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# School Finance

Report to the  
COLORADO  
GENERAL ASSEMBLY

Colorado Legislative Council  
Research Publication No. 398  
January 1995

# ACKNOWLEDGEMENTS

The following staff contributed to the development of this study.

**Deb Godshall**, *Principal Analyst II,*  
*Legislative Council Staff*

**Chris Ward**, *Research Associate II,*  
*Legislative Council Staff*

**Michael Mauer**, *Economist*  
*Legislative Council Staff*

**Bill Goosmann**, *Senior Analyst*  
*Legislative Council Staff*

**Henry Sobanet**, *Economist*  
*Legislative Council Staff*

**Nancy McCallin**, *Chief Economist*  
*Legislative Council Staff*

**Alice Boler Ackerman**, *Assistant Director*  
*Office of Legislative Legal Services*

**Michele Brown**, *Staff Attorney*  
*Office of Legislative Legal Services*

# **SCHOOL FINANCE STUDY**

**Report to the  
Colorado General Assembly**

**Research Publication No. 398  
January 1995**

# COLORADO GENERAL ASSEMBLY



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January 1995

To Members of the Sixtieth General Assembly:

Submitted herewith is the study on school finance. The study is required pursuant to Section 22-54-104.5, C.R.S. The purpose of the study was to examine a number of issues relating to the Public School Finance Act of 1994.

Respectfully submitted,

/s/ Charles S. Brown  
Director

CB/DG/bj

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## Study Charge

Section 22-54-104.5, C.R.S., directs the Legislative Council to conduct a study of a variety of school finance issues. Specifically, we are required to:

(I) Examine all hold harmless districts in an effort to identify those factors that significantly increase the cost of educational services, including the service of at-risk students and the cost impact of salary schedules;

(II) Examine the circumstances that contribute to a student becoming at risk, including the availability of data on such circumstances and the definition of at-risk pupils in Section 22-54-103 (1), C.R.S.;

(III) Examine and quantify the impact on each school district of prorating financial support for special education programs, student transportation programs, and programs provided under article 24 of this title; in addition, examine and quantify the unreimbursed cost impact of providing educational services to students whose primary language is not addressed under article 24 of this title;

(IV) Examine and quantify the cost impact on school districts that contain within their boundaries separate and distinct small attendance centers;

(V) Examine the issue of economies of scale and the size factor established pursuant to Section 22-54-104 (5) (b), C.R.S.;

(VI) Examine the ability of rural and urban public schools to meet their capital demands within the constraints of current laws and regulations;

(VII) Examine the feasibility of consolidating districts;

(VIII) Examine those districts that are levying in excess of 40.08 mills to pay for the district's share of the district's total program to determine whether the district levy is appropriate.

Each of the topics in the study directive is addressed in a separate chapter in this report. The chapter numbers correspond to the number preceding the study topic.



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## **Chapter I: Hold Harmless Districts**

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Section 22-54-104.5 (1) (a), C.R.S., requires an examination of all hold harmless districts in an effort to identify those factors that significantly increase the cost of educational services, including the service of at-risk students and the cost impact of salary schedules. Two techniques were used for this portion of the study: regression analysis and peer group comparison. Much of the data for the peer group comparison was compiled prior to the finalization of FY 1994-95 total program amounts. As a result, some hold harmless districts are not included in that portion of the study.

## FY 1994-95 HOLD HARMLESS DISTRICTS

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In FY 1994-95, 33 districts are being funded under the hold harmless provisions of the Public School Finance Act of 1994. This figure compares to an estimate of 26 such districts when House Bill 94-1001 was enacted by the General Assembly. Eight additional districts were added to those originally projected to be hold harmless: One district that was projected to be in the hold harmless category — Denver — was not when the figures for the current year were finalized.

Table I-1 contains a listing of the 33 hold harmless districts in FY 1994-95. The table also indicates the hold harmless amount per pupil and in total, and the per pupil hold harmless amount as a percentage of formula funding per pupil. In eight of the hold harmless districts, the amount of hold harmless funding per pupil is less than one percent of formula funding. Three districts have hold harmless amounts per pupil of between one percent and two percent. On the upper end of the spectrum, the hold harmless amount in nine districts is greater than ten percent, with the greatest dollar and percentage hold harmless in the Park-Park School District. Of the 33 hold harmless districts, seven were also hold harmless in FY 1993-94, the last year of the Public School Finance Act of 1988. These districts were Cherry Creek, Eagle, Park, Aspen, Rangely, Summit, and Washington-Woodlin.

## ANALYSIS OF COST FACTORS

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Two approaches were taken in analyzing the cost factors of hold harmless districts: regression analysis and peer group comparison. Regression analysis is a statistical technique frequently used to determine the effects of one or more independent variables on a single dependent variable. The peer group comparison, a much less sophisticated approach, attempted to group hold harmless and non-hold harmless districts with similar characteristics to compare factors that influence cost. The difference between the regression analysis and the peer group approach is that the former deals with hold harmless districts as a class of districts, while the latter investigates each hold harmless district individually.

Much of the work on this chapter of the report was completed prior to the finalization of total program figures for FY 1994-95. The regression analyses were updated to reflect the inclusion of the eight additional hold harmless districts, although we are also including the results of the regression analyses for the original 26 districts. However, peer groups were not compiled for these additional districts.

Table I-1: FY 1994-95 Hold Harmless Districts and Total and Per Pupil Hold Harmless Amounts

NO. OF DISTS	COUNTY DISTRICT	FY 1994-95 PUPIL COUNT	FY 1994-95 FORMULA TOTAL PROGRAM	FY 1994-95 FORMULA TOTAL PROGRAM PER PUPIL	FY 1994-95 GRAND TOT PRGM INCLUDING HOLD HARM	FY 1994-95 PER PUPIL TOT PRGM INCLUDING HOLD HARM	FY 1994-95 DOLLAR AMOUNT OF HOLD HARM PER PPL	FY 1994-95	FY 1994-95 HOLD HARMLESS AMOUNT
								HOLD HARM \$ AMT PER PUPIL AS % OF FORMULA	
1	ADAMS MAPLETON	4,630.8	19,469,916	4,204	19,706,617	4,256	51	1.2%	236,701
2	ADAMS WESTMINSTER	10,795.0	44,759,906	4,146	44,983,351	4,167	21	0.5%	223,445
3	ARAPAHOE CHERRY CREEK	33,306.0	143,986,686	4,323	150,593,181	4,522	198	4.6%	6,606,495
4	ARAPAHOE LITTLETON	15,261.8	62,352,687	4,086	64,586,869	4,232	146	3.6%	2,234,182
5	ARAPAHOE DEER TRAIL	173.0	1,358,907	7,855	1,365,415	7,893	38	0.5%	6,508
6	BENT MCCLAVE	247.5	1,491,805	6,027	1,619,065	6,542	514	8.5%	127,260
7	CHEYENNE KIT CARSON	135.5	1,027,757	7,585	1,101,166	8,127	542	7.1%	73,410
8	CONEJOS NORTH CONEJOS	1,176.0	5,167,227	4,394	5,357,853	4,556	162	3.7%	190,626
9	EAGLE EAGLE	3,347.0	15,105,536	4,513	17,217,329	5,144	631	14.0%	2,111,793
10	EL PASO MIAMI-YODER	226.8	1,556,580	6,863	1,603,031	7,068	205	3.0%	46,451
11	GRAND EAST GRAND	1,056.5	4,652,786	4,404	5,438,781	5,148	744	16.9%	785,995
12	KIOWA PLAINVIEW	87.0	701,004	8,058	763,816	8,779	722	9.0%	62,811
13	KIT CARSON HI PLAINS	130.0	977,925	7,523	1,119,596	8,612	1,090	14.5%	141,671
14	LA PLATA DURANGO	4,491.0	19,141,767	4,262	21,823,456	4,859	597	14.0%	2,681,689
15	LA PLATA BAYFIELD	912.5	4,279,438	4,690	4,297,845	4,710	20	0.4%	18,407
16	LAS ANIMAS PRIMERO	178.0	1,305,593	7,335	1,386,618	7,790	455	6.2%	81,025
17	LAS ANIMAS AGUILAR	171.0	1,235,236	7,224	1,240,102	7,252	28	0.4%	4,866
18	LAS ANIMAS KIM	75.5	625,610	8,286	653,952	8,662	375	4.5%	28,342
19	LOGAN FRENCHMAN	186.0	1,343,882	7,225	1,362,505	7,325	100	1.4%	18,623
20	LOGAN PLATEAU	142.5	1,107,177	7,770	1,147,520	8,053	283	3.6%	40,342
21	MESA DEBEQUE	150.5	1,165,632	7,745	1,175,432	7,810	65	0.8%	9,800
22	MOFFAT MOFFAT	2,752.8	10,971,361	3,986	11,254,932	4,089	103	2.6%	283,571
23	MORGAN WELDON	111.3	955,011	8,581	963,533	8,657	77	0.9%	8,522
24	PARK PARK	488.3	2,442,724	5,003	2,993,677	6,131	1,128	22.6%	550,953
25	PITKIN ASPEN	1,148.5	6,643,275	5,784	7,356,303	6,405	621	10.7%	713,028
26	RIO BLANCO RANGELY	702.6	3,083,100	4,388	3,733,181	5,313	925	21.1%	650,081
27	ROUTT STEAMBOAT SPRINGS	1,834.5	8,216,734	4,479	9,306,278	5,073	594	13.3%	1,089,544
28	SAN JUAN SILVERTON	99.3	850,850	8,568	861,709	8,678	109	1.3%	10,858
29	SEDGWICK PLATTE VALLEY	156.5	1,177,955	7,527	1,252,184	8,001	474	6.3%	74,229
30	SUMMIT SUMMIT	2,035.8	9,351,707	4,594	10,826,787	5,318	725	15.8%	1,475,080
31	WASHINGTON ARICKAREE	133.0	1,069,059	8,038	1,076,882	8,097	59	0.7%	7,823
32	WASHINGTON WOODLIN	125.8	990,492	7,874	1,065,624	8,471	597	7.6%	75,132
33	WELD KEENESBURG	1,326.5	5,879,285	4,432	5,919,663	4,463	30	0.7%	40,378
	**STATE TOTAL**	87,794.8	384,444,610	4,379	405,154,252	4,615	236	5.4%	20,709,641

## Regression Analysis

Regression analysis was performed to determine: (1) whether certain cost factors affect hold harmless districts differently than non-hold harmless districts, and (2) whether different factors affect hold harmless and non-hold harmless districts. We began the regression analysis with 24 data elements. Since personnel costs comprise approximately 80 to 90 percent of school district budgets, the universe of data included a variety of elements regarding the number of employees relative to the number of students (ratios) and the cost of those employees (salary levels). In addition, the study directive specifically required the use of data related to at-risk students and the cost impact of salary schedules. The following data elements were used in the regression analysis:

- pupil count
- free lunch count
- average teacher salary
- average teacher experience in district
- total average teacher experience
- percent of teachers with a master's degree or more
- beginning salary for a teacher with a bachelor's degree
- beginning salary for a teacher with a master's degree
- salary for a teacher with a master's degree and ten years experience
- free lunch percentage in grades one through eight
- assessed value per pupil
- cost of living
- select teacher ratio
- total teacher ratio
- teacher ratio
- non-teacher certificated ratio
- non-certificated staff ratio
- total employee ratio
- average pupils per school
- pupils per square mile
- percent special education students
- transportation costs per pupil
- percent of students identified under the English Language Proficiency Act
- average salary for non-teacher certificated staff

Although not a cost factor, assessed value per pupil was included in the data elements to see if it produced any results.

Models were formulated after experimentation with the data elements. The elements were used as independent variables to explain the differences in cost, or in this case, per pupil school finance act revenue. The models developed appeared to explain a large degree of variance, and had an adjusted  $R^2$  above .80. The models specifically for hold harmless districts had an adjusted  $R^2$  above .90.

*Do the Same Variables Affect Hold Harmless and Non-Hold Harmless Districts Differently?* In this analysis, all districts were included to determine the data elements that best explained cost. The best model expressed per pupil revenues as a function of the non-teacher certificated staff/pupil ratio, the teacher/pupil ratio, per pupil transportation costs, pupils per school, and average teacher salary. Then, a technique was applied that involved the use of dummy variables to see if there were differences between hold harmless and non-hold harmless districts for this given cost specification. In other words, these variables were tested to determine whether they influence hold harmless districts in a different manner than non-hold harmless districts. Using this

technique, we could not conclude that a structural difference exists between the two groups of school districts for the specified data elements. This particular cost structure did not reveal significantly different costs in one group versus the other. This was the case for both the projected group of hold harmless districts and the final group.

*Do Different Variables Affect Hold Harmless and Non-hold Harmless Districts?* In this approach, the data elements were analyzed separately for the hold harmless and non-hold harmless districts to determine whether different variables explained per pupil revenues in the two groups. We began with the same model described above and modified it as necessary. For the non-hold harmless districts, no changes were required in the model. Per pupil revenues continued to be a function of the five data elements described above: the two employment ratios, per pupil transportation, average teacher salary, and pupils per school.

The variables that were significant in the original 26 hold harmless districts were the non-teacher certificated staff/pupil ratio, the teacher/pupil ratio, and the assessed value per pupil. In contrast, when all 33 districts were used, the explanatory variables were the same as in the overall model except that per pupil transportation was eliminated. Thus, per pupil revenues were best explained by the teacher/pupil ratio, the non-teaching certificated staff ratio, pupils per school, and average teacher salary. The differences in the cost specifications between the 26-district group and the 33-district group may be caused by the nature of the districts added. The extra eight districts produced a relatively significant percentage increase in the number of hold harmless districts but, as a group, these districts tend to be more marginal hold harmless districts than the group as a whole. With the addition of these districts, the cost factors affecting hold harmless districts are essentially the same as those for non-hold harmless districts.

*Comparison of Two Approaches.* The analysis indicates that there does not seem to be significant differences in the determinants of per pupil revenues between hold harmless and non-hold harmless districts. Also, the two groups are not affected differently by a given set of cost variables. In all the models, the most significant variable affecting costs, as measured by the impact on per pupil revenue, is the ratio of teachers to students.

### **Peer Group Comparison**

The peer group approach attempts to identify non-hold harmless districts that are similar to hold harmless districts in terms of cost of living and pupil count, the two major differentiating factors in the distribution of revenue under the school finance act. These groups were initially developed so that regression analysis could be performed to determine whether different cost factors affect hold harmless districts. The number of districts in each sample proved to be insufficient to perform statistically valid regressions, however. Rather than discard the peer groups, we standardized and arrayed certain cost data by peer group to examine the selected data elements. The following paragraphs discuss the development of the peer groups, the methodology for

selecting and standardizing comparison data, results of the peer group comparisons (contained in Table I-2), and limitations of the data and methodology.

*Development of Peer Groups.* A peer group, based on districts that are comparable in terms of size and cost of living, was selected for each of the 26 districts that were originally projected to be hold harmless. To ensure a representative sample of peer districts, we identified the 35 districts (or 20 percent of the state's 176 districts) closest to the applicable hold harmless district in both enrollment and cost of living. For inclusion in the peer group, a district must have been in both the enrollment and cost of living samples. This step whittled down the size of the peer groups significantly. In some of the peer groups, it became apparent that the range in cost of living or pupil count was excessive. This phenomenon tended to occur at the high and low ends of the cost-of-living and enrollment spectrums. For example, the 35 districts closest in cost of living to Aspen produced such a wide range in cost of living that it could be argued that the districts in the peer group were no longer similar. To mitigate this situation, maximum differences in enrollment and cost of living for peer groups were established. Any district with an enrollment difference greater than 70 percent of the hold harmless district's enrollment was eliminated from the peer group; the ceiling for the cost-of-living differential was 4 percent.

Peer groups for 23 hold harmless districts are contained in Table I-2. The district for which the peer group was developed is indicated in bold-face type. There were no districts that met the criteria for the Aspen district, and only one district, Steamboat Springs (a hold harmless district), met the criteria for the Summit County School District. Thus, these two districts are not included in Table I-2. It should be noted that many of the peer groups contain multiple hold harmless districts.

*Selection and Standardization of Data.* As with the regression models, data on the number of employees relative to the number of students and compensation levels were selected because of the importance of personnel costs in school district budgets. The district ratio of the number of total employees to students was selected as the measure of the number of employees, while the average teacher salary was chosen as a proxy for compensation level. To incorporate data on at-risk students, three elements were included for each district: the percentage of students in grades one through eight participating in the free lunch program, the percentage of students identified for services under the English Language Proficiency Act, and the percentage of students served in special education programs. Because they were included in the regression models explaining school district costs, the average number of pupils per school and per pupil transportation costs were also selected as data elements.

A comparison of the selected data elements is difficult because of differing units of measurement, such as salary levels and ratios. This problem is addressed through the standardization of the data elements. The standardized value, sometimes called the Z-score, indicates how many standard deviations above or below the mean an observation falls. When applying this definition to Table I-2, the figures should be viewed in terms of their relationship to the mean. For example, a positive average teacher salary in column 2 indicates an average salary greater than the mean. The higher the number, the greater the distance from the mean. Applying the same philosophy to total employee ratios in column 3, a positive number signifies a ratio greater than the state average and a negative number means the district's ratio is less than the state average.

*Results of Peer Group Comparisons.* Table I-2 is based on the premise that districts similar in cost of living and enrollment would be expected to have similar salary and staffing patterns. To the extent that district patterns deviate from the norm, higher or lower costs result. Since hold harmless districts receive more revenue than comparable districts, we are looking for factors that increase costs. Factors other than personnel costs also affect district budgets and may not be related to school district enrollment or cost of living. Table I-2 presents the standardized values for the seven data elements previously described for hold harmless districts and each such district's peer group. The cost variables are arrayed so as to permit comparison among the districts in a grouping. In addition, some of the data elements are summed so that the relationship between two or more variables can be evaluated.

Column 2 of Table I-2 lists the standardized value for each district's average teacher salary. Column 3 provides the standardized value for total employee/pupil ratios. Unlike average salary, in which a high value translates into higher costs, low values signify higher costs for this element. A lower value compared to other districts means relatively more employees and, thus, higher costs. Separately viewed, each of these two components provide information on district costs relative to other districts.

The interaction between the number of employees on a district's payroll and the salary level of those employees would also appear to be an important determinant of district costs. For example, a district may choose to have high salary levels, but employ relatively fewer people. All else constant, this type of district would have lower costs than a district that also pays high salaries, but maintains a low staff/pupil ratio. Column 4 is intended to illustrate these types of interactions. The figure in column 4 is the result of subtracting column 3 from column 2.

There are a variety of other factors that impact a particular district's costs relative to other districts. Although certainly not an exhaustive list, columns 5 through 9 illustrate five of these factors: pupils per school, per pupil transportation costs, percent of students receiving special education services, percent of the student enrollment identified for English language proficiency programs, and the percentage of students in grades one through eight participating in the federal free lunch program. The latter three columns are provided as a measure of the at-risk population as required by the study directive. The combined impact of these three columns is indicated in

column 10. Intuitively, the average number of pupils per school inversely affects costs; that is, a district with a higher number of average pupils per school relative to other similar districts will have lower costs.

*Observations from Table I-2.* Overall, the three cost components that seem to provide the most information are average teacher salary, total employee ratio, and the combination of these two factors. The percentage of pupils served in the English language proficiency program is the least helpful, perhaps because so many districts have similar values. The at-risk data proved to be the most difficult to analyze generally. One theory for this difficulty is that, until now, it has never been a component of a school finance act that generated additional revenue for districts. To the extent that districts in a peer group were in the same funding category under the 1988 school finance act, it would seem reasonable that districts with high at-risk factors would be less likely to be hold harmless than those with low at-risk values, particularly in the free-lunch cost component. Pupils per school was informative in a limited number of peer groups.

*Metro-area Districts.* As can be seen in Table I-2, Adams-Mapleton is the only hold harmless district in its peer group, but it does not appear to distinguish itself from the other districts in any of the factors. The same holds true for Adams-Westminster, although it has a relatively low employee ratio (second in its peer group of ten districts). Similarly, Arapahoe-Littleton is second in its group in the average salary/employee ratio component. The district that exceeds Littleton in this measure, Commerce City, is also ranked first on the at-risk index, but is not a hold harmless district. Arapahoe-Cherry Creek is unlike the previous three hold harmless districts in that it does distinguish itself from its peer group. It is first in its group in average salary, the employee ratio, and the combination of salary and ratio, indicating high personnel costs relative to its peers.

*Districts with Enrollments of Less than 300.* Seventeen districts with enrollments of less than 300 are classified as hold harmless districts. We developed peer groups for ten of these districts. Many of the districts overlap in these groups, and the groups include some of the hold harmless districts for which we were unable to develop peer districts.

Seven of the 14 districts in the Cheyenne-Kit Carson peer group are hold harmless districts. When ranked by the average salary/employee ratio combination, all but one of the districts have values higher than those for the non-hold harmless districts. Similarly, there are four hold harmless districts in the Kiowa-Plainview grouping of ten districts. In the average salary/employee ratio column, three of the hold harmless districts have the highest values relative to the other districts. Interestingly, the four hold harmless districts in this group had the lowest free lunch values. With regard to the average salary/employee ratio component, the hold harmless districts in the Kit Carson-Hi Plains, Las Animas-Primero, Las Animas-Aguilar, Sedgwick-Platte Valley, Washington Arickaree, and Washington-Woodlin groups illustrate the same tendency as in the Kit Carson and Plainview groupings.



Seven of the 17 districts with enrollments of less than 300 have enrollments of between 150 and 300. All of these districts experienced increases in enrollment in October 1994, several in the range of 12 to 13 percent and one as high as 25 percent. This is interesting to note because, under the 1988 school finance act, increasing enrollment districts in this pupil count range would have seen declines in per pupil funding. The hold harmless provision in the 1994 act held the per pupil funding at the prior year's level, however.

*Mountain Districts.* The peer group for the East Grand School District contains 12 districts, of which only one other is hold harmless. East Grand ranked relatively high in both average salary and employee ratio. The combination of the two placed the district first in its group. The Steamboat Springs grouping also includes Summit County, a hold harmless district for which we did not include a separate peer group. Summit and Steamboat Springs ranked first and second, respectively, in the group in average salary as well as the salary/ratio combination. They are at the bottom of the group in terms of free lunch. Although we have included a peer group for Eagle, the information is not very enlightening because of the small number of districts in the group, of which most are hold harmless.

*Southern and Southwestern Districts.* Among its peer group, Park ranks first in the combination measure, as well as employee ratio, and in pupils per school and transportation costs per pupil. There appears to be no particular cost factor that distinguishes Durango from its peer group; North Conejos is second in its group in average teacher salary, following only Rangely.

*Rangely* has its own peer group, and it is also included as a comparable district for North Conejos. Within its own grouping, Rangely is the only hold harmless district. The district's salary costs appear to far exceed those of other districts in the group. Rangely's ranking is first in transportation cost per pupil and last in at risk.

*Limitations of the Data and Methodology.* The data in Table I-2 is simply intended to show how factors that may influence cost differ among districts, and how the interaction of these factors can heighten or diminish the impact. The data cannot be used to determine the amount of cost differential caused by variations in the factors, or the cost impact of the combined figures. This type of analysis would require knowledge of how individual components affect cost on a district-by-district basis, which we do not have.

## SUMMARY OF FINDINGS

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- ◆ The study directive called for an examination of hold harmless districts to identify those factors that significantly increase the cost of educational services. Two approaches were taken: regression analysis and peer group comparison.
  
- ◆ The regression analysis took two tacts: determining whether cost factors that impact the entire universe of districts impact hold harmless districts differently, and determining whether hold harmless districts have different cost structures than non-hold harmless districts. With regard to the second regression model, there does not seem to be significant differences in the determinants of per pupil revenues between hold harmless and non-hold harmless districts. The first regression indicates that the two groups are not affected differently by a given set of cost variables. The analysis may be affected by districts "on the margin" in terms of being hold harmless.
  
- ◆ The peer group comparison revealed that many of the hold harmless districts have higher cost indicators than similarly situated districts, particularly in the combination of average teacher salary and total employee ratio.

*Table I-2: Comparison of Standardized Cost Factors Among Hold Harmless Districts and Peer Districts  
as Determined by Pupil Count and Cost of Living*

COUNTY	DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		HOLD HARMLESS DISTRICTS	AVERAGE TEACHER SALARY	TOTAL EMPLOYEE RATIO	SUBTOTAL AVG SAL MINUS EMP RATIO	PUPILS PER SCHOOL	PER PPL TRANS COST	PERCENT SPECIAL ED	PERCENT ELPA IDENTIFIED	PERCENT FREE LUNCH	SUBTOTAL SUM OF COL 7 THRU 9
<b>ADAMS</b>	<b>MAPLETON</b>	<b>1</b>	<b>1.609</b>	<b>1.114</b>	<b>0.494</b>	<b>1.195</b>	<b>-0.846</b>	<b>0.225</b>	<b>0.953</b>	<b>-0.052</b>	<b>1.126</b>
ADAMS	COMMERCE CITY	0	1.796	0.922	0.874	1.440	-0.789	0.925	0.970	1.230	3.125
ADAMS	BRIGHTON	0	1.896	1.210	0.686	1.407	-0.386	0.702	2.471	0.235	3.408
ARAPAHOE	ENGLEWOOD	0	1.755	1.258	0.497	1.304	-0.924	-0.053	-0.263	-0.157	-0.474
ARAPAHOE	SHERIDAN	0	1.433	1.162	0.270	0.664	-0.700	2.225	0.158	1.073	3.456
CLEAR CREEK	CLEAR CREEK	0	0.839	0.442	0.397	0.107	-0.106	-0.391	-0.490	-0.821	-1.703
ELBERT	ELIZABETH	0	-0.181	0.490	-0.671	1.549	-0.235	1.334	-0.587	-1.193	-0.446
EL PASO	CHEYENNE MOUNTAIN	0	1.271	2.459	-1.189	1.146	-1.056	-0.369	-0.504	-1.536	-2.408
EL PASO	LEWIS-PALMER	0	0.718	1.835	-1.116	1.919	-0.317	-0.154	-0.587	-1.411	-2.152
EL PASO	FALCON	0	0.100	0.922	-0.822	1.175	-0.151	1.297	-0.469	-0.667	0.161
GARFIELD	RIFLE	0	0.175	1.403	-1.228	0.793	-0.407	1.298	-0.014	-0.318	0.966
GUNNISON	GUNNISON	0	-0.202	0.490	-0.692	-0.321	-0.304	0.727	-0.558	-1.178	-1.010
MONTROSE	MONTROSE	0	0.240	1.114	-0.874	0.782	-0.455	-0.168	0.131	0.157	0.119
WELD	FORT LUPTON	0	0.036	0.490	-0.454	2.022	-0.423	0.905	2.215	1.212	4.332
<b>ADAMS</b>	<b>WESTMINSTER</b>	<b>1</b>	<b>1.213</b>	<b>0.730</b>	<b>0.483</b>	<b>1.245</b>	<b>-0.788</b>	<b>0.801</b>	<b>0.363</b>	<b>0.218</b>	<b>1.382</b>
ADAMS	MAPLETON	1	1.609	1.114	0.494	1.195	-0.846	0.225	0.953	-0.052	1.126
ARAPAHOE	LITTLETON	1	1.775	0.922	0.853	2.458	-0.760	0.232	-0.371	-1.181	-1.320
ADAMS	COMMERCE CITY	0	1.796	0.922	0.874	1.440	-0.789	0.925	0.970	1.230	3.125
ADAMS	BRIGHTON	0	1.896	1.210	0.686	1.407	-0.386	0.702	2.471	0.235	3.408
BOULDER	ST VRAIN	0	1.920	1.162	0.758	1.316	-0.805	-0.454	0.263	-0.749	-0.940
DELTA	DELTA	0	0.219	0.586	-0.367	0.274	-0.288	0.189	0.007	0.396	0.592
EL PASO	ACADEMY	0	0.941	1.066	-0.125	2.321	-0.446	-0.104	-0.440	-1.462	-2.006
EL PASO	LEWIS-PALMER	0	0.718	1.835	-1.116	1.919	-0.317	-0.154	-0.587	-1.411	-2.152
MONTROSE	MONTROSE	0	0.240	1.114	-0.874	0.782	-0.455	-0.168	0.131	0.157	0.119
<b>ARAPAHOE</b>	<b>CHERRY CREEK</b>	<b>1</b>	<b>2.734</b>	<b>0.538</b>	<b>2.196</b>	<b>2.981</b>	<b>-0.616</b>	<b>0.464</b>	<b>0.017</b>	<b>-1.292</b>	<b>-0.812</b>
ADAMS	WESTMINSTER	1	1.213	0.730	0.483	1.245	-0.788	0.801	0.363	0.218	1.382
ARAPAHOE	LITTLETON	1	1.775	0.922	0.853	2.458	-0.760	0.232	-0.371	-1.181	-1.320
ADAMS	NORTHGLENN	0	1.855	1.066	0.789	2.103	-0.838	1.003	-0.266	-0.472	0.265
ARAPAHOE	AURORA	0	2.081	0.586	1.495	2.200	-0.714	1.209	0.576	0.042	1.827

*Table I-2: Comparison of Standardized Cost Factors Among Hold Harmless Districts and Peer Districts  
as Determined by Pupil Count and Cost of Living*

COUNTY DISTRICT	(1) HOLD HARMLESS DISTRICTS	(2) AVERAGE TEACHER SALARY	(3) TOTAL EMPLOYEE RATIO	(4) SUBTOTAL AVG SAL MINUS EMP RATIO	(5) PUPILS PER SCHOOL	(6) PER PPL TRANS COST	(7) PERCENT SPECIAL ED	(8) PERCENT ELPA IDENTIFIED	(9) PERCENT FREE LUNCH	(10) SUBTOTAL SUM OF COL 7 THRU 9
Boulder ST VRAIN	0	1.920	1.162	0.758	1.316	-0.805	-0.454	0.263	-0.749	-0.940
Boulder BOULDER	0	2.026	0.682	1.344	1.351	-0.451	1.784	0.669	-0.983	1.470
DOUGLAS DOUGLAS	0	0.921	1.018	-0.097	2.020	-0.322	0.004	-0.460	-1.531	-1.988
EL PASO ACADEMY	0	0.941	1.066	-0.125	2.321	-0.446	-0.104	-0.440	-1.462	-2.006
<b>ARAPAHOE LITTLETON</b>	<b>1</b>	<b>1.775</b>	<b>0.922</b>	<b>0.853</b>	<b>2.458</b>	<b>-0.760</b>	<b>0.232</b>	<b>-0.371</b>	<b>-1.181</b>	<b>-1.320</b>
ADAMS WESTMINSTER	1	1.213	0.730	0.483	1.245	-0.788	0.801	0.363	0.218	1.382
ADAMS NORTHGLENN	0	1.855	1.066	0.789	2.103	-0.838	1.003	-0.266	-0.472	0.265
ADAMS COMMERCE CITY	0	1.796	0.922	0.874	1.440	-0.789	0.925	0.970	1.230	3.125
Boulder ST VRAIN	0	1.920	1.162	0.758	1.316	-0.805	-0.454	0.263	-0.749	-0.940
DOUGLAS DOUGLAS	0	0.921	1.018	-0.097	2.020	-0.322	0.004	-0.460	-1.531	-1.988
EL PASO ACADEMY	0	0.941	1.066	-0.125	2.321	-0.446	-0.104	-0.440	-1.462	-2.006
MONTROSE MONTROSE	0	0.240	1.114	-0.874	0.782	-0.455	-0.168	0.131	0.157	0.119
<b>CHEYENNE KIT CARSON</b>	<b>1</b>	<b>-0.314</b>	<b>-1.960</b>	<b>1.646</b>	<b>-1.065</b>	<b>1.711</b>	<b>-1.395</b>	<b>1.211</b>	<b>-0.316</b>	<b>-0.500</b>
BENT MCCLAVE	1	-0.584	-0.759	0.175	-0.780	0.026	-0.625	-0.587	2.506	1.294
KIOWA PLAINVIEW	1	-0.592	-2.104	1.512	-1.162	3.004	-1.345	-0.587	-1.065	-2.997
KIT CARSON HI PLAINS	1	-0.896	-2.056	1.160	-1.105	1.667	-0.467	-0.587	-0.968	-2.022
LAS ANIMAS AGUILAR	1	-0.668	-1.239	0.571	-0.943	-0.085	-0.180	-0.587	1.276	0.508
SEDGWICK PLATTE VLY	1	-1.078	-1.768	0.690	-1.013	-0.121	-0.838	-0.587	0.186	-1.240
WASHINGTON WOODLIN	1	-0.577	-1.720	1.143	-1.092	4.013	-1.953	-0.587	-0.634	-3.174
BACA PRITCHETT	0	-1.510	-1.768	0.258	-1.170	1.004	3.392	-0.587	1.914	4.718
BACA VILAS	0	-1.805	-1.816	0.011	-1.203	-0.514	0.419	-0.587	1.346	1.177
BACA CAMPO	0	-1.930	-2.248	0.318	-1.211	1.529	-0.635	-0.587	-0.024	-1.246
KIT CARSON BETHUNE	0	-0.825	-1.047	0.222	-1.113	-0.324	-1.990	-0.587	0.101	-2.476
LINCOLN KARVAL	0	-1.136	-1.576	0.440	-1.173	4.783	-1.360	-0.587	-0.285	-2.233
SAGUACHE MTN VALLEY	0	-0.945	-1.047	0.102	-0.883	0.175	-1.722	-0.587	0.900	-1.409
SAGUACHE MOFFAT	0	-1.872	-1.576	-0.297	-1.169	0.452	-1.573	-0.587	1.285	-0.875

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*Table I-2: Comparison of Standardized Cost Factors Among Hold Harmless Districts and Peer Districts as Determined by Pupil Count and Cost of Living*

COUNTY DISTRICT	(1) HOLD HARMLESS DISTRICTS	(2) AVERAGE TEACHER SALARY	(3) TOTAL EMPLOYEE RATIO	(4) SUBTOTAL AVG SAL MINUS EMP RATIO	(5) PUPILS PER SCHOOL	(6) PER PPL TRANS COST	(7) PERCENT SPECIAL ED	(8) PERCENT ELPA IDENTIFIED	(9) PERCENT FREE LUNCH	(10) SUBTOTAL SUM OF COL 7 THRU 9
<b>CONEJOS NORTH CONEJOS</b>	<b>1</b>	<b>0.418</b>	<b>0.586</b>	<b>-0.168</b>	<b>-0.124</b>	<b>-0.504</b>	<b>-0.466</b>	<b>0.319</b>	<b>1.317</b>	<b>1.169</b>
RIO BLANCO RANGELY	1	1.371	0.826	0.544	0.049	0.027	-0.128	-0.587	-1.132	-1.848
OTERO ROCKY FORD	0	-0.392	-0.087	-0.305	0.219	-0.878	0.824	0.235	2.656	3.715
PHILLIPS HOLYOKE	0	-0.520	0.250	-0.769	0.252	-0.328	-0.124	0.228	-0.479	-0.374
RIO BLANCO MEEKER	0	0.318	0.538	-0.220	-0.083	-0.381	0.003	-0.587	-0.836	-1.421
RIO GRANDE DEL NORTE	0	0.062	-0.038	0.101	-0.436	-0.459	0.529	-0.525	1.519	1.523
RIO GRANDE MONTE VISTA	0	0.206	1.066	-0.860	0.488	-0.690	0.223	1.208	1.136	2.567
SAGUACHE CENTER	0	-0.782	0.058	-0.840	-0.164	-0.635	0.354	3.794	3.281	7.429
<b>EAGLE EAGLE</b>	<b>1</b>	<b>1.314</b>	<b>-0.087</b>	<b>1.401</b>	<b>0.537</b>	<b>0.048</b>	<b>-0.054</b>	<b>1.082</b>	<b>-0.827</b>	<b>0.202</b>
ROUTT STEAMBOAT SPRINGS	1	1.732	0.874	0.858	1.020	-0.154	-0.809	-0.587	-1.420	-2.816
SUMMIT SUMMIT	1	2.384	0.154	2.231	0.408	-0.320	0.616	-0.348	-1.345	-1.077
GARFIELD ROARING FORK	0	1.040	1.114	-0.074	0.904	-0.607	0.522	0.847	-0.968	0.401
<b>GRAND EAST GRAND</b>	<b>1</b>	<b>0.412</b>	<b>-0.087</b>	<b>0.499</b>	<b>-0.262</b>	<b>-0.320</b>	<b>-0.216</b>	<b>-0.587</b>	<b>-0.988</b>	<b>-1.792</b>
WELD KEENESBURG	1	0.207	1.114	-0.908	0.382	0.359	1.135	1.671	-0.454	2.352
ARCHULETA ARCHULETA	0	0.279	1.162	-0.884	0.879	-0.284	-0.370	-0.587	0.153	-0.804
CHAFFEE BUENA VISTA	0	-0.287	0.250	-0.537	-0.214	-0.175	-0.995	-0.587	-0.057	-1.640
EL PASO MANITOU SPRINGS	0	0.476	0.922	-0.446	0.351	-0.784	0.632	-0.587	-0.709	-0.665
LAKE LAKE	0	0.278	0.442	-0.164	0.562	-0.769	-0.190	-0.020	0.484	0.274
LAS ANIMAS TRINIDAD	0	0.506	0.922	-0.416	0.285	-0.702	0.903	-0.587	2.025	2.341
MORGAN BRUSH	0	-0.230	0.154	-0.384	0.501	-0.347	0.688	0.979	0.335	2.001
WELD EATON	0	0.174	1.258	-1.085	0.297	-0.546	-0.338	2.925	-0.173	2.413
WELD JOHNSTOWN	0	0.138	1.066	-0.929	0.249	-0.744	1.265	3.478	0.264	5.007
WELD PLATTE VLY	0	0.017	0.586	-0.569	1.159	-0.280	3.862	1.640	-0.024	5.477
WELD AULT-HIGHLND	0	-0.266	0.682	-0.948	0.098	-0.353	2.561	3.439	1.140	7.140
YUMA WEST YUMA	0	-0.551	-0.183	-0.368	-0.388	-0.172	0.484	0.017	-0.006	0.496

*Table I-2: Comparison of Standardized Cost Factors Among Hold Harmless Districts and Peer Districts  
as Determined by Pupil Count and Cost of Living*

COUNTY DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	HOLD HARMLESS DISTRICTS	AVERAGE TEACHER SALARY	TOTAL EMPLOYEE RATIO	SUBTOTAL AVG SAL MINUS EMP RATIO	PUPILS PER SCHOOL	PER PPL TRANS COST	PERCENT SPECIAL ED	PERCENT ELPA IDENTIFIED	PERCENT FREE LUNCH	SUBTOTAL SUM OF COL 7 THRU 9
<b>KIOWA PLAINVIEW</b>	<b>1</b>	<b>-0.592</b>	<b>-2.104</b>	<b>1.512</b>	<b>-1.162</b>	<b>3.004</b>	<b>-1.345</b>	<b>-0.587</b>	<b>-1.065</b>	<b>-2.997</b>
CHEYENNE KIT CARSON	1	-0.314	-1.960	1.646	-1.065	1.711	-1.395	1.211	-0.316	-0.500
KIT CARSON HI PLAINS	1	-0.896	-2.056	1.160	-1.105	1.667	-0.467	-0.587	-0.968	-2.022
LAS ANIMAS KIM	1	-1.798	-2.104	0.306	-1.203	4.296	0.472	0.590	-0.882	0.180
BACA PRITCHETT	0	-1.510	-1.768	0.258	-1.170	1.004	3.392	-0.587	1.914	4.718
BACA VILAS	0	-1.805	-1.816	0.011	-1.203	-0.514	0.419	-0.587	1.346	1.177
BACA CAMPO	0	-1.930	-2.248	0.318	-1.211	1.529	-0.635	-0.587	-0.024	-1.246
KIT CARSON BETHUNE	0	-0.825	-1.047	0.222	-1.113	-0.324	-1.990	-0.587	0.101	-2.476
LAS ANIMAS BRANSON	0	-1.858	-2.008	0.150	-1.276	2.734	-2.057	-0.587	2.656	0.012
LINCOLN KARVAL	0	-1.136	-1.576	0.440	-1.173	4.783	-1.360	-0.587	-0.285	-2.233
<b>KIT CARSON HI PLAINS</b>	<b>1</b>	<b>-0.896</b>	<b>-2.056</b>	<b>1.160</b>	<b>-1.105</b>	<b>1.667</b>	<b>-0.467</b>	<b>-0.587</b>	<b>-0.968</b>	<b>-2.022</b>
CHEYENNE KIT CARSON	1	-0.314	-1.960	1.646	-1.065	1.711	-1.395	1.211	-0.316	-0.500
KIOWA PLAINVIEW	1	-0.592	-2.104	1.512	-1.162	3.004	-1.345	-0.587	-1.065	-2.997
LAS ANIMAS AGUILAR	1	-0.668	-1.239	0.571	-0.943	-0.085	-0.180	-0.587	1.276	0.508
LAS ANIMAS KIM	1	-1.798	-2.104	0.306	-1.203	4.296	0.472	0.590	-0.882	0.180
BACA PRITCHETT	0	-1.510	-1.768	0.258	-1.170	1.004	3.392	-0.587	1.914	4.718
BACA VILAS	0	-1.805	-1.816	0.011	-1.203	-0.514	0.419	-0.587	1.346	1.177
BACA CAMPO	0	-1.930	-2.248	0.318	-1.211	1.529	-0.635	-0.587	-0.024	-1.246
KIT CARSON BETHUNE	0	-0.825	-1.047	0.222	-1.113	-0.324	-1.990	-0.587	0.101	-2.476
LAS ANIMAS BRANSON	0	-1.858	-2.008	0.150	-1.276	2.734	-2.057	-0.587	2.656	0.012
<b>LA PLATA DURANGO</b>	<b>1</b>	<b>1.159</b>	<b>0.538</b>	<b>0.621</b>	<b>0.996</b>	<b>-0.456</b>	<b>0.085</b>	<b>-0.295</b>	<b>-0.587</b>	<b>-0.797</b>
ADAMS MAPLETON	1	1.609	1.114	0.494	1.195	-0.846	0.225	0.953	-0.052	1.126
ROUTT STEAMBOAT SPRINGS	1	1.732	0.874	0.858	1.020	-0.154	-0.809	-0.587	-1.420	-2.816
ADAMS COMMERCE CITY	0	1.796	0.922	0.874	1.440	-0.789	0.925	0.970	1.230	3.125
ADAMS BRIGHTON	0	1.896	1.210	0.686	1.407	-0.386	0.702	2.471	0.235	3.408
ARAPAHOE ENGLEWOOD	0	1.755	1.258	0.497	1.304	-0.924	-0.053	-0.263	-0.157	-0.474
ARAPAHOE SHERIDAN	0	1.433	1.162	0.270	0.664	-0.700	2.225	0.158	1.073	3.456
CLEAR CREEK CLEAR CREEK	0	0.839	0.442	0.397	0.107	-0.106	-0.391	-0.490	-0.821	-1.703
ELBERT ELIZABETH	0	-0.181	0.490	-0.671	1.549	-0.235	1.334	-0.587	-1.193	-0.446

