

This Document is Made
Available Through
Courtesy of the
COLORADO LEGISLATIVE COUNCIL
343 State Capitol, Denver.



UNIVERSITY OF DENVER COLLEGE OF LAW LIBRARY

Stacks
52
Colo.6
no.17-1

LEGISLATIVE COUNCIL

REPORT TO THE

COLORADO GENERAL ASSEMBLY

ELEMENTARY AND SECONDARY PUBLIC SCHOOL FINANCE

RESEARCH PUBLICATION NO. 17-1

1956

LEGISLATIVE COUNCIL
OF THE
COLORADO GENERAL ASSEMBLY

Representatives

Palmer L. Burch, Chairman
W. K. Burchfield
Ed Harding
S. T. Parsons
C. Gale Sellens
John D. Vanderhoof
David A. Hamil, Speaker*
Ex-officio

Senators

Vernon A. Cheever, Vice-Chairman
Donald G. Brotzman
Ray B. Danks
Clifford J. Gobble
Martin C. Molholm

Stephen L. R. McNichols, Lt. Governor
Ex-officio

Shelby F. Harper, Director

* * * * *

The Legislative Council, which is composed of five Senators, six Representatives, and the presiding officers of the two houses, serves as a continuing research agency for the legislature through the maintenance of a trained staff. Between session, research activities are concentrated on the study of relatively broad problems formally proposed by legislators and the publication and distribution of factual reports to aid in their solution. During the sessions, the emphasis is on supplying legislators on individual request with personal memoranda providing them with information needed to handle their own legislative problems. Reports and memoranda both give pertinent data in the form of facts, figures, arguments, and alternatives, without these involving definite recommendations for action. Fixing upon definite policies, however, is facilitated by the facts provided and the form in which they are presented.

*Speaker Hamil resigned from the legislature effective July, 1956.

LEGISLATIVE COUNCIL
REPORT TO THE
COLORADO GENERAL ASSEMBLY

ELEMENTARY AND SECONDARY
PUBLIC SCHOOL FINANCE

Research Publication No. 17-1

1956

THIS REPORT, RESEARCH PUBLICATION NO. 17-1, CONCERNS ITSELF WITH RESEARCH AND STUDY OF ELEMENTARY AND SECONDARY SCHOOL FINANCE, CONDUCTED BY THE LEGISLATIVE COUNCIL COMMITTEE ON EDUCATION DURING 1956.

RESEARCH PUBLICATION NO. 17-2 CONTAINS THE MAJOR RESEARCH AND STUDY OF EDUCATION BEYOND THE HIGH SCHOOL. THESE TWO PUBLICATIONS COMPRISE THE SECOND ANNUAL REPORT OF THE COMMITTEE ON EDUCATION TO THE GENERAL ASSEMBLY, IN ACCORDANCE WITH THE PROVISIONS OF HOUSE JOINT RESOLUTION NO. 8 (1955).

LETTER OF TRANSMITTAL

October 1, 1956

The Honorable Palmer L. Burch, Chairman
Colorado Legislative Council
Denver, Colorado

Dear Representative Burch:

Transmitted herewith is the report on the study of elementary and secondary school finance, conducted by the Legislative Council Committee on Education during 1956.

This report, together with Research Publication No. 17-2, comprises the second annual report of the full Committee on Education to the Colorado General Assembly, in accordance with the provisions of House Joint Resolution No. 8 (1955).

Sincerely yours,

/s/ Ernest Weinland, Vice-chairman
Elementary and Secondary Education

* * * * *

The major findings and recommendations included in this report were presented to the Legislative Council on September 26, 1956.

LEGISLATIVE COUNCIL COMMITTEE ON EDUCATION

1956 Membership

Palmer L. Burch, Acting Chairman
John G. Mackie, Vice-Chairman, Higher Education
Ernest Weinland, Vice-Chairman, Elementary &
Secondary Education

SENATORS

Don G. Brotzman*
Neal Bishop**
Wm. Albion Carlson**
Frank L. Gill
Wilkie Ham**
Walter W. Johnson
George Wilson

REPRESENTATIVES

Robert E. Allen	Byron L. Johnson
W. K. Burchfield	C. Gale Sellens
Blanche Cowperthwaite**	Raymond H. Simpson
Charles W. Conklin	Rena Mary Taylor
David A. Hamil***	

TEMPORARY SUBCOMMITTEE ON THE ECONOMIC INDEX

Ernest Weinland, Chairman
Palmer Burch
Wm. Albion Carlson
Blanche Cowperthwaite
Byron Johnson

TEMPORARY SUBCOMMITTEE ON SPECIAL EDUCATION

C. Gale Sellens, Chairman
Charles W. Conklin
Blanche Cowperthwaite
Rena Mary Taylor

* Chairman from May 1955 to July 1956

** Appointed March, 1956

*** Resigned from Legislature July, 1956

F O R E W O R D

House Joint Resolution #8, enacted during the First Regular Session of the Fortieth General Assembly, directed the Legislative Council to appoint a permanent committee for the purpose of carrying on continuing studies of school finance. Pursuant to said Resolution a committee of sixteen legislators was appointed in May, 1955, and the first progress report was issued in November, 1955.

In March, 1956, the Legislative Council expanded the membership of the Committee on Education to nineteen and filled a vacancy caused by the resignation of Senator Mowbray, one of the original members. Senator Brotzman resigned from the overall committee chairmanship on July 25, 1956, having announced his candidacy for governor, and Representative Burch, General Vice-chairman, became Acting Chairman of the committee.

In the judgment of the Legislative Council, these nineteen members have worked diligently and effectively to carry out the responsibilities assigned to them. The first report made by the Committee on Education listed certain gaps and deficiencies which exist in the state's program for financing public education, and which reduce its potentialities for full effectiveness. Recommendations were included therein on how these weaknesses can be corrected.

This 1956 report of the committee seeks to "round out" the first progress report, by supplying additional research data in those areas which, due to limited time, could not be given sufficiently thorough study in 1955.

In reaching its conclusions, the committee has given careful consideration to the information which has been developed by its basic research. This information provides a comprehensive picture of public school education as it exists "today" in Colorado. The committee also recognized, however, that a forward-looking school finance program must encourage future growth and development. For this reason the committee, in formulating its recommendations, was guided not only by the current "average practice" existing in Colorado school districts but also took into consideration desirable practices, standards, and goals which might encourage economic and efficient school district operation.

In addition to this report which relates to elementary and secondary education, a subsequent report will be issued to cover junior colleges and senior colleges.

The Committee and the Legislative Council wish to express their appreciation to the State Board of Education and the Commissioner of Education for making the services of Mr. John J. Coffelt available for this study. Mr. Coffelt has carried the major research responsibility for the committee in its work on Public School Finance and has made an invaluable contribution to this study.

TABLE OF CONTENTS

Letter of Transmittal i
1956 Membership of Committee on Education ii
Foreword iii
Dates and Agenda of 1956 Meetings v

Part I

Recommendations and Findings

Recommendations 1
Findings 4

Part II

Public Education in Colorado

State Support and Public Education 10
Major Problems Facing Public Education in Colorado . . . 16

Part III

1956 Progress Report on Elementary and Secondary Education

Procedure 22
Report of Colorado Tax Commission 24
Research 29
Research Document #1 31
Research Document #2 36
Research Document #3 47
Research Document #4 56
Research Document #5 70

Part IV

Subcommittee Reports

Report of the Temporary Subcommittee on Special Education 81
Report of the Temporary Subcommittee on the Economic Index 94

Appendix 103

LEGISLATIVE COUNCIL COMMITTEE ON EDUCATION

Dates and Agenda of 1956 Meetings

<u>Date of Meeting</u>	<u>Committee</u>	<u>Agenda</u>
4/28/56	Full committee on Education	Economic Index, Federal Aid, Special Education
4/28/56	Subcommittee on Economic Index	Economic Index (Dr. Johns)
5/11/56	Subcommittee on Special Education	Visit to Denver Public Schools Selected Special Education Programs.
5/23/56	Full Committee on Education	Higher Education, Assessment Study of Tax Comm.
6/5/56	Subcommittee on Economic Index	Texas Economic Index, Isolation of Factors for Index, Use of Bureau of Business Research
6/15/56	Full Committee on Education	Higher Education, Economic Index, Elementary & Secondary Research.
7/13/56	Subcommittee on Special Education	Testimony, Report of State Department of Education, Preliminary Conclusions.
7/25/56	Full Committee on Education	Testimony of Colo. Committee on Educational Legislation, Availability of General Fund Money, Research Data, Committee Action on 1955 Recommendations
8/10/56	Subcommittee on Special Education	Final Subcommittee Recommendations
9/6/56	Full Committee on Education	Elementary & Secondary Education - Review of Research and Finalizing of Recommendations.
10/21, 22/56	Full Committee on Education	Higher Education - Jr. College, Student-Faculty Loads, Finance; also Economic Index.

Part I

1956 RECOMMENDATIONS AND FINDINGS

The Recommendations

The Recommendations of the Committee on Education are based upon a careful and comprehensive analysis of all the facts which bear upon the financing of elementary and secondary education in Colorado, including foreseeable trends in school enrollments and costs, quality of public education, and the comparative burden of local and state taxation. These facts also cover the division of the cost of public education between the school districts and the state, measures of local ability to support schools, and the various methods by which state aid for schools may be apportioned.

It is the collective opinion of the Legislative Council Committee on Education that, with minor exceptions, its continued research and study of public school finance further substantiate the conclusions and recommendations made in its 1955 report. Following are listed the recommendations of the committee as adopted at the August 22, 1956, meeting.

1. Amend the School Finance Act (Chapter 123-6-1 through 123-6-24, Colorado Revised Statutes, 1953) to provide for the following:
 - a. Change the calculation of classroom units from Aggregate Days of Attendance to Average Daily Attendance (Ag.D.A. divided by 172).
 - b. Provide for an "excess growth" factor whereby districts having an increase of seven per cent or more in average daily attendance during the first twelve weeks of the current school year

over the average daily attendance of the first twelve weeks of the previous school year may, in the discretion of the State Board of Education, be allowed one additional classroom unit in excess of such seven per cent increase for each 23 pupils in average daily attendance.

- c. Establish the pupil-teacher ratio at 1 - 23 for the first classroom unit and all thereafter, calculating to the major fraction of one-tenth of a unit. Authorize the State Board of Education to allow one full classroom unit to necessary small schools with less than 23 A.D.A., and permit up to three extra teachers in districts of less than 300 A.D.A., with the State Department of Education to review the necessity therefor.
 - d. Eliminate the "sparsity" factor.
 - e. Eliminate the district qualifying levy and increase the county qualifying levy to $11\frac{1}{2}$ mills. In those counties wherein a levy of $11\frac{1}{2}$ mills will produce a sum greater than the sum of the aggregate classroom unit values within the county, permit the Board of County Commissioners to reduce the County Public School Fund levy accordingly.
 - f. Raise the classroom unit value to \$5,000 for classroom units served by teachers holding a graduate certificate, and \$4,250 for classroom units served by teachers holding other than a graduate certificate. In the event that the state appropriation shall not be sufficient to support this foundation program, the amount appropriated should be prorated to the participating school districts.
 - g. Change the "minimum salary" provisions so as to guarantee not less than sixty-five per cent (65%) of the classroom unit values for teachers' salaries.
 - h. Eliminate "direct grant" state aid payments based upon aggregate days of attendance.
2. The Committee on Education or the Legislative Council should make the study of tax assessment practices in Colorado a matter of immediate concern. In this regard funds should be provided for such a study (which would include a determination of whether or not assessments in Colorado are equitable). At the same time, consider imposing a "small transfer tax" to permit the gathering of data for such a study.
 3. Amend Chapter 36-3-2, Colorado Revised Statutes, 1953, to require each district to lower its respective district special levy in order that the amount of revenue to be received therefrom will be reduced by an amount equivalent to the increase which the district will receive as a result of the increase in the County Public School Fund levy.

4. Retain as a legislative goal the integration of the transportation program with the basic School Finance Act, and request that this committee and the State Department of Education give additional study to the mechanics of accomplishing such a step.

(Note: House Bill #89, enacted during the Second Regular Session of the Fortieth General Assembly, created for the first time in Colorado, a Public School Transportation Fund. Appropriations to this fund were distributed in August, 1956, in accordance with a formula which permitted the gathering of data necessary to the accomplishment of this goal.)

5. Consider the feasibility of amending Chapter 35-7-17, Colorado Revised Statutes, 1953, so as to permit the county treasurer in each county, upon notification of the county commissioners, to place on the tax rolls improvements which have been completed after the legal date of assessment and upon which no assessment has been made by the assessor.
6. Retain, as a legislative goal, the integration of the Special Education program with the School Finance Act and request that this committee and the State Department of Education give additional study to the mechanics of accomplishing such a step. Amend the existing special education statute (Chapter 123-22-1 through 123-22-17, C.R.S. 1953) to provide for:
 - a. the distribution of funds appropriated for the purpose of implementing Article 22, Section 123, Colorado Revised Statutes, 1953, as amended, on the basis of classroom units for all types of special education classes.

