

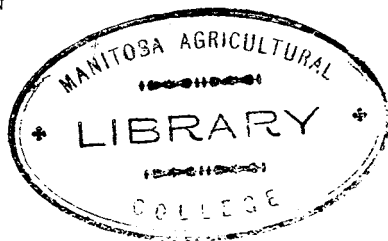
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Bulletin 368

November, 1930

COST OF PUBLIC EDUCATION FROM VIEWPOINT OF AGRICULTURE IN LARIMER COUNTY, COLORADO

By G. S. KLEMMEDSON



In cooperation with the Division of Finance, Bureau of
Agricultural Economics, U. S. D. A.,
Washington, D. C.

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STATEMENT OF COOPERATION

This study was carried on in cooperation with the Division of Agricultural Finance, Bureau of Agricultural Economics, United States Department of Agriculture, at Washington, D. C. Acknowledgment is due to Eric Englund, Assistant Chief, Bureau of Agricultural Economics, and Whitney Coombs* of the Division of Agricultural Finance, who gave helpful advice and assistance in tabulating the data.

Thanks are due to the County Superintendent of Schools and to the State Superintendent of Public Instruction who furnished much of the information upon which the study is based. We have also attempted to express in the bulletin, as occasion arose, our obligation to many others from whom we derived many suggestions.

PREFACE

The Colorado Agricultural College has recognized the need for a study of local government in Colorado for the purpose of aiding the agricultural interests of the state to reduce the present burden of local taxation. Most individual farm taxpayers have neither the time nor the technical knowledge to keep in touch with public officials, to watch expenditures of tax money, to suggest means for improving the effectiveness of each department of government and to recommend the business-like methods in governmental administration. Bulletin 361, "The Cost of Local Government in Larimer County, Colorado," was the first of this series on local government to be issued.

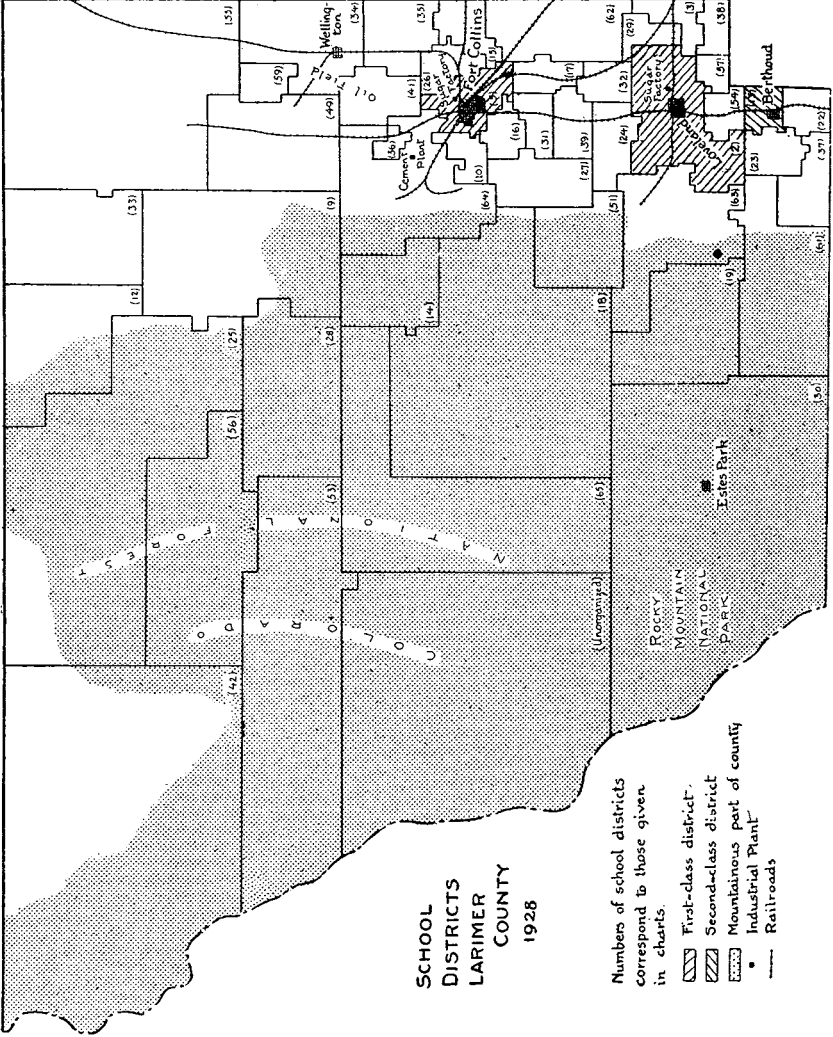
The public school is not only the largest, single object of county expenditure, it is also the branch of local government in which the growth of expenditure is greatest. The total expenditures for tax-supported educational purposes in Colorado amounted to 30 million dollars in 1928. Five years ago it amounted to 25 million dollars. Colorado has a yearly income of approximately 875 million dollars, therefore about 3.5 percent of our income is expended for public education. The most important problem in school taxation is how to keep taxes at the lowest level consistent with the rendering of modern educational service.

The major portion of the school funds is derived from the general property tax. General property taxes for educational purposes in Colorado increased from \$6,290,163 in 1912 to \$25,834,483 in 1927, or an increase of 311 percent.

*Deceased, November 8, 1930.

This present study reviews the cost of schools in Larimer County, Colorado, from 1901 to 1928. Receipts and expenditures for 1928 are given in detail. Most of the information for this study was obtained from the annual reports of the county superintendent of schools. Other information was obtained from the auditor's semi-annual reports for Larimer County. Information for District 5 was obtained from the secretary of the school board of that district. Much of the original statistical material for 1928 was tabulated and checked by the Division of Agricultural Finance, Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C., which is cooperating with the Department of Economics, Colorado Agricultural College.

The author found many errors in published records and even in the original records which were used as a basis of study. This was particularly true of bonded indebtedness and tax levy figures. Information obtained from the State Superintendent of Schools did not agree with figures obtained from the Colorado State Tax Commission or with those obtained from the State Board of Immigration. Records of bond issues in many counties are in a terrible condition. The errors were usually of the following sort: Those common to bookkeeping and accountancy, transposition of figures; errors in distribution of totals, computation of totals, averages and percentages; and confusion between different years. It is hoped that more care will be used in compiling school records in the future.



Map 1.—School districts, Larimer County, Colorado, 1928.

THE COST OF PUBLIC EDUCATION FROM VIEWPOINT OF AGRICULTURE

IN LARIMER COUNTY, COLORADO

BY G. S. KLEMMEDSON

The schools of Larimer County absorb a greater proportion of governmental expenditures than any other single governmental activity. Eight hundred and fifty thousand dollars annually is a huge bill; and while it is generally recognized that the taxpayer's money could not be better invested, prudence and restraint are as desirable in this as in all other matters of public finance. Progress in education must continue. The future will, no doubt, see greater expenditures for schools than in the past; but educational progress must be regulated and controlled by a knowledge of the facts and understanding of the issues involved.

An attempt will be made to approach school costs and taxation with the sole object of throwing light upon the vital points. How can the most, in the way of service, be received from the school tax dollar? Is the cost excessive? Can the present type of educational work be done for less? How can the taking of so many dollars for school taxation be prevented?

With this in mind we began a study of school expenditures to show the source and expenditure of all funds disbursed, to estimate the quality of services received from the expenditure of such funds and to see whether the funds were efficiently spent.

The farmer has paid a heavy increase in the cost of government, at a time when returns on his operations have been low and the cost of machinery and supplies high. Taxes take approximately one-third of the farmers' net incomes. In 1928 the farmers of Colorado received less than 20 percent of Colorado's income from all sources yet they paid 35 percent of the total property taxes in the state.

Our studies show conclusively that the tax burden is not equally distributed, that general property is carrying an undue share of the load and that agriculture is taxed the most heavily of all classes. They show that of a billion dollars of productive intangible property owned by the people of Colorado, 95 percent escapes direct state and local taxation. They show that millions of dollars in salaries and wages escape direct taxation annually. These studies indicate also that the farmers in certain school districts are taxing themselves to the breaking point in order to provide the minimum school facilities required by the state.

SUMMARY

The economic development and needs of Larimer County have outgrown the ancient system and structure of local school government which originated in New England nearly 150 years ago.

There are 46 separate taxing and spending units in the school system of this county which operate for the most part independently. The taxpayers of Larimer County pay yearly \$850,000 to support education, a part of which could be saved if school districts were consolidated into larger units of administrative control.

There are too many districts which make necessary too many of-ficers which is, in a large measure, responsible for the high local taxes.

Our tradition in Colorado has been to establish a school district wherever a dozen families happen to congregate and to set up an institution known as a school. Colorado still has 1900 one-teacher schools with costs and results out of all relation to each other.

When it costs more money to run schools we never think of reducing the overhead or cutting the cost of service—that which business concerns would do and are now doing thru mergers—but simply go back to the taxpayer for more tax money because governments are not in business for profit and cannot be thrown into bankruptcy courts.

The very weak organization of the present district school system defies administration which is either efficient or economical. The present poor organization manifests itself in improper administrative responsibilities, unnecessary duplication of services and an excessive number of separate districts having power to levy taxes and incur indebtedness.

Serious consideration should be given to a consolidation of all districts into a single county unit because it holds the key to sizable economies not possible under the present organization.

The task of reorganizing the present system requires changes in old laws which create and grant powers to local school districts.

One of the most outstanding characteristics of costs for elementary schools in Larimer County is the extreme variability among school districts.

One school district in Larimer County had only 4 pupils in daily attendance while another district had 2,785. The cost in the district with 4 children was \$416 per pupil while it was only \$124 in the larger district. The highest cost per pupil in all districts was \$416 while the lowest cost per pupil in attendance was \$61.

It does not seem possible to justify the wide difference in cost shown in this report. If the highest are not too high, then the lowest

ought not to be tolerated in a county that presumes to have a modern school system. If the lowest is satisfactory then the highest is undoubtedly waste.

The entire study shows that there are absolutely no standards of expenditures for anything in the school budget. Districts spend to suit their own particular likes.

The value of property owned by schools, the amount of school debt, and the amount spent for capital outlays vary greatly. The ratio of debt to property values also varies widely.

There are eight school districts with less than \$1000 of school property, and five districts with \$127,000 to \$909,000 of school property. Four districts have less than \$50 of school property per pupil in attendance while one district has \$1,512 of school property per pupil.

One district has only \$22,000 of taxable wealth while another has \$16,775,140.

It appears that to build a schoolhouse worth \$10,000, several of the lowest cases would have to vote bonds and pay heavy taxes for years, while the highest cases could build such a schoolhouse with a single tax levy of less than 1 percent.

Under the existing system of many small districts the resources of poor districts are often strained to offer only a meager educational program, while rich districts are able to finance an elaborate program without any perceptible effort.

There are 14 school districts in Larimer County that spend an average of \$106 per pupil, with a local tax burden of \$5.20 per \$1,000 valuation. But in another group of four districts the tax burden is \$11.95 per pupil per \$1,000 valuation, or more than twice as much as the first group, altho it results in spending only \$93.52 per pupil.

In 1928 there were 18 districts where the tax rate ranged from \$1 to \$5 per \$1,000 valuation, 16 districts from \$5 to \$10, 9 districts from \$10 to \$15, and 1 district from \$15 to \$20.

The small rural schools paid the lowest salaries and as a consequence, no doubt received less in the way of educational value. Teachers in the country school districts received an average annual salary of \$1,036 compared with \$1,640 paid in the town and city schools, yet the cost of education per pupil in the country schools amounted to \$147 compared with \$120 for the city and town schools.

The average number of years of teaching experience in the country schools was 4.7 years compared with 11.4 years in the city and town schools. Many of the teachers in the rural schools had 1 year or less of teaching experience.

Due to the difference in topography of the county, natural resources and density and character of population, it is inevitable that some parts of the county are comparatively wealthy and others relatively poor. Some districts have considerable railroad mileage and others have none, while some are fortunate in having valuable factories located within their districts.

Local units for financing schools are organized to meet local needs, with little concern for the general effect upon education of all the youth of the county or state, and with no concern at all for the effect upon the basis of revenues for all public purposes.

Very great inequalities in the educational opportunities for children have grown out of this extreme localism, with bad consequences to the county and state as a whole.

It might reasonably be anticipated that such organization would be the parent of heavy indebtedness, and so it is. The bonded indebtedness of the schools in this county amounted to \$1,149,800 April 1, 1929. Interest payments on school bonds amounted to \$58,925 in 1928. The amount to be repaid for each dollar borrowed thru the levying of taxes amounted to \$2.15 on each dollar borrowed. Hence, if it were possible to reform at once, the element of interest in school costs would continue to be large for many years.

The study indicates that there are opportunities for economy in school administration because of appreciable discrepancies in the operating costs of apparently comparable school districts.

Careful scrutiny should be directed toward school expenditures for administration, supplies, non-technical services and construction of buildings.

Experience with centralized purchasing systems in other counties of Colorado and in other states has demonstrated the possibility of reducing school supply costs by from 10 to 20 percent. A detailed study of this phase of school administration will be issued in the near future.

Some reduction in fixed charges should be made possible by closer attention to the methods and details of financing school construction. Rigid safeguards should be placed around the issuance of bonds, notes, warrants and all school borrowing.

The study indicates that we need better methods of financing schools, the adoption of larger units of administrative control, and a careful study of school expenditures.

Schools must adopt a business-like procedure of budget making. Continuous studies must be made of comparative unit costs in education to serve as a basis for evaluating the expenditure of any school. A simple and uniform system of accounting should be adopted. A sound debt policy must be developed.

It is, of course, true that expenditures for public schools has increased enormously during the last 30 years, until our expenditure for education is greater than for any other single activity. What the farm and city taxpayers forget is that the method by which the school tax is levied and the school money administered is responsible for a large portion if not most of his tax worries and trouble, rather than the actual cost of the schools themselves. If we had a modern tax system and up-to-date method of supporting our schools, together with business-like methods of administration in our school system, much of our trouble would vanish.

DEFINITIONS

A few terms which are frequently used should be clearly understood.

A. D. A., or average daily attendance is the total days of attendance divided by the actual number of days school was in session, exclusive of holidays.

Operating expense refers to all current running expenses such as teachers' salaries, operation, maintenance, auxiliary agencies, library and fixed charges, but does not include capital outlay, payment of bonds, overdrafts, unpaid warrants or interest.

Charts.—Many charts or graphs have been drawn on a special paper which is known as logarithmic paper. On this paper the slope of the line always indicates the rate of increase or decrease. Or, as someone has said, "The slope of the line tells the story."

ORGANIZATION OF LARIMER COUNTY

The school district is the strategic point in Larimer County's public school system, and the district board of education and the county superintendent are the means of communication between the local schools and the state superintendent of public instruction.

"The district system of schools is the oldest system we have in the United States. It was first adopted by Massachusetts by the Act of 1787, 2 years before the constitution was ratified by the 13 original states. The people of Massachusetts abolished it 95 years after its adoption, but Colorado still clings to the ancient system in spite of the fact that all of the conditions that suggested or compelled its adoption have long since disappeared."¹

The old records of Larimer county show that in 1868 there were 3 school districts, 75 persons of school age and \$160 on hand.

¹ C. G. Sargent, Rural School Improvement in Colorado, The Colorado Education Association, Denver, Colorado, 1925.

In 1928 there were 46 school districts, 9,628 children of school age, and school property amounting to \$1,888,124.

The schools in each district are under the supervision of a local school board elected by the district. Larimer County has a superintendent of schools who is chosen at the general election and who has limited advisory powers and certain powers for organizing new districts, consolidated schools and inter-district movements. A state superintendent of public instruction is chosen at each biennial general election.

The revenues for the operation of the schools are derived from three sources, namely, the general property tax, state aid and miscellaneous sources. These will be discussed in detail in the section on school revenues.

The school district is the unit for organization and administration of schools. No district can be created with fewer than 10 children of school age and no district can be divided unless it contains more than 9 square miles or has an assessed valuation of more than \$50,000 and 40 children of school age.

The school board of each district is practically independent of any outside authority in the management of its schools. The local board of education is supreme in authority and has the power to employ or discharge teachers, mechanics and laborers; fix their wages; fix the course of study and choose the kind of textbooks to be used; determine the length of school term; certify tax levies, etc.

The boards do all these and many other things without any reference to what other districts in the county are doing. The school boards spend more than 50 percent of all local taxes. For all practical purposes, each district is a separate and independent system.

TYPES OF DISTRICTS.—There are several kinds of school districts, tho not all of the different types may be found in this county: (a) The local tax district; (b) county high-school district; (c) union high-school district; (d) the consolidated school district; (e) joint-district; and (f) centralized.

Districts are classified by law as first, second and third class, according to the school census of each. Districts that have more than 1,000 children listed on their census books are called first-class districts. Districts having between 350 and 1,000 children listed on their census books are districts of the second class. All districts that have fewer than 350 children are third-class districts.

During the year 1928 there were 2 first-class districts, 1 second-class district and 43 third-class districts in Larimer County. Map 1, page 6, shows the location of these districts.

The types of schools in Larimer County are given in the following table:

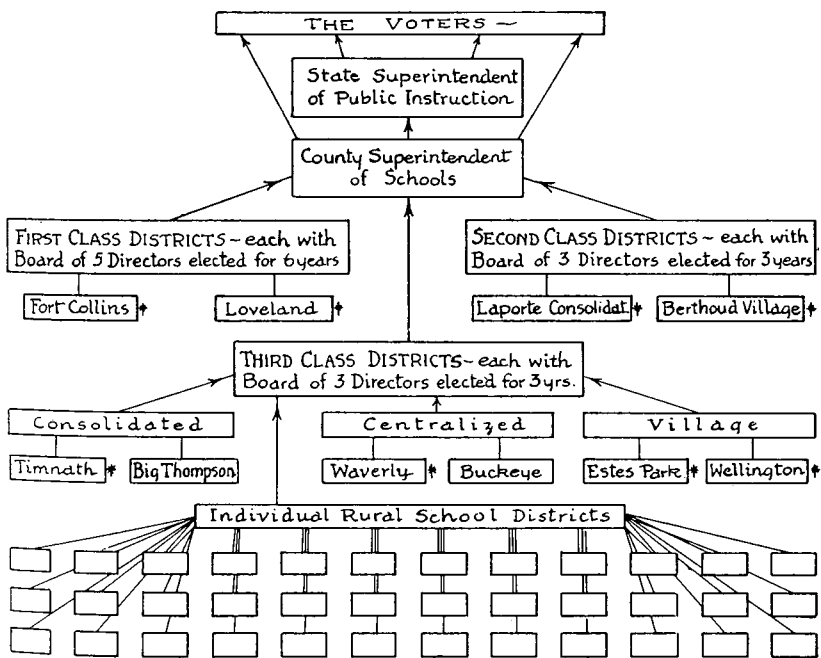
Table 1.—Types of Schools in Larimer County, Colorado, 1928.¹

District Number	School	Type
2	Loveland	First class
5	Fort Collins	First class
64	Laporte	Consolidated with bus transportation
62	Timnath	Consolidated with bus transportation
49	Waverly	Centralized with bus transportation
34	Wellington	Village or Type (a)
30	Estes Park	Village or Type (a)
13	Berthoud	Village or Type (a)

¹ All other districts in the county are of the third class.

