p. 33-4 and p. 40-41. Some of the essential features of sound plans of state and local taxation for public schools are outlined and possible new sources of revenue are indicated in p. 42-51. Contains bibliography.

26. NATIONAL INDUSTRIAL CONFERENCE BOARD. *Cost of Government in the United States, 1925-1926*. National Industrial Conference Board, 247 Park Ave., New York City, 1927. 294 p.

An analysis of public expenditures in the United States and its political subdivisions and the means by which revenues are raised to meet these expenditures. The fiscal aspects of education and highway construction and maintenance are given special attention.

27. NATIONAL INDUSTRIAL CONFERENCE BOARD. *The Fiscal Problem in Delaware*. National Industrial Conference Board, 247 Park Avenue, New York City, 1927, 150 p.

Chapters III and IV present a detailed analysis of the sources of revenue in use in Delaware. Chapter VI deals with the railroad tax and chapter V is on "The Financing of Education in Delaware."

28. NATIONAL INDUSTRIAL CONFERENCE BOARD. *The Fiscal Problem in Illinois*. National Industrial Conference Board, 247 Park Ave., New York City, 1927. 219 p.

Constitutional and legislative provisions, amount and sources of revenues and the distribution of the burden of taxation, the general property tax in Illinois and its reform, are studied and alternate methods of taxation considered in chapters IV-VII.

29. NATIONAL INDUSTRIAL CONFERENCE BOARD. *The Fiscal Problem in New York State*. National Industrial Conference Board, 247 Park Ave., New York City, 1928. 275 p.

The scope of this study is defined as follows:

"(1) an analysis of the issues of state and local expenditures, of the methods of promoting government efficiency and of the possibilities of exercising a degree of control over these expenditures; (2) an examination of the methods of financing state and local expenditures by borrowing and by taxation; (3) a comparison of the distribution of the tax burdens in New York State with that in other states, and a study of the distribution of the New York tax burden among different groups within the state; (4) an examination of the operation and effects of each tax used in New York State and a discussion of possible revisions and of new sources of revenue; and (5) a review of the various aspects of the interrelation of the state and the local revenue system which affect the distribution of the tax burden among groups within the state."

30. NATIONAL INDUSTRIAL CONFERENCE BOARD. *The Shifting and Effects of the Federal Corporation Income Tax*. Volume I, "Manufacturing and Mercantile Corporations." National Industrial Conference Board, 247 Park Ave., New York City, 1928. 251 p.

The first of a series of studies of the shifting and effects of some of the taxes of our federal and state systems. The incidence and distribution of the burden of the Federal tax on corporation income and its effect on business enterprise in manufacturing and mercantile corporations are here considered. Concludes that, according to the evidence discovered, this tax is not shifted by manufacturing and mercantile business except under rare circumstances.

31. NATIONAL TAX ASSOCIATION. "Preliminary Report of the Committee Appointed by the National Tax Association to Prepare a Plan of a Model System of State and Local Taxation." *Proceedings*, 1919: 426-70. National Tax Association, 1920.

Recommends plan of state and local taxation based upon three fundamental principles: (1) The payment by every person of a direct personal tax to the government under which he is domiciled; (2) the taxation of tangible property at its situs; (3) the taxation of business carried on for profit.

32. NEBRASKA STATE TEACHERS ASSOCIATION, LEGISLATIVE COMMITTEE, PAUL R. MORT, DIRECTOR OF STUDY. *The Status of Taxation in Nebraska. State Aid for Transportation*. Research Bulletin No. 4. Nebraska State Teachers Association, Lincoln, Nebraska, November, 1928, 18 p.

Two supporting studies made in connection with the development of a plan for equalizing educational opportunity in Nebraska. The first of these presents facts concerning Nebraska's revenue system in order that school support may be seen in its proper setting along with other interests of the commonwealth.

33. O'SHEA, M. V. AND OTHERS. *Public Education in Mississippi*. State of Mississippi, Jackson, Miss., 1926, 362 p.

In chapter XII, p. 300-24, which deals with "Educational Finances," existing and suggested new sources of school revenue are set forth.

34. PHILLIPS, FRANK M. *Statistics of State School Systems, 1925-26*. U. S. Department of Interior, Bureau of Education, Bulletin 1927, No. 39. Government Printing Office, Washington, D. C. 50 p.

Contains basic statistics of state school systems including those showing receipts from various revenue sources.

35. PITTENGER, BENJAMIN FLOYD. *An Introduction to Public School Finance*. Houghton Mifflin Co., New York City, 1925. 372 p.

Chapter XII, p. 332-64 deals with "Sources of Public School Revenues."

36. PITTENGER, B. F., AND WORKS, G. A. *Texas Educational Survey Commission Report*, Vol. II. "Financial Support." Texas Educational Survey Commission, Austin, Texas, 1925. 446 p.

Urges revision of state system of taxation and the raising and distribution of school moneys on a more scientific basis.

37. RAINEY, HOMER P. "A Study of School Finance in Oregon." *Commonwealth Review of the University of Oregon*, Vol. 7, No. 3. University of Oregon, Eugene, Oreg., July, 1925. 132 p.

An analysis of Oregon's system of school support and a discussion of the implications involved. The revenue system of the state is dealt with in p. 75-77 and p. 131-2.

38. RUSSELL, WILLIAM F., HOLY, THOMAS C., STONE, RALEIGH W., AND OTHERS. *The Financing of Education in Iowa*. Volume VIII of the Educational Finance Inquiry Commission, American Council on Education. Macmillan Co., New York City, 1925. 279 p.

Sources of support of schools are discussed and the state revenue system is analyzed in p. 78-110 and 148-57. Suggestions for tax reform are set forth in p. 160-62. Principles of plan of "Model System of State and Local Taxation" recommended by the National Tax Association are quoted.

39. SEARS, JESSE B., AND CUBBERLEY, E. P. *The Cost of Education in California*. Vol. VII of the Educational Finance Inquiry Commission, American Council on Education. Macmillan Co., New York City, 1924. 348 p.

Presents a cross-section of the financial status of education in California for the school year 1921-22. In p. 28-31, legal provisions for the support of education are summarized.

40. SELIGMAN, E. R. A. *Essays in Taxation*. Macmillan Co., New York City, 1921. 806 p.

A treatment of various special problems in the field of taxation.

41. SELIGMAN, E. R. A. "Financing of Education." *Educational Administration and Supervision* 8: 449-56; November, 1922.

Recommends newer types of taxation for support of education and greater centralization of administrative power in the state.

42. SELIGMAN, E. R. A. "How May the Necessary Funds for Public Education Be Provided?" *Proceedings* 60: 1386-92; National Education Association, Washington, D. C.

Advocates change in basis of taxation from property to income.

43. SELIGMAN, E. R. A. *Income Tax*. Macmillan Co., New York City, 1914. 743 p.

The history, theory and the status of income taxation in 1914 are dealt with.

44. SOWERS, DON C. *The Financing of Public Higher Education in Colorado*. University of Colorado Bulletin, Vol. 24, No. 9. University of Colorado Studies. University of Colorado, Boulder, Colorado, September, 1924. 191 p.

Chapter IV, p. 130-43, analyzes sources of revenue of Colorado's public higher educational institutions. In chapter VI, p. 161-71 the conclusion that owners of tangible property are bearing too large a share of the tax burden is reached. Newer type taxes are discussed.

45. SOWERS, DON C. *Financing Public School Education in Colorado*. University of Colorado Bulletin, Vol. 24, No. 6. University of Colorado Studies. University of Colorado, Boulder, Colo., June, 1924. 93 p.

In chapter IV, "Public School Revenues," p. 42-65, chapter V, "Colorado's Public School Fund," p. 66-75, and chapter VI, "Taxation and School Finance," p. 76-86, is presented information relative to state school funds and appropriations in Colorado and taxes levied for school support by other states.

