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ABSTRACT

This booklet investigates the fiscal impacts of declining enrollments from the point of view of state-level policy makers. Five aspects of declining enrollments are examined: (1) the magnitude of the problem both statewide and on a school district basis; (2) the type of school district affected by declining enrollments--central city, suburban, rural, large or small with respect to number of students; (3) wealth, tax rate, and state aid characteristics of declining enrollment districts; (4) the impact of declining enrollment on school district expenditures; and (5) the relationship between declining enrollments and the minority composition of school districts. A similar study was conducted in Iowa in 1976, and references to the Iowa results are made throughout. In conclusion, the implications of this study for new state policies are discussed. Detailed data on enrollment decline issues for the states studies are found in the appendixes. (MM)

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THE FISCAL IMPACTS OF DECLINING ENROLLMENTS:

A Study of Declining Enrollments in Four States — Michigan, Missouri, South Dakota and Washington

Report No. F76-5

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE, NATIONAL INSTITUTE OF EDUCATION

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FOREWORD

This publication is one of a series of school finance policy studies that the National Institute of Education (NIE/DHEW) is supporting at the ECS Education Finance Center. It draws upon the center's technical assistance activities with state legislatures and governors, as well as its demonstrated knowledge in this important field. NIE's sponsorship of this work is based on our conviction that the major burden for school finance reform now falls on the nation's legislators and governors and that "goal oriented" research of this kind will lead to a more informed and productive debate on the subject of school finance reform.

The emergence of this key role for state legislators and governors is the product of a series of important and far reaching court decisions. Beginning with the Serrano decision in California, a number of state courts have directed state legislators and governors to reconstruct the ways in which education resources are raised and distributed. In light of this state focus, it is particularly appropriate that ECS undertake research of this kind.

We at NIE hope this publication will serve the needs of legislators, governors, state and local education officials and interested citizens and thereby assist in the development and implementation of more equitable and effective systems of school finance.

Denis P. Doyle
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CONTENTS

TABLES

APPENDIX TABLES

INTRODUCTION

Declining public elementary and secondary school enrollment is one of the most perplexing policy issues with which state education policy makers have been faced in the past few years. Declining pupil enrollments hardly were mentioned as recently as five years ago, but today numerous school districts in nearly every state are faced with fiscal, education and personnel problems as their student populations drop each year.

The number of students enrolled in the nation's public elementary and secondary schools dropped from 45,903,000 to 44,700,000, a decline of 1,203,000 or 3 percent, between the 1970-71 and 1975-76 school years. As Table 1 shows, enrollments declined in 39 of the 50 states between the fall of 1970 and the fall of 1975. And according to nearly all reasonable projections, enrollments are predicted to decline further until the middle of the 1980s.

Table 1

Number of Public School Pupils by State
(thousands)

	Number of Students		Percent Change in Students, 1970-75
	1970	1975*	
Alabama	805	757	-6.0%
Alaska	80	86	+7.5
Arizona	440	483	+9.8
Arkansas	463	451	-2.6
California	4633	4394	-5.2
Colorado	550	563	+2.4
Connecticut	662	655	-1.1
Delaware	133	129	-3.0
District of Columbia	146	130	-11.0
Florida	1428	1544	+8.1
Georgia	1099	1072	-2.5
Hawaii	181	175	-3.3
Idaho	182	186	+2.2
Illinois	2357	2278	-3.4
Indiana	1232	1177	-4.5
Iowa	660	616	-6.7
Kansas	512	446	-12.9
Kentucky	717	695	-3.1
Louisiana	842	833	-1.1
Maine	245	248	+1.2
Maryland	916	887	-3.2
Massachusetts	1168	1200	+2.7
Michigan	2181	2121	-2.8
Minnesota	921	884	-4.0
Mississippi	534	509	-4.7

	Number of Students		Percent Change in Students,
	1970	1975*	1970-75
Missouri	1040	994	-4.4
Montana	177	171	-3.4
Nebraska	329	316	-4.0
Nevada	128	136	+6.3
New Hampshire	159	171	+7.5
New Jersey	1482	1458	-1.6
New Mexico	281	280	-0.4
New York	3477	3411	-1.9
North Carolina	1192	1169	-1.9
North Dakota	147	132	-10.2
Ohio	2426	2314	-4.6
Oklahoma	627	591	-5.7
Oregon	480	473	-1.5
Pennsylvania	2358	2261	-4.1
Rhode Island	188	177	-5.9
South Carolina	638	622	-2.5
South Dakota	166	153	-7.8
Tennessee	900	865	-3.9
Texas	2840	2762	-2.7
Utah	304	304	0.0
Vermont	103	104	+0.1
Virginia	1079	1084	+0.5
Washington	818	779	-4.8
West Virginia	400	401	0.0
Wisconsin	994	968	-2.6
Wyoming	87	85	-2.3
Total United States	45903	44700	-2.6

*Estimated

Source: U.S. Department of Health, Education and Welfare, National Center for Education Statistics, *Fall Statistics of Public Schools* (Washington: Government Printing Office, 1976).

The fiscal effects of declining enrollments have received little research. Precisely how declining enrollments affect local school districts and the dimensions of the appropriate state response are not well known. Nevertheless, local school districts across the country are seeking relief from the effects of declining enrollments from state legislators. It is in response to these policy issues that the current study was initiated.

Of course, the fact that declining enrollments create financial difficulties may appear paradoxical to many legislators and the public. For years the

basis of financial pressures on schools was from rapidly increasing enrollments; decline would seem to alleviate the pressures. But school districts simply cannot reverse their expenditure patterns easily. Seniority and tenure laws as well as the present levels of capital equipment (school buildings, etc.) do not permit contraction back along the same path that existed during expansion.

This booklet investi[redacted] of declining enrollments from the point of view of s[redacted] Investigation of the particular effects of declinin[redacted] individual school districts was not undertaken. The objective of this study is to make a preliminary analysis of whether declining enrollments are associated consistently with school fiscal characteristics, either within or across states, and, if so, to discuss potential state school finance policies to deal with these problems. Because a similar study of declining enrollments recently was conducted in Iowa, reference to the Iowa results will be made throughout the following discussion.[1]

Five aspects of declining enrollments are examined. The first is simply the magnitude of the problem both statewide and on a school district basis. The second relates to the type of school district affected by declining enrollments: central city, suburban, rural, large or small (with respect to numbers of students). The third aspect studied is the wealth, tax rate and state aid characteristics of declining enrollments districts. The fourth aspect includes the expenditures and personnel effects associated with changes in pupil enrollments. The last aspect considered in this study is the relationship between declining enrollments and the minority composition of school districts. The last section of the booklet discusses the implications of the study for new state policies. Due to the large number of tables involved, most of the detailed data on enrollment decline issues for the states studied are placed in an appendix. The text summarizes the findings with reference to the appropriate sets of tables.

The booklet is primarily descriptive in nature and conclusions drawn are certainly tentative. In any case, it is hoped that evidence presented here will shed light on some basic questions about the fiscal impact of declining enrollments as well as indicate questions requiring further basic and policy research.