The present organization of the schools of Larimer County is shown in Chart 1. A proposed change in this organization will be discussed later.

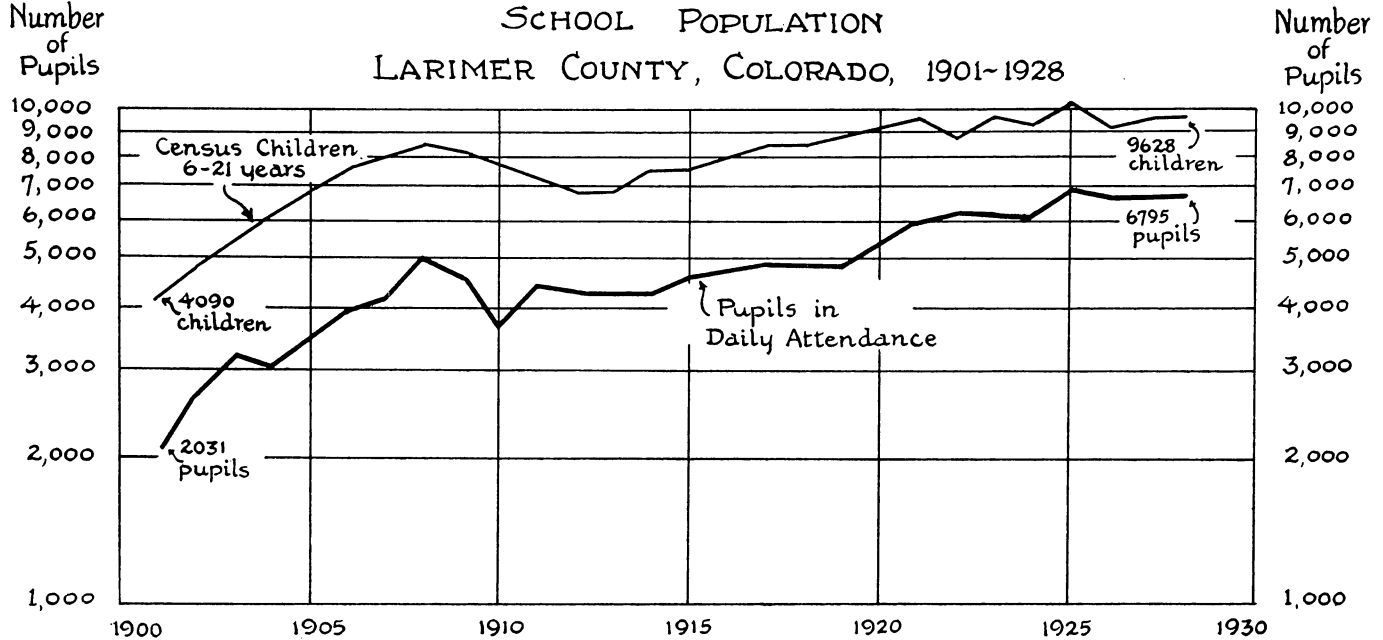
PRESENT ORGANIZATION OF SCHOOLS IN LARIMER COUNTY



*Starred schools have a 4-year High School

Chart 1.

SCHOOL POPULATION LARIMER COUNTY, COLORADO, 1901-1928



(Source: Report of State Superintendent of Public Instruction.)

SCHOOL CENSUS.—The school census of all districts includes the names of all persons between the ages of 6 and 21 years who are residents of the district on the tenth day of April of the year in which the census was taken. Table 2 gives the number of census children in the county from 1901 to 1928, while Table 3 gives the number in each district for 1928. There were 9,628 children of school age in the county in 1928. See Chart 2.

THE ENROLLMENT OF CHILDREN.—The enrollment of children was 8,989 or 93.5 percent of the census. Table 3 shows the total enrollment, the enrollment in one-, two-, and three-teacher schools; the total enrollment in grade schools and the enrollment in the high schools.

Table 2.—Showing Increase in School Population, Number of Teachers Employed and Length of School Term, 1901 to 1928, Larimer County, Colorado.

Year	Census children 6 to 21	Children in A. D. A.	Percentage of census in A. D. A.	Number of teachers employed	Average number days of school provided
(1)	(2)	(3)	(4)	(5)	(6)
1901	4090	2031	50	99	134
1902	4812	2695	56	104	151
1903	5472	3235	59	114	133
1904	6292	3056	49	120	144
1905	6707	3473	52	139	150
1906	7566	3897	52	142	153
1907	8029	4196	52	157	161
1908	8489	5001	59	171	139
1909	8018	4651	58	173	150
1910	7752	3598	46	181	144
1911	7227	4414	61	188	151
1912	6855	4303	63	191	152
1913	6960	4268	61	189	155
1914	7603	4365	57	192	160
1915	7759	4662	60	203	161
1916	8104	4798	59	210	162
1917	8431	4957	59	211	156
1918	8454	4965	59	216	152
1919	8843	4857	55	245	150
1920	9084	5452	60		158
1921	9510	5980	50		162
1922	8872	6252	50	277	164
1923	9503	6090	64	290	180
1924	9138	6075	66	287	182
1925	10097	6879	68	313	182
1926	9348	6660	71	322	180
1927	9618	6635	69	334	180
1928	9628	6795	72	330	180

Source: Biennial Reports, State Superintendent of Public Instruction.

Table 3.—Census and Enrollment Statistics, Number of Teachers Employed, and Average Salary Paid Teachers—Larimer County, Colorado, 1928.

District number	Number children enrolled in -			Total enrollment in -			Percentage of -						
	Census children between 6 and 21	One-teacher schools	Two-teacher schools	Three-teacher schools	Grade schools	High schools	Public schools	Average daily attendance	Census in A. D. A.	Enrollment in A. D. A.	Number teachers employed	Number pupils in attendance per teacher	Average salary per teacher
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
53	7	5	-	-	5	-	5	3.8	54.3	76.0	1	3.8	\$ 750
35	5	4	-	-	4	-	4	4.0	80.0	100.0	2*	4.0	525
18	11	5	-	-	5	-	5	5.0	45.4	100.0	1	5.0	765
56	7	7	-	-	7	-	7	5.0	71.4	71.4	1	5.0	810
33	11	9	-	-	9	4	13	5.9	53.6	45.4	2	3.0	772
19	18	7	-	-	7	-	7	6.8	37.8	97.1	1	6.8	680
12	22	10	-	-	10	-	10	7.0	31.8	70.0	2	3.5	855
25	14	8	-	-	8	2	10	7.6	54.3	76.0	3	2.5	765
61	19	10	-	-	10	-	10	8.9	46.8	89.0	2	4.4	720
28	25	15	-	-	15	-	15	9.5	38.0	63.3	2	4.8	788
36	28	20	-	-	20	-	20	10.0	35.7	50.0	1	10.0	900
14	9	13	-	-	13	-	13	11.0	122.2	84.6	1	11.0	903
37	28	20	-	-	20	-	20	12.9	46.1	64.5	2	6.4	470
27	25	23	-	-	23	-	23	14.8	59.2	64.3	1	14.8	945
57	28	-	21	-	21	-	21	15.0	53.6	71.4	2	7.5	532
42	39	16	-	-	16	-	16	15.5	39.7	96.9	2	7.8	672
39	40	-	29	-	29	-	29	19.3	48.2	66.6	2	9.6	1050
32	36	-	21	-	21	-	21	20.0	55.6	95.2	2	10.0	900
31	61	26	-	-	26	-	26	20.9	34.3	80.4	1	20.9	1050
29	29	-	35	-	35	-	35	21.3	73.4	60.9	2	10.6	900
24	38	-	20	-	20	-	20	22.5	59.2	112.5	2	11.2	968
51	55	-	38	-	38	-	38	30.0	54.5	78.9	2	15.0	900
38	44	-	57	-	57	-	57	34.0	77.3	57.6	2	17.0	638
9	104	19	59	-	78	-	78	35.0	33.7	44.9	4	8.8	825
59	72	-	62	-	62	-	62	39.0	54.2	62.9	2	19.5	1125

17	64	-	66	-	68	-	68	40.0	62.5	58.8	2	20.0	1232
16	67	-	64	-	68	-	64	41.0	61.2	64.1	2	20.5	984
54	109	-	-	52	52	-	52	41.3	37.9	79.4	3	13.8	1017
23	57	-	55	-	55	-	55	42.0	73.7	76.4	2	21.0	968
55	92	27	47	-	74	18	92	45.0	48.9	48.9	7	6.4	912
22	62	-	68	-	68	-	68	48.0	77.4	70.6	2	24.0	1080
41	90	-	-	73	73	-	73	49.3	54.8	67.5	3	16.4	1492
3	99	-	22	55	77	-	77	64.0	64.6	83.1	5	12.8	1080
10	137	-	-	105	105	-	105	68.0	49.8	64.8	3	22.7	1210
63	94	-	-	96	96	-	96	70.0	74.5	72.9	4	17.5	1036
26	118	-	-	117	117	5	122	75.0	63.6	61.5	3	25.0	1416
35	134	-	-	126	126	-	126	76.8	57.3	61.0	4	19.2	1230
15	139	-	-	141	141	-	141	93.0	66.9	66.0	4	23.2	1208
30	148	-	-	60	60	41	101	93.9	63.4	93.0	10	9.4	1550
49	143	-	-	113	118	26	144	111.0	77.6	77.1	5	22.2	1459
62	271	-	-	202	202	44	246	184.7	68.2	75.1	11	16.8	1453
64	377	-	-	350	350	73	423	263.8	70.0	62.4	13	20.3	1420
13	309	-	-	209	209	107	316	268.0	86.7	84.8	13	20.6	1564
34	325	-	-	244	244	150	394	279.8	86.1	71.0	13	21.5	1264
2	2304	-	-	1661	1661	438	2099	1674.0	72.7	79.8	64	26.2	1607
5	3714	-	-	2206	2206	1356	3562	2785.0	75.0	78.2	112	24.9	1738

Total
or
average

46	9628	244	666	5815	6725	2264	8989	6798.3	70.6	75.6	330	20.6	1444
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1 Ranked according to average daily attendance, lowest first. *1 Resigned.

THE AVERAGE DAILY ATTENDANCE.—The average daily attendance in Larimer County in 1928 amounted to 6,798, which was 70.6 percent of the census or 75.6 percent of the enrollment. Table 3. These figures show that there is about a 25 percent loss occasioned by irregular attendance in the different districts. One district had an average daily attendance of but 44 percent of the enrollment. This low attendance is sufficient to make a great difference in the efficiency of the schools and also in the cost of education per pupil in average daily attendance.¹ Much of this variation is due to the fluctuation in the number of persons employed in the sugar-beet industry.

NUMBER AND TYPE OF TEACHERS EMPLOYED.—The total number of teachers employed in all districts in Larimer County in 1928 was 330.

The average number of years of teaching experience was 4.7 years in the rural districts compared with 11.4 years for the city and town districts in 1928.

“In the third-class districts the teacher constitutes the greater part of the system. Almost the whole responsibility for the success of the school falls upon the teacher. But little, if any, help can or does come from the school board, the members of which do not claim to be educators, and the majority of whom rarely, if ever, visit the school. So the teacher can expect little help from within the district, less from the county organization, and still less from the state.

“We like to think that we have a splendid system of public schools included in one grand cooperative organization of districts, county and state, but such is not the case. The school system ceases at the district boundaries as far as the serious work of education is concerned, for if the teacher cannot and does not meet and overcome the difficulties and solve the problems as they arise, the school is a failure. To be sure, there is a county superintendent in each county, but there is no effective supervision of these schools, and there can be none under the present system.

“Practically all of the teachers begin their work in the country without any previous experience, with no professional training . . . while a large number of them are but little older than their oldest pupils. The great majority of our beginning teachers are bright, intelligent and resourceful young men and women, and the only thing that can be said against them is that they are lacking in education, professional training, are immature both in teaching and life experience, all of which most of them will get in due time, but they get these things by experimenting on country children, and as the records show, a very large percentage of the patients do not survive the shock of the operation. They should be equally as well trained for their work and the standards for country teachers should be just as high as is required of other teachers doing the same grade of work.”²

¹ Average daily attendance will be indicated in many places as A. D. A.

² C. G. Sargent, *The Rural and Village Schools of Colorado*. Colorado Agricultural College, Series XIV., No. 5, p. 51. 1914.

TEACHERS' SALARIES.—There is a great deal of variation in the average annual salaries paid in the different school districts of Larimer County. The average annual salaries varied from \$525 to \$1,738 in 1928. The lowest average salary is found in a small one-teacher school, while the highest salary average is found in the city schools of Fort Collins. Table 3.

THE NUMBER OF PUPILS PER TEACHER.—The number of pupils per teacher ranged from 2.5 to 26.2 with an average of 20.6 for the county. (See Table 3, Col. 12.) This important subject will be touched upon later under the section on costs. See Table 24.

AMOUNT INVESTED IN SCHOOL PROPERTY SHOWS WIDE VARIATION.—The subject of school property is a very important one. It shows what preparation has been made for the education of both country

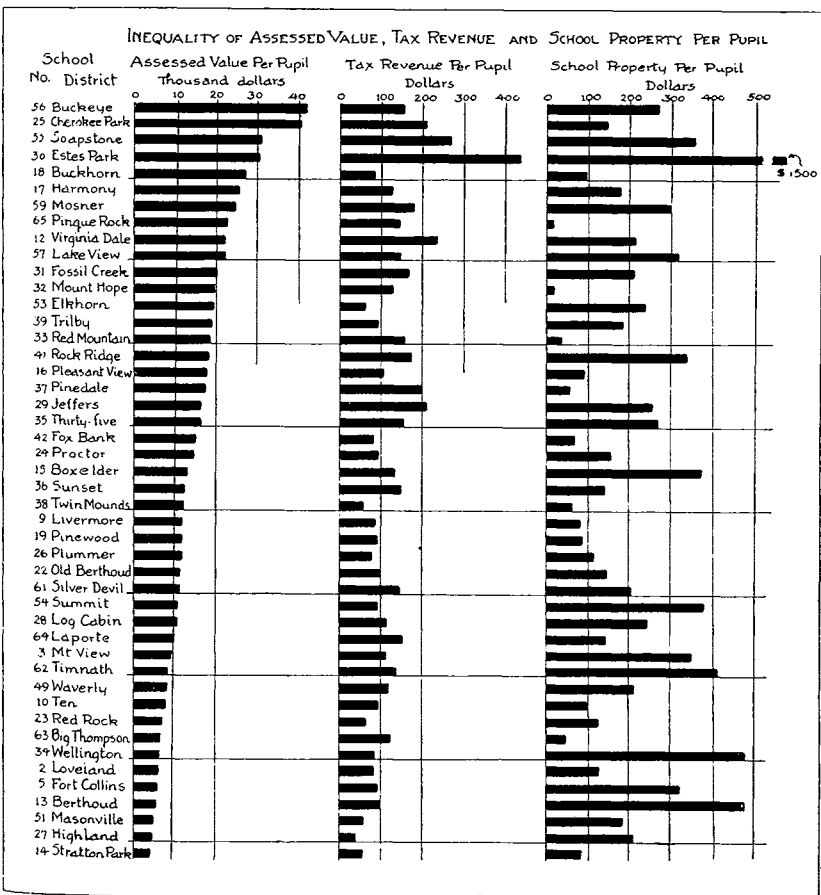


Chart 3.—Inequality in ability to support schools, Larimer County, Colorado.

and city school children, and this permanent investment in the school plant generally measures the interest of any community in the education of its children.

There are 80 schoolhouses in Larimer County with the following types of construction: 7 log, 34 frame and 39 brick or stone, of which 76 are in use. Twenty-six of these schools in use are of the one-room type. Four buildings are used exclusively for high-school purposes.

The value of all school property in Larimer County in 1928 was \$1,888,124. There were eight districts with less than \$1,000 of school property, one of which had only \$18 worth. There were five districts with \$127,000 to \$909,025 worth of school property.

The average investment in school property per pupil in attendance ranges from \$15 to \$1,512, while the average for all districts in the county was \$278. This information for each district is given in Table 4 and shown graphically in Chart 3. The average investment in school property per pupil in the country districts amounted to \$192 compared with \$303 per pupil in the city and town districts. See Table 26.

This study shows that one district had one thousand times more invested in school property per pupil than in another district. See Table 4, Col. 3. The interesting thing about it is that the school districts adjoin each other. This brings out the extreme variability of opportunity, costs and tax rates among school districts in Larimer County under the present system of financing education. While the children of the consolidated districts and cities enjoy the best that the ablest talent can provide, and the best money can buy, many of the country children must be content with a rather mediocre or ordinary education.

A recent survey¹ of the buildings and grounds of all the third-class school districts, all located in the rural sections of this county, indicates that they all fail to meet the minimum standards essential for meeting modern hygienic requirements such as good natural lighting, heating and ventilation, water supply, cleaning system, toilets, pupils' desks and blackboards. Facilities for enabling the schools to perform their function in the communities were below standard.

If 1,000 points are considered the minimum in a system of scoring the schools on the basis of buildings and grounds, it is found that the one-teacher schools average only 635 points. In other words, the one-teacher schools in Larimer County have only about two-thirds of the amount of building and ground equipment considered as essential for rural schools by leading educators. The score for the two-, three- and four-teacher schools was 774.

¹ C. W. McLain. An Educational Survey of The Third-Class School Districts of Larimer County, Colorado. Colorado Agricultural College. Master's Thesis, 1929.

Table 4.—Inequality in Ability to Support Schools Shown by Inequality of Assessed Value of Property, Amount of Tax Revenue, and Value of School Property Within the District per Pupil in Attendance, Larimer County, 1928.