46. SOWERS, DON C. *The Tax Problem in Colorado, with Special Reference to a Readjustment of the Tax Burden*. Bureau of Business and Government Research, University Extension Division, University of Colorado, Boulder, Colo., December, 1928. 104 p.

A study of Colorado's revenue system for the purpose of discovering the means to securing a more equitable distribution of the tax burden and greater economy in the expenditure of the tax dollar.

47. STATE EDUCATIONAL COMMISSION, FRED W. MORRISON, DIRECTOR. *Report on the Public School System of North Carolina, Part IV*. "The Financial Condition of the Counties of North Carolina." State Educational Commission, Raleigh, N. C., 1927. 381 p.

Chapter I, p. 1-11, contains an analysis of the extent of the burden imposed by the general property tax in North Carolina counties and the application of this tax to the support of education and other public enterprises. Contains also brief statement of sources of state school revenues in North Carolina.

48. STRAYER, GEORGE D., AND HAIG, ROBERT MURRAY. *The Financing of Education in the State of New York*. Vol. I of the Educational Finance Inquiry Commission, American Council on Education. Macmillain Co., New York City, 1923. 205 p.

Assembles comprehensive data bearing upon school finance in the State of New York and develops new technics for use in analyzing these data. The state revenue system and sources of school support are analyzed in chapters VI and VII, p. 92-115. Chapter XI, p. 156-60 suggests needed steps to be taken in tax reform. Quotes recommendations of plan of "Model System of State and Local Taxation" outlined by National Tax Association.

49. SWIFT, FLETCHER HARPER. *A Biennial Survey of Public School Finance in the United States, 1920-1922*. U. S. Department of Interior, Bureau of Education, Bulletin 1923, No. 47, Government Printing Office, Washington, D. C.

Among the topics discussed in this bulletin are these: State Policies in Public School Fin-

ance; A New Conception of State Aid; Reforms in Apportioning State School Funds; and Need for New Sources of Revenue.

50. SWIFT, FLETCHER HARPER. "Declining Importance of State Funds in Public School Finance." *School Review* 29:534-46; September, 1921.

Presents data to show decrease in relative amount of school revenues derived from state sources.

51. SWIFT, FLETCHER HARPER. *A History of Public Permanent Common School Funds in the United States*. Henry Holt and Co., New York City, 1911. 493 p.

An authoritative study in this field, tracing the history of the permanent school funds of each of the states of the union.

52. SWIFT, FLETCHER HARPER. *The Public School System of Arkansas*. Part II, "Public School Finance." U. S. Department of Interior, Bureau of Education, Bulletin 1923, No. 11. Government Printing Office, Washington, D. C. 110 p.

An investigation of the educational situation in Arkansas and the underlying causes in so far as they are related to the system of financing the schools. Federal, state and local sources of revenue are described in p. 28-57. Newer type taxes are suggested in p. 97-101.

53. SWIFT, FLETCHER HARPER. *State Policies in Public School Finance*. U. S. Department of Interior, Bureau of Education, Bulletin 1922, No. 6. 54 p.

Presents in concise form significant data of more extensive studies by author in the field of school finance. "School revenues and national aid," p. 20-22, "Existing and potential sources of school revenue," p. 23-44; "Limited possibilities of permanent school funds," p. 49, and "Appropriations versus taxation," p. 49-54, are topics dealt with.

54. SWIFT, FLETCHER HARPER. "State Taxes as Sources of Public School Revenue." *Bulletin of the National Tax Association* 14: 69-77; December, 1928.

The importance of taxation as a source of school revenue, the status of the state school tax in the United States, and types of state taxes levied for school purposes, are discussed. Presents findings concerning the general property tax levied for school purposes in twenty-seven states.

55. SWIFT, FLETCHER HARPER. "State Taxes for Public Schools in Michigan." *Journal of Educational Research* 18:381-586; December, 1928.

A brief analysis of tax provisions for raising school revenue in Michigan.

56. SWIFT, FLETCHER HARPER. *Studies in Public School Finance. The West, California and Colorado*. Research Publications of the University of Minnesota, Education Series No. 1. University of Minnesota, Minneapolis, Minn., 1923. 221 p.

The first volume in a series of studies of state systems of school support. Analysis of existing, and suggestions as to new, sources of revenue in the states studied will be found in p. 11-107, 162-167.

57. SWIFT, FLETCHER HARPER, DEL PLAINE, FRANCES KELLEY, AND TROXEL, OLIVER LEONARD. *Studies in Public School Finance. The Middle West, Illinois, Minnesota, South Dakota, Alaska*. Research Publications of the University of Minnesota, Education Series No. 3. University of Minnesota, Minneapolis, Minn., June, 1925. 329 p.

The third volume in a series of studies of state systems of school support. Analysis of existing, and suggestions as to new, sources of revenue in the states studied will be found in p. 4-44, 88-97, 150-175, 225-253, 293-299.

58. SWIFT, FLETCHER HARPER, AND GOLDTHORPE, JOHN HAROLD. *Studies in Public School Finance, The South. Arkansas, Oklahoma, Alabama, Tennessee*. Research Publications of the University of Minnesota, Education Series No. 4. University of Minnesota, Minneapolis, Minn., July, 1925. 224 p.

The final volume in a series of studies of state systems of school support. Analysis of existing, and suggestions as to new, sources of revenue in the states studied will be found in p. 9-18, 29-34, 78-80, 94-109, 124-7, 141-55, 193-5.

59. SWIFT, FLETCHER HARPER, GRAVES, RICHARD A., AND TIEGS, ERNEST WALTER. *Studies in Public School Finance. The East. Massachusetts, New York, New Jersey*. Research Publications of the University of Minnesota, Education Series No. 2. University of Minnesota, Minneapolis, Minnesota, November, 1923. 240 p.

The second volume in a series of studies of state system of school support. Analysis of existing, and suggestions as to new, sources of revenue in the states studied will be found in p. 9-56, 109-111, 125-138, 169-82, 188-90, 191-93, 200-210.

60. SWIFT, FLETCHER HARPER. *Summary of Status of Newer Types of State School Taxes*. Mimeographed 10 p. Also in *Official Report*, 1927, Department of Superintendence, National Education Association, Washington, D. C., p. 365-8.

A tabulation of provisions for the levying of newer type taxes in the various states.

61. TUPPER, C. RALPH. *A Survey of the Arizona Public School System*. State Board of Education, Phoenix, Arizona, January 1, 1925. 112 p.

Presents data on school conditions in Arizona. Provisions governing the raising of revenue for the schools from state, county and district sources are described in p. 82-83, 88-90, 95-96.

62. U. S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS. *Digest of State Laws Relating to Taxation and Revenue, 1922*. Government Printing Office, Washington, D. C., 1924. 544 p.

Compiled as part of the decennial report on Wealth, Public Debt and Taxation. Of value as a guide in making comparative studies of state tax systems.

63. U. S. DEPARTMENT OF INTERIOR, BUREAU OF EDUCATION. *Public Education in Oklahoma*. Bulletin 1923, No. 14. Government Printing Office, Washington, D. C. 93 p.

Chapter III, "Problems of Financing the Public Schools," p. 26-75 discusses sources and distribution of school revenues.

64. U. S. DEPARTMENT OF INTERIOR, BUREAU OF EDUCATION. *Survey of Education in Utah*. Bulletin 1926, No. 18. Government Printing Office, Washington, D. C. 510 p.

Existing and possible sources of revenue are considered in p. 455-65 and p. 493-500.