One classroom unit -- each twelve (12) educable mentally handicapped children . .	\$3,000
One classroom unit -- each twelve (12) physically handicapped children	\$4,000
One classroom unit -- each six (6) deaf or blind children	\$4,000
One classroom unit -- each four (4) homebound or hospitalized children enrolled for 170 days	\$3,200
One classroom unit -- each eighty (80) speech defective children	\$3,000

These payments reflect "excess costs" and should be in addition to all other aid to the district from county and state funds. In no case should a district receive more reimbursement under this act than its actual excess cost. The number of special education classroom units allowed any school district should not exceed the number of equivalent full-time special education teachers, with classroom units prorated to tenths.

- b. the distribution of the special education funds to the district of attendance, with state aid for transportation or room and board for non-resident children in special education classes to be paid separately to the district of residence.

The Findings

The following information taken from Part II, Legislative Council Research Publication #17, 1955, and brought up-to-date, present basic data pointing up the current status of the state's public school program.

Summary of Enrollments, Certificated Employees, and Number of School Districts, 1953-54 through 1956-57

School Year	Total Enrollment (k - 12)	Certificated Employees (k - 12)	No. of School Districts
1953-54	266,381	11,644	1,009
1954-55	283,897	12,531	998*
1955-56	300,000 (est.)	13,553	951
1956-57 (est.)	316,000	14,500	925

(Certificated Employee: Includes administrators and all other non-teaching personnel holding a valid Colorado Teaching Certificate.)

* Includes 237 non-operating districts.

Total Expenditures for Public School Education, Kinder- garten through Junior College, 1953-54 through 1956-57

School Year	Current Operations	Debt Service	Capital Outlay	Total
1953-54	\$68,056,212	\$ 9,851,717	\$24,745,900	\$102,653,829
1954-55	75,140,817	11,120,178	28,593,342	114,854,337
1955-56 (est.)	81,500,000	12,000,000	28,000,000	121,500,000
1956-57 (est.)	89,100,000	12,000,000	28,000,000	129,100,000

Per Cent of Public School Income from Local, State and Federal Sources, 1953-54 through 1955-56

School Year	Local	State	Federal
1953-54	76.6%	21.8%	1.6%
1954-55	80.2	17.2	2.6
1955-56 (est.)	77.3	20.5	2.2

The following findings summarize the research efforts of the committee during 1956, and supplement the data compiled in 1955, and reported in Part II, Legislative Council Research Publication #17.

PUPIL-TEACHER RATIOS (1954-55 School Year):

1. The average pupil-teacher ratio for all school districts was 20.2 to 1. The highest average county pupil-teacher ratio was 23.7 to 1 (Jefferson); the lowest average county pupil-teacher ratio was 11.3 to 1 (Gilpin).
2. The median state pupil-teacher ratio calculated on the basis of A.D.A. is 21.2 to 1; the median calculated on the basis of number of districts is only 14.6 to 1. The following medians were calculated on the basis of number of districts:

<u>No. of Teachers in District</u>	<u>A.D.A. Per Teacher</u>
1	9.3
2	13.9
3 - 10	15.3
11 - 20	16.7
21 - 35	18.6
over 35	21.5

CLASSROOM UNIT EXPENDITURES (1954-55 School Year):

1. The highest average classroom unit expenditure (county level) was \$7,382 (Rio Blanco); the lowest average C.R.U. expenditure was \$3,828 (Conejos). Excluding transportation expenditures, the highest average C.R.U. expenditure was \$7,047 (Denver, and the lowest was \$3,590 (Conejos).
2. Following are the low, high, and average current expenditures per teacher for the 1954-55 school year, including and excluding transportation costs:

	<u>Low</u>	<u>High</u>	<u>Average</u>
Average including trans. costs . .	\$2,132	\$13,410	\$5,651
" excluding " "	2,132	7,713	5,418

3. The average current expenditure per teacher (including transportation costs) for "one-teacher" school districts was \$4,109; the average for "two-teacher" school districts was \$4,421.
4. Approximately one-fourth (26 per cent) of the teachers were employed in school districts that expended \$6,400 or more per teacher; fewer than seven per cent were employed by districts spending \$3,900 or less per teacher.

EXPENDITURES PER A.D.A. (1954-55 School Year):

1. Current expenditures per A.D.A. ranged from a low of \$142 (Montezuma) to a high of \$2,771 (Bent). The average expenditure per A.D.A. for the state was \$280. Excluding transportation costs, the state average was \$268.
2. A total of 483 school districts reported expenditures for transportation. The highest transportation expenditure per A.D.A. was \$957 (Huerfano); the lowest was \$0.08 per A.D.A. (Adams).

TEACHER-ADMINISTRATOR RATIOS (1954-55 School Year):

1. Following is the average ratio of teachers per non-teacher, according to type and size of school district.

	<u>All Districts</u>	<u>Excluding Districts with No Non-teaching Personnel</u>
1st class	13.3 to 1	13.2 to 1
2nd class	14.8 to 1	13.1 to 1
3rd class	41.3 to 1	9.3 to 1
Co. H.S.	10.4 to 1	7.3 to 1
Union H.S.	8.1 to 1	8.0 to 1

2. Following is the average ratio of teachers per non-teacher in first class districts, analyzed by number of teachers employed:

Less than 40 teachers	17.8 to 1
41 to 80 "	10.8 to 1
81 to 120 "	13.1 to 1
121 to 500 "	12.3 to 1
over 500 "	14.0 to 1

ASSESSED VALUATION PER A.D.A. (1954-55 School Year):

1. The average assessed valuation per A.D.A. was \$10,457. The range in assessed valuation per A.D.A. was from \$1,275 (District #13, Conejos) to \$669,765 (District #93, Logan). In other words, the richest district had 525 times more taxable wealth per child than the poorest district.

SPARSITY FACTOR

Because of the general lack of information concerning the use and effects of the "sparsity" factor contained in the present School Finance Act, the research staff were directed to analyze its financial effect upon school districts

and its relationship to transportation costs. The following findings were taken from this study.

1. Of the 998 school districts in Colorado during the 1955-56 school year, a total of 473 districts (47.4%) had a "sparsity" factor.
2. Of these 473 districts, only 241 received additional state aid as a result of the application of the sparsity factor. Sixty-four districts received maximum benefits, while the remaining 177 districts qualified for partial benefits.
3. The total state payments in 1955-56 attributable to the application of the sparsity factor was \$683,087.
4. A total of eighty-seven (87) school districts who received sparsity benefits in 1955-56 did not provide transportation. These districts received a total of \$120,941 in sparsity benefits, or approximately eighteen per cent of all state payments for sparsity during this school year.
5. An additional \$69,197 in sparsity benefits was paid to 34 districts in excess of their budgeted expenditures for transportation.
6. There were 472 school districts providing transportation budgets in 1955-56 that received no sparsity benefits.

(Note: Emphasis is given to the relationship of sparsity benefits and transportation because the belief is commonly held that the "sparsity factor" was incorporated in the school finance act as an allowance for transportation expense of a district.)

7. The range in payments for sparsity (1955-56) was from \$37 to \$12,690. The average sparsity payment was \$2,834.

SPECIAL EDUCATION

At the April 28, 1956, meeting of the Committee on Education, the State Department of Education presented several recommended changes in the existing statutes designed to improve the quality of the state's program for handicapped children. A Temporary Subcommittee on Special Education was appointed to give intensive study to this area of public school finance. Following are summarized the major findings of this subcommittee.

1. A total of 5,112 children were enrolled in "special education" classes during 1955-56. This is an increase of 494 over 1954-55 enrollments, but represents (on the basis of State Department of

Education estimates) only one-sixth of the children in Colorado who should be enrolled in such classes.

2. In 1955-56, the average cost per A.D.A. for mentally handicapped children was \$444.76; for physically handicapped it was \$679.75.
3. The average cost per teacher in 1955-56 for mentally handicapped children was \$5,667; for physically handicapped, it was \$6,803.
4. The average number of pupils per teacher for special education classes during 1955-56 was:

<u>Type of Class</u>	<u>A.D.A. per Teacher</u>
Mentally Handicapped	12.7
Physically Handicapped:	
Deaf	6.6
Blind	5.1
Partially Seeing	8.8
Crippled	12.5
Speech Correction	114.1

CURRENT ATTENDANCE

The Legislative Council, in its 1955 report to the Second Regular Session of the Fortieth General Assembly, recommended that further study be given to the use of current school attendance in calculating equalization payments to local school districts. (Colorado presently uses the previous year's attendance data.) During 1956, the staff followed up this recommendation by making a study of the school finance legislation of those states presently distributing funds on a "current attendance" basis.

Eighteen states currently distribute some state aid to public schools on the basis of current attendance. The program of each state falls into one or more of the following four basic patterns.

1. Use of a Growth Factor - State aid is distributed on the basis of the previous year's attendance data. However, if attendance in the current school year exceeds that of the previous year by a specified amount, an adjustment may be made based on this growth.
2. Use of Estimates - State aid is distributed on the basis of estimated enrollments submitted by each school district. In most

cases adjustments are made at the end of the school year when actual attendance data are available.

3. Use of a Specified Date - The attendance at a specified date or for a specified period of time early in the school year is used to determine current attendance.
4. Use of Adjusting Payments - State aid is distributed on the basis of the previous school year's attendance data, with adjusting payments made on current attendance as soon as such data are available.

ECONOMIC INDEX

In its 1955 report, the Committee on Education pointed out that the major weakness in the existing School Finance Act is the basis for measuring local district financial ability. However, the committee agreed to delay study of this problem pending the outcome of certain legislation enacted by the 1955 General Assembly which was designed to remedy this situation.

In taking another look at this problem at its first meeting in 1956, the committee concluded that 1955 legislative attempts to solve it were inadequate. Upon the suggestion of several groups interested in state school finance, a temporary subcommittee was appointed to give concentrated study to the feasibility of developing an economic index to measure local district ad valorem taxpaying ability.

Following its study, this subcommittee recommended that the Legislative Council proceed with the development of a specific economic index. A contract was made with the Bureau of Business Research, University of Colorado, to develop an index based upon certain data which experience has shown reflect economic ability. At the time this report went to press, the Bureau had not yet completed the index.

Inasmuch as the economic index could not be completed in time to receive thorough study, the committee voted to include the index in its 1956 report without recommendation.

Part II

PUBLIC EDUCATION IN COLORADO

State Support and Public Education

The cornerstone of Colorado's public school system was laid in 1861, with the passage of the first territorial legislation providing for public schools. Since then, the state's educational system has grown as its population and economy have grown. The way of life it helps to perpetuate has undergone important changes since the days of the public schools, with the result that the role of education has become increasingly more important. The consequence has been an expanding cost of the educational program, and this has created the necessity for the state to assist in financing public education--thus has come about the concept of a state-local partnership in school finance.

Because public education is so important in a democracy, it is essential to organize the public school system that, within the limits of the resources available, all children may receive adequate educational opportunities regardless of where they may live. It is with this philosophy in mind that the Legislative Council Committee on Education has conducted its studies of the state's role in financing public education in Colorado.

State Responsibility

It has long been recognized as a matter of sound public policy that state government has a responsibility to assure that every child has access to an adequate education program. Article IX, Section 2, of the State's Constitution reads in part, as follows:

"The General Assembly shall, as soon as practicable, provide for the establishment and maintenance of a thorough and uniform system of free public schools throughout the state, wherein all residents of the state, between the ages of six and twenty-one years, shall be educated gratuitously."

A 1937 decision of the Colorado Supreme Court affirmed that the state, through its legislature, is not only responsible for the establishment of a thorough and uniform system of free public schools, but that it may also share in the financing of those schools. In their decision, the Supreme Court stated that,

"The establishment and maintenance of the public schools of the state is the carrying out of a state, and not a local or municipal purpose; . . . there is no constitutional inhibition to prevent the appropriation by the legislature of money from the general funds of the state for the use of school districts, and it has such power."¹

In addition, Article X, Section 17, of the State Constitution provides that the General Assembly may levy income taxes for the support of the state, or any political subdivision thereof, including the support of public schools.

Local Responsibility

While it is true that provision for public education is a function of the state, the constitution has placed the responsibility for operating the public schools into the hands of the local people. Article IX, Section 15, of the State's Constitution provides:

"The General Assembly shall, by law, provide for the organization of school districts of convenient size, in each of which shall be established a board of education, to consist of three or more directors to be elected by the qualified electors of the district. Said directors shall have control of instruction in the public schools of their respective districts."

These locally elected school boards are empowered by statute to employ school personnel, construct buildings, decide upon the curriculum, select textbooks, levy a tax for school purposes, and do all things necessary for the welfare of the public school program which are essential to the accomplishment of the objectives of the school district. As of March, 1955,

¹Wilmore v Annear, Auditor et al, 100 Colo., C 106.

there were 898 school districts in Colorado, and approximately 2700 school board members.