Location	District No.	Assessed value per pupil	Tax revenue per pupil	School property per pupil
		(1)	(2)	(3)
Buckeye	56	\$42,248	\$152	\$ 270
Cherokee Park	25	40,957	209	148
Soapstone	55	31,122	268	354
Estes Park	30	30,630	437	1,512
Buckhorn	18	27,776	86	95
Harmony	17	25,384	129	175
Mosner	59	25,130	181	306
Pinque Rock	65	22,510	147	18
Virginia Dale	12	22,376	237	214
Lake View	57	22,047	141	315
Fossil Creek	31	20,801	168	210
Mount Hope	32	20,631	126	15
Elkhorn	53	19,247	60	237
Trilby	39	19,144	98	186
Red Mountain	33	18,819	154	31
Rocky Ridge	41	18,395	170	340
Pleasant View	16	18,500	103	91
Pinedale	37	17,030	196	57
Jeffers	29	16,290	213	257
Thirty-five	35	16,273	153	268
Fox Bank	42	15,754	88	65
Proctor	24	14,368	99	153
Box Elder	15	13,563	138	378
Sunset	36	12,863	143	140
Twin Mound	38	12,635	52	62
Livermore	9	12,429	88	80
Pinewood	19	12,251	97	81
Plummer	26	12,027	78	110
Old Berthoud	22	11,874	101	143
Silver Devil	61	11,406	149	221
Summit	54	11,198	92	373
Log Cabin	28	11,080	115	244
Laporte	64	10,470	151	143
Mountain View	3	9,860	118	351
Timnath	62	8,916	140	410
Waverly	49	8,626	126	207
Ten	10	8,019	93	96
Red Rock	23	7,129	62	123
Big Thompson	63	6,690	124	40
Wellington	34	6,635	88	476
Loveland	2	6,408	81	127
Fort Collins	5	6,023	98	376
Berthoud	13	5,619	107	474
Masonville	51	5,134	60	180
Highland	27	4,857	39	209
Stratton Park	14	4,640	52	89
Average		\$ 8,227	\$107	\$ 278

Source: Records, State Superintendent of Public Instruction, 1928.

Ranked according to assessed value per pupil in average daily attendance.

This study indicates that in the one-teacher schools only 62 percent of the general building and grounds conditions were satisfactory while 38 percent were unsatisfactory, that is, the schools were deficient in lighting, floors, walls, blackboards, desks, foundation, roof, fencing and playground apparatus. The two-, three- and four-teacher-school studies indicated that 45 percent of these had satisfactory general buildings and ground conditions while 55 percent were unsatisfactory in this respect.

The author concludes his study with the following remarks:

"There is no question about the inequality of opportunity in the schools which have been studied. Many of the districts are progressive and are improving their buildings each year, but in many districts the conditions are really serious.

"It probably would not be possible to point to any one cause for failure of the school buildings to measure up to the minimum essential standards which have been set. In most cases it is probably due to a lack of knowledge of the conditions that exist and of methods for improving them. Perhaps in a few instances this lack of knowledge might even amount to apathy. A few districts might be financially unable to improve conditions, and others possibly would profess inability to improve conditions. . . . There are a number of situations in the county where centralization or consolidation would be possible. If they could be formed, the educational opportunities of a large number of children would be raised to a par with the best that are offered at any place."

ASSESSED VALUATION OF SCHOOL DISTRICTS.—The assessed valuation of any school district is the sum of all taxable property in that district that is listed for taxation. Valuations vary greatly in Larimer County because of the great difference in topography, altitude, climatic conditions, natural resources, and density and character of the population. There is a wide variation in the assessed values in adjoining districts and frequently within the same district.

The weak spots in the present system of financing schools is shown clearly in Table 4, columns 1 and 2 and Chart 3, which indicate the inequality of assessed value of property and the amount of tax revenue per pupil. The difficulty with placing too large a proportion of the burden of school support upon the local school districts is that educational opportunities and tax burdens will be very unequal.

The State of Colorado has contributed only 3.3 percent of the cost of education in the state while the county has contributed 19.8 percent and the local districts 76.9 percent in 1928.

Many school districts have a small amount of assessed property within the district because of the large amount of government and

state property exempt from taxation. The revenue situation in many of these school districts is influenced materially because of public policies and by state laws which work a hardship on these particular districts.

Most of the western part of the county, or 597,000 acres, are held by the national government in the form of national forests. See Map 1, page 6. One hundred twenty-six thousand acres belong to the Rocky Mountain National Park and are not subject to taxation. Seventy thousand acres belong to the state and are also exempt from taxation.

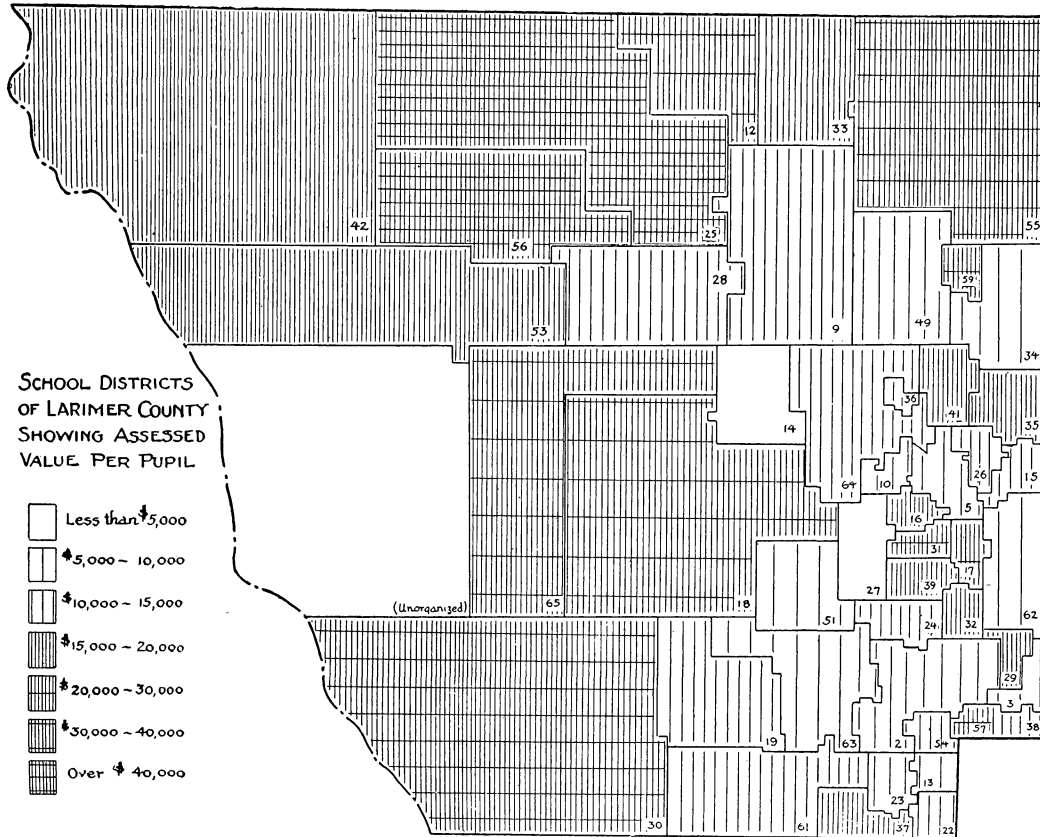
Deeded and improved lands also vary greatly in value according to their location, rainfall and other characteristics. Only 45 percent of the land area of Larimer County is agricultural land. About 17 percent of the agricultural land is irrigated, 3 percent dry-farming and 80 percent grazing land.

Some districts have their valuations increased because they are fortunate in having railroads, factories or oil fields located within their boundaries. See Map 1, page 6. The effect is to throw into a single district taxable wealth far beyond its needs. One district has an assessed valuation of \$22,510 while another has an assessed valuation of \$16,775,140. Table 5.

Tables 5.—Total Assessed Value of Property, by School Districts, Larimer County, Colorado, 1928.

District number	Assessed value of property in district	District number	Assessed value of property in district
65	\$ 22,510	31	\$ 434,740
14	51,040	9	435,000
27	71,880	54	462,460
53	73,140	63	463,280
19	83,310	10	545,300
61	101,510	22	569,950
28	105,260	3	631,060
33	111,030	16	750,290
36	128,630	26	902,050
18	138,880	41	906,850
51	154,030	49	957,530
12	156,630	59	980,080
56	211,240	17	1,015,370
37	219,690	35	1,249,730
42	244,180	15	1,261,560
23	299,400	55	1,400,500
25	311,270	13	1,505,930
57	330,700	62	1,646,790
24	336,780	34	1,856,470
29	346,980	64	2,833,230
39	369,480	30	2,876,180
32	412,620	2	10,727,310
38	429,600	5	16,775,140

Source: Records of State Superintendent of Public Instruction.



Map 2.—Wide discrepancy between assessed value per pupil is evident.

There are many districts with low revenue-producing ability because of low assessed valuations. Eight districts had less than \$1,000 revenue for school purposes from property taxes. The amount of revenue per district from school taxes ranged from \$147 to \$273,938, with a district average of \$15,747 for the county.

Naturally under the existing system of many small school districts the resources of poor districts with very little taxable wealth are often strained to offer only a meager educational program, while rich districts are able to finance an elaborate program, without perceptible effort. Map 2 shows the wide discrepancy between assessments in the different districts.

BONDED AND FLOATING INDEBTEDNESS OF SCHOOL DISTRICTS.—Bonds for school buildings are issued by school districts in Larimer County. The total indebtedness of all the school districts for all purposes was \$1,164,641 in 1928, according to figures obtained from records of the state superintendent of public instruction. Of this total \$1,090,500 was bonded indebtedness and \$74,141 was floating indebtedness.

The indebtedness per pupil in average daily attendance was \$171, consisting of \$160 bonded indebtedness, \$6 registered warrants, and \$5 non-registered warrants. Table 6 gives a summary of the indebtedness of districts. It shows the indebtedness per pupil as well as the ratio of debt to assessed value of property.

A more detailed discussion of the Larimer County school indebtedness by individual bond issues is given in Colorado Experiment Station Bulletin 361.

Estes Park had by far the highest indebtedness per pupil in the county with an average of \$1,014 per pupil; Timnath ranked second with \$414, and Wellington third with \$403. A few districts had little or no indebtedness whatsoever. See Table 6 and Chart 3.

A study of the distribution of the ratio of debt to assessed valuation shows that the ratio of debt to valuation was less than 1 percent in 33 districts, from 1 to 2 percent in 5 districts, from 2 to 3 percent in 2 districts, from 3 to 4 percent in 2 districts, from 4 to 5 percent in 2 districts, from 5 to 6 percent in 1 district, and over 6 percent in 1 district for the year 1928.

INEQUALITIES IN TAX LEVIES DUE TO PRESENT SYSTEM OF ORGANIZATION.—The statute providing for a general county school tax was enacted in 1877, a time when conditions were very different from what they are today.

The tax rate on each thousand dollars of the assessed valuation of real property, after falling in 1922 to under \$11.50 in 1923, has in-

Table 6.—Indebtedness of School Districts, Larimer County, Colorado, 1928.
(Ranked according to indebtedness per pupil)

Dist. No.	Location	Types of indebtedness					
		Total indebtedness	Bonded	Registered warrants	Non-registered warrants	Indebtedness per pupil in A. D. A.	Ratio of debt to assessed value
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
30	Estes Park	\$ 95,206	\$ 91,000	\$ 3,271	\$ 935	\$1,013.91	3.31
62	Timnath	76,500	76,500			414.18	4.64
34	Wellington	112,667	100,500	11,652	515	402.67	6.06
41	Rocky Ridge	16,018	12,000	2,794	1,224	324.91	1.76
63	Big Thompson	20,303	18,500	1,164	729	291.33	4.35
13	Berthoud	75,860	75,000	860		283.06	5.03
3	Mountain View	17,118	14,000	2,179	939	267.47	2.71
54	Summit	10,125	9,500	625		245.16	2.18
15	Box Elder	22,048	20,000	1,906	141	237.08	1.74
5	Fort Collins	535,478	565,000		20,478	210.22	3.49
35	Thirty-five	16,030	15,000	1,030		208.72	1.28
33	Red Mountain	1,057		718	339	179.15	.95
49	Waverly	19,799	15,500	4,289	11	178.37	.20
12	Virginia Dale	944		654	290	134.86	.60
23	Red Rock	4,208	4,000		208	100.19	1.40
29	Jeffers	1,875		1,808	67	88.03	.54
51	Masonville	1,900		1,896	4	63.33	1.23
9	Livermore	2,016		1,639	377	57.60	.46
16	Pleasant View	2,118		2,118		51.66	.29
2	Loveland	72,583	72,000		583	43.36	.67
10	Ten	2,848			2,848	41.88	.52
22	Old Berthoud	2,000	2,000			41.67	.35
28	Log Cabin	388			388	40.84	.36
14	Stratton Park	415			415	37.73	.31
32	Mount Hope	507			507	25.35	.12
53	Elkhorn	90			90	23.68	.12
36	Sunset	210		110	100	21.00	.16
37	Pinedale	225		225		17.44	.10
55	Soapstone	768			768	17.07	.05
31	Fossil Creek	297			207	14.21	.06
61	Silver Devil	109			109	12.25	.10
39	Trilby	233			233	12.07	.06
64	Laporte	2,387			2,387	9.05	.08
25	Cherokee Park	56			56	7.37	.01
27	Highland	100		105	4	7.36	.15
17	Harmony	36			36	.90	.003
59	Mosner	20			20	.51	.002
65	Pinque Rock	None					
18	Buckhorn	None					
56	Buckeye	None					
19	Pinewood	None					
57	Lakeview	None					
42	Fox Bank	None					
24	Proctor	None					
38	Twin Mounds	None					
26	Plummer	None					
Total		\$1,164,641	\$1,090,500	\$ 39,043	\$35,008		
Average all districts			\$160.48	\$5.75	\$5.16	\$171.39	2.08

Source: Records of State Superintendent of Public Instruction, 1928.

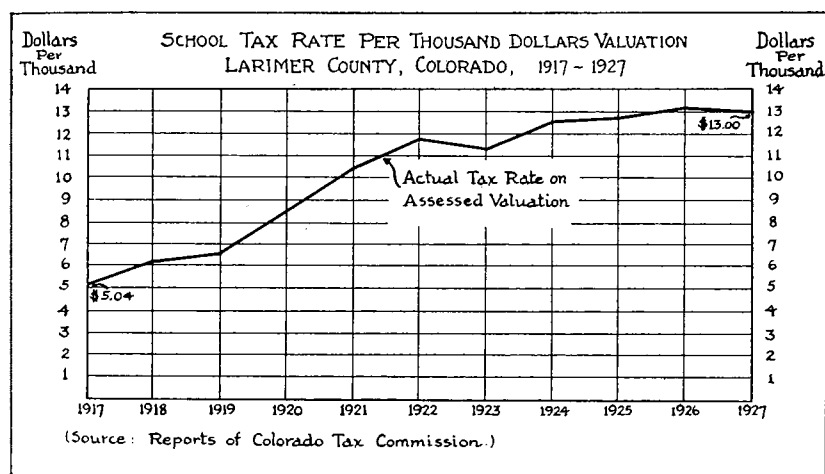


Chart 4.

creased to \$13.00 in 1927. The trend of tax rates seems to be resuming the upward trend which was reversed in 1922. See Table 7 and Chart 4.

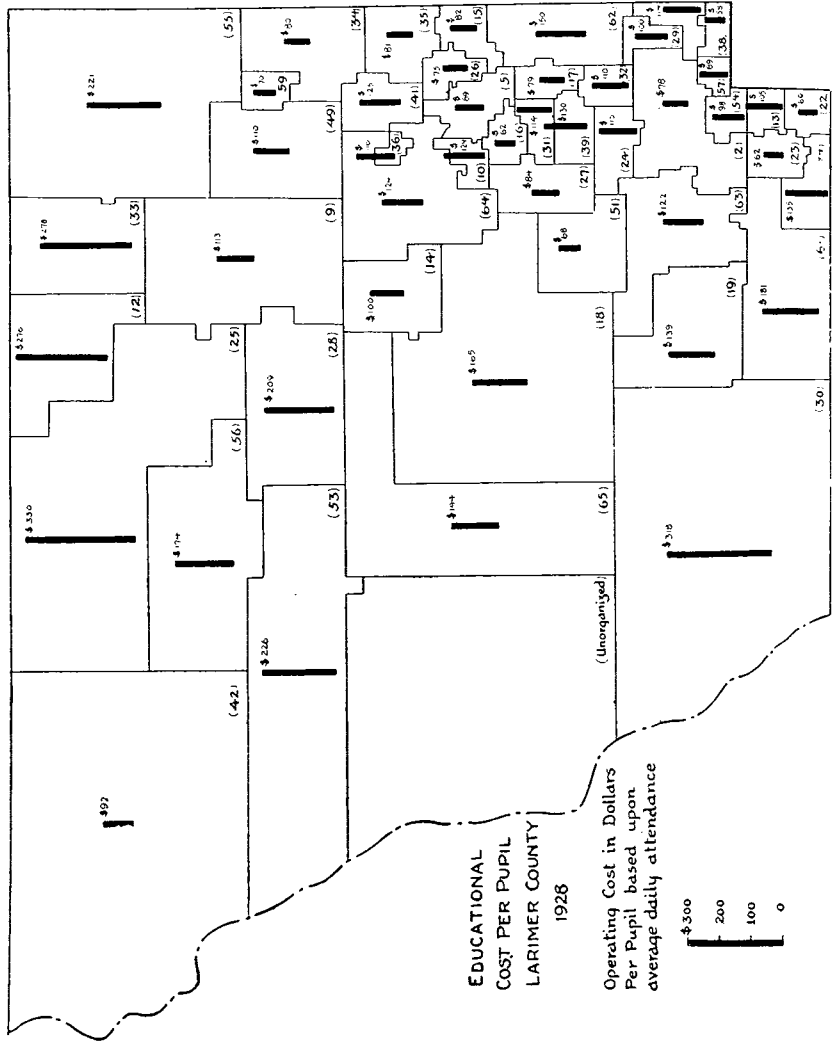
Table 7.—School Tax Rate per \$1,000 Valuation in Larimer County, Colorado, 1917-1927.

Year	Rate per \$1,000 valuation ¹
1917	\$ 5.04
1918	6.04
1919	6.49
1920	8.43
1921	10.52
1922	11.95
1923	11.40
1924	12.65
1925	12.82
1926	13.09
1927	13.00

¹ Annual reports of Colorado State Tax Commission.

There are 14 school districts in Larimer County that spend an average of \$106 per pupil, with a local tax burden of \$5.20 per \$1,000 valuation. But in another group of four districts the tax burden is \$11.95 per \$1,000 valuation or more than twice as much as the first group; altho it results in spending only \$93.52 per pupil.