II. Apportionment of State Aid to Public Schools

The problem of financing a state public school system is not completely solved when the revenue is received by the state treasury. There still remains the problem of exchanging this money for grounds, buildings, furniture, teachers, services, supplies, books, and the many other items which must be purchased before the work of education can go forward. Since our states do not exercise their right directly to control the details of school administration, but instead delegate large financial powers to subordinate units, it becomes necessary for each state to apportion its contribution to these smaller units. Several different purposes of state apportionments to the local units are recognized, as follows:

1. *Participation* by the State in supporting education
2. *Stimulation* of the local units by setting up certain minimal conditions for receiving state aid
3. *Equalization* of school costs and educational opportunities among the local units.

Each of these purposes is represented in the bibliography. Various bases for apportioning the state school fund are also presented in the books and articles listed. It may be useful to consider these bases as being of three different types, namely: *the basis of need* for education, as represented by the number of persons to be educated; *the basis of ability* to pay for education, as represented by the wealth or income of the local unit; and *the basis of performance*, as represented by the amount of money spent for schools, or by the educational opportunities provided. Each of these points of view also is represented in the references below.

1. ADAMS, JESSE E. *A Study in the Equalization of Educational Opportunities in Kentucky*. Bulletin of the University of Kentucky, Vol. 20, No. 9. September, 1928. College of Education, Bureau of Social Service, University of Kentucky, Lexington, Ky. 268 p.

Surveys educational inequalities of state and ranks counties educationally on the basis of facts revealed. Presents several plans aiming at equalization.

2. ALEXANDER, CARTER. *Bibliography on Educational Finance*. Vol. IV of the Educational Finance Inquiry Commission, American Council on Education. Macmillan Co., New York City, 1924. 257 p.

Annotated bibliography extending to January 1, 1923. A section on "Aid and Apportionment" will be found in p. 7-26.

3. BALDWIN, ROBERT DODGE. *Financing Rural Education*. Rural Education Series, Vol. I. Rural Service Press, Stevens Point, Wis., 1927. 210 p.

A study of the provisions of the several states governing general and special aid for rural education. Briefly reviews previous studies of state school finance.

4. BURNS, R. L. *Measurement of the Need for Transporting Pupils*. Teachers College, Columbia University, Contributions to Education, No. 289. Bureau of Publications, Teachers College, Columbia University, New York City, 1927. 61 p.

Develops an index of cost of transporting pupils for the convenience of those interested in the formulation of state equalization programs based on the measurement of educational need. The importance of cost of transportation as an essential element in the cost of a prescribed minimum educational program is emphasized.

5. BUTTERWORTH, JULIAN E. *Problems in State High School Finance*. World Book Co., 1918. 214 p.

Deals with the historical development and the present status of state aid for high schools.

6. CALLAHAN, JOHN. *Equalizing Educational Opportunity in Wisconsin*. State Department of Public Instruction, Madison, Wis., 1924. 62 p.

Surveys variations in taxable wealth and educational offering among Wisconsin school districts. Proposes bill designed to bring about equalization of educational opportunity.

7. CALLAHAN, JOHN. *The Financial Situation in Wisconsin High School Districts*. State of Wisconsin, Department of Public Instruction, May, 1926. 87 p.

Provisions of the law governing general and special aid for high schools are briefly summarized on p. 12.

8. CARR, JOHN W. *Factors Affecting Distribution of Trained Teachers Among Rural White Elementary Schools of North Carolina*. Teachers College, Columbia University, Contributions to Education, No. 269. Bureau of Publications, Teachers College, Columbia University, New York City, 1927. 91 p.

Emphasizes the importance of the findings of this study to any plan for distributing state aid on the basis of educational need.

9. CAVINS, LORIMER V., AND BOWMAN, EDGAR I. *The Financing of Education in West Virginia*. Under the direction of George M. Ford, State Superintendent of Free Schools, Charleston, West Virginia, 1926. 94 p.

A study embracing the scope and size of the educational program and factors connected with problems of state aid.

10. CLARK, HAROLD F. "The Effect of Population upon the Ability to Support Education." *Bulletin of the School of Education* Vol. 2, No. 1. Bureau of Cooperative Research, School of Education, Indiana University, Bloomington, Indiana, September, 1925. 29 p.

Emphasizes importance of the ratio of child to adult population as a factor in determining ability of a community to support education. Develops a formula, the use of which in connection with figures for per capita wealth is suggested as a more adequate measure of ability to support education than has hitherto been available.

11. CUBBERLEY, ELLWOOD P. *School Funds and their Apportionment*. Teachers College, Columbia University, Contributions to Education, No. 2. Teachers College, Columbia University, October, 1905. 255 p.

A detailed study of the bases of apportioning state aid. Recommends the distribution of state funds on a combination teacher-attendance basis, and the setting aside of a reserve fund

for the relief of the poorest communities and to encourage the introduction by local communities of new and desirable features in the school system.

12. CUBBERLEY, ELLWOOD P. *State School Administration*. Houghton Mifflin Co., Boston, Mass., 1927. 773 p.

Chapter XVII, p. 450-485 deals with apportionment plans and subsidies for education.

13. DAWSON, HOWARD A. *Financial Support of Education in Arkansas*. State Department of Education, Little Rock, Arkansas, 1926. 75 p.

Suggestions for a program of equalizing educational opportunity in Arkansas are contained in p. 86-7.

14. GENERAL EDUCATION BOARD. *Public Education in Indiana*. General Education Board, 61 Broadway, New York City, 1923. 304 p.

Chapter XVI, p. 254-63, discusses the equalization of the school cost burden within the state. Earlier surveys using similar technics have been made by the General Education Board in North Carolina, Maryland, Delaware, and Kentucky.

15. INDIANA RURAL EDUCATION SURVEY COMMITTEE. *Report State of Indiana*, Indianapolis, Indiana, March, 1926. 130 p. (copies may be obtained by addressing H. N. Sherwood, State Superintendent of Schools, Room 227, State House, Indianapolis, Indiana).

The proceeds of the state school tax and the state deficiency fund are described in p. 91-99.

16. LEE, CHARLES A. *Facts Concerning Public Education in Missouri*. Report of the Missouri School Survey, State of Missouri, Jefferson City, Mo., 1924. 139 p.

Chapter II on "School Support in Mississippi" presents information concerning educational inequalities within the state and discusses bases of apportioning school funds.

17. MORRISON, FRED WILSON. *Equalization of the Financial Burden of Education among Counties in North Carolina*. Teachers College, Columbia University, Contributions to Education, No. 184. Teachers College, Columbia University, New York City, 1925. 88 p.

Seeks to discover basis for equalizing financial burden, among counties of North Carolina, of support of a minimum compulsory educational program. Analyzes present educational situation and presents program for better handling of equalization fund.

18. MORRISON, HENRY C. *The Financing of Public Schools in the State of Illinois*. Volume IX of the Educational Finance Inquiry Commission, American Council on Education. Macmillan Co., New York City, 1924. 162 p.

One of four volumes devoted to the study of Illinois' system of educational finance. Offers a summary and interpretation of material and findings presented in more detail in other three volumes. Chapter III of Part I, p. 38-54 presents data on inequalities in educational opportunity in Illinois, while the possibility of remedying the situation by means of a state grants-in-aid policy is discussed in p. 78-80.

19. MORT, PAUL R. "Equalization of Educational Opportunity." *Journal of Educational Research* 13: 90-103; February, 1926.

Names equalization of the burden of a permissible minimum program as the sole objective of a sound plan of state aid and indicates technics for developing and testing state aid plans. Outlines essential features of plan proposed for New York State.

20. MORT, PAUL R. *The Measurement of Educational Need*. Teachers College, Columbia University, Contributions to Education, No. 150. Teachers College, Columbia University, New York City, 1924. 84 p.

Develops a technic for deriving a measure of educational need of the component parts of a state. Educational need is defined as a composite of the elements affecting the cost to a community of a prescribed minimum public educational offering.