Trends in Public School Expenditures

Since World War II, the cost of public education in Colorado has risen rapidly. In the 1944-56 school year, the total cost of public school education (including Junior Colleges but excluding state-supported institutions of higher learning) in the state was \$25,855,300. Ten years later, 1954-55, it had climbed to more than \$114,000,000, an increase of over 344 per cent. This upward trend can be expected to continue through 1960, by which time it is estimated that the expenditures for elementary and secondary education will approach \$150 million. Chart I, prepared from the following data provided by the State Department of Education, illustrates this trend.

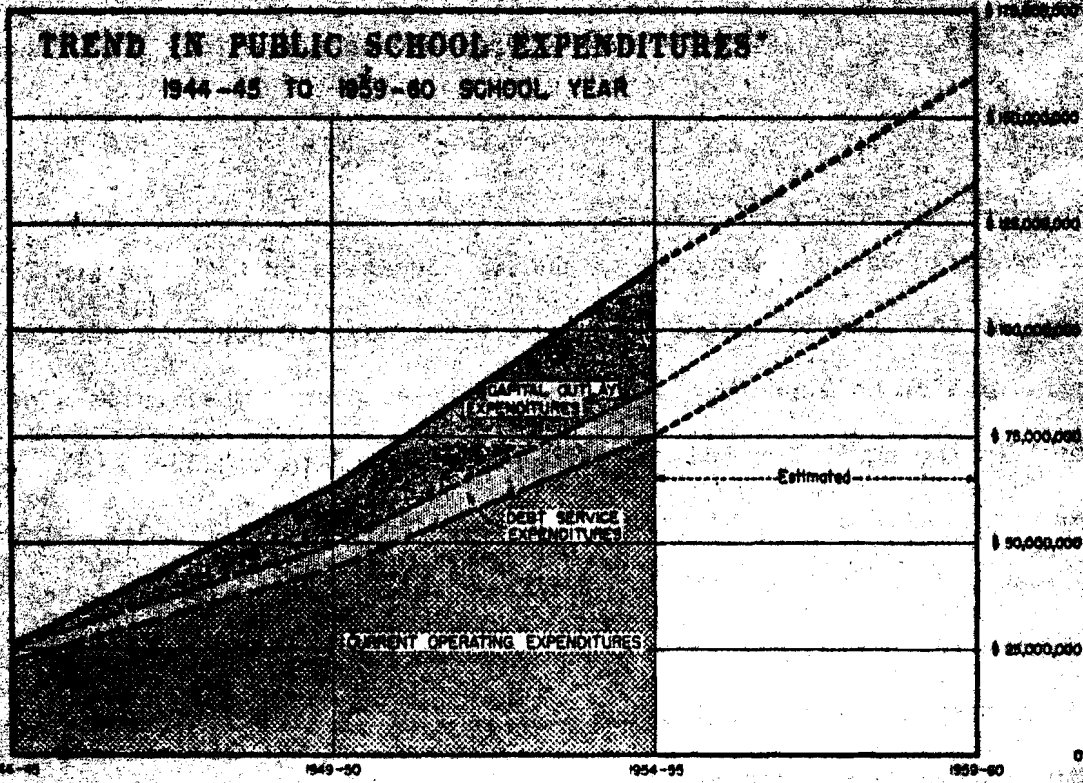
Cost of Public Education in Colorado
1944-45 through 1954-55

School Year	Current Operations	Debt Service	Capital Outlay	Total
1944-45	\$ 21,946,195	\$ 3,288,445	\$ 620,696	\$ 25,855,336
1949-50	43,961,680	5,439,977	13,797,339	63,198,996
1954-55	75,140,817	11,120,178	28,593,342	114,854,337
1959-60*	117,600,000	17,000,000	25,000,000	159,600,000

Where Does the School Dollar Come From?

Money for the support of elementary and secondary schools is derived from four levels of government--the local school district, the county, the state, and Federal. Chart 2, page 15, shows the relative amount of income from each of these four sources.

CHART 1



* 1959-60 estimated by State Department of Education, and includes kindergarten thru Jr. Colleges.

Local District: By far the largest per cent of school funds is derived from sources available at the local district level of government. Although there are a number of sources of income available to the local school board, the bulk of "local revenues are derived from the school district "Special" levy. The following data, taken from the 1955 Annual Report of the Colorado Tax Commission, shows the total amount of local school district taxes levied during the past ten years.

<u>Year</u>	<u>Total School District Taxes Levied</u>	<u>% Increase over preceding year</u>
1945	\$19,139,663	
1946	22,200,351	16.0%
1947	26,623,632	19.9
1948	31,309,232	17.6
1949	35,043,391	11.9
1950	37,548,951	7.1
1951	43,382,562	15.5
1952	48,065,340	10.8
1953	53,843,988	12.0
1954	61,427,904	14.1
1955	66,216,721	7.8

Percent increase 1955 over 1945 246%

County: The State's Public School Finance Act (Section 123-6-7, C.R.S. 1953), creates in the office of the county treasurer of each county, a continuing fund known as the County Public School Fund, and requires the board of county commissioners in each county to levy a tax of four and one-half mills on all taxable property in the county. The proceeds from this levy are paid into this fund and are distributed monthly on the basis of aggregate daily attendance to each eligible school district in the county to fulfill the county's share of the cost of the public school finance program. In 1955, this county tax levy amounted to \$8,534,554.

State Appropriations: Monies distributed by the state in support of public education come from three major sources. These are (1) legislative appropriations, (2) income from the Public School Fund, and (3) federal mineral leases. Monies from these three sources constitute "state aid". The following table shows the amount of funds distributed to public school districts, by fiscal year.

Fiscal	Legislative Appropriations*	Public School Income Fund**	Federal Mineral Leases	Total
1952-53	\$12,500,000	\$2,300,806.30	\$	\$14,800,806.30
1953-54	11,750,000	2,398,137.28	958,538.58	15,081,675.86
1954-55	11,500,000	2,893,871.63	1,046,447.08	15,380,318.71
1955-56	14,000,000	3,146,274.00	2,321,301.00	19,467,575.00
1956-57(est.)	16,500,000	2,900,000.00	2,900,000.00	22,300,000.00

* Excluding special education appropriation.

** Including remainder balances.

Federal Government: There are numerous Federal programs which provide some of money to local school districts in Colorado. These programs include school lunch, vocational education, grants-in-aid to federally impacted areas, federal flood control lease monies, federal fines, and federal forest reserve monies. The greatest amount of federal aid which may be used by school districts for

CHART 2

WHERE THE 1954-55 SCHOOL DOLLAR CAME FROM*

(Elementary and Secondary Education)

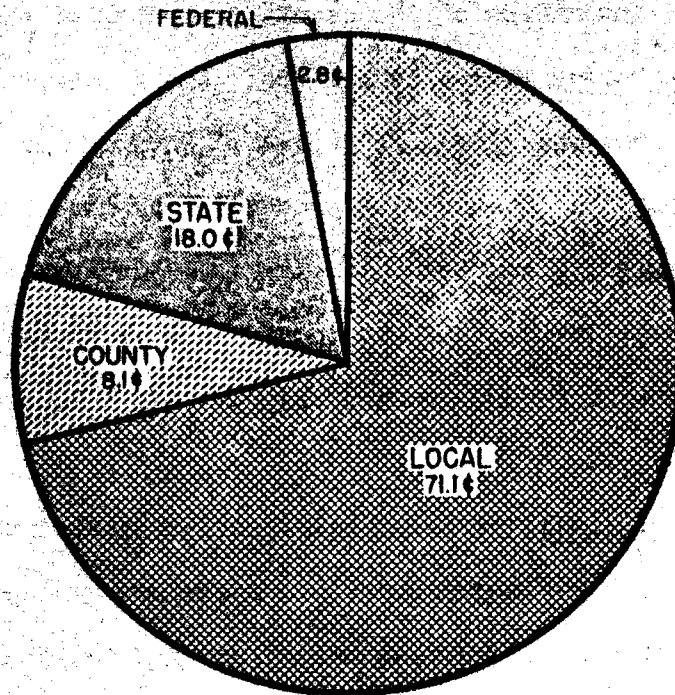
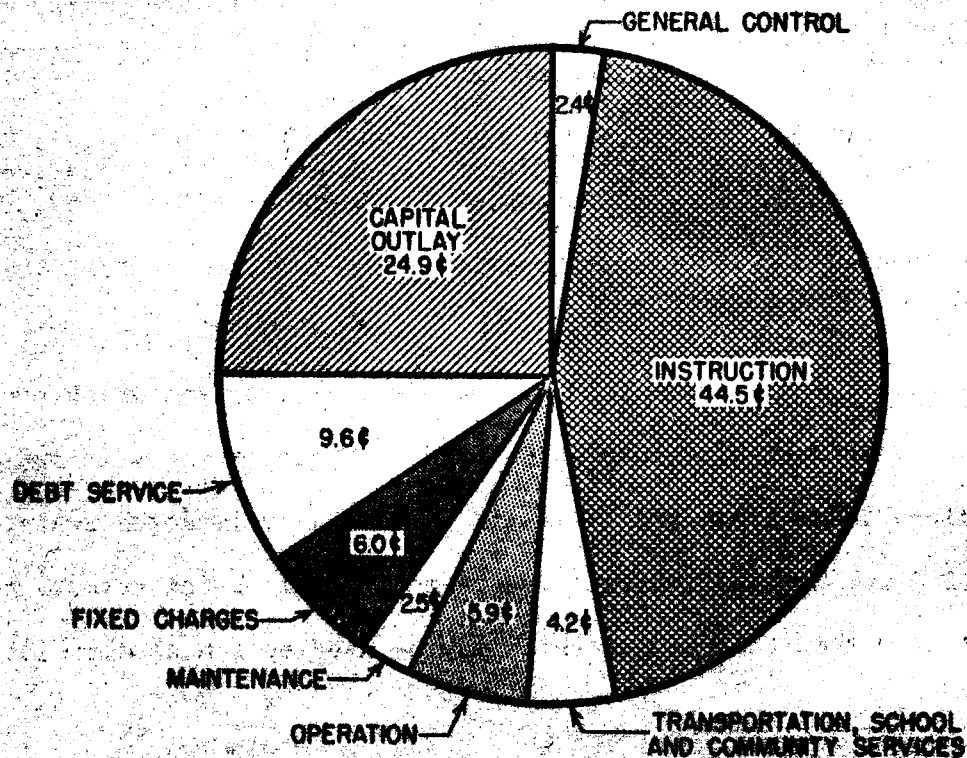


CHART 3

WHERE THE 1954-55 SCHOOL DOLLAR WENT



* Total income, including revenue for current expenses, debt service and capital outlay

current operating expenditures is received under the provisions of Public Law 874, a federal program to provide financial assistance to local school districts upon which the United States has placed financial burdens because of "federal in-paction".

A total of seventy-seven Colorado school districts were entitled to Federal payments under Public Law #874 for the 1955-56 school year. Total entitlements for these seventy-seven districts amounted to \$2,096,491.43, with individual payments ranging from a low of \$704.14 (District #4, Dolores County) to a high of \$506,688.90 (District #1, Denver).

Where Does the School Dollar Go?

The educational program which a school district provides determines the extent and purpose of its expenditures. Chart 3, page 15, shows how many cents of each school dollar was spent (1954-55) for each major service comprising the classroom unit. The average school district in Colorado spends approximately forty-five per cent of each dollar on "instructional" costs, of which teachers' salaries is the chief expenditure.

Major Problems Facing Public Education in Colorado

A number of important changes have occurred in the social and economic welfare of Colorado in the last fifteen years which is having marked effects on public education. For example, the total population of the state has experienced a rapid growth since World War II; yet, during this same period, more than one-half of the sixty-three counties in the state have experienced a decrease in population. This intra-state population shift combined with immigration, expansion of industry, federal installations, improvements in highways and

greater use of air transportation, have created serious problems for both urban and rural school systems.

Enrollments

There has been a marked increase in the number of children enrolling in the public schools in Colorado in recent years. The impact of the so-called "war babies" is now being felt by school districts. In 1950, there were 224,056 pupils enrolled in the public schools of the state. If present trends continue, there will be at least 393,000 pupils enrolled by 1960, an increase of more than seventy-five per cent for the ten year period.

Following are projected public school enrollments for elementary and secondary schools in Colorado, through the 1960-61 school year; as presented by the State Department of Education.

<u>School Year</u>	<u>Projected Enrollment (K-12)</u>	<u>Amount of Increase</u>	<u>Pct. of Increase</u>
1953-54*	266,381		
1954-55*	283,897	17,516	6.6%
1955-56	299,545	15,648	5.5%
1956-57	315,596	16,051	5.4%
1957-58	333,489	17,893	5.7%
1958-59	352,852	19,363	5.8%
1959-60	373,894	20,042	5.7%
1960-61	393,019	20,125	5.4%

*Actual

Teacher Supply

The lack of a supply of properly qualified teachers is a problem which has faced Colorado school boards for fourteen consecutive years. In 1955-56, there were 13,553 full-time teachers employed in the state. Of this number, approximately 700 held emergency certificates, including both Special Permits and

Letters of Authorization issued by the State Board of Education. In addition, there were 48 emergency certificates issued to "substitute" teachers.