In 1928 there were 18 districts where the district school tax rate ranged from \$1 to \$5 per \$1,000 valuation, 16 districts from \$5 to \$10, 9 districts from \$10 to \$15, and 1 district from \$15 to \$20. Two districts had no levy for schools in 1928 because of surplus funds from the previous year. The highest levy for any district was \$18.20. This was District No. 13 in which the city of Berthoud is located. The lowest was \$1.38 for District 56 located in the mountainous section of



Map 3.—Larimer County needs a plan to equalize school costs

the county. In other words, a farmer in one district pays 13 times as much district school tax per \$1,000 valuation as a farmer in another district. The average for all districts in the county was \$12.96 per \$1,000 valuation. See Table 8.

In this county there are 39 different tax levies—education is bought at 39 different prices. In one case it is purchased for \$1.38 per \$1,000 valuation and in another case it costs \$18.20 per \$1,000 valuation. If all of the school districts were combined into one county unit, a uniform levy on all the property in the combined districts would give the same amount of revenue as is obtained by the 39 different rates under the present system. One uniform tax rate would equalize the cost of education in all the districts. Map 3.

A NEW PLAN FOR EQUALIZING SCHOOL TAXES

A plan advocated by the Colorado Education Association for the refinancing of education in the state would reduce the average mill levy for the county to a uniform tax rate of 5 mills for educational purposes.¹

Under this plan the state underwrites or guarantees to each district a minimum educational program that will cost not less than \$1,000 per elementary classroom unit which is defined as 28 pupils in average daily attendance. The state would require that a district tax of 2 mills and a county tax of 3 mills be levied on their taxable property. If the returns from these two taxes do not amount to \$1,000 per classroom unit, the state will supply the difference which would amount to about \$50,000 a year in new state aid for Larimer County in addition to present state aid for schools.

This would mean an average reduction of about 8 mills for Larimer County which would afford considerable relief to the owners of real estate. This program would reduce local property taxes for school purposes where reductions are most needed. It is obvious that if state aid is to be used to equalize the school-tax burden, the funds so used must come from other sources than the property tax. Taxation authorities in Colorado are in general agreement that the percentage of tax money from property taxes should be decreased and that the newer forms of wealth, such as personal and business income, should bear a larger share of the cost of public education.

NEW YORK AND NORTH CAROLINA IRON OUT INEQUALITIES.—The state of New York paid out some \$90,000,000 in 1929 in state aid for local schools in accordance with its policy of equalizing the local tax burden and of giving each child in the state a standard free education. The program used in New York is similar to the program proposed for Colorado. It has resulted in a considerable reduction in farm taxes.

¹ Details of this plan can be obtained from the Colorado Education Association, Denver, Colorado.

Table 8.—Tax Levies for School Purposes by Districts, Larimer County, Colorado, 1928. (Dollars per \$1000 valuation.)

Dist. No.	Location	Total ¹ levies	Distribution of District Levies			
			Total district levies	Special fund	Redemption fund	Interest on bonds
13	Berthoud	\$23.93	\$18.20	\$13.00	\$2.50	\$2.70
62	Timnath	20.88	14.36	10.00	1.8	2.56
63	Big Thompson	19.95	13.37	10.00	1.0	2.37
5	Fort Collins	19.48	13.22	10.55	1.0	1.67
30	Estes Park	17.42	11.70	8.16		1.67
49	Gleneyre and Waverly	17.68	11.95	8.91	1.5	1.54
51	Masonville	17.73	12.00	12.00		
41	Rocky Ridge	17.75	12.20	9.50	1.70	1.00
34	Wellington	16.68	10.94	7.44	1.00	2.50
10	Number Ten	16.73	11.00	11.00		
64	Cache la Poudre, Laporte	15.47	9.74	9.74		
14	Stratton Park	14.18	8.40	8.40		
2	Loveland	14.84	9.11	8.00	.84	.27
54	Summit	14.89	9.16	7.00	1.16	1.00
12	Virginia Dale	13.38	7.61	7.61		
38	Twin Mounds	13.39	7.66	7.66		
23	Red Rock	13.54	7.81	5.40	1.74	.67
61	Meadow Hollow, Silver Dale	13.73	8.00	8.00		
3	Mount View	12.11	9.08	6.38	1.00	1.10
15	Box Elder	12.22	6.50	3.50	2.80	.20
28	Log Cabin, Adams	12.28	6.57	6.57		
55	Round Butte, Soapstone, East	12.38	6.62	6.62		
37	Culver, Pinedale	12.43	6.70	6.70		
33	Red Mountain, Upper Box Elder	12.73	7.00	7.00		
35	No. Thirty-five	11.46	5.73	3.00	2.00	.73
29	Jeffers	11.73	6.00	6.00		
50	Mosner	10.35	4.62	2.54	1.30	.78
9	Livermore	10.55	4.82	4.82		
19	Pinewood	10.63	4.90	4.90		
18	Buckhorn	10.73	5.00	5.00		
31	Fossil Creek	10.73	5.00	5.00		
32	Mount Hope	10.73	5.00	5.00		
39	Trilby	10.73	5.00	5.00		
65	Pinque Rock	10.73	5.00	5.00		
24	Proctor	9.16	3.43	3.43		
16	Pleasant View	9.28	3.50	3.50		
26	Plummer	9.29	3.57	3.57		
27	Highland	9.95	4.22	4.22		
42	Fox Bank	8.22	2.50	2.50		
25	Sloan Boyle, Cherokee Park	8.29	2.56	2.56		
22	Old Berthoud	8.54	2.81	2.81		
56	Fairmount, Buckeye Spring, Westlakes	7.11	1.38	1.38		
57	Lake View	7.73	2.00	2.00		
17	Harmony	7.73	2.00	2.00		
36	Sunset	5.73				
53	Eikhorn	5.73				

¹ Includes state levy of 1.73 mills for state educational institutions and 4 mills for general county school tax.

Source: County Treasurer.

North Carolina, California, Delaware, and other states have similar plans to relieve the burdens of real estate taxes. North Carolina has completely equalized school taxes in most of her counties. They now have the same theoretical school tax rate in 92 out of approximately 100 counties.

COMPARISON OF CITY SCHOOL COSTS AND TAXATION IN NORTHERN COLORADO

For this comparison the school systems of Boulder, Greeley, Fort Collins, Longmont, Loveland and Windsor Consolidated are chosen to represent school districts of the first class; Eaton and Ault Consolidated as school districts of the second class; Berthoud and Estes Park as village schools of the third class; Timnath and Laporte as typical consolidated schools; and Box Elder with four teachers and a teacherage as representing the rural schools.

Statistics are taken from annual reports for the year ending June 30, 1927.

Table 9.—Showing the Assessed Valuation per Pupil Based on Average Attendance in Cities in Northern Colorado, 1927.

Location	Number census children	Pupils in average attendance	Total assessed valuation	Assessed valuation per pupil
(1)	(2)	(3)	(4)	(5)
1. Estes Park	143	98.2	\$ 2,746,430	\$27,967
2. Box Elder	140	89.7	1,405,340	15,673
3. Timnath	271	162.3	1,918,730	11,822
4. Eaton	773	553.8	5,303,230	8,574
5. Longmont	2,507	1,326.0	10,761,172	7,679
6. Greeley	3,870	2,328.0	16,002,930	6,874
7. Loveland	2,304	1,652.0	11,058,940	6,691
8. Berthoud	309	244.9	1,582,140	5,460
9. Laporte	377	274.9	1,683,300	6,124
10. Boulder	3,826	2,332.8	14,210,435	6,091
11. Fort Collins	3,714	2,719.4	16,868,790	5,952
12. Windsor	1,170	923.0	5,195,140	5,628
13. Ault	663	472.4	2,499,990	5,292

Source: Reports by Harry B. McCreary, Secretary of School District No. 5, Larimer County, Colorado, 1927.

It will be observed that Estes Park, the village school, leads the list with the enormous valuation of \$27,967 per pupil, followed by Box Elder, the rural school, and then by Timnath Consolidated.

The wealthy districts such as Boulder and Fort Collins are well down the list. Greeley, however, is higher on account of smaller comparative attendance.

The assessment of the Great Western Sugar Company is of importance in many of the above valuations. The high showing of Eaton is closely associated with a lowered tax levy as shown in Table 10.

Table 10.—Showing the Total Tax Levies in Dollars per \$1,000 Valuation for Cities in Northern Colorado, 1927.¹

Location	Type of School	For operation and interest	For bond interest	Bond redemption	Total
(1)	(2)	(3)	(4)	(5)	(6)
1. Ault	Consolidated	\$19.58	\$ 3.80	\$....	\$19.58
2. Windsor	Consolidated	19.28	4.20	....	19.28
3. Boulder	City	18.50	1.00	3.00	21.50
4. Berthoud	Village	17.70	2.50	1.00	18.70
5. Greeley	City	17.18	2.50	....	17.18
6. Laporte	Consolidated	16.52	1.12	1.00	17.52
7. Timnath	Consolidated	15.98	2.25	....	15.98
8. Fort Collins	City	15.38	1.73	1.00	16.38
9. Longmont	City	14.36	2.30	....	14.36
10. Loveland	City	11.96	.10	.91	12.87
11. Estes Park	Village	11.42	.40	1.95	13.37
12. Eaton	City	9.58	.17	....	9.58
13. Box Elder	Rural	7.69	2.10	1.20	8.80

¹ From reports by Harry B. McCreary, District No. 5.

² Total secured by adding columns 3 and 5.

It will be observed that all Larimer County districts, with the exception of Timnath, carry a levy for redeeming bonds. Boulder has a levy of \$3 per \$1,000 valuation for this purpose, which is very large. Ault and Windsor, who head the list with a levy for operation and interest of over \$19 per \$1,000 valuation, have no levy for sinking funds or bond redemptions. The large amount of interest paid accounts in a measure for the high levy.

Most of the districts with the large assessed valuations per pupil are well down on the above list.

SUMMARY.—Due to the improvement of highways and automobiles, the population of the nation has become more mobile than ever before. People can move and do move in great numbers from place to place, and from the farm to the city. Services are becoming generalized but the taxes remain local.

The farmer bears the burden. He educates children, many of whom go to the cities as soon as they reach a productive age. As a result of the shifting of population from rural communities to cities, and from one section of the country to another, every child in any rural school is to some extent a potential citizen of other communities and states.

The greatest burden of the present school tax falls on property in districts which are least able to bear the burden because of the low

assessed valuation of property within the school district. The unequal amount of tax revenues available per pupil for educational purposes is shown by comparing different school districts. The assessed value of property and the amount of tax revenue is often 10 times as great in one district as in another.

Within one school district may be concentrated several industrial concerns, such as a cement plant or sugar factory—that manufacture and distribute products thruout the state. Such a district can support well-equipped schools on a low tax rate. Other less fortunate districts, perhaps only a few miles distant, may have comparatively little taxpaying ability and yet a large school population. In such districts even a high and burdensome tax does not raise enough to support good schools. Thus districts differ tremendously in their ability to maintain schools.

LARIMER COUNTY, COLORADO, SCHOOL REVENUES

The revenues for the operation of the public schools of the county are derived from three sources:

1.—The backbone of the revenue system of schools is the general property tax which comprised 78.4 percent of the total receipts for educational purposes in 1928. See Table 11. The property tax reve-

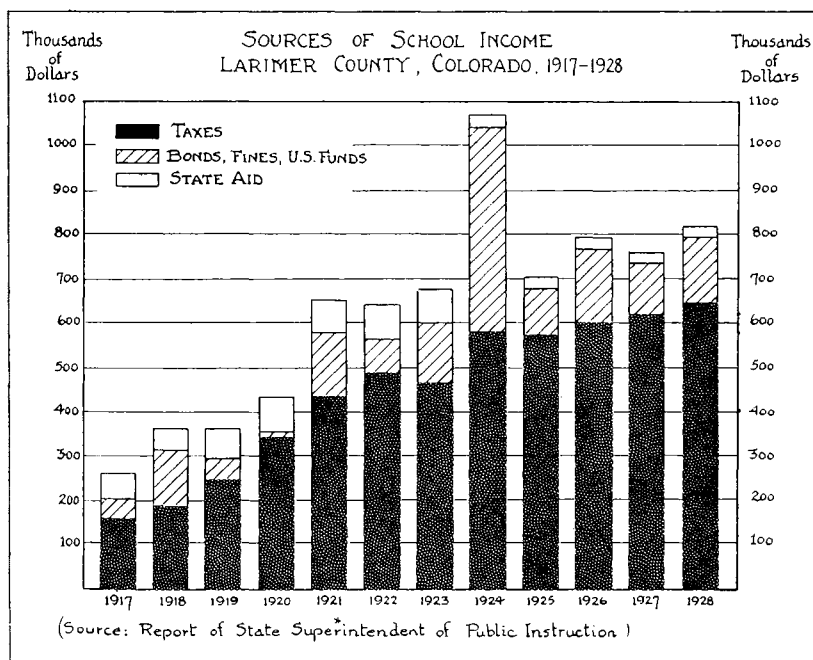


Chart 5.

nue is obtained from two sources: A general county school tax on all taxable property in the county, and district taxes which are collected on the taxable property of individual districts.

2.—Then there is a permanent state school fund, the accrued interest of which is apportioned by the state superintendent of public instruction. This money is apportioned to each county on a per capita basis of school census. This fund also serves as an equalizing one in that state aid supplements county taxation where a 5-mill local tax is not sufficient to supply \$75 a month per teacher.

3.—In addition to these two sources certain fines, governmental subventions, tuitions and forfeitures are turned into the school funds.

Chart 5 indicates the sources of county income over a 12-year period. The amount raised from local property taxation is shown by the solid black portion of each bar. This amount is of the greatest direct importance to the taxpayer and it is this portion of the total cost that has been constantly on the increase.

Income from state aid bears a constantly decreasing proportion of the total revenues.

The amount raised by bond issues and minor miscellaneous sources is shown by the hatched portion of the bar. Income derived from the sale of bonds eventually must be paid for out of taxes.

Table 11 gives an analysis of the school income of the county for 1923 to 1928.

Table 11.—Analysis of School Income, Larimer County, Colorado, 1923-1928.

Source	1923	1924	1925	1926	1927	1928
(1)	(2)	(3)	(4)	(5)	(6)	(7)
State funds	\$134,515	\$ 33,274	\$ 26,364	\$ 28,390	\$ 21,611	\$ 26,218
Property taxes	464,543	579,156	575,948	600,964	622,331	646,416
Bond issues and miscellaneous	76,869	461,870	100,870	168,791	121,901	152,159
Total income	\$675,927	\$1,074,300	\$703,182	\$798,145	\$765,843	\$824,793
	Percentage Distribution					
State funds	19.9	3.1	3.74	3.55	2.82	3.17
Property taxes	68.7	53.9	81.92	75.29	81.26	78.37
Bond issues and miscellaneous	11.4	43.0	14.34	21.16	15.92	18.46
	100.00	100.00	100.00	100.00	100.00	100.00

Source: Reports, State Superintendent of Public Instruction.

The present system of keeping school records is inadequate and does not permit a detailed analysis, either of current income or of the sources of income. For example, at present it is impossible to tell exactly how much of the revenue from miscellaneous sources was de-

rived from the sale of bonds. It is strongly urged that sources of income should be classified and segregated in greater detail, than is done at present, by the county superintendent of schools and by the state superintendent of public instruction.

PROPERTY TAXES BEAR THE SCHOOL BURDEN.—The total property taxes levied by the county, exclusive of cities or towns, for all purposes, was \$1,322,376 in 1928. Of this total, \$829,035 or 62.7 percent was for schools and \$493,341 for other purposes than schools. See Chart 6.

PROPERTY TAXES FOR SCHOOLS AND FOR OTHER SERVICES IN LARIMER COUNTY IN 1928.

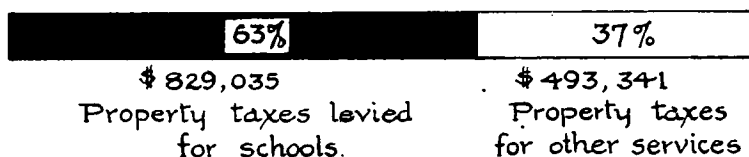


Chart 6.

As has been stated before, the problem of providing adequate educational facilities is particularly difficult in districts with a small amount of assessed property. As a result farmers and ranchmen situated in these districts bear a heavy burden of local and special district taxation to provide the minimum school facilities required by the state.

In making a study of school revenue we need to know to what proportionate extent various school districts and varying classes of schools derive their revenues, which are: The general property tax; the income from the permanent state school fund; and from other sources. This information is shown in Table 12, which gives the total receipts from all sources distributed on a percentage basis. One horizontal column of this table shows the percentage of total receipts derived from property taxes. Variations in these revenue receipts are highly significant in determining whether additional equalization is desirable.

Table 12 and Chart 7 show that some districts depend on general property taxation almost wholly for their revenue while other districts receive as high as 60 percent of their revenue from the state school fund. Districts unable to pay the minimum salary requirement are forced to depend on state funds to a large extent. In order to reduce the burden of local property taxation a new method of apportionment of such state school funds is necessary as well as larger funds from the state.

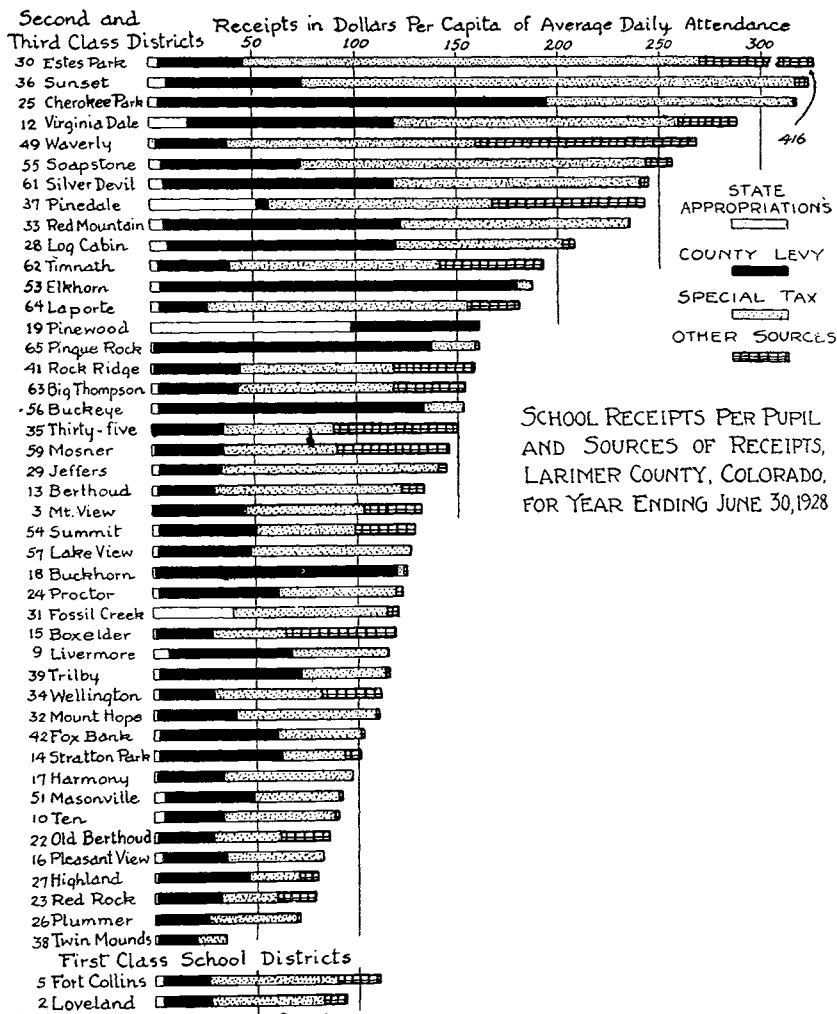
Table 12.—Receipts per Pupil in Attendance and Percentage Distribution, for Each School District, Larimer County, Colorado, for Year Ending June 30, 1928.