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[1] National Conference of State Legislatures (NCSL). *An Assessment of the Tax and Expenditure Equity of Iowa's School Finance System* (Washington, D.C.: NCSL, 1976).

I. MAGNITUDE OF THE DECLINING ENROLLMENT PROBLEM

Pupil enrollments peaked in Michigan during the 1971-72 school year. Between that time and the 1974-75 school year, enrollments dropped an average of one percent a year (Table 2). There were nearly 40,000 fewer students enrolled in Michigan public schools in 1974-75 as compared with 1970-71. Enrollments in Michigan are projected to continue to decline through 1979-80.

Table 2

Number of Public School Students in Michigan, Missouri, South Dakota and Washington, 1970-71 to 1974-75, With Projections to 1979-80.

School Year	Number of Public School Students			
	Michigan	Missouri	South Dakota	Washington
1970-71	2,178,745	1,084,833	167,347	764,928
1971-72	2,212,505	1,087,985	164,993	756,103
1972-73	2,193,270	1,082,744	160,420	741,393
1973-74	2,159,966	1,069,940	157,255	737,636
1974-75	2,139,720	1,053,829	154,353	729,805
Percent Change 1971-75	-1.8%	-2.9%	-7.8%	-4.6%
1975-76	2,143,233*	1,036,711*	149,352	727,773
1976-77	2,103,925*	1,024,319*	149,198*	724,512
1977-78	2,052,825*	1,007,159*	146,983*	718,000*
1978-79	1,997,425*	982,910*	145,885*	704,200*
1979-80	1,939,425*	955,468*	144,932*	688,800*
Percent Change 1976-80	-9.5%	-7.9%	-2.7%	-5.4%

*State Projections

Source: Based on data from the State Departments of Education in Michigan, Missouri, South Dakota and Washington.

The data in this study were provided by the state departments of education in the four states. All assessed valuation and tax rate figures have been adjusted by official assessment-ratios findings. Since the legal assessment levels vary among the four states, the absolute values of both assessed valuations and tax rates should not be compared among the states. The student count is the official September enrollment figure for Michigan, average daily attendance in Missouri, average daily membership in South Dakota and average annual enrollment in Washington. The total expenditure per pupil figure used is current operating expenditures; instructional, administrative, transportation, operation-and-maintenance-of-plant-and-equipment and fixed expenditures are the standard definitions used by the respective state departments. The teacher count is number of teaching positions in Michigan, full-time equivalent teachers in Missouri, number of instructional staff in South Dakota and number of certified staff in Washington. The definition of central city, suburban and nonmetropolitan area is according to the 1970 U.S. Census. All data are stored in the multistate school finance data base of the Education Finance Center, Education Commission of the States. Data from

In fact, between 1974-75 and 1979-80, Michigan is expecting an additional drop of 200,000 in the number of students attending public schools.

Table 2 shows that public elementary and secondary school enrollments in Missouri also peaked in the 1971-72 school year. Since that time Missouri has been losing students at an increasing rate. Although enrollments in Missouri public schools dropped overall by only 34,000 between 1971-72 and 1974-75, an average of 11,000 per year, state enrollment projections predict a pupil drop of 27,000 per year by the beginning of the 1980s. If enrollment declines have produced problems thus far in Missouri, the data in Table [illegible] indicate that the problems will intensify in the near future.

South Dakota appears to have experienced the most severe extent of declining enrollments, experiencing overall declines of between two and three percent each year during the past five years. For the 1974-75 school year, South Dakota enrolled 13,000 fewer students than it did in the 1970-71 school year, a decrease of nearly eight percent. The enrollment projections for South Dakota predict a leveling off of pupil declines. However, past enrollment projections have not been very accurate. Therefore, if recent past experience can be taken as a clue, South Dakota may still experience enrollment drops of significant degree over the near future.

The number of students in Washington's public schools also has been on the decline in the past few years. Between 1970-71 and 1974-75, Washington lost a total of 32,000 public school students, an overall drop of four percent or about a one-percent decline each year. In 1979-80 the total public school student population in Washington is predicted to be 688,800, yielding a total drop of 76,000 students or 10 percent during the decade of the 1970s.

Effects by Grade Level

Although dropping at a faster rate in some states than in others, the decrease in the number of students attending public schools in these four states is a dramatic reversal of the rapid increase in students that was experienced during the 1960s. The overall figures discussed above, however, mask the differential changes in the distribution of students by grade level. The overall impact of declining enrollments has been most severe in the early grades while enrollment increases are still taking place in the secondary grades. (See Appendix Tables A-1 to A-4.)

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nearly all school districts were used for Michigan, South Dakota and Washington. Only data from Missouri's unified K-12 districts were used. However, because there was not sufficient information to allocate the students and expenditure data of school districts that consolidated between 1970-71 and 1974-75 to the districts into which they conolidated, those districts were dropped from the analysis. Enrollment increases in some cases, therefore, are a result of school district consolidation and not increases in the actual number of students.

Enrollments in Michigan declined only in grades 1-4 between 1970-71 and 1974-75.[3] These declines, however, will be felt in the upper grades during the second half of the 1970s. Similarly in Missouri, pupil decreases were a phenomenon only for grades K-6 between 1970-71 and 1974-75. However, the projections for Missouri indicate not only that the elementary school declines in the early 1970s will produce high school declines in the late 1970s, but also that enrollments will continue to decline in the elementary grades during that same time period. Thus, schools with grades 7-12 in Missouri will be experiencing dramatic decreases in student enrollments for at least the next decade. In South Dakota, enrollments dropped in nearly all grades between 1970-71 and 1974-75, although the decreases were quite small in the upper grades. Finally, in Washington, overall pupil enrollments fell in grades 1-5 but continued to increase in grades 7-12.

In summary, although enrollments in all four states have dropped overall, the impact has been felt primarily at the elementary level thus far. For the most part, the junior and high school student population still is increasing. But, the elementary student declines soon will trickle up to the higher grades, for probably the next decade it will be the high schools in these states that will be coping with the losses of great numbers of pupils. In short, the full effect of the phenomenon of declining enrollments has not occurred yet and the disruptions caused by the loss of students soon will begin to affect the budgeting and education programs for all grade levels in these four states.

Effects at the School District Level

Not only is the loss of students not uniform among grade levels, but also it is far from uniform among school districts. If the overall drop in students in a state were experienced uniformly by every school district in the state, state policy with respect to the decline would be fairly straightforward to develop.

In fact, however, there is a wide range in the distribution of changes in the student population among school districts in the four states studied. Table 3 shows that in Michigan about 40 percent of the school districts lost students while 60 percent gained. In Missouri the split was about 50-50. In South Dakota, over 75 percent of the districts lost students between 1970-71 and 1974-75. And in Washington, around 50 percent of the school districts experienced enrollment declines.