State Department of Education reports show 300,000 children enrolled in the state's public schools in 1955-56, with approximately 318,000 estimated for the 1956-57 school year. By 1960, public school enrollments will have reached 393,000, or approximately 93,000 more children than were in school in 1955-56. At a ratio of one teacher for each twenty-three pupils, Colorado must find an additional 4,000 teachers in the next five years to provide for these increasing enrollments.

In addition, school boards are faced with the even greater task of finding replacements for the experienced teachers who annually leave the teaching profession. According to recent studies, this amounts to approximately 1,500 teachers a year, or a total of 7,500 replacements required by 1960. Thus, Colorado school boards are faced with locating 11,500 additional teachers by 1960, not to mention those needed to replace sub-standard teachers, to relieve present over-crowded classrooms, and to accommodate broadened educational programs.

Institutions of higher learning in Colorado are graduating approximately 1,500 teachers each year. Recent increases in enrollment in the state's teachers college indicate that a decided increase may be expected during the next five years. It is estimated that approximately 10,000 teachers will be graduated from Colorado colleges and universities between 1956 and 1960. However, past experience has indicated that at least fifty per cent of these graduates will accept employment in other states.

If this pattern continues, about 5,000 of the 11,500 teachers needed by 1960 will come from the graduating classes of Colorado colleges and universities. School boards will therefore be faced with the necessity of recruiting about 6,500 teachers from other states during this five year period. Since the

present level of teachers' salaries in Colorado is not conducive to attracting teachers from the surrounding states, school boards will continue to face an up-hill struggle in the battle for teachers.

School Finance

Chart 1, page 13, indicates that expenditures for public education in Colorado will continue to rise rapidly for a number of years to come. Chart 2, page 15, shows that more than three-fourths of the income for the support of public education is derived from ad valorem taxes levied at the local district and county levels of government. Thus, unless additional sources of revenue, other than from the property tax, are made available to local school boards, it is inevitable that ad valorem taxes will continue to rise in Colorado.

It is an economic fact that the income from different sources of revenue will react in varying degrees to changes in business and economic conditions. The proceeds of some kinds of taxes, such as Income and Sales Taxes, respond quickly to economic cycles, producing liberally when business is good and dropping when business becomes slack. In contrast, the ad valorem, or general property tax, is more steady, and shows a considerable amount of lag in adjusting to changing economic conditions. It is slow to change because both property assessments and tax rates are usually changed only moderately, if at all. Also, school budgets must be prepared and tax levies determined as much as a year before the proceeds are required. Consequently, local revenues for schools have been slow to respond to rapidly expanding needs.

In some respects, it is desirable to have a reasonably stable and continuous source of income, since the education of children must be financed every year regardless of economic conditions. However, in periods of rapidly rising costs

such as has been experienced during the last decade, school boards have been hard pressed to secure adequate school revenues from the general property tax.

Assessment Practices

Under Colorado's existing School Finance Act, approximately fifty per cent of "state aid" money distributed to public schools is disbursed under an equalization program wherein school districts receive payments on the basis of local need, financial ability, and tax effort. Local "ability" is measured in terms of the amount of revenue which a specified property tax mill levy will produce. Under Colorado's formula for determining equalization payments, the greater the amount a school district realizes from the minimum qualifying local district levy, the smaller the amount of state equalization which it receives.

If the taxable real property of a school district is under-assessed in relation to the level of assessment of such property in other districts, the minimum qualifying levy will produce proportionately less revenue, which in turn means that its equalization payment will be disproportionately high. Therefore, counties which are under-assessed in terms of the general level of assessments throughout the state receive more state equalization in proportion to their true ad valorem taxpaying ability than do those counties which are somewhat "in line" with the general level of assessments.

Recent independent research indicates that there are wide inter-county and intra-county variances in Colorado between the ratio of assessed value of taxable real property to the market value thereof. Since there is no data to permit the adjustment of assessed valuation to a single uniform standard, it is currently impossible to accurately appraise the relative local tax effort or ability of individual school districts. The development of a fair and workable state formula for distributing equalization payments rests upon the

such as has been experienced during the last decade, school boards have been hard pressed to secure adequate school revenues from the general property tax.

Assessment Practices

Under Colorado's existing School Finance Act, approximately fifty per cent of "state aid" money distributed to public schools is disbursed under an equalization program wherein school districts receive payments on the basis of local need, financial ability, and tax effort. Local "ability" is measured in terms of the amount of revenue which a specified property tax mill levy will produce. Under Colorado's formula for determining equalization payments, the greater the amount a school district realizes from the minimum qualifying local district levy, the smaller the amount of state equalization which it receives.

If the taxable real property of a school district is under-assessed in relation to the level of assessment of such property in other districts, the minimum qualifying levy will produce proportionately less revenue, which in turn means that its equalization payment will be disproportionately high. Therefore, counties which are under-assessed in terms of the general level of assessments throughout the state receive more state equalization in proportion to their true ad valorem taxpaying ability than do those counties which are somewhat "in line" with the general level of assessments.

Recent independent research indicates that there are wide inter-county and intra-county variances in Colorado between the ratio of assessed value of taxable real property to the market value thereof. Since there is no data to permit the adjustment of assessed valuation to a single uniform standard, it is currently impossible to accurately appraise the relative local tax effort or ability of individual school districts. The development of a fair and workable state formula for distributing equalization payments rests upon the

development of a method to accurately determine relative taxpaying ability of school districts.

School District Structure

In 1955, the Committee on Education appointed a Subcommittee on School District Reorganization and Recodification to study the school district structure in Colorado. This subcommittee's findings, based upon research studies, public hearings, and field trips throughout Colorado, reported in the 1955 report of the Legislative Council, Research Publication No. 17, revealed that there were 998 school districts in Colorado in March, 1955. Of this number, 124 school districts did not maintain any school, and of the total forty-five per cent (45%) did not directly support a twelve-grade program of public education.

There was a total of \$223,421,940 of assessed valuation not directly supporting a twelve-grade program of public education. In addition, it is interesting to note that twenty-five per cent (25%) of the elementary schools employed only one teacher, and more than fifty per cent (50%) employed three or less teachers.

The subcommittee concluded that there are a number of inadequate school districts in Colorado which, under present statutes, can continue to exist indefinitely and receive state financial assistance. Their studies indicate that detailed planning of the realignment of the state's local school district structure is needed, but that existing school laws do not adequately provide for new or continued school district organization on a sound basis. It was their conclusion that sound school district organization is essential to the success of any program of state-local school financing.

Part III

1956 PROGRESS REPORT ON ELEMENTARY AND SECONDARY EDUCATION

Procedure

The Committee on Education held its first meeting of 1956, on April 28. The purpose of this meeting was to review the work of the committee during the preceding year and to determine the direction which its studies should take in 1956.

At this meeting it was decided to continue the policy of having all meetings open to the public. The staff was directed to develop a mailing list containing the names of various organizations and associations interested in the work of the committee, and to distribute to them copies of all notices of meetings, research data, and minutes of meetings. The names of seventy-nine persons, representing the following groups, were included in this mail list.

- American Association of University Women
- Colorado Assessor's Association
- Colorado Association of County Commissioners
- Colorado Association of County Superintendents
- Colorado Association of School Boards
- Colorado Citizens Council for the Public Schools
- Colorado Education Association
- Colorado Congress of Parents and Teachers
- Colorado Farm Bureau
- Colorado Federation of Teachers
- Colorado League of Women Voters
- Colorado Public Expenditures Council
- Colorado State Grange
- Colorado School Protective Association
- Colorado State Department of Education
- Colorado Tax Commission
- Denver - Public Schools and City & County Officials
- Farmers Union
- Rocky Mountain School Study Council

The following areas relating to public school finance were identified by the Committee as needing further research and study:

1. The present method of measuring "local ability" in determining equalization payments.
2. The use of "current attendance" in distributing state aid.
3. The effect of the "sparsity" factor on state aid.
4. Mechanics of integrating the special education program with a foundation program.
5. A comparative analysis of state aid payments under the School Finance Act and the proposed School Foundation Act (Senate Bill 2, 1956).
6. Pupil-teacher ratios and classroom unit expenditures.

Two temporary subcommittees¹ were appointed at the April 28 meeting and directed to give concentrated study to the following problems:

1. The development of an economic index to measure local ad valorem tax paying ability in Colorado.
2. The integration of the Special Education program with a foundation program.

These two subcommittees were directed to report back by September 1, 1956, in order that their conclusions could be included in the 1956 report of the committee. The report of each temporary subcommittee is reproduced in Part IV. Because of unavoidable delays, the actual data relating to the economic index will be released as a separate supplement to this report.

Meetings

Beginning with the April 28 meeting, the Committee on Education scheduled monthly meetings in Denver, and in addition, the temporary subcommittees held several all-day meetings. These meetings were open to the public, and representatives of organizations and agencies interested in public school finance were invited to present their views and recommendations. Dr. R. L. Johns, University of Florida, a nationally recognized authority on school finance and a proponent

¹Membership listed in front of this report.

of the economic index as a means of measuring local district ability, was retained to meet with the full committee and with the Temporary Subcommittee on the Economic Index. As a consequence, the committee directed this temporary subcommittee to proceed with the development of such an index for Colorado in order that the committee would have something specific to review before accepting or rejecting the idea of an economic index.

On July 25, the Colorado Committee on Educational Legislation, a group representing the Colorado Congress of Parents and Teachers, Colorado Education Association, and the Colorado Association of School Boards, presented and discussed principles which they felt were basic to sound and progressive school finance legislation.

At the August 22 meeting, the committee met to consider the reports of its two temporary subcommittees, and approved the recommendations thereof as reproduced on pages 83 and 84 of this report.

Report of Colorado Tax Commission

At the May 23 meeting of the committee, the Colorado Tax Commission was called upon to present its report of research completed on inter-county assessments, as provided for in House Bill 455 (1955). Following is the report presented by Tax Commissioner, A. A. Hall:

"H.B. 455, 1955 Legislature, appropriated \$15,000 to the Colorado Tax Commission, 'for expenses incurred by said Commission in assisting in the administration of the public school finance act of State of Colorado as amended.'

"In an attempt to comply with the provisions of this Act and Senate Bill 321, the efforts of the Tax Commission staff were directed to making a survey in as many counties as possible prior to meeting of State Board of Equalization in September 1955.

"Two additional men were hired on contract basis, Ed Wright, former assessor of Larimer County, and E. Beasley, retired C.P.A., Durango, Colorado. Other desirable men were contacted but refused

assignment due to no assurance of permanent employment and low salaries (the men were offered approximately the salaries being paid our Consultant Assessors).

"A rapid survey was made in thirty-three counties. Counties selected were those representing considerable assessed valuation and where indications were that irregular practices had been or were being employed by the assessors.

"Results of the survey established that a difference to a varying degree existed in the initial appraised values and the assessed values as finally extended on the roll. A check was made on both rural and urban properties. The total difference between recorded initial appraised values and assessed values in the thirty-three counties amounted to \$14,975,910, or .52% of the total assessed valuation of the state. Percentage differences in the counties ranged from a high of 10.77% to a low of total county valuations of .58%. The difference between appraised value and assessed value was due primarily to percentage allowances made over and above normal age depreciation, and to a lesser degree the failure to keep adjustments made upon properties in classification, errors in computations, additions to buildings, etc., up-to-date on appraisal cards and roll.

"Field inspection of properties to extent permitted by limited time and personnel definitely established that initial appraisals were not sufficiently accurate and up-to-date (the first appraisals were made in 1948) to permit a logical conclusion to be drawn as to the justification for the difference between the initial appraisals and the 1955 assessed valuations. Accordingly, abstracts as returned by the sixty-three assessors (with two minor changes) were submitted to the State Board of Equalization. That Board ordered no change, so in effect the assessed value as reflected on the abstracts became the 'appraised valuation of all taxable property, as determined by the State Board of Equalization for assessment purposes,' in each and every county in the state.

"Assessors and Boards of County Commissioners in counties studied were informed of conditions within their counties. This situation was called to all the assessors' attention at the annual conference in January 1956. Emphasis was placed upon the fact that initial appraisals of all properties, urban and rural, must be corrected according to Manual procedure in measuring, classifying and pricing buildings, that depreciation below 60% of appraisal value (this is maximum allowance for normal age depreciation) was only to be allowed and to the degree warranted in each particular case as established by actual inspection of property. All assessors were taken on a field trip and instructed in the application of allowance for physical condition, location, changes in economy in locality, etc. Sixty-one of the sixty-three counties were represented on this trip, sixty assessors being present and a large number of deputies and appraisal men.

"Considerable attention has been and is being given to El Paso, Jefferson, and Pueblo Counties, not because these three counties are among the four receiving the greatest amount of money under classroom

unit equalization program, but because the past history indicates that Jefferson and Pueblo Counties have long been poorly assessed, and tremendous growth and changes in property values have created many problems in all three counties.

"A detailed survey has been completed in nine northeastern counties and on rural properties in Prowers County. The nine counties are similarly situated and in the area of the state assessors have been using percentage discounts to a varying degree. The survey was conducted to determine to what extent the assessors had followed instructions to correct the situation.