*Table I-2: Comparison of Standardized Cost Factors Among Hold Harmless Districts and Peer Districts  
as Determined by Pupil Count and Cost of Living*

COUNTY DISTRICT	(1) HOLD HARMLESS DISTRICTS	(2) AVERAGE TEACHER SALARY	(3) TOTAL EMPLOYEE RATIO	(4) SUBTOTAL AVG SAL MINUS EMP RATIO	(5) PUPILS PER SCHOOL	(6) PER PPL TRANS COST	(7) PERCENT SPECIAL ED	(8) PERCENT ELPA IDENTIFIED	(9) PERCENT FREE LUNCH	(10) SUBTOTAL SUM OF COL 7 THRU 9
EL PASO LEWIS-PALMER	0	0.718	1.835	-1.116	1.919	-0.317	-0.154	-0.587	-1.411	-2.152
GUNNISON GUNNISON	0	-0.202	0.490	-0.692	-0.321	-0.304	0.727	-0.558	-1.178	-1.010
MONTROSE MONTROSE	0	0.240	1.114	-0.874	0.782	-0.455	-0.168	0.131	0.157	0.119
<b>LAS ANIMAS PRIMERO</b>	<b>1</b>	<b>-0.821</b>	<b>-1.287</b>	<b>0.467</b>	<b>-0.975</b>	<b>1.007</b>	<b>-0.415</b>	<b>-0.048</b>	<b>0.546</b>	<b>0.083</b>
LOGAN FRENCHMAN	1	-0.910	-1.383	0.473	-0.970	0.646	0.711	-0.587	0.017	0.140
LOGAN PLATEAU	1	-0.542	-1.239	0.697	-1.024	0.448	-1.069	-0.587	-0.524	-2.181
MESA DEBEQUE	1	-0.926	-1.528	0.601	-1.046	-0.374	-0.815	-0.587	0.338	-1.065
SEDGWICK PLATTE VLY	1	-1.078	-1.768	0.690	-1.013	-0.121	-0.838	-0.587	0.186	-1.240
WASHINGTON ARICKAREE	1	-1.628	-1.960	0.332	-1.054	1.537	-0.138	-0.587	0.361	-0.364
WASHINGTON WOODLIN	1	-0.577	-1.720	1.143	-1.092	4.013	-1.953	-0.587	-0.634	-3.174
LINCOLN GENOA-HUGO	0	-0.912	-0.855	-0.057	-0.750	0.008	-0.628	-0.587	-1.070	-2.286
OTERO CHERAW	0	-1.115	-1.143	0.029	-1.029	-0.471	-0.996	-0.587	0.025	-1.558
SAGUACHE MOFFAT	0	-1.872	-1.576	-0.297	-1.169	0.452	-1.573	-0.587	1.285	-0.875
WASHINGTON OTIS	0	-1.139	-1.095	-0.043	-0.910	0.256	-0.167	-0.587	-0.164	-0.918
<b>LAS ANIMAS AGUILAR</b>	<b>1</b>	<b>-0.668</b>	<b>-1.239</b>	<b>0.571</b>	<b>-0.943</b>	<b>-0.085</b>	<b>-0.180</b>	<b>-0.587</b>	<b>1.276</b>	<b>0.508</b>
BENT MCCLAVE	1	-0.584	-0.759	0.175	-0.780	0.026	-0.625	-0.587	2.506	1.294
CHEYENNE KIT CARSON	1	-0.314	-1.960	1.646	-1.065	1.711	-1.395	1.211	-0.316	-0.500
KIOWA PLAINVIEW	1	-0.592	-2.104	1.512	-1.162	3.004	-1.345	-0.587	-1.065	-2.997
KIT CARSON HI PLAINS	1	-0.896	-2.056	1.160	-1.105	1.667	-0.467	-0.587	-0.968	-2.022
LAS ANIMAS PRIMERO	1	-0.821	-1.287	0.467	-0.975	1.007	-0.415	-0.048	0.546	0.083
SEDGWICK PLATTE VLY	1	-1.078	-1.768	0.690	-1.013	-0.121	-0.838	-0.587	0.186	-1.240
WASHINGTON ARICKAREE	1	-1.628	-1.960	0.332	-1.054	1.537	-0.138	-0.587	0.361	-0.364
WASHINGTON WOODLIN	1	-0.577	-1.720	1.143	-1.092	4.013	-1.953	-0.587	-0.634	-3.174
BACA CAMPO	0	-1.930	-2.248	0.318	-1.211	1.529	-0.635	-0.587	-0.024	-1.246
KIT CARSON ARRIBA-FLAGLER	0	-0.449	-0.663	0.214	-0.702	0.531	-0.726	-0.587	-0.389	-1.703
KIT CARSON STRATTON	0	-0.763	-0.423	-0.340	-0.876	0.062	0.270	-0.261	-0.433	-0.425
KIT CARSON BETHUNE	0	-0.825	-1.047	0.222	-1.113	-0.324	-1.990	-0.587	0.101	-2.476
LINCOLN GENOA-HUGO	0	-0.912	-0.855	-0.057	-0.750	0.008	-0.628	-0.587	-1.070	-2.286
LINCOLN KARVAL	0	-1.136	-1.576	0.440	-1.173	4.783	-1.360	-0.587	-0.285	-2.233

Table I-2: Comparison of Standardized Cost Factors Among Hold Harmless Districts and Peer Districts as Determined by Pupil Count and Cost of Living

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
COUNTY DISTRICT		HOLD HARMLESS DISTRICTS	AVERAGE TEACHER SALARY	TOTAL EMPLOYEE RATIO	SUBTOTAL AVG SAL MINUS EMP RATIO	PUPILS PER SCHOOL	PER PPL TRANS COST	PERCENT SPECIAL ED	PERCENT ELPA IDENTIFIED	PERCENT FREE LUNCH	SUBTOTAL SUM OF COL 7 THRU 9
	PROWERS GRANADA	0	-1.538	0.058	-1.595	-0.656	0.330	-1.286	-0.587	0.710	-1.163
	SAGUACHE MTN VALLEY	0	-0.945	-1.047	0.102	-0.883	0.175	-1.722	-0.587	0.900	-1.409
	SAGUACHE MOFFAT	0	-1.872	-1.576	-0.297	-1.169	0.452	-1.573	-0.587	1.285	-0.875
	<b>LAS ANIMAS KIM</b>	<b>1</b>	<b>-1.798</b>	<b>-2.104</b>	<b>0.306</b>	<b>-1.203</b>	<b>4.296</b>	<b>0.472</b>	<b>0.590</b>	<b>-0.882</b>	<b>0.180</b>
	KIOWA PLAINVIEW	1	-0.592	-2.104	1.512	-1.162	3.004	-1.345	-0.587	-1.065	-2.997
	KIT CARSON HI PLAINS	1	-0.896	-2.056	1.160	-1.105	1.667	-0.467	-0.587	-0.968	-2.022
	LAS ANIMAS BRANSON	0	-1.858	-2.008	0.150	-1.276	2.734	-2.057	-0.587	2.656	0.012
	<b>LOGAN PLATEAU</b>	<b>1</b>	<b>-0.542</b>	<b>-1.239</b>	<b>0.697</b>	<b>-1.024</b>	<b>0.448</b>	<b>-1.069</b>	<b>-0.587</b>	<b>-0.524</b>	<b>-2.181</b>
	LAS ANIMAS PRIMERO	1	-0.821	-1.287	0.467	-0.975	1.007	-0.415	-0.048	0.546	0.083
	LOGAN FRENCHMAN	1	-0.910	-1.383	0.473	-0.970	0.646	0.711	-0.587	0.017	0.140
	MESA DEBEQUE	1	-0.926	-1.528	0.601	-1.046	-0.374	-0.815	-0.587	0.338	-1.065
	WASHINGTON ARICKAREE	1	-1.628	-1.960	0.332	-1.054	1.537	-0.138	-0.587	0.361	-0.364
	LINCOLN GENOA-HUGO	0	-0.912	-0.855	-0.057	-0.750	0.008	-0.628	-0.587	-1.070	-2.286
	MINERAL CREEDE	0	0.408	-1.287	1.696	-1.146	0.605	-1.160	-0.587	-1.132	-2.879
	OTERO CHERAW	0	-1.115	-1.143	0.029	-1.029	-0.471	-0.996	-0.587	0.025	-1.558
	WASHINGTON OTIS	0	-1.139	-1.095	-0.043	-0.910	0.256	-0.167	-0.587	-0.164	-0.918
	WASHINGTON LONE STAR	0	-0.888	-2.056	1.168	-1.227	1.142	1.833	-0.587	0.085	1.331
	WELD BRIGGS DALE	0	-1.343	-2.152	0.809	-1.232	0.968	-1.475	-0.587	0.125	-1.937
	WELD PRAIRIE	0	-0.339	-1.432	1.093	-1.086	1.958	-1.250	-0.587	-0.405	-2.243
	WELD GROVER	0	-1.047	-1.960	0.913	-1.159	0.519	-0.778	-0.587	-0.269	-1.635
	<b>MOFFAT MOFFAT</b>	<b>1</b>	<b>1.543</b>	<b>0.538</b>	<b>1.005</b>	<b>0.447</b>	<b>-0.366</b>	<b>0.064</b>	<b>-0.456</b>	<b>-0.795</b>	<b>-1.187</b>
	ALAMOSA ALAMOSA	0	0.621	0.586	0.035	0.826	-0.653	0.566	2.404	0.978	3.948
	CHAFFEE SALIDA	0	-0.018	0.730	-0.748	1.028	-0.787	0.140	-0.553	-0.206	-0.619
	FREMONT CANON CITY	0	1.238	0.826	0.412	1.517	-0.829	0.037	-0.513	0.227	-0.250
	FREMONT FLORENCE	0	0.197	0.922	-0.725	1.849	-0.545	0.395	-0.484	0.253	0.163
	MONTEZUMA MONTEZUMA	0	0.236	0.538	-0.302	0.254	-0.418	-0.568	3.167	0.532	3.131
	OTERO EAST OTERO	0	-0.172	0.010	-0.182	0.645	-0.922	0.798	0.273	1.145	2.215



*Table I-2: Comparison of Standardized Cost Factors Among Hold Harmless Districts and Peer Districts  
as Determined by Pupil Count and Cost of Living*

COUNTY DISTRICT	(1) HOLD HARMLESS DISTRICTS	(2) AVERAGE TEACHER SALARY	(3) TOTAL EMPLOYEE RATIO	(4) SUBTOTAL AVG SAL MINUS EMP RATIO	(5) PUPILS PER SCHOOL	(6) PER PPL TRANS COST	(7) PERCENT SPECIAL ED	(8) PERCENT ELPA IDENTIFIED	(9) PERCENT FREE LUNCH	(10) SUBTOTAL SUM OF COL 7 THRU 9
PROWERS LAMAR	0	0.070	0.586	-0.516	0.195	-0.857	0.082	0.510	0.824	1.417
RIO GRANDE MONTE VISTA	0	0.206	1.066	-0.860	0.488	-0.690	0.223	1.208	1.136	2.567
<b>PARK PARK</b>	<b>1</b>	<b>-0.175</b>	<b>-0.903</b>	<b>0.729</b>	<b>-0.931</b>	<b>1.743</b>	<b>-0.563</b>	<b>-0.484</b>	<b>-0.472</b>	<b>-1.518</b>
ADAMS STRASBURG	0	-0.170	0.778	-0.948	-0.570	-0.236	0.108	-0.587	-1.292	-1.772
ARAPAHOE BYERS	0	-0.212	1.066	-1.278	-0.341	-0.317	-1.209	-0.587	0.235	-1.561
ELBERT BIG SANDY	0	-0.595	-0.135	-0.460	-0.849	0.002	-0.415	-0.587	1.230	0.228
EL PASO CALHAN	0	-0.656	0.922	-1.578	-0.645	0.231	0.288	-0.587	-0.052	-0.351
EL PASO ELLICOTT	0	-0.529	0.250	-0.779	0.005	-0.040	-0.569	-0.160	-0.487	-1.216
EL PASO PEYTON	0	-0.827	-0.135	-0.693	-0.789	0.182	-0.642	-0.587	-0.157	-1.387
GARFIELD PARACHUTE	0	-0.262	-0.087	-0.175	-0.535	-0.542	0.598	-0.587	-0.346	-0.335
GILPIN GILPIN	0	-0.301	-0.663	0.362	-0.498	0.025	0.773	-0.587	0.218	0.404
GRAND WEST GRAND	0	0.280	-0.038	0.318	-0.498	-0.141	1.242	-0.587	0.978	1.633
MONTROSE WEST END	0	-0.261	-0.087	-0.175	-0.444	-0.546	0.887	-0.587	1.073	1.373
SAN MIGUEL NORWOOD	0	-0.689	-0.087	-0.602	-0.558	-0.322	-0.493	-0.587	-0.605	-1.686
<b>RIO BLANCO RANGELY</b>	<b>1</b>	<b>1.371</b>	<b>0.826</b>	<b>0.544</b>	<b>0.049</b>	<b>0.027</b>	<b>-0.128</b>	<b>-0.587</b>	<b>-1.132</b>	<b>-1.848</b>
BENT LAS ANIMAS	0	-0.522	0.154	-0.676	-0.027	-0.276	0.113	-0.057	1.449	1.505
CROWLEY CROWLEY	0	-1.157	0.394	-1.551	0.209	-0.146	-0.651	-0.511	1.047	-0.115
HUERFANO HUERFANO	0	-0.883	-0.423	-0.460	-0.320	-0.359	0.491	0.203	2.925	3.619
KIT CARSON BURLINGTON	0	-0.628	0.202	-0.830	0.152	-0.405	-0.043	0.814	0.135	0.906
OTERO FOWLER	0	-0.718	-0.375	-0.343	-0.804	-0.267	-0.384	-0.587	-0.074	-1.045
PHILLIPS HOLYOKE	0	-0.520	0.250	-0.769	0.252	-0.328	-0.124	0.228	-0.479	-0.374
RIO BLANCO MEEKER	0	0.318	0.538	-0.220	-0.083	-0.381	0.003	-0.587	-0.836	-1.421
RIO GRANDE DEL NORTE	0	0.062	-0.038	0.101	-0.436	-0.459	0.529	-0.525	1.519	1.523
RIO GRANDE SARGENT	0	-0.214	-0.279	0.065	-0.206	-0.096	0.124	0.933	-0.190	0.868
SAGUACHE CENTER	0	-0.782	0.058	-0.840	-0.164	-0.635	0.354	3.794	3.281	7.429

Table I-2: Comparison of Standardized Cost Factors Among Hold Harmless Districts and Peer Districts as Determined by Pupil Count and Cost of Living

COUNTY DISTRICT	(1) HOLD HARMLESS DISTRICTS	(2) AVERAGE TEACHER SALARY	(3) TOTAL EMPLOYEE RATIO	(4) SUBTOTAL AVG SAL MINUS EMP RATIO	(5) PUPILS PER SCHOOL	(6) PER PPL TRANS COST	(7) PERCENT SPECIAL ED	(8) PERCENT ELPA IDENTIFIED	(9) PERCENT FREE LUNCH	(10) SUBTOTAL SUM OF COL 7 THRU 9
<b>ROUTT STEAMBOAT SPRINGS</b>	<b>1</b>	<b>1.732</b>	<b>0.874</b>	<b>0.858</b>	<b>1.020</b>	<b>-0.154</b>	<b>-0.809</b>	<b>-0.587</b>	<b>-1.420</b>	<b>-2.816</b>
SUMMIT SUMMIT	1	2.384	0.154	2.231	0.408	-0.320	0.616	-0.348	-1.345	-1.077
ADAMS BENNETT	0	-0.898	0.874	-1.772	0.310	-0.549	-0.385	-0.587	-0.605	-1.578
ARAPAHOE SHERIDAN	0	1.433	1.162	0.270	0.664	-0.700	2.225	0.158	1.073	3.456
CLEAR CREEK CLEAR CREEK	0	0.839	0.442	0.397	0.107	-0.106	-0.391	-0.490	-0.821	-1.703
ELBERT ELIZABETH	0	-0.181	0.490	-0.671	1.549	-0.235	1.334	-0.587	-1.193	-0.446
GUNNISON GUNNISON	0	-0.202	0.490	-0.692	-0.321	-0.304	0.727	-0.558	-1.178	-1.010
LA PLATA BAYFIELD	1	0.614	0.298	0.316	0.148	-0.472	-0.765	1.209	-0.732	-0.289
LA PLATA IGNACIO	0	0.490	-0.279	0.768	-0.329	1.172	-0.473	-0.587	0.890	-0.171
LARIMER ESTES PRK	0	0.812	0.874	-0.062	0.905	-0.538	0.904	-0.478	-1.028	-0.601
PARK PLATTE CANYON	0	0.531	0.394	0.137	1.022	0.134	0.410	-0.587	-1.054	-1.232
<b>SEDGWICK PLATTE VLY</b>	<b>1</b>	<b>-1.078</b>	<b>-1.768</b>	<b>0.690</b>	<b>-1.013</b>	<b>-0.121</b>	<b>-0.838</b>	<b>-0.587</b>	<b>0.186</b>	<b>-1.240</b>
LAS ANIMAS PRIMERO	1	-0.821	-1.287	0.467	-0.975	1.007	-0.415	-0.048	0.546	0.083
LAS ANIMAS AGUILAR	1	-0.668	-1.239	0.571	-0.943	-0.085	-0.180	-0.587	1.276	0.508
LOGAN FRENCHMAN	1	-0.910	-1.383	0.473	-0.970	0.646	0.711	-0.587	0.017	0.140
LOGAN PLATEAU	1	-0.542	-1.239	0.697	-1.024	0.448	-1.069	-0.587	-0.524	-2.181
MESA DEBEQUE	1	-0.926	-1.528	0.601	-1.046	-0.374	-0.815	-0.587	0.338	-1.065
WASHINGTON ARICKAREE	1	-1.628	-1.960	0.332	-1.054	1.537	-0.138	-0.587	0.361	-0.364
WASHINGTON WOODLIN	1	-0.577	-1.720	1.143	-1.092	4.013	-1.953	-0.587	-0.634	-3.174
BACA PRITCHETT	0	-1.510	-1.768	0.258	-1.170	1.004	3.392	-0.587	1.914	4.718
BACA VILAS	0	-1.805	-1.816	0.011	-1.203	-0.514	0.419	-0.587	1.346	1.177
BACA CAMPO	0	-1.930	-2.248	0.318	-1.211	1.529	-0.635	-0.587	-0.024	-1.246
KIT CARSON BETHUNE	0	-0.825	-1.047	0.222	-1.113	-0.324	-1.990	-0.587	0.101	-2.476
LINCOLN GENOA-HUGO	0	-0.912	-0.855	-0.057	-0.750	0.008	-0.628	-0.587	-1.070	-2.286
LINCOLN KARVAL	0	-1.136	-1.576	0.440	-1.173	4.783	-1.360	-0.587	-0.285	-2.233
OTERO CHERAW	0	-1.115	-1.143	0.029	-1.029	-0.471	-0.996	-0.587	0.025	-1.558
SAGUACHE MTN VALLEY	0	-0.945	-1.047	0.102	-0.883	0.175	-1.722	-0.587	0.900	-1.409
SAGUACHE MOFFAT	0	-1.872	-1.576	-0.297	-1.169	0.452	-1.573	-0.587	1.285	-0.875
WASHINGTON OTIS	0	-1.139	-1.095	-0.043	-0.910	0.256	-0.167	-0.587	-0.164	-0.918

*Table I-2: Comparison of Standardized Cost Factors Among Hold Harmless Districts and Peer Districts  
as Determined by Pupil Count and Cost of Living*

COUNTY DISTRICT	(1) HOLD HARMLESS DISTRICTS	(2) AVERAGE TEACHER SALARY	(3) TOTAL EMPLOYEE RATIO	(4) SUBTOTAL AVG SAL MINUS EMP RATIO	(5) PUPILS PER SCHOOL	(6) PER PPL TRANS COST	(7) PERCENT SPECIAL ED	(8) PERCENT ELPA IDENTIFIED	(9) PERCENT FREE LUNCH	(10) SUBTOTAL SUM OF COL 7 THRU 9
<b>WASHINGTON ARICKAREE</b>	<b>1</b>	<b>-1.628</b>	<b>-1.960</b>	<b>0.332</b>	<b>-1.054</b>	<b>1.537</b>	<b>-0.138</b>	<b>-0.587</b>	<b>0.361</b>	<b>-0.364</b>
LAS ANIMAS PRIMERO	1	-0.821	-1.287	0.467	-0.975	1.007	-0.415	-0.048	0.546	0.083
LOGAN FRENCHMAN	1	-0.910	-1.383	0.473	-0.970	0.646	0.711	-0.587	0.017	0.140
LOGAN PLATEAU	1	-0.542	-1.239	0.697	-1.024	0.448	-1.069	-0.587	-0.524	-2.181
MESA DEBEQUE	1	-0.926	-1.528	0.601	-1.046	-0.374	-0.815	-0.587	0.338	-1.065
SEDGWICK PLATTE VLY	1	-1.078	-1.768	0.690	-1.013	-0.121	-0.838	-0.587	0.186	-1.240
WASHINGTON WOODLIN	1	-0.577	-1.720	1.143	-1.092	4.013	-1.953	-0.587	-0.634	-3.174
SAGUACHE MOFFAT	0	-1.872	-1.576	-0.297	-1.169	0.452	-1.573	-0.587	1.285	-0.875
WASHINGTON OTIS	0	-1.139	-1.095	-0.043	-0.910	0.256	-0.167	-0.587	-0.164	-0.918
<b>WASHINGTON WOODLIN</b>	<b>1</b>	<b>-0.577</b>	<b>-1.720</b>	<b>1.143</b>	<b>-1.092</b>	<b>4.013</b>	<b>-1.953</b>	<b>-0.587</b>	<b>-0.634</b>	<b>-3.174</b>
LAS ANIMAS PRIMERO	1	-0.821	-1.287	0.467	-0.975	1.007	-0.415	-0.048	0.546	0.083
LAS ANIMAS AGUILAR	1	-0.668	-1.239	0.571	-0.943	-0.085	-0.180	-0.587	1.276	0.508
LOGAN FRENCHMAN	1	-0.910	-1.383	0.473	-0.970	0.646	0.711	-0.587	0.017	0.140
LOGAN PLATEAU	1	-0.542	-1.239	0.697	-1.024	0.448	-1.069	-0.587	-0.524	-2.181
MESA DEBEQUE	1	-0.926	-1.528	0.601	-1.046	-0.374	-0.815	-0.587	0.338	-1.065
SEDGWICK PLATTE VLY	1	-1.078	-1.768	0.690	-1.013	-0.121	-0.838	-0.587	0.186	-1.240
WASHINGTON ARICKAREE	1	-1.628	-1.960	0.332	-1.054	1.537	-0.138	-0.587	0.361	-0.364
BACA PRITCHETT	0	-1.510	-1.768	0.258	-1.170	1.004	3.392	-0.587	1.914	4.718
BACA VILAS	0	-1.805	-1.816	0.011	-1.203	-0.514	0.419	-0.587	1.346	1.177
BACA CAMPO	0	-1.930	-2.248	0.318	-1.211	1.529	-0.635	-0.587	-0.024	-1.246
KIT CARSON BETHUNE	0	-0.825	-1.047	0.222	-1.113	-0.324	-1.990	-0.587	0.101	-2.476
LINCOLN KARVAL	0	-1.136	-1.576	0.440	-1.173	4.783	-1.360	-0.587	-0.285	-2.233
SAGUACHE MTN VALLEY	0	-0.945	-1.047	0.102	-0.883	0.175	-1.722	-0.587	0.900	-1.409
SAGUACHE MOFFAT	0	-1.872	-1.576	-0.297	-1.169	0.452	-1.573	-0.587	1.285	-0.875
WASHINGTON OTIS	0	-1.139	-1.095	-0.043	-0.910	0.256	-0.167	-0.587	-0.164	-0.918
<b>WELD KEENESBURG</b>	<b>1</b>	<b>0.207</b>	<b>1.114</b>	<b>-0.908</b>	<b>0.382</b>	<b>0.359</b>	<b>1.135</b>	<b>1.671</b>	<b>-0.454</b>	<b>2.352</b>
GRAND EAST GRAND	1	0.412	-0.087	0.499	-0.262	-0.320	-0.216	-0.587	-0.988	-1.792
ARCHULETA ARCHULETA	0	0.279	1.162	-0.884	0.879	-0.284	-0.370	-0.587	0.153	-0.804
CHAFFEE BUENA VISTA	0	-0.287	0.250	-0.537	-0.214	-0.175	-0.995	-0.587	-0.057	-1.640

*Table I-2: Comparison of Standardized Cost Factors Among Hold Harmless Districts and Peer Districts as Determined by Pupil Count and Cost of Living*

COUNTY	DISTRICT	(1) HOLD HARMLESS DISTRICTS	(2) AVERAGE TEACHER SALARY	(3) TOTAL EMPLOYEE RATIO	(4) SUBTOTAL AVG SAL MINUS EMP RATIO	(5) PUPILS PER SCHOOL	(6) PER PPL TRANS COST	(7) PERCENT SPECIAL ED	(8) PERCENT ELPA IDENTIFIED	(9) PERCENT FREE LUNCH	(10) SUBTOTAL SUM OF COL 7 THRU 9
EL PASO	MANITOU SPRINGS	0	0.476	0.922	-0.446	0.351	-0.784	0.632	-0.587	-0.709	-0.665
	LAKE LAKE	0	0.278	0.442	-0.164	0.562	-0.769	-0.190	-0.020	0.484	0.274
LAS ANIMAS	TRINIDAD	0	0.506	0.922	-0.416	0.285	-0.702	0.903	-0.587	2.025	2.341
MORGAN	BRUSH	0	-0.230	0.154	-0.384	0.501	-0.347	0.688	0.979	0.335	2.001
WELD	GILCREST	0	0.365	0.730	-0.365	0.212	-0.141	0.253	3.784	0.262	4.299
WELD	EATON	0	0.174	1.258	-1.085	0.297	-0.546	-0.338	2.925	-0.173	2.413
WELD	WINDSOR	0	0.332	0.490	-0.158	0.595	-0.785	0.140	-0.587	-0.620	-1.067
WELD	JOHNSTOWN	0	0.138	1.066	-0.929	0.249	-0.744	1.265	3.478	0.264	5.007
WELD	PLATTE VLY	0	0.017	0.586	-0.569	1.159	-0.280	3.862	1.640	-0.024	5.477
WELD	AULT-HIGHLND	0	-0.266	0.682	-0.948	0.098	-0.353	2.561	3.439	1.140	7.140
YUMA	WEST YUMA	0	-0.551	-0.183	-0.368	-0.388	-0.172	0.484	0.017	-0.006	0.496

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## **Chapter II: At-Risk Pupils**

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This chapter addresses the portion of the study directive relating to at-risk pupils. The directive requires us to examine the circumstances that contribute to a student becoming at risk, including the availability of data on such circumstances and the statutory definition of at-risk pupils. Under the school finance act, at-risk pupils are students eligible to participate in the federal free lunch program.<sup>1</sup> This chapter is divided into four categories: circumstances that contribute to students becoming at risk, the availability of information on the number of at-risk students, the experience in other states of using various means to count at-risk students, and an examination of the current definition of at risk used in Colorado.

## CIRCUMSTANCES CONTRIBUTING TO STUDENTS BECOMING AT RISK

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In general, the term "at risk" refers to students who are likely to fail at school, whether that failure leads to dropping out or failure to achieve a certain level of skills even though they remain in school. The literature on this subject indicates that there are many factors why students become at risk, and that the same individual may be influenced by several of those factors. The discussion of the circumstances associated with students becoming at risk is grouped into three categories: family background, school experience, and out-of-school behavior.<sup>2</sup> Please be aware that within each category some of the items are more *indicators of* a student being at risk (e.g., use of illegal drugs) than a *reason for* the student being at risk (e.g., learning disability).

### Family Background

Low socio-economic status — whether defined by the parents' occupation, education, or income — increases the likelihood of a student dropping out. For instance, the level of education attained by the parent correlates with the likelihood of dropping out, and students whose siblings or parents dropped out are also more likely to drop out. Similarly, parents' educational expectations and aspirations appear to influence whether a student will drop out. A student's family situation also seems to influence their educational performance. For example, poor relationships between students and their parents and the level of parental involvement in the student's schooling correlate with the likelihood of dropping out. Also, students from large families with single, female heads of household are more likely to drop out of school, and students who are married, have children, or both have higher dropout rates than unmarried students or those without children. Poor performance in school is also associated with the transiency of the family. Other factors that appear to influence academic performance include: students living in institutional settings or in transitional housing and the degree to which English is spoken in the household.

After adjusting for differences in demographics among dropouts — ethnicity, age, sex, and the like — dropout rates appear to correlate most with socio-economic status. However, factors such as single parent household, the level of the parent's education, family mobility, older siblings that are dropouts, and being over-age for the grade further increase the likelihood that a student will drop out.<sup>3</sup>

### School Experience

Students with a history of low academic achievement or low test scores are more likely to drop out. Relatedly, students with learning and other disabilities and students with poor study habits have higher rates of dropping out. Students who are held back in earlier grades because of poor performance also have a higher dropout rate. Higher

levels of aggressiveness and frequent disciplinary problems are also indicators that a student may drop out, as are incidents of delinquency, truancy, suspension, and expulsion from school.

Dropouts frequently cite an inability to get along with teachers as a reason for dropping out. Teacher attitudes toward students and their expectations of those students may also play a part in whether a student remains in school and how well they do. Overall, schools with greater stress on academics have lower dropout rates. Schools with high minority populations are likely to have higher dropout rates, even after controlling for the effects of differences in socio-economic status and demographics.

### **Out-of-School Behavior**

Students with paying jobs are more likely to drop out of school. Economic factors, such as the need to support a family, are often cited as a reason to leave school before graduating. Student use of alcohol, illegal drugs, and cigarettes also correlate with the dropout rate. Student exposure to violence, abuse, or neglect also appear to correlate with their tendency to drop out.

## **AVAILABILITY OF DATA ON AT-RISK FACTORS**

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As the summary of the literature in the preceding section indicates, many different factors can influence the degree to which a student becomes at risk. This should, in theory, provide many different sources of information that would indicate the size of the at-risk population in a given school district. Many of these sources, however, are not easily used in the context of school finance. Much of the difficulty results from the desire to modify at-risk funding as frequently as possible in order to reflect changes in district at-risk populations.

A Legislative Council staff study conducted prior to the enactment of House Bill 94-1001 (March 1993) attempted to develop an at-risk index. This study used census data to provide information on the prevalence of at-risk students in the various school districts, and then used that information to compile an index that would indicate the extent of a school district's at-risk population relative to other districts.<sup>4</sup> The census data used included the percentage of children age five to 17 living in poverty, the percentage of persons age 18 and older without a high school diploma, and the percentage of children age five to 17 who speak English "not well" or "not at all."

Census data have limitations, however. For instance, it is collected every ten years (with some adjustments every five years) and, therefore, does not provide timely information on the changes in a given district's at-risk student population relative to other districts. The state demographer is required by law to update census information annually but only in the areas of population, age, and sex. The study also expressed concerns about the accuracy of the census data, especially that collected on the long form, when used for school district purposes. The long form is sent to a sampling of households. The sample is selected to be statistically valid for the geographical area being sampled. However, the data may not be statistically valid when disaggregated to the school district level, especially in smaller districts.

A subsequent study (August 1993) focused on identifying a proxy for the at-risk index. The goals for the source of information suggested that it "provide a fair representation of the at-risk population, be available on an annual basis, and be subject to verification."<sup>5</sup> The study focused on measures of achievement and socio-economic status, both of which were identified in literature as being indicators of at-risk status.

***Measures of Achievement.*** Regarding achievement, the state does not currently have a uniform testing system that would provide consistent test score data across all school districts. Though graduation *rates* are uniformly collected for all districts, graduation *standards* differ between districts, raising doubts about the uniformity of the data. Staff analysis of graduation rates also showed a low correlation with the at-risk index developed with census data. This index was composed of the measures of poverty, adult education, and language ability in the household, as noted in the previous section.

***Socio-economic Status and Other At-Risk Indicators.*** Regarding factors related to socio-economic status, the August study considered the following sources:

- number of children from families receiving payments under the federal Aid to Families with Dependent Children (AFDC) program;
- number of children qualifying for federal "Chapter 1" assistance;
- number of children who qualify for the federal lunch program;
- number of juvenile arrests;
- number of low birth-weight babies;
- number of teen births; and
- graduation/dropout rates.

However, several of these sources were eliminated because they were not collected frequently enough (e.g., Chapter 1 eligibility), inconsistencies existed in the data (e.g., number of juvenile arrests, graduation rates), data was insufficient (e.g., number of teen births), or the data was not available on a school district basis (e.g., low birth-weight babies). As a consequence, the study focused its attention on the two remaining potential sources of information: the number of pupils eligible for AFDC and the federal school lunch program. Each of these was correlated with the at-risk index and free lunch program data had the highest correlation. In addition to the factors discussed above, Table II-1 provides a list of the factors associated with at-risk pupils and issues related to the use of that information in allocating school finance dollars.



## SOURCES OF DATA ON AT-RISK STUDENTS — OTHER STATES

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States that provide revenue to school district for at-risk youth generally use a measure of either socio-economic status or achievement. The method of distributing revenue in achievement-based states is usually a categorical program, and performance of students on a standardized test determines eligibility. In states that distribute revenue based on socio-economic status, the allocation of resources is frequently in the overall funding formula. Staff consulted with several other states in which at-risk funding is based on socio-economic status. Some of these states currently use the free lunch count like Colorado and others use another measure or series of measures. We attempted to determine the level of satisfaction with the free lunch and other standards by talking with state education department personnel and legislative staff familiar with school finance and at-risk funding.

### Free Lunch States

In brief, eligibility for the federal free lunch program is set at 130 percent of federal poverty guidelines (modified for family size and adjusted for inflation). Those qualifying for the federal food stamp or AFDC programs also qualify for the free lunch program. We contacted three of the states that currently use the federal free lunch standard in allocating at-risk funding — Arizona, Kansas, and New Jersey. To briefly outline our findings: due to the structure of Arizona's program, comparisons with Colorado are limited; legal challenges and lack of resources to fully fund New Jersey's current school finance act have kept attention on more fundamental elements and away from the specific issues of how at-risk students are funded; and Kansas provides some perspectives but the system has only been in effect since 1992. More information on each state is provided below.

*Arizona.* Along with other criteria, eligibility for the federal free and reduced price lunch programs is used in Arizona to judge school district applications to participate in a state grant program for at-risk students. The program began in 1988 as a pilot project involving, eventually, 22 programs in districts with high concentrations of at-risk students. Though originally designed to operate for four years, the program continues to be funded on a grant basis and involves only those districts originally selected to participate. Limited funding prevents other districts with at-risk students from participating. The issue of expanding the program has been raised, as has the idea of incorporating a similar at-risk funding mechanism into the overall school finance formula. (The current formula uses performance on limited English proficiency exams as a weighting measure to allocate additional at-risk funding.)

Interestingly, a report from Arizona came to a conclusion similar to that reached in Colorado regarding the usefulness of the federal free and reduced price lunch program to count at-risk students. Benefits of the lunch program count include "it(s) availability at both the district and school levels on an annual basis, and the fact that

it is based primarily on the economic condition of the families of the students applying to the program." The report also noted, however, that the data may not be "truly comprehensive" because not all eligible families participate, especially at the high school level.<sup>6</sup>

**New Jersey.** In New Jersey's most recent school finance act, the federal free lunch and free milk programs are used to count at-risk students.<sup>7</sup> Various weighting factors are then applied to determine funding. Two factors make comparisons to Colorado difficult: 1) due to a lack of resources, at-risk funding under the act was held at prior years' levels; and 2) after its adoption, the overall school funding act was judged to be unconstitutional by the state's Supreme Court. According to personnel in the state, since the act has never operated fully and because the overall funding situation is of greater concern at present, the index *per se* has not been an issue.

**Kansas.** Under the current system, Kansas provides an additional five percent of base state aid for each at-risk student in a district. Education department personnel indicated that, because the free lunch program is based on a measure of wealth, complaints have been heard from wealthier school districts that it does not adequately count the number of at-risk students in their districts. Legislative staff indicated that, from the outset, the state legislature has been uncomfortable with the use of free lunch program as an at-risk indicator because: 1) it may undercount at-risk students in wealthier districts; and 2) it may overcount at-risk students in other districts (e.g., small rural districts). The staff in Kansas also noted that the standard has been reviewed once but a better indicator was not identified. The five percent add-on was initially an "experiment" but has since become permanent. The feeling exists that the percentage add-on may not be high enough.

### **Non-Free Lunch States**

We contacted five states that use other socio-economic indicators to count at-risk students and to allocate at-risk funding. Three states — Connecticut, Pennsylvania, and Ohio — use eligibility for the federal AFDC program to determine the number of at-risk students. The two remaining states — Illinois and Oregon — use eligibility for the federal Chapter 1 program to determine the number of at-risk students. "Chapter 1" refers to a section of the Elementary and Secondary Education Act of 1965 which distributes federal funds to schools "in recognition of the special educational needs of low-income families" and the ability of local schools to meet those needs. Eligibility is based on census definition of poverty. Specifics for each state are provided below.

**Connecticut.** Within Connecticut's foundation formula, the district's enrollment is increased by 25 percent of: 1) children eligible for AFDC; and 2) students scoring below a "remedial standard" on a statewide mastery test. (The test is given in the 4th, 6th, and 8th grades.) According to a representative of the state education department, use of the AFDC standard is "not an issue."<sup>8</sup> Though some districts complain that the AFDC count does not reflect all students at risk, the use of the remedial standard does

identify those students performing poorly independent of a wealth standard. Calls to other Connecticut agencies and interested parties revealed similar opinions.

*Pennsylvania.* Pennsylvania uses an "economic supplement" within its overall school finance formula to direct additional funds to districts for the presence of at-risk students. Eligibility for the federal AFDC program is the proxy used for at-risk students. The act, however, is currently being litigated because, according to plaintiffs, the overall act is underfunded. According to legislative staff, the suit was originally brought by small and rural districts but has since been joined by larger urban districts. As with New Jersey, under these circumstances, the issue of overall funding seems to be overshadowing the more specific issue of how at-risk students are counted and funded.

*Ohio.* Ohio has two main at-risk funding programs, both based on AFDC eligibility. According to a representative of the state education department's school finance section, problems arise because AFDC information is not organized along school district boundaries. Consequently, the state social services department which handles the AFDC program sometimes assigns students to the wrong districts. Some (mostly urban) districts complain about this lack of accuracy, but procedures are in place through which districts can review these student assignments and have them corrected. Ohio has been using the AFDC count for 15 years.<sup>9</sup>

*Illinois.* Eligibility for additional at-risk funding in Illinois is based on the count in the federal Chapter 1 program. Though the Chapter 1 program is based on the federal census, many districts do not "trust" the census to produce an accurate count of at-risk students, according to state education department personnel. He stated that difficulties also arise because census tract boundaries do not coincide with school district boundaries. He said that the federal free and reduced price lunch programs were considered but that: 1) the department audited only three percent of the students claimed; and 2) the free lunch program does not operate in grades nine through 12. Therefore, a count based on the lunch programs is not considered accurate. The state is now considering using the federal AFDC count. However, rural districts have pointed out that participation in AFDC is lower in non-urban areas of the state even though the same number of families may be eligible.<sup>10</sup>

*Oregon.* According to legislative staff, the state's current formula based on the Chapter 1 count was adopted in 1991. The state originally considered free lunch participation but, since several districts did not participate in the program, census data was chosen. He also noted school districts are currently undergoing a consolidation phase and that this may limit or eliminate those districts not participating in the free lunch program. He also noted some consideration is being given to including a concentration factor related to at-risk students. However, the resources do not currently exist to fund such a provision, so its adoption would involve redistributing existing revenue.<sup>11</sup>

## AT-RISK DEFINITION FOR FUNDING PURPOSES

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This section reviews the definition of "at risk" in the 1994 school finance act in light of the preceding information. The current definition of at-risk pupils is as follows:

- *for the 1994-95 fiscal year*, the greater of: 1) those pupils in the district eligible to participate in the federal free lunch program; and 2) the number of pupils in the district eligible to participate in the free lunch program plus 25 percent of the *difference* between: a) the district's percentage of pupils in grades one through eight who are eligible for free lunch times the district's pupil enrollment; and b) the number of district pupils eligible for free lunch.
- *for fiscal years 1995-96 and thereafter*, the district's percentage of pupils in grades one through eight who are eligible for free lunch times the district's pupil enrollment (Section 22-54-103 (1), C.R.S.).

This definition of "at risk" appears to address certain goals established for at-risk funding: 1) it is available on an annual basis; 2) it is subject to verification; and 3) it provides a fair representation of the at-risk population, at least in terms of the relative differences among districts. Information on those students eligible to participate in the federal free lunch program is available annually, is collected in the same manner across all districts, and is also subject to verification through an audit process.