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[3] For all states studied, it is difficult to attach significance to the changes in the number of kindergarten students. In all states, many school districts initiated kindergarten instruction during the time period indicated. Thus, the enrollment changes in that time are a combination of newly enrolled students from a given number of potential kindergarteners, together with increases and decreases in the total number of potential kindergartners.

Table 3

Distribution of Percent Change in Students Between 1970-71 and 1974-75 in Michigan, Missouri, South Dakota and Washington

Percent Change in students, 1970-71 to 1974-75	Number of School Districts			
	Michigan	Missouri	South Dakota	Washington
Over -25%	12	5	7	9
-20 to -25%	9	4	10	9
-15 to -20%	18	21	24	15
-10 to -15%	48	42	40	24
-5 to -10%	63	85	52	48
0 to -5%	97	60	26	43
0 to 5%	84	97	16	46
5 to 10%	95	48	7	35
10 to 15%	59	42	3	15
15 to 20%	29	24	2	17
20 to 25%	25	10	3	13
Over 25%	44	7		23

Source: Based on data from the State Departments of Education in Michigan, Missouri, South Dakota and Washington.

The percent change in students, moreover, varied widely. Twenty-one Michigan school districts experienced a drop of greater than 20 percent of their students; percent pupil declines of that magnitude occurred for 9 Missouri school districts, 17 South Dakota school districts, and 18 Washington school districts. At the other extreme, 69 school districts in Michigan gained more than 20 percent. Similarly, 27 districts in Missouri gained in excess of 20 percent as did 5 districts in South Dakota and 36 districts in Washington.

While there were significant numbers of school districts at the extremes of gains and losses of students, numerous districts saw significant but moderate percent changes in the 10- to 20-percent range. Finally, numerous districts had changes within plus or minus 10 percentage points, but even for such marginal percent changes, the changes in the absolute numbers of students were dramatic for some districts. (See Appendix Tables A-5 to A-8.)

Changes in absolute enrollment by grade level is another important issue. (See Appendix Tables A-9 to A-11.) In Michigan, the 10 percent of the school districts experiencing the greatest percent pupil loss enrolled 48 fewer K-3 students over this time period, 18 fewer grade 4-6 students and a loss of 398 fewer grade 7-12 students. The total average loss of K-6 students was 545, enough to close two elementary schools in most school districts if proximity of students and other circumstances allowed this. Likewise in Washington over these five years, the average pupil loss was 381 K-6 students and 380 grade 7-12 students for the decile of school districts with the largest percent loss of students (the first decile). Similar numbers occurred for the first decile districts in Missouri.

In summary, enrollment changes, declines as well as increases, are an important phenomenon for the school districts in the four states studied. All states have experienced and will continue to experience overall losses in the pupil populations of their elementary and secondary schools. In addition, the pupil declines have occurred primarily in grades K-6; thus, the enrollment-drop phenomenon will be felt in the high schools of these states for at least the next decade. Finally, the distribution of enrollment changes is far from equal among the school districts within the states. Many school districts have experienced declines of students in excess of 20 percent while some districts have had enrollment increases of over 20 percent. Whatever the percent change of students, however, the absolute number of student changes is dramatic. In most states, those school districts hit hardest by the loss of students have lost enough students to force the closing of up to two elementary schools on the average.

While there are many school districts that have increasing numbers of students and while the problems they face are important, they nevertheless can take advantage of current administrative procedures and state policies that were developed during the 1960s in the era of rapid enrollment increases. The school districts experiencing enrollment losses are faced with budgetary problems as well as a lack of state policies and administrative strategies developed for a declining situation. The following sections identify some of the fiscal problems associated with the phenomenon of declining enrollments and make suggestions for developing state policies to deal with these problems.[4]

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[4] An interesting methodological paper on declining enrollments based on a formal economic model of school district decision making is Jay G. Chambers and Guilbert C. Hentschke, "The Impact of Declining Enrollments on Costs of Education and the Level of School District Expenditures: An Analysis of School District Decision-Making in the Face of Declining Enrollments," paper presented at the annual meeting of the American Educational Research Association, San Francisco, Calif., April 1976.

II. TYPE OF SCHOOL DISTRICTS AFFECTED BY DECLINING ENROLLMENTS

School districts were categorized by two variables for this study. The first was student size, where the objective was to determine whether large, medium or small school districts were most acutely hit by declining enrollments. The second category was central city, suburban or rural location, where the objective was to determine the difference in the impact of declining enrollments among these three types of geographical locations.

School District Size

The one strong conclusion that can be drawn from data on declining enrollments and district size is that declining student enrollment is a phenomenon for school districts across all ranges of size. (See Appendix Tables A-12 to A-19.) Some very large districts lost sizable numbers of pupils, some very small districts lost students and many school districts with an average enrollment experienced significant pupil declines.

However, a closer scrutiny of the data provides some more definitive conclusions. In Michigan the largest school districts — defined here as those with greater than 10,000 students — averaged a net pupil loss of 4.3 percent over these five years. Thus, in Michigan enrollment declines were especially severe for large districts. At the other end of the scale, there were many very small districts — those with less than 500 students — that lost large numbers of pupils. Although the standard deviation of the variable, percent pupil change, was high among all ranges of school district size, for school districts with fewer than 500 students the standard deviation was significantly larger than for all other categories.[5] Thus, while many very small Michigan school districts had enrollment increases, many small school districts also had enrollment drops. While all sizes of school districts experienced enrollment declines in Michigan, very large and very small districts were affected most.

The results for Missouri, South Dakota and Washington are very similar to those for Michigan. The school districts with greater than 10,000 students in all three states averaged decreases in enrolled students. In addition, the standard deviation of the percent enrollment change for the smallest school districts was quite high indicating numerous decreasing enrollment as well as increasing enrollment districts in this category. For South Dakota in particular, the decile of school districts with the greatest average percent

[5] Standard deviation is a statistical term that can be used to indicate the variation of a variable. Approximately two-thirds of observations, or school districts, are within one standard deviation of the mean (average) for a normal ("bell-shaped") distribution. About 95 percent of all observations are within two standard deviations of the mean. Thus, if the average of the number of school buildings, for example, for 36 school districts is 20, and the standard deviation is 5, one can reasonably expect that about two-thirds of those districts, 24, will have a number of school buildings within one standard deviation of 20; that is, they will have between 15 and 25 school buildings.

decline had an average student size of half that in any other decile. In Missouri, both very small and the largest school districts averaged net declines in student enrollment. The situation for smaller districts conforms with the fairly general findings of regional economic analysis where smaller population areas tend to be relatively less "stable" — they tend either to grow or decline significantly.

It should be noted for all states that a number of school districts, primarily small districts, consolidated over this time period. Thus, while the absolute number of students in two districts that consolidated would have increased, if one district consolidated into another, which often occurred, the net pupil loss would be masked by the fact of consolidation. Data were not readily available in any of the states studied to sort out the interaction of these two phenomena. Thus, in some instances the degree of decline could be underestimated.