"Field men were instructed to take off transfers of urban and rural properties for period of March 1955 to March 1956, taking only those transferred by warranty deeds that showed a consideration of \$2,000 or more, and that would be considered normal sales. Improvements on each property were appraised and depreciation for age allowed up to a maximum of 60% any additional allowance justified was made and reasons noted. Appraisal time determined was compared with appraisal as made by the assessor and to the assessed value as determined by him, which figure would, of course, reflect any additional allowance he may have made to the initial appraisal figure.

"Percent appraised value by the assessor is of the appraisal value by the Commission was determined, also the percent of the assessed value is of the appraisal by Commission, and the percent of the assessed value is of the sales value and the percent of the appraised value by the Commission is of sales.

RESULTS AND CONCLUSIONS:

"URBAN PROPERTIES APPRAISED VALUE by assessors compared, on an average, pretty favorably with appraisal as made by the Commission. Inequities between individual properties ranged from 20.53% to 166.86%. Additional allowance over and above normal age depreciation resulted in a slight difference in one or two counties between the average appraised value of improvements by the assessor and the assessed value of the improvements. This was not a serious factor on urban properties.

"RURAL improvements showed a much greater variance than in urban improvements. The Appraised value by the assessor, when compared to that of the Commission, ranged from 66.43% to 115.05%. This spread was apparently due to two things; first, an error in classification of buildings, some were too high, others too low, and second, failure on the part of the assessor to pick up new and added improvements that have developed since the original appraisal was made. Individual properties ranged from 9.25% to 182.00%.

"When assessed value was compared to appraised value of improvements, as made by the Commission, greater discrepancies were evident. Percentage discounts allowed ranging as high as 30% have resulted in the average assessed value varying from 57% to 99% of the appraised value as determined by the Commission. On both rural and urban

improved properties, the appraised value as determined by the Commission showed a higher percent of the sales price than the assessed value showed of this figure.

"Sales of unimproved lands indicated an average assessment ranging from a low of 5.3% to 77.33%. The percentage of assessment to sales on unimproved lands was lower in all counties than the percentage of assessment to sales on improved properties, both urban and rural.

"The assessors of the ten counties included in the survey, with several commissioners from the counties, were called into a meeting with the Tax Commission, Monday, May 21. The data compiled on the counties was discussed in detail and each assessor and commissioner permitted an opportunity to explain the situation in his county. The change necessary in each county to bring the assessed valuation, on an average, up to the appraised valuation by the Commission was called to the attention of the assessor.

"Attempts will be made to make a check in each county prior to July first on properties included in the survey to determine the 1956 valuation as finally made by the assessor. In counties where this figure does not approximate the appraisal figure by the Tax Commission, the matter will be referred to the County Board of Equalization prior to July 16, and if satisfactory adjustment is not made, facts surrounding the case will be submitted to the State Board of Equalization in the report of the Tax Commission on September 10. No definite recommendations can be prepared for submission to the State Board of Equalization until after abstracts are submitted by assessors to the Tax Commission.

"Mr. Beasley has dealt exclusively with merchandise assessments. He has not worked full time due to commitment to La Plate County. He has checked at least 20% of merchandise assessments in twelve major counties, pointing out to assessors generally over-all low assessments and particularly inequities existing between assessments on classes of property and between individual taxpayers in each class. He has picked up a great deal of value on 'omitted assessments', and we expect 1956 abstracts to reflect substantial increases in merchandise assessments as a result of his work. Our request for appropriation sufficient to continue his service after July first was denied. On one omitted assessment made by Mr. Beasley, the taxes collected amounted to \$15,200, or \$200 more than the entire supplemental appropriation.

"Our objective was, is, and will continue to be a complete and equalized assessment in all counties, and all efforts will be directed to that end. 1957 will find a large number of counties applying depreciation following instructions in the Manual that depreciation is to be allowed at least every five years. The values resulting from reappraisal were first put on the tax rolls in 1952, so 1957 will find the greatest percentage of counties applying depreciation. Some few counties as Denver, Delta, Larimer, Montrose, and Prowers have applied

depreciation, or will apply it in 1956. This fact must be considered in comparing ratios of assessed values to sales in counties.

"Suggestions and instructions to assessors applying depreciation in their counties emphasize, first, all buildings depreciated down to 40% shall be inspected, and any additional allowance justified before being allowed. Second, careful check shall be made on all buildings for additions and modernization which shall be considered in new value of building before allowance for depreciation. Third, all lots and lands not included in agricultural lands of the county shall be re-valued and new value of approximately 35% of average current selling price in area where land is located shall be new value of lands. In many counties, this review will result in an increase of over-all value.

"A point of interest might be that six of the northeastern counties included in our survey were among those in which the A B & Q Railroad Company conducted a sales ratio study for 1955. The percentages shown in the railroad study in no case coincided with those determined by our men for the same period, and in some instances varied as much as 46%. This emphasizes the fact that while sales ratios are a necessary factor in any study and are indicative of trends, they cannot be relied upon entirely in establishing values.

"Opinions seem to be that the most effective way to have equalization in distribution of school funds is to have an equalized assessment of all properties between counties. Obviously, before this can be accomplished, equalization and uniformity of assessments within counties must be realized.

"Enactment of legislation to provide the following would do much to accomplish the objective:

1. Change assessment date to January 1.
2. Require all merchants and manufacturers to file with assessor opening and closing inventory, gross sales, cost of goods sold and depreciation schedule as shown on current year's income tax report.
3. Clarification and fixation of responsibilities for assessing and collecting tax on house trailers - \$25 to \$30,000,000 in valuation is escaping taxation in part or entirely under present setup.
4. Provide for entire assessment of oil and gas to be made against producers rather than to multiple royalty interest holders.
5. Provide that one levy sufficient to take care of all outstanding bond issues, existing after consolidation of taxing districts, be applied to total valuation of taxing district.

"These last two would not affect assessed valuations but would greatly lessen detail work in the assessor's office in some counties, thereby allowing more time to appraisal of properties.

"The last comments are more or less general information but may be of some benefit in giving a better overall picture of the situation."

Research

On the following pages are reproduced the major research work completed by the full Committee on Education during 1956. In addition, there were two research documents completed which were too voluminous to be reproduced in this report.

In order to provide an indication of the nature of information included in each of these studies, a "sample" sheet from each study, listed as Research Documents No. 1 and 2, is incorporated as a part of this report. Copies of the complete studies are available for reference in the office of the Legislative Council, Room 341, State Capitol. Following is a list of the research material contained herein and a statement as to the reason why such a study was made. The reports and research of the subcommittees are contained in Part IV.

Research Document No. 1 - Comparative Analysis of State Aid Payments Under the Present School Finance Act (Senate Bill #7) and the Proposed School Foundation Act (Senate Bill #2, 1956).

Senate Bill #2, (1956), which embodied the main principles recommended in 1955 by the Committee on Education, was rejected during the 1956 legislative session. The committee requested this analysis, using actual data for the 1955-56 school year, in order to determine what weaknesses, if any, existed in the committee's proposals.

Research Document No. 2 - Comparative Information on Enrollments, Teachers, and School Finance, by District and by County, 1954-55 School Year.

The purpose of this study was to develop a comprehensive picture of public school education as it exists today in Colorado, and to analyze "average practice" with respect to classroom unit expenditures, pupil-teacher ratios, teacher-administrator ratios, assessed valuation per pupil, etc.

Research Document No. 3 - Analysis of Pupil-Teacher Ratios in Colorado High Schools, 1955-56 School Year.

Previous research of the committee indicated that one of the major problems encountered in developing a foundation program was that of making adequate provision for the "small high school". A single-step pupil-teacher ratio which is realistic apparently does not provide sufficient classroom units to districts having high schools with fewer than 150 pupils. This study was undertaken to determine average pupil-teacher ratios in the various sized high schools of the state.

Research Document No. 4 - Analysis of the Sparsity Factor.

Because of the general lack of information concerning the use and effects of the "sparsity" factor contained in the School Finance Act, this study was made to determine its financial effect upon school districts and its relationship to transportation costs. Since the belief is commonly held that the sparsity factor was incorporated in the school finance act as an allowance for transportation expenditures of school districts, emphasis is given in this study to the relationship of sparsity benefits and transportation expenditures.

Research Document No. 5 - Use of Current School Year Attendance in Distributing State Aid.

The existing school finance law in Colorado provides for the distribution of state aid to school districts on the basis of the previous school year's attendance data, which works a hardship on those districts experiencing rapid enrollment increases. The committee asked the research staff to study the school finance legislation of other states to determine how they have solved this problem. This study reports on the methods used in eighteen states which presently are using current attendance data to distribute state aid.

At its May 23 meeting, the committee requested the research staff to check on the current status of efforts of the county commissioners in Adams, Arapahoe, and Jefferson counties to assess a "move-in fee". This fee was being assessed to take the place of ad valorem taxes during the period between the occupancy of a home and its being placed on the tax rolls. Memoranda on the follow-up of this request are contained in the Appendix.

RESEARCH DOCUMENT NO. 1

**Comparative Analysis of State Aid Payments
Under the Present School Finance Act
and the Proposed School
Foundation Act.**

(Sample sheets taken from complete study)

August, 1956

SAMPLE SHEET OF CALCULATIONS
for
TABLE I

(Research Document No. 1)

Adams County-1955-56

School District	Aggregate Days of Attendance		Classroom Units #7				Classroom Units #2			Classroom Unit Values		
	Unweighted	Weighted	Difference	Employed		Used		Calcu- lated	Used		S.B. #7	S.B. #2
				Grad.	Non-grad.	Grad.	Non-grad.		Grad.	Non-grad.		
1	88,388.0	88,388.0		24	15.0	24.0	1.2	21.2	21.2		\$ 75,240	\$ 110,240
5	2,935.0	5,870.0	2,935.0		2.0		2.0	1.1			5,400	4,950
12	86,654.5	86,654.5		13	14.7	13.0	11.8	20.8	13.0		70,860	102,700
14	571,864.5	571,864.5		186	19.0	159.2		133.7	133.7		477,600	695,240
17	1,160.5	2,321.0	1,160.5		1.1			1.0				
22	2,924.0	4,386.0	1,462.0		1.8		1.8	1.1			4,860	4,950
23	2,448.0	3,060.0	612.0		1.3		1.0	1.0			2,700	4,500
24	26,137.5	26,137.5		1	5.0	1.0	5.0	6.8	1.0		16,500	27,700
26	3,091.3	5,409.8	2,318.5	2	2.0	2.0		1.2	1.2		6,000	6,240
27	352,921.5	352,921.5		79	20.0	79.0	19.6	82.8	79.0		289,920	427,900
37	2,184.0	3,276.0	1,092.0		1.4		1.0	1.0			2,700	4,500
50	470,844.5	470,844.5		117	33.0	117.0	14.4	110.2	110.2		389,880	573,040
62	7,055.0	7,055.0			2.6		2.6	2.3			7,020	10,350
J. 29	33,506.0	33,506.0		11	2.0	9.9		8.5	8.5		29,700	44,200
J. 31	31,496.0	31,496.0		7	3.0	7.0	2.3	8.0	7.0		27,210	40,900
J. 55	4,190.5	6,285.8	2,095.3	1	2.0	1.0	1.3	1.4	1.0		6,510	7,000
Total	1,687,800.0	1,699,476.1	11,675.3	441	122.7	413.1	64.0	402.1	375.8	24.5	\$1,412,100	\$2,064,410

SAMPLE SHEET OF CALCULATIONS

for

TABLE I-A

(Research Document No. 1)

Adams County-1955-56

School District	Unweighted Ag.D.A.	Average Daily Attendance	No. Teachers Employed	Cal. C.R.U. #1 Total	Cal. C.R.U. #1 Pct. of Total Employed	Used C.R.U. #1 Total	Used C.R.U. #1 Pct. of Total Employed	Cal. C.R.U. #2 Total	Cal. C.R.U. #2 Pct. of Total Employed	Used C.R.U. #2 Total	Used C.R.U. #2 Pct. of Total Employed
1	88,388.0	519.9	39.0	25.2	.65%	25.2	.65%	21.2	.54%	21.2	.54%
5	2,935.0	17.1	2.0	2.2	1.10%	2.0	1.00%	1.1	.55%	1.1	.55%
12	86,654.5	509.8	27.7	24.8	.90%	24.8	.90%	20.8	.75%	20.8	.75%
14	571,864.5	3,324.8	205.0	159.2	.76%	159.2	.76%	133.7	.65%	133.7	.65%
17	1,160.5	6.7		1.1				1.0			
22	2,924.0	17.0	2.0	1.8	.90%	1.8	.90%	1.1	.55%	1.1	.55%
23	2,448.0	14.2	1.9	1.3	1.30%	1.0	1.00%	1.0	1.00%	1.0	1.00%
24	26,127.5	152.0	6.0	7.9	1.32%	6.8	1.13%	6.0	1.00%	6.0	1.00%
26	3,091.3	18.0	2.0	2.1	1.05%	1.2	.60%	2.0	1.00%	1.2	.60%
27	352,921.5	2,051.9	99.0	98.6	1.00%	82.8	.84%	98.6	1.00%	82.8	.84%
37	2,184.0	12.7	1.0	1.4	1.40%	1.0	1.00%	1.0	1.00%	1.0	1.00%
50	470,844.5	2,737.5	150.0	131.4	.88%	110.2	.73%	131.4	.88%	110.2	.73%
62	7,055.0	41.0	3.0	2.6	.87%	2.3	.77%	2.6	.87%	2.3	.77%
J. 29	33,508.0	194.8	13.0	9.9	.76%	8.5	.65%	9.9	.76%	8.5	.65%
J. 31	31,496.0	183.1	10.0	9.3	.93%	8.0	.80%	9.3	.93%	8.0	.80%
J. 55	4,190.5	24.4	3.0	2.3	.77%	1.4	.47%	2.3	.77%	1.4	.47%
Total	1,687,800.8	9,812.9	563.7	481.1		402.1		477.1		400.3	