21. MORT, PAUL R. *State Support for Public Education*. Bureau of Publications, Teachers College, Columbia University, New York City, 1926. 104 p.

A summarization of recently developed technics and procedures designed to be of service to those concerned with problems of state aid for public schools. Attempt is made in Part I to present fundamental principles of a satisfactory system of state aid. Part II is devoted to technics of applying such principles. Makes use of New York State data in illustration of technics.

22. MORT, PAUL R. "State Support of Public Schools." *American Educational Digest* 47: 303-4; March, 1928.

A statement of the problem of state support of education as one which involves the following steps: (1) defining a minimum educational program to be guaranteed all children of the state; (2) the equalization of the burden of support of this program in accordance with each community's ability to pay; (3) the provision of unlimited local opportunity for providing educational facilities above the minimum program. Suggests encouragement of local effort by providing adequate state leadership and an efficient system of school organization.

23. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "Major Issues in School Finance,"

Part II. *Research Bulletin* 5: 1-63; January, 1927. Washington, D. C. 63 p.

Defects in state systems of distributing school support and remedies for these defects are considered in p. 34-7 and p. 39-40. Indications of ability and effort are also discussed.

24. NEBRASKA STATE TEACHERS ASSOCIATION, LEGISLATION COMMITTEE, PAUL R. MORT, DIRECTOR OF STUDY. *A Plan for Providing Equality of Educational Opportunity in Nebraska*. Nebraska State Teachers Association, Lincoln, Nebraska, 1928. 62 p.

Applies scientific methods to measurement of cost of prescribed minimum educational program in each of Nebraska counties and ability of county to meet such cost. Develops plan of support by which burden of minimum program may be distributed in accordance with county's ability to pay. Appendix I, p. 42-44, presents draft of bill.

25. NEBRASKA STATE TEACHERS ASSOCIATION, COMMITTEE ON LEGISLATION, PAUL R. MORT, DIRECTOR OF STUDY. *The Status of Taxation in Nebraska. State Aid for Transportation*. Research Bulletin No. 4. Nebraska State Teachers Association, Lincoln, Nebraska, November, 1928. 18 p.

Two supporting studies made in connection with the development of a plan for equalizing educational opportunity in Nebraska. The second of these considers the growing problem of the cost of school transportation and suggests a solution of this problem.

26. NEULEN, LESTER NELSON. *State Aid for Educational Projects in the Public Schools*. Teachers College, Columbia University, Contributions to Education, No. 308. Bureau of Publications, Teachers College, Columbia University, New York City, 1928. 84 p.

A fact-finding study of tendencies and general and special practice in state aid for educational projects, and the effects of such practice on the classroom product. Chapters III, IV, V and VI of Part II deal with "Effect of Special Subsidies on Consolidation"; "Effect of Special Subsidies on Transportation"; "Effect of Special Subsidies on High School Libraries"; and "Effect of Special Subsidies on High Schools."

27. NORTON, JOHN K. *The Ability of the States to Support Education*. National Education Association, Washington, D. C. 88 p.

Develops a formula for measuring economic power. Presents comprehensive data as to wealth and income and educational obligations of each state as measured by the number of children of 6 to 13 years.

28. OREGON STATE TEACHERS' ASSOCIATION. *Adequate Revision and the Equalization of Taxa-*

tion for Education in Oregon. Oregon State Teachers Association, Portland, Oregon, 1928. Mimeographed.

Summarizes constitutional and statutory provisions for school support in Oregon. Presents data showing inequality of tax burden within the state and submits equalization plan using the "equated teacher" basis. County unit recommended.

29. O'SHEA, M. V., AND OTHERS. *Public Education in Mississippi*. State of Mississippi, Jackson, Mississippi, 1926. 362 p.

In chapter XII, p. 300-24, which deals with "Educational Finances," factors influencing ability to support education and the system of distributing state funds in use in Mississippi are discussed.

30. PITTENGER, BENJAMIN FLOYD. *An Introduction to Public School Finance*. Houghton Mifflin Co., New York City, 1925. 372 p.

Chapter XI, "Apportioning the Benefits," p. 296-331, deals with bases and methods of state aid.

31. PITTENGER, B. F., AND WORKS, G. A. *Texas Educational Survey Report*, Vol. II, "Financial Support." Texas Educational Survey Commission, Austin, Texas, 1925. 446 p.

Urges revision of state system of taxation and the raising and distribution of school moneys on a more scientific basis.

32. RAINEY, HOMER P. *The Distribution of School Funds in the State of Oregon*. University of Oregon Publications, Education Series, Vol. I, No. 1. University of Oregon, Eugene, Oregon, December, 1926. 48 p.

An analysis of the school support problem in Oregon with a proposed program designed to meet more scientifically the state's educational needs and bring about greater equality in the distribution of the burden of school support.

33. REEVES, FLOYD W. *The Political Unit of Public School Finance in Illinois*. Volume X of the Educational Finance Inquiry Commission, American Council on Education. Macmillan Co., New York City, 1924. 166 p.

One of four volumes devoted to the study of Illinois' system of educational finance. Deals with the school district as the unit of school support. Presents information as to inequalities in ability and effort to support education in Illinois. Recommends the state as the principal unit of school support and a revised method of distributing state aid.

34. RUSSELL, WILLIAM F., HOLY, THOMAS C., STONE, RALEIGH W., AND OTHERS. *The Financing of Education in Iowa*. Volume VIII of the Educational Finance Inquiry Commission, American

Council on Education. Macmillan Co., New York City, 1925. 279 p.

For discussion of methods of distributing state aid in Iowa, see p. 162-64.

35. SEARS, JESSE B., AND CUBBERLEY, E. P. *The Cost of Education in California*. Volume VII of the Educational Finance Inquiry Commission, American Council on Education. Macmillan Co., New York City, 1924. 348 p.

Presents a cross-section of the financial status of education in California for the school year, 1921-22. Chapter III, "Financial Provisions for Schools" describes the plan by which units of the educational system derive support from state and local sources, and chapter VI analyzes the extent to which the cost of education would be equalized under various plans of support.

36. SINGLETON, GORDON G. *State Responsibility for the Support of Education in Georgia*. Teachers College, Columbia University, Contributions to Education, No. 181. Teachers College, Columbia University, New York City, 1925. 56 p.

A study of Georgia's system of school finance which seeks to determine the responsibility of the state for the support of education, and to propose a plan for its realization. Employs the teacher unit as the measure of local educational need.

37. SNYDER, E. R. *Legal Status of Rural Schools in the United States with Special Reference to the Methods Employed in Extending State Aid to Secondary Education in Rural Communities*. Teachers College, Columbia University, Contributions to Education, No. 24. Teachers College, Columbia University, 1909. 225 p.

Provisions of laws in twenty states from 1897 to 1906 are discussed.

38. SOWERS, DON C. *The Financing of Public School Education in Colorado*. University of Colorado Bulletin, Vol. 24, No. 6. University of Colorado Studies. University of Colorado, Boulder, Colo., June, 1924. 93 p.

Recommends an increased state contribution as essential to equalization of the burden of school support. Bases of apportionment of state aid are dealt with in p. 71-3.

39. STAFFELBACH, ELMER H. "The Relationship of School Population Density to Educational Unit Costs in the States." *Educational Administration and Supervision* 14: 73-85; February, 1928.

An investigation of the effects of sparseness of school population upon cost of education per child, as a measure of the need of federal aid in sparsely settled states.

40. STATE EDUCATIONAL COMMISSION, FRED W. MORRISON, DIRECTOR. *Report on the Public School System of North Carolina, Parts I-III*. State

Educational Commission, Raleigh, N. C., 1927. 269 p.