No. and class of district	Pupils in average daily attendance	Total receipts	Receipts per Pupil A. D. A.					Percentage Distribution					
			Total	Property Tax			All other sources	Property Tax				All other sources	Percentage property tax is of total revenue
				General state funds	County levy	Special district tax		General state funds	County levy	Special district tax			
Third class	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
30	93.9	\$ 49,935	\$416.18	\$ 4.56	\$ 41.30	\$223.91	\$146.41	1.1	9.9	53.8	35.2	63.7	
36	10.0	3,256	323.20	7.90	66.40	243.20	5 70	2.4	20.5	75.3	1.8	95.8	
25	7.6	2,547	306.71	4.74	190.26	110.92	.79	1.5	62.0	36.2	.3	98.2	
12	7.0	1,956	278.28	9.29	100.14	141.14	27.71	3.3	36.0	50.7	10.0	86.7	
49	111.0	31,478	263.25	3.64	29.92	121.83	107.86	1.4	11.4	46.3	40.9	57.7	
55	45.0	11,726	257.06	6.13	68.93	170.42	11.50	2.4	26.8	66.3	4.5	93.1	
61	8.9	2,261	245.06	6.97	111.91	121.91	4.27	2.8	45.7	49.8	1.7	95.5	
37	12.9	3,756	241.62	51.47	6.12	107.83	76.20	21.4	2.5	44.6	31.5	47.1	
33	5.9	1,476	235.59	6.61	115.76	113.22	.....	2.8	49.1	48.1	.....	97.2
28	9.5	1,998	207.79	8.21	111.89	81.37	6.32	4.0	53.8	39.2	3.0	93.0	
62	184.7	48,195	193.14	4.15	35.02	102.77	51.20	2.1	18.1	53.3	26.5	71.4	
53	3.8	2,000	187.90	4.74	174.74	8.42	.....	2.5	93.0	4.5	.....	97.5
64	263.8	49,182	181.41	3.88	24.13	126.87	26.53	2.1	13.4	69.9	14.6	83.3	
19	6.8	1,199	162.06	97.94	64.12	.....	.....	60.4	39.6	.....	.....	39.6
65	4.0	653	162.00	2.50	133.75	22.50	1.25	1.5	83.8	13.9	.9	97.7	
41	49.3	9,573	157.78	2.47	40.41	74.60	40.30	1.6	25.6	47.3	26.5	72.9	
63	70.0	11,193	153.93	3.91	37.94	75.94	36.14	2.5	24.6	49.4	23.5	74.0	
56	5.0	1,005	153.80	3.60	130.40	19.80	.....	2.3	84.8	12.9	.....	97.7
35	76.8	15,294	152.54	.60	34.60	56.65	60.69	.4	22.7	37.1	39.8	59.8	
59	39.0	7,232	149.64	2.38	35.05	59.13	54.08	1.6	22.8	39.5	36.1	62.3	
29	21.3	4,682	147.42	3.85	30.61	106.29	6.67	2.6	20.8	72.1	4.5	92.9	
13	268.0	37,644	132.70	3.27	27.66	91.68	10.09	2.5	20.8	69.1	7.6	89.9	
3	64.0	9,698	132.47	.....	45.97	58.19	28.31	.....	34.7	43.9	21.4	78.6
54	41.3	5,814	128.15	3.39	48.23	47.53	95.76	2.6	37.6	37.2	.....	74.8

57	15.0	2,169	126.34	2.60	44.27	79.47	-----	2.1	35.0	62.9	-----	97.9
18	5.0	2,271	124.90	2.00	118.00	2.50	1.40	1.6	95.3	2.0	1.1	97.3
24	22.5	2,901	121.82	2.67	59.02	56.93	3.20	2.2	48.4	46.8	2.6	95.2
31	20.9	2,538	120.48	39.43	-----	75.69	5.36	32.7	-----	62.8	4.5	62.8
15	93.0	16,757	119.55	1.95	27.41	41.03	49.16	1.6	22.9	34.4	41.1	57.3
9	35.0	4,190	116.55	8.29	61.17	47.09	-----	7.1	52.5	40.4	-----	92.9
39	19.3	2,927	116.37	3.21	68.81	43.26	1.09	2.8	59.1	37.2	.9	96.3
34	279.8	36,622	112.34	3.29	27.10	52.87	29.08	2.9	24.1	47.1	25.9	71.2
32	20.0	2,377	110.50	2.35	38.55	69.05	.58	2.1	34.9	62.5	.5	97.4
42	15.5	1,853	103.23	3.42	57.55	41.23	1.03	3.3	55.8	39.9	1.0	95.7
14	11.0	1,396	100.82	3.00	60.36	30.91	6.55	3.0	59.8	30.7	6.5	90.5
17	40.0	5,307	98.00	2.12	33.20	62.68	-----	2.2	33.9	63.9	-----	97.8
51	30.0	2,901	91.70	5.20	44.27	41.40	.83	5.7	48.3	45.1	.9	93.4
10	68.0	6,632	90.84	5.40	29.29	55.49	.66	5.9	32.2	61.2	.7	93.4
22	48.0	5,180	86.40	1.73	27.67	32.69	24.31	2.0	32.0	37.8	28.2	69.8
16	41.0	3,551	83.39	3.49	32.39	47.44	.07	4.2	38.8	56.9	.1	95.7
27	14.8	1,336	80.26	2.43	44.86	23.51	9.46	3.0	55.9	29.3	11.8	85.2
23	42.0	4,023	78.77	1.86	31.62	27.36	17.93	2.4	40.1	34.7	22.8	74.8
26	75.0	7,493	71.07	.45	26.57	42.52	1.53	.6	37.4	59.8	2.2	97.2
38	34.0	2,467	34.94	1.59	19.53	13.56	.26	4.6	55.9	38.8	.7	94.7
Total and average		\$ 428,640	\$ 155.96	\$ 4.20	\$ 35.59	\$ 83.44	\$ 32.73	2.7	22.8	53.5	21.0	76.3
First class												
5	2,785.0	349,023	109.53	3.62	22.69	62.41	20.81	3.3	20.7	57.0	19.0	77.7
2	1,674.0	231,271	92.81	3.77	24.44	65.00	10.60	4.1	26.3	58.2	11.4	84.5
Total and average		\$ 580,294	\$ 103.26	\$ 3.68	\$ 23.35	\$ 59.25	\$ 16.98	3.6	22.6	57.4	16.4	80.0
All districts												
6798	\$1,008,934	\$121.38	\$ 3.86	\$ 27.56	\$ 67.57	\$ 22.39	3.2	22.7	55.7	18.4	78.4	

Districts ranked according to receipts per pupil, highest first.

Data from Annual Report of County Superintendent of Schools, 1928.



(Source: Annual Report of County Superintendent of Schools, 1928.)

Chart 7.

Out of every dollar raised by taxation in Larimer County for educational purposes, the higher educational institutions in the state receive 14.6 cents while the elementary schools of the county receive 85.4 cents. The general property tax for all purposes could be reduced approximately 10 percent if the present property tax for state educational purposes were discontinued and revenues for these purposes were obtained instead from some state source such as a state income tax, sales tax on selected articles, severance or special tax.

ANALYSIS OF EXPENDITURES IN LARIMER COUNTY, COLORADO

TREND OF SCHOOL EXPENDITURES.—There has been a steady increase in school expenditures in Larimer County from \$58,000 in 1901 to \$858,958 in 1928. See Table 15 and Chart 8. Chart 8 indicates the trend of expenditures over a period of 28 years. The heavy upper line shows for each year the total of all items of expense. The lower line omits expenditures for capital outlay and debt service. The slope of the lines indicates the rate of increase in expenditures. For example, a glance will show that expenditures in the last year have increased much less rapidly than in the years 1922 and 1924 but at practically the same rate as in the years 1918 to 1921.

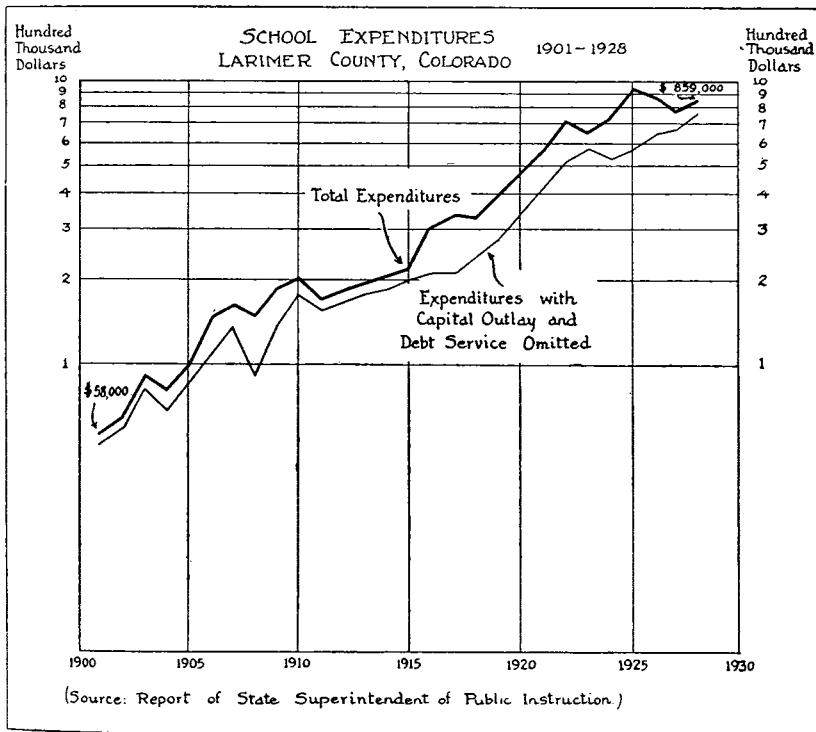


Chart 8.

WHY SCHOOL COSTS HAVE INCREASED.—Three sets of factors have united in the past to increase expenditures for school purposes.

First, increased enrollment, the lengthening of the school term, and the improved average attendance have of necessity increased the quantity of education that must be supplied.

In the second place, loss in purchasing power of the dollar has

affected the final price that must be paid for education. The 1928 dollar had but 59 percent of its 1913 purchasing power and, consequently, it takes more dollars to provide a given amount of schooling.

Finally, there has been a definite improvement in the quality of education supplied. This better education necessarily costs more.

INCREASE IN QUANTITY OF EDUCATION SUPPLIED.—The growth in population of Larimer County during the years under consideration has added to the number of children who should and do attend school. The number of children of school age rose from 4,090 in 1901 to 9,628 in 1928. See Table 2.

Table 15.—Trend of School Expenditures, Larimer County, Colorado, 1901 to 1928.

Amounts in thousands of dollars						
Year	Teachers' Salary	Fuel and Upkeep	Buildings Sites, etc.	Interest on Bonds Expenditures	Total Expense ¹	Total Expense Corrected for Change in Price Level ²
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1901	38	15	2	2	58	
1902	46	13	4	2	66	
1903	48	17	6	3	92	
1904	44	22	8	3	81	
1905	61	24	3	5	98	
1906	81	28	28	5	144	
1907	82	35	21	7	165	
1908	79	26	47	7	147	
1909	87	38	37	8	182	
1910	120	48	17	7	202	
1911	113	35	7	7	170	
1912	120	36	7	7	182	
1913	128	34	6	7	192	192
1914	134	38	9	6	201	201
1915	139	42	9	7	218	211
1916	149	40	86	9	307	263
1917	151	46	114	13	340	245
1918	163	66	69	17	330	210
1919	184	74	98	17	390	225
1920	248	67	109	19	463	240
1921	331	80	104	25	556	341
1922	337	149	163	36	705	446
1923	347	130	29	38	649	393
1924	374	123	156	39	728	439
1925	400	125	285	57	916	539
1926	444	147	181	58	881	515
1927	463	148	59	60	790	462
1928	477	159	39	56	859	502

Source: Report, State Superintendent of Public Instruction.

¹ Includes miscellaneous expense not segregated.

² Carl Snyder's index used.

In 1901 the average school term was 134 days in the rural sections of the county. In 1928 it was 180 days. This lengthening of the school term has involved a corresponding increase in the salaries paid to teachers. It has also resulted in greater maintenance and general repair costs, as well as greater outlays for supplies.

In 1901 only 50 percent, or one-half of the children between the ages of 6 to 21, actually attended school each day. Improved attendance and better transportation facilities have increased this proportion to 72 percent in 1928. In other words, in the pioneer days only two out of every four children attended school, while at present three out of every four do so. This increase of attendance, however, has not necessarily increased school costs in the same proportion. In fact, it involves a greater use of classroom with a corresponding reduction of costs per pupil. Nevertheless, in the long run this improvement in the attendance ratio has carried with it a definite addition to school costs.

CHANGES IN PRICE LEVEL AFFECT SCHOOL COSTS.—The actual trend of school expenditures is shown in column 6 of Table 15. Had the value of the dollar remained nearly the same during the period from 1901 to 1928, the figures in that column would indicate the "real" trend of school expenditures. It is a matter of common knowledge, however, that the dollar in education, as in other matters, does not purchase the same quantity and quality of goods and services today that it did even 10 years ago. In order, therefore, to arrive at the approximate "real" increase in school expenditures it is necessary to take into account the increase in the price of all factors which enter into school costs, including salaries. Such an adjusted list for expenditures is shown in column 7, Table 15, in which the Snyder price index numbers¹ are applied to the various school costs beginning with the year 1913. The extent of the difference between the "adjusted" and apparent costs is readily shown by examining the two columns.

School costs showed only a steady increase before the war period. During the war years, school expenditures were cut to the minimum. In this period teachers' salaries lagged far behind the soaring cost of living, with the result that many teachers were drawn away from the schools into positions paying higher salaries. The construction of urgently needed school buildings was postponed until after the war.

¹ The Carl Snyder index has been carried back only to 1913: First, because little of the present wide range of materials for making the index was available before that date; and second, because in the 30 years or more preceding the war the discrepancy between indexes of commodity prices and that of the general price level is relatively small.

IMPROVEMENT IN QUALITY OF EDUCATION SUPPLIED.—In the period studied there has been a definite improvement in the quality of education supplied. The last few years have seen a marked raising of the standards of teacher training and higher salaries paid to these better-equipped teachers. Also new courses, particularly those of a vocational nature, have been added to the school schedule.

The proportion of high-school students to the total number of students enrolled has increased rapidly. This factor accounts for a considerable part of the increase in school expenditures since it costs about three times as much to educate a high-school student as a grammar-school student.

One of the most notable improvements in the quality of educa-

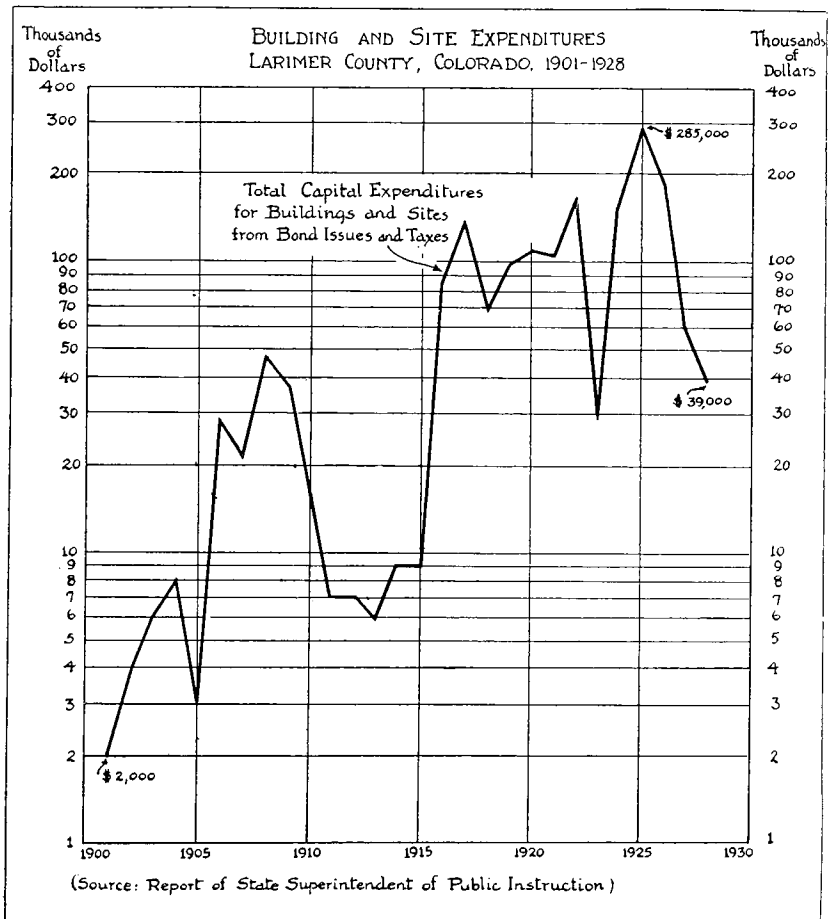


Chart 9.