Regarding how representative the federal lunch program count is of the number of students being at risk, eligibility for the lunch program is based on a measure of income.<sup>12</sup> Income correlates to a high degree as a predictor of whether a student will be at risk during his or her educational career. The current definition also goes further to address some common misgivings about the free lunch count: that some students do not participate in the free lunch program and some schools and districts do not have such programs. The statute specifies that funding will be provided for students who are *eligible* for the free lunch program rather than for those actually *participating*. Thus, funding is provided to districts for at-risk students on the basis of household income, not on participation.

It can be argued that eligibility cannot be ascertained without participation. However, federal legislation<sup>13</sup> has authorized, and the Colorado Department of Education offers, a direct certification program. Under this program, children may be certified as eligible for free meals based on documentation of eligibility for food stamps. A list of students eligible for free meals is generated by the department based on enrollment data provided by the district and food stamp program participants provided by the Department of Human Services. The district's entire student database is matched with the statewide food stamp database. A student who is certified as eligible for the free lunch program under the direct certification method need not

complete a separate application at his or her school to participate in the program. Thirty-four districts participated in the direct certification program in FY 1994-95.

In FY 1994-95, at-risk funding was provided for approximately 138,875 pupils. The portion of the definition of at-risk pupils that requires consideration of grades one through eight eligibility accounted for almost 7,100 of those pupils.

## **SUMMARY OF FINDINGS**

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- ◆ There are many circumstances and factors that have been identified as indicators of a student being at risk. Some of these factors are more easily quantifiable than others. Quantifiable factors tend to be more easily assimilated into funding formulas than other types of factors.
- ◆ Dropout rates appear to correlate most with socio-economic status, and eligibility for the free lunch program is a measure of income.
- ◆ Criticisms in Colorado relating to the use of eligibility for the free lunch program as a measure of at risk are similar to those in other states. The direct certification program and the use of grade school eligibility seem to ameliorate those criticisms.
- ◆ Other factors could be added to or replace the current definition but additional data collection may be required.
- ◆ Eligibility for the free lunch program was selected as the definition for at-risk pupils because it is available on an annual basis, it is verifiable, and it provides a fair relative representation of the at-risk population.

**Table II-1: Factors Causing or Related to Students Becoming at Risk and the Availability of Information on Those Factors**

<b>At Risk Factor</b>	<b>Availability of Data</b>
Socio-economic status (SES) <ul style="list-style-type: none"> <li>• families receiving AFDC</li> <li>• children qualifying for Chapter 1</li> <li>• children qualifying for free or reduced priced lunch</li> </ul>	In general, SES has high correlation with at-risk index; concerning specific sources listed at left: <ul style="list-style-type: none"> <li>• data not maintained on school district basis</li> <li>• data collected once every ten years</li> <li>• data collected annually; standards consistent and available for all school districts</li> </ul>
Single, female heads of household	Data collected once every ten years through the census
Size of family	Data collected once every ten years through the census
Level of adult education	Data collected once every ten years; data may not be statistically valid
Poor relationships between students and parents	Data not collected
Level of parental involvement in student's schooling	Data not collected
Parents' educational expectations and aspirations	Data not collected
Poor performance in school (e.g., test scores, graduation rates, poor study habits)	Data not currently collected at state level on uniform basis
Family mobility (transiency)	Some data are collected by school district
Poor self-esteem	Data not collected
Student over-age for the grade; student held back because of poor performance	Data not collected uniformly among districts
Health-related factors (e.g., teen pregnancy, low birth weight babies)	Difficulties collecting information on school district basis; data may not be statistically valid
Students with learning and other disabilities	Data not collected uniformly among districts
Crime-related factors (e.g., rates of arrest, incarceration)	Data not collected uniformly; difficulties collecting information on school district basis
Higher levels of aggressiveness, disciplinary problems (e.g., delinquency, suspension, truancy, expulsion)	Data not collected uniformly among districts
Student-teacher relationship; teacher attitude toward and expectations of student	Data not collected uniformly among districts
Prevalence of minority populations	Data collected by school district
Student use of alcohol, illegal drugs, cigarettes	Data not collected uniformly; difficulties collecting information on school district basis
Language spoken in household is other than English; English as a second language	Data collected once every ten years through census and every year for state categorical program
Student living in institutional setting, transitional housing	Data collected once every ten years
Student exposure to violence, abuse, or neglect	Data not collected uniformly; difficulties collecting information on school district basis



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### **Chapter III: Categorical Funding**

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Section 22-54-104.5, C.R.S., directs our office to examine and quantify the impact on each school district of prorating financial support for special education programs, student transportation programs, and programs provided under the English Language Proficiency Act (ELPA). Our approach to this charge has been to examine school district costs for these programs relative to the general fund revenue of each school district. A brief description of the funding formula for each program is also provided. In addition, the charge requires us to examine and quantify the unreimbursed impact of providing educational services to students whose primary language is not addressed in ELPA. The provisions of Article 24 of Title 22 outline a methodology for distributing state funds to school districts to help defray the costs of transitional programs to improve the English language skills of students. A student is eligible to be counted under the program if the student's dominant language is not English. Because the statutory provisions do not limit the program to any specific languages, we were unaware of the issues involved in this latter portion of the charge and, thus, have not addressed it in this report.



## CATEGORICAL PROGRAMS

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The study directive requires that the impact of prorating financial support for three categorical programs — The Exceptional Children's Educational Act (ECEA), the public school transportation program, and the English Language Proficiency Act (ELPA) — be quantified. The state provides funding for each of these programs differently. For the year examined, state funding for the ECEA and the transportation program was based on a percentage of costs. Federal funding is available for district special education programs, while not for others. Unlike special education and transportation, state funding for ELPA is not allocated on program cost, but is distributed based on eligible pupils. One element common to all three programs is that state law provides for the sharing of costs of the programs. The cost sharing approach is more evident in transportation and ECEA where only certain costs are reimbursable, and then only a portion of those costs are eligible for state funding. However, state appropriations for all three programs fall short of the funding level established by statute.

The statute creating each of the three categorical programs contains a provision for prorating state funding in the event the appropriation is not sufficient to reimburse districts at the actual state share level. In FY 1992-93, the most recent year actual data are available on a school district basis, the ECEA was funded at 32.9 percent of the entitlement level. Transportation and ELPA were funded at 73.5 percent and 32.1 percent, respectively. The impact by district is discussed in the following paragraphs. Three important caveats must be noted about the data used for this analysis, however.

- Special education revenue and expenditure data are collected by administrative unit and not by school district. Although 31 districts representing 78.5 percent of special education full-time equivalents (FTE) operate as administrative units, the remaining 145 districts are involved in collaborative efforts to provide special education services. The only information collected by school district in these 145 districts is the number of special education FTE. For these districts, expenditure and revenue data were apportioned from administrative units to school districts based on the percentage of the unit's FTE in any given district. Thus, in the majority of school districts, the special education data are estimates.
- FY 1992-93 data are used for this analysis. Since that time, both the school finance act and the funding provisions of the Exceptional Children's Educational Act have been rewritten. More so than the ECEA, school finance act funding changes could impact the figures presented in this section.

- We have used general fund revenue per pupil as the basis for computing the impact of prorating categorical programs. Not all districts account for revenue in the same manner, however. Thus, the impacts may be skewed by different accounting practices.

### **Proration of Categoricals by District**

Two approaches are taken in the district analysis of the impact of prorating categorical funding. The first considers only reimbursable costs, while the second takes into account all costs for a given program. The differences between total costs and reimbursable costs are discussed in the descriptions of each program's funding formula. For the two approaches, the unreimbursed cost per pupil is computed as a percentage of general fund revenue per pupil.

***Reimbursable Program Costs.*** Table III-1 illustrates the unreimbursed expenditures for categorical programs as a percentage of general fund revenue, on a per pupil basis, in FY 1992-93. To compute the percentages in this table, the categorical expenditures per pupil (column 8) are based solely on reimbursable costs as defined by the applicable law. The ELPA is not a cost-based program, thus total district expenditures for the program are indicated. The proportion that unreimbursed costs are of general fund revenue (column 15) ranges from a high of 7.9 percent in the Jackson-North Park district to a low of 0.8 percent in Ouray. The statewide average proportion is 4.4 percent per pupil. On a dollar basis, the range is from \$46 to \$443, with the same two districts at the high and low ends of the spectrum. The statewide average amount of unreimbursed categorical expenditures per pupil is \$201.

***Total Program Costs.*** Table III-2 presents the same information as Table III-1, except that the basis for computing unreimbursed expenditures per pupil is the total cost of the applicable program. For ELPA, the expenditures are no different than those contained in the preceding table. On the revenue side, the transportation and ELPA payments remain the same, but the special education reimbursement is increased by federal funding and other state funds that apply to special education programs (the three- and four-year-old preschool program and the per pupil operating revenue for students in self-contained programs, among others). Not surprisingly, the unreimbursed amounts and percentages increase from those in Table III-1, and the ranges increase as well. The percentage range in this case is from 15.2 percent, again in North Park, to 0.7 percent in Kit Carson-Bethune. The state average is 7.8 percent. Compared to a state average amount of \$383 per pupil, the range in unreimbursed per pupil expenditures is \$69 in Bethune to \$1,148 in Lincoln-Karval.

## **Public School Transportation**

School districts are eligible for reimbursement of a portion of the cost of transporting pupils between their residences and their schools. State aid is distributed using a formula that takes into account mileage and excess costs. A district's reimbursement entitlement is equal to:

- 38.87 cents for each mile traveled, and
- 33.87 percent of the difference between the district's current operating expenditures and the mileage allowance.

"Current operating expenditures" includes such items as motor fuel and oil, vehicle maintenance costs, equipment, facilities, driver employment costs, and insurance. Districts are not eligible for reimbursement for the cost of purchasing buses or for field trips. The amount of reimbursement to which a district is entitled is limited to 90 percent of district current operating expenditures.

To put this formula into perspective, total transportation expenditures reported by school districts in FY 1992-93 totalled \$90.4 million. Of that amount, \$86.9 million qualified under the definition of current operating expenditures. The difference between total transportation and current operating expenditures, \$3.5 million in this example, is absorbed by districts. These dollars are primarily spent for field and activity trips. The current operating expenditure amount of \$86.9 million consists of a portion reimbursed by the state and a local share amount. The state portion is computed using the mileage and excess cost formula described above; in FY 1992-93, it equalled \$44.3 million. The difference between current operating expenditures and the state, or reimbursable, portion — \$42.6 million — is funded by districts. The appropriation of \$32.6 million for FY 1992-93, however, was \$11.7 million shy of the state's \$44.3 million share, resulting in a proration of 73.5 percent. As illustrated by this example, the proration is applied only to a defined portion of total transportation costs (49 percent). Therefore, the state provided revenue for 73.5 percent of its share, which was equivalent to about 36.1 percent of total transportation costs. The figures in Table III-1 reflect the former, while the figures in Table III-2 are based on the latter set of numbers.

## **Exceptional Children's Educational Act**

The method for allocating state funding for special education was significantly revamped in 1994. The figures in Tables III-1 and III-2 do not reflect the 1994 changes but, rather, are based on the ECEA as it existed for FY 1992-93. At that time, an administrative unit was entitled to reimbursement for up to 80.0 percent of approved costs such as salaries, consultation and evaluation services, inservice training, specific equipment, certain tuition fees, and mileage expenses incurred by consultants. Similar to transportation, these are the expenditure amounts included in Table III-1.

As amended in 1994, ECEA no longer distributes state funds on a percentage-of-cost basis. Beginning in FY 1994-95, an administrative unit is entitled to a base amount of state funding equal to the amount of state funding received in the preceding budget year. Once the base amount of funding is determined for all districts, any remaining portion of the appropriation is distributed to units providing services to more special education children than during the preceding budget year. Each unit's share of this additional amount is based on its proportion of the total number of additional children in the state being provided with special education services.

### **English Language Proficiency Act**

As previously mentioned, state aid for ELPA is not allocated on a percentage-of-cost basis. In fact, in FY 1992-93 the state share prescribed by law would have generated \$8.1 million for school districts. According to school district figures, ELPA expenditures in the same year totalled \$5.5 million, or \$2.6 million less than the entitlement funding level. Because there is no statutory method for determining reimbursable costs for this program, the expenditure figure of \$5.5 million is used in both Tables III-1 and III-2.

ELPA provides financial assistance to districts with students whose dominant language is not English. Districts are required to identify, assess, and provide programs for students in the following classifications:

- (a) students speaking a language other than English who do not comprehend or speak English;
- (b) students comprehending or speaking some English but whose predominant language is not English; and
- (c) students comprehending and speaking English and one or more other language, whose dominant language is difficult to determine, and whose English language development and comprehension are at or below test (state or national) level.

ELPA funding is provided for up to two years for each participating student. Seventy-five percent of the annual ELPA allocation, up to \$400 per pupil or 20 percent of the state average per pupil operating revenue for the preceding year, whichever is greater, must be spent per student in categories (a) and (b). The remainder of the funding, up to \$200 per pupil or ten percent of the state average, whichever is greater, must be spent on students in category (c). Any moneys remaining after these provisions are met may be spent on students in category (c).

## SUMMARY OF FINDINGS

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- ◆ State law provides for both a state and local share of categorical program funding. The appropriation is insufficient to pay the state share so categorical support is prorated.
  
- ◆ The financial impact of the proration varies by district.
  
- ◆ Because of different accounting practices among districts, law changes, and different methods of administering programs, it is difficult to ensure that data are consistent across all school districts.

**Table III-1: Unreimbursed Per Pupil Expenditures for Categorical Programs as a Percent of Total General Fund and Transportation Fund Revenue Per Pupil**

**(Categorical Program Expenditures Based on the Reimbursable Cost of a Program)**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	1992-93			
													1992-93	1992-93		
COUNTY	DISTRICT	1992-93 FUND PUPIL	1992-93 GENERAL & TRANS FUND REVENUE (COL 2)	1992-93 REIMBUR'LE TRANSP EXPENDS	1992-93 ELPA EXPENDS	1992-93 ECEA REIMBUR'LE EXPENDS (COL 4 + (5 + 6)	1992-93 REIMBUR'LE EXPENDS PER PPL	1992-93 STATE TRANSP PAYMENT	1992-93 STATE ELPA PAYMENT	1992-93 STATE ECEA PAYMENT	1992-93 TOTAL CATEGOR'L REIMBURSE	1992-93 PAYMT PER PUPIL	1992-93 COL 8 - COL 13 PER PUPIL	1992-93 COL 14 PER PPL AS % OF TOTAL (COL 3)		
															1992-93	1992-93
ADAMS	MAPLETON	4,680.2	21,174,970	4,524	196,624	157,867	934,495	1,288,986	275	144,594	36,628	335,616	516,838	110	165	3.6%
ADAMS	NORTHGLENN	20,634.4	90,461,942	4,384	951,662	40,412	6,158,096	7,150,170	347	699,837	35,060	2,171,556	2,906,453	141	206	4.7%
ADAMS	COMMERCE CITY	5,712.8	26,352,264	4,613	259,560	122,718	1,577,843	1,960,121	343	190,878	122,718	537,689	851,283	149	194	4.2%
ADAMS	BRIGHTON	3,922.9	17,691,386	4,510	394,561	47,578	1,076,527	1,518,666	387	290,154	61,494	365,501	717,149	183	204	4.5%
ADAMS	BENNETT	840.3	3,240,459	3,856	78,294	0	132,220	210,515	251	57,578	0	47,486	105,062	125	125	3.3%
ADAMS	STRASBURG	392.0	1,778,624	4,537	60,684	0	82,081	142,764	364	44,628	0	29,479	74,104	189	175	3.9%
ADAMS	WESTMINSTER	10,490.0	45,868,002	4,373	514,016	50,844	2,947,253	3,512,113	335	377,999	51,825	1,055,868	1,485,692	142	193	4.4%
ALAMOSA	ALAMOSA	2,406.9	8,845,472	3,675	131,365	0	532,999	664,364	276	96,604	0	191,422	288,026	120	156	4.3%
ALAMOSA	SANGRE DECRISTO	281.4	1,604,131	5,701	56,273	0	39,246	95,520	339	41,382	0	14,095	55,477	197	142	2.5%
ARAPAHOE	ENGLEWOOD	4,128.0	17,408,748	4,217	129,740	0	881,963	1,011,703	245	95,409	0	316,750	412,159	100	145	3.4%
ARAPAHOE	SHERIDAN	1,630.8	7,136,898	4,376	83,698	24,660	447,527	555,885	341	61,550	6,574	160,725	228,849	140	201	4.6%
ARAPAHOE	CHERRY CREEK	29,569.0	157,462,908	5,325	2,149,938	518,009	8,258,526	10,928,473	370	1,581,029	93,749	2,645,335	4,320,113	146	223	4.2%
ARAPAHOE	LITTLETON	15,226.9	67,977,389	4,464	951,167	8,556	4,298,881	5,258,604	345	699,473	16,798	1,327,187	2,043,458	134	211	4.7%
ARAPAHOE	DEER TRAIL	161.0	1,093,944	6,795	20,612	0	9,777	30,389	189	15,158	0	3,511	18,669	116	73	1.1%
ARAPAHOE	AURORA	25,474.2	118,087,152	4,636	1,621,528	252,930	8,172,971	10,047,429	394	1,192,445	175,583	2,696,320	4,064,348	160	235	5.1%
ARAPAHOE	BYERS	351.7	1,709,720	4,861	38,018	0	27,470	65,488	186	27,958	0	9,866	37,823	108	79	1.6%
ARCHULETA	ARCHULETA	1,102.9	4,502,159	4,082	136,128	0	194,007	330,135	299	100,106	0	63,120	163,226	148	151	3.7%
	BACA WALSH	287.5	1,380,095	4,800	81,655	3,333	89,786	174,774	608	60,048	3,936	32,246	96,230	335	273	5.7%
	BACA PRITCHETT	78.0	607,413	7,787	24,668	0	38,305	62,973	807	18,141	0	13,757	31,898	409	398	5.1%
	BACA SPRINGFIELD	351.2	1,535,804	4,373	40,796	0	33,821	74,617	212	30,001	0	12,147	42,147	120	92	2.1%
	BACA VILAS	69.5	498,083	7,167	15,398	0	13,961	29,359	422	11,323	0	5,014	16,337	235	187	2.6%
	BACA CAMPO	72.3	534,579	7,394	36,059	0	8,925	44,983	622	26,517	0	3,205	29,722	411	211	2.5%
	BENT LAS ANIMAS	777.8	3,038,661	3,907	81,432	2,149	105,605	189,186	243	59,884	2,149	37,927	99,960	129	115	2.9%
	BENT MCCLAVE	180.8	1,163,734	6,437	36,913	48	21,324	58,285	322	27,145	48	7,658	34,852	193	130	2.0%
	BOULDER ST VRAIN	14,659.9	59,147,167	4,035	833,586	66,282	3,174,830	4,074,698	278	613,005	72,303	1,030,299	1,715,607	117	161	4.0%
	BOULDER BOULDER	21,588.5	108,472,109	5,025	1,981,810	1,373,634	6,880,812	10,236,256	474	1,457,390	143,545	2,017,356	3,618,291	168	207	6.1%
	CHAFFEE BUENA VISTA	826.5	3,420,050	4,138	88,086	0	11,218	159,303	193	64,777	0	20,396	85,472	103	89	2.2%

**Table III-1: Unreimbursed Per Pupil Expenditures for Categorical Programs as a Percent of Total General Fund and Transportation Fund Revenue Per Pupil**

**(Categorical Program Expenditures Based on the Reimbursable Cost of a Program)**

COUNTY	DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		1992-93 FUNDED PUPIL COUNT	1992-93 GENERAL & TRANS FUND REVENUE	1992-93 REVENUE (COL 2) PER PPL	1992-93 REIMBUR'LE TRANSPO EXPENDS	1992-93 ELPA EXPENDS	1992-93 ECEA REIMBUR'LE EXPENDS	1992-93 REIMBUR'LE (COL 4 + EXPENDS (5 + 6) PER PPL	1992-93 REIMBUR'LE EXPENDS PER PPL	1992-93 STATE TRANSPO PAYMENT	1992-93 STATE ELPA PAYMENT	1992-93 STATE ECEA PAYMENT	1992-93 TOTAL CATEGOR'L REIMBURSE	1992-93 PAYMT PER PUPIL	1992-93 COL 8 - COL 13 PER PUPIL	1992-93 COL 14 PER PPL AS % OF TOTAL (COL 3)
CHAFFEE	SALIDA	1,264.0	4,879,857	3,861	77,044	0	235,235	312,279	247	56,857	0	68,359	125,016	99	148	3.8%
CHEYENNE	KIT CARSON	131.7	1,496,978	11,367	65,831	979	7,225	74,035	562	48,411	979	2,595	51,985	395	167	1.5%
CHEYENNE	CHEYENNE R-5	349.0	1,608,511	4,609	81,315	392	56,070	137,776	395	59,798	392	20,137	80,328	230	165	3.6%
CLEAR CREEK	CLEAR CREEK	1,393.3	6,424,093	4,611	213,322	840	301,391	515,552	370	156,873	758	101,740	259,371	186	184	4.0%
CONEJOS	NORTH CONEJOS	1,132.2	4,541,215	4,011	89,854	5,371	157,378	252,603	223	66,077	4,834	56,521	127,432	113	111	2.8%
CONEJOS	SANFORD	303.4	1,449,857	4,778	20,837	3,347	27,321	51,504	170	15,323	1,627	9,812	26,762	88	82	1.7%
CONEJOS	SOUTH CONEJOS	434.0	1,582,961	3,847	42,294	0	76,577	118,871	274	31,103	0	27,502	58,605	135	139	3.8%
COSTILLA	CENTENNIAL	340.5	1,675,839	4,922	88,477	1,408	105,459	175,344	515	50,357	6,979	37,875	95,210	280	235	4.8%
COSTILLA	SIERRA GRANDE	315.5	1,558,060	4,938	55,411	0	19,227	74,638	237	40,748	0	6,905	47,853	151	86	1.7%
CROWLEY	CROWLEY	555.8	2,125,582	3,824	74,871	507	51,435	126,813	228	55,059	507	18,473	74,038	133	95	2.5%
CUSTER	WESTCLIFFE	339.0	1,633,607	4,819	57,021	0	19,672	76,693	226	41,932	0	6,646	48,578	143	83	1.7%
DELTA	DELTA	3,914.5	16,383,435	4,185	339,044	12,263	798,008	1,149,315	294	249,327	11,939	286,597	547,863	140	154	3.7%
DENVER	DENVER	56,155.4	295,486,983	5,262	6,431,210	717,201	18,679,445	25,827,856	480	4,729,406	787,669	5,822,545	11,339,620	202	258	4.9%
DOLORES	DOLORES	295.8	1,509,048	5,102	60,108	0	48,624	108,731	368	44,202	0	17,463	61,665	208	159	3.1%
DOUGLAS	DOUGLAS	14,233.0	64,826,635	4,555	1,589,249	55,852	3,227,454	4,872,555	342	1,168,707	9,063	1,075,002	2,252,772	158	184	4.0%
EAGLE	EAGLE	2,749.8	15,641,052	5,888	531,941	241,609	482,074	1,255,624	457	391,180	0	140,090	531,270	193	263	4.6%
ELBERT	ELIZABETH	1,415.9	5,112,945	3,611	166,819	0	338,148	504,967	357	122,676	0	121,443	244,119	172	184	5.1%
ELBERT	KIOWA	207.8	1,138,810	5,460	27,737	0	10,789	38,526	185	20,397	0	3,464	23,861	115	71	1.3%
ELBERT	BIG SANDY	287.2	1,385,742	4,825	72,314	0	40,878	113,193	394	53,179	0	13,125	66,304	231	163	3.4%
ELBERT	ELBERT	150.3	807,470	5,372	20,983	0	8,034	29,017	193	15,431	0	2,580	18,010	120	73	1.4%
ELBERT	AGATE	55.0	566,600	10,302	21,046	0	1,919	22,964	418	15,477	0	689	16,166	294	124	1.2%
EL PASO	CALHAN	331.8	1,528,960	4,608	61,766	0	68,586	130,351	393	45,421	0	22,022	67,443	203	190	4.1%
EL PASO	HARRISON	9,818.3	41,013,301	4,177	402,790	30,571	2,524,423	2,957,784	301	296,205	27,513	848,657	1,172,375	119	182	4.4%
EL PASO	WIDEFIELD	7,157.4	30,432,900	4,252	240,504	28,561	1,692,603	1,961,668	274	176,863	8,923	512,015	697,801	97	177	4.2%
EL PASO	FOUNTAIN	3,680.7	16,064,708	4,365	257,843	24,726	1,125,010	1,407,579	382	189,614	6,319	398,652	594,585	162	221	5.1%
EL PASO	COLORADO SPRINGS	29,473.8	115,202,867	3,908	1,229,583	127,874	7,180,866	8,538,323	290	904,215	47,964	2,578,945	3,531,124	120	170	4.3%
EL PASO	CHEYENNE MOUNTAIN	2,473.3	10,430,554	4,217	32,453	1,249	372,951	406,653	164	23,866	1,249	119,749	144,863	59	106	2.5%

**Table III-1: Unreimbursed Per Pupil Expenditures for Categorical Programs as a Percent of Total General Fund and Transportation Fund Revenue Per Pupil**

**(Categorical Program Expenditures Based on the Reimbursable Cost of a Program)**

COUNTY	DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		1992-93 FUNDED PUPIL COUNT	1992-93 GENERAL & TRANS FUND REVENUE (COL 2)	1992-93 REVENUE PER PPL	1992-93 REIMBUR'LE TRANSPO EXPENDS	1992-93 ELPA EXPENDS	1992-93 ECEA REIMBUR'LE EXPENDS	1992-93 REIMBUR'LE (COL 4 + 5 + 6)	1992-93 REIMBUR'LE EXPENDS PER PPL	1992-93 STATE TRANSPO PAYMENT	1992-93 STATE ELPA PAYMENT	1992-93 STATE ECEA PAYMENT	1992-93 TOTAL CATEGOR'L REIMBURSE	1992-93 PER PUPIL	1992-93 COL 8 - COL 13	1992-93 PER PPL AS % OF TOTAL (COL 3)
EL PASO	MANITOU SPRINGS	1,183.4	4,595,028	3,883	71,097	0	286,857	357,953	302	52,283	0	92,105	144,388	122	180	4.6%
EL PASO	ACADEMY	11,222.0	48,905,355	4,358	1,057,960	39,206	2,381,802	3,478,968	310	778,006	0	673,294	1,451,300	129	181	4.1%
EL PASO	ELLCOTT	474.8	2,050,532	4,319	75,781	0	80,470	136,251	287	55,728	0	19,416	75,144	158	129	3.0%
EL PASO	PEYTON	310.0	1,399,612	4,515	62,781	0	40,251	103,012	332	46,153	0	12,924	59,077	191	142	3.1%
EL PASO	HANOVER	73.5	569,342	7,746	28,690	0	8,489	37,179	506	21,098	0	2,728	23,824	324	182	2.3%
EL PASO	LEWIS-PALMER	2,532.5	9,723,213	3,839	316,593	0	440,604	757,196	299	232,817	0	141,471	374,288	148	151	3.9%
EL PASO	FALCON	2,470.8	9,691,253	3,922	377,576	0	726,400	1,103,976	447	277,663	0	233,236	510,899	207	240	6.1%
EL PASO	EDISON	30.7	289,310	9,424	17,349	0	4,510	21,858	712	12,758	0	1,448	14,206	463	249	2.6%
EL PASO	MIAMI-YODER	166.7	1,246,630	7,478	62,246	153	27,140	89,539	537	45,775	153	8,714	54,642	328	209	2.8%
FREMONT	CANON CITY	3,388.0	13,844,214	4,086	156,993	7,543	754,444	918,980	271	115,450	1,250	270,952	387,652	114	157	3.8%
FREMONT	FLORENCE	1,582.3	6,060,335	3,830	121,072	0	342,343	463,415	293	89,034	0	115,657	204,691	129	164	4.3%
FREMONT	COTOPAXI	246.9	1,263,560	5,118	95,413	0	20,647	116,060	470	70,185	0	6,975	77,141	312	158	3.1%
GARFIELD	ROARING FORK	3,714.3	16,840,974	4,534	320,784	163,186	819,593	1,303,563	351	235,899	25,021	238,172	499,092	134	217	4.8%
GARFIELD	RIFLE	2,497.4	9,222,858	3,693	262,277	24,384	724,225	1,010,888	405	192,874	7,721	210,458	411,054	165	240	6.5%
GARFIELD	PARACHUTE	386.2	2,175,402	5,633	37,808	0	102,458	140,266	363	27,603	0	29,774	57,577	149	214	3.8%
	GILPIN GILPIN	325.4	1,588,660	4,882	27,298	0	122,085	149,383	459	20,074	0	41,212	61,286	188	271	5.5%
GRAND	WEST GRAND	518.4	2,592,152	5,000	86,949	0	188,765	275,714	532	63,941	0	55,729	119,669	231	301	6.0%
GRAND	EAST GRAND	1,018.4	5,452,088	5,354	73,296	0	222,625	295,922	291	53,901	0	65,725	119,626	117	173	3.2%
GUNNISON	GUNNISON	1,459.3	6,564,212	4,498	198,223	196	284,399	482,818	331	145,770	196	93,717	239,683	164	167	3.7%
HINSDALE	HINSDALE	58.0	556,766	9,599	48,247	0	1,754	50,000	862	35,480	0	578	36,058	622	240	2.5%
HUERFANO	HUERFANO	718.0	2,663,232	3,709	86,372	0	158,218	244,590	341	63,516	0	53,452	116,969	163	178	4.8%
HUERFANO	LA VETA	246.3	1,185,142	4,812	17,758	0	39,148	56,906	231	13,059	0	13,226	26,285	107	124	2.6%
JACKSON	NORTH PARK	300.0	1,682,963	5,610	65,022	3,291	163,968	232,281	774	47,816	3,291	48,408	99,515	332	443	7.9%
JEFFERSON	JEFFERSON	76,024.7	344,443,372	4,531	4,739,523	773,550	23,422,656	28,935,729	381	3,485,367	150,196	7,965,872	11,601,435	153	228	5.0%
	KIOWA EADS	297.5	1,178,422	3,961	59,468	0	53,709	113,177	360	43,732	0	19,289	63,021	212	169	4.3%
	KIOWA PLAINVIEW	100.4	901,833	8,982	45,001	0	5,373	50,374	502	33,093	0	1,930	35,023	349	153	1.7%
KIT CARSON	ARRIBA-FLAGLER	237.9	1,404,275	5,903	69,336	0	27,550	96,686	407	50,988	0	9,894	60,883	256	151	2.6%



**Table III-1: Unreimbursed Per Pupil Expenditures for Categorical Programs as a Percent of Total General Fund and Transportation Fund Revenue Per Pupil**

**(Categorical Program Expenditures Based on the Reimbursable Cost of a Program)**

COUNTY	DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		1992-93 FUNDED PUPIL	1992-93 GENERAL & TRANS FUND REVENUE	1992-93 REVENUE (COL 2) PER PPL	1992-93 REIMBUR'LE TRANSPO EXPENDS	1992-93 ELPA EXPENDS	1992-93 ECEA REIMBUR'LE EXPENDS	1992-93 REIMBUR'LE (COL 4 + 5 + 6) EXPENDS PER PPL	1992-93 STATE TRANSPO PAYMENT	1992-93 STATE ELPA PAYMENT	1992-93 STATE ECEA PAYMENT	1992-93 TOTAL CATEGOR'L REIMBURSE	1992-93 PAYMT PER PUPIL	1992-93 COL 8 - COL 13 PER PUPIL	1992-93 COL 14 PER PPL AS % OF TOTAL (COL 3)	
KIT CARSON	HI PLAINS	111.8	863,545	7,724	49,065	0	17,652	66,717	597	36,081	0	6,340	42,421	379	217	2.8%
KIT CARSON	STRATTON	260.0	1,289,147	4,958	65,908	435	55,389	121,733	488	48,468	392	19,893	68,753	264	204	4.1%
KIT CARSON	BETHUNE	85.0	600,322	7,063	18,631	0	586	19,217	226	13,701	0	210	13,911	164	62	0.9%
KIT CARSON	BURLINGTON	837.3	3,345,162	3,995	103,096	8,198	153,694	264,988	316	75,815	6,916	55,198	137,929	185	152	3.8%
	LAKE LAKE	1,140.2	4,818,867	4,226	67,525	0	189,097	236,822	208	49,657	0	49,139	98,796	87	121	2.9%
LA PLATA	DURANGO	4,064.4	17,990,837	4,426	450,425	309	856,254	1,306,988	322	331,235	309	278,580	610,124	150	171	3.9%
LA PLATA	BAYFIELD	801.3	3,518,900	4,391	81,219	0	105,477	186,696	233	59,727	0	34,317	94,044	117	116	2.6%
LA PLATA	IGNACIO	940.8	4,852,778	5,158	203,282	3,007	143,218	349,507	371	149,490	7,877	46,596	203,963	217	155	3.0%
LARIMER	POUDRE	18,677.9	81,041,690	4,339	1,245,017	58,516	4,688,445	5,891,978	321	915,565	65,638	1,462,988	2,444,191	131	190	4.4%
LARIMER	THOMPSON	11,824.5	44,458,737	3,760	683,324	6,726	2,683,725	3,373,775	285	502,505	7,861	862,112	1,372,478	116	169	4.5%
LARIMER	ESTES PRK	1,158.2	5,489,702	4,723	108,906	1,185	247,934	358,025	309	60,088	672	89,043	169,803	147	163	3.4%
LAS ANIMAS	TRINIDAD	1,584.9	5,818,251	3,671	80,593	0	379,266	459,859	290	59,267	0	128,131	187,398	116	172	4.7%
LAS ANIMAS	PRIMERO	166.7	1,041,987	6,251	32,612	0	22,056	54,667	328	23,982	0	7,451	31,433	189	139	2.2%
LAS ANIMAS	HOEHNE	274.8	1,376,905	5,018	52,001	0	42,486	94,487	344	38,241	0	14,353	52,594	191	152	3.0%
LAS ANIMAS	AGUILAR	156.9	1,020,797	6,506	22,074	0	22,677	44,750	285	16,232	0	7,661	23,894	152	133	2.0%
LAS ANIMAS	BRANSON	36.0	457,683	12,713	29,001	0	0	29,001	806	21,327	0	0	21,327	582	213	1.7%
LAS ANIMAS	KIM	66.0	596,417	9,037	74,393	0	14,662	89,055	1,349	54,707	0	5,266	59,973	909	441	4.9%
LINCOLN	GENOA-HUGO	236.3	1,317,996	5,578	53,336	0	31,339	84,675	358	39,222	0	11,255	50,477	214	145	2.6%
LINCOLN	LIMON	480.8	1,828,749	3,804	53,313	0	52,451	105,764	220	39,205	0	18,837	58,043	121	99	2.6%
LINCOLN	KARVAL	81.5	657,867	8,072	47,337	0	5,579	52,916	649	34,811	0	2,004	36,815	452	198	2.4%
LOGAN	VALLEY	2,647.9	10,762,049	4,064	250,612	6,845	529,794	787,251	297	184,296	5,962	189,341	379,599	143	154	3.8%
LOGAN	FRENCHMAN	179.8	1,083,732	6,027	44,813	0	37,736	82,549	459	32,955	0	12,264	45,219	251	208	3.4%
LOGAN	BUFFALO	236.0	1,297,693	5,499	36,911	0	32,575	69,486	294	27,144	0	10,587	37,731	180	135	2.4%
LOGAN	PLATEAU	135.5	921,028	6,797	40,921	0	11,373	52,294	386	30,092	0	3,696	33,788	249	137	2.0%
MESA	DEBEQUE	108.0	727,395	6,735	12,173	0	11,231	23,404	217	8,952	0	3,688	12,640	117	100	1.5%
MESA	PLATEAU	506.5	2,054,351	4,056	54,399	46	87,090	141,537	279	40,004	48	28,602	68,653	136	144	3.5%
MESA	MESA VALLEY	16,685.0	67,673,881	4,056	1,263,712	0	4,329,485	5,593,205	335	929,313	0	1,421,854	2,351,167	141	194	4.6%

**Table III-1: Unreimbursed Per Pupil Expenditures for Categorical Programs as a Percent of Total General Fund and Transportation Fund Revenue Per Pupil**

**(Categorical Program Expenditures Based on the Reimbursable Cost of a Program)**

COUNTY	DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		1992-93 FUNDED PUPIL COUNT	1992-93 GENERAL & TRANS FUND REVENUE	1992-93 REVENUE (COL 2) PER PPL	1992-93 REIMBUR'LE TRANSPO EXPENDS	1992-93 ELPA EXPENDS	1992-93 ECEA REIMBUR'LE EXPENDS	1992-93 REIMBUR'LE (COL 4 + (5 + 6) PER PPL	1992-93 REIMBUR'LE EXPENDS PER PPL	1992-93 STATE TRANSPO PAYMENT	1992-93 STATE ELPA PAYMENT	1992-93 STATE ECEA PAYMENT	1992-93 TOTAL CATEGOR'L REIMBURSE	1992-93 PAYMT PER PUPIL	1992-93 COL 8 - COL 13 PER PUPIL	1992-93 COL 14 AS % OF TOTAL (COL 3)
MINERAL	CREEDE	88.7	975,845	11,002	40,227	0	6,713	46,940	529	29,582	0	2,411	31,993	361	169	1.5%
MOFFAT	MOFFAT	2,609.4	11,977,938	4,590	239,894	9,711	474,809	724,214	278	176,414	1,671	170,452	348,537	134	144	3.1%
MONTEZUMA	MONTEZUMA	3,188.9	14,370,347	4,509	331,235	50,328	498,293	879,856	276	243,585	63,529	178,858	486,072	153	124	2.7%
MONTEZUMA	DOLORES	538.4	2,506,440	4,673	51,355	0	84,015	135,370	252	37,765	0	30,173	67,939	127	126	2.7%
MONTEZUMA	MANCOS	471.0	2,337,328	4,962	63,856	712	80,524	145,092	308	46,958	712	28,920	76,590	163	145	2.9%
MONTROSE	MONTROSE	4,474.0	16,679,475	3,728	338,958	36,045	1,076,894	1,451,895	325	249,263	17,948	301,491	568,701	127	197	5.3%
MONTROSE	WEST END	417.5	2,017,464	4,832	34,828	0	138,037	172,865	414	25,812	0	49,575	75,187	180	234	4.8%
MORGAN	BRUSH	1,291.3	5,532,169	4,284	155,959	0	292,906	448,865	348	114,690	0	100,848	215,537	167	181	4.2%
MORGAN	FT MORGAN	2,761.9	9,437,422	3,417	184,670	0	652,920	837,590	303	135,803	0	224,800	360,604	131	173	5.1%
MORGAN	WELDON	131.5	1,072,529	8,156	24,692	0	18,113	42,805	328	18,158	0	6,236	24,394	186	140	1.7%
MORGAN	WIGGINS	448.9	1,983,649	4,419	74,925	0	54,821	129,746	289	55,099	0	18,875	73,973	165	124	2.8%
OTERO	EAST OTERO	1,907.8	6,665,394	3,494	57,322	14,671	343,766	415,759	218	42,154	8,020	123,461	173,634	91	127	3.6%
OTERO	ROCKY FORD	1,193.8	4,481,453	3,754	41,093	10,965	219,173	271,230	227	30,219	5,056	78,714	113,989	95	132	3.5%
OTERO	MANZANOLA	247.1	1,158,760	4,689	18,727	0	24,484	43,211	175	13,772	0	8,793	22,565	91	84	1.8%
OTERO	FOWLER	433.8	1,918,812	4,423	76,326	0	48,052	124,378	287	56,129	0	17,258	73,386	169	118	2.7%
OTERO	CHERAW	193.5	1,259,790	6,511	21,973	0	13,081	35,054	181	16,159	0	4,698	20,856	108	73	1.1%
OTERO	SWINK	347.0	1,378,167	3,972	17,232	0	37,615	54,848	158	12,672	0	13,509	26,182	75	83	2.1%
OURAY	OURAY	192.3	1,131,019	5,882	7,104	0	9,713	16,817	87	5,224	0	2,719	7,944	41	46	0.8%
OURAY	RIDGWAY	218.7	1,210,584	5,535	34,806	0	38,463	73,269	335	25,596	0	10,768	36,364	166	169	3.0%
PARK	PLATTE CANYON	1,175.5	5,414,380	4,606	190,105	0	204,899	395,004	336	139,800	0	73,588	213,388	182	155	3.4%
PARK	PARK	388.4	2,588,405	6,664	167,184	341	50,841	218,365	562	122,944	196	14,774	137,914	355	207	3.1%
PHILLIPS	HOLYOKE	574.0	2,303,667	4,013	71,552	2,154	91,189	164,895	287	52,618	2,154	29,636	84,408	147	140	3.5%
PHILLIPS	HAXTUN	290.5	1,424,751	4,904	66,461	0	67,286	133,747	460	48,874	0	21,867	70,742	244	217	4.4%
PITKIN	ASPEN	1,041.5	7,027,729	6,748	107,018	29,377	125,890	262,285	252	78,699	3,566	36,583	118,849	114	133	2.0%
PROWERS	GRANADA	240.4	1,067,861	4,442	24,222	0	16,049	40,271	168	17,813	0	5,764	23,576	98	69	1.6%
PROWERS	LAMAR	1,998.4	7,730,632	3,868	104,197	23,473	340,790	468,460	234	76,625	10,947	122,391	209,963	105	129	3.3%
PROWERS	HOLLY	313.0	1,420,929	4,540	52,450	2,866	43,523	98,839	316	38,571	2,966	15,631	57,068	182	133	2.9%

**Table III-1: Unreimbursed Per Pupil Expenditures for Categorical Programs as a Percent of Total General Fund and Transportation Fund Revenue Per Pupil**