The heavy impact of declining enrollments on the largest and smallest school districts in the states also was found in the recent study in Iowa for both the time period analyzed in this study, 1970-71 to 1974-75, as well as the projected results for the time period from 1974-75 to 1980-81.[6]

Central City, Suburban and Nonmetropolitan School Districts

In most states, as in the four states in this study, the very smallest school districts are located in predominantly rural (nonmetropolitan) areas, while the largest school districts are in the metropolitan (central city and suburban) locations. Table 4 shows that the nonmetropolitan areas in all four states had the school districts with the maximum percent decreases in students. At the same time, the school districts with the maximum increases in students also were located in nonmetropolitan areas in the four states. Again, these numbers probably result from both significant student losses for some school districts and some school district consolidation, rather than student increases. Of course, some rural areas are experiencing significant immigration, particularly in areas of natural resource development. In any case, as noted above (see footnote 2), data were not available to sort out the different factors, such as consolidation and immigration.

The data in the table are clear, however, for the effect of pupil decreases on central city school districts; the average percent pupil change is negative for the central cities in each of the four states. This fact confirms the above conclusion that the very largest school districts in each state appear to be hardest hit by pupil declines.

Ideally, declining enrollments should have certain beneficial effects from the viewpoints of parents, educators and taxpayers. A given amount of

[6] National Conference of State Legislatures, *An Assessment of the Tax and Expenditure Equity of Iowa's School Finance System*, p. IV-2.

Table 4

Average Percent Change in Students Between 1970-71 and 1974-75 Among Michigan, Missouri, South Dakota and Washington School Districts by Central City, Suburban and Nonmetropolitan Locations

State	Location of District	Number of Districts	Percent Change in Students, 1970-71 to 1974-75			
			Average	Minimum	Maximum	Standard Deviation
Michigan	Central City	11	-5.3%	-12.3%	11.4%	7.6
	Suburban	225	+2.9	-30.8	148.2	18.1
	Nonmetropolitan	347	+5.7	-48.5	162.5	18.6
Missouri	Central City	5	-10.1	-21.1	2.7	9.5
	Suburban	85	5.0	-22.1	61.9	16.9
	Nonmetropolitan	365	1.1	-34.4	116.5	12.8
South Dakota	Central City	2	-8.3	-5.8	-10.9	3.6
	Suburban	10	-1.0	-18.5	12.0	9.9
	Nonmetropolitan	180	-6.7	-37.5	235.4	21.7
Washington	Central City	4	-12.5	-18.5	-8.0	4.5
	Suburban	65	4.6	-19.1	65.0	15.3
	Nonmetropolitan	228	1.5	-85.9	204.6	25.9

Source: Based on data from the State Departments of Education in Michigan, Missouri, South Dakota and Washington.

dollars and less pupils, inflation and other cost-increasing factors [illegible] could provide the opportunity for enriching school programs and reducing class sizes. And for sufficient declines, even with the latter enhancement of education quality, taxpayers should face significantly leveling off or even declining taxes for education purposes. Where and how these benefits may occur and discussions of why they may not be all that are hoped for — due to such factors as limitations on reducing staffing and building use — have been discussed by various writers.[7] Of course, many current and potential teachers and administrators are rather dismayed at the leveling off or actual shrinkage of job opportunities, particularly when cutbacks rather than enrichment are the result of declining enrollments.

Table 5 gives the percent enrollment change for all the central cities in these four states as well as some relevant fiscal data. Eighteen of the 22 central cities experienced enrollment drops between 1970-71 and 1974-75. The declines ranged from five percent for Lansing and Ann Arbor, Mich. (1680 and 1005 students, respectively) to 21 percent (12,750 students) for Kansas City, Mo. In between were St. Louis with a loss of 17 percent (15,900 students), Seattle with a drop of 18.5 percent (14,775 students), Sioux Falls, S.D., with a decrease of 10.9 percent (2115 students) and Detroit with a decline of 10 percent (29,000 students). In percentage terms, but especially in terms of the numbers of students, these figures are dramatic.

The fiscal, expenditure and programmatic variables shown in the last four columns of Table 5 indicate that these central cities have not been able to achieve relatively advantaged positions due to these losses of students; in fact, the central cities face important fiscal constraints in most situations. For example, Detroit, which lost 29,000 students, has the highest pupil-teacher ratio of all central cities examined here, greatly above the statewide average. In addition, Detroit's expenditures per pupil also are below the statewide average and third lowest among all Michigan central cities. In fact, except for Kalamazoo and Ann Arbor, a university town, the declining enrollment central city school districts in Michigan possess average or below-average property wealth, tax rates above the state average and pupil-teacher ratios nearly identical to the statewide average. In short, central city school districts in Michigan did not turn pupil declines into either below-state-average pupil-teacher ratios or above-state-average expenditures per pupil. If the central cities in Michigan gained any advantage from their pupil losses, it would have been in moving them from a disadvantaged position closer to statewide averages.

In Missouri the pattern is a bit more mixed, primarily because Kansas City has a property wealth 50 percent above the statewide average. However, all of the central cities in Missouri have pupil-teacher ratios above the state-

[7] See, for example, National Association of State Boards of Education, *A Report on Declining Enrollments* (Denver, Colo.: National Association of State Boards of Education, July 1976); Jonathon P. Sher and Rachel B. Tompkins, *Economy, Efficiency, and Equality: The Myths of Rural School and District Consolidation* (Washington, D.C.: National Institute of Education, July 1976).

Table 5

Selected School Finance Variables for the Central City Districts in Michigan, Missouri, South Dakota and Washington, 1974-75

School District	Percent Change in Students, 1970-71 to 1974-75	Number of Students, 1974-75	Adjusted Assessed Valuation Per Pupil, 1974-75	Adjusted School Tax Rate, 1974-75	Current Operating Expenditures Per Pupil, 1974-75	Pupil-Teacher Ratio, 1974-75
Michigan						
Muskegon Heights	-12.3%	3,600	$ 15,400	$27.80	$1,170	21
Jackson	-12.1	12,800	26,000	31.50	1,343	23
Kalamazoo	-11.9	15,900	33,300	34.40	1,594	23
Muskegon City	-9.8	9,500	19,500	29.65	1,427	19
Detroit	-9.8	260,900	22,100	22.51	1,290	26
Flint	-7.8	42,400	24,900	30.65	1,349	24
Lansing	-4.8	31,900	24,600	30.00	1,427	22
Ann Arbor	-5.0	19,100	42,200	32.55	1,524	20
Bay City	+0.6	17,200	22,100	25.00	1,110	25
Grand Rapids	+3.7	36,300	22,700	27.10	1,295	22
Saginaw	+11.4	7,600	29,800	26.35	1,175	22
Statewide Average	-5.2	41,600	25,700	23.84	1,337	23
Missouri						
Kansas City	-21.1	47,957	29,989	2.17	1,441	18
St. Louis	-17.4	77,807	14,265	3.49	1,214	19
St. Joseph	-9.4	14,123	16,651	1.95	957	19
Springfield	-5.4	22,192	23,178	1.69	1,033	20
Columbia	+2.7	9,817	21,415	2.29	1,131	18
Statewide Average	+1.7	1,865	19,965	1.98	1,015	17
South Dakota						
Sioux Falls	-10.9	17,286	15,885	43.49	936	18.3
Rapid City	-5.8	13,128	12,381	44.37	838	19.3
Statewide Average	-6.4	794	17,827	37.82	1,051	14.8
Washington						
Seattle	-18.5	65,089	114,232	5.95	1,830	16
Everett	-13.2	11,065	70,366	6.25	1,459	18
Spokane	-10.2	31,582	57,075	5.24	1,265	20
Tacoma	-8.0	34,329	56,877	7.92	1,632	17
Statewide Average	+2.0	2,510	$134,073	$ 3.79	$1,525	17

Source: Based on data from the State Departments of Education in Michigan, Missouri, South Dakota and Washington.

wide average, including Kansas City whose higher expenditures per pupil may be caused in part by the longevity pay of the teaching staff remaining and not by greater numbers of teachers.