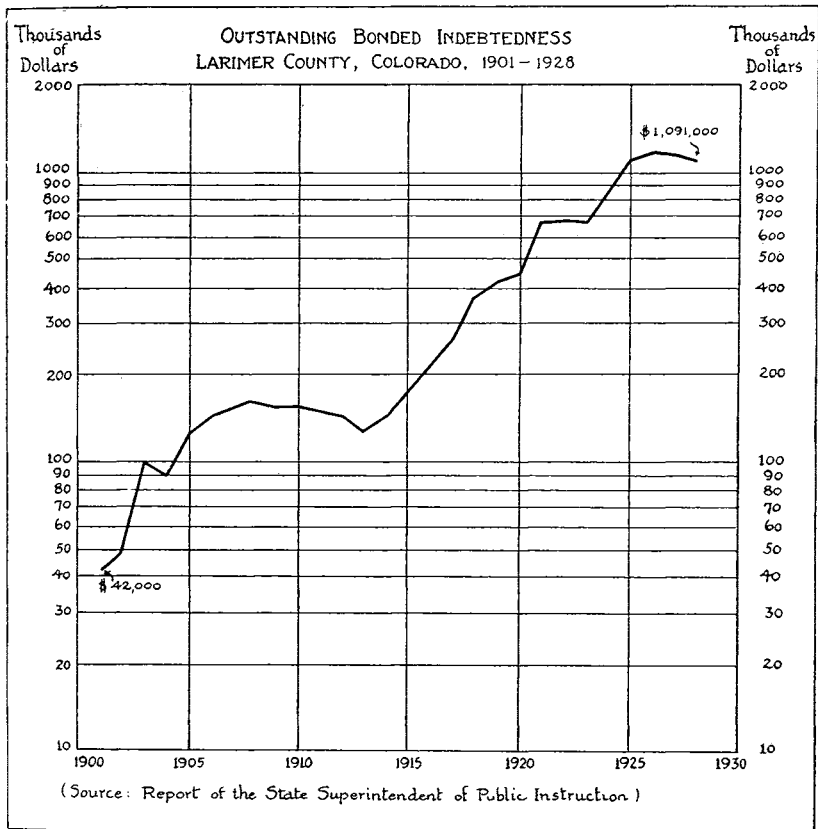


Chart 10.

tion offered in rural schools of Larimer County in recent years has been accomplished thru the consolidation and centralization of groups of small, poorly equipped, one-teacher schools into single school units.

BONDED INDEBTEDNESS.—In order to maintain the quality of education it is necessary to provide adequate buildings and equipment. Since most school districts do not have sufficient taxable property within their district to permit the financing of building programs out of current tax funds, it is almost necessary, under the present system, to raise funds by means of bonds. Interest on indebtedness, however, keeps school costs and taxes high.

An analysis of school bonded indebtedness from 1901 to 1928 (Table 16) shows that bonded indebtedness has paralleled the figures for school expenditures. By the end of the war period there was a wide-spread dearth of school buildings. Chart 9 shows this situation graphically. It was urgent that construction on a large scale should

be undertaken at once. The necessary funds could not be raised immediately without creating an excessive tax burden. Hence, school districts, towns and cities borrowed extensively to finance the construction of much needed school buildings. Bonds increased from \$42,000 in 1901 to \$1,091,000 in 1928. See Chart 10.

Interest payments on indebtedness soon became an important factor in the increased cost of education. Table 15 shows that interest payments made only a small increase until 1917, but after this date interest on bonds rose rapidly from \$13,000 in 1917 to \$60,000 annually in 1927. See Chart 11.

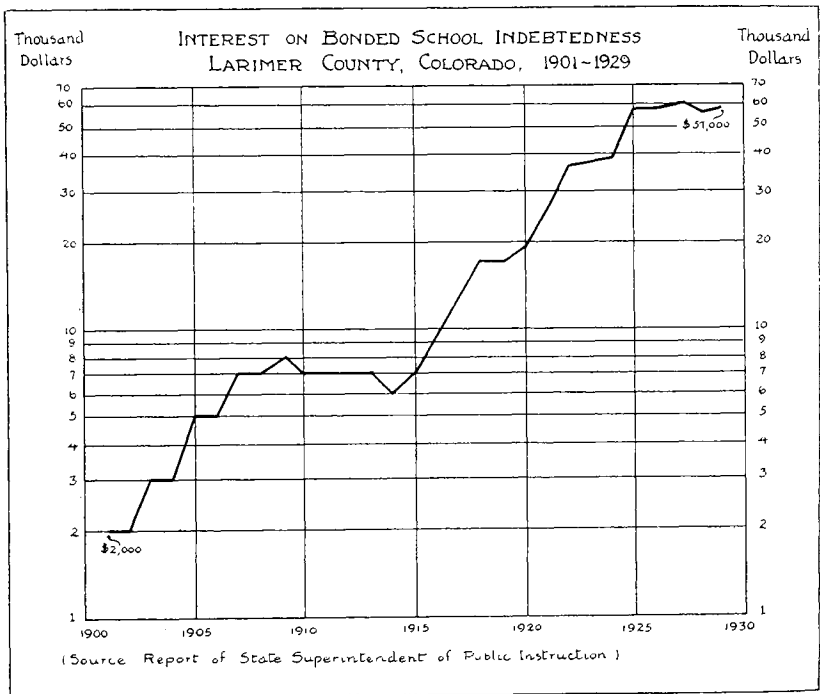
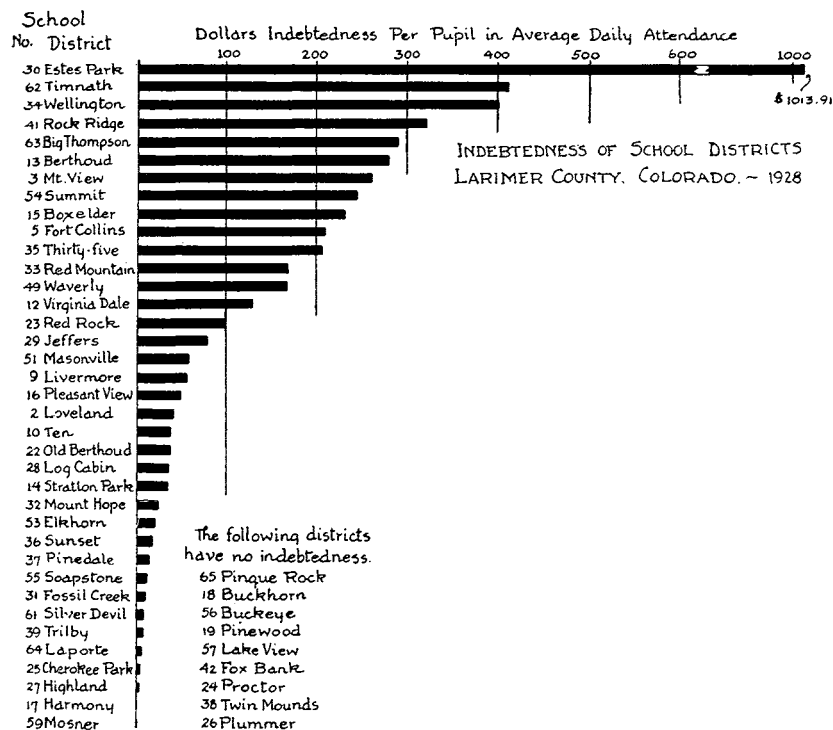


Chart 11.

The wide variation in indebtedness per pupil between the different districts of the county is shown in Chart 12. Estes Park has the tremendous indebtedness figure of \$1,013.91 per pupil in average daily attendance.

HOW THE SCHOOL DOLLAR IS SPENT.—Of each dollar spent for education in the county in 1928, 4.5 cents were expended for capital outlay, including buildings and equipment of a permanent nature as shown in Table 17. Debt service took 18.8 cents, 6.8 cents of which were used for interest payments and 12 cents of which were used



(Source: Reports of State Supl. of Pub Inst.)

Chart 12.

chiefly for the payment of bonds for school buildings and other permanent improvements extending over a period of 25 years. The major part of the school-tax dollar was paid for current operating

Table 16.—Bonded Indebtedness, Larimer County, Colorado, Schools, 1901 to 1928.

Year	Bonds outstanding (Thousands of dollars)	Year	Bonds outstanding (Thousands of dollars)
1901	42	1915*
1902	49	1916*
1903	100	1917	269
1904	90	1918	372
1905	124	1919	420
1906	143	1920	458
1907	152	1921	665
1908	164	1922	679
1909	158	1923	668
1910	159	1924	774
1911	151	1925	1,099
1912	146	1926	1,185
1913	129	1927	1,151
1914	141	1928	1,091

Source: Annual Reports, State Superintendent of Public Instruction.

*Information not available.

expenses; to be exact, 76 cents. In other words, the main cost of operating the schools was centered on current expenses.

An analysis of the amount spent per dollar for current expenses, shows that 55.5 cents was paid for teachers' salaries. This was the largest single cost. Fixed charges, general control, maintenance and operation of the school plant and auxiliary agencies took 20.5 cents. The proportionate distribution of these costs for Larimer County were quite comparable with the costs in other parts of the state. See Chart 13.

PERCENTAGE DISTRIBUTION OF COSTS OF SCHOOLS IN LARIMER COUNTY COMPARED WITH COLORADO - 1928

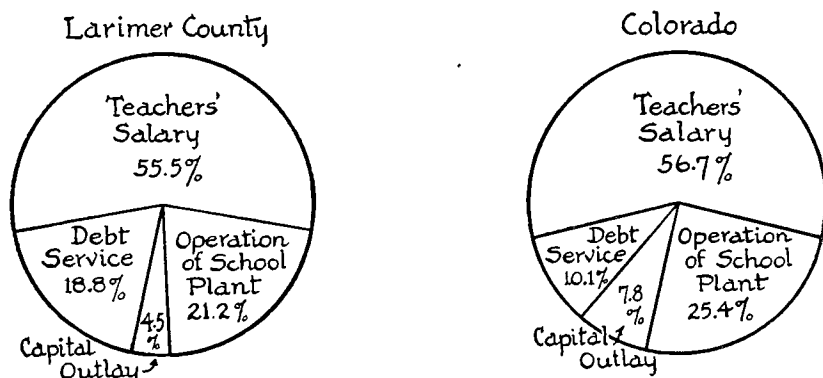


Chart 13.

Table 17.—Expenditures of Schools and Percentage Distribution, Larimer County, Colorado, 1928.

Purpose of expenditure	Amount	Percentage
Operating expense:		
Teachers' salaries	\$476,635	55.5
Fuel, rent and current expense	174,443	20.3
Library	1,870	.2
Total current expense	\$652,748	76.0
Debt service:		
Redemption of bonds	\$ 97,979	11.4
Payment of overdrafts	4,985	.6
Interest on bonds	55,953	6.5
Interest on warrants	2,982	.3
Total	\$161,899	18.8
Capital outlays for buildings, grounds and equipment	\$ 38,602	4.5
Refunds and abatements	\$ 5,709	.7
Total expenditures	\$558,958	100.0

WHAT DOES EDUCATION COST PER PUPIL IN LARIMER COUNTY?—A number of taxpayers, parents and school children have asked this question.

The average cost per pupil in average daily attendance for the entire state, including payments for new buildings and debt charges, was \$116.47 in 1923 as compared with \$69.00 in 1917, or an increase of 168.8 percent; while for Larimer County, the figures were \$106.60 and \$68.06 respectively, an increase of 156.6 percent. In 1928 the cost in Larimer County had risen to \$126.41 per pupil, an increase of 11.8 percent over 1923.

In further answer to the question it is well to compare Larimer County school costs with other typical counties in Colorado. Table 18 gives the per capita costs of education in 10 typical counties in Colorado for 1917, 1923 and 1928.

Larimer County costs compared favorably with the costs in other counties in Colorado and were slightly below the state average in 1917, 1923 and 1928.

Table 18.—Cost of Education in 1917, 1923 and 1928,
in Ten Typical Counties of Colorado.

County	Per capita cost for education		
	1917	1923	1928
(1)	(2)	(3)	(4)
Clear Creek	\$ 71.56	\$115.99	\$125.82
Jackson	87.65	164.16	134.98
Larimer	68.06	106.60	126.41
Las Animas	46.41	89.74	93.14
Lincoln	50.42	116.23	120.69
Mesa	58.91	88.03	98.10
Otero	51.24	103.31	116.61
Río Blanco	74.01	199.80	140.85
Río Grande	105.89	136.65	153.09
Weld	68.61	106.89	161.37
State average	\$ 69.00	\$116.47	\$134.19

The data for 1917 and 1923 were obtained from a thesis prepared by Susan Holterin for the degree of master of arts, Colorado Agricultural College. 1926; p. 31.

TREND OF SCHOOL COSTS IN LARIMER COUNTY, 1901 TO 1928.—School costs per capita have doubled in Larimer County from 1901 to 1928, as shown in Table 19 and Chart 14. In 1901 it cost \$6.07 per month per pupil in average daily attendance while it cost \$13.94 in 1928. The increase per capita would of course be somewhat less if the cost were adjusted for price changes.

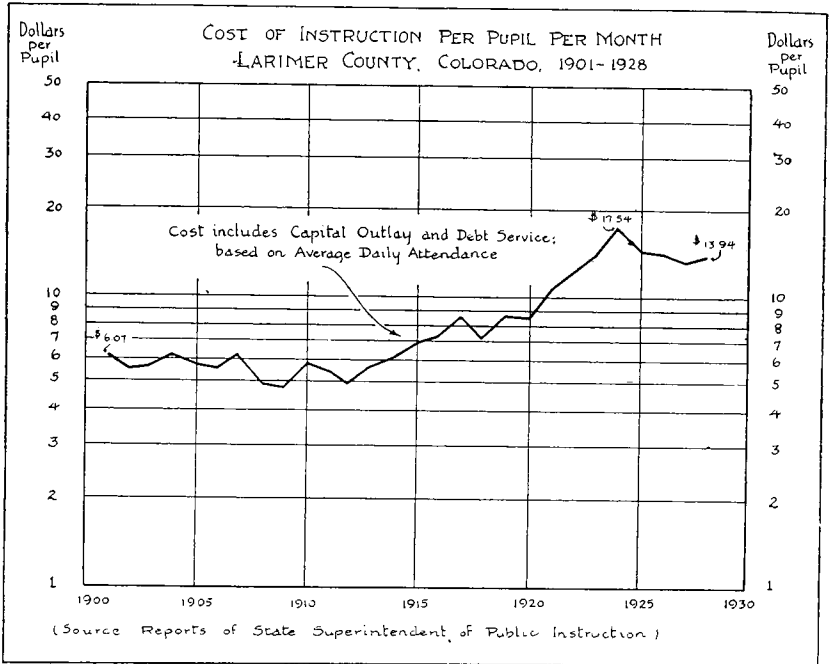


Chart 14.

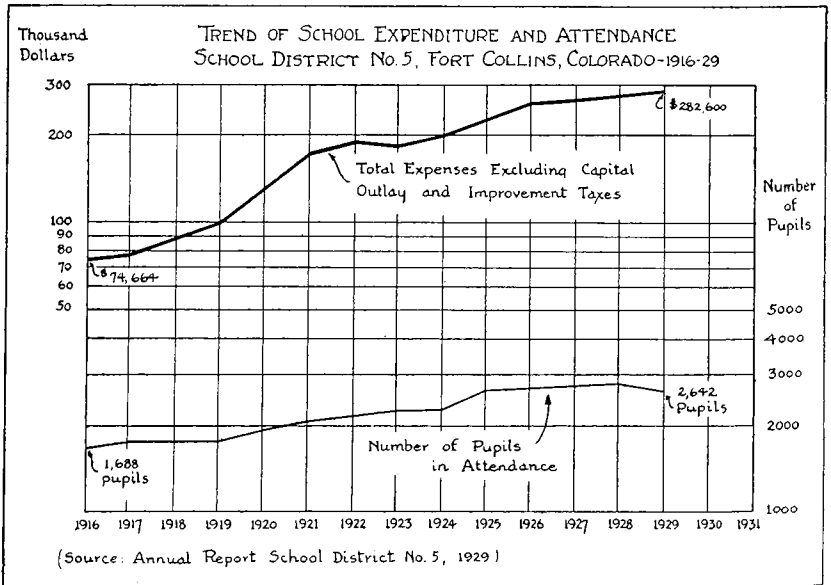


Chart 15.

The increased cost for education in Larimer County has been partially due to such factors as an increase in the length of the term and the large increase in the number of pupils in attendance as shown by Charts 2 and 15.

Table 19.—Trend of School Costs in Larimer County, Colorado, 1901 to 1928.

Year	Cost per month per pupil in A. D. A.	Year	Cost per month per pupil in A. D. A.
(1)	(2)	(3)	(4)
1901	\$ 6.07	1915	\$ 6.96
1902	5.66	1916	7.23
1903	5.78	1917	8.57
1904	6.16	1918	7.15
1905	5.76	1919	8.74
1906	5.50	1920	8.50
1907	6.21	1921	10.73
1908	4.99	1922	12.12
1909	4.73	1923	13.93
1910	5.86	1924	17.57
1911	5.67	1925	14.41
1912	4.96	1926	14.05
1913	5.63	1927	13.22
1914	6.06	1928	13.94

Source: Reports, State Superintendent of Public Instruction.

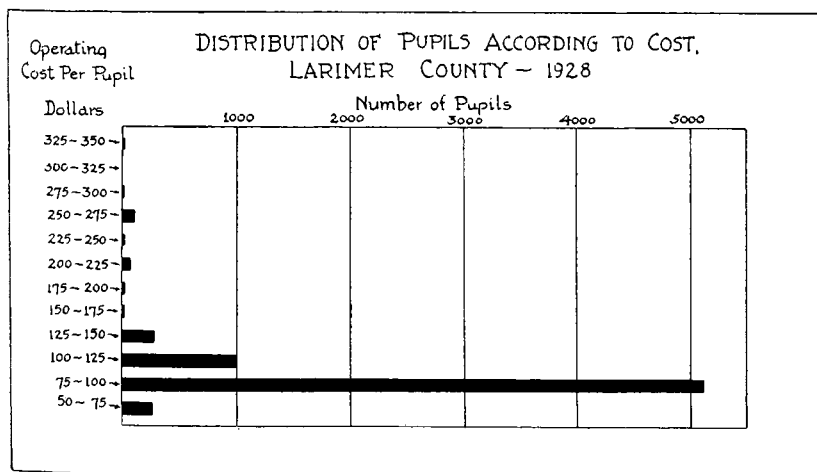


Chart 16.

The operating cost per pupil varies widely in different districts. See Chart 16. The costs in the most populous districts are low.