**(Categorical Program Expenditures Based on the Reimbursable Cost of a Program)**

COUNTY	DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		1992-93 FUNDED PUPIL COUNT	1992-93 GENERAL & TRANS FUND REVENUE	1992-93 REVENUE (COL 2) PER PPL	1992-93 REIMBUR'LE TRANSPO EXPENDS	1992-93 ELPA EXPENDS	1992-93 ECEA REIMBUR'LE EXPENDS	1992-93 REIMBUR'LE (COL 4 + EXPENDS (5 + 6) PER PPL	1992-93 REIMBUR'LE EXPENDS PER PPL	1992-93 STATE TRANSPO PAYMENT	1992-93 STATE ELPA PAYMENT	1992-93 STATE ECEA PAYMENT	1992-93 TOTAL CATEGOR'L REIMBURSE	1992-93 PER PUPIL	1992-93 COL 8 - COL 13 PER PUPIL	1992-93 COL 14 AS % OF TOTAL (COL 3)
PROWERS	WILEY	310.9	1,310,130	4,214	27,622	0	17,107	44,729	144	20,313	0	6,144	26,457	85	59	1.4%
PUEBLO	PUEBLO CITY	17,452.0	88,901,852	3,948	315,356	61,559	3,782,927	4,159,842	238	231,908	60,141	1,331,883	1,623,932	93	145	3.7%
PUEBLO	PUEBLO RURAL	4,086.9	16,899,141	4,135	569,608	0	634,061	1,203,669	295	418,881	0	227,717	646,598	158	136	3.3%
RIO BLANCO	MEEKER	743.0	3,131,648	4,215	78,840	0	162,359	241,199	325	57,978	0	56,813	114,791	154	170	4.0%
RIO BLANCO	RANGELY	610.3	4,642,505	7,607	78,431	0	139,787	218,218	358	57,677	0	48,915	106,592	175	183	2.4%
RIO GRANDE	DEL NORTE	653.8	2,886,413	4,109	87,266	299	155,696	223,261	341	49,466	299	55,917	105,682	162	180	4.4%
RIO GRANDE	MONTE VISTA	1,343.9	5,381,164	4,004	91,372	10,147	258,002	359,521	288	67,193	11,744	92,659	171,597	128	140	3.5%
RIO GRANDE	SARGENT	446.7	2,070,255	4,635	57,232	3,644	81,254	142,129	318	42,087	3,644	29,182	74,913	168	150	3.2%
ROUTT	HAYDEN	487.3	2,755,466	5,655	63,620	0	169,767	233,388	479	46,785	0	50,120	98,905	199	280	5.0%
ROUTT	STEAMBOAT SPRINGS	1,826.9	8,646,918	5,315	154,724	0	248,597	403,321	248	113,781	0	73,393	187,174	115	133	2.5%
ROUTT	SOUTH ROUTT	340.0	1,976,946	5,815	62,263	0	118,582	180,845	532	45,787	0	35,009	80,796	238	294	5.1%
SAGUACHE	MTN VALLEY	199.4	1,071,777	5,375	41,457	0	5,484	46,941	235	30,487	0	1,969	32,456	163	73	1.4%
SAGUACHE	MOFFAT	97.0	837,975	8,639	24,237	0	4,782	29,019	299	17,823	0	1,718	19,541	201	98	1.1%
SAGUACHE	CENTER	641.4	2,493,901	3,888	50,330	9,080	132,991	192,402	300	37,012	13,481	47,763	98,256	153	147	3.8%
SAN JUAN	SILVERTON	107.4	668,130	6,221	0	0	8,489	8,489	79	0	0	2,765	2,765	26	53	0.9%
SAN MIGUEL	TELLURIDE	328.5	2,212,907	6,738	23,511	0	57,421	80,932	246	17,290	0	20,622	37,912	115	131	1.9%
SAN MIGUEL	NORWOOD	301.3	1,510,521	5,013	32,441	0	47,624	80,064	266	23,856	0	17,104	40,960	136	130	2.6%
SEDGWICK	JULESBURG	334.5	1,528,099	4,588	39,370	0	40,380	79,750	238	28,952	0	13,123	42,075	126	113	2.5%
SEDGWICK	PLATTE VLY	167.0	1,098,264	6,576	31,856	0	15,392	47,048	282	23,279	0	5,002	28,281	169	112	1.7%
SUMMIT	SUMMIT	1,671.3	11,053,570	6,614	198,835	7,427	398,977	605,238	362	146,220	2,172	115,942	264,334	158	204	3.1%
TELLER	CRIPPLE CREEK	336.3	2,209,870	6,571	58,531	0	97,719	156,251	465	43,043	0	31,376	74,419	221	243	3.7%
TELLER	WOODLAND PARK	2,277.2	9,304,391	4,086	210,109	0	441,320	651,430	286	154,511	0	141,701	296,212	130	156	3.8%
WASHINGTON	AKRON	429.3	1,776,989	4,139	85,394	0	91,189	176,582	411	62,797	0	29,636	92,433	215	196	4.7%
WASHINGTON	ARICKAREE	139.0	971,637	6,990	72,157	0	20,405	92,562	666	53,063	0	6,632	59,695	429	236	3.4%
WASHINGTON	OTIS	184.4	1,108,554	6,012	41,242	0	26,441	67,683	367	30,329	0	8,593	38,922	211	156	2.6%
WASHINGTON	LONE STAR	61.5	507,304	8,249	30,044	0	20,060	50,104	815	22,094	0	6,519	28,613	465	349	4.2%
WASHINGTON	WOODLIN	124.3	1,187,877	9,557	60,544	0	1,196	61,740	497	44,523	0	430	44,953	362	135	1.4%

**Table III-1: Unreimbursed Per Pupil Expenditures for Categorical Programs as a Percent of Total General Fund and Transportation Fund Revenue Per Pupil**

**(Categorical Program Expenditures Based on the Reimbursable Cost of a Program)**

COUNTY	DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		1992-93 FUNDED PUPIL COUNT	1992-93 GENERAL & TRANS FUND REVENUE (COL 2)	1992-93 REVENUE PER PPL (COL 2)	1992-93 REIMBUR'LE TRANSPO EXPENDS	1992-93 ELPA EXPENDS	1992-93 ECEA REIMBUR'LE EXPENDS	1992-93 REIMBUR'LE (COL 4 + EXPENDS (5 + 6)	1992-93 REIMBUR'LE EXPENDS PER PPL	1992-93 STATE TRANSPO PAYMENT	1992-93 STATE ELPA PAYMENT	1992-93 STATE ECEA PAYMENT	1992-93 TOTAL CATEGOR'L REIMBURSE	1992-93 PER PUPIL	1992-93 COL 8 - COL 13 PER PUPIL	1992-93 COL 14 PER PPL AS % OF TOTAL (COL 3)
WELD	GILCREST	1,662.0	7,770,353	4,675	158,123	0	221,132	379,255	228	118,281	0	76,642	192,923	116	112	2.4%
WELD	EATON	1,172.3	4,589,430	3,915	95,342	0	112,109	207,451	177	70,113	0	38,856	108,969	93	84	2.1%
WELD	KEENESBURG	1,173.2	4,831,923	4,119	247,347	0	213,788	461,135	393	181,895	0	74,097	255,992	218	175	4.2%
WELD	WINDSOR	1,746.5	7,019,576	4,019	73,717	0	318,722	392,439	225	54,210	0	109,254	163,464	94	131	3.3%
WELD	JOHNSTOWN	1,161.0	4,587,681	3,951	70,842	0	208,403	279,244	241	52,096	0	72,230	124,326	107	133	3.4%
WELD	GREELEY	11,679.7	45,371,065	3,885	541,430	120,888	2,941,780	3,604,098	309	398,159	135,480	962,705	1,496,344	128	180	4.6%
WELD	PLATTE VLY	902.8	3,827,015	4,239	98,592	0	289,288	387,880	430	72,503	0	100,264	172,767	191	238	5.6%
WELD	FORT LUPTON	2,180.3	8,859,633	4,101	188,506	35,570	363,074	567,150	263	123,917	35,570	125,837	285,324	132	130	3.2%
WELD	AULT-HGHLND	794.7	3,309,194	4,164	94,390	0	201,801	295,991	372	69,413	0	69,873	139,286	175	197	4.7%
WELD	BRIGGS DALE	68.8	572,161	8,316	26,844	0	3,286	29,930	435	18,594	0	1,131	20,725	301	134	1.6%
WELD	PRAIRIE	103.0	904,746	8,784	53,229	0	7,289	60,518	588	39,144	0	2,509	41,653	404	183	2.1%
WELD	GROVER	85.5	690,407	8,075	40,028	0	10,393	50,421	590	29,436	0	3,578	33,014	386	204	2.5%
YUMA	WEST YUMA	927.9	4,298,059	4,632	138,278	2,908	191,473	332,658	359	101,687	2,697	62,227	166,611	180	179	3.9%
YUMA	EAST YUMA	897.5	4,238,802	4,723	187,900	647	221,700	410,247	457	138,179	647	72,051	210,876	235	222	4.7%
**STATE	TOTAL**	567,138.5	2,559,567,342	4,513	44,280,352	5,451,360	147,563,740	197,305,452	348	32,570,397	2,405,168	48,589,983	83,565,548	147	201	4.4%

NOTE: Special education expenditures and revenues are accounted for on an administrative unit basis. An administrative unit may be a single district, but in most instances it is a BOCES. Special education expenditure and revenue data for multi-district administrative units were apportioned among the districts in the unit based on the percentage of pupils in the district. This is the only methodology available for disaggregating costs and revenue, but it may not represent actual district experience.

SOURCE: Data provided by the Colorado Department of Education.

**Table III-2: Unreimbursed Per Pupil Expenditures for Categorical Programs as a Percent of Total General Fund and Transportation Fund Revenue Per Pupil**

**(Categorical Program Expenditures Based on the Total Cost of a Program and Not Simply the Reimbursable Portion)**

COUNTY	DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		1992-93 FUNDED PUPIL COUNT	1992-93 GENERAL & TRANS FUND REVENUE	1992-93 REVENUE (COLUMN 2) PER PUPIL	1992-93 (GENERAL & TRANSP) EXPENDS - TRANSFERS	1992-93 ELPA EXPENDS	1992-93 SPECIAL EDUCATION EXPENDS	1992-93 CATEGOR'L EXPENDS (COL 4 + (5 + 6))	1992-93 CATEGOR EXPENDS PER PPL	1992-93 STATE TRANSP PAYMENT	1992-93 STATE ELPA PAYMENT	1992-93 FEDERAL EDUCATION PAYMENT	1992-93 STATE & SPECIAL CATEGOR'L REIMBURSE	1992-93 PER PAYMT PUPIL	1992-93 COL 8 - PER PPL COL 13	1992-93 COL 14 AS % OF TOTAL (COL 3)
ADAMS	NORTHGLENN	20,634.4	102,637,733	4,974	1,946,171	40,412	9,979,872	11,966,455	580	699,837	35,060	4,777,493	5,512,390	267	313	6.3%
ADAMS	COMMERCE CITY	5,712.8	27,349,441	4,787	607,806	122,718	2,997,455	3,727,979	653	190,876	122,718	1,140,362	1,453,956	255	398	8.3%
ADAMS	BRIGHTON	3,922.9	18,670,042	4,759	811,823	47,578	1,770,814	2,630,215	870	290,154	61,494	740,459	1,092,107	278	392	8.2%
ADAMS	BENNETT	840.3	3,830,968	4,559	139,687	0	266,538	406,225	483	57,576	0	111,469	169,045	201	282	6.2%
ADAMS	STRASBURG	392.0	2,053,490	5,238	95,723	0	165,464	281,187	666	44,626	0	89,198	113,824	290	376	7.2%
ADAMS	WESTMINSTER	10,490.0	50,133,423	4,779	1,120,510	50,844	5,027,485	8,198,839	591	377,999	51,825	1,897,057	2,326,881	222	369	7.7%
ALAMOSA	ALAMOSA	2,406.9	10,347,000	4,299	337,872	0	927,348	1,265,220	528	98,604	0	426,078	522,682	217	309	7.2%
ALAMOSA	SANGRE DECRISTO	281.4	1,813,539	6,445	84,017	0	68,284	152,301	541	41,382	0	31,374	72,756	259	283	4.4%
ARAPAHOE	ENGLEWOOD	4,128.0	19,737,395	4,781	300,528	0	1,564,394	1,864,922	452	95,409	0	716,353	811,762	197	255	5.3%
ARAPAHOE	SHERIDAN	1,630.8	7,759,484	4,758	209,825	24,660	833,201	1,067,686	655	61,550	6,574	484,891	553,015	339	316	6.6%
ARAPAHOE	CHERRY CREEK	29,569.0	169,717,524	5,740	4,423,585	518,009	14,840,690	19,782,284	669	1,581,029	93,749	5,473,952	7,148,730	242	427	7.4%
ARAPAHOE	LITTLETON	15,226.9	74,478,828	4,891	1,732,675	8,556	7,327,501	9,068,732	596	699,473	18,798	2,648,631	3,364,902	221	375	7.7%
ARAPAHOE	DEER TRAIL	161.0	1,383,048	8,590	33,620	0	19,710	53,330	331	15,158	0	8,243	23,401	145	186	2.2%
ARAPAHOE	AURORA	25,474.2	123,364,823	4,843	3,187,807	252,930	13,916,255	17,356,992	681	1,192,445	175,583	5,973,242	7,341,270	288	383	8.1%
ARAPAHOE	BYERS	351.7	1,953,961	5,556	78,813	0	55,376	134,189	382	27,958	0	23,159	51,116	145	236	4.3%
ARCHULETA	ARCHULETA	1,102.9	5,301,137	4,807	256,094	0	346,718	602,812	547	100,106	0	151,042	251,148	228	319	6.6%
BACA	WALSH	287.5	1,777,597	6,183	123,584	3,333	185,773	312,690	1,068	60,048	3,936	85,523	159,507	555	533	8.6%
BACA	PRITCHETT	78.0	778,743	9,984	43,143	0	79,255	122,398	1,569	18,141	0	40,752	58,893	755	814	8.2%
BACA	SPRINGFIELD	351.2	1,905,246	5,425	98,398	0	69,978	188,376	479	30,001	0	35,982	65,983	188	292	5.4%
BACA	VILAS	69.5	618,564	8,900	12,158	0	28,887	41,045	591	11,323	0	14,854	26,177	377	214	2.4%
BACA	CAMPO	72.3	674,663	9,331	49,440	0	18,466	67,906	939	26,517	0	9,495	36,012	498	441	4.7%
BENT	LAS ANIMAS	777.6	3,476,898	4,470	182,171	2,149	224,562	408,882	526	59,884	2,149	121,058	183,091	235	290	6.5%
BENT	MCCLAVE	180.6	1,430,464	7,912	55,949	48	44,121	100,118	554	27,145	48	22,686	49,880	276	278	3.5%
BOULDER	ST VRAIN	14,659.9	63,666,984	4,343	1,502,782	66,282	5,375,098	6,944,162	474	613,005	72,303	2,059,628	2,744,936	187	286	6.6%
BOULDER	BOULDER	21,588.5	117,240,538	5,431	4,114,410	1,373,634	12,072,733	17,560,777	813	1,457,390	143,545	4,481,279	6,082,214	282	532	9.8%
CHAFFEE	BUENA VISTA	826.5	3,947,099	4,776	214,514	0	107,898	322,412	390	64,777	0	36,900	101,677	123	267	5.6%
CHAFFEE	SALIDA	1,264.0	5,674,457	4,489	135,224	0	356,390	491,614	389	56,657	0	121,882	178,539	141	248	5.5%
CHEYENNE	KIT CARSON	131.7	1,435,505	10,900	96,039	979	14,564	111,582	847	48,411	979	6,091	55,481	421	426	3.9%
CHEYENNE	CHEYENNE R-5	349.0	2,106,720	6,036	122,967	392	116,012	239,371	566	59,798	392	59,653	119,342	343	342	5.7%
CLEAR CREEK	CLEAR CREEK	1,393.3	6,997,513	5,022	385,519	840	602,896	989,255	710	156,873	758	233,192	390,823	281	430	8.6%
CONEJOS	NORTH CONEJOS	1,132.2	5,609,066	4,954	200,824	5,371	273,817	480,012	424	66,077	4,834	125,808	196,719	174	250	5.1%

**Table III-2: Unreimbursed Per Pupil Expenditures for Categorical Programs as a Percent of Total General Fund and Transportation Fund Revenue Per Pupil**

**(Categorical Program Expenditures Based on the Total Cost of a Program and Not Simply the Reimbursable Portion)**

COUNTY	DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		1992-93 FUNDED PUPIL COUNT	1992-93 GENERAL & TRANS FUND REVENUE	1992-93 REVENUE (COLUMN 2) PER PUPIL	1992-93 GENERAL & TRANSPO EXPENDS - TRANSFERS	1992-93 ELPA EXPENDS	1992-93 SPECIAL EDUCATION EXPENDS	1992-93 CATEGOR'L EXPENDS (COL 4 + 5 + 6)	1992-93 CATEGOR EXPENDS PER PPL	1992-93 STATE TRANSPO PAYMENT	1992-93 STATE ELPA PAYMENT	1992-93 FEDERAL EDUCATION PAYMENT	1992-93 CATEGOR'L TOTAL REIMBURSE	1992-93 PER PUPIL	1992-93 PER PUPIL	1992-93 PER PPL AS % OF TOTAL (COL 3)
CONEJOS	SANFORD	303.4	1,525,997	5,030	47,151	3,347	47,535	98,033	323	15,323	1,627	21,840	38,790	128	195	3.9%
CONEJOS	SOUTH CONEJOS	434.0	2,021,779	4,658	81,822	0	133,234	215,056	496	31,103	0	61,215	92,318	213	283	6.1%
COSTILLA	CENTENNIAL	340.5	1,833,770	5,386	142,410	1,408	183,485	327,303	961	50,357	6,979	64,304	141,640	416	545	10.1%
COSTILLA	SIERRA GRANDE	315.5	1,681,345	5,329	116,933	0	33,453	150,386	477	40,748	0	15,370	56,118	178	299	5.6%
CROWLEY	CROWLEY	555.8	2,670,547	4,805	148,140	507	109,375	256,022	464	55,059	507	58,962	114,528	208	258	5.4%
	CUSTER WESTCLIFFE	339.0	1,955,796	5,769	109,820	0	37,123	146,943	433	41,932	0	13,738	55,671	164	289	4.7%
	DELTA DELTA	3,914.5	17,599,741	4,496	905,384	12,263	1,424,334	2,341,981	598	249,327	11,939	840,147	901,413	230	368	8.2%
DENVER	DENVER	56,155.4	309,047,266	5,503	13,711,168	717,201	34,657,397	49,085,766	874	4,729,406	787,669	13,095,050	18,612,125	331	543	9.9%
DOLORES	DOLORES	295.8	1,994,388	6,742	106,919	0	95,474	202,393	684	44,202	0	39,832	84,034	284	400	5.9%
DOUGLAS	DOUGLAS	14,233.0	73,871,277	5,190	3,172,822	55,852	5,528,682	8,757,356	615	1,166,707	9,063	2,124,034	3,301,804	232	383	7.4%
	EAGLE EAGLE	2,749.8	18,471,922	6,718	866,344	241,609	730,359	1,838,312	669	391,180	0	249,777	840,957	233	435	6.5%
	ELBERT ELIZABETH	1,415.9	6,306,301	4,454	346,253	0	689,061	1,035,314	731	122,676	0	362,292	484,967	343	389	8.7%
	ELBERT KIOWA	207.8	1,482,709	7,135	36,388	0	19,234	55,622	268	20,397	0	9,774	30,171	145	122	1.7%
	ELBERT BIG SANDY	287.2	1,554,176	5,411	87,160	0	72,877	160,037	557	53,179	0	37,032	90,211	314	243	4.5%
	ELBERT ELBERT	150.3	1,289,476	8,579	35,360	0	14,322	49,682	331	15,431	0	7,278	22,708	151	179	2.1%
	ELBERT AGATE	55.0	562,469	10,227	74,794	0	3,868	78,662	1,430	15,477	0	1,617	17,094	311	1,119	10.9%
EL PASO	CALHAN	331.8	1,714,899	5,168	119,654	0	122,273	241,927	729	45,421	0	62,132	107,554	324	405	7.8%
EL PASO	HARRISON	9,818.3	43,485,987	4,429	1,011,202	30,571	5,489,482	6,531,235	685	296,205	27,513	2,570,877	2,894,595	295	370	8.4%
EL PASO	WIDEFIELD	7,157.4	32,286,828	4,511	596,632	28,561	3,062,571	3,687,764	515	176,863	8,923	1,498,124	1,683,910	235	280	6.2%
EL PASO	FOUNTAIN	3,680.7	18,733,067	5,090	507,320	24,726	1,990,635	2,522,681	685	189,614	6,319	926,253	1,122,186	305	380	7.5%
EL PASO	COLORADO SPRING	29,478.8	131,230,345	4,452	2,337,311	127,874	12,425,677	14,890,862	505	904,215	47,964	5,820,699	6,772,878	230	275	6.2%
EL PASO	CHEYENNE MOUNTA	2,473.3	11,689,568	4,726	98,811	1,249	664,888	764,948	309	23,866	1,249	337,858	382,973	147	163	3.4%
EL PASO	MANITOU SPRINGS	1,183.4	5,215,550	4,407	127,344	0	511,401	638,745	540	52,283	0	259,865	312,148	264	276	6.3%
EL PASO	ACADEMY	11,222.0	51,327,104	4,574	2,154,226	39,206	3,589,129	5,782,561	515	778,006	0	1,440,326	2,218,332	198	318	6.9%
EL PASO	ELLICOTT	474.8	2,469,114	5,200	139,162	0	107,804	248,966	520	55,728	0	54,780	110,508	233	287	5.5%
EL PASO	PEYTON	310.0	1,597,884	5,154	107,962	0	71,759	179,721	580	46,153	0	36,464	82,617	267	313	6.1%
EL PASO	HANOVER	73.5	713,487	9,707	41,394	0	15,134	56,528	769	21,098	0	7,690	28,788	392	377	3.9%
EL PASO	LEWIS-PALMER	2,532.5	11,108,364	4,386	567,671	0	785,497	1,353,168	534	232,817	0	399,145	631,962	250	285	6.5%
EL PASO	FALCON	2,470.6	10,922,819	4,421	655,711	0	1,295,009	1,950,720	790	277,663	0	658,049	935,712	379	411	9.3%
EL PASO	EDISON	30.7	362,492	11,808	14,435	0	8,040	22,475	732	12,758	0	4,085	16,843	549	183	1.6%
EL PASO	MIAMI-YODER	166.7	1,511,155	9,065	111,233	153	48,385	159,771	958	45,775	153	24,586	70,514	423	535	5.9%

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**Table III-2: Unreimbursed Per Pupil Expenditures for Categorical Programs as a Percent of Total General Fund and Transportation Fund Revenue Per Pupil**

**(Categorical Program Expenditures Based on the Total Cost of a Program and Not Simply the Reimbursable Portion)**

COUNTY	DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		1992-93 FUNDED PUPIL COUNT	1992-93 GENERAL & TRANS FUND REVENUE	1992-93 REVENUE (COLUMN 2) PER PUPIL	1992-93 GENERAL & TRANSPO EXPENDS - TRANSFERS	1992-93 ELPA EXPENDS	1992-93 SPECIAL EDUCATION EXPENDS	1992-93 CATEGOR'L EXPENDS (COL 4 + (5 + 6)	1992-93 CATEGOR EXPENDS PER PPL	1992-93 STATE TRANSPO PAYMENT	1992-93 STATE ELPA PAYMENT	1992-93 FEDERAL SPECIAL PAYMENT	1992-93 TOTAL CATEGOR'L REIMBURSE	1992-93 PER PUPIL	1992-93 PER PUPIL	1992-93 PER PPL
FREMONT	CANON CITY	3,388.0	14,708,269	4,341	327,354	7,543	1,344,694	1,679,591	496	115,450	1,250	610,214	726,914	215	281	6.5%
FREMONT	FLORENCE	1,582.3	7,177,112	4,536	264,737	0	648,046	910,783	576	89,034	0	239,084	328,118	207	368	8.1%
FREMONT	COTOPAXI	246.9	1,551,328	6,283	125,126	0	38,963	164,089	665	70,165	0	14,419	84,585	343	322	5.1%
GARFIELD	ROARING FORK	3,714.3	17,427,228	4,692	563,688	163,186	1,241,712	1,968,586	530	235,899	25,021	424,656	685,576	185	345	7.4%
GARFIELD	RIFLE	2,497.4	11,271,891	4,513	503,588	24,384	1,097,226	1,625,198	651	192,874	7,721	375,243	575,838	231	420	9.3%
GARFIELD	PARACHUTE	386.2	2,285,568	5,918	64,863	0	155,228	220,091	570	27,803	0	53,087	80,890	209	360	6.1%
GILPIN	GILPIN	325.4	1,734,080	5,329	100,611	0	244,217	344,828	1,060	20,074	0	94,459	114,534	352	708	13.3%
GRAND	WEST GRAND	518.4	3,157,047	6,090	138,917	0	328,222	467,139	901	63,941	0	85,635	149,576	289	613	10.1%
GRAND	EAST GRAND	1,018.4	5,989,234	5,881	227,422	0	387,097	614,519	603	53,901	0	100,996	154,897	152	451	7.7%
GUNNISON	GUNNISON	1,459.3	7,455,630	5,109	331,792	196	521,630	853,618	585	145,770	196	172,184	318,150	218	367	7.2%
HINSDALE	HINSDALE	58.0	600,486	10,353	76,997	0	3,217	80,214	1,383	35,480	0	1,062	36,541	630	753	7.3%
HUERFANO	HUERFANO	718.0	3,456,454	4,814	153,342	0	298,579	451,921	629	63,516	0	110,496	174,012	242	387	8.0%
HUERFANO	LA VETA	246.3	1,513,043	6,143	39,129	0	73,878	113,007	459	13,059	0	27,340	40,399	164	295	4.8%
JACKSON	NORTH PARK	300.0	1,591,281	5,304	78,654	3,291	285,105	367,050	1,223	47,816	3,291	74,386	125,493	418	805	15.2%
JEFFERSON	JEFFERSON	76,024.7	362,323,687	4,766	10,800,148	773,550	41,192,100	52,765,798	694	3,485,367	150,196	15,129,711	18,765,274	247	447	9.4%
KIOWA	EADS	297.5	1,508,756	5,071	73,165	0	111,128	184,293	619	43,732	0	57,141	100,873	339	280	5.5%
KIOWA	PLAINVIEW	100.4	810,643	8,074	105,556	0	11,117	116,673	1,162	33,093	0	5,716	38,809	387	776	9.6%
KIT CARSON	ARRIBA-FLAGLER	237.9	1,700,985	7,150	103,573	0	55,538	159,111	669	50,988	0	23,226	74,215	312	357	5.0%
KIT CARSON	HI PLAINS	111.8	1,025,466	9,172	80,303	0	35,585	115,888	1,037	36,081	0	14,882	50,963	456	581	6.3%
KIT CARSON	STRATTON	260.0	1,603,318	6,167	82,787	435	111,658	194,880	750	48,468	392	46,696	95,556	368	382	6.2%
KIT CARSON	BETHUNE	85.0	811,794	9,551	18,900	0	1,181	20,081	236	13,701	0	494	14,195	167	69	0.7%
KIT CARSON	BURLINGTON	837.3	4,018,050	4,799	169,289	8,198	309,826	487,313	582	75,815	6,916	129,572	212,303	254	328	6.8%
LAKE	LAKE	1,140.2	5,349,572	4,692	126,974	0	256,188	383,162	336	49,657	0	87,614	137,271	120	216	4.6%
LA PLATA	DURANGO	4,064.4	22,005,888	5,414	769,663	309	1,530,248	2,300,220	566	331,235	309	666,628	998,172	246	320	5.9%
LA PLATA	BAYFIELD	801.3	4,011,439	5,006	148,653	0	188,502	337,155	421	59,727	0	82,118	141,845	177	244	4.9%
LA PLATA	IGNACIO	940.8	5,628,377	5,980	559,707	3,007	255,951	918,665	870	149,490	7,877	111,501	268,868	286	584	9.5%
LARIMER	POUDRE	18,677.9	84,501,658	4,524	1,887,877	58,516	8,731,065	10,677,476	572	915,565	65,638	3,850,473	4,831,676	259	313	6.9%
LARIMER	THOMPSON	11,824.5	50,323,998	4,256	1,195,749	6,726	4,613,180	5,815,655	492	502,505	7,861	1,727,478	2,237,844	189	303	7.1%
LARIMER	ESTES PRK	1,158.2	5,865,467	5,034	195,850	1,185	450,706	647,741	559	50,038	672	184,094	264,854	229	331	6.5%
LAS ANIMAS	TRINIDAD	1,534.9	6,729,203	4,246	203,115	0	715,725	918,840	580	59,267	0	264,870	324,137	205	375	8.8%
LAS ANIMAS	PRIMERO	166.7	1,310,951	7,864	92,316	0	41,622	133,938	803	23,382	0	15,403	39,385	236	567	7.2%

**Table III-2: Unreimbursed Per Pupil Expenditures for Categorical Programs as a Percent of Total General Fund and Transportation Fund Revenue Per Pupil**

**(Categorical Program Expenditures Based on the Total Cost of a Program and Not Simply the Reimbursable Portion)**

COUNTY	DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		1992-93 FUNDED PUPIL COUNT	1992-93 GENERAL & TRANS FUND REVENUE	1992-93 REVENUE (COLUMN 2) PER PUPIL	1992-93 (GENERAL & TRANSPO) EXPENDS - TRANSFERS	1992-93 ELPA EXPENDS	1992-93 SPECIAL EDUCATION EXPENDS	1992-93 CATEGOR'L EXPENDS (COL 4 + 5 + 6)	1992-93 CATEGOR EXPENDS PER PPL	1992-93 STATE TRANSPO PAYMENT	1992-93 STATE ELPA PAYMENT	1992-93 FEDERAL EDUCATION PAYMENT	1992-93 STATE & FEDERAL SPECIAL CATEGOR'L REIMBURSE	1992-93 PER PAYMT PUPIL	1992-93 COL 8 - COL 13 PER PPL AS % OF TOTAL (COL 3)	
LAS ANIMAS	HOEHNE	274.8	1,696,375	6,173	96,588	0	80,176	176,762	643	38,241	0	29,671	67,912	247	396	6.4%
LAS ANIMAS	AGUILAR	156.9	1,383,092	8,815	44,222	0	42,794	87,016	555	16,232	0	15,837	32,070	204	350	4.0%
LAS ANIMAS	BRANSON	36.0	405,610	11,267	35,428	0	0	35,428	984	21,327	0	0	21,327	592	392	3.5%
LAS ANIMAS	KIM	66.0	737,480	11,174	90,628	0	30,337	120,965	1,833	54,707	0	15,599	70,306	1,085	768	6.9%
LINCOLN	GENOA-HUGO	236.3	1,520,257	6,434	72,106	0	63,176	135,282	572	39,222	0	26,421	65,643	278	295	4.6%
LINCOLN	LIMON	480.8	2,181,928	4,538	62,650	0	105,735	168,385	350	39,205	0	44,219	83,425	174	177	3.9%
LINCOLN	KARVAL	81.5	752,486	9,233	121,813	0	11,247	133,060	1,633	34,811	0	4,703	39,514	485	1,148	12.4%
LOGAN	VALLEY	2,647.9	11,536,482	4,357	500,552	6,845	946,733	1,454,130	549	184,296	5,962	587,445	777,703	294	255	5.9%
LOGAN	FRENCHMAN	179.8	1,435,665	7,985	83,428	0	81,094	164,522	915	32,955	0	31,003	63,958	356	559	7.0%
LOGAN	BUFFALO	236.0	1,482,412	6,281	83,691	0	70,003	153,694	651	27,144	0	26,763	53,906	228	423	6.7%
LOGAN	PLATEAU	135.5	1,277,053	9,425	56,169	0	24,440	80,609	595	30,082	0	9,344	39,436	291	304	3.2%
MESA	DEBEQUE	108.0	910,838	8,434	22,672	0	19,910	42,582	394	6,952	0	9,951	18,903	175	219	2.6%
MESA	PLATEAU	506.5	2,801,408	5,531	102,541	48	154,395	256,984	507	40,004	48	77,167	117,218	231	276	5.0%
MESA	MESA VALLEY	16,685.0	71,117,740	4,262	2,682,236	0	7,675,377	10,357,613	621	929,313	0	3,836,151	4,765,464	286	335	7.9%
MINERAL	CREEDE	88.7	987,395	11,132	40,248	0	11,680	51,928	585	29,582	0	5,367	34,949	394	191	1.7%
MOFFAT	MOFFAT	2,609.4	13,332,999	5,110	553,121	9,711	811,788	1,374,620	527	176,414	1,671	197,319	375,404	144	383	7.5%
MONTEZUMA	MONTEZUMA	3,186.9	15,113,100	4,742	634,083	50,328	978,411	1,662,822	522	243,585	63,529	408,197	715,311	224	297	6.3%
MONTEZUMA	DOLORES	536.4	2,849,574	5,312	130,775	0	164,966	295,741	551	37,765	0	68,824	106,590	199	353	6.6%
MONTEZUMA	MANCOS	471.0	2,600,103	5,520	197,340	712	158,111	356,163	756	46,958	712	65,964	113,635	241	515	9.3%
MONTROSE	MONTROSE	4,474.0	19,162,595	4,283	848,450	36,045	1,819,037	2,703,532	604	249,263	17,948	676,975	944,186	211	393	9.2%
MONTROSE	WEST END	417.5	2,283,445	5,469	69,702	0	271,039	340,741	816	25,612	0	113,079	138,691	332	484	8.8%
MORGAN	BRUSH	1,291.3	6,044,064	4,681	279,653	0	513,374	793,027	614	114,690	0	195,747	310,436	240	374	8.0%
MORGAN	FT MORGAN	2,761.9	11,514,528	4,169	357,873	0	1,144,366	1,502,239	544	135,803	0	436,341	572,144	207	337	8.1%
MORGAN	WELDON	131.5	1,121,810	8,531	48,163	0	31,747	79,910	608	18,158	0	12,105	30,263	230	378	4.4%
MORGAN	WIGGINS	448.9	2,344,601	5,223	141,552	0	96,084	237,636	529	55,099	0	36,636	91,735	204	325	6.2%
OTERO	EAST OTERO	1,907.8	8,003,176	4,195	140,157	14,671	730,999	885,827	464	42,154	8,020	394,071	444,245	233	231	5.5%
OTERO	ROCKY FORD	1,193.8	5,559,909	4,657	100,686	10,965	466,059	577,710	484	30,219	5,056	251,246	286,520	240	244	5.2%
OTERO	MANZANOLA	247.1	1,522,600	6,162	43,593	0	52,063	95,656	367	13,772	0	28,067	41,838	169	218	3.5%
OTERO	FWLNER	453.3	2,143,891	4,942	102,623	0	102,181	204,804	472	56,129	0	55,084	111,213	256	216	4.4%
OTERO	CHERAW	193.5	1,438,645	7,435	35,927	0	27,815	63,742	329	16,159	0	14,995	31,153	161	168	2.3%
OTERO	SWINK	347.0	1,800,300	5,188	35,970	0	79,986	115,956	334	12,672	0	43,120	55,792	161	173	3.3%



**Table III-2: Unreimbursed Per Pupil Expenditures for Categorical Programs as a Percent of Total General Fund and Transportation Fund Revenue Per Pupil**

**(Categorical Program Expenditures Based on the Total Cost of a Program and Not Simply the Reimbursable Portion)**

COUNTY	DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		1992-93 FUNDED PUPIL COUNT	1992-93 GENERAL & TRANS FUND REVENUE	1992-93 REVENUE (COLUMN 2) PER PUPIL	1992-93 (GENERAL & TRANSPO) EXPENDS - TRANSFERS	1992-93 ELPA EXPENDS	1992-93 SPECIAL EDUCATION EXPENDS	1992-93 CATEGOR'L EXPENDS (COL 4 + 5 + 6)	1992-93 CATEGOR EXPENDS PER PPL	1992-93 STATE TRANSPO PAYMENT	1992-93 STATE ELPA PAYMENT	1992-93 FEDERAL EDUCATION PAYMENT	1992-93 STATE & SPECIAL CATEGOR'L REIMBURSE	1992-93 PER PAYMT PUPIL	1992-93 COL 8 - COL 13 PER PPL AS % OF TOTAL (COL 3)	
OURAY	OURAY	192.3	1,386,803	7,212	34,144	0	16,407	50,551	263	5,224	0	6,106	11,330	59	204	2.8%
OURAY	RIDGWAY	218.7	1,485,091	6,791	45,872	0	64,970	110,842	507	25,596	0	24,179	49,775	228	279	4.1%
PARK	PLATTE CANYON	1,175.5	6,239,856	5,308	395,322	0	417,533	812,855	691	139,800	0	219,528	359,328	306	386	7.3%
PARK	PARK	388.4	2,933,168	7,552	286,351	341	77,026	363,718	936	122,844	196	26,342	149,482	385	552	7.3%
PHILLIPS	HOLYOKE	574.0	2,656,911	4,629	127,032	2,154	195,962	325,148	566	52,618	2,154	74,918	129,690	228	341	7.4%
PHILLIPS	HAXTUN	290.5	1,844,056	5,659	99,058	0	144,596	243,654	839	48,874	0	55,280	104,154	359	480	8.5%
PITKIN	ASPEN	1,041.5	7,369,209	7,076	306,946	29,377	190,728	527,051	506	78,699	3,566	65,228	147,493	142	364	5.2%
PROWERS	GRANADA	240.4	1,488,880	6,193	92,636	0	33,206	125,842	523	17,813	0	17,074	34,887	145	378	6.1%
PROWERS	LAMAR	1,998.4	8,323,451	4,165	179,161	23,473	705,117	907,751	454	76,625	10,947	362,566	450,138	225	229	5.5%
PROWERS	HOLLY	313.0	1,675,152	5,352	148,019	2,866	90,053	240,938	770	38,571	2,866	46,305	87,741	280	489	9.1%
PROWERS	WILEY	310.9	1,607,901	5,172	79,116	0	35,395	114,511	368	20,313	0	18,200	38,513	124	244	4.7%
PUEBLO	PUEBLO CITY	17,452.0	75,786,503	4,343	585,133	61,559	6,690,265	7,336,957	420	231,908	80,141	2,404,196	2,696,245	154	266	6.1%
PUEBLO	PUEBLO RURAL	4,086.9	18,743,538	4,586	1,067,891	0	1,248,633	2,316,524	567	418,881	0	440,743	859,624	210	356	7.8%
RIO BLANCO	MEEKER	743.0	3,365,446	4,556	154,671	0	326,144	480,815	847	57,978	0	105,873	163,851	221	427	9.4%
RIO BLANCO	RANGELY	610.3	5,141,895	8,425	189,109	0	280,801	469,910	770	57,677	0	91,154	148,831	244	526	6.2%
RIO GRANDE	DEL NORTE	653.8	3,372,700	5,159	123,399	299	270,890	394,588	604	49,466	299	124,463	174,228	266	337	6.5%
RIO GRANDE	MONTE VISTA	1,343.9	5,885,265	4,379	176,279	10,147	448,890	635,316	473	67,193	11,744	206,246	285,184	212	261	5.9%
RIO GRANDE	SARGENT	446.7	2,267,303	5,076	124,640	3,644	141,371	269,655	604	42,087	3,644	84,954	110,685	248	356	7.0%
ROUTT	HAYDEN	487.3	2,422,751	4,972	133,398	0	295,188	428,586	880	46,785	0	77,017	123,802	254	625	12.6%
ROUTT	STEAMBOAT SPRING	1,626.9	11,583,317	7,120	430,627	0	432,256	862,883	530	113,781	0	112,779	226,560	139	391	5.5%
ROUTT	SOUTH ROUTT	340.0	2,116,967	6,226	108,133	0	206,189	314,322	924	45,787	0	53,796	99,583	293	632	10.1%
SAGUACHE	MTN VALLEY	199.4	1,458,842	7,316	89,134	0	9,541	78,675	395	30,487	0	4,384	34,870	175	220	3.0%
SAGUACHE	MOFFAT	97.0	986,482	10,170	40,306	0	8,321	48,627	501	17,823	0	3,823	21,646	223	278	2.7%
SAGUACHE	CENTER	641.4	2,861,138	4,461	92,908	9,080	231,387	333,375	520	37,012	13,481	106,313	156,806	244	275	6.2%
SAN JUAN	SILVERTON	107.4	863,073	8,222	5,529	0	15,188	20,717	193	0	0	6,616	6,616	62	131	1.6%
SAN MIGUEL	TELLURIDE	328.5	2,572,835	7,832	64,293	0	112,747	177,040	539	17,290	0	47,038	64,328	196	343	4.4%
SAN MIGUEL	NORWOOD	301.3	1,586,753	5,266	67,148	0	93,510	160,658	533	23,856	0	39,013	62,869	209	325	6.2%
SEDGWICK	JULESBURG	334.5	1,539,884	4,604	47,625	0	86,776	134,401	402	28,952	0	33,175	62,127	186	216	4.7%
SEDGWICK	PLATTE VLY	167.0	1,418,474	8,494	45,578	0	33,077	78,655	471	23,279	0	12,646	35,925	215	256	3.0%
SUMMIT	SUMMIT	1,671.3	11,984,534	7,171	373,084	7,427	604,464	984,975	589	146,220	2,172	208,722	355,114	212	377	5.3%
TELLER	CRIPPLE CREEK	336.3	2,459,792	7,314	150,563	0	174,212	324,775	966	43,043	0	88,525	131,568	391	575	7.9%

**Table III-2: Unreimbursed Per Pupil Expenditures for Categorical Programs as a Percent of Total General Fund and Transportation Fund Revenue Per Pupil**

**(Categorical Program Expenditures Based on the Total Cost of a Program and Not Simply the Reimbursable Portion)**

COUNTY	DISTRICT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		1992-93 FUNDED PUPIL COUNT	1992-93 GENERAL & TRANS FUND REVENUE	1992-93 REVENUE (COLUMN 2) PER PUPIL	1992-93 GENERAL & EXPENDS - TRANSFERS	1992-93 ELPA EXPENDS	1992-93 SPECIAL EDUCATION EXPENDS	1992-93 CATEGOR'L EXPENDS (COL 4 + 5 + 6)	1992-93 CATEGOR EXPENDS PER PPL	1992-93 STATE TRANSPO PAYMENT	1992-93 STATE ELPA PAYMENT	1992-93 FEDERAL SPECIAL EDUCATION PAYMENT	1992-93 TOTAL CATEGOR'L REIMBURSE	1992-93 PAYMT PER PUPIL	1992-93 COL 8 - COL 13 PER PUPIL	1992-93 COL 14 PER PPL AS % OF TOTAL (COL 3)
TELLER	WOODLAND PARK	2,277.2	10,481,044	4,803	814,884	0	786,775	1,401,839	616	154,511	0	399,794	554,305	243	372	8.1%
WASHINGTON	AKRON	429.3	2,008,167	4,678	135,992	0	195,962	331,954	773	62,797	0	74,918	137,715	321	452	9.7%
WASHINGTON	ARICKAREE	139.0	1,108,875	7,978	95,350	0	43,850	139,200	1,001	53,063	0	16,764	69,828	502	499	6.3%
WASHINGTON	OTIS	184.4	1,415,291	7,675	87,626	0	56,820	124,446	675	30,329	0	21,723	52,052	282	393	5.1%
WASHINGTON	LONE STAR	81.5	597,543	9,716	36,132	0	43,108	79,240	1,288	22,094	0	16,480	38,575	627	661	6.8%
WASHINGTON	WOODLIN	124.3	1,072,350	8,827	161,936	0	2,411	164,347	1,322	44,523	0	1,008	45,532	366	956	11.1%
WELD	GILCREST	1,662.0	7,118,295	4,283	445,449	0	437,138	882,587	531	116,281	0	185,357	301,638	181	350	8.2%
WELD	EATON	1,172.3	5,396,670	4,603	195,899	0	221,620	417,519	356	70,113	0	93,972	164,085	140	216	4.7%
WELD	KEENESBURG	1,173.2	5,962,276	5,082	460,537	0	422,621	883,158	753	181,895	0	179,202	361,097	308	445	8.8%
WELD	WINDSOR	1,746.5	7,155,432	4,097	187,781	0	559,107	746,888	428	54,210	0	227,425	281,635	161	266	6.5%
WELD	JOHNSTOWN	1,161.0	5,120,544	4,410	136,716	0	411,974	548,690	473	52,096	0	174,687	226,783	195	277	6.3%
WELD	GREELEY	11,679.7	50,490,572	4,323	1,380,740	120,888	5,055,470	6,557,098	561	398,159	135,480	1,939,556	2,473,195	212	350	8.1%
WELD	PLATTE VLY	902.8	3,692,613	4,090	210,545	0	571,870	782,415	867	72,503	0	242,487	314,990	349	518	12.7%
WELD	FORT LUPTON	2,160.3	10,090,063	4,671	427,187	35,570	717,731	1,180,488	546	123,917	35,570	304,336	463,822	215	332	7.1%
WELD	AULT-HIGHLND	794.7	3,674,449	4,624	170,946	0	398,529	569,475	717	69,413	0	168,986	238,399	300	417	9.0%
WELD	BRIGGS DALE	68.8	638,956	9,287	37,439	0	5,759	43,198	628	19,594	0	2,196	21,790	317	311	3.4%
WELD	PRAIRIE	103.0	1,038,081	10,078	81,440	0	12,775	94,215	915	39,144	0	4,871	44,015	427	487	4.8%
WELD	GROVER	85.5	826,797	9,670	36,958	0	18,216	55,174	645	29,436	0	6,946	36,381	426	220	2.3%
YUMA	WEST YUMA	927.9	4,537,482	4,890	241,390	2,908	411,470	855,768	707	101,687	2,697	157,308	261,692	282	425	8.7%
YUMA	EAST YUMA	897.5	4,466,041	4,976	307,896	647	476,427	784,970	875	138,179	647	182,141	320,967	358	517	10.4%
**STATE	TOTAL**	567,138.5	2,785,952,480	4,912	90,414,984	5,451,360	261,999,087	357,865,431	631	32,570,397	2,405,168	105,927,158	140,902,723	248	383	7.8%

NOTE: Special education expenditures and revenues are accounted for on an administrative unit basis. An administrative unit may be a single district, but in most instances it is a BOCES. Special education expenditure and revenue data for multi-district administrative units were apportioned among the districts in the unit based on the percentage of pupils in the district. This is the only methodology available for disaggregating costs and revenue, but it may not represent actual district experience.