For South Dakota, the two largest cities have a per pupil property wealth below the state average, tax rates above the state average, expenditures

below the state average and pupil-teacher ratios above the statewide average, a disadvantaged position in each case. Enrollment declines clearly have not permitted large city school districts in South Dakota to assume an advantaged position.

In Washington, the pupil-teacher ratios in the cities are all at, above or just one below the statewide average, even with dramatic losses of students. However, Seattle spends about $300 per pupil above the statewide average. Since the pupil-teacher ratio in Seattle is just one under the statewide average, it may be that the high-expenditure level is produced primarily by mandated longevity pay for the very experienced teaching staff remaining in the school district.

In summary, central city school districts have been hit acutely by losses of public school enrollments. As the data discussed above indicate, moreover, only in very few cases have the decreases resulted in fiscal advantages for those school districts. In most cases, the decreased basic need for school services probably at best has increased the cities' position from one of great disadvantage to one of lesser disadvantage relative to statewide averages.

As will be discussed in the next section, high declining enrollment districts also tend to have both above-average property tax rates and property values per pupil. The former is particularly a problem for the major central cities, which have high proportions of disadvantaged students and nonschool dependent populations. The central city schools are faced with high needs in the areas of compensatory, special and bilingual education. Although wealth tends to be above average, property tax rates also are above average. Thus, school aid formulas that address only wealth per pupil in assessing school district needs would not give much help to these central city districts with their greater problems resulting both from declining enrollments and higher needs.

III. RELATIONSHIPS BETWEEN DECLINING ENROLLMENTS AND WEALTH, TAX RATES AND STATE AID

Both property wealth per pupil and school tax rates vary considerably among school districts with different levels of declining enrollment. (See Appendix Tables A-20 to A-23.) Overall, therefore, both wealthy and poor, and both high and low, tax rate school districts have been affected by changes in student enrollment declines as well as increases.

Despite the variation, two other fairly clear patterns emerge from these data. First, the average property wealth per pupil in the first decile, that is, the decile of districts with the most severe student declines, is above the statewide average and, except for one other decile in Michigan, the highest among all deciles in all four states. The average property wealth of the highest declining enrollment districts is 25 percent above the statewide average in Michigan, 25 percent above in Missouri, 25 percent above in South Dakota and 180 percent higher than the statewide average in Washington. In general, therefore, the 10 percent of school districts with the greatest enrollment declines possess a fiscal capacity 25 percent or more above the rest of the state. This result also was found in the NCSL study of declining enrollments in Iowa.[8] In short, while budgetary problems may be caused by declining enrollments, the fiscal advantages of the school districts most severely affected, in general, may be sufficient to allow these school districts to handle the extra costs on their own. However, as noted above, there is a great variation in wealth among the school districts hardest hit by student decreases. While on average these districts may possess a wealth advantage, many of them are poor in property wealth; some are central city districts hard pressed to cope with the fiscal problems created by student losses.

Second, the average tax rates among the 10 percent of the school districts most acutely affected by declining enrollments are above or the same as the statewide averages in Michigan, Missouri and Washington. The average tax rate of these school districts exceeds the statewide average by about 10 percent in Michigan and 20 percent in Missouri. While the average tax rate of the lowest decile in Washington is the same as the statewide average, the average tax rate in the next two deciles exceeds the statewide average by 37 percent and 29 percent, respectively. These results suggest that even with an average property wealth advantage, school districts with significant enrollment declines do not enjoy significantly lower tax rates; on the average, they exert above-average tax efforts for public schools. These results are in contrast to those in Iowa where declining enrollment districts not only possessed a property wealth advantage but also had lower-than-average tax rates.[9]

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[8] National Conference of State Legislatures, *An Assessment of the Tax and Expenditure Equity of Iowa's School Finance System*, p. IV-3.

[9] National Conference of State Legislatures, *An Assessment of the Tax and Expenditure Equity of Iowa's School Finance System*, p. IV-3.

Even with a wealth advantage, however, the decile of districts with the largest percent enrollment drops received state aid per pupil amounts significantly above the statewide average. (See Appendix Tables A-24 to A-27.) This is a curious finding. Admittedly, the data do not indicate what other factors may account for these high levels of state aid per pupil. In South Dakota, for example, these districts are small in pupil size and the above-average state aid figures reflect, in part, the small school factors in the South Dakota formula. Nevertheless, the consistent trend across all four states is at least prima facie evidence that declining enrollment districts are reaping some benefit of state education aid policy, whether or not there are special considerations for school districts with enrollment drops.

IV. THE IMPACT OF DECLINING ENROLLMENTS ON SCHOOL DISTRICT EXPENDITURES

During the 1971-1975 period examined for this study, the consumer price index increased by over 30 percent, or at an average annual rate of close to 7 percent; wages and salaries in the private sector, at least, tended to rise about as fast. Thus, even if decreasing amounts of real resources would have been used by schools during this period, dollar expenditures probably would have risen greatly in any case. Schools as well as many other sectors have been burdened by the ravages of inflation. The deep recession of 1974-75 increased the problems of disadvantaged students, while also reducing state revenues. In addition, mandated new programs have increased pressures on local spending without sufficient state or federal aid.

Even if general inflation and all the other above noted problems were not so severe, it should be recognized that school expenditures cannot be cut at the same time and at the same rate as enrollment declines occur. The case of instructional personnel provides a good example. In most school districts, teacher contracts must be signed in the spring, long before the late fall, when the precise nature of enrollment drops is determined. This causes at least a one-year lag in personnel cuts. However, before personnel cuts can be implemented there must be significant enrollment drops in each grade level. A drop of 30 to 40 students in an elementary school is not sufficient to cut one teacher. A drop of 30 to 40 students in a grade level is needed in most elementary schools in order to provide the possibility for cutting one teacher position. Moreover, even as teacher positions are cut, tenure laws and seniority provisions usually require that the least experienced and, thus, least costly teachers are cut first. This leaves a higher-cost teaching staff in the school, which pushes expenditures per pupil up even if a constant pupil-teacher ratio is maintained. Finally, the within-school lags are magnified across school districts with respect to the magnitude of enrollment declines that are needed to close entire schools with a minimum disruption of the districts' educational programs. Thus, operation and maintenance expenditures cannot be reduced much as pupils decline. A similar inability holds true for fixed costs. Thus, in the short run, operation and maintenance of plant expenditures per pupil and fixed expenditures per pupil necessarily increase in declining enrollment districts if for no other reason than that the same total expenditures are divided by a smaller number of students.