The equalization of the burden of supporting the present six months school term and an eight months school term are discussed in chapters II, p. 3-14, and III, p. 15-25, respectively.

41. STATE OF CONNECTICUT, DIVISION OF RESEARCH AND SURVEYS OF THE STATE BOARD OF EDUCATION. *Financing Education in Connecticut. A Proposed Plan to Enable the State of Connecticut to Meet More Adequately Its Educational Responsibility*. State of Connecticut, Hartford, 1927. 198 p.

Discusses conditions constituting need of revision of existing grant system. Develops measures of educational task and ability to support schools and coordinates these into a plan of state participation in support, based upon principle of equalization of a satisfactory minimum educational opportunity.

42. STATE OF NEW YORK, SPECIAL JOINT COMMITTEE ON TAXATION AND RETRENCHMENT. *Report*. J. B. Lyon, Albany, N. Y., January 15, 1925. "State Aid for Public Schools in the State of New York," by Paul R. Mort, p. 21-83.

Defines sound principles of state aid for public education. Considers defects of system of state aid then in effect and proposes new plan.

43. STRAYER, GEORGE D., AND HAIG, ROBERT MURRAY. *The Financing of Education in the State of New York*. Volume I of the Educational Finance Inquiry Commission, American Council on Education. Macmillan Co., New York City, 1923. 205 p.

Assembles comprehensive data bearing upon school finance in New York State, and develops new technics for use in analyzing these data. The system of distributing federal and state subventions in New York is described in p. 94-100. Chapter VII, p. 161-76, investigates the operation of this system in districts and counties of varying economic resources. Defines problem and outlines procedures in the equalization of school support.

44. SWIFT, FLETCHER HARPER. *A Biennial Survey of Public School Finance in the United States, 1920-1922*. U. S. Department of Interior, Bureau of Education, Bulletin 1923, No. 47. Government Printing Office, Washington, D. C.

Among the topics discussed in this bulletin are these: "State Policies in Public School Finance"; "A New Conception of State Aid"; "Reforms in Apportioning State School Funds"; and "Need for New Sources of Revenue."

45. SWIFT, FLETCHER HARPER. *State Policies in Public School Finance*. U. S. Department of Interior, Bureau of Education, Bulletin 1922, No. 6. 54 p.

Presents in concise form significant data of more extensive studies by author in the field of school finance. Provisions of states governing apportionment of state aid are briefly summarized.

46. SWIFT, FLETCHER HARPER. "State School Funds and Their Apportionment." *American School Board Journal* 76: 39-41, February, 1928; 39-41, April, 1928; 41-3, June, 1928; 77: 37-9, September, 1928; 78: 43-5, February, 1929.

A series of five articles: I. "The Maryland Plan"; II. "The Ohio Plan"; III. "The Oklahoma Plan"; IV. "The Delaware Plan"; V. "The Massachusetts Plan."

47. SWIFT, FLETCHER HARPER. *Studies in Public School Finance. The West. California and Colorado*. Research Publications of the University of Minnesota, Education Series, No. 1. University of Minnesota, Minneapolis, Minn., October, 1922. 221 p.

The first volume in a series of studies of state systems of school support. Methods of apportioning school funds in the states studied are critically analyzed in p. 108-24, 177-89, 193-5.

48. SWIFT, FLETCHER HARPER, DEL PLAINE, FRANCES KELLEY, AND TROXEL, OLIVER LEONARD. *Studies in Public School Finance. The Middle West. Illinois, Minnesota, South Dakota, Alaska*. Research Publications of the University of Minnesota, Education Series, No. 3. University of Minnesota, Minneapolis, Minn., June, 1925. 329 p.

The third volume in a series of studies of state systems of school support. Methods of apportioning school funds in the states studied are critically analyzed in p. 45-97, 176-92, 200-202, 254-83, 299-302.

49. SWIFT, FLETCHER HARPER, AND GOLDTHORPE, JOHN HAROLD. *Studies in Public School Finance. The South. Arkansas, Oklahoma, Alabama, Tennessee*. Research Publications of the University of Minnesota, Education Series, No. 4. University of Minnesota, Minneapolis, Minn., July, 1925. 224 p.

The final volume in a series of studies of state systems of school support. Methods of apportioning school funds in the states studied are critically analyzed in p. 18-19, 37-38, 64-5, 110-16, 127-30, 157-64, 186-91.

50. SWIFT, FLETCHER HARPER, GRAVES, RICHARD E., AND TIEGS, ERNEST WALTER. *Studies in Public School Finance. The East. Massachusetts, New York, New Jersey*. Research Publications of the University of Minnesota, Education Series, No. 2. University of Minnesota, Minneapolis, Minnesota, November, 1923. 240 p.

The second volume in a series of studies of state systems of school support. Methods of apportioning school funds in the states studied

are critically analyzed in p. 57-109, 139-58, 183-6, 190-91.

51. TUPPER, C. RALPH. *A Survey of the Arizona Public School System*. State Board of Education, Phoenix, Arizona, January 1, 1925. 112 p.

Presents data on school conditions in Arizona. The system by which the state equalization fund is distributed to the counties and districts is described in p. 83-84, 87-88.

52. UPDEGRAFF, HARLAN. *Rural School Survey of New York State. "Financial Support."* Ithaca, New York, 1922. 233 p.

A study of rural school conditions in the state of New York. Reveals differences among districts both in effort and ability to support schools and suggests plan of state aid by which these differences may be eliminated. Proposed plan includes features designed to stimulate local initiative.

53. UPDEGRAF, HARLAN, AND KING, LEROY A. *A Survey of the Fiscal Policies of the State of Pennsylvania in the Field of Education*. Part II "Education." Report of Citizens' Committee on the Finances of Pennsylvania to Hon. Gifford Pinchot, December, 1922. 207 p.

Presents theory of state aid, based on "ability and effort" of local communities formerly worked out for New York State and applies it to conditions existing in Pennsylvania.

54. U. S. DEPARTMENT OF INTERIOR, BUREAU OF EDUCATION. *Public Education in Oklahoma*. Bulletin 1923, No. 14. Government Printing Office, Washington, D. C. 93 p.

Chapter III, "Problems of Financing the Public Schools," p. 26-75, discusses sources and distribution of school revenues.

55. U. S. DEPARTMENT OF INTERIOR, BUREAU OF EDUCATION. *Survey of Education in Utah*. Bulletin 1926, No. 18. Government Printing Office, Washington, D. C. 510 p.

Unequal educational opportunities in the state and their relation to Utah's method of distributing state funds are considered in chapter XI, p. 418-455.

56. WORKS, GEORGE A. "The Relation of the State to the Support of Education." *Elementary School Journal* 27: 335-43; January, 1927.

Maintains that there are inherent weaknesses in any plan for distributing state aid which recognizes equalization as its only objective. Enumerates these weaknesses and combats position taken by those who favor such a plan. Declares that "if we are to maintain an educational system responsive to the demands of a democratic society, it is important that the largest possible provision consistent with our economic status be made for growth through the recognition of effort."

III. Financial Aspects of Certain Administrative Problems

In this last division of the bibliography a selected series of administrative issues are represented. The division comprises five short reference lists on financial aspects of the following problems:

1. County unit of school support
2. State regulation of teachers salaries
3. Financing a state teachers retirement system
4. State school budgeting
5. Sources of information on economic resources and school costs.

1. County Unit of School Support

The size and nature of the local units for school control and support vary among our states. The town, parish, district, community, township, and county are each used as the unit of control by one or more states. Of all these units none has been more fully discussed than the county. The financial importance of the unit selected for school control is obvious. The larger the unit of taxation the stronger the tendency towards equalization of school costs. Other conditions being equal, the larger the school, the lower the cost per pupil. The size and nature of the administrative unit also affects the theory and practice of state apportionments. The references below offer a nucleus of material for the study of the financial aspects of county unit control.