SOURCE: Data submitted by school districts to the Colorado Department of Education.

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## **Chapter IV: Small Attendance Centers**

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The purpose of this chapter is to examine and quantify the cost impact of school districts that contain within their boundaries separate and distinct small attendance centers. We examined the cost impact of small attendance centers in two ways: we compared differences in the cost of educating students among the small attendance centers, and we compared differences in the cost of educating a student in a small attendance center versus a regular school.

## SMALL ATTENDANCE CENTERS

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In order to examine and quantify the cost impact, we first needed to define a small attendance center. For purposes of this study, we used the same definition for small attendance centers as that found in the Public School Finance Act of 1973. The definition is as follows:

*small attendance center = an elementary or secondary school with fewer than 175 pupils that is located twenty or more miles from any similar center.*

After defining a small attendance center, the next step was to determine how many such centers were operating in the state. Therefore, a letter was sent to all Colorado school districts asking for specific information on those schools which met the definition of a small attendance center. The letter asked for data on the school's enrollment, staffing, and expenditures. Our survey showed that there were 26 public school facilities operating in school year 1993-94 which could be defined as small attendance centers. In 1988 — the last year for which small attendance center funding was provided under the school finance act — 160 schools qualified for small attendance center funding, although some of those schools were located in districts with a total enrollment less than 175 pupils.

Excluded from this analysis of small attendance centers were all schools located in districts with enrollments less than 175. These districts were excluded because, in many cases, they contained only one attendance center. We believed it would bias the sample to compare very small enrollment districts with only one school to districts which operate small, isolated schools far from their main population center. In addition, districts with small enrollments are already compensated through the size factor contained in the Public School Finance Act of 1994.

### Comparisons

*Comparison of Small Attendance Centers.* According to the data supplied by school districts, summarized in Table IV-1, the 26 small attendance centers were operated by 14 school districts across the state as follows:

- 15 elementary schools,
- six high schools,
- four schools serving at least grades 1 through 12, and
- one middle school.

The survey results showed that the small attendance center with the fewest number of pupils in the state — Canyon Elementary School in the Poudre School District — had ten pupils enrolled on October 1, 1993; the largest school meeting the definition of a small attendance center was the Fraser Elementary School, in the East Grand School District, which had 166 pupils enrolled. Staff at these isolated schools ranged in size from 1.5 FTE in the Powderwash School, serving grades 1 through 12 in Moffat County, to 30 FTE at the Liberty K-12 School in the West Yuma School District. Staffing ratios were found to range from a low of 4.4 pupils per staff person at the Liberty School to a high of 14.7 pupils per staff person at the Silverheels Middle School in Park County.

Total expenditures for the small attendance centers ranged from \$3,233 per pupil at Fraser Elementary to \$9,531 per pupil at the Lake George Elementary School in Park County. Throughout all the small attendance centers operating in school year 1993-94, the average expenditure per pupil was \$5,726.

*Table IV-1: Colorado Small Attendance Centers, School Year 1993-94*

County	District	Small Attendance Center	Grades Served	School Pupil Count	School Staff	Per Pupil School Expenditures
Arapahoe	Byers	Byers	9-12	107	15	\$3,922
Boulder	Boulder	Gold Hill	K-5	29	3	\$4,850
Boulder	Boulder	Jamestown	K-5	27	3	\$5,494
Grand	E. Grand	Fraser	K-5	166	15	\$3,233
Grand	E. Grand	Grand Lake	K-5	96	11	\$4,469
Huerfano	Huerfano	Gardner	Pk-8	125	23	\$4,260
Larimer	Poudre	Livermore	K-6	45	4	\$5,101
Larimer	Poudre	Red Feather	K-6	53	5	\$5,215
Larimer	Poudre	Stove Prairie	K-6	43	4	\$5,263
Larimer	Poudre	Canyon	K-6	10	2	\$9,126
Logan	Valley	Caliche	K-6	137	15	\$5,328
Logan	Valley	Caliche	7-12	132	16	\$6,701
Mesa	Valley	Gateway	K-12	38	8	\$5,467
Moffat	Moffat	Powderwash	1-12	21	2	\$4,249
Moffat	Moffat	Maybell	1-6	11	2	\$6,535
Moffat	Moffat	Dinosaur	K-12	91	8	\$5,574
Otero	Fowler	Fowler	9-12	162	15	\$4,125
Park	Park	Lake George	K-6	108	16	\$7,719
Park	Park	South Park	9-12	75	9	\$9,531
Park	Park	Silverheels	6-8	88	6	\$5,130
Park	Park	Guffey	K-6	33	5	\$6,969
Park	Park	Edith Teter	Pk-5	152	19	\$7,213
Pueblo	Pueblo 70	Beulah	K-8	138	20	\$5,924
Sedgwick	Julesburg	Julesburg	9-12	130	13	\$4,298
Washington	Akron	Akron	9-12	132	12	\$7,805
Yuma	W. Yuma	Liberty	K-12	131	30	\$5,384
<b>STATE TOTAL</b>				<b>2,280</b>	<b>278</b>	

*Comparison of School District and Small Attendance Center Data.* Some interesting findings were noted when data from the small attendance centers were compared with average districtwide data. For example, as a percentage of district expenditures, the cost impact of small attendance centers varied widely. The operation of Boulder County's two small attendance centers required only 0.23 percent of the district's total expenditures for FY 1993-94. However, each of the Park County School District's five schools could be considered a small attendance center so 100 percent of Park County's FY 1993-94 budget was required for the operation of these centers.

In terms of staffing ratios, we found that 16 of the small attendance centers were operating with a ratio of pupils per staff greater than the comparable ratio of the district. That is, 16 out of the 26 small attendance centers operated with a staff that was leaner than the district's average. Assuming all other things equal, it could be argued that a higher pupil per staff ratio (i.e., a leaner staff) would lead to a smaller per pupil expenditure. However, 16 of the small attendance centers were found to have a per pupil expenditure greater than the district average.

*Table IV-2: Comparison of School District and Small Attendance Center Data, School Year 1993-94*

County	District	Small Attendance Center	Grades Served	School Pupil/Staff Ratio	District Pupil/Staff Ratio	Per Pupil School Expenditures	Per Pupil District Expenditures
Arapahoe	Byers	Byers	9-12	7.13	9.30	\$3,922	\$4,277
Boulder	Boulder	Gold Hill	K-5	9.98	9.60	\$4,850	\$5,193
Boulder	Boulder	Jamestown	K-5	9.23	9.60	\$5,494	\$5,193
Grand	E. Grand	Fraser	K-5	11.28	7.79	\$3,233	\$5,304
Grand	E. Grand	Grand Lake	K-5	8.50	7.79	\$4,469	\$5,304
Huerfano	Huerfano	Gardner	Pk-8	5.43	7.39	\$4,260	\$3,981
Larimer	Poudre	Livermore	K-6	11.13	10.60	\$5,101	\$4,211
Larimer	Poudre	Red Feather	K-6	10.64	10.60	\$5,215	\$4,211
Larimer	Poudre	Stove Prairie	K-6	10.68	10.60	\$5,263	\$4,211
Larimer	Poudre	Canyon	K-6	6.42	10.60	\$9,126	\$4,211
Logan	Valley	Caliche	K-6	9.13	9.56	\$5,328	\$4,054
Logan	Valley	Caliche	7-12	8.05	9.56	\$6,701	\$4,054
Mesa	Valley	Gateway	K-12	4.58	9.90	\$5,467	\$3,773
Moffat	Moffat	Powderwash	1-12	14.00	9.55	\$4,249	\$4,677
Moffat	Moffat	Maybell	1-6	5.50	9.55	\$6,535	\$4,677
Moffat	Moffat	Dinosaur	K-12	11.82	9.55	\$5,574	\$4,677
Otero	Fowler	Fowler	9-12	10.80	7.62	\$4,125	\$4,200
Park	Park	Lake George	K-6	6.97	6.61	\$7,719	\$7,561
Park	Park	South Park	9-12	8.11	6.61	\$9,531	\$7,561
Park	Park	Silverheels	6-8	14.67	6.61	\$5,130	\$7,561
Park	Park	Guffey	K-6	7.33	6.61	\$6,969	\$7,561
Park	Park	Edith Teter	Pk-5	8.22	6.61	\$7,213	\$7,561
Pueblo	Pueblo 70	Beulah	K-8	6.90	9.41	\$5,924	\$3,949
Sedgwick	Julesburg	Julesburg	9-12	10.40	7.79	\$4,298	\$4,383
Washington	Akron	Akron	9-12	11.35	9.45	\$7,805	\$4,082
Yuma	W. Yuma	Liberty	K-12	4.37	7.89	\$5,384	\$4,251

When compared with district averages, 18 of the 26 small attendance centers operated as expected — the pupil/staff ratio was lower and per pupil expenditures were higher or the ratio was higher and per pupil expenditures were lower. Seven small attendance centers were found to have a higher ratio than their district but spent more per pupil than the district average. And one school — Byers High School in Arapahoe County — had a lower pupil/staff ratio but actually spent less per pupil than the district average.

## **Considerations**

Much of the research on small schools makes a distinction between schools that are small by choice and those that are small by necessity. In general, schools classified as small attendance centers under Colorado's 1973 school finance act fall under the second category because they are small and isolated facilities operated so that students are not transported unreasonable distances. However, isolation can be measured in several ways and a different group of facilities would qualify under different criteria. Colorado's 1973 act used miles travelled to define an isolated facility; it did not take into account student travelling time or the terrain over which students are transported.

If the General Assembly were to consider a factor to provide additional funding for the operation of small attendance centers, there are several relevant issues for discussion. First, it should be noted that calculations performed prior to the passage of the Public School Finance Act of 1988 incorporated small attendance center funding received under the 1973 school finance act. That is, funding for small attendance centers was included in each school district's base when the 1988 school finance act was adopted, and therefore is built into each school district's base funding today. Second, low enrollment districts (under 175 pupils) are already being compensated for their additional costs through the size factor in the school finance formula. Third, all reasonable measures of isolation should be considered in determining the eligibility criteria, including travelling time of students; distance and safety of travel; the availability and condition of regional roads and the seasonal changes in those conditions; and terrain and geographic barriers. Fourth, the state's policy should measure isolation based on the availability of facilities within an entire region, not just within the boundaries of a particular school district.

Finally, local school districts have sole responsibility for decisions related to the organization of schools, including the operation of small attendance centers. Consideration should be given to the issue of whether the basis of the factor relates to school building enrollment, campus enrollment, or some other measure of students at a school site. Depending on the amount of additional funding provided through a small attendance center factor, a district might have an incentive to continue the operation of an unnecessary small attendance center when students could be taught more cost effectively in a neighboring school, a neighboring district, or even a neighboring state.

## SUMMARY OF FINDINGS

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- ◆ For purposes of this study, a small attendance center was defined as an elementary or secondary school with fewer than 175 pupils that is located 20 or more miles from a similar center. In the 1993-94 school year, there were 26 small attendance centers operated across the state in 14 school districts, excluding schools operated by districts with a total enrollment less than 175.
  
- ◆ The cost impact of small attendance centers on the school districts which operate them varies widely in terms of the total impact on a district's budget and also in terms of differences in expenditures per pupil.
  
- ◆ Funding for small attendance centers received under previous school finance legislation has been incorporated into each district's base and is reflected in funding provided through the current school finance act. Other considerations that might be included in evaluating the need for small attendance center funding in Colorado are measures of isolation, the adjustment for size currently contained in the school finance act, and the effect of such a funding mechanism on local decisions.



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## **Chapter V: Economies of Scale**

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This chapter of the report examines the issue of economies of scale and the size factor established pursuant to Section 22-54-104 (5) (b), C.R.S. Our approach to this study topic is multi-faceted. We reviewed germane research in the area of economies of scale, and a summary of that information is included. We also describe the size adjustment factor in House Bill 94-1001 and review the steps involved in deriving the formula incorporated into the size adjustment factor. Enrollment-based funding formulas in other states are discussed, and an analysis of expenditures for larger districts nationwide is presented. Finally, we provide a brief description of recent activities in Kansas regarding review of that state's size factor.

## ECONOMIES OF SCALE

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### Literature and Research

Economies of scale can be defined as decreases in the average cost per unit corresponding to increases in the number of units produced. We conducted a review of published literature on the subject to determine how other professionals have measured economies of scale and to assess the methodology in Colorado's school finance act in light of these studies. The goal was to ascertain whether there is any consistency in the modeling techniques, data specifications, or results of economies-of-scale studies that could be applied in Colorado.

The array of studies examined dealing with economies of scale was not limited to the education sector. The manufacturing sector has also been the subject of scale analysis. Examples of manufacturing studies we reviewed are:

- An investigation of the effects of size on production in nineteenth century United States manufacturing, comparing smaller southern manufacturers with larger northern ones;<sup>1</sup>
- An examination of a variety of articles from varying industries relating to increasing returns to scale;<sup>2</sup> and
- A study of economies of scale in transportation costs and location.<sup>3</sup>

Among the studies we examined specifically related to education are:

- The determination of the optimal school district size in nine states;<sup>4</sup>
- An analysis of the relationship between size and the quality of education in Hawaii;<sup>5</sup>
- Two articles that emphasized rural economies of scale;<sup>6 7</sup> and
- Two articles that comprehensively reviewed previous research on economies of scale in education. The first examined over 35 studies dealing with K-12 education, and the second investigated more than 85 articles covering higher education.<sup>8 9</sup>

There appears to be no concurrence on the appropriate methodology for finding and measuring economies of scale. However, the most widely accepted method in the literature is the development of econometric models, generally taking the form of production and cost functions. The studies that were found to be most useful for our purposes were those that examined per pupil costs at the district level, measuring district size by the number of students in the district. For example, one study

determined the optimal school district size measured in students, based on minimizing per pupil costs, for nine different states.<sup>10</sup>

The historical research points out a number of common input variables, including:<sup>11 12</sup>

- teacher education, salary, or experience;
- pupil/teacher, pupil/administrator, and pupil/support staff ratios;
- physical resources;
- building sizes and values;
- social proxies (such as students in free lunch programs);
- initial intelligence (such as IQ test scores); and
- the number of schools per district.

The most common measure of educational output is standardized test scores. A recent study of educational outcomes in Hawaii is representative of much of the literature in its use of such test scores as the output of school districts.<sup>13</sup> Another study used the number of graduates and their grade point average as a measure of output.<sup>14</sup>

Many authors note that the output of the educational system goes far beyond measurable test scores, and that a properly specified model would need to account for these outputs as well. Another author advised accounting for the teaching of societal attitudes and social relations in any measure of output.<sup>15</sup> The importance of differences in course offerings was also acknowledged as both an input to costs and an output factor affecting the overall balance of learning in a district.<sup>16 17 18</sup> In addition, it was pointed out that models may be biased because the output of some schools (elementary or middle schools) are actually inputs into other schools (middle or high schools).<sup>19</sup>

### **Application of Econometric Analysis to Colorado**

The use of cost and production models in Colorado proves difficult due to a lack of some of the applicable output data. Most noticeably, there is a lack of consistent and available data to measure either the quantity or quality of education, such as standardized test scores, social interactions, and the learning of societal values. The econometric cost and production models work very well when examining the production of goods in industries such as manufacturing, but have proven more difficult to use in service industries such as education. As one author noted, "Production functions are more difficult to use for services than for the production of manufactured goods because the relationship between inputs and outputs has not been clearly defined in conceptual terms."<sup>20</sup>

One option that has been used to account for a lack of data in educational models is the use of proxies. Proxies are variables used in modeling that are thought to be similar enough to the unavailable data to accurately represent said data in the model. However, when one attempts to proxy in econometric models for educational outcomes it is difficult to guarantee that unrealistic constraints are not placed on the

models. The primary proxy used in developing the size factor in current law is expenditure data to represent costs in school districts. One author points out that expenditure data is suspect because it was partially created in a political arena, and may not reflect costs in a consistent time period across districts.<sup>21</sup> Although expenditure data were used in Colorado, steps were taken to reduce the impact of the concerns, such as determining each district's size factor by a weighted scale. Despite the use of expenditure data, good proxies for other variables are difficult to find for Colorado.

## **Economies of Scale in Education**

The overwhelming evidence available in the economic literature attests to the existence of economies of scale in education and industry, providing sufficient evidence that economies of scale exist in Colorado's K-12 educational system. One author defined the savings available from economies of scale as:

. . . teacher specialization (which a larger enrollment permits) and resulting improvements in instructional efficiency. Also, more economic meshing of the personnel assignments (classroom teachers, professional support staff, administrators, and clerical, custodial, and others) can be achieved more readily with a larger enrollment. Such advantages also will apply to uses of various instructional equipment. Furthermore, with larger schools, the cost of procurement and maintenance of larger capacity equipment is proportionately less than for smaller capacity equipment. Similar advantages also apply to the cost of purchasing and handling larger quantities of supplies.<sup>22</sup>

Another study found that scale-related economies in higher education are greatest for administrative expenditures, followed by operations and maintenance, educational and general expenditures, and instructional costs.<sup>23</sup> In a nine-state study, economies of scale were found to exist in all nine states. Two authors, who both reviewed a large number of other studies, found overwhelming evidence of the existence of economies of scale.<sup>24 25</sup>

While a number of authors point out that as districts continue to get larger and more complex the size-cost relationship becomes increasingly difficult to observe, evidence also exists concluding that large school districts experience diseconomies of scale. The nine-state study found there was evidence to support the theory that diseconomies of scale arise when size exceeds the optimum, although the optimum size varied in each state studied.<sup>26</sup> Among the issues causing the variances are differences in costs, geography, and educational goals among states. Another study<sup>27</sup> found evidence that average costs decrease at a decreasing rate as enrollment increases and that instructional unit costs begin to rise again as institutions become very large. It was

further found that relatively large institutions had higher unit costs than mid-sized institutions, forming a U-shaped<sup>A</sup> cost curve.<sup>28</sup> Still another author found that:

Based on those studies which are conceptually acceptable and which use the appropriate unit of analysis, per pupil school costs appear to be characterized by a U-shaped average cost curve.<sup>29</sup>

A U-shaped average cost curve equates to economies-of-scale savings as low enrollment districts increase in size, but diseconomies-of-scale costs when high enrollment districts exceed the optimum size.

To acknowledge that economies of scale exist in Colorado, it logically follows that they be considered in educational funding. A manufacturing study found, "That the market size for individual firms or products prevented southern enterprises from producing an output large enough to reap the benefits of internal economies of scale, thereby placing them at a price-competitive disadvantage *vis a vis* the larger, and hence, lower cost producers in the north."<sup>30</sup> The point made is relevant to education because it shows that smaller districts can not exist on an equal financial footing with larger districts when larger districts reap advantages from economies of scale. Hence, a size adjustment may be necessary for smaller districts to provide a comparable level of educational services with those districts that are able to operate at lower cost. By the same standards, large districts experiencing diseconomies of scale are unable to provide the same level of service as those districts that are operating at the optimal size. In the nine-state study, the optimum sized school district varied from 20,000 students in Nebraska to 160,000 students in New York.<sup>31</sup>

### **Additional Issues**

Expected savings associated with increasing district size have fueled considerable debate about consolidation in the United States. While it has been shown that costs are generally higher among smaller school districts, it does not follow out of necessity that small school districts should automatically be combined to achieve economies of scale. One author writes, ". . . size cannot be considered in a vacuum. The data seem to indicate that size factors have some influence on educational outcomes. But this influence is mediated by other factors (such as SES) and there are many social/political/geographic factors which determine the boundaries of school districts, the size of schools, and, of course, class size."<sup>32</sup> A variety of additional factors influence the educational environment. These influences cannot always be measured in a cost-benefit analysis, but are critical to the decision-making process. They include:

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A. A U-shaped average cost curve is one in which per pupil costs decrease as student populations increase up to a certain number of students, at which time per pupil average costs begin to increase as student populations increase. In Colorado, we refer to the curve as a backwards (or mirrored) J-curve because the increasing costs are measured only for the districts in Colorado and, thus, do not continue indefinitely.

- educational quality
- sparsity
- psychological factors
- social skills
- community involvement
- capacity utilization
- transportation
- course offerings
- available facilities
- local control
- availability of extra curricular activities

The impact of these issues can be difficult to determine, however two of them — sparsity and educational quality — have received significant attention in the literature.

The sparsity of a region may limit the savings available from economies of scale. In general, the more sparsely populated a district is, the harder it will be to achieve these savings. For example, if school districts consolidated to achieve economies of scale, potential increases in the costs of transporting students could offset some of the savings from economies of scale. In fact, a rural school district study found that the average cost curve for transportation shows higher costs as enrollment increases.<sup>33</sup>

Many studies have found an inverse relationship between the size of a school district and the performance of the students in the school district. It is argued that smaller class sizes lead to more individualized treatment for students and a better educational environment. However, there are many factors that affect student achievement and it is not always clear that small size can be credited for higher achievement. For example, a recent study comparing school size and educational output found there was no significant difference in the standardized test results among third graders in varying sized schools in Hawaii.<sup>34</sup> There was some evidence that small schools had a lower number of sixth grade students with low test scores, but no difference in the number of sixth graders with average or above average test scores.

## COLORADO'S SIZE FACTOR

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### District Size Adjustment

*The Size Factor.* House Bill 94-1001 established a formula for determining a size factor for each school district which is used in the calculation of the district's funding. The size adjustment formula provides a unique factor for each school district, based on the district's October 1 enrollment within the school district budget year. When viewed in terms of enrollment, the size adjustment formula produces a curve that resembles a backwards J curve, in which the smallest enrollment districts receive the largest size adjustment but the largest enrollment districts also receive a size adjustment.

According to Section 22-54-104 (5) (b), C.R.S., a district's size factor for the 1994-95 budget year and budget years thereafter is determined by the following formula.

<i>Table V-1: Calculation of a District's Size Factor</i>	
If a district's funded pupil count is:	The district's size factor shall be:
Less than 276	$1.5502 + (0.00376159 \times \text{the difference between the funded pupil count and } 276)$
276 or more but less than 459	$1.2430 + (0.00167869 \times \text{the difference between the funded pupil count and } 459)$
<del>459 or more but less than 1,027</del>	<del><math>1.1260 + (0.00020599 \times \text{the difference between the funded pupil count and } 1,027)</math></del>
<del>1,027 or more but less than 2,293</del>	<del><math>1.0578 + (0.00005387 \times \text{the difference between the funded pupil count and } 2,293)</math></del>
<del>2,293 or more but less than 5,814</del>	<del><math>1.0000 + (0.00001642 \times \text{the difference between the funded pupil count and } 5,814)</math></del>
5,814 or more but less than 21,940	10000
21,940 or more but less than 32,193	$1.0000 + (0.00000334 \times \text{the difference between the funded pupil count and } 21,940)$
32,193 or more	1.0342

**District Reorganization.** Section 22-54-104 (5) (b), C.R.S., also includes a provision for dealing with certain district reorganizations. If a district with less than 12,000 pupils reorganizes into two or more districts, each of the resulting districts is prohibited from receiving a size factor greater than the size factor provided to the original district. This provision removes any incentive for a district with less than 12,000 pupils to deconsolidate to take advantage of the higher size factor attributable to smaller enrollment districts. Also, if a district with more than 18,000 pupils reorganizes into two or more districts, each of the resulting districts is entitled to receive the same size adjustment as that of the original district for two years. This provision for larger enrollment districts mitigates, in the short term, any disincentive to reorganization attributable to the size factor.

## Determining the Formula for the Size Adjustment

As adopted by the 1993 Interim Committee on School Finance, the size adjustment formula was designed to accommodate the diseconomies of scale experienced by very small districts and very large districts. The adjustment was identified by examining historical expenditure data in relation to enrollment, after it was determined that actual district expenditures provided the best available proxy for cost. In order to eliminate some potential biases, the historical data were modified to control for a number of factors before they were compared.

First, expenditures from 1991 — the last year for which data were available at the time the interim study was conducted — were adjusted to the 1993-94 level funded under the provisions of the Public School Finance Act of 1988. This adjustment step was performed to correct for anomalies in the 1991 data due to the phase-in of the 1988 act, which was not yet completed in 1991. Specifically, total 1991 school finance act funding for each district was subtracted from total 1991 general fund expenditures, including transfers, and the difference was added to total estimated FY 1993-94 school finance act funding.

Second, the estimated 1993-94 general fund expenditures were divided by each district's estimated October 1, 1993, pupil count to determine an average per pupil expenditure amount. The third modification involved dividing the per pupil figures by each district's respective cost-of-living factor to account for regional differences in the cost of housing, goods, and services. Finally, \$313 was subtracted from each per pupil amount to account for the fact that all districts are required by law to devote at least that much per pupil for instructional supplies and materials, capital reserve, and insurance reserve.

Following modification of the data, the final per pupil expenditures were graphed by the October 1993 enrollment of each district and a LOWESS line was plotted against the data. LOWESS<sup>B</sup> is a method of weighting data and fitting a line which accommodates curvilinear data. The LOWESS line revealed distinct breakpoints indicating where changes in expenditure patterns based on enrollment occurred. An enrollment level and per pupil expenditure were determined for each breakpoint. The expenditure at each breakpoint was divided by the expenditure of the minimum point on the curve to establish the factors such that the minimum size factor was 1.00. According to the LOWESS line, the lowpoint of the curve occurred at an enrollment of 17,659. Using the breakpoints and the slope between each point, the interim committee bill included a formula that attempted to replicate the LOWESS line and calculate a size factor for any enrollment level without step changes. Graph V-1 shows data described above and the LOWESS line.

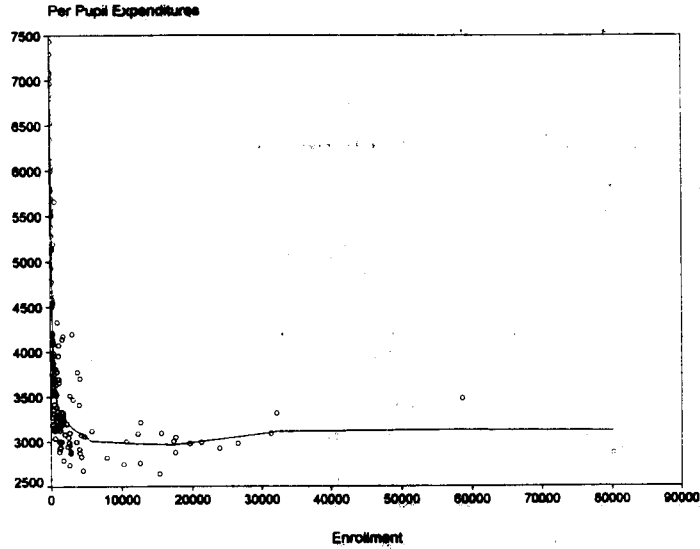
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B. See Appendix A for a detailed explanation of the LOWESS function.



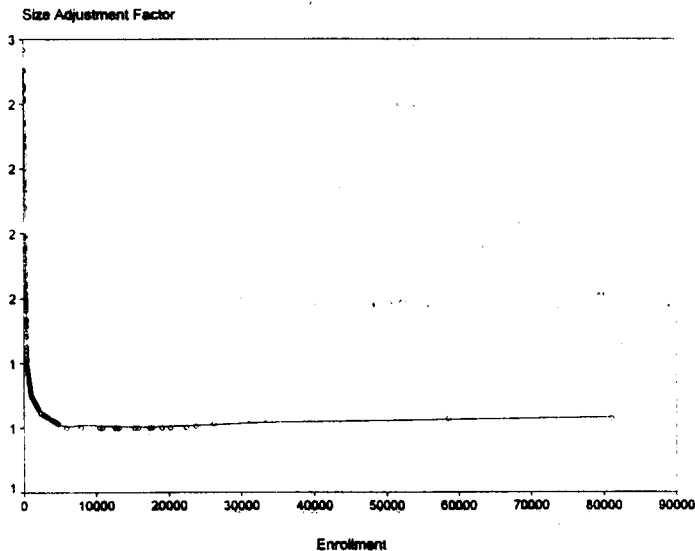
**Graph V-1: Per Pupil Expenditures by Enrollment**

*Fitted with LOWESS Line*



When House Bill 94-1001 was considered by the General Assembly, a modification was made to the size adjustment factor proposed by the interim committee. The net effect of the modification was a downward shift of the entire J-curve, decreasing the overall impact of the size adjustment. Specifically, the size adjustment curve was recalculated using as a minimum the per pupil expenditures for districts with enrollments of 5,814, instead of the lower per pupil expenditure of districts with enrollments of 17,659. After the modification, districts with enrollments between 5,814 and 21,940 received a size adjustment factor of 1.00, where before only districts with enrollments of 17,659 received a size adjustment factor of 1.00. Graph V-2 shows the size factor established in Section 22-54-104 (5) (b), C.R.S.

**Graph V-2: School District Size Factors by Enrollment**



## USE OF ENROLLMENT-BASED FUNDING FACTORS IN OTHER STATES

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We identified eleven states that provide additional funding under their school finance formulas using a size adjustment factor. Ten states are summarized here: Alaska, Arizona, Colorado, Florida, Kansas, Nebraska, New Mexico, Ohio, Oklahoma, and Texas.<sup>35</sup> California has a size adjustment formula, but due to the complexity of California's school finance formula, it is not included in this comparison. Also, state formulas which provide funding for small attendance centers are not discussed here. It cannot be assumed that the universe for determining which states offer size-adjustment programs is all 50 states because of the differences in state school finance formulas.

### **Basis of Formula**

Eight of the ten states examined — Arizona, Colorado, Florida, Kansas, Nebraska, Ohio, Oklahoma, and Texas — have size adjustment formulas which are also based on district pupil counts. New Mexico's size adjustment formula uses both district pupil counts and individual school counts to determine eligibility. Alaska's size adjustment formula is based on community membership counts, where one or more communities are located within a district and are comprised of "feeder schools" within the district.

Of the ten states, some provide additional funding on a pupil basis while others provide assistance on some other defined unit basis. For purposes of this comparison, all size adjustment formulas have been converted to indicate their respective impact on per pupil funding.

*J Curve vs. Enrollment Cap.* Three states — Colorado, Nebraska, and New Mexico — have formulas which mirror a J curve, such that the smallest enrollment districts receive the largest size adjustment but the largest districts also receive additional funding. The remaining five states have size adjustment formulas which provide additional funding only for districts or schools with less than a specific enrollment level. Three of these states — Arizona, Oklahoma, and Texas — also incorporate measures of sparsity into their size adjustment formulas.

### **State Comparisons**

The size adjustment formulas for states which provide additional funding for districts based on enrollment are summarized in Table V-2. Table V-2 lists: 1) the maximum size adjustment; 2) the enrollment level where the size adjustment reaches zero; and 3) whether the formula provides increases for larger districts beyond the "optimum" point.

*Table V-2: Comparison of Various States' Size Adjustments*

(1) State	(2) Max. Per Pupil Size Factor*	(3) Enrollment Where Size Factor is Zero (Nadir)	(4) Formula Adjustment for Districts with Enrollments > Nadir
Alaska	2.438	46,000 <sup>C</sup>	No adjustment for larger districts
Arizona	1.219	600	No adjustment for larger districts
Colorado	2.588	5,800 - 21,940	Factor increases to 1.034 for districts with 32,123 or more pupils
Florida	1.188	21,924	No adjustment for larger districts
Kansas <sup>D</sup>	2.142	1,900	No adjustment for larger districts
Nebraska <sup>E</sup>	1.680	500-1,000	Factor increases to 1.196 for districts with 10,000 or more pupils
New Mexico	1.222	4,000-10,000	Increasing factor for districts > 10,000; > 15,000; and > 35,000, up to 1.31
Ohio	1.099 <sup>F</sup>	1,000	No adjustment for larger districts
Oklahoma	1.186	529	No adjustment for larger districts
Texas	1.391	1,600	No adjustment for larger districts

\* The size adjustments shown in Table V-2 reflect what the smallest district in Colorado (with 37 pupils) would receive under each state's size adjustment formula. In theory, the maximum size adjustment would occur at the smallest possible district enrollment, or 0 students.

As shown in Table V-2, Column 2 represents the relative factor by which the district receiving the greatest size adjustment exceeds the district receiving no size adjustment. In Colorado, for example, the district with a size factor of 2.588 would receive 2.588 times the amount received by a district with no size adjustment. Therefore, under the formulas in Table V-2, a district with a size adjustment of zero, or no additional funding based on enrollment, would have a size factor of 1.000.

C. Alaska provides size adjustment funding for all school districts but the state's largest.

D. Kansas' low enrollment weighting formula was recently the subject of court review. The Kansas Supreme Court upheld the state formula.

E. The size adjustment shown for Nebraska applies to district with students in grades 9-12 only. A smaller adjustment is provided for districts with students in other grades.

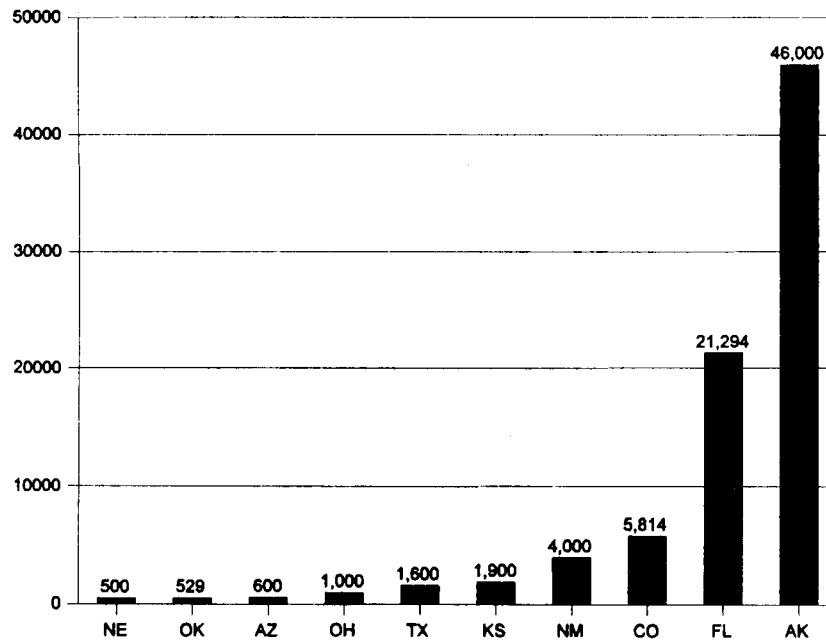
F. Ohio provides additional funding on a flat dollar amount — \$10 for each student below 1,000 in addition to a minimum program per pupil of \$2,636.

Column 3 illustrates the enrollment level where the size adjustment reaches 1.000 and no additional funding for enrollment is provided. In seven of the states — Alaska, Arizona, Florida, Kansas, Ohio, Oklahoma, and Texas — the figure represents the maximum enrollment for a size adjustment. However, in three of the states — Colorado, Nebraska, and New Mexico — the figure in Column 3 represents the enrollment levels where districts are presumed to be operating without the additional costs associated with very small or very large size, and so no additional funding is provided. Districts with enrollments greater than the level listed for these three states receive additional funding as described in Column 4.

**Table V-2 Comparisons.** According to the data in Column 2 of Table V-2, Colorado's formula provides the greatest amount of additional funding to very small districts. Ohio provides the least additional funding per pupil for these districts. The data in Column 3 indicate that Alaska provides size adjustment funding to the greatest enrollment range of districts — all except the largest district — while Oklahoma provides size adjustment funding to the smallest enrollment range of districts — only those with less than 529 pupils.

Six of the ten states either eliminate additional funding or reach the nadir of the funding formula curve at 1,900 or less pupils. Graph V-3 highlights the maximum enrollment level for low-enrollment funding in each state. The three states that operate under a J-curve — Colorado, Nebraska, and New Mexico — also provide additional funds for districts with very large enrollments

**Graph V-3: Maximum Enrollment Size of Districts Receiving Low Enrollment Funding**



Of the three states which operate under a J-curve, Colorado has the highest enrollment level for the nadir of the curve. According to the data in Column 4, New Mexico provides the greatest amount of additional funding to very large districts.

*Assumptions Used in Table V-2.* The size adjustment factors in Column 2 of Table V-2 were derived by using each state's size adjustment formula and the estimated October 1993 enrollment of Colorado school districts. In the case of some states, the size adjustment formulas were not entirely comparable to Colorado's formula and certain assumptions were made. For example, in computing Alaska's maximum size factor, we assumed that a school district in Colorado was comparable to an educational community in Alaska. For Florida and New Mexico, which provide size funding to individual schools, the average school size of each Colorado school district was assumed to be the actual size of each school in the district.

Some states included in this analysis provide funding for isolated districts or isolated schools in addition to enrollment-based funding. However, the data in Table V-2 is based solely on size adjustment formulas. For example, we did not incorporate the additional funding that Texas provides to districts which are greater than 300 square miles because this isolation measure is not included in Colorado's proposed formula. Similarly, Table V-2 presents Arizona's size adjustment formula for non-isolated school districts instead of the formula for isolated school districts. Table V-2 includes Oklahoma's size adjustment formula, although that state allows districts to use either the size adjustment formula or an isolation formula, whichever provides greater assistance. In New Mexico, one part of the state's size adjustment formula is called isolation assistance and another is called density assistance, but both are based on enrollment so both parts were included.