At least in the short run, then, expenditures per pupil in declining enrollment school districts must rise. The increase, moreover, is mainly outside the control of either the school board or school administrators. Over the longer run, however, expenditures can be brought under control as teacher cuts and school building closings become more feasible. And advance planning can shorten the time lags necessary for these adjustments.

The above comments are true only in the context of maintaining the level of the quality of the school program as it was in the era before enrollments began to decline. Many argue that declining enrollments provide a school

district with opportunities to enhance the school program. Under this supposition, while expenditures per pupil will rise, quality also will rise. If, moreover, teacher cuts do not occur, part of the increase in quality will be lower pupil-teacher ratios and more personalized instructional programs.

Whatever tack a school board decides to take, and it usually will be some cut in resources and some increase in program quality, declining enrollments do force expenditure-per-pupil changes in and among school districts. The following subsections examine the associations of declining enrollments first with instructional and administrative expenditures, including average teacher salaries and pupil-teacher ratios, and second with fixed expenditures and the cost of operating and maintaining the school plants.

Instructional and Administrative Expenditures

Average current operating expenditures per pupil in the highest declining enrollment districts exceed the statewide averages. (See Appendix Tables A-28 to A-31). In general, the declining enrollment districts are spending 20 percent or more above the statewide average. Both instructional and administrative expenditures per pupil for the declining enrollment districts are higher than the statewide average. In fact, within all four states, there is a fairly consistent pattern for both instructional and administrative expenditures per pupil to decrease as enrollment changes move from a decrease to a stable to an increase situation. Put another way, while instructional and administrative expenditures per pupil are above average for declining enrollment districts, they are below average for increasing enrollment districts.

In addition, in Michigan and Washington increases between 1970-71 and 1974-75 in instructional and administrative expenditures per pupil are greatest in the most acutely affected declining enrollment districts. Moreover, the increases in administrative expenditures per pupil, on a percent-increase basis, significantly exceed those for instructional expenditures per pupil. Thus, while expenditures per pupil on teachers and instructional resources have increased in these declining enrollment districts, the increases have been even more pronounced, on a percentage basis, for administrative expenses. These findings, as well as those in the preceding paragraph, were also true of expenditures in the NCSL Iowa study.[10]

Conceivably, such districts, particularly the large urban districts, could have received state and federal aid and mandates requiring more administrators. On the other hand, it may be easier or more acceptable to decision makers to reduce the number of teachers rather than the number of administrators in the face of declining enrollments. Data were not available within the limitations of this study to determine why ad-

[10] National Conference of State Legislatures, *An Assessment of the Tax and Expenditure Equity of Iowa's School Finance System*, pp. IV-3 to IV-4.

ministrative expenditure increases were greater than instructional expenditure increases.

Pupil-teacher ratios are also lowest in the declining enrollment districts. (See Appendix Tables A-32 to A-34.) Not only are pupil-teacher ratios lower in these school districts but also the decrease between 1970-71 and 1974-75 in the pupil-teacher ratios for these school districts has been greater than that for the other districts. Especially for Washington, the change in the pupil-teacher ratio has been a proportional function of enrollment changes; if enrollments dropped, fewer pupils were in each teacher's class; if enrollments increased, more pupils were in each teacher's class.[11]

Nevertheless, the average teacher salary in declining enrollment districts is not significantly above the average statewide. In Washington, in fact, the average teacher salary in the decile of districts hardest hit by enrollment drops is below the statewide average. Although the average teacher salary in the first decile of declining enrollment districts is above the statewide average in Michigan, the change between 1970-71 and 1974-75 in the average teacher salary is of the same magnitude as for all deciles and, thus, a lower-percent change. Similarly, in Washington the percent change in average teacher salaries among the deciles of school districts is nearly the same.

In a sense these results on teacher salaries are perplexing. If declining enrollment districts are required by tenure and seniority laws to keep the more experienced, higher-paid teachers, why is the average teacher salary in the declining enrollment districts not well above the statewide average? The answer cannot be determined from the data developed for this report alone. From Section I, however, it is known that the greatest student declines occurred in the very largest and in the very smallest school districts. On average, teacher salaries are higher in the large city school districts and lower in the small rural areas. Thus, the average teacher salary figures might reflect the mean of a bimodal distribution, i.e., the average of many below-average salaries and many above-average salaries. These results also might reflect education-experience differences that existed prior to the enrollment decline.

However, the results in this section, in general, confirm certain *a priori* predictions. Expenditures per pupil are indeed higher in the declining enrollment school districts. Pupil-teacher ratios are also lower. Whether this is a short-run phenomenon or whether it reflects a permanent increase in the quality of the educational program is not possible to determine. Of course, the above-average expenditures complicates further the design of an appropriate state aid policy for fiscal problems caused by enrollment drops. Perhaps the most questionable expenditure increase is the disproportionate rise in administrative expenditures per pupil.

[11] It should be noted that unless pupil-teacher ratios fall dramatically, enrollment declines produce a decrease in the demand for teachers. Thus, unless the number of college and higher education students enrolled in teacher preparation courses decreases, the country will continue to have a surplus of teachers.

Other Selected Education Expenditures

Three categories of education expenditures are especially difficult to reduce in the short run in situations of either decreases or increases in numbers of students: transportation, operation and maintenance of plant and fixed charges. (See Appendix Tables A-35 to A-38.) There appear to be no strong patterns between transportation expenditures and declining enrollments. This finding is not surprising because transportation expenditures depend almost entirely on the area size and geographical characteristics of a school district.

The patterns with respect to maintenance and operation of plant and fixed charges are as expected. Expenditures per pupil in these two categories of expenditures are higher in declining enrollment school districts. In fact, among the districts in all four states expenditures per pupil for these two categories of costs decrease almost uniformly as pupil changes in the school districts move from decreasing, to stability, to increasing. These are costs that can be decreased literally only by closing entire school buildings. Closing school buildings can occur only when declining enrollments have occurred in relatively large numbers over relatively long periods of time.

V. THE IMPACT OF DECLINING ENROLLMENTS ON MINORITY STUDENTS

One overlooked result for school finance in general as well as declining enrollments in particular is the impact on particular subgroups of the student population. (See Appendix Tables A-39 to A-42.) Minority students in many states become somewhat disadvantaged by many standard forms of school finance reform. One of the emerging trends related to declining enrollments is its impact on school districts with concentrations of minority students.

In Michigan and Missouri the school districts with large concentrations of minority students have been hardest hit by declining enrollments. For Michigan the three deciles of school districts with the greatest enrollment losses have average minority concentrations above the other seven deciles of districts—in some cases double the statewide average. In Missouri, the results are stronger. The two deciles of districts having the greatest enrollment declines have very high concentrations of minority students: on average 36 percent of their student bodies is comprised of minority students.