Table 20.—Annual Cost per Pupil for Education in One-, Two-, Three-, and Four -or-More-Teacher Schools in Larimer County, Colorado, 1928.
(Cost includes capital outlay and debt service)

One-teacher schools			Two-teacher schools			Three-teacher schools			Four-or-more-teacher schools		
Dist.	Total cost per pupil	Teacher cost per pupil	Dist.	Total cost per pupil	Teacher cost per pupil	Dist.	Total cost per pupil	Teacher cost per pupil	Dist.	Total cost per pupil	Teacher cost per pupil
25	\$335.65	\$301.97	29	\$277.29	\$ 84.51	41	\$164.24	\$ 90.79	30	\$396.40	\$165.13
12	321.00	244.29	32	141.30	90.00				49	229.40	65.70
33	305.25	261.86	39	138.86	108.81	10	136.32	53.38	62	182.60	86.55
37	230.71	72.87	59	131.00	57.69				64	181.05	69.96
53	230.52	197.37	24	128.93	86.00	54	112.32	73.85	63	153.45	59.17
28	229.27	165.79	57	111.20	71.00				13	140.17	75.85
61	228.54	161.80	17	87.92	61.61	26	75.87	56.64	5	124.17	69.91
36	211.90	90.00	16	85.34	47.98				34	116.19	58.71
56	183.80	162.00	51	83.63	60.00				35	111.20	64.06
18	165.40	153.00	23	77.78	46.08				15	100.55	51.96
14	153.36	82.04	22	67.56	45.00				2	89.53	61.42
65	151.50	131.25	38	61.51	37.50						
19	139.27	100.00									
31	124.21	50.24									
42	106.13	86.71									
27	86.15	63.85									
Average	\$187.39	\$116.51		\$117.75	\$ 60.61		\$118.56	\$ 65.94		\$125.18	\$ 68.72

¹ Ranked according to cost per pupil in average daily attendance, highest first.

HOW DOES THE COST IN A ONE-TEACHER SCHOOL COMPARE WITH THE COST IN A TWO-, THREE-, AND FOUR-OR-MORE-TEACHER SCHOOL?—In order to answer this question, all the schools in the different classes were grouped together and the average cost of each group determined. The results are shown in Table 20.

It is thus clearly demonstrated that the cost of instruction in the one-teacher schools in most cases is considerably higher than it is in the schools with more than one teacher. In order to make a true comparison, however, it would be necessary also to make a comparison of the quality of education offered by each type of school. While there would be exceptions to any broad generalization, yet, in a general way, there can be no doubt but that the larger schools provide a higher quality of education.

The four-or-more-teacher schools show a higher per-pupil cost than the two-, or three-teacher schools, but this is undoubtedly due to the fact that they provide an opportunity for a much better and broader type of education.

COST OF INSTRUCTION PER PUPIL IN FIRST-CLASS SCHOOL DISTRICTS COMPARED TO THAT IN THIRD-CLASS DISTRICTS.—Many taxpayers have the general idea that it costs more to teach pupils in the first-class school districts than it does in the smaller one- and two-teacher schools in the third-class districts. Table 21 shows that the opposite is true.

Altho the average annual salary of teachers in the third-class school districts was \$1,163 compared with \$1,607 in the first-class school districts, yet the teaching cost per pupil in average daily attendance was approximately \$10 less in the first than in the third-class districts. The total expense per pupil was 40 percent higher in the third-class districts.

Instruction costs per pupil are more in the third-class school districts largely because of the small number of pupils instructed per

Table 21.—Comparison of Costs per Pupil in First and Third-Class School Districts in Larimer County, Colorado, 1928.

Type of school	Number of district	Number of pupils in A. D. A.	Number of teacher	Number of pupils per teacher	Average annual salary per teachers	Cost per pupil in A. D. A.	
						Teacher expense	Total expense
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
First class	2	4,459	176	25.3	\$1,607	\$66.73	\$111.17
Third class	44	2,336	154	15.2	1,163	76.66	155.50
All county schools	46	9,628	330	20.6	\$1,444	\$70.14	\$126.41

Table 22.—Cost of Public School Education per Pupil in Attendance, Larimer County, Colorado, 1928.

No. of district	No. of pupils in A. D. A.	Distribution of total cost per pupil								
		Total expense	Total cost per pupil	Teacher expense	School plant maintenance and operation	Total current operating expenses	Capital outlay, new grounds, bldgs., equip.	Redemption of bonds payment of overdrafts	Interest on bonds and warrants	Abatement
Third-class districts	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
30	93.9	\$ 37,224	\$396.40	\$165.13	\$152.92	\$318.05	\$ 25.64	\$.....	\$ 49.13	\$ 3.58
25	7.6	2,551	335.65	301.97	27.63	329.60	.....	5.00	.....	1.05
12	7.0	2,247	321.00	244.29	32.00	276.29	1.00	15.85	26.43	1.43
33	5.9	1,801	305.25	261.86	15.93	277.79	6.10	20.17	.....	1.19
29	21.3	5,906	277.29	84.51	15.92	100.43	136.43	37.61	1.69	1.13
55	45.0	11,890	264.22	141.82	79.43	221.25	14.64	24.33	2.22	1.78
37	12.9	2,976	230.71	72.87	61.71	134.58	7.60	53.88	33.02	1.63
53	3.8	876	230.52	197.37	28.15	225.52	5.00	.....	.....	-
49	111.0	25,463	229.40	65.70	44.29	109.99	21.57	93.87	2.49	1.48
28	9.5	2,178	229.27	165.79	42.95	208.74	14.84	4.53	.32	.84
61	8.9	2,034	228.54	161.80	19.55	181.35	34.49	10.11	1.35	1.24
36	10.0	2,119	211.90	90.00	26.00	116.00	25.20	60.90	7.40	2.40
56	5.0	919	183.80	162.00	12.00	174.80	8.00	.....	.....	.20
62	184.7	33,725	182.60	86.55	63.79	150.34	6.21	.....	24.73	1.32
64	263.8	47,763	181.05	69.96	54.04	124.00	.....	44.97	10.68	1.40
18	5.0	827	165.40	153.00	12.40	165.40	.....	.....	.....	-
41	49.3	8,097	164.24	90.79	34.36	125.15	23.89	.....	14.10	1.10
63	70.0	10,742	153.45	59.17	62.78	121.95	7.94	6.17	16.40	.99
14	11.0	1,687	153.36	82.09	18.18	100.27	38.00	6.82	7.82	.45
65	4.0	606	151.50	131.25	13.25	144.50	4.50	.75	1.50	.25
9	35.0	5,203	148.67	94.29	19.20	113.49	.....	32.66	2.03	.49
3	64.0	9,115	142.43	84.38	29.86	114.24	.....	14.36	12.44	1.39
32	29.0	2,826	141.30	90.00	20.40	110.40	4.55	24.80	.85	.70
13	268.0	37,563	140.17	75.85	29.08	104.93	12.34	7.46	14.52	.92

19	6.8	947	139.27	100.00	38.68	138.68	.....	.....	.....	.59
39	19.3	2,680	138.86	108.81	20.83	129.74	8.65	.....	.....	.47
10	68.0	9,270	136.32	53.38	79.94	124.32	11.09	.....	.....	.57
59	39.0	5,109	131.00	57.69	12.33	70.02	.....	45.85	14.00	1.13
24	22.5	2,901	128.93	86.00	29.33	115.33	13.02	.....	.....	.58
31	20.9	2,596	124.21	50.24	64.07	114.31	3.16	5.74	.....	.81
34	279.7	32,510	116.19	58.71	21.79	80.50	.18	16.71	18.09	.71
54	41.3	4,639	112.32	73.85	23.65	97.50	1.21	1.36	.....	.75
35	76.8	8,541	111.20	64.06	17.02	81.08	13.42	.....	15.74	.96
57	15.0	1,668	111.20	71.00	18.27	89.27	8.40	11.40	1.33	.80
42	15.5	1,645	106.13	86.71	5.29	92.00	13.68	.....	.....	.45
15	93.0	9,351	100.55	51.96	30.37	82.33	4.86	1.69	10.77	.90
17	40.0	3,517	87.92	61.62	17.73	79.25	8.05	.....	.....	.62
27	14.8	1,275	86.15	63.85	19.93	83.78	1.49	.....	.....	.88
16	41.0	3,499	85.34	47.98	14.34	62.32	.98	19.29	2.29	.46
51	30.0	2,509	83.63	60.00	7.53	67.53	.57	14.03	1.07	.43
23	42.0	3,266	77.78	46.08	16.20	62.37	10.79	.....	4.17	.45
26	75.0	5,690	75.87	56.64	18.47	75.11	.33	.....	.....	.43
22	48.0	3,243	67.56	45.00	15.31	60.31	4.19	.....	2.50	.56
38	34.0	2,091	61.51	37.50	20.36	57.86	3.65	.....	.....	.....
<hr/>										
Average and totals	2,339.0	\$363,285	\$155.50	\$ 76.66	\$40.06	\$116.72	\$ 8.73	\$16.75	\$12.24	\$ 1.06
<hr/>										
First-class districts										
5	2,785.0	345,797	124.17	69.91	19.44	89.35	4.13	19.58	10.32	.79
2	1,674.0	149,876	89.53	61.42	16.95	78.37	4.01	5.56	.97	.62
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Average and totals	4,459.0	\$495,673	\$111.17	\$ 66.73	\$18.51	\$85.24	\$ 4.08	\$14.32	\$ 6.81	\$.72
<hr/>										
Average and totals all schools	6,798.0	\$858,958	\$126.41	\$ 70.14	\$25.93	\$96.07	\$ 5.68	\$15.15	\$ 8.67	\$.84

Ranked according to cost per pupil, highest first.
Data from Annual Report of County Superintendent of Schools, 1928.

Table 23.—Percentage Distribution of Costs of Public School Education per Pupil in Attendance, Larimer County, Colorado, 1928.

District number	Teachers' expense	Plant maintenance and operation	Capital outlay	Redemption of bonds, payment of overdrafts	Interest	Abatement	Total current operating expense
Third class	(1)	(2)	(3)	(4)	(5)	(6)	(7)
30	41.6	38.6	6.5	—	12.4	.9	80.2
25	90.0	8.2	—	1.5	—	.3	98.2
12	76.1	9.9	.3	5.0	8.2	.5	86.0
33	85.8	5.2	2.0	6.6	—	.4	91.0
29	30.5	5.7	49.2	13.6	.6	.4	36.2
55	53.7	30.1	5.5	9.2	.8	.7	83.8
37	31.6	26.7	3.3	23.4	14.3	.7	58.3
53	85.6	12.2	2.2	—	—	—	97.8
49	28.6	19.3	9.4	40.9	1.1	.7	47.9
28	72.3	18.7	6.5	2.0	.1	.4	91.0
61	70.8	8.5	15.1	4.4	.6	.6	79.3
36	42.5	12.2	11.9	28.8	3.5	1.1	54.7
56	88.1	7.0	4.8	—	—	.1	95.1
62	47.4	34.9	3.4	—	13.6	.7	82.3
64	38.6	29.9	—	24.8	5.9	.8	68.5
18	92.5	7.5	—	—	—	—	100.0
41	55.3	20.9	14.5	—	8.6	.7	76.2
63	38.6	40.9	5.2	4.0	10.7	.6	79.5
14	53.5	11.9	24.8	4.4	5.1	.3	65.4
65	86.0	8.8	3.0	.5	1.0	.1	95.4
9	63.4	12.9	—	22.0	1.4	.3	76.3
3	59.2	21.0	—	10.1	8.7	1.0	80.2
32	63.7	14.4	3.2	17.6	.6	.5	78.1
13	54.1	20.8	8.8	5.3	10.3	.7	74.9
19	71.8	27.8	—	—	—	.4	99.6
39	78.4	15.1	6.2	—	—	.3	93.5
10	39.2	52.1	8.1	—	.2	.4	91.3
59	44.0	9.4	—	35.0	10.7	.9	53.4
24	66.7	22.8	10.1	—	—	.4	89.5
31	40.5	51.6	2.5	4.6	.2	.6	92.1
34	50.5	18.7	.2	14.4	15.6	.6	29.2
54	65.7	21.1	1.1	1.2	10.2	.7	86.8
35	57.6	15.3	12.0	—	14.2	.9	72.9
57	63.9	16.4	7.6	10.2	1.2	.7	80.3
42	81.7	5.0	12.9	—	—	.4	86.7
15	51.7	30.2	4.8	1.7	10.7	.9	81.9
17	70.1	20.1	9.1	—	—	.7	90.2
27	74.1	23.2	1.7	—	—	1.0	97.3
16	56.2	16.8	1.2	22.6	2.7	.5	73.0
51	71.7	9.0	.7	16.8	1.3	.5	80.7
23	59.2	20.9	13.9	—	5.4	.6	80.1
26	74.7	24.3	.4	—	—	.6	99.0
22	66.6	22.7	6.2	—	3.7	.8	89.3
38	61.0	33.1	5.9	—	—	—	94.1
Average	49.3	25.7	5.6	10.8	7.9	.7	75.9
First class							
5	56.3	15.7	3.3	15.8	8.3	.6	72.0
	68.6	18.9	4.5	6.2	1.1	.7	87.6
Average	60.0	16.7	3.7	12.9	6.1	.6	76.7
Average all schools	55.5	20.5	4.5	12.0	6.8	.7	76.0

teacher. It will be noted that each teacher in the first-class school districts instructed almost 70 percent more pupils on the average than did the teacher in the third-class districts.

COMPARISON OF SCHOOL COSTS BETWEEN INDIVIDUAL SCHOOL DISTRICTS IN LARIMER COUNTY.—Previous discussion has compared the cost of education in several counties of Colorado and between several types and classes of school districts within the county. In order to get at the heart of the situation it is necessary to compare the costs of one district with another.

Many taxpayers wonder why it should cost \$396 to educate a pupil in one district while it costs only \$62 to render the same job in another district. Such cost differences actually occurred in Larimer County in 1928, as may be noted by referring to Table 22, column 3 and Map 3 which give a comparison of operating costs in each district.

Altho the high cost is due in some cases to superior educational facilities, yet in some cases it is due to the fact that the school is small and has but four or five pupils per teacher, which makes the cost abnormally high. See Chart 17. In other cases it is due to poor financial and uneconomical school management.

In order to throw light on the situation, school costs have been divided for analysis into current operating and total costs.

The operating cost has been classified into teacher expense and into items forming the other operating expenses such as maintenance and operation of the school plant, library and other costs connected with instruction. Total cost includes also expense for capital outlay and debt service.

It will be noted from Table 23, showing the percentage distribution of the various costs, that there is a wide difference in the proportion of different items entering into the total cost or expenditure. For example, in some districts the operating expense, column 7, makes up the total cost because of lack of indebtedness or capital outlay payments. In other instances the operating expense forms only a small proportion of the total cost due to large expenditures for buildings, for redemption of bonds, or for interest charges on outstanding indebtedness. In some cases the expense for operating and maintaining the school plant is out of all proportion to the expense for teachers' salaries.

Generally speaking current operating expenditure includes only the day-by-day running expenses of the school district, consisting of the costs of administration, instruction, auxiliary agencies, operation and maintenance. To these are customarily added fixed charges. Each of these main sub-divisions of current expenditures should be analyzed in order to make a true comparison between school districts

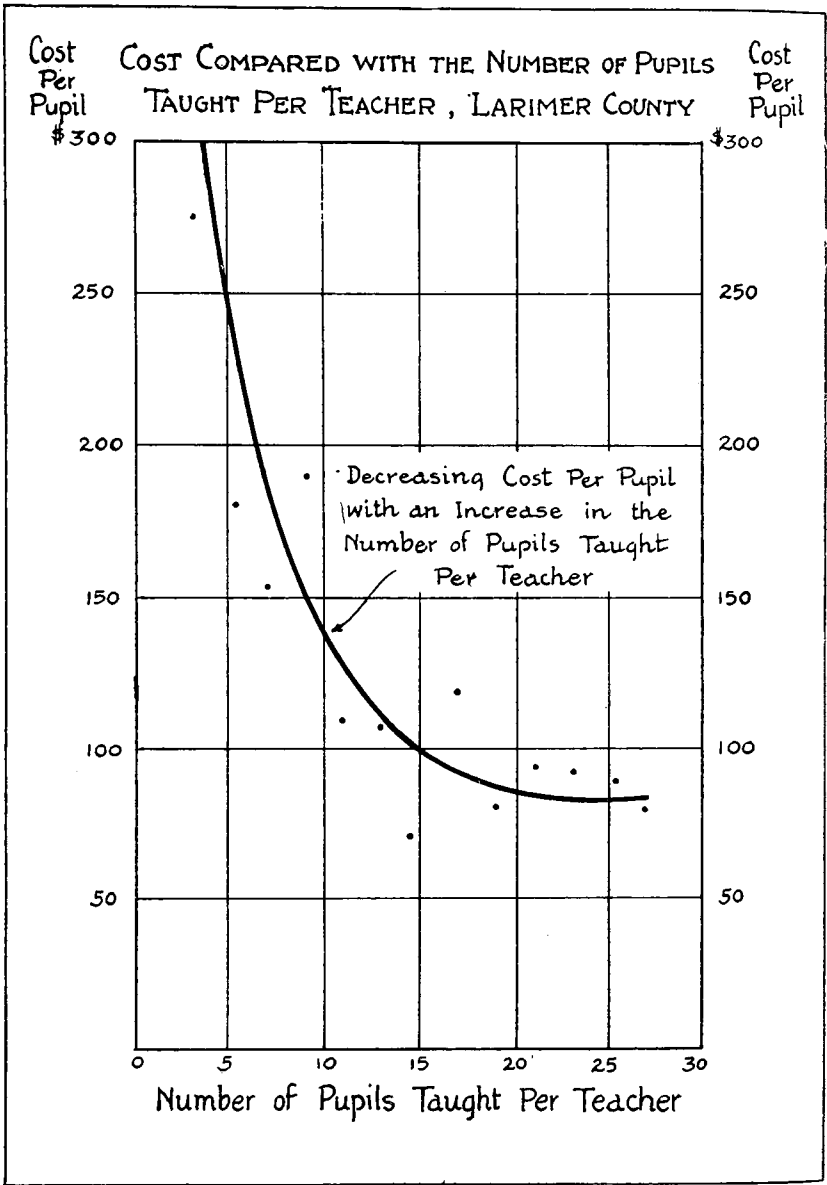


Chart 17.

and in order to see whether the schools are economically operated. However, with the present system of reporting school statistics it is impossible to do this. To do it there would be required a complete reclassification of accounts following an entirely new system, which would be too expensive for the college to undertake.

Capital expenditures, or expenditures for permanent improvements, are paid for partially from taxes and other current revenues, and partially from the proceeds of the sale of bonds. The source of these expenditures should be indicated in the published county and state school records. At present this information is not available.

COSTS AS RELATED TO NUMBER OF PUPILS PER TEACHER.—The small teaching load, and the resultant high teaching cost, are extremely characteristic of the small school. Table 24 shows that in schools with more than 18 pupils per teacher the cost per pupil in average daily attendance was less than \$95; with a single exception a lower number of pupils per teacher made the cost much higher.

Both Table 24 and Chart 17 show that when the number of pupils per teacher falls below 10, the cost per pupil rises rapidly. This is a question that should be given most careful consideration by taxpayers and those in charge of the schools.

Table 24.—Relationship Between Operating Cost and Number of Pupils per Teacher, Larimer County, Colorado, 1928.