## **DISECONOMIES OF SCALE FOR LARGER DISTRICTS**

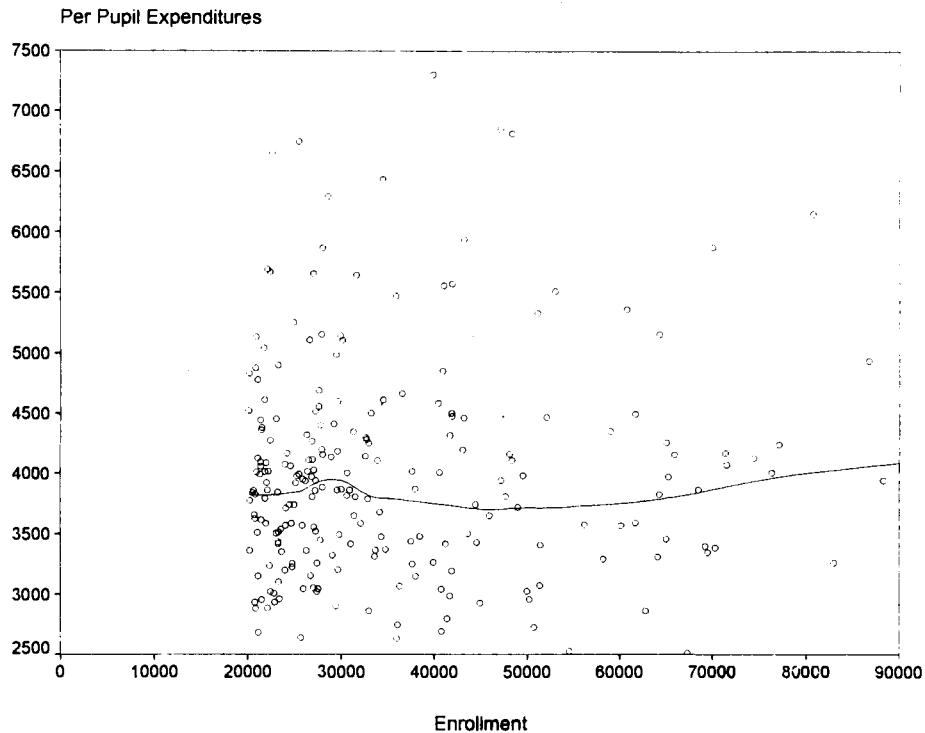
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While researchers may not agree on the actual enrollment level where economies of scale can be achieved, there seems to be general support for the concept that per pupil costs are greater in smaller enrollment districts. With respect to larger enrollment districts, there is still debate regarding whether diseconomies of scale exist. Research discussed at the beginning of this chapter makes reference to studies that validate a U-shaped cost curve. Applying the LOWESS methodology used to develop the size adjustment factor in Colorado to national expenditure data, it appears that per pupil expenditures follow the traditional long run average cost curve. That is, per pupil expenditures appear to decrease up to a certain enrollment level and then increase beyond that level, indicating diseconomies of scale for larger enrollment districts.

Graph V-4 presents per pupil expenditures for each district in the United States with an enrollment of 20,000 or more, graphed by the enrollment of the district. The

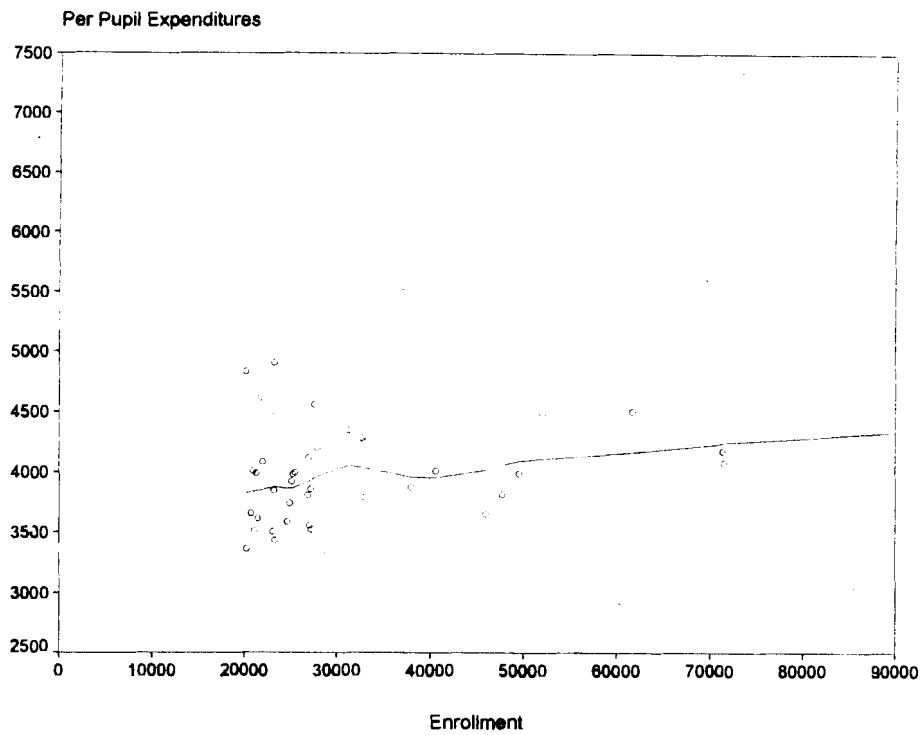
data in Graph V-4 reflect 1991-92 total expenditures divided by fall 1991 enrollment, according to Table 91 of the 1993 *Digest of Education Statistics*, published by the National Center for Education Statistics, U.S. Department of Education. A LOWESS line is provided which reflects the central tendency of per pupil expenditures by enrollment.

**Graph V-4: Per Pupil Expenditures by Enrollment for All U.S. School Districts with Enrollments Over 20,000**

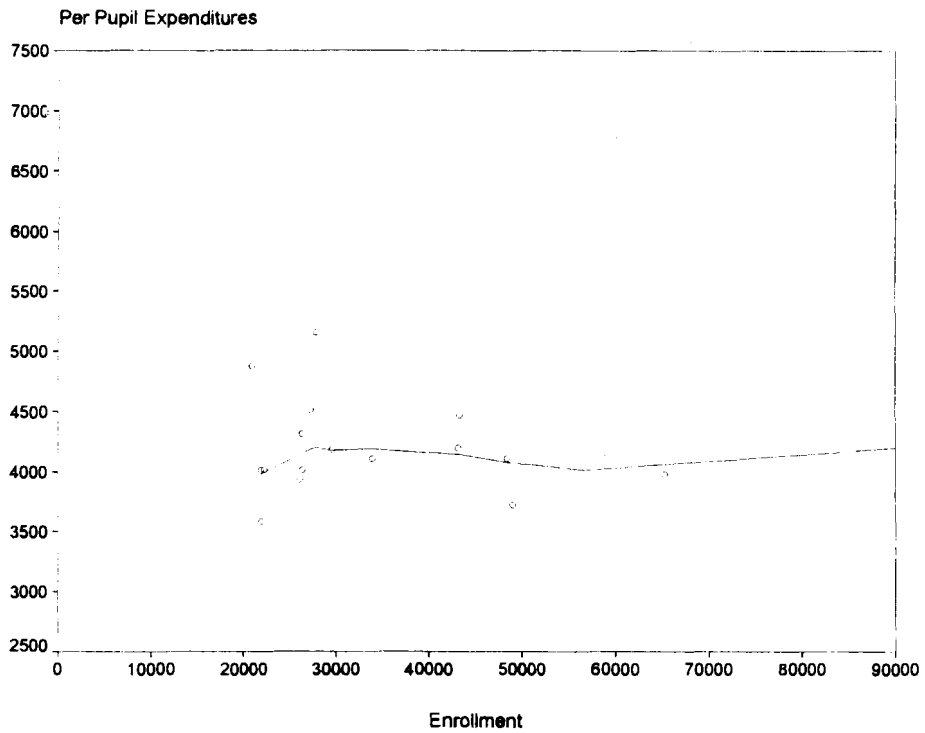


While the LOWESS line shown in Graph V-4 indicates that per pupil expenditures increase with increases in enrollment, the magnitude of the diseconomies seems to differ by state. The following graphs (Graph V-5 and Graph V-6) present the same curvilinear relationship for two states which have a significant number of districts with enrollments over 20,000 — California and Florida.

**Graph V-5: Per Pupil Expenditures by Enrollment for California School Districts with Enrollments Over 20,000**



**Graph V-6: Per Pupil Expenditures by Enrollment for Florida School Districts with Enrollments Over 20,000**



## STUDY OF KANSAS' LOW ENROLLMENT WEIGHTING FORMULA

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In April 1994, the Kansas Legislative Coordinating Council (LCC) contracted with two education finance consultants to study the state's low enrollment weighting and to make recommendations to the LCC regarding "an appropriate economy of scale weight factor for low enrollment school districts . . ." <sup>36</sup> The study was ordered after a district court in Kansas ruled that the School District Finance and Quality Performance Act was unconstitutional because a provision allocating additional funding to districts with fewer than 1,900 students did not "contain a rational basis grounded upon education theory." A primary goal of the study was to document a rational basis for providing additional revenue to low enrollment school districts. However, before the study was concluded, the Kansas Supreme Court unanimously upheld the constitutionality of the act, reversing the decision of the district court. A thorough summary of both the district court decision and the supreme court decision is provided in Appendix B.

In its decision, the Kansas Supreme Court noted the following:

The act has been through the legislative process, was amended in many respects on its way to enactment, and became the law of this state . . . The wisdom or desirability of the legislation is not before us. The constitutional challenge goes only to testing the legislature's power to enact the legislation.

In light of the supreme court ruling, the Kansas legislature has no obligation to revise or even reexamine its low enrollment weight formula. It remains to be seen, therefore, how the findings of the study may effect the state's size factor. Even so, the study confirmed some basic economy-of-scale, including the following.

- It costs more per pupil to offer an equivalent educational program in smaller enrollment districts than it does in larger enrollment districts.
- Pupil/teacher ratios appear to be the greatest contributor to high per pupil costs.
- It can be difficult to identify variables related to cost which do not reflect historical expenditures.



## SUMMARY OF FINDINGS

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- ◆ In general, the research on economies of scale has found that costs decrease as size increases. Some research has also found that costs increase again as size increases beyond the optimum point, producing a U-shaped average cost curve.
  
- ◆ The research has not concluded that one particular methodology exists for computing an adjustment for size based on economies of scale, nor has it identified a particular size level at which economies of scale are optimized.
  
- ◆ Economic modeling is the most frequently used methodology for identifying economies of scale in published literature. While data on the input side of the model may be available, the commonly used data elements to measure output (achievement) are not readily available in a consistent format in Colorado. However, non-econometric methods are used in many unpublished practical business applications.
  
- ◆ The use of expenditure data as a proxy for cost has been criticized in Colorado and elsewhere because of its basis in historical funding. The methodology used to determine the size factor — the LOWESS line — mitigates some of the criticism because it is based on the central tendency of districts and not on individual district data. The Kansas Supreme Court recently upheld that state's size factor which was also premised on historical expenditure data.
  
- ◆ Colorado is not the only state to include a size adjustment in its funding formula. More states adjust for low-enrollment districts than for large districts, however.

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## **Chapter VI: Ability of Schools to Meet Capital Demands**

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The purpose of this chapter of the study is to examine the ability of rural and urban public schools to meet their capital demands within the constraints of current laws and regulations. This chapter discusses current provisions in law and compares the ability of each district to raise a specified amount of revenue.

## ABILITY OF SCHOOLS TO MEET CAPITAL DEMANDS

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### Current Law

In Colorado, the responsibility for providing public K-12 educational facilities is vested with local boards of education. Three basic mechanisms are available to school districts under current law. These mechanisms are described below.

***Local Bond Referenda.*** The process for raising revenue for capital construction projects used by most school districts involves issuing bonds and repaying the bonded debt with property tax revenue from a bond redemption levy. Under Article 42 of Title 22, C.R.S., school districts can request voter approval to issue bonded debt to meet their capital needs. Districts may also ask for voter approval to impose a bond redemption mill levy in order to make the annual debt payments.

The process for issuing bonded debt and limitations on the amount of bonded debt are determined through actions of the General Assembly. These actions can affect the ratings received by school districts on bond issuances and, therefore, the cost of bond issues. For example, with the passage of House Bill 94-1001, the General Assembly increased the statutory limit on allowable debt for school districts from 20 percent of the assessed value of taxable real property in the district to the greater of 20 percent of assessed value or six percent of the actual value.

In addition, Section 22-41-110, C.R.S., provides that the state will guarantee payment of a school district's debt service if the district is unable to make the payment to the extent that the district is entitled to receive equalization aid payments from the state. Under this program, debt payments made by the state on behalf of a district are withheld from the succeeding payment of the state's share of the district's total program. Districts which are entitled to this state guarantee generally receive a higher rating and lower interest rate on their bonds at the time of issuance. According to Standard & Poor (S&P), if a district's state aid is at least "one times" the district's expected debt service, that district's bonds should receive at least an "A" rating.

Currently, school district bond ratings in Colorado range from AA to BBB, according to the rating system of S&P. Under that system, AA is the second-highest possible rating and BBB is the lowest investment grade rating; no districts have issued bonds at a junk bond rating. As of January 13, 1995, the following interest rates applied to the respective bond ratings for issuances to be repaid over a 20-year period: AAA, 6.10 percent; AA, 6.30 percent; A, 6.55 percent; and BBB, 6.85 percent.

**Capital Improvement Zones.** Section 22-43.5-101, *et seq.*, C.R.S., allows citizens in portions of an existing school district to form a separate taxing jurisdiction, or capital improvement zone, for the purpose of raising revenue for capital construction through the issuance of bonded debt. The statute specifies the criteria which must be met before a capital improvement zone can be established and grants the local school board authority to establish a planning committee, once the criteria are met. The planning committee must consider several issues before presenting its proposal at public hearings and, finally, to the voters of the proposed taxing jurisdiction. Currently, there is no outstanding bonded debt issued in the name of a capital improvement zone.

**Special Building Fund — "Pay as You go".** School districts also have the option of requesting voter approval to impose up to ten mills per year for up to three years in order to pay for capital improvements, under Section 22-40-102 (1.5), C.R.S.

If approved by voters, revenue from the additional property tax is credited to the district's special building fund. Under the law, school boards may decrease the amount or the duration of the levy without voter approval. Currently, there are no districts utilizing this financing mechanism for school facilities.

Aside from legislative mechanisms, there are other ways of increasing a district's ability to provide facilities. Having students attend classes throughout the year can increase the capacity of buildings. Year-round schools have been used most often in districts with rapid enrollment growth. Also, intergovernmental agreements leading to joint usage may allow political subdivisions to provide facilities while sharing debt, tax burden, and other costs.

### **Comparison of Ability**

This part of the study measures the local effort required to raise a random amount of revenue per pupil from a locally-imposed mill levy. For purposes of this comparison, the mill levy in each district which would produce \$200 per pupil was calculated. Table VI-1 presents each district's October 1994 enrollment; 1994 assessed valuation (for 1995 property tax collections); assessed value per pupil; total amount produced in the district at \$200 per pupil; and the mill levy required to produce the \$200 per pupil. Generally, districts with higher assessed values per pupil have an easier ability to raise revenue through property taxes, as evident by lower mill levies. However, the actual ability of school districts to raise revenue for capital construction is largely based on the willingness of voters to approve additional property taxes.

As presented in Table VI-1, the mill levies required to produce \$200 per pupil in each district range from a low of 0.289 mills in the Aspen School District to a high of 21.374 mills in the Fountain School District in El Paso County. Statewide, the average number of mills required to raise \$200 per pupil is 4.713. This comparison shows 84 district with mill levies below the state average and 92 districts with mill levies above the average.

## SUMMARY OF FINDINGS

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- ◆ It is the responsibility of local boards of education to provide public K-12 educational facilities. State law allows school districts to raise revenue locally to provide capital facilities through bonded indebtedness, capital improvement zones, and a pay-as-you-go mechanism.
- ◆ The ability of school districts to meet their capital demands is based on several factors including actions of the General Assembly, the taxing ability of districts, and the willingness of voters to provide funding.

*Table VI-1: School District Mill Levies Required to Raise \$200 Per Pupil in Property Taxes*

COUNTY	DISTRICT	OCTOBER 1994 PUPILS	1994 ASSESSED VALUATION	ASSESSED VALUATION PER PUPIL	PROPERTY TAX REVENUE (\$200/PUPIL)	REQUIRED MILL LEVY
ADAMS	MAPLETON	4,630.8	230,075,380	49,684	926,160	4.025
ADAMS	NORTHGLENN	22,389.0	539,061,890	24,077	4,477,800	8.307
ADAMS	COMMERCE CITY	5,918.8	206,458,390	34,882	1,183,760	5.734
ADAMS	BRIGHTON	4,042.0	139,222,720	34,444	808,400	5.807
ADAMS	BENNETT	979.0	37,837,180	38,649	195,800	5.175
ADAMS	STRASBURG	444.5	17,285,420	38,887	88,900	5.143
ADAMS	WESTMINSTER	10,795.0	318,758,430	29,528	2,159,000	6.773
ALAMOSA	ALAMOSA	2,377.8	55,903,313	23,511	475,560	8.507
ALAMOSA	SANGRE DECRISTO	318.0	11,611,704	36,515	63,600	5.477
ARAPAHOE	ENGLEWOOD	4,374.5	178,250,860	40,748	874,900	4.908
ARAPAHOE	SHERIDAN	1,903.5	66,375,740	34,870	380,700	5.736
ARAPAHOE	CHERRY CREEK	33,306.0	1,674,441,650	50,274	6,661,200	3.978
ARAPAHOE	LITTLETON	15,261.8	627,575,210	41,121	3,052,360	4.864
ARAPAHOE	DEER TRAIL	173.0	13,012,140	75,215	34,600	2.659
ARAPAHOE	AURORA	26,181.8	755,003,970	28,837	5,236,360	6.936
ARAPAHOE	BYERS	369.0	17,388,700	47,124	73,800	4.244
ARCHULETA	ARCHULETA	1,280.0	78,807,766	61,569	256,000	3.248
BACA	WALSH	274.0	21,473,610	78,371	54,800	2.552
BACA	PRITCHETT	85.0	5,502,200	64,732	17,000	3.090
BACA	SPRINGFIELD	356.6	13,684,070	38,374	71,320	5.212
BACA	VILAS	70.8	5,005,000	70,692	14,160	2.829
BACA	CAMPO	86.5	7,636,380	88,282	17,300	2.265
BENT	LAS ANIMAS	755.1	18,206,180	24,111	151,020	8.295
BENT	MCCLAVE	247.5	8,700,220	35,152	49,500	5.690
BOULDER	ST VRAIN	15,729.5	657,943,730	41,829	3,145,900	4.781
BOULDER	BOULDER	23,686.5	1,820,696,730	76,866	4,737,300	2.602
CHAFFEE	BUENA VISTA	834.8	38,551,250	46,180	166,960	4.331
CHAFFEE	SALIDA	1,334.1	45,846,962	34,365	266,820	5.820
CHEYENNE	KIT CARSON	135.5	44,456,775	328,094	27,100	0.610
CHEYENNE	CHEYENNE R-5	357.8	57,855,248	161,697	71,560	1.237
CLEAR CREEK	CLEAR CREEK	1,358.3	98,721,680	72,680	271,660	2.752
CONEJOS	NORTH CONEJOS	1,176.0	12,441,154	10,579	235,200	18.905
CONEJOS	SANFORD	331.5	3,502,308	10,565	66,300	18.930
CONEJOS	SOUTH CONEJOS	426.0	10,891,953	25,568	85,200	7.822
COSTILLA	CENTENNIAL	368.5	38,482,120	104,429	73,700	1.915
COSTILLA	SIERRA GRANDE	314.5	34,257,040	108,925	62,900	1.836
CROWLEY	CROWLEY	600.0	13,709,766	22,850	120,000	8.753
CUSTER	WESTCLIFFE	392.5	35,111,030	89,455	78,500	2.236
DELTA	DELTA	4,396.5	119,764,802	27,241	879,300	7.342
DENVER	DENVER	58,513.8	4,220,924,400	72,136	11,702,760	2.773
DOLORES	DOLORES	309.8	23,401,912	75,539	61,960	2.648
DOUGLAS	DOUGLAS	18,997.5	833,453,990	43,872	3,799,500	4.559
EAGLE	EAGLE	3,347.0	765,804,790	228,803	669,400	0.874
ELBERT	ELIZABETH	1,759.3	44,259,440	25,157	351,860	7.950
ELBERT	KIOWA	262.5	9,905,070	37,734	52,500	5.300
ELBERT	BIG SANDY	332.8	8,847,610	26,585	66,560	7.523
ELBERT	ELBERT	196.5	5,197,620	26,451	39,300	7.561
ELBERT	AGATE	74.0	6,940,650	93,793	14,800	2.132
EL PASO	CALHAN	446.0	8,071,130	18,097	89,200	11.052
EL PASO	HARRISON	10,484.5	234,048,190	22,323	2,096,900	8.959
EL PASO	WIDEFIELD	7,912.0	108,327,720	13,692	1,582,400	14.608
EL PASO	FOUNTAIN	4,150.0	38,832,900	9,357	830,000	21.374
EL PASO	COLORADO SPRINGS	31,029.0	1,207,293,160	38,909	6,205,800	5.140
EL PASO	CHEYENNE MOUNTAIN	2,816.5	159,027,020	56,463	563,300	3.542
EL PASO	MANITOU SPRINGS	1,325.8	47,712,290	35,988	265,160	5.557
EL PASO	ACADEMY	13,100.5	407,526,160	31,108	2,620,100	6.429
EL PASO	ELLCOTT	555.0	9,444,320	17,017	111,000	11.753
EL PASO	PEYTON	384.0	10,110,730	26,330	76,800	7.596
EL PASO	HANOVER	124.0	6,382,070	51,468	24,800	3.886
EL PASO	LEWIS-PALMER	3,274.8	104,463,700	31,899	654,960	6.270

*Table VI-1: School District Mill Levies Required to Raise \$200 Per Pupil in Property Taxes*

COUNTY	DISTRICT	OCTOBER 1994 PUPILS	1994 ASSESSED VALUATION	ASSESSED VALUATION PER PUPIL	PROPERTY TAX REVENUE (\$200/PUPIL)	REQUIRED MILL LEVY
EL PASO	FALCON	3,087.5	74,236,770	24,044	617,500	8.318
EL PASO	EDISON	34.5	2,447,404	70,939	6,900	2.819
EL PASO	MIAMI-YODER	226.8	5,768,973	25,436	45,360	7.863
FREMONT	CANON CITY	3,836.0	98,438,966	25,662	767,200	7.794
FREMONT	FLORENCE	1,797.3	43,115,921	23,989	359,460	8.337
FREMONT	COTOPAXI	294.0	18,500,688	62,928	58,800	3.178
GARFIELD	ROARING FORK	4,259.5	297,110,150	69,752	851,900	2.867
GARFIELD	RIFLE	2,897.0	76,412,270	26,376	579,400	7.583
GARFIELD	PARACHUTE	545.0	37,405,920	68,635	109,000	2.914
	GILPIN GILPIN	332.5	133,461,200	401,387	66,500	0.498
	GRAND WEST GRAND	520.5	51,696,540	99,321	104,100	2.014
	GRAND EAST GRAND	1,056.5	131,021,210	124,014	211,300	1.613
GUNNISON	GUNNISON	1,634.0	145,998,357	89,350	326,800	2.238
HINSDALE	HINSDALE	56.5	16,585,339	293,546	11,300	0.681
HUERFANO	HUERFANO	826.5	70,419,199	85,202	165,300	2.347
HUERFANO	LA VETA	273.0	15,396,122	56,396	54,600	3.546
JACKSON	NORTH PARK	319.3	23,335,000	73,082	63,860	2.737
JEFFERSON	JEFFERSON	81,059.0	3,374,735,990	41,633	16,211,800	4.804
	KIOWA EADS	293.0	20,304,200	69,298	58,600	2.886
	KIOWA PLAINVIEW	87.0	15,364,480	176,603	17,400	1.132
KIT CARSON	ARRIBA-FLAGLER	237.8	15,300,666	64,343	47,560	3.108
KIT CARSON	HI PLAINS	130.0	10,238,624	78,759	26,000	2.539
KIT CARSON	STRATTON	278.5	10,254,719	36,821	55,700	5.432
KIT CARSON	BETHUNE	119.5	6,259,196	52,378	23,900	3.818
KIT CARSON	BURLINGTON	813.3	33,523,512	41,219	162,660	4.852
	LAKE LAKE	1,156.0	45,685,340	39,520	231,200	5.061
LA PLATA	DURANGO	4,491.0	470,767,430	104,825	898,200	1.908
LA PLATA	BAYFIELD	912.5	84,363,300	92,453	182,500	2.163
LA PLATA	IGNACIO	997.0	72,568,091	72,786	199,400	2.748
LARIMER	POUDRE	20,174.0	932,297,010	46,213	4,034,800	4.328
LARIMER	THOMPSON	12,766.0	409,783,450	32,100	2,553,200	6.231
LARIMER	ESTES PRK	1,345.8	126,401,210	93,923	269,160	2.129
LAS ANIMAS	TRINIDAD	1,582.0	33,596,110	21,236	316,400	9.418
LAS ANIMAS	PRIMERO	178.0	12,956,010	72,787	35,600	2.748
LAS ANIMAS	HOEHNE	314.5	14,567,990	46,321	62,900	4.318
LAS ANIMAS	AGUILAR	171.0	9,396,830	54,952	34,200	3.640
LAS ANIMAS	BRANSON	55.0	7,324,480	133,172	11,000	1.502
LAS ANIMAS	KIM	75.5	5,534,150	73,300	15,100	2.729
LINCOLN	GENOA-HUGO	240.5	16,185,520	67,299	48,100	2.972
LINCOLN	LIMON	564.0	18,803,736	33,340	112,800	5.999
LINCOLN	KARVAL	83.8	4,391,731	52,407	16,760	3.816
LOGAN	VALLEY	2,728.5	81,879,000	30,009	545,700	6.665
LOGAN	FRENCHMAN	186.0	7,238,660	38,918	37,200	5.139
LOGAN	BUFFALO	265.5	8,262,478	31,120	53,100	6.427
LOGAN	PLATEAU	142.5	10,437,430	73,245	28,500	2.731
	MESA DEBEQUE	150.5	21,790,350	144,786	30,100	1.381
	MESA PLATEAU	559.0	24,034,410	42,995	111,800	4.652
	MESA MESA VALLEY	17,623.0	488,528,355	27,721	3,524,600	7.215
MINERAL	CREEDE	105.0	13,010,040	123,905	21,000	1.614
MOFFAT	MOFFAT	2,752.8	354,147,865	128,650	550,560	1.555
MONTEZUMA	MONTEZUMA	3,320.6	140,988,650	42,459	664,120	4.710
MONTEZUMA	DOLORES	620.5	18,720,525	30,170	124,100	6.629
MONTEZUMA	MANCOS	551.5	14,735,092	26,718	110,300	7.486
MONTROSE	MONTROSE	4,846.8	141,188,470	29,130	969,360	6.866
MONTROSE	WEST END	557.0	29,670,810	53,269	111,400	3.755
MORGAN	BRUSH	1,432.0	137,084,221	95,729	286,400	2.089
MORGAN	FT MORGAN	2,872.5	92,793,550	32,304	574,500	6.191
MORGAN	WELDON	111.3	6,833,540	61,397	22,260	3.257
MORGAN	WIGGINS	555.5	21,100,190	37,984	111,100	5.265
OTERO	EAST OTERO	1,940.0	30,759,947	15,856	388,000	12.614

Table VI-1: School District Mill Levies Required to Raise \$200 Per Pupil in Property Taxes

COUNTY	DISTRICT	OCTOBER 1994 PUPILS	1994 ASSESSED VALUATION	ASSESSED VALUATION PER PUPIL	PROPERTY TAX REVENUE (\$200/PUPIL)	REQUIRED MILL LEVY
OTERO	ROCKY FORD	1,201.0	18,857,340	15,701	240,200	12.738
OTERO	MANZANOLA	277.0	3,423,150	12,358	55,400	16.184
OTERO	FOWLER	450.0	10,583,220	23,518	90,000	8.504
OTERO	CHERAW	234.0	2,917,250	12,467	46,800	16.043
OTERO	SWINK	353.0	5,279,790	14,957	70,600	13.372
OURAY	OURAY	225.0	19,841,040	88,182	45,000	2.268
OURAY	RIDGWAY	253.3	27,869,180	110,024	50,660	1.818
PARK	PLATTE CANYON	1,419.0	43,263,040	30,488	283,800	6.560
PARK	PARK	488.3	71,013,560	145,430	97,660	1.375
PHILLIPS	HOLYOKE	630.5	30,438,450	48,277	126,100	4.143
PHILLIPS	HAXTUN	307.5	14,424,320	46,908	61,500	4.264
PITKIN	ASPEN	1,148.5	796,118,430	693,181	229,700	0.289
PROWERS	GRANADA	303.0	7,581,500	25,021	60,600	7.993
PROWERS	LAMAR	2,018.3	43,612,110	21,608	403,660	9.256
PROWERS	HOLLY	354.5	11,326,680	31,951	70,900	6.260
PROWERS	WILEY	324.3	8,728,430	26,915	64,860	7.431
PUEBLO	PUEBLO CITY	17,317.3	457,629,360	26,426	3,463,460	7.568
PUEBLO	PUEBLO RURAL	4,574.0	164,145,360	35,887	914,800	5.573
RIO BLANCO	MEEKER	771.0	46,480,520	60,286	154,200	3.318
RIO BLANCO	RANGELY	702.6	244,508,120	348,005	140,520	0.575
RIO GRANDE	DEL NORTE	751.0	28,644,700	38,142	150,200	5.244
RIO GRANDE	MONTE VISTA	1,364.0	27,871,430	20,434	272,800	9.788
RIO GRANDE	SARGENT	416.5	20,437,110	49,069	83,300	4.076
ROUTT	HAYDEN	476.5	53,977,600	113,279	95,300	1.766
ROUTT	STEAMBOAT SPRINGS	1,834.5	212,304,500	115,729	366,900	1.728
ROUTT	SOUTH ROUTT	422.5	37,765,330	89,385	84,500	2.238
SAGUACHE	MTN VALLEY	195.5	9,244,484	47,286	39,100	4.230
SAGUACHE	MOFFAT	167.5	12,428,501	74,200	33,500	2.695
SAGUACHE	CENTER	706.0	17,181,444	24,336	141,200	8.218
SAN JUAN	SILVERTON	99.3	12,481,720	125,697	19,860	1.591
SAN MIGUEL	TELLURIDE	434.5	227,989,210	524,716	86,900	0.381
SAN MIGUEL	NORWOOD	309.0	14,503,070	46,936	61,800	4.261
SEDGWICK	JULESBURG	320.3	14,482,120	45,214	64,060	4.423
SEDGWICK	PLATTE VLY	156.5	11,856,370	75,760	31,300	2.640
SUMMIT	SUMMIT	2,035.8	481,406,100	236,470	407,160	0.846
TELLER	CRIPPLE CREEK	472.5	79,709,700	168,698	94,500	1.186
TELLER	WOODLAND PARK	2,774.5	89,031,780	32,089	554,900	6.233
WASHINGTON	AKRON	490.5	20,552,806	41,902	98,100	4.773
WASHINGTON	ARICKAREE	133.0	18,282,633	137,463	26,600	1.455
WASHINGTON	OTIS	180.8	9,417,230	52,086	36,160	3.840
WASHINGTON	LONE STAR	73.5	3,803,124	51,743	14,700	3.865
WASHINGTON	WOODLIN	125.8	14,849,520	118,041	25,160	1.694
WELD	GILCREST	1,846.0	220,445,782	119,418	369,200	1.675
WELD	EATON	1,290.0	45,258,034	35,084	258,000	5.701
WELD	KEENESBURG	1,326.5	67,941,484	51,219	265,300	3.905
WELD	WINDSOR	1,824.5	123,845,768	67,879	364,900	2.946
WELD	JOHNSTOWN	1,220.0	40,237,716	32,982	244,000	6.064
WELD	GREELEY	12,514.3	385,174,913	30,779	2,502,860	6.498
WELD	PLATTE VLY	943.5	77,267,839	81,895	188,700	2.442
WELD	FORT LUPTON	2,348.5	112,718,680	47,996	469,700	4.167
WELD	AULT-HIGHLND	847.0	33,735,240	39,829	169,400	5.021
WELD	BRIGGS DALE	86.5	5,804,070	67,099	17,300	2.981
WELD	PRAIRIE	122.5	13,184,210	107,626	24,500	1.858
WELD	GROVER	109.5	9,168,830	83,734	21,900	2.389
YUMA	WEST YUMA	940.0	53,578,901	56,999	188,000	3.509
YUMA	EAST YUMA	893.3	45,726,223	51,188	178,660	3.907
**STATE	TOTAL**	612,503.1	29,654,991,952	48,416	122,500,620	4.131



## Chapter VII: Consolidation of School Districts

This chapter examines the feasibility of consolidating or reorganizing school districts under Colorado law and reviews issues related to school district organization. To some, consolidation means the closing of schools or school districts. Within the context of this study, however, consolidation is synonymous with reorganization. So, while the merger of existing school districts is a large part of this analysis, the entire range of reorganization options are considered.

## HISTORICAL PERSPECTIVE ON CONSOLIDATION IN COLORADO

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The issue of consolidation has its roots in the efforts to maximize production efficiency, which began during World War II. The early theory made claims that "bigger is better" — bigger factories, bigger production facilities, etc. For school districts, it implied that students could be taught more efficiently, or at a lower cost, in larger institutions. Advocates of consolidation pointed to economies of scale, more expansive course offerings, greater opportunities for specialized study, and better facilities as benefits of reorganization. In response, supporters of smaller educational settings cited the high attendance rate and high achievement rate of students, smaller class sizes leading to more interaction between teachers and students, the close relationship between the community and the school district, and decentralized (local) control as benefits of the current system. One author observed that a significant result of the movement to increase productivity and efficiency through consolidation was a reduction in the number of school districts in the United States from 128,000 to 15,900, noting that, "in large part these reductions were the result of aggressive state policies that provided incentives or mandates for school district consolidation . . ."1

Prior to the 1940s there were over 2,000 school districts in Colorado, some of which consisted of a single school and many others which did not provide a complete K-12 education. The School District Reorganization Act of 1949 was passed in an attempt to reduce the number of districts and provide a more uniform system of education. The statute governing school district organization underwent several revisions through 1965, by which time there were just 181 school districts. In 1974, the act was revised again when pre-1940 statutes regarding consolidation of school districts were incorporated into the 1965 act so that all law regarding the organization of school districts was in one part of Colorado's statutes. From 1983 to 1986, five more consolidations occurred, resulting in the present 176 school districts.

Following the consolidations which occurred from 1983 to 1986, it became evident that the process outlined in the organization act was cumbersome, outdated, and did not recognize the needs of districts. Therefore, during the summer of 1991, the House and Senate Education Committees met jointly to consider the issue of school district organization and proposed legislation that ultimately became the basis for the School District Organization Act of 1992. The legislation sought to achieve the following goals.

- Update the process to address the current needs of school districts;
- Simplify and clarify the process for consolidation or reorganization; and
- Make statutes more readable so that districts and citizens might have a clear sense of the process.

## CURRENT LAW IN COLORADO

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Several provisions in Colorado law that have a direct impact on school district organizational questions are discussed here, including the School District Organization Act of 1992, the Public School Finance Act of 1994, and Article X Section 20 of the Colorado Constitution (Amendment No. 1).

### **School District Organization Act of 1992**

Before the enactment of the School District Organization Act of 1992 (Section 22-30-101, *et seq.*, C.R.S.), the primary purpose of the Colorado statute was to define a process for the merger of school districts. Designed for broader usage, the 1992 act applies in the following situations:

- consolidating two or more existing school districts into a new single district;
- deconsolidating an existing school district into two or more new school districts;
- dissolving and annexing a school district which has lost its accreditation; or
- modifying the boundaries of existing school districts to improve operations and provide better educational opportunities for students.

Under the 1992 act, no reorganization of a school district can occur without the appointment of a school organization planning committee. A planning committee must be appointed under the following circumstances: at the request of affected local school boards; upon the submission of a petition to the county clerk with the signatures of at least 25 percent of the eligible voters in each affected district; or if the state board declares a school district is no longer accredited. Section 22-30-106 (2), C.R.S., specifies the composition of the planning committee.

The planning committee is responsible for developing a plan of organization which considers:

- the educational needs of the affected population;
- the provision of diverse educational opportunities for students;
- equalization of the educational opportunities for students in the affected region;

- the efficiency and effectiveness of the various organization options being studied;
- facility use;
- establishment of boundaries for all existing or new school districts;
- equitable adjustment and distribution of the properties and cash assets of the school districts whose boundaries may be affected; and
- representation for each proposed school district's board of education members.

Section 22-30-115, *et seq.*, C.R.S., details the steps to be taken by the planning committee including adoption of a preliminary plan, public hearings, adoption of a final plan, and submission of the final plan to the commissioner of education. The final reorganization plan is subject to approval by voters in the affected areas and the act outlines provisions for requesting voter approval. Finally, the act establishes procedures to ensure the payment of any existing bonded indebtedness of the old district and to allow newly organized districts to issue bonded debt of their own.

### **Potential Obstacles to Reorganization**

During the course of this study, several individuals familiar with Colorado's reorganization statute were contacted, including staff at the Colorado Department of Education (CDE) and representatives of groups that have recently attempted school district reorganizations in Broomfield, Crested Butte, and Pueblo West. Four areas were identified where the statute is unclear or where it specifically hinders reorganization efforts. The first three areas relate to the requirements that must be met before a school organization planning committee is established; the fourth relates to the requirement for voter approval of the reorganization plan.

#### ***1. Proponents of reorganization argue that the statute requires petitioners to collect and submit an unreasonably large number of petition signatures.***

Under Section 22-30-105 (1) (b), C.R.S., petitioners must collect and submit the signatures of 25 percent of the eligible electors in each affected district in order to have a planning committee established. Proponents of a plan to create a new school district in Broomfield say this requirement presents a significant obstacle to their efforts because Broomfield currently encompasses portions of five school districts (Boulder, Northglenn, Jefferson, St. Vrain, and Fort Lupton) in four counties (Boulder, Adams, Jefferson, and Weld). The Broomfield students comprise only a small minority of the

total student population in each of the respective districts. Before a planning committee could be established even to consider creation of a Broomfield school district, proponents must collect signatures of 25 percent of the eligible electors in each of the five existing school districts.

2. *The statute does not specify whether petitioners may substitute a school board resolution for petition signatures when one affected board of education has passed a resolution but others have not passed a similar resolution.*

Citizens interested in creating a new school district in Pueblo West requested approval to establish a planning committee from the Pueblo 60 and Pueblo 70 School Districts. One school board voted for the establishment of a planning committee while the other voted against it. The proponents were unclear whether they could substitute a school board resolution for petition signatures in the one district whose board voted to establish a planning committee instead of collecting petition signatures in both districts.

3. *School boards can preempt petitioners by appointing a school district planning committee and "stacking" the committee while petitioners are still in the process of collecting signatures.*

Currently, a school district which opposes reorganization can preempt petitioners if the district learns of the petition effort and appoints a planning committee before the petitions are submitted and verified. This situation exists because a school district planning committee is established much quicker by school board resolution than by petition. Those involved in reorganization efforts suggest the statutes be clarified to prevent such occurrences. Clarification might take the form of a temporary prohibition on the establishment of a planning committee by a school district when a petition committee has begun circulating petitions. The prohibition could be lifted upon submission of the petition signatures, after petitioners have been allowed a specified time period in which to collect signatures, or at the request of the petitioners.

4. *The requirement for voter approval in each district affected by a reorganization plan limits the ability of local areas to establish their own school districts.*

Any reorganization plan is subject to approval by a majority of voters in each district affected by the reorganization plan. This voter-approval requirement makes the issue of local self determination a difficult one; residents in one region are often frustrated when they are unable to convince the entire district to reorganize, and other

residents of the district sometimes feel that reorganization will remove a valuable part of the district's character and negatively impact the district's tax base. In November 1994, voters in the Gunnison School District rejected a proposed reorganization plan that would have split the existing district into two separate districts — one in Gunnison and one in Crested Butte. The proposal was heavily supported in Crested Butte but it failed because the act requires approval by a majority of voters in the entire district and, districtwide, voters were unconvinced of the need to allow greater local control and funding of schools.

## **Public School Finance Act of 1994**

Under the size factor in Colorado's funding formula, the smallest enrollment districts receive the largest size adjustment but the largest enrollment districts also receive a size adjustment (Section 22-54-104 (5) (b), C.R.S.). Recognizing that this factor creates a natural disincentive for small districts to consolidate and for large districts to deconsolidate, the General Assembly set limitations on the use of the size factor for some reorganized districts. Specifically, when a district with less than 12,000 pupils reorganizes into two or more districts, the size factor for each resulting district is the same as that of the original district, or lower than what it might otherwise be for the new districts. At the other end of the spectrum, if a school district with more than 18,000 pupils reorganizes into two or more districts, each district is allowed the size factor of the original district for two budget years. These size factor modifications address only deconsolidation efforts, however. The disincentive to consolidate still exists.

However, school district reorganization in Colorado raises at least two issues that are not specifically addressed in the Public School Finance Act of 1994. It is important to note that changes to the school finance act related to these two issues may create direct or indirect incentives causing districts to consider their organizational structure.

### ***1. What mill levy should the new school district(s) impose?***

In 1993, following the passage of Article X, Section 20 of the state constitution, the uniform mill levy provision in the school finance act was eliminated. It was replaced with a provision that requires districts to levy the maximum amount of mills allowed under the constitution in order maximize their state aid. The General Assembly could provide clarification of its intent in this area, recognizing that the impact of a reorganization on property taxes may affect such efforts.

## ***2. What cost-of-living factor will be used by the new district(s)?***

Currently, the school finance act provides cost-of-living factors that are updated every two years for existing districts. The act makes no provision for including proposed districts in the biennial cost-of-living study (from which the cost-of-living factors are created) so a district would not be included in the study unless it was in existence at the time the study was conducted. In addition, the number of school districts throughout the state and the size of each could impact the cost of conducting the cost-of-living study.

### **School District Boundaries**

The debate over school district organization causes some to consider also the issue of local determination of school district boundaries. Only once has the General Assembly defined the boundaries of a school district through statute; Article XX, Section 7 of the Colorado Constitution requires that the City and County of Denver always constitute a single school district. However, the Colorado Supreme Court ruled in 1968 that "the General Assembly has plenary powers to determine the number, nature, and powers of school districts and their territory, and may modify or withdraw all such powers as it pleases."<sup>2</sup> The issue before the court in 1968 was brought by a school district seeking to overturn portions of the School District Organization Act of 1957 and nullify a reorganization plan in Morgan County.