SAMPLE SHEET OF CALCULATIONS
for
TABLE II

Adams County-1955-56

(Research Document No. 1)

School District	C.R.U. Values #7	C.R.U. Values #2	Effort #7			Effort #2 (11½ mills)	State Aid #7			State Aid #2 (exc. for excess growth units)
			Dist. (7 mills)	County (4½ mills)	Total		Ag.D.A. Payment	Equalization	Total	
1	\$ 75,240	\$ 110,240	\$ 66,693	\$ 1,861,627	\$ 4,807,698	\$ 48,547	\$ 1,829,708	\$ 8,547	\$ 26,844.08	\$ 61,693
5	5,400	4,950	28,840	61,817	2,822,225	2,150	60,757		607.57	2,800
12	70,860	102,700	62,469	1,825,116	4,421,809	45,266	1,793,823	8,391	26,329.23	57,434
14	477,600	695,240	313,266	12,044,603	19,282,032	306,787	11,838,091	164,334	282,714.91	388,453
17			4,984	24,442	473,970		24,022		240.22	
22	4,860	4,950	4,146	61,585	353,010	2,150	60,529	714	1,319.29	2,800
23	2,700	4,500	2,696	51,560	217,994	1,924	50,675	4	510.75	2,576
24	16,500	27,700	16,774	550,508	1,128,902	12,222	541,069		5,410.69	15,478
26	6,000	6,240	7,168	65,109	651,735	2,716	63,993		639.93	3,524
27	289,920	427,900	177,569	7,433,228	10,323,670	188,757	7,305,781	112,351	185,408.81	239,143
37	2,700	4,500	10,002	45,999	954,212	1,924	7,863		78.63	2,576
50	389,880	578,040	188,738	9,916,921	8,956,843	252,808	9,746,890	201,142	298,610.90	320,232
62	7,020	10,350	7,384	148,592	589,855	4,527	146,046		1,460.46	5,823
J. 29	29,699	44,200	20,723	705,692	1,366,633	19,364	693,600	9,272	16,208.00	24,836
J. 31	27,209	40,900	16,690	663,350	1,005,668	18,004	651,995	10,756	17,275.95	22,896
J. 55	6,509	7,000	8,204	88,255	732,109	2,862	86,749		867.49	4,138
Total	\$1,412,097	\$2,064,410	\$936,346	\$35,548,404	\$58,086,365	\$910,008	\$34,901,591	\$515,511	\$864,526.91	\$1,154,402

SAMPLE SHEET OF CALCULATIONS
for
TABLE III

(Research Document No. 1)

Adams County-1955-56

Analysis of Excess Growth Factor

School District	Empl. Teachers		Calculated C.R.U.'s	Exc. Growth C.R.U.'s (1954 over 1953)	Used C.R.U.'s before growth		Non-used C.R.U.'s before growth	Excess Growth C.R.U.'s		Exc. Growth C.R.U. Values	
	Grad.	Non-grad.			Grad.	Non-grad.		Used	Not Used		
								Grad.	Non-grad.		
1	24	15.0	21.2	4.1	21.2			2.8	1.3	\$ 20,410	
5		2.0	1.1			1.1					
12	13	14.7	30.8	10.2	13.0	7.8			6.9	3.3	
14	186	19.0	133.7	20.9	133.7			20.9		108,680	
17			1.0				1.0				
22		2.0	1.1	.1		1.1			.1	450	
23		1.0	1.0	.1		1.0				.1	
24	1	5.0	6.8	.8	1.0	5.0	.8			.8	
26	2		1.2		1.2						
27	79	20.0	82.8	2.0	79.0	3.8			2.0	9,000	
37		1.0	1.0			1.0					
50	117	33.0	110.2	16.3	110.2			6.8	9.5	78,110	
62		3.0	2.3	.2		2.3			.2	900	
J. 29	11	2.0	8.5	.2	8.5			.2		1,040	
J. 31	7	3.0	8.0	.2	7.0	1.0			.2	900	
J. 55	1	2.0	1.4		1.0	.4					
Total	441	122.7	402.1	55.1	375.8	24.5	1.8	30.7	20.2	4.2	\$250,540

RESEARCH DOCUMENT NO. 2

**Comparative Information on Enrollments,
Teachers, and School Finance,
by County and by District,
1954-55 School Year.**

(Summary tables and sample county sheet)

August, 1956

E X P L A N A T I O N

Purpose: This report was prepared to provide the Legislative Council Committee on Education with comparative information on enrollments, teachers, current operating expenditures and levies of Colorado school districts.

Source: The data for this report were taken from audited Annual Reports of the County Superintendent of Schools to the State Commissioner of Education (Form CS-1 Rev.). The 1954-55 school year was used as this is the latest year for which complete and accurate data are available.

Information on school district levies was taken from the Forty-third Annual Report of the Colorado Tax Commission (1954). The County Public School Fund Levy of 4.5 mills is not shown in this report.

Limitations: (1) County totals may not always conform to the county totals in other similar reports, since the data for joint school districts were shown in the "headquarters" counties only.

(2) In some instances, school districts held school for less than a full school term. Data for these districts were not shown if they did not reflect proportional costs.

(3) "Certificated Personnel" reflects the number of teachers employed only; no adjustment could be made for those teachers who were employed on a part-time basis. To this extent, the data in columns 15 and 16 are invalid.

(4) Because of the dissolution of school districts during the school year and the transfer of this assessed valuation to other school districts, the data in Column 17 will not always coincide with those in the Tax Commission report.

(5) Since no data were shown on those districts transporting to other school districts and because there was no way of determining to which districts the children were transported, transportation expenditures of non-operating districts were necessarily omitted from this study.

(6) The reader is cautioned against using the totals of columns 10 and 11 to determine teacher-administrator ratios, because of the large number of one-, two-, and three-teacher school districts that do not employ administrative personnel.

H I G H L I G H T S

Enrollments:

The total average daily attendance for all public schools in Colorado (kindergarten through grade twelve), for the 1954-55 school year was 258,974.

Of the 755 operating school districts in 1954-55, 229 school districts (over 30 per cent) employed only one teacher. These 229 districts had an average daily attendance of 2,237 or less than 1 per cent of the total state A.D.A.

An additional 122 school districts (16 per cent) employed only two teachers and enrolled only 1.3 per cent of the total state A.D.A. Thus, in 1954-55, 46 per cent of all Colorado school districts employed two or less teachers.

There were only 47 school districts employing more than 35 teachers. These 47 districts enrolled approximately 74 per cent of the public school children.

Classroom Unit Expenditures:

The highest average classroom unit expenditure (county level) was \$7,382 (Rio Blanco); the lowest average C.R.U. expenditure was \$3,828 (Conejos). Excluding transportation expenditures, the highest average C.R.U. expenditure was \$7,047 (Denver), and the lowest was \$3,590 (Conejos).

Following are the low, high, and average current expenditures per teacher for the 1954-55 school year, including and excluding transportation costs:

	<u>Low</u>	<u>High</u>	<u>Average</u>
Average including trans. costs	\$2,132	\$13,410	\$5,651
" excluding " "	2,132	7,713	5,418

The average current expenditure per teacher (including transportation costs) for "one-teacher" school districts was \$4,109; the average for "two-teacher" school districts was \$4,421.

Approximately one-fourth (26 per cent) of the teachers were employed in school districts that expended \$6,400 or more per teacher; fewer than seven per cent were employed by districts spending \$3,900 or less per teacher.

Expenditures Per A.D.A.

Current expenditures per A.D.A. ranged from a low of \$142 (Montezuma) to a high of \$2,771 (Bent). The average expenditure per A.D.A. for the state was \$280. Excluding transportation costs, the state average was \$268.

A total of 483 school districts reported expenditures for transportation in 1954-55. The highest transportation expenditure per A.D.A. was \$957 (Huerfano); the lowest was \$0.08 per A.D.A. (Adams).

Pupil-Teacher Ratios:

In 1954-55, the average "pupil-teacher ratio" for all school districts was 20.2 to 1. The highest average county pupil-teacher ratio was 23.7 to 1 (Jefferson); the lowest average county pupil-teacher ratio was 11.3 to 1 (Gilpin).

The median state pupil-teacher ratio calculated on the basis of A.D.A. is 21.2 to 1; the median calculated on the basis of number of districts is only 14.6 to 1. The following medians were calculated on the basis of number of districts.

<u>No. of Teachers</u>	<u>A.D.A. Per Teacher</u>
1	9.3
2	13.9
3 - 10	15.3
11 - 20	16.7
21 - 35	18.6
over 35	21.5

Teacher-Administrator Ratios:

Following is the average ratio of teachers per non-teacher, according to type and size of school district; 1954-55 school year.

	<u>All Districts</u>	<u>Excluding Districts with No Non-Teaching Personnel</u>
1st class	13.3 to 1	13.2 to 1
2nd class	14.8 to 1	13.1 to 1
3rd class	41.3 to 1	9.3 to 1
Co. H.S.	10.4 to 1	7.8 to 1
Union H.S.	8.1 to 1	8.0 to 1

Following is the average ratio of teachers per non-teacher in first class districts, analyzed by number of teachers employed:

Less than 40 teachers	17.8 to 1
41 to 80 "	10.8 to 1
81 to 120 "	13.1 to 1
121 to 500 "	12.3 to 1
over 500 "	14.0 to 1

Assessed Valuation:

The average assessed valuation per A.D.A. in 1954-55 was \$10,457. The range in assessed valuation per A.D.A. was from \$1,275 (District #13, Conejos) to \$869,765 (District #93, Logan). In other words, the richest district had 525 times more taxable wealth per child than the poorest district.

Frequency Distribution of A.D.A. per Teacher According to the Number of Districts and Number of Teachers per District, with Total A.D.A. for Each Class Interval

A.D.A. Per Teacher	1 Teacher* School Districts		2 Teacher School Districts		3 to 10 Teacher School Districts		11 to 20 Teacher School Districts		21 to 35 Teacher School Districts		36 Teachers and Over		Total	
	No. of Dist.	A.D.A.	No. of Dist.	A.D.A.	No. of Dist.	A.D.A.	No. of Dist.	A.D.A.	No. of Dist.	A.D.A.	No. of Dist.	A.D.A.	No. of Dist.	A.D.A.
Less than 4.0	27	80.9	1	3.5									28	84.4
4.0 --- 4.9	12	54.9											12	54.9
5.0 --- 5.9	18	97.1	1	11.8	2	32.0							21	140.9
6.0 --- 6.9	16	105.8	1	12.5	1	40.0							18	158.3
7.0 --- 7.9	18	136.1	2	30.7	2	47.3							22	214.1
8.0 --- 8.9	16	136.2	7	119.9	5	242.4							28	498.5
9.0 --- 9.9	23	219.3	8	148.8	10	460.0	1	107.5					42	935.6
10.0 --- 10.9	15	159.0	14	294.4	10	665.3	1	193.5					40	1,312.2
11.0 --- 11.9	18	205.9	13	295.6	9	674.7	3	485.0					43	1,661.2
12.0 --- 12.9	12	150.3	8	200.7	20	1,374.3	2	336.4	2	723.9			44	2,785.6
13.0 --- 13.9	12	161.4	6	164.5	19	1,541.3	7	1,396.0	1	285.2			45	3,548.4
14.0 --- 14.9	7	101.3	10	285.7	25	1,815.2	14	2,998.4	1	449.7	2	1,445.8	59	7,096.1
15.0 --- 15.9	10	153.8	11	336.0	26	2,018.0	8	1,726.0	3	1,153.5	1	583.2	59	5,970.5
16.0 --- 16.9	5	82.3	9	296.4	22	1,892.2	16	3,995.6	6	2,566.0			58	8,832.5
17.0 --- 17.9	10	175.4	5	171.5	16	1,637.5	15	3,868.3	2	985.2			48	6,837.9
18.0 --- 18.9	2	36.8	7	256.7	20	1,922.6	6	1,780.0	7	3,200.7	2	3,404.6	44	10,601.4
19.0 --- 19.9	1	19.6	6	232.5	10	1,354.2	11	3,025.8	6	2,990.8	6	10,918.0	40	18,540.9
20.0 --- 20.9	1	20.9	7	286.1	8	718.8	4	1,353.3	3	1,637.1	7	13,091.6	30	17,107.8
21.0 --- 21.9	2	43.5	4	171.9	9	910.7	3	1,065.4			11	84,141.8	29	86,333.3
22.0 --- 22.9	1	22.0	1	44.8	2	152.1	1	408.0	4	2,282.0	5	12,036.4	14	14,945.3
23.0 --- 23.9	1	23.4	1	47.2	1	207.4	1	381.8			9	30,637.3	13	31,297.1
24.0 --- 24.9	1	24.7			2	270.1			2	1,272.4	3	24,555.9	8	26,123.1
25.0 --- 25.9					4	479.3	1	508.0			1	11,702.1	6	12,689.4
26.0 --- 26.9	1	26.0			1	81.1	1	364.2	1	684.8			3	1,075.0
27.0 --- 27.9													1	81.1
Total	229	2,236.6	122	3,411.2	224	18,436.5	95	23,993.2	38	18,231.3	47	192,516.7	755	258,925.5

*Included are all certificated personnel

Frequency Distribution of Total Current Expenditures Per Teacher* According to the Number of School Districts and Number of Teachers Employed in Each District, with the Average Current Expenditures for Each Class Interval.