This pattern, however, is not evidenced in either South Dakota or Washington. In South Dakota, the minority population is almost entirely Indian and is enrolled in a relatively few number of school districts. There is no apparent pattern to the results in Washington: school districts with both high and low concentrations of minorities have been affected by both losses and gains of students.

However, in a recent study of declining enrollments in Illinois it was found that, as in Michigan and Missouri, school districts with declining enrollments tended to have high concentrations of minority pupils as well as high concentrations of Title I eligible pupils.[12] Such results indicate that there is a socio-demographic implication of the declining enrollment phenomenon. Central cities are the most vivid example. Declining enrollments in many cases are producing changes in the ethnic and economic compositions of pupil enrollment, specifically increasing the concentrations of poor and minority students in certain areas. Such results indicate that there not only is a link between declining public school enrollments and declining national birth rates, but also between declining enrollments in many school districts and white, middle- and upper-income flight, or at least nonreplacement of white children, in many of the nation's urban areas.[13] Across the nation only 12 of 85 large city districts surveyed by the National Association of State Boards of Education did not have enrollment declines during 1970-1974, and the racial and ethnic mix has continued to become predominantly black and Spanish-surnamed.

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[12] G. Alan Hickrod, et. al., *Enrollment Change and Personnel Change in the K-12 Schools of Illinois* (Normal, Ill.: Illinois State University, 1976.)

[13] See National Association of State Boards of Education, *A Report on Declining Enrollments*, p. 5.

VI. CONCLUSIONS AND STATE POLICY IMPLICATIONS

This study of the impact of declining enrollments in four states has produced a number of findings. Many of the findings are similar to those of recent studies in Illinois and Iowa. The major findings are:

1. Declining enrollments have occurred primarily in the elementary grades. Declining enrollments are just beginning to affect middle schools and high schools but will have an impact at that level for the next decade.

2. Declining enrollments are distributed unevenly among school districts in a state. Many school districts have undergone dramatic losses of students, other school districts have had large student increases and still other school districts have had a relatively stable student population.

3. Declining enrollments have occurred in school districts of all sizes, but have affected most severely the largest and the smallest school districts in a state.

4. Declining enrollments have hit central cities most acutely. Many large city school districts have experienced drops of greater than 10 percent of their student populations, totaling close to 25,000 students in some cases over a five-year period.

5. Declining enrollment school districts, in general, have above-average property wealth per pupil and receive above-average state aid per pupil. In some states, declining enrollment districts have higher-than-average tax rates, but in other states, declining enrollment districts exert lower-than-average school tax efforts. In any case, there are wide variations in the wealth and tax-rate levels of declining enrollment districts.

6. Declining enrollment school districts are above statewide averages per pupil for total, instructional, operation-and-maintenance-of-plant and fixed expenditures. Declining enrollment districts also have lower-than-average pupil-teacher ratios but about average teacher salaries.

7. School districts with significant declines in the student population tend to be school districts with higher-than-average concentrations of minority students.

Although not discussed explicitly above, a further important inference can be drawn as noted earlier (see footnote 11). If current pupil-teacher ratios are maintained, it is likely that there will be a net decrease in the number of teachers demanded over at least the next five years. Further significant reductions in pupil-teacher ratios will be necessary to raise demand. In any case, the demand side does not look like an important source of reducing the current "excess supply" of teachers, unless states and local districts make major decisions to reduce class sizes further in the pursuit of higher quality of education.

What are appropriate new policies with respect to the state role in coping with the phenomenon of declining enrollments? Since most state aid policies allocate aid on the basis of the number of pupils in a given district, state aid decreases as the number of students decline.[14] But as discussed previously, there are time lags involved in the ability of school districts to cut back on school resources as enrollment decline sets in. There are a number of ways states have attempted to cushion the impact of enrollment declines on state aid losses, but none of the four states included in this study had specific provisions during the period analyzed. The simplest has been to count only half the pupil decline. This cushions the loss of students for only one year, however, and is probably too short run in its effect.

The other method, now used in Colorado, North Dakota and Ohio and proposed for use in a number of other states including South Dakota, is to use the greater of the current year enrollment or the average of the enrollment of the preceeding two or three years. This method provides a longer-term cushion and is probably more reflective of the time period needed by school districts to cut back on school resources as enrollments drop. In addition, this method phases in and phases out naturally and, thus, is sensitive to the enrollment changes and changes in enrollment change rates of individual school districts. As a method of counting children for the allocation of state aid in an era of declining enrollments, a three-year floating average is preferable.

However, counting children is only the beginning of an appropriate state declining enrollment aid policy. Some states, like Iowa, calculate the "bonus pupils" that such a system produces and then allocate a lump sum of dollars to all declining enrollment school districts regardless of the property or income wealth of the school district. While this aid structure makes more sense for property-poor school districts, the findings in this study show that declining enrollment districts have, in general, above-average wealth and in many cases significantly above-average property wealth. It makes little sense to allocate bonus state aid for any purpose to very wealthy school districts.

Thus, any kind of state factor for declining enrollments should be allocated by some equalization formula. The simplest way to make such an allocation is to determine an appropriate pupil weight that would reflect the higher costs of declining enrollments; such a system would designate additional state aid for declining enrollments on a pupil-weighted system and allocate the aid through the general equalization aid formula. Of course, a separate equalization formula, such as those used for capital construction or special

[14] Leppert and Routh emphasize the need for basic analysis of the fiscal characteristics of high-decline districts. They also point out that "while greater state assumption of costs has been advocated to reduce district disparities, it is in those states with a high state share that districts will have the greatest difficulty adjusting to decline if the majority of state aid continues to be student-count related." See Jan Leppert and Dorothy Routh. *An Analysis of State School Finance Systems as Related to Declining Enrollments* (Tallahassee, Fla.: MGT of America, Inc., September 1976), pp. 30-31.

education aid in many states, could be developed for just the declining enrollment aid. Furthermore, as indicated at the end of Section II, in central cities, where declining enrollments often have been large, the many other difficulties of such districts may require special attention.

Clearly, one major problem in a pupil-weighted system would be determining the extra cost caused by declining enrollments. At present, such results are not available. But research now in progress by the Education Commission of the States (ECS) in Missouri could be the beginning of creating a methodology for determining and defining the magnitude of the extra costs produced by declining enrollments. The ECS study is focused primarily on overall cost-of-education differentials among school districts. But a subcomponent of the research project is to identify the elements of those cost differentials caused exclusively by declining enrollments. Such results would give the state a means of using some objective criteria to set the level of extra aid to be allocated to alleviate school districts of the higher costs per pupil forced on them because of a loss of students.