### **Amendment No. 1**

Aside from the issues discussed above, the creation of a new school district raises constitutional questions. Article X, Section 20, of the Colorado Constitution sets limits on revenue and spending for governmental entities. For a new school district, it is unclear what the base will be for determining the allowable growth in spending or revenue. And, there have been questions raised about the timing for reorganization elections, and the ability of voters to authorize the issuance of bonded debt by an entity that is not yet in existence.

## OTHER STUDIES

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There have been several recent studies concerned with the organization of school districts, including at least three in Colorado since 1987. Some provide data analysis indicating positive and negative aspects of certain organizational structures while others deal directly with the feasibility of reorganization.

### **Study of School District Administration and Staffing**

Pursuant to Section 22-2-118, C.R.S., CDE conducted a study of school district administration and staffing patterns for the purpose of determining where savings of state and local funds could be realized.<sup>3</sup> A report based on the results of the study was presented in January 1990 and contained five sections related to: characteristics and trends of Colorado school district staffing; cost saving measures already undertaken by Colorado school districts; cost saving proposals; a case study of school district reorganization and shared services; and recommendations.

According to the report, the state experienced a five percent decline in the number of general administrators following school district consolidations that occurred between 1983 and 1986. School districts had already begun instituting cost saving measures such as closing schools in response to declining enrollments, increasing class sizes, combining classes, and sharing personnel with other districts. CDE put forth some additional cost saving proposals such as increasing employee and resource sharing, using telecommunications linkages, expanding the use of cooperative purchasing agreements, combining public and school district libraries, and privatizing certain services. CDE reports that some of the proposed cost saving measures were successfully implemented: currently there are at least 12 joint libraries in operation throughout the state, and the East Central BOCES has established a telecommunications link between several districts in eastern Colorado that allows a single teacher to interact with students in each district simultaneously.

The report included a case study of three districts in the San Luis Valley that had begun the process of considering reorganization with the primary goal of consolidating tax resources and building a new high school. However, the effort was abandoned after one of the districts decided to pursue voter approval to build a high school on their own. According to the CDE report, concern in the region during the reorganization negotiations centered on school district identity and school finance (i.e. the level of funding for the new district).

In the final section of the report, CDE provides recommendations for methods to reduce costs beyond the cost savings already achieved by school districts. The report notes, however, that many of the recommendations for further cost savings involve some loss of control on the part of individual school districts. The recommendations include creating incentives for school districts to use shared services, strengthening



BOCES and encouraging participation in cooperative service arrangements, revising the organization act, amending the school finance act to consider reorganizations, expanding the statewide cooperative purchasing agreements and creating incentives for districts to use the agreements, developing telecommunications networks, and creating incentives for school districts to experiment with alternative organizational arrangements. CDE reports that use of BOCES has helped some districts achieve some economies-of-scale savings while discussion on the other recommendations has continued.

### **Colorado School District Organization**

A 1991 CDE report provided a history of school district consolidation in Colorado and an analysis of school district organizations by county, geographic area, and enrollment.<sup>4</sup> Using 1990 data, the report states that reorganizing the state's existing school districts into units of at least 400 pupils would eliminate 74 districts; requiring a minimum enrollment of 750 pupils would eliminate 97 districts; and organizing school districts would affect 32 percent of Colorado public school students. Using 1994 data, a minimum enrollment of 400 pupils would affect 70 districts; a minimum enrollment of 750 pupils would affect 94 districts; and organizing countywide school districts would affect 33.5 percent of students.

The study noted that reorganization is one option to making districts operate more efficiently on a financial basis and it discussed alternatives to complete consolidation, such as sharing of resources and staff and consolidation of some functions. A large portion of the report focused on potential changes to the organization act and many of these recommendations were incorporated into the 1992 organization act.

### **Peat Marwick Main Study**

In 1987, the Colorado Legislative Council contracted with Peat Marwick Main & Company (PMM) to conduct a study of the organization, staffing, and key operational areas of 20 Colorado school districts of varying enrollment levels.<sup>5</sup> In its report, PMM made over 300 recommendations — some calling for state action and others calling for action on the part of the 20 districts. Although the study was not limited to consolidation issues, it generally favored an increase in the size of school districts to reduce overall per pupil costs.

For example, the consultants recommended that the state evaluate the costs of operating schools with small enrollments (less than 600 pupils) and that the net cost of consolidation be considered. Further, PMM recommended that the state establish a minimum school district size of 600 students in order to achieve efficiencies of scale. In making the recommendation, analysts at PMM noted that:

. . . it is our experience that schools with small enrollments are more expensive to operate and may not be an effective allocation of financial resources.

Specifically, the study noted three phenomena that tend to drain financial resources away from other priorities at small districts — small districts tend to pay more per pupil for building maintenance; food service operations are less likely to be self sufficient in small districts, and small districts tend to have higher per pupil transportation costs.

In terms of reorganization, PMM recommended that the state consider the entire range of consolidation options, including:

- consolidating elementary schools within a district;
- consolidating secondary schools within a district;
- consolidating selected elementary or secondary schools between adjacent districts;
- consolidating adjacent districts with maintenance of elementary schools in present locations and physical merger of secondary schools; and
- consolidation of adjacent districts and physical merger of all campuses.

Table VII-1 lists the criteria recommended by Peat Marwick Main & Company to be considered in school or school district reorganization decisions.

<b>Table VII-1. Criteria to Be Considered in School District Reorganization Decisions</b>	
<b>Quality Issues</b>	
Time spent by students riding buses; Percent or number of students to be transported in excess of determined acceptable time limits; Level of students to be transported (elementary or secondary); and Improvement in availability of courses offered at receiving campuses, particularly at the secondary level.	
<b>Potential Cost Savings</b>	
Increase in pupil/teacher ratios reducing overall instructional costs; Elimination of administrative and support staff on closed campuses; Elimination of fixed overall costs at closed campuses, such as utilities, maintenance, and insurance costs; Elimination or reduction of central administrative costs; and Increased efficiencies at receiving campuses or districts due to increased volumes.	
<b>Potential Cost Increases</b>	
Increased costs of transportation; Increased instructional staffing requirements for campuses receiving students; Increased campus administrative and support costs such as additional assistant principals, counselors and clerical support; Increased central administrative costs at receiving districts including one-time transition costs; Additional facility requirements; and One-time transition costs for both losing and receiving campuses.	

Source: Peat Marwick Main & Co., 1987

Peat Marwick Main recommended using incentives instead of punishments to achieve the consolidation goals.

### **Kansas Study**

In April 1994, the Kansas Legislative Coordinating Council (LCC) contracted with two education finance consultants to study the state's low enrollment weighting and to make recommendations to the LCC regarding "an appropriate economy of scale weight factor for low enrollment school districts . . ."6 The study was ordered after a district court ruled that the School District Finance and Quality Performance Act was unconstitutional because a provision allocating additional funding to districts with fewer than 1,900 students did not "contain a rational basis grounded upon education theory." A primary goal of the study was to document a rational basis for providing additional revenue to low enrollment school districts but it analyzed several school district organizational issues as well.

## ACTIVITIES IN OTHER STATES

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The issue of school district reorganization is not limited to Colorado. Other states are grappling with the issue as well. Some states address the topic as an organization issue, while others approach consolidation through finance laws.

### School District Organization Laws

States which have developed a statewide school district organization plan have two basic choices when it comes to implementation, each with its own challenges. Some states have offered financial or other incentives to induce school district reorganization while others have simply mandated reorganization.

- Oklahoma** combined both methods in reorganization reforms instituted in 1990, by linking consolidation incentives with new school accreditation requirements. Smaller districts tend to have difficulty meeting the new accreditation standards without consolidating with other districts. The most challenging standards for small districts are expected to be the specific number of books per school size, libraries staffed with certified librarians, a certain number of counselors per school size and specific classes that are not currently offered.
- In **New York**, a committee of school district superintendents developed a list of guidelines to facilitate consolidations recommended by the state department of education in 1992. The guidelines called for the state to provide teacher retirement incentives; to "develop shared service mergers as a transition phase to actual consolidation and district elimination"; and to provide additional funding to consolidated districts so that local citizens do not face increased taxes because of the consolidation.<sup>7</sup>
- In **Oregon**, consolidation efforts by the legislature have been directed at unifying elementary and high school districts into K-12 districts. No incentives are provided; the state will order the merger of any elementary school district which has not unified with a high school district by 1996.

### School Finance Laws

Beyond direct reorganization programs, state school finance formulas can often provide the strongest influence on the organizational characteristics of school districts, whether by design or not. For instance, Michigan's new school finance formula creates a financial incentive for school district consolidation, according to a preliminary report by some school administrators there.<sup>8</sup> Per pupil spending for a group of existing Michigan districts considering reorganization ranges from \$4,800 to \$6,900, but a new

consolidated district would qualify for an estimated \$7,700 per pupil. Elsewhere, the consultants that conducted the Kansas study noted that:

The literature and the experience of other states indicate that there is considerable conceptual, if not political, support for limiting the state's obligation for funding small schools that remain small through local choice rather than because of low population density. Continuing to provide the low enrollment weighting to all small districts provides a financial disincentive to such districts which might otherwise consider a reorganization.<sup>9</sup>

### **SUMMARY OF FINDINGS**

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- ◆ The last school district consolidation in Colorado occurred in 1986. Recently, there has been an increase in activity in this arena, probably because the School District Organization Act of 1992 permits deconsolidations. The activity has been centered around the creation of new districts from existing districts.
  
- ◆ Those who have been involved in reorganization efforts have cited problems with the organization act, primarily involving the creation of planning committees. The school finance act is silent on several issues relating to reorganization.
  
- ◆ The size factor in the school finance act provides a financial disincentive for small districts to consolidate.
  
- ◆ Some states have approached consolidation by offering financial incentives, while others have simply mandated it.
  
- ◆ There has been an increase in the sharing of services and facilities among districts, but more collaboration could occur.

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## **Chapter VIII: Mill Levies**

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This chapter addresses the portion of the charge that requires an examination of districts that are levying in excess of 40.080 mills for the district's share of total program. Included in this chapter is a review of the provisions of current law regarding school district levies and a historical perspective of the development of the formula. Mill levy and property tax information on districts with levies in excess of 40.080 mills is also presented.

## MILL LEVIES GREATER THAN 40.080 MILLS

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In December 1994, the available data indicated eleven districts would be required to levy more than 40.080 mills in FY 1994-95 to receive their full complement of state aid. The levies of districts are currently based on a formula contained in the Public School Finance Act of 1994. The mill levy provisions in the act reflect, in large measure, the provisions of Article X, Section 20 of the state constitution. Because of the interaction between the two, the statutory formula takes into consideration mill levies that were imposed prior to the enactment of the current statutory financing mechanism.

### Development of School District Mill Levy Formula

*Public School Finance Act of 1988.* The passage of the Public School Finance Act of 1988 significantly changed the method of financing public K-12 education in Colorado. One of the most notable differences was the method of calculating the local share — or property tax portion — of school district funding. The local share was premised on a statewide uniform mill levy concept. The concept originated from the philosophy that the tax effort of taxpayers to support public education should be the same, or uniform, across the state. The uniform mill levy provisions were included in the 1988 act from its inception (1988 mill levy certifications for the 1989 budget year) through 1992, although in practice only through the 1991 levy certifications. Throughout this time frame, a variety of methods were used to determine the uniform levy. In some years, the Colorado Department of Education was directed by law to certify a uniform levy to target a percentage state share specified by statute. In other years, the department was required to set the levy to target a specific amount of property taxes statewide. In one year, the uniform levy was contained in statute.

The uniform levy in the 1988 act did not apply to two types of districts. Any district in which the uniform levy would have produced more in property taxes than the district's total program was exempted from the uniform levy requirement. In these districts, the uniform levy was reduced to the millage that would generate the district's total program as well as a dollar amount equal to its state categorical support. In effect, these districts had levies less than the uniform millage. The second type of district — hold harmless districts — had levies higher than the uniform mill levy. Since hold harmless districts could also be included in the first type of district, this second group was comprised of districts that received their funding under the hold harmless provisions of the act *and* did not have sufficient property wealth to impose a levy less than the uniform rate. Essentially, hold harmless districts received revenue under the act at a higher per pupil level than other districts in the same funding category. These districts were required to pay for this additional funding through their property tax, however. The levy for these hold harmless districts was the uniform rate plus the millage required to fund the total program amount in excess of that provided through the category funding formula. Levies of these two classes of districts tended

It was not necessary for the department to attempt to harmonize the property tax requirements of the school finance act with the constitutional amendment because, ironically, the uniform levy from the preceding year (40.080 mills) generated the required amount of property taxes statewide.

During the 1993 legislative session, the General Assembly repealed the uniform mill levy provision of the 1988 act. The new formula for computing districts' local shares, effective for the 1993-94 fiscal year, was substantially the same formula employed by the department in 1992. The effect of this change on districts with levies in excess of 40.080 mills was twofold. First, districts that had not yet fully funded the amount of their hold harmless from the property tax could not increase their levies to do so. Second, districts were no longer able to decrease their levies if the rate over 40.080 mills produced a greater amount of revenue than the hold harmless amount. Thus, the original goal of having districts that were being funded at a higher amount pay for that additional funding, and only the additional funding, was no longer part of the school finance act. Nevertheless, only hold harmless districts had a levy in excess of 40.080 mills.

***Public School Finance Act of 1994.*** The method for calculating school district levies under the 1994 school finance act is essentially the same as the maximum property tax provisions of Article X, Section 20 of the state constitution. The formula was modified somewhat to account for the expansion of the local share to include specific ownership tax revenue. To receive its full complement of state aid, a district must levy the lesser of:

- the prior year's levy;
- the levy that produces a percentage change in property taxes equal to inflation plus the percentage change in enrollment; or
- the levy that generates a district's total program amount less specific ownership tax revenue and less minimum state aid.

For 81 districts, the levy produced by this formula in FY 1994-95 will be the uniform levy last certified by the department of 40.080 mills. Eleven districts will have levies greater than 40.080 mills, while levies in the remaining 84 districts will be less. Of these 84 districts, only two districts appear to be certifying a levy that meets the third standard of the formula described above.

As with the implementation of the 1988 act, the 1994 act also contains hold harmless provisions with respect to total program funding. However, unlike the 1988 act, the 1994 act does not contain similar provisions for funding the amount of the hold harmless with a local levy. Districts that were hold harmless under the 1988 act and imposing a tax rate in excess of 40.080 mills continue to do so unless the district's levy has been reduced by the limitation on the change in property tax revenue. The levies of eight of these districts have been reduced since the enactment of Article X, Section 20 of the state constitution.



## Districts Levying in Excess of 40.080 Mills

As previously mentioned, eleven districts are expected to impose a levy greater than 40.080 mills in FY 1994-95 for the district share of total program. These districts are listed in Table VIII-1. For each district, the table also includes the number of mills levied greater than 40.080 mills and the property taxes attributable to the excess levy.

<i>Table VIII-1: Districts with FY 1994-95 Levies in Excess of 40.080 Mills</i>			
<b>County-District</b>	<b>Mill Levy</b>	<b>Levy Greater Than 40.080 Mills</b>	<b>Property Tax From Excess Levy</b>
Arapahoe-Cherry Creek*	46.738	6.658	11,148,433
Baca-Springfield	52.443	12.363	169,176
Conejos-South Conejos	41.458	1.378	15,009
Costilla-Sierra Grande	40.358	0.278	9,523
Elbert-Agate	51.561	11.481	79,686
El Paso-Calhan	42.351	2.271	18,330
El Paso-Cheyenne Mountain	41.732	1.652	262,713
El Paso-Edison	47.630	7.550	18,478
Lake-Lake	43.489	3.409	155,741
Routt-South Routt	43.239	3.159	119,301
Washington-Woodlin*	43.856	3.776	56,072
<b>TOTAL</b>	<b>46.082</b>	<b>6.002</b>	<b>12,052,462</b>

\* indicates a hold harmless district

The number of districts levying greater than 40.080 mills in FY 1994-95 represents a reduction of one district from the number in FY 1993-94. Of the eleven districts, two are hold harmless (Arapahoe-Cherry Creek and Washington-Woodlin) and the remaining nine are funded under the formula provisions of the act. In addition to the two hold harmless districts listed in Table VIII-1, there are 31 other hold harmless districts.

## **Appropriateness of Levies in Excess of 40.080 Mills**

The issue with respect to districts levying more than 40.080 mills appears to be whether there is a continued basis for such levies under the Public School Finance Act of 1994. There are several issues to consider in determining whether this is the case.

Under the 1988 act, the theory was that certain districts were receiving more funding than other similar districts, and the additional funding should be part of the local share. The additional funding became a levy that was added to the uniform levy. With the adoption of Article X, Section 20 of the state constitution, the maximum mill levy/property tax provisions of the amendment were incorporated into the school funding law. There is no distinction in the 1994 act for differences in levies based on differences in total program, however. The districts with the higher levies simply had higher levies when the act was implemented. It is important to note that a uniform levy, as the concept existed in the 1988 school finance act, does not currently exist.

While the state constitution prescribes the maximum property tax revenue that may be generated in any district, it does not require that a district collect that amount of revenue. Thus, the General Assembly could revise the statutory mill levy formula to address this issue. A change in the formula that would act to reduce levies would impact either the state or school districts. For example, a maximum levy of 40.080 mills would have reduced property tax collections statewide by \$12.1 million in FY 1994-95. Such a reduction could have been accommodated by either an increase in the state appropriation or a program that was \$12.1 million less rich. It could be argued, however, that school districts with higher levies subsidize programs in other districts by reducing the need for state aid. That is, program funding can be as rich as it is because of the higher tax effort of taxpayers in 11 districts.

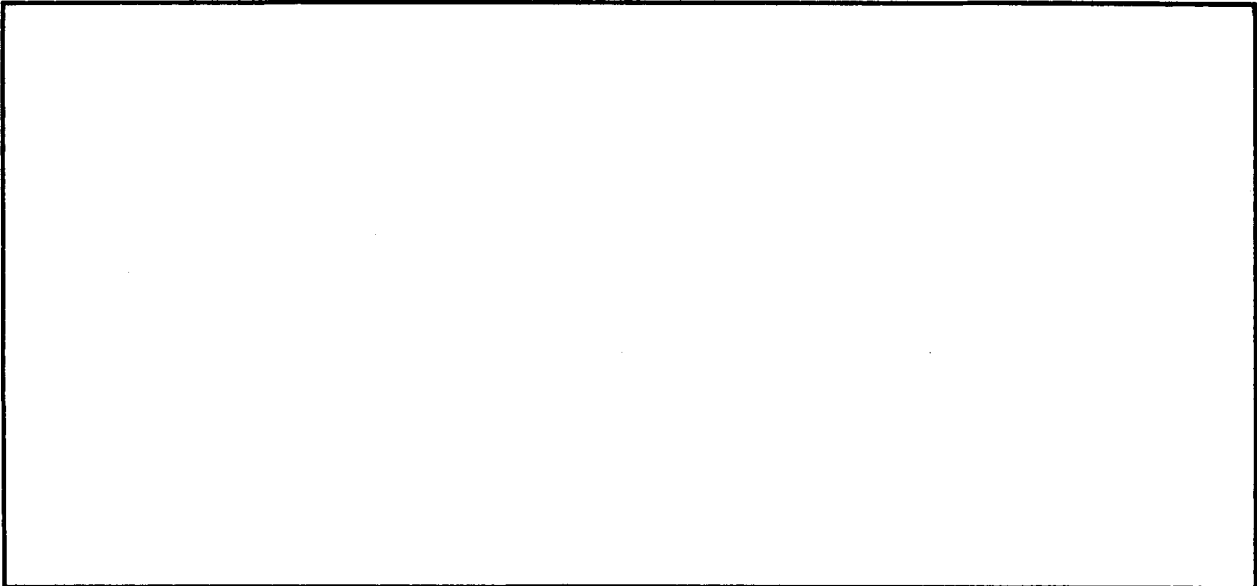
One of the concerns when the current formula for calculating school district levies was enacted was maintaining the local tax base. Its enactment came after four consecutive years of declines in statewide assessed value (1987-1991), followed by two years of slight increases: 0.7 percent in 1992 and 1.1 percent in 1993. Before the constitutional amendment was adopted, school district levies could be increased to maintain the property tax base. Now, school district mill levies either remain constant or decrease. The decline in levies is evident in figures cited earlier. In the year prior to the adoption of the constitutional amendment, 143 districts levied 40.080 mills while only 81 are expected to impose that levy in the current budget year. The number of districts levying in excess of 40.080 mills has decreased from 19 to 11. The concern was that a downturn in the economy and a resulting decrease in assessed values will not only reduce property taxes in a given year, but reduce the base from which to calculate maximum property taxes in future years. A reduction in property taxes increases the need for state aid. Such a state aid increase does not provide additional funding for education; it simply offsets a reduction in another revenue source. However, assessed value estimates prepared by our office indicate that the statewide assessed valuation will grow at a compound average annual growth rate of 4.6 percent between 1994 and 1999. Using the mill levy formula contained in the school finance act and these assessed value

estimates, school finance property taxes are projected to increase at a compound average annual growth rate of 3.4 percent during the same time period.

### **SUMMARY OF FINDINGS**

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- ◆ Following the adoption of Article X, Section 20 of the state constitution at the November 1992 election, the General Assembly incorporated the maximum mill levy/property tax provisions of the amendment into the school finance act. Because of this, the school finance act provides for a reduction in district levies only when necessary to stay within respective property tax revenue limits.
  
- ◆ Eleven districts have levies above 40.080 mills because of the interaction between mill levy and total program provisions in the 1988 school finance act.
  
- ◆ The General Assembly could modify the mill levy formula in the Public School Finance Act of 1994 to reduce levies in these districts, but such a modification would have financial implications.



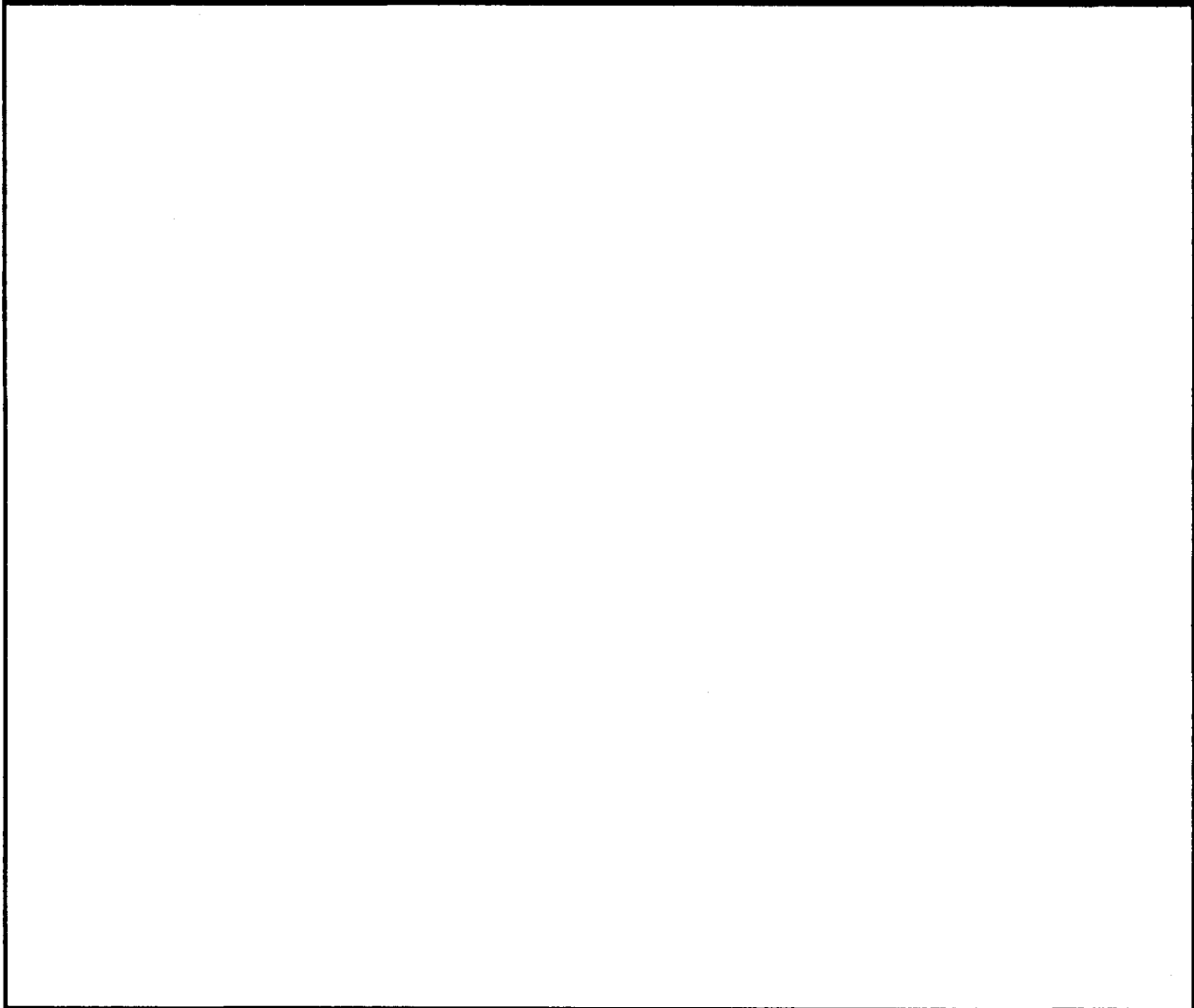
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**Endnotes**

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## CHAPTER 2

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1. Section 22-54-104.5, C.R.S.; House Bill 94-1001.
2. Joel D. Sherman, *Dropping Out of School*, Volume I: Causes and Consequences for Male and Female Youth, Pelavin Associates, Inc., December 1987 (prepared for the Office of Planning, Budget, and Evaluation, U.S. Department of Education) and, *Characteristics of At-Risk Students in NELS:88 National Education Longitudinal Study of 1988*, National Center for Education Statistics, U.S. Department of Education, NCES 92-042, August 1992.
3. See *Characteristics*, *ibid.*
4. *Legislative Council Staff Report on the School District Setting Category Study*, Colorado General Assembly, Legislative Council Research Publication No. 376, March 1993, pp. 54-5.
5. *Legislative Council Staff Report on the Senate Bill 93-87 Setting Category Study*, Colorado General Assembly, Legislative Council Research Publication No. 378, August 1993, p. 33.
6. *The "At Risk" Status of Arizona School Districts*, FY 1990 and Revised FY 1987 Data Tables, Research and Development Division Statistical Report, Arizona Department of Education, August 1991, pp. i-ii.
7. Students who qualify for the federal free lunch program are automatically eligible for the free milk program (42 USCS 1772 (6)).
8. Joan Martin, Connecticut Department of Education.
9. Susan Tavakolian, School Finance Section, Ohio Department of Public Instruction.
10. Greg Ey, Illinois Department of Education.
11. Terry Drake, staff to the state legislature's Revenue and School Finance Committee.
12. Eligibility for the free lunch program is 130 percent of the nonfarm income poverty guidelines established by the federal Office of Management and Budget, modified by family size and indexed to inflation. For a family of four, the income level is between \$18,000 and \$20,000.
13. Public Law 101-147.

## CHAPTER 5

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1. Atack, Jeremy, *Estimation of Economies of Scale in Nineteenth Century United States Manufacturing*, Garland Publishing, Inc., New York, 1985.
2. Buchanan, James M., and Yong J. Yoon, *The Return to Increasing Returns*, The University of Michigan Press, 1994.
3. Norman, George, *Economies of Scale, Transport Costs, and Location*, Martinus Nijhoff Publishing, Kluwer Boston, Inc., Hingham, Massachusetts, 1979.
4. Nels W. Hansen "Economy of Scale as a Cost Factor in Financing Public Schools," *National Tax Journal*, 17 (March 1964), 92-95.
5. John A. Thompson, "Scale Economies and Student Performance in Hawaii," *Journal of Education Finance*, 19 (Winter 1994), 279-291.
6. Robert J. Tholkes, "Economies of Scale in Rural School District Reorganization," *Journal of Education Finance*, 16 (Spring 1991), 497-514.
7. Fred White and Luther Tweeten, "Optimal School District Size Emphasizing Rural Areas", *American Journal of Agricultural Economics*, (February 1973), 45-53.
8. William F. Fox, "Reviewing Economies of Size in Education," *Journal of Education Finance*, 6 (Winter 1981), 273-296.
9. Paul T. Brinkman and Larry L. Leslie, "Economies of Scale in Higher Education: Sixty Years of Research," *The Review of Higher Education*, 10 (Fall 1986) 1-28.
10. Nels W. Hansen "Economy of Scale as a Cost Factor in Financing Public Schools," *National Tax Journal*, 17 (March 1964), 92-95.
11. William F. Fox, "Reviewing Economies of Size in Education," *Journal of Education Finance*, 6 (Winter 1981), 273-296.
12. Paul T. Brinkman and Larry L. Leslie, "Economies of Scale in Higher Education: Sixty Years of Research," *The Review of Higher Education*, 10 (Fall 1986) 1-28.
13. John A. Thompson, "Scale Economies and Student Performance in Hawaii," *Journal of Education Finance*, 19 (Winter 1994), 279-291.
14. D. Verry and B. Davies, *University Costs and Output*, Elsevier, Amsterdam, 1976.
15. Henry M. Levin, "Measuring Efficiency in Educational Production," *Public Finance Quarterly*, 2 (January 1974), 3-24.

## Chapter 5 (continued)

16. Jordan, T. E., *An Exploration of the Relationship Among Size, Cost, and Selected Educational Opportunities in Certain Texas Public Junior Colleges*, Ed.D. diss., University of Houston, 1965.
17. Keene, T. W., *Foundation Program Cost Differentials for Community Junior Colleges*, Ed.D. diss., University of Florida, 1963.
18. Robert J. Tholkes, "Economies of Scale in Rural School District Reorganization," *Journal of Education Finance*, 16 (Spring 1991), 497-514.
19. William F. Fox, "Reviewing Economies of Size in Education," *Journal of Education Finance*, 6 (Winter 1981), 273-296.
20. William F. Fox, "Reviewing Economies of Size in Education," *Journal of Education Finance*, 6 (Winter 1981), 273-296.
21. William F. Fox, "Reviewing Economies of Size in Education," *Journal of Education Finance*, 6 (Winter 1981), 273-296.
22. John Riew, "Scale Economies, Capacity Utilization, and School Costs: A Comparative Analysis of Secondary and Elementary Schools," *Journal of Education Finance*, 11 (Spring 1986), 433-446.
23. Paul T. Brinkman and Larry L. Leslie, "Economies of Scale in Higher Education: Sixty Years of Research," *The Review of Higher Education*, 10 (Fall 1986), 1-28.
24. William F. Fox, "Reviewing Economies of Size in Education," *Journal of Education Finance*, 6 (Winter 1981), 273-296.
25. Paul T. Brinkman and Larry L. Leslie, "Economies of Scale in Higher Education: Sixty Years of Research," *The Review of Higher Education*, 10 (Fall 1986), 1-28.
26. Nels W. Hansen "Economy of Scale as a Cost Factor in Financing Public Schools," *National Tax Journal*, 17 (March 1964), 92-95.
27. Paul T. Brinkman and Larry L. Leslie, "Economies of Scale in Higher Education: Sixty Years of Research," *The Review of Higher Education*, 10 (Fall 1986), 1-28.
28. Maynard, James, *Some Microeconomics of Higher Education*, University of Nebraska Press, Lincoln, Nebraska, 1971.
29. William F. Fox, "Reviewing Economies of Size in Education," *Journal of Education Finance*, 6 (Winter 1981), 273-296.
30. Atack, Jeremy, *Estimation of Economies of Scale in nineteenth Century United States Manufacturing*, Garland Publishing, Inc., New York, 1985.

## Chapter 5 (continued)

31. Nels W. Hansen "Economy of Scale as a Cost Factor in Financing Public Schools," *National Tax Journal*, 17 (March 1964), 92-95.
32. Berlin and Cienkus, "Diseconomies of Scale In Learning Output," *Education and Urban Society*, 21 (February 1989), 228-231.
33. Fred White and Luther Tweeten, "Optimal School District Size Emphasizing Rural Areas", *American Journal of Agricultural Economics*, (February 1973), 45-53.
34. John A. Thompson, "Scale Economies and Student Performance in Hawaii," *Journal of Education Finance*, 19 (Winter 1994), 279-291.
35. *Public School Finance Programs of the United States and Canada*, 1990-1991 Vols. I and II, American Education Finance Association and the Center for the Study of the States, 1992, Table 7.
36. Mary F. Hughes and Gerald R. Bass, "Multi-phased Study of an Economy of Scale Weight Factor for Low Enrollment School Districts in the State of Kansas," presented to the Legislative Coordinating Council, Kansas Legislature, December 19, 1994.

## CHAPTER 7

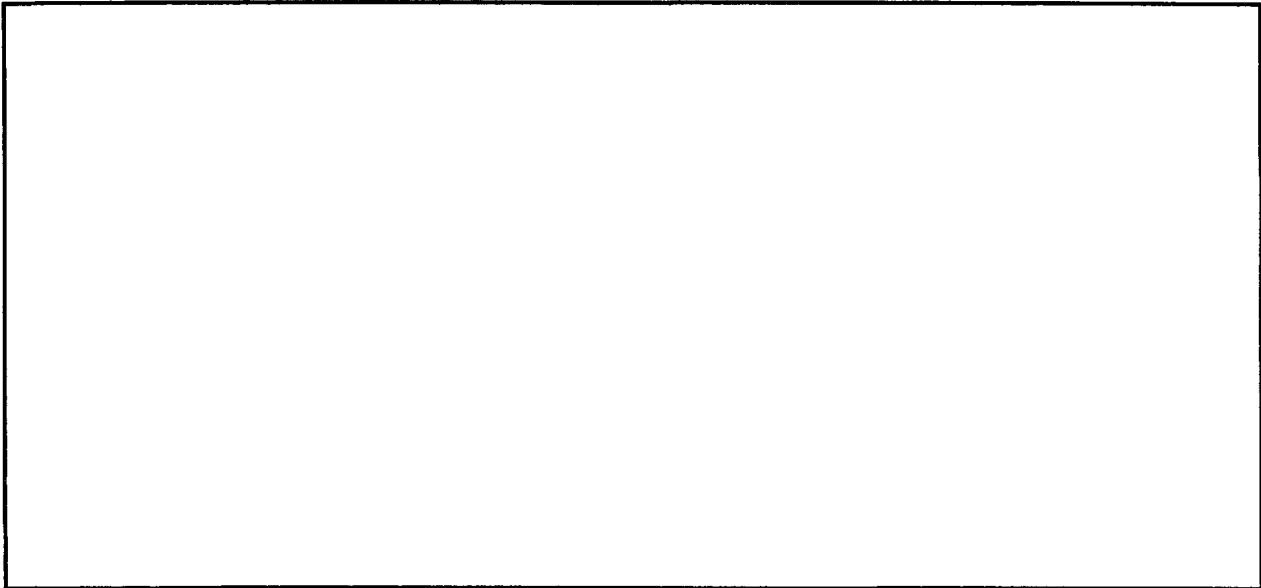
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1. Deborah A. Verstegen, "Efficiency and Economies-of-Scale Revisited: Implications for Financing Rural School Districts," *Journal of Education Finance*, 16 (Fall 1990), 159-179.
2. School District No. 1 v. School Planning Committee, 164 Colo. 541, 437 P.2d 787 (1968).
3. "Study of School District Administration and Staffing," Colorado Department of Education, January 1990.
4. "A report on Colorado School District Organization," Colorado Department of Education, August 21, 1991.
5. "Evaluation of School District Organization and Staffing," Peat Marwick Main and Company, presented to the Colorado Legislative Council, December 10, 1987.
6. Mary F. Hughes and Gerald R. Bass, "Multi-phased Study of an Economy of Scale Weight Factor for Low Enrollment School Districts in the State of Kansas," presented to the Legislative Coordinating Council, Kansas Legislature, December 19, 1994.



## **Chapter 7 (continued)**

7. David K. Wiles, "What is Useful Policy Information in School Consolidation Debates?," *Journal of Education Finance* 19 (Winter 1994), 292-318.
8. Education Week, October 19, 1994, p. 4.
9. Mary F. Hughes and Gerald R. Bass, "Multi-phased Study of an Economy of Scale Weight Factor for Low Enrollment School Districts in the State of Kansas," presented to the Legislative Coordinating Council, Kansas Legislature, December 19, 1994.



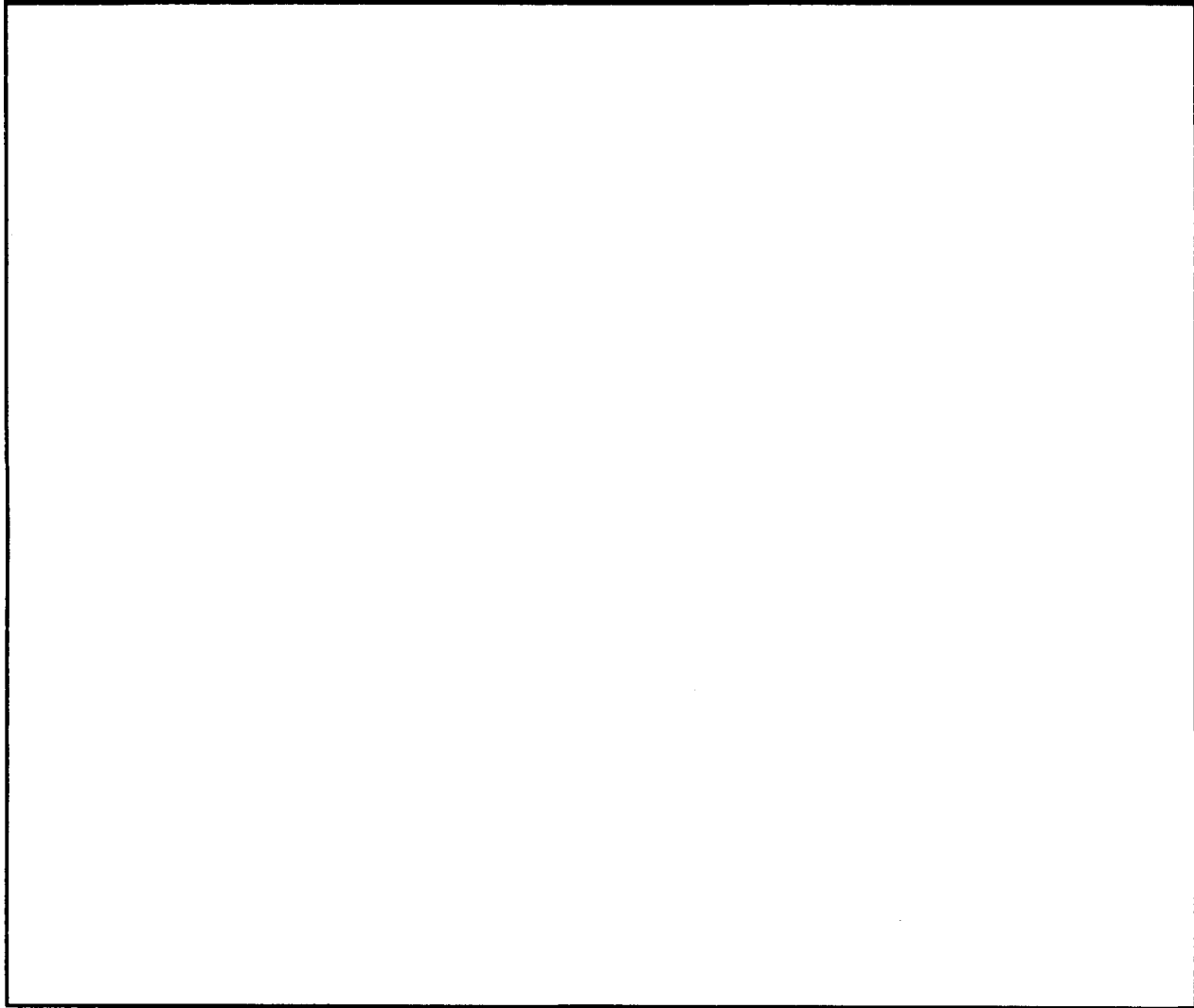
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**Appendices**

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## APPENDIX A

### STATISTICAL METHODS USED TO DETERMINE LINES OF BEST FIT

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LOWESS<sup>1</sup> is a statistical smoothing method that employs weighted least squares to fit a curve to a scatter plot. To start, an  $x$ -value on the scatter plot is chosen as the point of interest to which a  $y$ -value will be matched for the LOWESS curve. Next, the user establishes a percentage of the total points on the plot that will be used to create a range around the point of interest. So, if there are 40 points on the scatter plot and the user chooses 50 percent, then the 20 nearest points, as measured by their distance along the  $x$ -axis from the point of interest, would be used. Weights are then assigned to the points being used, with the nearest point to the  $x$ -value of interest receiving the highest weight and the furthest point receiving the lowest weight. A line is then fit by weighted least squares to the points being used. The  $y$ -value for the point on the fitted line that corresponds to the chosen  $x$ -value is then used as the  $y$ -value for the LOWESS curve at that  $x$ -value. At this time, one  $x,y$ -point on the LOWESS curve has been found. A new  $x$ -value is chosen, and the process is repeated until the entire LOWESS curve has been created.

#### Example:

Graph XX illustrates the steps used to find one  $x,y$  point for the fitted LOWESS curve. There are 20 points in the scatter plot and 50 percent of the points will be used at any one time. In step 1, the point  $x_6$  has been chosen as the point of interest. The ten closest points (50 percent of 20) to  $x_6$  along the  $x$ -axis are isolated as the points that will be used to draw the fitted line. Step 2 assigns a weight function to the points so that the points closest to  $x_6$  receive the most weight and those points outside of the range receive no weight. The weight given to a point is the height of the curve at  $x_i$  in the lower left panel. The following are the important features of the weight assignment:

1. The point at  $x_6$  has the largest weight.
2. The weight function decreases smoothly as  $x$  values are further away from  $x_6$ .
3. The weight function is symmetrical around  $x_6$ .
4. The weight function declines to zero as  $x$  reaches the 50 percent boundary.

The formula used to find the weight  $t_i$  for the specific point  $(x_k, y_k)$  when computing a smoothed value at  $x_i$  is:

$$t_i(x_k) = T((x_i - x_k) / d_i)$$

**Where:**

$x_i$  = the  $x$ -value that has been chosen as the point of interest.