1. COOK, ALBERT S. "Centralizing Tendencies in Educational Administration; the County as a Unit for Local Administration." *Educational Administration and Supervision* 4: 133-40; March, 1918.

Declares the two requirements to be met in a good system of schools are adequate financial support and effective organization and control, and seeks to demonstrate that these can best be secured under the county unit system of local administration. Describes administrative and supervisory systems in effect in Baltimore County, Maryland.

2. CUBBERLEY, ELLWOOD P. *State School Administration*. Houghton Mifflin Co., Boston, Mass., 1927. 773 p.

The section on "Taxation for Schools," p. 414-25, describes the evolution from the district to the county as a school tax unit. Evidence of educational inequalities resulting from a dependence on district taxation and of the

advantages of the county as an equalizing unit is presented.

3. HOOD, WILLIAM R. "The County as a Source of School Support." *American School Board Journal* 68: 37-8; February, 1924.

Maintains that while county school control and county school support are closely related, the need of equalization of educational opportunities is an argument for the county as a tax unit, rather than as a unit of educational administration. Presents a statement of county tax provisions in 26 states in 1923. Argues for increased support of schools by the county and also by the state.

4. ILLINOIS STATE TEACHERS ASSOCIATION. *Some Problems of the Larger School Unit in Illinois*. Illinois State Teachers Association, Springfield, Ill., July 10, 1926. 21 p.

Summary of data presented to members of the Committee on the Larger Unit, of the Illinois State Teachers Association. Deals with the evils of the district system in Illinois.

5. NORTH CAROLINA STATE EDUCATIONAL COMMISSION, FRED W. MORRISON, DIRECTOR. *Report on the Public School System of North Carolina*, Part IV, "The Financial Condition of the Counties." State Educational Commission, Raleigh, N. C., 1927. 381 p.

A study of the financial situation in North Carolina counties as it is related to the support of school terms of six and eight months. Detailed information concerning tax levies and indebtedness is presented.

6. REEDER, WARD G. "Proposed Modification of County Tax Law for Ohio Schools." *Educational Research Bulletin* 5: 1-11; January 20, 1926.

Suggests revision of the existing bases on which Ohio counties distribute aid to the school districts within their boundaries and develops a formula for computing share of each district in county apportionment.

7. REEVES, FLOYD W. *The Political Unit of Public School Finance in Illinois*. Volume X of the Educational Finance Inquiry Commission, American Council on Education. Macmillan Co., New York City, 1924. 166 p.

Deals with the district as the tax unit for support of schools in Illinois. Considers the effect of adopting units of larger size upon economic conditions and the equalization of educational opportunity in the state.

8. STRAYER, GEORGE D., AND HAIG, ROBERT MURRAY. *The Financing of Education in the State of New York*. Volume I of the Educational Finance Inquiry Commission, American Council on Education. Macmillan Co., New York

City, 1923. Chapter XII, "The Size of the Unit for School Support and the Problem of State Aid," p. 161-76.

Describes the operation of the present system of state aid, considers what would be the effect of making the county the unit of school support and develops an index of economic resources based on the county's wealth and reported taxable income.

9. SWIFT, FLETCHER HARPER. *A Biennial Survey of Public School Finance in the United States*. U. S. Department of Interior, Bureau of Education, Bulletin 1923, No. 47. Government Printing Office, Washington, D. C. p. 28-31.

Deals with the rising importance of the county as a unit for providing school revenue. Reviews recent legislation.

10. SWIFT, FLETCHER HARPER. *Studies in Public School Finance*. Research Publications of the University of Minnesota, Education Series, Nos. 1-4. University of Minnesota, Minneapolis, Minn., October, 1922-July, 1925.

A series of studies of state systems of school support: "The West, California and Colorado"; "The East, Massachusetts, New York, and New Jersey"; "The Middle West, Illinois, Minnesota, South Dakota and Alaska"; "The South, Arkansas, Oklahoma, Alabama, and Tennessee." Existing systems of county and district aid are described, information on educational inequalities presented, and recommendations for the abolition of districts as units of school support offered.

11. WILLIAMS, J. HAROLD. *Reorganizing a County System of Rural Schools. Report of a Study of the Schools in San Mateo County, California*. U. S. Department of Interior, Bureau of Education, Bulletin 1916, No. 16. Government Printing Office, Washington, D. C. 50 p.

A typical county survey, recommending county-unit organization. Deals extensively with financial adjustments to be made after adoption of the county-unit. The statistics are out-of-date but the technics employed are worthy of careful study.

2. State Regulation of Teachers Salaries

Since approximately three-fourths of all school current expenditures are payments for teaching service, the financial importance of teachers' salaries is obvious. The state may enter into salary regulation in two ways. First, some states have regulations governing the way in which school revenue must be distributed among the various expenditures. For example, California requires that all state apportionments must be used for the payment of

teachers salaries. Second, several states have a minimum salary law forbidding local units to pay less than certain specified salaries. The penalty for infringement of this law is generally the loss of the state apportionment for the year following.

Some of the references describe minimum salary laws now and formerly in force. Others discuss the relation of school finance to teachers salaries in general.

1. CARR, WILLIAM G. "Teachers Salaries: A Guide to Literature and Problems." *Sierra Educational News* 26: 22-27; June, 1928.

A recent bibliography. Contains a list of older bibliographies on salaries.

2. CHANCELLOR, WILLIAM ESTABROOK. "Teachers Wages from the Viewpoint of Economics." *American School Board Journal* 71: 37-39, 38-41; November, December, 1925.

Presents the thesis that teaching is a non-economic service, and draws conclusions from this point of view.

3. CUBBERLEY, ELLWOOD P. *State and County Educational Reorganization*. Macmillan Company, New York, 1914. p. 176.

Outlines an ideal state law for regulation of salaries.

4. CUBBERLEY, ELLWOOD P. *State School Administration*. Houghton Mifflin Company, Boston, 1927. Chapter XXIV.

Traces the history and present status of salary legislation in several states.

5. EVENDEN, E. S. "Essential Features of a State Salary Law." *Educational Review* 60: 205-215; October, 1920.

Holds that salary laws should consider training, experience, and success in teaching. Urges that initial salaries be high enough to attract desirable beginners and that the schedule should be such as to hold out the hope of economic independence in age for every competent teacher.

6. LIBBY, RICHARD J. "A Salary Schedule for Rural Teachers." *Proceedings* 66: 498-500; 1928. National Education Association, Washington, D. C.

Proposes that minimum requirements for certification should be accompanied by minimum salary laws. Describes the experience of Maine with such a law since 1919.

7. MORRISON, H. C. "Taxation, Teachers Salaries, and Cost of Education." *Elementary School Journal* 20: 47-56; September, 1919.

Deals with sources of revenue for teachers

salaries and concludes that the income tax is a desirable method of raising revenue for salaries.

8. SIES, RAYMOND W. "Legal Regulation of Minimum Salaries for Teachers." *Educational Review* 35: 10-31; January, 1908.

An old study but included because it has not been superseded by any more recent compilation of information on the subject.

3. Financial Aspects of State Teacher Retirement Systems

Twenty-three states now have state-wide teacher retirement systems. In two of these the state provides all of the money necessary to pay retirement salaries and to operate the system. In eighteen other states only a part of the total cost of the system is carried by the state. The financial problems connected with retirement systems are a branch of actuarial science and are among the most difficult which the states have to face. Among the agencies which have made extensive studies of teachers retirement problems are the Carnegie Foundation for the Advancement of Teaching, the National Council of Teachers Retirement Systems, the United States Bureau of Labor Statistics, the Institute for Governmental Research, various State Education Associations, and the Research Division of the National Education Association. The references below include studies representative of each of these groups. A few important statements of basic principles and descriptions of retirement systems in selected states are also included.

1. CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING, 522 FIFTH AVENUE, NEW YORK CITY. *Twenty-second Annual Report of the President and of the Treasurer*, 1927. p. 77-108.

Points out sources of unsound legislation. Indicates procedures in organizing a state-wide teacher retirement system. Discusses status of retirement legislation in the several states, industry, and other professions.

2. CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING, 522 FIFTH AVENUE, NEW YORK CITY. *Proceedings*, February 27-29, 1928. Boston, Massachusetts. 15 p.

Discusses pensions from viewpoint of efficiency, rehabilitation of retired teachers, actuarial problems, and tendencies and dangers in a teacher retirement system.

3. COMMITTEE ON A TEACHERS' RETIREMENT PLAN FOR MARYLAND. *Report on a Proposed Plan*

for the Retirement of Teachers in the State of Maryland. Baltimore, Maryland, 1927. 65 p.

Summarizes main provisions of a teacher retirement plan later enacted for Maryland. Gives information on cost to teachers and state, including basic actuarial data.

4. FURST, CLYDE, MATTOCKS, RAYMOND L., AND SAVAGE, HOWARD J. *Retiring Allowances for Officers and Teachers in Virginia Public Schools*. Bulletin No. 17. Carnegie Foundation for the Advancement of Teaching, New York City. 1926. 70 p.

Outlines proposed plan of retiring allowances for officers and teachers in Virginia public schools. Discusses principles underlying plan and related problems.

5. HOBBS, LUCY E. "History of the Teachers' Annuity Movement in Iowa." *University of Iowa Extension Bulletin No. 145*. April 1, 1926. College of Education Series, No. 20. University of Iowa, Iowa City, Iowa. 62 p.

Traces history of movement to secure a teachers' pension and annuity law for Iowa.

6. HOUSMAN, IDA E. *A Digest and an Explanation of the New Jersey Teachers' Pension and Annuity Fund Law*. Published by the author, 519 Garden Street, Hoboken, N. J. 1927. 144 p.

Presents New Jersey Teachers' Pension and Annuity Fund Law in simplified form with explanatory material. Includes text, and important rulings.

7. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "The Advance of the Teacher Retirement Movement." *Research Bulletin* 6: 149-204; May, 1928. National Education Association, Washington, D. C.

Committee on Retirement Allowances presents revised extended statement of the "Fundamental Principles of a Teacher Retirement System," with data on teacher retirement systems in effect, plans for retirement legislation among states, and reasons for support of retirement measures. Includes questions and answers bearing on retirement systems, and bibliographical material.

8. PALMER, NIDA PEARL. *Pension Systems for Public School Teachers*. U. S. Department of the Interior, Bureau of Education, Bulletin, 1927, No. 23. Government Printing Office, Washington, D. C. 90 p.

Analyzes teachers' pension systems in United States for tendencies and criteria in evaluating pension systems. Presents data on administration, benefits, and financing of teachers' pension systems, from 1894 to 1924.

9. SAVAGE, HOWARD J., AND COGSWELL, EDMUND S. *A Retirement Plan for Colorado Public Schools*. Bulletin Number 22. Carnegie Foundation for

the Advancement of Teaching, New York City, 1928. 72 p.

An outline and discussion of retirement plan proposed for Colorado public schools, including actuarial and financial data.

10. SHAW, REUBEN T. *A Study of the Adequacy and Effectiveness of the Pennsylvania School Employes' Retirement System*. Published by Pennsylvania State Education Association, 400 North Third Street, Harrisburg, Pa., 1926. 159 p.

Deals with regulations and basis of superannuation retirement in Pennsylvania, covering age and service requirements, costs, benefits, and salary factors, and practice in other states. Presents data on social and economic status of retired school employees.

11. "State and City Retirement Systems for Teachers." *Monthly Labor Review* 27: 15-26; July, 1928. See "Pension Systems in the United States." *School and Society* 28: 181-82; August 11, 1928.

Reports findings of Bureau of Labor Statistics in 1927. Covers state-wide and a number of city teacher retirement systems, presenting data on establishment, membership, management, support, and benefits.

12. STUDENSKY, PAUL. *Teachers' Pension Systems in the United States*. Institute for Government Research. D. Appleton and Company, New York City, 1920. 460 p.

Critical, descriptive treatment of teachers' pension systems in the United States. Part I describes evolution of such systems, analyzes general problem of teacher retirement allowances, and discusses underlying principles. In Part II a number of systems are treated in detail.

4. State School Budgeting

One of the most effective tools for the control and analysis of expenditures is the budget. Since the budget has been adopted successfully by both business concerns and private individuals, it is natural and proper that governmental agencies, including the schools, should also investigate its nature and uses. A study of the accompanying references will show that the budget idea is being rapidly adopted and perfected by those responsible for the administration of public education. In addition to the special references on school budgeting, a few references of a more general nature are included.

1. ALEXANDER, CARTER. *Bibliography on Public School Finance*. Vol. IV of the Educational

Finance Inquiry Commission, American Council on Education. Macmillan Company, New York, 1924. 257 p.

A section on "Budget and Budgetary Procedure" will be found in p. 30-33.

2. BUCK, ARTHUR E. *Budget Making*. D. Appleton and Company, New York, 1921. 234 p.

Handbook on the forms and procedure of making budgets, state or city.

3. CASE, HIRAM C. *Handbook of Instructions for Recording Disbursements for School Purposes*. University of the State of New York, Albany, 1917. 25 p.

A model handbook for introducing a uniform state system of school accounting. Formulated with the approval of the United States Commissioner of Education and the National Association of School Accounting Officers.

4. ENGELHARDT, N. L., AND ENGELHART, FRED. *Public School Business Administration*. Bureau of Publication, Teachers College, Columbia University, New York, 1927. Chapter XXII, "The Budget, Its Preparation, and Use," p. 508-57.

Deals with general aspects, procedures and standards in the preparation and administration of school budgets. Special attention is given to budgetary procedure in fiscally independent and fiscally dependent city school systems. Reproduces in whole or in part four city school budgets illustrating superior form and arrangement. Bibliography includes references to material in the field of state budget making.

5. GRAVES, FRANK P. "Budget Making and Spending by the State." *Proceedings* 61: 960-962; 1923. National Education Association, Washington, D. C.

Financial accounting and budgetary procedures in New York State are described.

6. LINDSAY, E. E. *Problems in School Administration*. Macmillan Company, New York, 1928. p. 77-98.

Defines the budget. Discusses three factors in budget making: (1) needs, which involves a consideration of expenses of previous year, and of changes which should be made during the coming year; (2) comparisons with budgets of other districts; and (3) amount of income available. Discusses uses of budget in checking on expenditures.

7. MICHIGAN STATE TEACHERS ASSOCIATION, COMMITTEE ON UNIFORM CHILD ACCOUNTING AND UNIT COSTS. *A Uniform Financial Procedure for the Public Schools of Michigan*. Bulletin No. 4, Part I. Michigan State Teachers Association, Lansing, Michigan, October, 1924. 16 p.

Seeks to develop a system of uniform financial accounting which may be applied to the public school districts of Michigan on the recommendation of the State Department of Education. Part I of this report is concerned with rules and procedures for the development of the school budget.

8. MOEHLMAN, ARTHUR B. *Public School Finance*. Rand McNally and Company, Chicago, 1927. p. 172-86.

Discusses steps in the development of the school budget: (1) preparation, which involves (a) policy, (b) form, (c) facts, and (d) methods; (2) presentation, dependent on legal requirements, the audience, and community organization; and (3) the administration of the budget, determined by the local educational organization.

9. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "School Records and Reports." *Research Bulletin* 5:226-350; November, 1927. National Education Association, Washington, D. C.

See section on "Financial Records of a School System," p. 233-44, and bibliography on "Finance Records," p. 327-33.

10. PITTENGER, BENJAMIN FLOYD. *An Introduction to Public School Finance*. Houghton Mifflin Company, Boston, 1925. p. 45-72.

Defines the budget. Analyzes budget making into five steps: (1) collecting information; (2) classifying information; (3) drafting the budget; (4) adopting the budget; and (5) seeing to its proper administration. Discusses values of the budget in industry, in government, and in the school.

11. "School Budgets in North Carolina." *American School Board Journal* 76:141-2; March, 1928.

Reports on changes made in the state school law, relating to budgets of county boards of education. Law provides that budgets will set aside three separate funds: (a) current expense, (b) capital outlay, and (c) debt service. System is designed to make possible inter-county comparisons and state-wide summaries.

12. SHILLING, JOHN. "An Adventure in Financing a State School System." *Educational Administration and Supervision* 9:81-6; February, 1923.

A theoretical state budget plan that permits of the expenditure of only given percentages of total school funds for given purposes.

13. *State Budget Systems*. Pennsylvania State Chamber of Commerce, Harrisburg, Pennsylvania, 1922. 120 p.

A budget plan for Pennsylvania. Describes Pennsylvania's appropriation methods and the

budget systems in the states. Defines four types of budgets, with reference to location of responsibility: executive, administrative, administrative-legislative, and legislative.

5. Sources of Information on Economic Resources and School Costs

Many national agencies are engaged in collecting and distributing information on the economic resources and school costs of the states. Among the most important of those agencies, all of which are represented in the references given below, are: National Industrial Conference Board; National Bureau of Economic Research; United States Department of Commerce, Bureau of the Census; United States Department of the Interior, Bureau of Education; United States Department of Labor, Bureau of Labor Statistics; and the Research Division of the National Education Association. A number of important studies of school costs limited to one or a few states have been omitted. The bibliographies in reference 2 below may be consulted for further guidance on this subject.

1. NATIONAL BUREAU OF ECONOMIC RESEARCH. *Income in the United States. Its Amount and Distribution, 1909-1919*. Vol. I, Harcourt Brace and Co., New York, 1921. 152 p. Vol. II, National Bureau of Economic Research, New York, 1922. 440 p.

Volume I estimates amount of national income by sources of production and by incomes received and submits final estimate based on combination of results obtained by both methods. Volume II reports in detail procedure and sources of information used in arriving at estimates presented and discussed in more summarized form in Volume I.

2. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "Major Issues in School Finance," Parts I and II. *Research Bulletin* 4:236-65, November, 1926; 5:1-63, January, 1927.

Evidence as to the economic resources of the nation is presented in Part I and of the states in Part II, p. 5-29.

3. NATIONAL INDUSTRIAL CONFERENCE BOARD. "The Growth of State and Local Expenditure." *Conference Board Bulletin*, No. 17. National Industrial Conference Board, 247 Park Avenue, New York City, May 15, 1928, p. 136-9.

A discussion of the factors in the rise of state and local government costs and a diagrammatic presentation of the relative influence of each of them. Factors named are: increasing density in population; addition of new and ex-

pansion of former governmental functions; and loss in value of the dollar. Concludes that in all probability the greater part of increase in government costs has been unavoidable.

4. NATIONAL INDUSTRIAL CONFERENCE BOARD. "Measures of the Purchasing Value of the Dollar." *Conference Board Bulletin*, No. 16, p. 129-31; April 15, 1928. National Industrial Conference Board, 247 Park Avenue, New York City.

Presents figures for purchasing power of the dollar based upon indexes of cost of living, wholesale food prices, retail food prices, wage rates, and general price level. Figures based upon cost of living are from 1914 to 1927; other series are from 1900 to 1927. Indexes of general price level (Carl Snyder's) include prices of food, wholesale and retail, rents, transportation costs, land values, bonds and stocks, and wages, thus seeking to represent everything for which money is paid out in our economic life.

5. NATIONAL INDUSTRIAL CONFERENCE BOARD. *Cost of Government in the United States, 1925-26*. National Industrial Conference Board, 247 Park Avenue, New York, 1927. 237 p.

Presents facts with regard to government expenditures, tax collections and public indebtedness. Chapter VI, p. 147-90, deals with "Fiscal Aspects of Education." The report for 1926-27, intended to supplement this volume, is just off the press.

6. NATIONAL INDUSTRIAL CONFERENCE BOARD. *Cost of Living in the United States 1914-1927*. National Industrial Conference Board, 247 Park Avenue, New York, 1928. 266 p.

Summarizes in one volume the results of previous investigations of the Conference Board in this field with particular emphasis on changes in the cost of living between November, 1925, and January, 1928.

7. NATIONAL INDUSTRIAL CONFERENCE BOARD. "Estimates of National Wealth and Income." *Conference Board Bulletin*, No. 5, p. 33-40; May, 1927. National Industrial Conference Board, 247 Park Avenue, New York City.

Gives census estimates of national wealth for the years 1880, 1890, 1900, 1904, 1912, and 1922 and the Conference Board's estimate for 1925. Figures on national income, total, per capita and per person gainfully occupied, 1909-1926, are given and compared with estimates by other authorities. Discusses bases on which various estimates are built.

8. NATIONAL INDUSTRIAL CONFERENCE BOARD.

"National Wealth and its Local Distribution." *Conference Board Bulletin*, No. 18, p. 141-44; June 15, 1928, National Industrial Conference Board, 247 Park Ave., New York City.

Presents an estimate of national wealth for 1927 and distributes this estimate by states.

9. NORTON, JOHN K. *The Ability of the States to Support Education*. National Education Association, Washington, D. C. 88 p.

Presents comprehensive data as to the wealth, income and educational obligations of each state.

10. REEDER, WARD G., AND PAISLEY, ETHAN A. *Trends of School Costs in Ohio*. Ohio State University Studies, Contributions in School Administration, No. 3, Ohio State University Press, Columbus, Ohio, 1926.

Studies trends of school costs in Ohio, 1870 to 1924. Seeks to interpret these trends and on this basis to make predictions for the future. Compares increase in costs with increase in ability to support education.

11. U. S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS. *Financial Statistics of States, 1926*. Government Printing Office, Washington, D. C., 1927. 133 p.

Annual report of the Bureau of the Census showing the financial transactions, the assessed valuation of taxable property and the taxes levied thereon, and indebtedness and assets of the 48 states for the fiscal year, 1926. Financial transactions include receipts, costs, and indebtedness incurred in meeting costs of the state as a whole and its important departments. The 1927 report is in press.

12. U. S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. "Changes in Cost of Living in the United States." *Monthly Labor Review* 27: 186-99; August, 1928.

Gives index numbers for changes in cost of living from December, 1914, to June, 1928, in the United States, using 1913 as a base and in specified cities from December, 1915, to June, 1928, using December, 1914, as a base. Indexes are for specified items and for all items.

13. U. S. DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION. *Statistics of State School Systems, 1925-26*. Bureau of Education Bulletin, 1927, No. 41. Government Printing Office, Washington, D. C.

Attendance, property values, and receipts and expenditures are among the principal items included.

ROYAL CANADIAN MOUNTED POLICE

DEPARTMENT OF JUSTICE

OTTAWA, CANADA

SEPTEMBER 15, 1964

TO: THE ATTORNEY GENERAL

FROM: THE CHIEF OF POLICE

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F WE WOULD have the values of individualism, their stimulation to initiative, to the development of hand and intellect, to the high development of thought and spirituality, they must be tempered with that firm and fixed ideal of American individualism—an equality of opportunity.—*Herbert Hoover.*