Current Expense per Teacher	Number of Teachers in School District										Totals	
	1 Teacher	2 Teachers	3-6 Teachers	7-10 Teachers	11-20 Teachers	21-35 Teachers	36-50 Teachers	51-75 Teachers	76-100 Teachers	Over 100 Teachers	No. of Dist.	Av. Cur. Exp. per Teacher
Less than \$2,700												
\$2,701-\$3,000	21	1	3	4	1						22	\$2,261
\$3,001-\$3,300	18	3	7	15	4						24	2,876
\$3,301-\$3,600	28	12	20	8	9						48	3,176
\$3,601-\$3,900	31	21	17	11	4						72	3,451
\$3,901-\$4,200	29	22	17	4	4						78	3,765
\$4,201-\$4,500	21	10	21	4	9						69	4,072
\$4,501-\$4,800	15	7	12	15	17						73	4,344
\$4,801-\$5,100	17	9	11	8	19						80	4,639
\$5,101-\$5,400	16	9	25	11	12						94	4,979
\$5,401-\$5,700	4	6	11	8	11						53	5,383
\$5,701-\$6,000	4	3	6	4	7						31	5,617
\$6,001-\$6,300	4	4	7	1	8						29	5,951
\$6,301-\$6,600	4	4	5	4	1						24	6,270
Over \$6,600	17	11	11	9	6						58	7,140
Totals	229	122	156	68	95	36	47	755				
Av. Cur. Exp. per Teacher	\$4,109	\$4,421	\$4,758	\$5,115	\$5,003	\$5,077	\$5,982					

Grand Average Cur. Exp. per Teacher \$5,651

*Included are all certificated personnel.

No. of School Districts and A.D.A.
According to "A.D.A. per Teacher".

No. of School Districts and A.D.A.
According to Number of Teachers* Employed

Size of School Dist.	School Dists.		Av. Daily Atten.	
	No. of Dist.	% of Total	No. of A.D.A.	% of Total
1 Teach. S.D.	229	30.3%	2,236.6	0.9%
2 Teach. S.D.	122	16.2	3,411.2	1.3
3-10 Teach. S.D.	224	29.7	18,536.5	7.2
11-20 Teach. S.D.	95	12.6	23,993.2	9.3
21-35 Teach. S.D.	38	5.0	18,231.3	7.0
Over 35 Teach. S.D.	47	6.2	192,516.7	74.3
Total, State	755	100.0	258,925.5	100.0

*Included are all certificated personnel.

A.D.A. Per Teacher	School Dist.			A.D.A.			
	No. of Dist.	% of Total	Cumulative %	No. of A.D.A.	Cumulative A.D.A.	% of Total	Cumulative %
Less than 4.0	28	3.7		84.4		0.03	
4.0 - - - 4.9	12	1.6	5.3%	54.9	139.3	0.02	0.05%
5.0 - - - 5.9	21	2.8	8.1	140.9	280.2	0.05	0.10
6.0 - - - 6.9	18	2.3	10.4	158.3	438.5	0.06	0.16
7.0 - - - 7.9	22	2.9	13.3	214.1	652.6	0.08	0.24
8.0 - - - 8.9	28	3.7	17.0	498.5	1,151.1	0.19	0.43
9.0 - - - 9.9	42	5.6	22.6	935.6	2,086.7	0.36	0.79
10.0 - - 10.9	40	5.3	27.9	1,312.2	3,398.9	0.51	1.30
11.0 - - 11.9	43	5.7	33.6	1,661.2	5,060.1	0.64	1.94
12.0 - - 12.9	44	5.8	39.4	2,785.6	7,845.7	1.08	3.02
13.0 - - 13.9	45	6.0	45.4	3,548.4	11,394.1	1.37	4.39
14.0 - - 14.9	59	7.8	53.2	7,096.1	18,490.2	2.74	7.13
15.0 - - 15.9	59	7.8	61.0	5,970.5	24,460.7	2.31	9.44
16.0 - - 16.9	58	7.7	68.7	8,832.5	33,293.2	3.41	12.85
17.0 - - 17.9	48	6.4	75.1	6,837.9	40,131.1	2.64	15.49
18.0 - - 18.9	44	5.8	80.9	10,601.4	50,732.5	4.10	19.59
19.0 - - 19.9	40	5.3	86.2	18,540.9	69,273.4	7.16	26.75
20.0 - - 20.9	30	4.0	90.2	17,107.8	86,381.2	6.61	33.36
21.0 - - 21.9	29	3.8	94.0	86,333.3	172,714.5	33.34	66.70
22.0 - - 22.9	14	1.9	95.9	14,945.3	187,659.8	5.77	72.47
23.0 - - 23.9	13	1.7	97.6	31,297.1	218,956.9	12.09	84.56
24.0 - - 24.9	8	1.1	98.7	26,123.1	245,080.0	10.09	94.65
25.0 - - 25.9	6	0.8	99.5	12,689.4	257,769.4	4.90	99.55
26.0 - - 26.9	3	0.4	99.9	1,075.0	258,844.4	0.42	99.97
27.0 - - 27.9	1	0.1	100.0	81.1	258,925.5	0.03	100.00
Total, State	755	100.0		258,925.5		100.0	

Median (by districts) Pupil-Teacher Ratio	14.6 - 1
Median (by A.D.A.)	21.2 - 1
State Average	20.2 - 1

SUMMARY BY COUNTY

County (1)	No. of Dist. (2)	Total Enrollment			Total A.D.A. (6)	Average Cost Per A.D.A.			Total Cert. Personnel			A.D.A. Per Teacher		Av. Cur. Exp. Per C.P.		Assessed Valuation	
		K-8 (3)	9-12 (4)	Total (5)		Trans. (7)	Cur. Exp. Less Trans. (8)	Total Cur. Exp. (9)	Teach. (10)	Non-teach. (11)	Total (12)	Including Non-teach. (13)	Excluding Non-teach. (14)	Excluding Trans. (15)	Total (16)	Total (17)	Per A.D.A. (18)
Adams	19	8,494	1,882	10,376	9,410.3	12.23	\$223.61	\$235.84	437	26	463	20.3	21.5	\$4,544.84	\$4,793.46	\$ 72,011,475	\$ 7,652
Alamosa	12	1,556	524	2,080	1,960.0	11.53	233.65	245.18	99	8	107	18.3	19.8	4,279.96	4,491.19	15,099,952	7,704
Arapahoe	16	14,737	3,101	17,838	16,664.7	3.74	212.16	215.90	672	52	724	23.0	24.8	4,883.33	4,969.48	131,538,451	7,893
Archuleta	1	513	111	624	583.2	22.70	289.82	312.52	35	3	38	15.3	16.7	4,447.88	4,796.31	4,852,640	8,321
Baca	30	1,129	360	1,489	1,408.8	44.05	273.27	317.32	92	5	97	14.5	15.3	3,968.92	4,608.65	19,278,257	13,684
Bent	16	1,308	377	1,685	1,571.7	20.46	264.11	284.57	82	6	88	17.9	19.2	4,717.11	5,082.54	14,845,711	9,446
Boulder	31	6,760	2,252	9,012	8,497.5	5.68	262.62	268.30	379	32	411	20.7	22.4	5,429.74	5,547.19	90,732,966	10,678
Chaffee	14	1,040	339	1,379	1,325.4	13.40	211.64	225.04	58	3	61	21.7	22.9	4,998.46	4,889.65	13,271,710	10,013
Cheyenne	7	429	196	625	607.2	104.46	383.71	488.17	42	4	46	13.2	14.5	5,664.92	6,443.80	15,234,350	25,090
Clear Creek	7	406	133	539	503.6	5.47	284.48	289.95	29	1	30	16.8	17.4	4,775.43	4,867.32	5,557,700	11,036
Conejos	17	1,928	556	2,484	2,399.5	12.62	189.99	202.61	124	3	127	18.9	19.4	3,589.58	3,828.09	9,971,651	4,156
Costilla	12	1,196	248	1,444	1,291.2	18.53	216.75	235.28	63	4	67	19.3	20.5	4,177.22	4,534.29	5,498,445	4,258
Crowley	9	770	246	1,016	1,006.0	22.06	259.64	281.70	59	4	63	16.0	17.1	4,116.02	4,498.31	7,568,895	7,524
Custer	2	197	76	273	267.0	57.07	248.35	305.42	17	1	18	14.8	15.7	3,683.86	4,530.36	3,338,001	12,502
Delta	1	2,457	1,042	3,499	3,308.6	23.31	252.28	275.59	155	11	166	19.9	21.3	5,028.26	5,492.86	21,615,845	6,533
Denver	1	60,194	15,283	75,477	63,307.0	2.54	328.47	331.01	2,743	208	2,951	21.5	23.1	7,046.50	7,101.07	929,494,610	14,682
Doroles	9	413	82	495	446.9	26.54	272.40	298.94	28	1	29	15.4	16.0	4,197.80	4,606.76	4,055,990	9,076
Douglas	18	647	216	863	830.0	39.05	267.92	306.97	50	2	52	16.0	16.6	4,276.38	4,899.74	12,460,614	15,013
Eagle	15	738	246	984	930.9	32.39	309.97	342.36	66	1	67	13.9	14.1	4,306.67	4,756.75	12,110,816	13,018
Elbert	8	560	221	781	744.8	62.27	304.69	366.96	46	3	49	15.2	16.2	4,631.31	5,577.83	11,713,115	15,727
El Paso	22	14,280	3,327	17,607	16,552.9	8.59	242.50	251.09	661	43	704	23.5	25.0	5,701.68	5,903.75	127,751,457	7,718
Fremont	25	2,375	815	3,190	2,991.6	14.44	250.31	264.75	146	12	158	18.9	20.5	4,739.40	5,012.89	24,320,210	8,129
Garfield	27	1,862	661	2,523	2,325.6	20.57	265.84	286.41	125	10	135	17.2	18.6	4,579.53	4,933.95	23,622,120	10,157
Gilpin	7	100	40	140	135.9	40.97	418.32	459.29	11	1	12	11.3	12.4	4,737.41	5,201.43	2,641,940	19,440
Grand	14	682	199	881	828.2	13.25	343.19	356.44	56	3	59	14.0	14.8	4,817.44	5,003.39	10,519,990	12,702

SUMMARY BY COUNTY (CONT'D)