Number of pupils per teacher	Number of districts	Number of pupils in attendance	Cost per pupil in A. D. A. ¹
2.1 to 4	4	25	\$276.92
4.1 to 6	5	33	174.63
6.1 to 8	5	96	153.12
8.1 to 10	5	178	193.32
10.1 to 12	3	54	108.09
12.1 to 14	2	105	107.03
14.1 to 16	2	45	69.47
16.1 to 18	4	338	119.91
18.1 to 20	3	156	77.74
20.1 to 22	6	916	94.50
22.1 to 24	4	320	94.66
24.1 to 26	2	2860	88.98
26.1 to 28	1	1674	78.37

¹ Operating cost includes teacher's salary, current expense and library, but does not include capital outlay or debt service.

The cost figures as worked out in Table 25 show that only 7 percent of the total number of students in Larimer County has a per capita operating cost above \$125. Most of the districts which have such a cost are located in the mountainous sections. See Map 3. On the other hand, there are a few districts that are probably not spending enough money per pupil for about 4 percent of the total number of pupils were educated at a cost between \$50 and \$75 per pupil.

VARIATIONS IN STANDARDS OF INSTRUCTION.—It is difficult to say just how much should be spent by the individual school district per pupil. It is also almost impossible to find a system of ranking which

Table 25.—Distribution of Students According to Operating Cost per Student in A. D. A., Larimer County, Colorado, 1928.

Cost per pupil in A. D. A.	Number of pupils	Percentage
\$ 50—\$ 75	249	3.65
75— 100	5,096	74.98
100— 125	998	14.67
125— 150	264	3.83
150— 175	10	.15
175— 200	9	.15
200— 225	55	.81
225— 250	4	.06
250— 275	101	1.49
275— 300	6	.09
300— 325	....	....
325— 350	8	.12

will take into consideration all the factors that enter into the quality or amount of education received. There is always a possibility that a school spending a comparatively small amount of money per pupil may be turning out the best product, or a teacher receiving a low salary be doing a better job of teaching than one with better training and receiving a higher salary. Certainly that is not usually the case.

On the other hand, do country schools which spend more per pupil for education than city and town schools receive a correspondingly greater return in the value of the educational work? In order to answer this question, it is necessary to secure some factors which will serve as a rough measure of educational value.

Educational experts have developed several measures for this purpose, some of them depending upon an elaborate combination of factors. Fortunately, however, no such complicated measure is needed. The pay of teachers is by all odds the most important element in the current cost of public education. The professional qualifications of teachers and the general caliber of the teaching force, as indicated by the average salary paid, may, therefore, safely be taken as a fairly reliable index of the value of the education given.

In Table 3 the education given in each district is appraised on the basis of the average salary received by the entire teaching force. It will be seen that the small rural schools pay the lowest salaries. As a consequence they receive less in the way of educational value. Exceptions to this rule are very few.

The educational qualifications of teachers given in Table 26 show that teachers in city schools are much better qualified to teach than are those in the country schools. Their average teaching experience of 11.4 years is also far greater than the 4.7 years for those teaching in country schools.

Yet this superior teaching is given at a considerably lower cost per pupil.

Table 26.—Education Received by Children Attending Rural Schools Compared with Those Attending City Schools in Larimer County, Colorado, 1928.

Factors compared	City Schools	Rural Schools
Number of school districts	6	40
Number of pupils in daily attendance	5,286	1,509
Number of census children	7,071	2,557
Number of teachers employed	223	107
Percentage attendance is of census	75	59
Number of children in attendance per teacher	24	14
Expenditure for education per pupil	\$ 120	\$ 147
Investment in school property per pupil	\$ 303	\$ 192
Average annual salary of teachers	\$1,640	\$1,036
Educational qualifications of teachers:		
Percentage of teachers holding life certificates	55	24
Percentage of teachers with limited state certificates	31	23
Percentage of teachers holding degrees	40	12
Percentage of teachers with normal training	45	41
Percentage with first-grade certificates	5	34
Percentage with second-grade certificates	1	25
Percentage with third-grade certificates	5	2
Average number of years teaching experience	11.4	4.7

Source: Annual Report, County Superintendent of Schools.

COMPARISON OF SCHOOL COSTS IN SEVERAL CITIES AND TOWNS IN NORTHERN COLORADO.—Taxpayers in Larimer County will be interested in Table 27 which gives a comparison of costs in several localities in Northern Colorado. This comparison was made by Harry B. McCreary, secretary of School District No. 5, and is taken from the 1927 annual report.

It shows the cost of instruction per pupil, based on average attendance. This cost is necessarily high in the smaller districts conducting high schools, especially where transportation is furnished.

It will be observed that the number of pupils per instructor has considerable bearing on the cost per pupil. If the number of pupils is not large enough to keep the classes up to normal size, the teaching cost becomes excessive. This is markedly the case in Estes Park which had 9.8 pupils per instructor with an annual cost of \$379.44 per pupil.

Interest costs seem excessive in several places, such as Estes Park, Timnath, Ault, Berthoud and Windsor.

Charts 15 and 18 show graphically the trend of school expenditure, school attendance and cost per pupil for District 5.

Table 27.—Annual Cost per Pupil, Based on Average Attendance, Interest Charges per Pupil and Pupils per Instructor in Several Localities in Northern Colorado, 1927.

Location	Type of school	Annual cost per pupil ²	Interest charges per pupil	Number of pupils per instructor
(1)	(2)	(3)	(4)	(5)
1. Estes Park	Village	\$379.44	\$45.67	9.8
2. Timnath	Consolidated	200.16	27.38	14.7
3. Greeley	City	122.00	11.36	22.6
4. Laporte	Consolidated	121.59	5.73	21.1
5. Boulder	City	121.16	5.67	20.8
6. Ault	Consolidated	114.48	20.17	22.5
7. Berthoud	Village	112.41	16.13	17.5
8. Windsor	Consolidated	110.79	16.40	24.9
9. Fort Collins	City	106.87	10.73	25.4
10. Boxelder	Rural	101.25	11.17	22.4
11. Longmont	City	96.48	8.46	27.1
12. Loveland	City	95.18	3.18	26.2
13. Eaton	City	93.60	1.22	19.8

Source: Annual Report of School District No. 5, 1927.

² All expenses except capital outlay.

Table 28.—Trend of Enrollment and School Costs in District No. 5, Fort Collins, Colorado, 1916 to 1929.1

Year	School census	School enrollment	Pupils in A. D. A.	Expense ²		Salary Cost	
				District total	Per pupil in A. D. A.	District total	Per pupil in A. D. A.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1916	2,600	2,318	1,687.9	\$ 74,664.00	\$ 44.23	\$ 62,409.62	\$36.97
1917	2,602	2,430	1,769.0	77,614.92	43.87	62,849.58	35.53
1918	2,791	2,458	1,719.9	89,474.71	52.02	68,178.32	39.64
1919	2,742	2,539	1,762.7	97,133.04	55.10	75,613.80	42.90
1920	2,881	2,742	1,902.0	129,062.08	67.85	98,773.13	51.93
1921	2,989	2,812	2,077.2	174,576.51	84.04	134,829.26	64.91
1922	2,924	2,927	2,194.3	192,796.88	87.86	147,725.84	67.33
1923	2,987	2,986	2,253.6	184,965.16	82.07	140,600.66	62.39
1924	2,998	2,992	2,276.5	197,833.90	86.90	155,717.10	68.40
1925	3,500	3,534	2,643.7	231,149.32	87.43	170,284.12	64.41
1926	3,449	3,349	2,694.5	261,640.77	97.10	191,847.39	71.20
1927	3,714	3,458	2,719.4	267,398.86	98.33	200,162.14	73.60
1928	3,766	3,562	2,784.9	279,785.43	100.46	209,533.67	75.23
1929	3,689	3,360	2,642.0	282,600.08	106.96	213,223.96	80.70

Source: Annual Report, School District No. 5, 1929.

¹ School year ends June 30.

² Total expense includes salaries, repairs, supplies, operating expense, interest on bonds, county treasurer's fees, but does not include permanent improvements, furniture, municipal improvement taxes or capital expenditures.

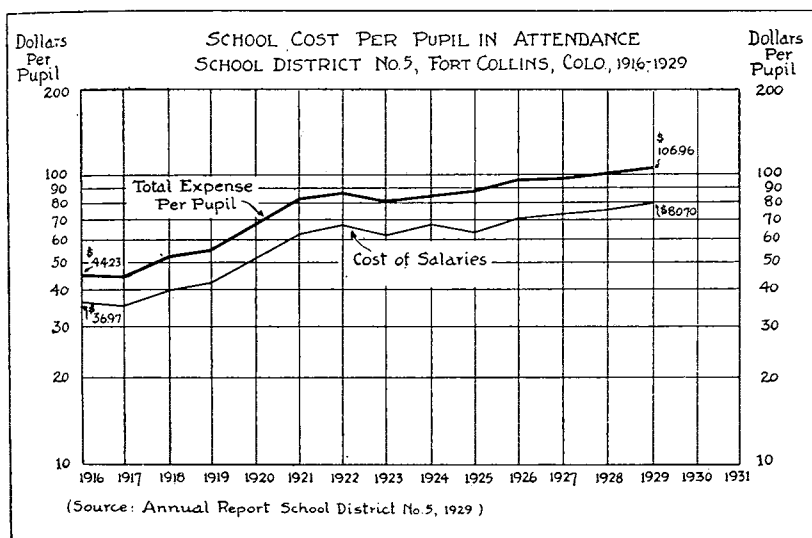


Chart 18.

SUGGESTIONS TOWARD IMPROVING THE EDUCATIONAL TAX SITUATION IN LARIMER COUNTY, COLORADO

SUMMARY OF THE PRESENT SITUATION.—A study of the problem of school organization and of educational financing in Larimer County leads to three definite conclusions:

- 1.—There are at present great inequalities in school taxation.
- 2.—There is much inequality in educational opportunity and in the efficiency of instruction.
- 3.—Hundreds of country boys and girls are being cheated out of an adequate education.

NEED OF CENTRALIZATION.—It is evident that a part of these inequalities could be remedied by centralization. The present division of the county with its 46 separate taxing and spending units, operating independently, lends itself neither to efficient nor economical administration. Old district lines need revamping. Many districts should be consolidated. There are too many school houses, too much duplication of services and too many officers. Consolidation would save money and make stronger and better schools, with improved educational opportunities and better instruction. This has been definitely proved in many parts of Colorado. In these days of improved roads and better transportation, plans for such consolidation should not be delayed. It is the only hope that the country child can have of living at home and at the same time receive the school advantages

that the fortunate children have who live in a city or near an already established consolidated school. Only in the mountainous sections of the county would consolidation prove impracticable.

But we should go farther. The very weak organization of the present district system defies efficient or economical administration. Each district runs its own affairs, levies taxes, incurs debts and sets school standards. The result is extreme variability in costs and in results.

THE ROOT OF THE PROBLEM.—There is a need to do away with all of the rural school districts as now administered and to handle the county as a unit. The county superintendent of schools is virtually without power in the present plan. She can neither raise standards nor curb extravagance. She has no voice in the selection of teachers, nor in their dismissal. She can advise, but has few powers. This should be changed. The county needs a county board of education which can attack the problem of giving urban and rural children the same educational advantages. Such a board would have the power of setting standards for the entire county and of seeing that the standards were maintained. It is believed that such centralized authority would save the taxpayers thousands of dollars in overhead expenses in the matter of handling funds and in the purchase of supplies, furniture and equipment in large quantities.

The county-unit plan of operating schools would eliminate the 46 different tax rates for school purposes in the county at present and substitute one uniform school tax levy. All of the wealth of the county would be pooled, and both the costs to the taxpayer and the educational opportunities of their children would be equalized.

UTAH HAS SUBSTITUTED ECONOMY AND EFFICIENCY FOR WASTE.—There are only 40 school districts in the State of Utah; 5 of these are cities of the first and second class. There are 24 school districts having the same geographical boundaries as the counties. There are four counties having two districts each, and one county having three districts.

In the majority of the districts the purchasing is done by the district superintendent. In the larger districts, however, the clerk of the board of education acts as the purchasing agent for the board.

This plan of rural-school organization makes for economy, efficiency and a richer community life. Local school taxes are equal throughout the district. School opportunities, therefore, do not depend upon the relative wealth of individual communities. Material savings are made in purchasing and distributing supplies. Useless purchases are avoided, better prices are obtained, and schools are more fully

supplied with things actually needed. In most districts the salaries and expenses of the five board members amount to considerably less than what was formerly paid to school trustees and the districts can provide themselves with more adequate and efficient supervision and still realize an immediate net saving in administration expense.¹

Utah's rural schools are as efficiently managed as the schools in our Colorado cities. Where Utah has only 40 school districts, Colorado is burdened with 2,032 school districts, while Larimer county alone has more school districts than the entire state of Utah.

At present there are two counties in Colorado where the county-unit plan prevails: Denver and San Juan counties. Other states having the county-unit system, or where the county board is the paramount board, are Alabama, California, Florida, Kentucky, Louisiana, Maine, New Mexico, North Carolina, Tennessee, Utah and Virginia.²

It may be argued that such a plan would be objected to by the school systems of the cities and towns. Most of the cities and towns of Larimer County boast of the efficiency of their schools. Both school officials and citizens speak of the superior advantages being given their children, of their trained teachers and the breadth of richness of their courses of study. No mention, however, is made by them of the hundreds of country children on the farms, who for lack of funds and in accordance with the prevailing district school system, are forced to attend school in their inefficient little one-room school-houses under the instruction of less competent teachers who will remain but a short time.

Such great discrimination in educational opportunity between urban and rural children is daily growing greater. In the last 10 years there has been a tendency for wealth to concentrate in the cities and towns. Comparatively little is left in the country to support public education without a tremendous burden on real estate. In spite of this there has been absolutely no change made in our Colorado school machinery to fit the changing needs and demands. We still cling to the old idea that each community, without regard to its wealth or size, should be left to finance and administer its own schools. As a result hundreds of country boys and girls are being cheated out of a good education. The county-unit plan offers a partial solution of their problem.

EDUCATIONAL COSTS CAN BE CUT.—Even under the present school district system increased efficiency would come from the following needed improvements in school administration:

¹ C. N. Jenson, State Superintendent of Public Instruction, Salt Lake, Utah, Correspondence, September, 1930.

² Correspondence with the Commissioner of Education, Bureau of Education, United States Department of the Interior. March, 1930.

- 1.—The adoption of a simple and uniform system of accounting.
- 2.—A study of comparative unit costs in education which would serve as a basis for evaluating the expenditures of any school.
- 3.—The adoption of a business-like procedure of budget making in order to eliminate wasteful expenditures.
- 4.—The development of a sound debt policy and the avoiding of bonds where at all possible.

Decentralized administration usually means that one of the costly school functions—that of erecting new buildings—is in the hands of persons who know relatively little about it, either from the standpoint of providing suitable structures or from that of building economically. Here again the county-unit plan of administration would give reasonable standardization of school structure and encourage worth-while savings.

Attention should be given to long-term planning of school construction programs. We have not begun to realize on the economies of long-term planning of capital expenditures, not only charting out school construction needs by themselves but also correlating them with the acquisition of other public works in the order of their necessity.

A more detailed study of school indebtedness should be made with an idea of seeing whether the cost of financing capital expenditures can be reduced. We have not exerted all of the skill of which we are capable to place the pay-as-you-go system in its fullest operation. To carry on construction programs with borrowed money costs us double, for the dollar of interest is the price we pay on every dollar of public school debt.

STATE AID.—Because of the importance of education in preparing for good citizenship, it has long been felt in many states that only by state regulation can a proper standard be maintained, and that our fundamental public institutions, which depend largely on the intelligence of the citizens, can only be safeguarded and preserved thru a closely supervised state system of education. This policy of compulsory standards has, of course, implied monetary aid from the state governments because of the financial inability of many communities to carry thru a program of public-school education of even poor quality, let alone one conforming to the new requirements.

There are two remedies to be applied to relieve the burden of rural school taxation in Larimer County. One, as already stated, is to relieve them as individual districts by levying taxes over larger taxing units or securing money from other sources of revenue. The other is to grant larger amounts of money as state aid to these rural communities, similar to plans in use in New York, North Carolina, Delaware and California.

The real remedy for the heavy property school-tax burden must come from the state itself. In order to provide such a remedy the state must have at its disposal much larger funds. Evils recognized all over Colorado as inherent in the general property tax necessitate the discovery of new sources of revenue. Whichever way one turns in the search for a principle under which educational opportunity and the burden of school support can be equalized and the impoverishment of the sources of the revenue can be checked, he always encounters the property tax as the greatest obstacle. It is impossible to escape the conclusion that the development of a system of taxation more in accord with the modern economic organization of society is a condition which must be solved before there can be any real improvement in financial support of public education in Colorado.

NEED FOR NEW SOURCES OF STATE SCHOOL REVENUE.—At the present time no less than nine major types of taxes are employed by other states in the United States for providing school revenue. They may well be presented in the order of their frequency, which is as follows :

Table 29.—Sources of Revenue for State School Support.

Type of tax	Number of states using method as source of state school fund
General property	27
Corporation	13
Business and occupation	8
Severance	7
Inheritance	6
Poll	5
Tobacco	5
Income	5
Gasoline and motor fuel	3

Source: Fletcher Harper Swift, *Severance Tax as a Source of School Revenue in the United States*, School Life. Vol. XV, No. 2. October, 1929.

Mr. Swift says, "It must be borne in mind that the summary presented above does not indicate the total number of states which are levying the nine types of taxes referred to, but only those states which use such taxes as sources of state school support."

All thoughtful students of the tax situation in Colorado recognize the desirability of discovering new sources of state school revenue in order to check the tendency to increase unduly the rates at present levied on general property of which the farmers and home owners bear the heaviest burden.

No law appropriating additional state aid should be passed however, without a clause empowering and directing the state department

of education to withhold additional state aid from any school district which refuses to cooperate in a program of consolidation. State aid should not be used to perpetuate the small inefficient school district.

We are past the age of the pioneer and the ox-drawn cart. We no longer expect every group of a dozen families to construct, maintain and go in debt to look after their roads. The county has taken over the road problem. Highways have been built and county roads improved and maintained by the county and paid for out of county taxes. The state has aided with certain highways and so has the federal government.

In education, however, we are back in the pioneer days with each group of families largely left to handle as best it may its own problems. The way to progress demands that the county make its education a county problem and that efficiency be adopted by consolidation and expert leadership. State aid should be greatly increased and the burden taken off the farmer and home owner by the adoption of other sources of taxation revenue.

It will never be possible to build a highway to the door of every mountain home. Nor will every sparsely settled section be able to receive for many years the advanced educational advantages of the more thickly settled communities. But that is not going to excuse any county or any state that does not give the farm boy and girl a new deal in educational opportunity.