$d_i$  = the distance from  $x_i$  to its  $q$ th nearest neighbor along the  $x$ -axis. Where  $q$  is  $f_n$  rounded to the nearest integer and  $f$  is approximately the fraction of points to be used in the computation of the fitted value (50 percent in this case).

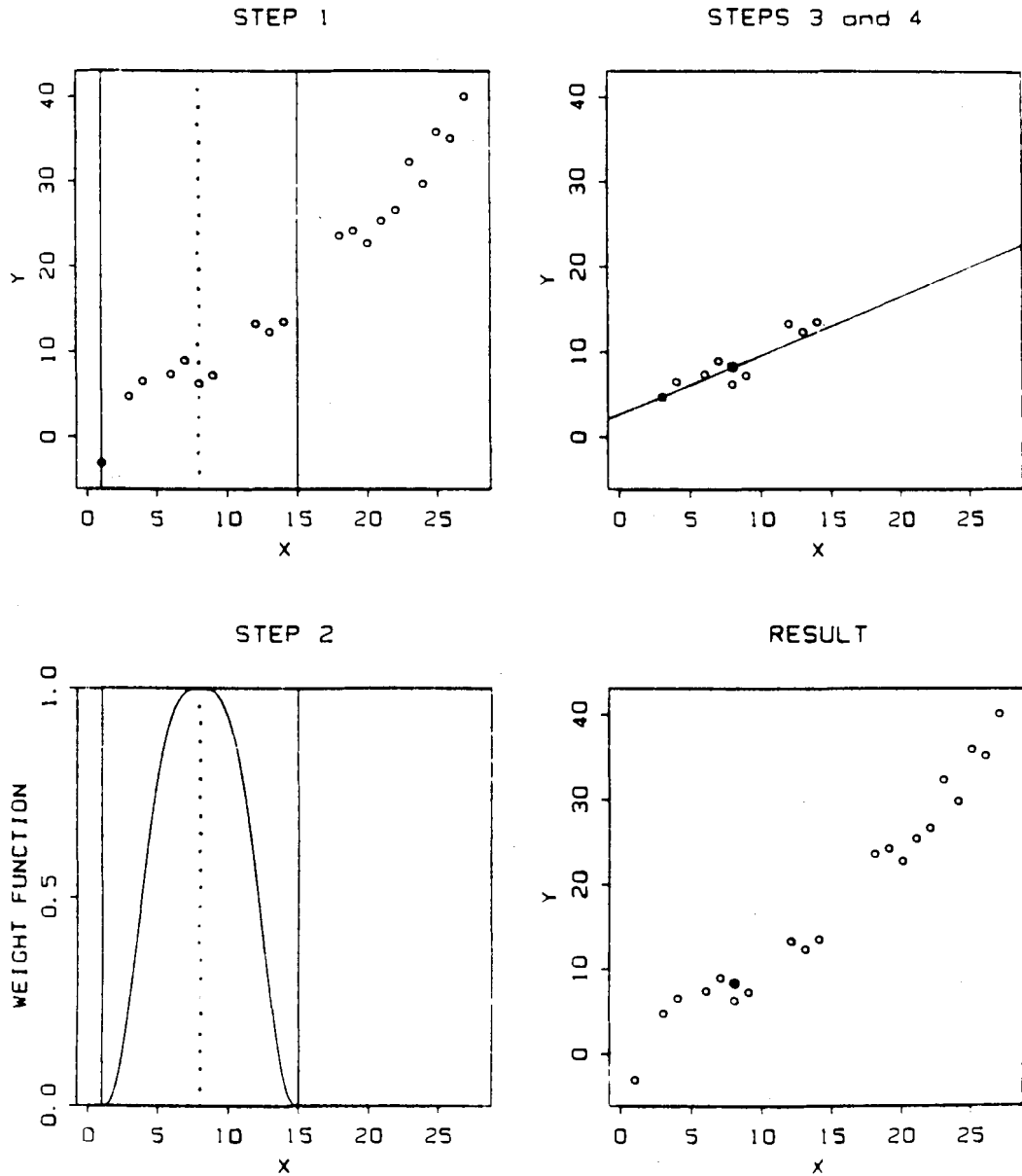
$(x_k, y_k)$  = the coordinates of the point which is being weighted.

And, where the functional form of  $T$  is:

$$T(u) = (1 - |u|^3)^3 \text{ for } |u| < 1 \text{ and } T(u) = 0 \text{ otherwise (the tricube weight function).}$$

After the weights are assigned, a line is fit to the points on the scatter plot that have been isolated (50 percent of the values closest to  $x_i$ ). The fitted line describes in a linear way how  $y$  depends on  $x$  within the interval. Steps 3 and 4 show the points within the 50 percent interval along with the fitted line. The fitted value for the LOWESS curve is defined to be the value of the fitted line at  $x = x_k$ . This point has been added to the scatter plot and is the solid point on the line. The process is repeated for every  $x$  value until all of the points for the LOWESS curve have been found.

The four panels depict the computation of a smoothed value at  $x_6$ , using neighborhood weights.



1. Chambers, J.M., W.S. Cleveland, B. Kleiner, and P.A. Tukey. *Graphic Methods for Data Analysis*, Belmont, California, Wadsworth International Group: Boston; Duxburg Press, 1983.

## APPENDIX B

### SUMMARY OF KANSAS SCHOOL FINANCE CASE

*by Michele Brown, Staff Attorney  
Office of Legislative Legal Services*

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In 1992, the Kansas legislature enacted the School District Finance And Quality Performance Act. The act funds public schools through a base state aid per pupil that is multiplied by the adjusted or weighted enrollment of the school district.

Within a few months of the passage of the legislation, 97 plaintiffs sought a court determination that the act was entirely or partially unconstitutional.

#### **School District Finance and Quality Performance Act**

The school board of each school district must levy an ad valorem tax each year at rates specified in the act. The district deposits the proceeds into its general fund. Each June 1, the district remits to the state treasurer the local effort revenues, which include the ad valorem taxes and other receipts, that exceed the district's "state financial aid." The remitted funds are referred to as recapture funds. A district's state financial aid is determined by multiplying the base state aid per pupil designated by the legislature by the district's adjusted or weighted enrollment. At the time of the case, the base state aid per pupil was \$3,600. The adjusted or weighted enrollment is based on the district's full time enrollment adjusted by six weighting factors, which are determined by formulas prescribed in the act, that account for specified student populations for which higher costs are associated. The populations include bilingual students, vocational education students, at-risk students, students in low enrollment districts, students in new facilities, and students who are transported.

Once each factor is determined by a district, the enrollment is adjusted and then multiplied by the \$3,600 base state aid per pupil. The total is available to the district unless the district was affected by the state transitional aid provision cap or unless the district adopted a local option budget.

The state transitional aid cap applied to the 1992-93 school year only. It restricted increases in each school district's operating budget to no more than ten percent plus enrollment growth over the 1991-92 adjusted operating budget. The limitation applied regardless of whether the budget increase was from state financial aid or a combination of state financial aid and the local option budget.

School districts may adopt a local option budget in an amount that cannot exceed 25 percent of a district's state financial aid. The act includes a formula that reduces the 25 percent figure by the same percentage as the percentage increase of any legislatively-enacted increases in the base state aid per pupil. Because of the cap, some

districts could not use the local option budget provisions or the full 25 percent allowed. The local option budget provisions are triggered when and if the local school board determines the amount budgeted is insufficient and the adoption of a local option budget would be in the best interests of the districts. The school district may adopt a local option budget for a period of up to four years in any amount up to the maximum allowed under the act.

To fund the local option budget, the school district may levy local property taxes. Also, a district may receive supplemental general state aid if the district's assessed valuation per pupil is at or below the seventy-fifth percentile of the assessed valuation per pupil statewide for the prior year. The supplemental general state aid is based on an equalization methodology known as a guaranteed tax base. A district under the seventy-fifth percentile receives supplemental general state aid in the proportion of the district's assessed valuation per pupil for the prior year to the seventy-fifth percentile of assessed valuation per pupil statewide for the prior year.

### **The Decision of the District Court**

In addition to challenging the basic premise and framework of the act, the plaintiffs raised over 70 specific objections to the act. Of these, the district court found only two unconstitutional.

### **General Parameters of Constitutional Analysis**

The district court discussed the general parameters of constitutional analysis, citing three well-grounded rules that governed the court's consideration. First, the act is protectively shrouded with a presumption of constitutionality; only if the statute clearly appears unconstitutional can the court strike it.

Second, a court may not substitute its social and economic beliefs for the judgment of legislative bodies and is not concerned with the wisdom, need, or appropriateness of legislation. Separation of power and majoritarian constraints result in the conclusion that a court cannot substitute policy for the legislative judgment as long as that judgment is constitutional.

Third, it is the court's duty to declare legislation unconstitutional when the legislation fails to meet the requirements of the constitution.

### **Equal Protection**

The district reviewed a number of opinions in determining the appropriate level of scrutiny to apply to equal protection issues. It found that under the United States constitution, education is not a fundamental right. Decisions of other states uniformly rejected claims that school finance legislation creates "suspect" classes for which a strict

scrutiny analysis would be required. After reviewing the decisions, the district court decided that the rational basis test should be applied.

### **The District Court Found Two Provisions of the Act Unconstitutional**

The district court found two provisions of the act unconstitutional. The first was the provision that involves low enrollment weighting. The second provision imposes an ad valorem tax for three years.

***Low Enrollment Weighting.*** Low enrollment weighting is one of the factors for which a school district receives a higher or weighted reimbursement per pupil. The justification for the weighting is to account for the higher costs of operating a district that cannot efficiently, because of size, meet the educational needs of students. The low enrollment weighting factor accounts for the allocation of the most funds of any of the weights. Two hundred sixty-one of 305 school districts received low enrollment weighting. Although 85 percent of the districts received low enrollment weighting, the extra money is spread over only 37 percent of the students.

The district court found that there was a rational basis for a low enrollment weighting. The evidence established that low enrollment weighting recognizes and compensates for the higher fixed and operating costs per pupil necessary to provide an educational program in low enrollment districts. Also, because of student sparsity, many school districts are necessarily small and consolidation is not feasible. Small districts with small schools are unable to achieve efficiencies or economies of scale associated with large enrollment schools and districts. In order to offer comparable educational programs, small districts need more revenue per pupil than large districts.

The district court then considered whether there was a rational basis for providing low enrollment weighting to a school with an enrollment of 1,899 but not one with 1,900. The district court found the provision violated the equal protection and due process provisions of the Kansas constitution.

The inclusion of 85 percent of the districts in the weighting suggested that the basis for the weighting was skewed. The evidence indicated that if there was a need for such a high degree of educational spending, then the base state aid per pupil was artificially low. If so, that would hurt the districts that do not receive the weighting and that operate with an artificially low base state aid per pupil.

Also, there was a lack of evidence of an educational basis for extending the low enrollment weighting to the larger districts. There was no study or writing that supported the theory that school districts with enrollments up to 1,900 students suffer from inefficiencies because of economy of scale. There is no justification for distinguishing this category of middle-sized districts from large districts.

The court also found that the low enrollment weighting perpetuated the inequities that arose under the prior act, the School District Equalization Act.



*Ad Valorem Tax.* The Kansas constitution prohibits legislation that imposes a state property tax for a period of more than two years. The act provided that each locally-elected school board must levy an ad valorem tax of 32 mills for the 1992-93 school year, 33 for the 1993-94 school year, and 35 for the 1994-95 school year and succeeding years. The district court found the provision violated the Kansas constitution because the third year of the tax levy exceeded the two-year limit set in the constitution. The district court then severed the provision relating to the mill levy for the 1994-95 school year, stating that the legislature must enact that levy separately and at least every two years after that.

### **The District Court Found Other Provisions Constitutional**

The provisions of the act that the district court found constitutional include: local control, quality performance accreditation, school site councils, in-service training and length of school year, "suitable" financing, one-person-one-vote, other categories of weighting, multiple subjects in one bill, taking of property, and the uniform operation of the act.

*Local Control.* The plaintiffs argued that the act violates article 6, section 5, of the Kansas constitution because it infringes on local control by imposing a uniform statewide tax levy, by limiting the budget authority of districts, and by restricting the local option budget. Article 6, section 5, provides:

Local public schools under the general supervision of the state board of education shall be maintained, developed, and operated by locally elected boards. When authorized by law, such boards may make and carry out agreements for cooperative operation and administration of educational programs under the general supervision of the state board of education, but such agreements shall be subject to limitation, change or termination by the legislature.

The witnesses conceded that the local school districts retained the right to manage schools on a day-to-day basis, but argued that right was hollow if the local school board did not have the ability to fund the programs, the curriculum, the negotiated contracts, and the other matters over which the locally-elected boards have control.

The district court found that the Kansas Supreme Court had determined previously that the legislature grants locally-elected boards any power they have over raising funds. The intent is for strong legislative powers to spring from the duty to provide for the finance of education. Among the inherent powers is the duty to delegate to local political subdivisions. In turn, the powers of local subdivisions are limited to the legislative grant of authority. According to the district court, this is consistent with the history of school finance since the time of Kansas statehood.

The district court concluded that the finance provisions of the act do not violate article 6, section 5, of the Kansas constitution. In exercising its power to finance public schools, the legislature did not impede unduly the power of locally-elected boards to establish, operate, and maintain schools.

***Quality Performance Accreditation.*** The plaintiffs argued that the quality performance accreditation (QPA) provisions restrict the authority of the locally-elected board to maintain, operate, and develop the district in violation of article 6, section 5, quoted earlier. They argued that, in measuring an outcome, the state board predetermines a curriculum and a focus in education.

The district court noted that the Kansas Supreme Court has recognized that the state board cannot control local schools, but the state can oversee, direct, inspect the performance of, and superintend those schools. The QPA standards allow the state board to perform the task of "critical evaluation" in accrediting schools. Although evaluation based on outcomes rather than inputs may make the evaluation more critical of what is being taught, the result is not that the state board controls the public schools. According to the district court, local schools have significant latitude in planning curriculum and the means to achieve the specific outcomes. Therefore, the state board did not infringe on the constitutional powers of the locally-elected board.

***School Site Councils.*** The plaintiffs argued that the legislature had unduly interfered with locally-elected boards by requiring school site councils as part of the QPA process. The trial evidence indicated that the size, makeup, functioning, and roles of the site councils vary from district to district. The statute requires the school principal to be a member of the council with the rest of the representation comprised of teachers, other school personnel, parents of students attending the school, the business community, and other community groups to be represented. The method for selecting those individuals, the organizational structure, and the nature of the representation from these groups is left to the district.

The role of the council set out in the statute is vague, but it appears the site council plays only an advisory role in evaluating goals and objectives and determining methods to meet those goals and objectives. It has no direct power and cannot mandate action by the school or by the locally-elected board. The locally-elected boards maintain full control.

Given the discretion that the locally-elected school board has in defining the selection, size, makeup, organization, and role of these councils, the district court found that the statute is not so unreasonable that it unduly interferes with the local school board in performing its constitutional duty to maintain, develop, and operate the local public school system.

***In-service Requirements and Length of School Year.*** Some plaintiffs objected to the provisions that generally lengthen the school year and impose requirements for the amount of in-service training for the professional staff.

Prior to the act, in-service education was encouraged but not mandated. The act required all school districts to provide at least two days of in-service education for its personnel in 1992-93 and at least three days in 1993-94.

There was no argument that appropriate in-service programs at the local level do not benefit the state's education system. The opposition arose from mandating the in-service training and the extension of the school year.

The district court found that these provisions fall within the legislature's power to maintain schools, do not unduly hamstring the locally-elected district, and, therefore, are not unconstitutional.

**"Suitable" Financing.** Some plaintiffs argued that the legislature had violated section 6 of article 6 of the Kansas constitution by not providing "suitable" educational financing, and the failure infringes on local control. In support of the argument, the plaintiffs cite cuts in programs and expenditures made in some school districts.

The plaintiffs with decreased funds argued that the legislation "cut off the mountaintops in Kansas education to fill in the valleys." Some plaintiffs argued that the act should have raised all districts to the level of the mountaintops.

The court noted that such a decision is a policy decision to be made by the legislature not the court. The court's consideration was governed by sections 1 and 6 of article 6 of the Kansas constitution.

Section 1 requires the legislature to "provide for intellectual, educational, vocational and scientific improvement . . . ." The section does not express or imply a standard of equality or quality of education.

Section 6 states the "legislature shall make suitable provision for finance of the educational interests of the state".

The issue, according to the district court, was whether the act satisfies this provision, not whether the level of finance is optimal or the best policy.

The standard most comparable to the Kansas constitutional requirement of "suitable" funding is a requirement of adequacy found in several state constitutions. In common terms, "suitable" means fitting, proper, appropriate, or satisfactory. Suitability does not mandate excellence or high quality. According to the district court, suitability does not mandate any objective quantifiable education standard against which schools can be measured by a court.

The district court found that the definitions in the cases from other states were similar to the ten statements or goals enunciated by the Kansas legislature in defining the outcomes for Kansas schools, which included the goal of preparing the learners to live, learn, and work in a global society. Developed after considerable study by the educators from Kansas and other states, the QPA standards provide the act with a

legislative and regulatory mechanism for judging whether an education is "suitable". Since it is well settled that courts should not substitute judicial judgment for educational decisions and standards, the district court did not substitute its judgment of what is "suitable" but used as a base the standards enunciated by the legislature and the state department of education.

The evidence presented was that all schools in Kansas were able to meet such a standard. Although some plaintiffs argued that eventually the act would result in closure of schools and even the district and, therefore, the financing would not be suitable, the district court stated that it could not base its judgment on the speculation. The district court found that the standards were being met at that time. The district court indicated also that its judgment was not controlled by the many policy concerns raised by plaintiffs such as failing to ensure that per pupil spending would continue to increase in proportion with increasing needs, not allowing local boards to make long range plans, not providing an inflationary factor, and fostering a spend-or-lose philosophy.

***One-Person-One-Vote.*** One plaintiff argued that the district elects only two members to the state house and one senator but the entire legislature mandates the tax, budget, and accreditation criteria for the district's schools. The argument was that the act violates the one-person-one-vote principle since the legislature as a whole determines general tax budgets and accreditation issues for that district.

According to the district court, the plaintiff did not establish that any disparities in legislative district representation occurred or that any school district within the state, and more particularly the plaintiff's district, was failed to comply with the one-person-one-vote rule.

The argument depends on an interpretation that section 5 of article 6 of the Kansas constitution places the tax, funding, and budget issues in the control of the locally-elected board. The district court noted it had already determined that the constitution does not give locally-elected boards control of these issues. Instead, that control is given to the legislature. Thus, the actions of the legislature are within its constitutional powers. Therefore, the district is represented on all issues to the extent guaranteed under the Kansas constitution, and the act did not violate the one-person-one-vote principle.

***Local Option Budget.*** The plaintiffs also argued that the local option budget provisions violate the equal protection provisions. The argument was that the mere existence of the provision results in disparate impact and the equalization component of the formula results in disparate impact.

Under the local option budget, a local school district may increase its budget by up to 25 percent of the district's state financial aid. This local option budget is funded through local property taxes. If the district's assessed valuation per pupil is at or below the 75th percentile of the assessed valuation per pupil statewide, the district will receive supplemental general state aid in the proportion of the district's assessed valuation per

pupil for the prior year to the 75th percentile of assessed valuation per pupil statewide for the prior year.

Some plaintiffs objected to the inclusion of the provisions in the act, arguing that, if financing under the act is "suitable", there is no need for the additional funding authority that results in increased disparity in spending. Other plaintiffs argued that the option should be unrestricted so that district spending is not limited. Several plaintiffs argued there is no rational basis for a cutoff at the 75th percentile.

The legislative history of the act includes several purposes for the local option budget: 1) to account for the differences in needs and costs from district to district; 2) to reduce spending differentials while accommodating local needs; and 3) to provide some degree of local control of finances. The district court concluded that the evidence showed that each of these goals was met at least as of the 1991-92 school year.

The provisions allow flexibility in the formula to account for local variations. The premise of the act is that spending should be substantially equal while recognizing that needs vary. The legislative and judicial records indicated differing needs, including costs influenced by remoteness, geographic distances to culturally and educationally enriching opportunities, differing costs of living, and security concerns. Accommodating the various needs is not at odds with the constitution. What the Kansas constitution requires is equal funding unless a rational basis exists for a disparate classification, the accommodation of which results in an equal educational opportunity. To accomplish this, some expenditure disparities will exist.

Allowing for the variances does not necessarily result in spending disparity. The trial evidence indicated that the impact of the local option budget was consistent with its intended purpose of narrowing the range of spending per student. The reduction results from greater utilization of the local option budget by low spending districts rather than by higher spending districts.

With regard to the third legislative goal, there was also substantial testimony that the local option budget had played a significant factor in promoting local control. Those districts involved in a protest petition and subsequent election found a need to involve patrons of the district in a dialogue regarding expenditures and educational expectations. Therefore, the evidence established that the provisions were rationally related to legitimate legislative goals.

Plaintiffs also attacked the legislative decision to extend equalization through supplemental state aid only to districts at or below the 75th percentile for assessed valuation per pupil. They argued it was an arbitrary cutoff with no rational basis.

According to the district court, part of the purpose of equalization was to counteract any correlation between differences in spending and district wealth. Under the prior law, 25 percent of the variation in spending among school districts was attributable to school district wealth, which is the assessed valuation in the district for each student enrolled. Under the act, only five percent of the variation in spending is

attributable to wealth. The district court found that there was not a significant correlation between district wealth and the disparities. As a result, there was not evidence sufficient to conclude that a line drawn at 75 percent had resulted in disparities because of wealth. The district court found the conclusion valid that the decision to utilize the local option budget arose because of needs perceived to exist by local boards and their electorate.

Furthermore, the district court found it was not arbitrary and capricious to draw a line at 75 percent. Eighty-four percent of the public school students in Kansas attend a school at or below the 75th percentile in assessed valuation per pupil. In comparison with other states' equalization formulas, the inclusion of 84 percent of students in the guaranteed tax base mechanism is fairly high coverage. According to the district court, those excluded districts have considerably more district wealth than those that receive aid.

The district court concluded that, while the utilization of the 75th percentile might not be scientifically based, the goals of the statute were being met and the cutoff could not be so wide of the mark as to lack a rational basis.

The plaintiffs attacked the local option budget because of what they argued was an arbitrary cap set at 25 percent. The legislative record revealed a concern that the local option budget not develop into a mechanism that allows wide disparities in spending that strongly correlate with district wealth. To guard against wealth-based disparities, the legislature made the policy decision to cap the option so that wealthy districts could not fund local schools at a level highly disproportionate to other districts' spending. Some plaintiffs argued that there eventually would be wealth-based disparities, despite the cap, because poorer districts would not be able to afford to utilize the local option budget.

Although logical, the first year under the act disproved the theory. The evidence showed that the gap in spending lessened because of the local option budget. Also statistical evidence did not show a correlation between wealth and the local option budget as exercised by districts in the 1992-93 school year. Based on the evidence before it, the district court concluded there was a rational basis for the cap and evidence that the goals of the legislature were being met.

***Transportation Weighting.*** The transportation weighting was derived from the transportation aid formula under the prior law. The legislative and trial record indicated little criticism of the formula and, nothing indicated that the formula should be questioned. There was evidence that the formula was well constructed. In light of this, the district court found the historical basis was a legitimate justification for the weighting. The court concluded that since there was a rational basis for the formula, the transportation weighting did not violate the equal protection provision.

***Other Weighting Factors and Base State Aid Per Pupil.*** The district court found there was no evidence that the bilingual education, vocational education, at-risk, and new facility weighting factors or the base state aid per pupil resulted in disparate treatment or classifications. All districts and all students are treated the same under the application of those portions of the formula, thus, there was no basis for an equal protection attack.

***Due Process Arguments.*** Under the equal protection clause, a court must determine whether a fundamental interest is affected by the statute, and then apply the appropriate level of scrutiny, strict or heightened or the rational basis test. As noted above for the equal protection argument, the district court determined the appropriate standard to apply was the rational basis test, which determines whether the challenged classification is rationally related to a state interest.

Since the district court applied the same test under the equal protection analysis, it did not repeat the determinations already made relating to the low enrollment weighting, the local option budget, and the transportation weighting.

***Bilingual Weighting.*** The factual or empirical data that served as the basis for the statute specifying bilingual education program weighting of 0.2 was limited to the recommendation of an expert and some historical data from the 1990-91 school year reflecting expenditures per pupil by some Kansas school districts for bilingual education. The Kansas Department of Education compiled the data from records pertaining to a grant program. Because the data came from grant statistics and was not artificially controlled by prior legislative decisions or by the fund transfers made in anticipation of the passage of the act, the district court found the historical data served as a rational basis for the weighting.

The rational basis was supported by the recommendation from the expert who outlined the research base regarding the most successful methods for teaching students who do not know or who are not proficient in English. After further analysis, the expert concluded the additional cost to fund the program was about 20 percent or an extra weight of 0.2.

The legislature chose a 0.2 weighting, two times the historical costs and a weighting that had been recommended by the expert as the optimum. Given this record, the district court concluded that there was a rational basis for the weighting.

***Vocational Education Weighting.*** The factual or empirical data that served as the basis for the statute that specified vocational education program weighting of 0.5 was limited to per pupil expenditures of area vocational and technical schools in Kansas for the 1990-91 school year. The data was derived from a source not funded under the school finance formula and, therefore, not tainted by the inequities of the formula. After examining the data and after computing costs associated with vocational programs at the area vocational-technical schools, a special committee noted in its preliminary report that vocational education students would be counted an additional 0.5 if they were in an approved vocational education program. An expert agreed.

Subsequently, the committee changed its recommendation. In its final report, the committee noted that, under the federal Carl Perkins Act, the integration of academic and vocational courses and programs was very important, and the costs of these programs, whether academic or vocational, would be similar in nature. The committee recommended that, although some vocational students may cost more, they should be counted as 1.0 under the formula.

The legislature chose to count a vocational student as 1.5 or a 0.5 weighting under the formula based on a full-time equivalency computation of the time the student was in an approved vocational education course. Because the legislature chose to fund the cost at a higher level than the committee recommended and to fund the actual costs at the level recommended by the expert, the court concluded there was a rational basis for the weighting.

***New Facility Weighting.*** The new facility weighting is available for the first two years a building is in operation. The district must have used the full amount of the local option budget authorized for the school year in order to qualify for the weighting.

Under prior law, school districts were able to petition the state board of tax appeals for additional taxing authority to finance new facilities operations. In the 1993 amendments to the act, the legislature revived this mechanism. Districts could levy an ad valorem tax on the taxable tangible property of the district each year for a period of time not to exceed two years in an amount authorized by the state board of tax appeals.

There was evidence presented to the legislature of the extraordinary costs of opening a new facility. A study examined the costs incurred by three districts in the opening of new facilities. The costs ranged from \$1,000 to \$3,030 per pupil.

In both 1992 and 1993, the legislature required that the local option budget be exhausted before the weighting was available, indicating an intent that the weighting not fund the entire cost of a new facility. The legislature, in allowing a weighting of one-fourth (0.25) of the base state aid per pupil (\$900 per pupil) and recognizing the utilization of the local option budget (another \$900), funded the new facility weighting within the range of the per pupil cost spread documented by the study. While the amount was not at the high end of the actual costs, it did not lack any factual basis since it fell within the historical range. Therefore, the district court found a rational basis for the weighting.

***Base State Aid per Pupil.*** The plaintiffs argued that there was no rational basis for the base state aid per pupil. The factual or empirical data that served as the basis for the statute specifying base state aid per pupil of \$3,600 was limited to historical expenditures for public education in other states and data from several years indicating historical expenditures per pupil for public education in Kansas. The plaintiffs argued that the data was not sufficiently comprehensive nor accurate to serve as a rational basis.



Historical data reflected a median budget per pupil of \$4,622.82 in 1989-90, \$4,786.597 in 1990-91, and \$4,857.90 in 1991 and 1992. The amounts did not include categorical aid such as special education, vocational education, transportation, food service, adult education, driver training, at-risk student aid, or state aid for bilingual education. The historical figures were significantly more than \$3,600. Using the figures as a comparison, however, was like comparing apples to oranges because of the impact of weightings. The evidence established that most districts experienced a higher budget per pupil under the act than in the prior year. The district court found this fact established a rational basis for the number as it would be utilized under the new formula with the weighting.

***Multiple Subjects in One Bill.*** The district court quoted article 2, section 16, of the Kansas constitution, which limits a bill to one subject, except for appropriation bills and bills for revising or recodifying statutes, with the subject expressed in the title, and instructs that the provisions of the section be liberally construed to effectuate the acts of the legislature. In construing the provision, the Kansas Supreme Court had advised that the constitution should not be construed narrowly or technically to invalidate proper and needful legislation, and, where the subject of the legislation is germane to other provisions, the act is not objectionable as containing more than one subject or as containing matter not expressed in the title. The provision is violated only where an act embraces two or more dissimilar and discordant subjects that cannot reasonably be considered as having any legitimate connection with or relationship to each other.

The title of the act was "An Act concerning school districts; affecting the financing thereof and providing revenue therefor; relating to quality performance and accountability . . . ." According to the district court, all provisions in the act related to education and creating a new accountability standard for school districts. The topics were germane to each other even though different aspects of financing were addressed, including a formula, mechanisms for funding the formula, and accountability for receiving the funding.

The plaintiffs argued that the inclusion of amendments to various tax acts and the quality performance issues violated article 2, section 16, of the Kansas constitution. The court found the provisions did not violate the constitution. Because the tax provisions were intended to provide money to fund the formula, the two portions of the act had a legitimate connection and relationship to each other.

***Taking of Property in Violation of the Fifth and Fourteenth Amendments.*** One plaintiff alleged that one provision of the act violated the 5th and 14th amendments of the U.S. constitution. The provision states:

On June 1 of each year, commencing on June 1, 1993, the amount, if any, by which a district's local effort exceeds the amount of the district's state financial aid, as determined by the state board, shall be remitted to the state treasurer.

The remitted funds are often labelled "recapture" funds. Once turned over to the state, the monies are deposited in the State School District Finance Fund and are remitted to those districts that do not have sufficient local effort to fully fund the district's state financial aid. The difference between the district's state financial aid and the district's local effort is the amount of "general state aid" to which the district is entitled.

The concept of recapture funds is to equalize ad valorem tax levies across the state and to treat the dollars generated as state dollars. The act significantly decreased the wide disparity in mill levies under the prior law.

Statewide the low total mill rate was 32.00, the median 40.80, and the high 80.65. Each of the recapture districts experienced mill rates very near the statewide median and well below that experienced by some taxpayers.

The taxpayers in the recapture districts suffered substantial tax increases in order to raise to the level of the median. They claimed the money belonged to their respective districts and should not be shared or even collected. One plaintiff argued that a taking results when funds from one district are used in another.

The essence of the argument was that the taxpayers residing in the recapture districts pay taxes to educate students who do not reside within the recapture district. According to the district court, it is no more unconstitutional for all the taxpayers of one school district to pay taxes that benefit students throughout the state than it is for the largest taxpayer in that district, the owners of a corporation, to pay any taxes toward education when those owners have no children to educate in the public school system.

The district court stated that each taxpayer benefits or suffers from the quality or lack of quality of the education received by Kansas students. The taxpayers in the recapture districts receive and benefit from contributing to the education of all Kansas students. The act recognizes that in the 1990s, the state cannot thrive with a parochial attitude of educating "our" children.

As a result, the taxpayers in the recapture districts receive a benefit. The mill levy paid in those districts does not result in such an inequality between the burden imposed and the benefit received that it amounts to an arbitrary taking of property without compensation in violation of the fourteenth amendment.

More important to the analysis was the proportion of taxes the taxpayers in the recapture districts pay in relation to the rest of Kansas citizens and the amount of per pupil budget in these districts. Only seven of the districts' mill levies exceed the state average, none by more than six mills. All are considerably below the state's highest mill levy. The complaining district was 1.95 mills below the state average. Six districts' budgets per pupil exceeded the state average, and a seventh was approximately only \$9 below the average. At least five of the districts had at least \$1,000 more revenue per pupil in 1992-93 than in 1991-92.

The district court concluded that the 5th and 14th amendments of the U.S. constitution were not violated by the act.

*Uniform Operation of Laws.* Article 2, section 17, of the Kansas constitution provides:

**Uniform operation of laws of a general nature.** All laws of a general nature shall have a uniform operation throughout the state: Provided, The legislature may designate areas in counties that have become urban in character as "urban areas" and enact special laws giving to any one or more of such counties or urban areas such powers of local government and consolidation of local government as the legislature may deem proper.

The district court concluded that, article 2, section 17, of the Kansas constitution does not require that a law of a general nature, in order to have uniform operation throughout the state, affect every community or individual alike. A rational justification for treating various localities differently preserves the constitutionality of a statute under an article 2, section 17, challenge. As with equal protection, differential treatment cannot rest entirely on financial or economic considerations.

One district made several arguments that the act violates the section:

1. Each school district receives a different amount of the ad valorem tax revenue generated by the statewide mill levy.
2. Each district's budget is different.
3. Some districts receive state aid while others do not.
4. Some districts must remit the recapture funds.
5. Seven recapture districts are subject to reduction of the base state aid per pupil if the state revenue falls short.
6. One school district receives two pupil equivalency for students at a boys ranch.
7. Ad valorem proceeds may be utilized to pay the principal and interest on bonds issued by cities and not all districts have cities that have issued bonds.

With regard to the first two arguments, the district court found that the legislature adopted a funding model based on funding per pupil rather than on school districts. Each district, regardless of location, receives the same amount per pupil as a district in which a similarly situated pupil (weighted pupil) attends school. Although per pupil spending may vary, the variance is not based on geographic disparities but

rational distinctions relating to the needs of the student as recognized by the weighting system. The district court concluded that the statute operates uniformly throughout the state, and the variances are rationally based.

With regard to the third and fourth arguments, the situations reflect the uniformity of application throughout the state rather than show geographic disparity. Regardless of district wealth, all districts levy the same base rate of tax. The uniformity complies with article 2, section 17, of the Kansas constitution. The uniformity is not defeated by the fact that district wealth varies resulting in some districts needing state aid and others remitting funds. Rather, this indicates the uniformity that was so lacking under the prior law.

With regard to the fifth argument, under the act, all districts receive a uniformly distributed proportion of the revenue shortfall. There is no distinction based on the geographic location in a property rich district. Therefore, the district court found the statute has uniform application.

With regard to the sixth argument, the act does distinguish the residents of the boys ranch, but, it also required that for the additional weighting, the resident must be in the custody of the secretary of social and rehabilitation services. The purpose for the distinction was that persons in the custody of social and rehabilitation services and provided educational services at the state institution do not count in the definition of a pupil under the act. The definition takes those at the boys ranch out of the operation of the definitional exclusion. The provision also creates a specific weighting tied to the additional needs of those children in the special circumstances residing at the boys ranch. The only basis for lack of geographic uniformity is the ranch's location and the fact that this particular class of individuals do not reside in all school districts. The special weighting is rational given the unique circumstances and needs arising from that situation.

With regard to the last argument, districts that have adopted local option budgets may levy an ad valorem tax to pay principal and interest on bonds for the financing of redevelopment projects pursuant to another statutory provision. That provision gives "any city" the power to issue the bonds. Therefore, the provision is uniform throughout the state. While there are districts with cities that have issued bonds and others that have not, the distinction does not arise from lack of uniformity in the wording or application of either section.

The court concluded that the act applies uniformly throughout the state, and thus is geographically uniform in most respects. Where classifications do result in geographic disparities, the district court found those classifications had rational justifications. Consequently, the act does not violate article 2, section 17, of the Kansas constitution.

## CONCLUSION

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The district court concluded that all portions of the act were constitutional except those relating to the low enrollment weighting and the mill levy set for more than two years after the passage of the act. The district court eliminated the mill levy for years beyond two years from the act. The district court found that the low enrollment weighting provisions were so integral to the act that it could not sever them. The court suspended that holding until July 1, 1994.

### **The Decision of the Kansas Supreme Court**

The Kansas Supreme Court considered six of the issues that were before the district court. The supreme court found the issues of local control, suitable financing, multiple subjects, taking of property, and uniform operation to be constitutional.

*Local Control.* It was argued that the act violated article 6 of the Kansas constitution by imposing a statewide tax levy, restricting the local option budget, and lessening each school district's budget authority, and, therefore, infringing on local control. The argument was that fiscal control is an integral part of local control. The supreme court disagreed.

Section 6 of article 6 states that "the legislature shall make suitable provision for finance of the educational interests of the state". According to the court, the proponents sought to rewrite sections 5 and 6 of article 5 to require the state to provide direct financial aid or the means to raise tax moneys sufficient to cover what each school district determined is "suitable" financing for that particular district's needs. Under that rationale, the legislature would have little or no role in determining what amount of financing was suitable for a particular district.

The court noted that article 6, section 1, of the Kansas constitution places the responsibility of establishing and maintaining a public school system on the state. School districts have no inherent power of taxation but have always been funded through legislation.

The court then considered the conflict between article 6, sections 1 and 5. Section 1 places responsibility for maintaining public schools with the legislature while section 5 places it with locally-elected boards.

The court found that the duties of the local school board are not self-executing but depend on statutory enactments by the legislature. It was the court's view that the duties and obligations of the legislature and the local boards must be read together and harmonized. The court agreed with the district court's opinion that the provision did not violate the constitution. In exercising its power to finance public schools, the legislature did not unduly impede the power of locally-elected boards to establish, operate, and maintain schools.

**"Suitable" Financing.** The supreme court found that the district court correctly held that the issue for judicial consideration was whether the act provides suitable financing, not whether the level of financing is optimal or the best policy. The supreme court agreed with the district court's analysis and conclusion that the act does not contravene the provisions of section 6 (b) of article 6 that provide that the legislature shall make suitable provision for the financing of public education.

**Equal Protection.** One plaintiff contended the district court should have applied the strict scrutiny test or, alternatively, the heightened scrutiny test instead of the rational basis test. The supreme court did not agree.

After noting that the district court exhaustively analyzed decisions from other jurisdictions in concluding that education was not a fundamental right requiring the application of the strict scrutiny test, the supreme court concluded that the district court was correct to apply the rational basis test.

The court then looked to the arguments that the base state aid per pupil, the bilingual weighting, the vocational education weighting, the low enrollment weighting, the at-risk weighting, the new facility weighting, the local option budget, and the supplement general state aid provisions lack a rational basis. According to the supreme court, the argument before it was that a rational basis must always be based on and arise from scientific data. The court noted that lines had to be drawn in financing public schools, but that the dispute was primarily over where the lines were drawn. The supreme court stated that the drawing of lines lies at the heart of the legislative process and the compromises inherent in the process.

The supreme court found a rational basis existed for all of the provisions but continued its discussion with regard to the low enrollment weighting factor.

**Low Enrollment Weighting.** The supreme court concluded that the district court erred in holding that the record did not contain a rational basis grounded on educational theory for the low enrollment weighting. The court noted that the district court acknowledged there was a precedent in Kansas for the low enrollment weighting and the establishment of categories based on student numbers with different levels of funding.

According to the court, the district court's decision was based on expert testimony at trial that did not support the 1,899 pupil cut-off but was inconsistent as to where a more appropriate line should be drawn. The absence of scientific evidence at trial specifically approving the 1,899 pupil cut-off was not determinative of whether or not the legislation had a rational basis for drawing the line where it did. The court concluded there was a rational relationship between the legislation's legitimate objective of more suitably funding public schools and the classification created in the low enrollment weighting factor.

***Multiple Subjects in One Bill.*** Some plaintiffs argued the district court erred in holding the act did not violate article 2, section 6, of the Kansas constitution, requiring that a bill contain only one subject.

The supreme court found that everything in the act related to public education. The court found there is nothing wrong with including expenditures and the means of raising extra revenue together so that members of the legislature may see where revenue will come from prior to voting on the expenditure.

The court concluded that the act did not embrace two or more dissimilar and discordant subjects that could not reasonably be considered as having any legitimate connection with or relationship to the other.

***Taking of Property in Violation of the Fifth and Fourteenth Amendments.*** A plaintiff contended that the act's recapture provision, which results in funds from their district being used in another district, constituted a taking.

According to the supreme court, the issue was whether taxpayers in the recapture districts receive a benefit for the taxes that ultimately educate students in another school district or whether the mill in those districts imposes such a disproportionate inequity between the burden imposed and the benefit received that it constituted a taking in violation of the fourteenth amendment.

The court agreed with the district court's reasoning that a taxpayer does not personally have to have a child in a public school before he or she benefits from public education.

The state was viewed as a whole for funding purposes, and the education of each similarly situated child is to be equally funded, regardless of where the child lives. The act provides that the cost of public education is a charge against taxable property at a uniform mill rate across the state. As a result, the cost of public education as a charge against taxable property no longer depends on where the property is located or the ad valorem tax of the property in the district.

***Uniform Operation of Laws.*** According to the supreme court, the only prohibition contained in article 2, section 17, of the Kansas constitution relates to laws of a general nature that affect the people of the state generally. Those laws must be geographically uniform. A rational justification for treating various localities differently

preserves the constitution of a statute under article 2, section 17, but the basis for different treatment cannot be entirely financial or economic.

The proponents raised the argument with respect to the boys ranch, ad valorem taxes to repay bonds issued by cities, and the fact that each district receives a different amount of money under the act.

The supreme court agreed with the district court and found there was not a geographic uniformity issue with respect to the boys ranch because of the unique circumstances and needs arising from that situation.

The district court found uniformity with respect to the bond argument since the provision gives "any city" of the state the power to issues bonds. The fact that some cites have issued bonds and other have not is not because of a lack of uniformity in the state.

The court also concluded that the funding model adopted by the legislature was one of uniform funding for each similarly situated pupil. Each district, wherever located, received the same amount per pupil as a district in which similarly situated pupil attends school. Although per pupil spending may vary, the variance is not geographically based but is based on rational distinctions related to the needs of the students as recognized by the weighting system.

## **Conclusion**

The supreme court determined that the act is within all constitutional limitations and, therefore, is constitutionally permissible legislation.