County (1)	No. of Dist. (2)	Total Enrollment			Total A.D.A. (6)	Average Cost Per A.D.A.			Total Cert. Personnel			A.D.A. Per Teacher		Av. Cur. Exp. Per C.P.		Assessed Valuation	
		K-8 (3)	9-12 (4)	Total (5)		Trans. (7)	Cur. Exp. Less Trans. (8)	Total Cur. Exp. (9)	Teach. (10)	Non-teach. (11)	Total (12)	Including Non-teach. (13)	Excluding Non-teach. (14)	Excluding Trans. (15)	Total (16)	Total (17)	Per A.D.A. (18)
Gunnison	22	698	217	915	836.6	\$28.45	\$351.80	\$380.25	55	5	60	13.9	15.2	\$4,905.25	\$5,301.94	\$ 11,592,960	\$13,857
Hinsdale	2	21	7	28	25.1		504.93	504.93	2		2	12.6	12.6	6,336.87	6,336.87	988,821	39,395
Huerfano	26	1,267	318	1,585	1,520.9	20.97	246.34	267.31	88	4	92	16.5	17.3	4,072.47	4,419.06	11,075,330	7,282
Jackson	7	331	121	452	445.7		292.74	292.74	24	1	25	17.8	18.6	5,218.98	5,436.44	7,240,243	16,245
Jefferson	1	13,315	3,555	16,870	15,271.8	8.09	226.84	234.93	604	40	644	23.7	25.3	5,379.46	5,571.19	92,187,150	6,036
Kiowa	10	440	134	574	543.6	64.69	324.69	389.38	35	3	38	14.3	15.5	4,644.78	5,570.14	14,119,386	25,974
Kit Carson	15	1,175	447	1,622	1,525.9	58.21	279.48	337.69	89	7	96	15.9	17.1	4,442.21	5,367.45	20,163,433	13,214
Lake	6	1,222	371	1,593	1,487.9	3.87	276.07	279.94	71	5	76	19.6	21.0	5,404.63	5,480.47	26,774,435	18,513
La Plata	15	2,493	838	3,331	3,128.0	19.77	204.48	224.25	137	12	149	21.0	22.8	4,292.84	4,707.84	27,543,340	8,806
Larimer	34	6,178	2,131	8,309	7,703.7	7.64	237.58	245.22	364	22	386	20.0	21.2	4,741.43	4,893.98	84,425,504	10,959
Las Animas	47	3,916	1,209	5,125	4,823.7	24.14	255.14	279.28	260	19	279	17.3	18.6	4,411.16	4,828.51	31,631,550	6,558
Lincoln	20	922	378	1,300	1,263.9	55.77	276.55	332.32	74	2	76	16.6	17.1	4,599.06	5,526.60	19,125,949	15,132
Logan	30	3,231	971	4,202	3,965.1	22.95	276.61	299.56	206	17	223	17.8	19.2	4,918.23	5,326.31	55,415,410	13,976
Mesa	3	6,787	2,271	9,058	8,514.7	9.67	249.26	258.93	371	35	406	21.0	23.0	5,227.53	5,430.34	57,109,160	6,707
Mineral	1	78	28	106	106.3	14.77	314.17	328.94	6	1	7	15.2	17.7	6,203.96	6,428.31	1,771,365	16,664
Moffat	28	1,026	294	1,320	1,230.6	30.34	288.40	318.74	70	3	73	16.9	17.6	4,861.72	5,373.23	15,495,205	12,592
Montezuma	16	1,810	669	2,479	2,347.0	19.21	227.54	246.75	114	6	120	20.0	20.6	4,490.40	4,826.09	10,079,000	4,294
Montrose	20	2,876	920	3,796	3,467.8	14.66	235.07	249.73	169	10	179	19.4	20.5	4,554.01	4,838.03	21,742,780	6,270
Morgan	16	3,668	1,177	4,865	4,575.2	16.96	245.80	262.76	206	12	218	21.0	22.2	5,158.64	5,514.58	43,025,670	9,404
Otero	17	4,685	1,284	5,969	5,779.5	8.74	234.97	243.71	271	24	295	19.6	21.3	4,603.41	4,774.69	39,840,924	6,893
Ouray	2	350	125	475	431.2	22.95	279.66	302.61	22	3	25	17.2	19.6	4,823.56	5,219.35	3,695,802	8,571
Park	14	234	53	287	260.0	68.36	338.68	407.04	17	1	18	14.4	16.3	4,892.01	5,879.49	6,534,195	25,132
Phillips	14	885	307	1,192	1,109.8	51.06	302.08	353.14	66	2	68	16.3	16.8	4,930.09	4,763.48	16,261,272	14,652
Pitkin	2	295	102	397	370.9	42.55	291.04	333.59	22	1	23	16.1	16.9	4,693.30	5,379.44	6,432,361	17,343
Prowers	35	2,421	705	3,126	2,962.2	19.64	270.59	290.23	163	8	171	17.3	18.2	4,687.28	5,027.54	27,962,649	9,440

SUMMARY BY COUNTY (CONT'D)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Pueblo	2	16,656	3,847	20,503	19,150.0	\$ 4.48	\$249.34	\$249.34	770	48	818	23.4	24.9	\$5,732.28	\$5,837.22	\$ 132,742,825	\$ 6,932
Rio Blanco	11	888	302	1,190	1,083.0	40.06	437.05	477.11	65	5	70	15.5	16.7	6,761.67	7,381.52	67,822,680	62,625
Rio Grande	3	1,992	534	2,526	2,387.8	14.14	235.36	249.50	117	5	122	19.6	20.4	4,606.55	4,883.21	17,229,500	7,216
Boutt	32	1,153	463	1,616	1,572.5	26.55	315.04	341.59	94	4	98	16.0	16.7	5,055.25	5,481.19	20,117,105	12,793
Saguache	5	1,104	224	1,328	1,240.2	27.76	243.68	271.44	61	6	67	18.4	20.3	4,510.75	5,024.51	12,116,577	9,770
San Juan	1	169	55	224	202.3	3.72	324.10	327.82	13	1	14	14.5	15.6	4,645.82	4,699.55	2,485,907	12,288
San Miguel	10	470	132	602	571.9	17.12	300.61	317.73	36	2	38	15.1	15.9	4,524.22	4,781.88	6,633,880	11,600
Sedgewick	13	888	248	1,136	1,046.9	13.24	344.11	357.35	65	5	70	15.0	16.1	5,146.37	5,344.40	14,049,283	13,420
Summit	8	184	43	227	217.8	52.47	452.36	505.03	18	1	19	11.5	12.1	5,187.68	5,789.21	4,540,590	20,848
Teller	8	432	168	600	598.2	20.19	307.22	327.41	36	2	38	14.7	15.5	4,512.80	4,809.42	5,510,670	9,872
Washington	33	1,248	404	1,652	1,579.1	43.54	349.99	391.53	109	4	113	14.0	14.5	4,890.88	5,471.44	31,145,122	19,723
Weld	82	11,143	3,302	14,445	13,621.5	14.39	252.32	266.71	712	38	790	18.2	19.1	4,582.55	4,843.92	130,109,860	9,552
Yuma	35	1,577	617	2,194	2,146.8	39.06	293.10	332.16	130	6	136	15.8	16.5	4,626.56	5,243.19	22,181,672	10,332
Grand Total	996	223,019	61,524	284,543	298,973.6		\$268.29	\$279.81	12,007	817	12,824	20.2	21.6	\$5,417.97	\$5,650.59	\$2,708,028,476	\$10,457
Grand Average																	

*This total varies from the total A.D.A. figure in Tables A, C, and D, as certain districts reporting part-time enrollments were excluded from these tables.

NOTE: Joint districts data are reported in headquarter's county only.

Non-teaching is defined as principals, supervisors, and superintendents who spend 2/3 or more of their time in administrative duties.

SAMPLE SHEET OF CALCULATIONS

for

ADAMS COUNTY

Dist. No.	Enrollment		A.D.A.				Cost Per A.D.A.			Certificated Personnel			A.D.A. Per Teacher			Cur. Exp. Per Cert. Person		1954 Assessed Valuation		1954 School Dist. Levy (mills)	
	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	
(1)	560	560	508.0	7.41	\$146.62	\$154.03	20	20	20	20	25.4	25.4	\$3,912.32	\$5,586,240	\$10,997	13.50	3.00	16.50			
2	19	19	17.3	250.99	717.87	968.86	2	2	2	2	8.7	8.7	8,390.64	3,027,420	174,995	8.00		8.00			
3	609	609	481.4	23.37	199.93	183.30	20	21	21	21	22.9	24.1	4,201.89	3,855,380	8,009	25.00		25.00			
4	3,009	566	3,575	8.51	221.14	229.45	148	12	160	160	19.9	21.5	4,596.05	22,506,610	7,084	18.60	4.50	23.10			
5	4	4	6.8	29.65	537.14	568.79	1	1	1	1	6.8	6.8	3,666.19	792,570	105,410	6.60		6.60			
6	19	19	17.0	72.75	353.53	426.28	1	1	1	1	17.0	17.0	6,010.02	531,070	31,239	12.05		12.05			
7	15	15	14.1		321.72	321.72	1	1	1	1	14.1	14.1	4,536.26	301,940	21,414	13.60		13.60			
8	174	174	150.2	.08	162.87	162.95	6	6	6	6	25.0	25.0	4,079.23	1,401,620	9,332	13.09	3.91	17.00			
9	18	18	17.8	3.03	381.49	384.52	2	2	2	2	8.9	8.9	3,395.24	767,560	43,121	11.50		11.50			
10	1,529	533	1,960.7	16.01	231.44	247.45	86	4	90	90	21.8	22.8	5,042.03	14,222,490	7,254	18.47	5.75	24.22			
11	127	65	189.3	65.50	331.01	396.51	12	1	13	13	14.6	15.8	4,820.02	1,930,533	10,198	25.35	3.50	28.85			
12	121	65	177.9		345.13	345.13	8	1	9	9	19.8	22.2	6,822.12	1,422,632	7,997	17.65	3.70	21.35			
13	13	13	12.6	11.70	299.71	311.41	1	7	1	1	12.8	12.8	3,836.30	1,270,220	99,236	3.00	5.40	8.40			
14	2,237	623	2,860	6.60	220.52	227.12	123	3	130	130	20.1	21.2	4,437.30	10,306,480	3,948	29.37	7.55	36.92			
15	23	23	23.6		942.98	942.98	3	3	3	3	7.9	7.9	7,418.09	1,052,810	44,611	15.60		15.60			
16	47	47	40.6		228.25	228.25	3	3	3	3	13.5	13.5	3,089.00	750,290	18,480	13.67		13.67			
Total	8,494	1,882	9,410.3				437	26	463					\$72,011,475							

*Port War Reserve Fund Levy included.

There may be more than one Road and Interest Levy in some school districts. If so, the B & I mill Levy shown is that which is levied against the greatest amount of assessed valuation in the district.

Note: Joint Districts data are reported in headquarter's county only.

Non-teaching is defined as principals, supervisors, and superintendents who spend 2/3 or more of their time in administrative duties.

RESEARCH DOCUMENT NO. 3

**Analysis of Pupil-Teacher Ratios
in Colorado High Schools,
1955-56 School Year**

July, 1956

TABLE 4

Ratio of enrollment to Teachers in First Class School Districts
as of November 1, 1955

High School	Dist. No.	Grades in H.S.	Enrollment in H.S.*	Teachers** in H.S.	Enrollment per Teacher
Adams City	14	10-12	493	28	17.6
Alamosa	3	9-12	478	21	22.8
Aurora	J. 28	9-12	1,120	49	22.7
Boulder	3	10-12	920	40	23.0
Brighton	27	10-12	393	24	16.4
Brush	2	9-12	282	18	15.7
Canon	1	9-12	543	29	18.7
Center	J. 26	7-12	302	12	25.2
Cherry Creek	5	7-12	703	30	23.4
Cheyenne Jr. & Sr.	12	7-12	489	26	18.8
Colorado Springs Main	11	10-12	1,922	81	23.7
Cripple Creek--Victor	1	9-12	105	6	17.5
Del Notre	C. 7	7-12	331	21	15.8
Delta	J. 50	9-12 ^a	1,172	69	17.0
Denver	1	10-12	10,430	455	22.9
Durango	9	10-12	561	19	29.5
Englewood	1	10-12	1,020	47	21.7
Florence	2	9-12	253	15	16.9
Ft. Collins	5	9-12	1,113	31	35.9
Ft. Lupton	8	7-12	417	20	20.9
Ft. Morgan Jr. & Sr.	3	7-12	1,120	46	24.3
Greeley	6	10-12	825	41	20.1
Ignacio	J. 11	7-12	295	12	24.6
Jefferson	R. 1	9-12 ^b	3,477	176	19.8
La Jara	1	8-12	227	13	17.5
La Junta	11	10-12	412	45	9.2
Leadville	2	10-12	206	14	14.7
Littleton	6	8-12	700	27	25.9
Longmont	17	7-12	1,184	48	24.7
Loveland	2	10-12	486	25	19.4

TABLE 4 (CONT'D)

High School	Dist. No.	Grades in H.S.	Enrollment in H.S.*	Teachers** in H.S.	Enrollment per Teacher
Manitou Springs	14	7-12	410	19	21.6
Mesa County Valley	51	9-12	2,299	111	20.7
Monte Vista	C. 8	9-12	274	17	16.1
Platte Canon	1	9-12	11	1	11.0
Pueblo	60	10-12	2,781	113	24.6
Pueblo	70	9-12	584	30	19.5
Rocky Ford	4	9-12	425	24	17.7
Salida	7	9-12	314	16	19.6
Trinidad	1	9-12	608	30	20.3
Westminster	50	10-12	535	29	18.4
Windsor	4	9-12	163	9	18.1
Total			40,383	1,887	833.9

Grand Average Enrollment Per Teacher - - - - - 21.4

^aTwo high schools have 7--12 H.S. program

^bThree high schools have 7--12, and three schools 10--12.

Frequency Distribution by Highschool Enrollment

<u>H.S. Enrollment</u>	<u>No. Dist.</u>	<u>Enrollment</u>	<u>Teachers</u>	<u>Avg. Enrollment Per Teacher</u>
0-- 25	1	11	1	11.0
26-- 50				
51-- 75				
75--100				
101--200	2	268	15	17.9
201--300	6	1,537	89	17.3
Over 300	32	38,567	1,782	21.6
Total	41	40,383	1,887	

* Enrollment as of November 1, 1955

** As reported in 1955-56, State Department of Education Directory