Finally, state policies should be developed to help create a set of administrative procedures and strategies to cope with a situation of decremental budgeting. School administrators in this country primarily have been trained to administer school systems with increasing enrollments. The managerial techniques used to maximize the efficiency and effectiveness of organizations are different when the organization — school — is increasing, stable or decreasing in size. While designing the appropriate adjustments in state aid formulas for the declining enrollment situation is relatively straight-forward, perhaps the most fruitful focus of state energy would be on retraining school administrators and managers to cope effectively, efficiently and humanely in an era when the number of students enrolled in public schools rapidly is decreasing. The effect of enrollment declines and the concomitant resource cuts have a heavy impact on both teachers and students. While the fiscal effects of declining enrollments are important, the human effects are even more important and should receive the bulk of state attention and focus.

APPENDIX

DETAILED STATISTICAL TABLES

Table A-1

Number of Students by Grade Level in Michigan School Districts, 1970-71 and 1974-75

Grade	Number of Students 1970-71	1974-75
K	167,904	162,074
1	162,487	152,746
2	165,155	152,163
3	163,823	151,580
4	166,155	157,410
5	162,657	164,989
6	162,074	167,904
7	170,236	172,568
8	167,904	176,066
9	176,981	181,896
10	173,151	190,147
11	155,078	163,823
12	136,422	146,916
Total	2,139,027	2,130,282

Source: Based on data from Michigan State Department of Education.

Table A-2

Number of Students by Grade Level in Missouri School Districts, 1970-71, 1974-75 and 1979-80*

Grade	Number of Students 1970-71	1974-75	1979-80
K	516	74,274	65,893
1	81,062	72,311	70,549
2	86,609	71,620	71,721
3	87,952	73,450	72,749
4	87,656	77,345	69,419
5	87,137	81,551	65,508
6	86,021	83,230	64,847
7	84,317	86,229	68,921
8	83,542	86,233	71,829
9	84,032	91,041	79,822
10	78,831	85,540	81,274
11	68,446	78,115	77,493
12	61,572	67,576	70,773
Total	1,062,970	1,029,215	930,798

*Projected

Source: Based on data from the Missouri State Department of Education.

Table A-3

Number of Students by Grade Level in South Dakota School Districts, 1970-71 and 1974-75

Grade	Number of Students 1970-71	1974-75
K	9,553	10,269
1	12,943	10,456
2	13,318	10,115
3	13,627	10,529
4	13,805	11,419
5	13,924	12,237
6	13,885	12,970
7	13,625	13,757
8	13,848	14,141
9	14,063	14,083
10	13,673	13,532
11	12,941	12,620
12	12,268	12,271
Total	173,006	161,122

Source: Based on data from the South Dakota State Department of Education.

Table A-4

Number of Students by Grade Level in Washington School Districts, 1970-71 and 1974-75

Grade	Number of Students 1970-71	1974-75
K	51,730	54,600
1-6	381,880	338,072
7-12	367,681	377,256
Total	801,291	770,128

Source: Based on data from the Washington State Department of Education.

Table A-5

Descriptive Statistics of Enrollment Change Among Michigan School Districts by Deciles of Percent Change in Students, 1970-71 to 1974-75

Decile	Number of School Districts	Percent Change in Students, 1970-71 to 1974-75 Average	Minimum	Maximum	Standard Deviation
First	59	-19.4%	-12.0%	-48.5%	8.0
Second	59	-9.0	-6.2	-11.9	1.8
Third	58	-4.7	-3.4	-6.1	0.8
Fourth	59	-1.8	-0.6	-3.4	0.8
Fifth	58	0.9	-0.5	2.5	0.9
Sixth	58	4.0	2.5	5.6	0.9
Seventh	58	6.6	5.6	8.2	0.8
Eighth	58	10.2	8.2	12.3	1.2
Ninth	58	16.4	12.5	21.3	2.8
Tenth	58	41.7	21.8	162.5	29.0
Statewide	583	4.4%	-48.5%	162.5%	18.3

Source: Based on data from the Michigan State Department of Education.

Table A-6

Descriptive Statistics of Enrollment Change Among Missouri School Districts by Deciles of Percent Change in Students, 1970-71 to 1974-75

Decile	Number of School Districts	Percent Change in Students, 1970-71 to 1974-75 Average	Minimum	Maximum	Standard Deviation
First	46	-17.1%	-12.4%	-34.4%	5.3
Second	45	-10.0	-8.2	-12.3	1.2
Third	46	-7.0	-5.8	-8.1	0.7
Fourth	45	-4.2	-2.4	-5.8	1.1
Fifth	46	-0.8	-2.4	0.5	0.9
Sixth	45	1.6	0.6	2.7	0.6
Seventh	46	4.1	2.7	6.2	1.0
Eighth	45	8.4	6.4	10.6	1.2
Ninth	45	13.4	10.9	16.3	1.6
Tenth	46	29.0	16.3	116.5	17.8
Statewide	455	1.7%	-34.4%	116.5%	13.7

Source: Based on data from the Missouri State Department of Education.

Table A-7

Descriptive Statistics of Enrollment Change Among South Dakota School Districts by Deciles of Percent Change in Students, 1970-71 to 1974-75

Decile	Number of School Districts	Percent Change in Students, 1970-71 to 1974-75 Average	Minimum	Maximum	Standard Deviation
First	19	-24.8%	-19.9%	-37.5%	4.2
Second	19	-17.6	-15.7%	-19.3	1.3
Third	19	-14.0	-12.5	-15.7	0.9
Fourth	19	-11.5	-10.6	-12.5	0.7
Fifth	19	-9.6	-8.7	-10.3	0.5
Sixth	20	-7.7	-6.9	-8.7	0.6
Seventh	20	-5.7	-4.2	-6.7	0.6
Eighth	19	-2.7	-0.6	-4.0	1.0
Ninth	19	1.3	-0.5	4.1	1.5
Tenth	19	28.3	4.3	235.4	52.6
Statewide	192	-6.4%	-37.5%	235.4%	21.1

Source: Based on data from the South Dakota State Department of Education.

Table A-8

Descriptive Statistics of Enrollment Change Among Washington School Districts by Deciles of Percent Change in Students, 1970-71 to 1974-75

Decile	Number of School Districts	Percent Changes in Students, 1970-71 to 1974-75 Average	Minimum	Maximum	Standard Deviation
First	30	-28.2%	-16.5%	-85.9%	17.2
Second	29	-12.6	-10.4	-16.5	1.8
Third	30	-8.6	-7.3	-10.4	1.0
Fourth	30	-5.6	-4.4	-7.3	0.8
Fifth	30	-2.2	-0.5	-4.3	1.2
Sixth	29	0.9	-0.5	2.3	0.9
Seventh	30	4.1	2.3	6.4	1.2
Eighth	30	8.8	6.4	12.5	1.6
Ninth	29	16.9	12.6	22.3	2.9
Tenth	30	46.3	22.4	204.3	42.7
Statewide	297	2.0%	-85.9%	204.3%	23.8

Source: Based on data from the Washington State Department of Education.

Table A-9

Average Change in Student Enrollment by Grade Level Among Michigan School Districts by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment	Average change in Student Enrollment Grades K-3	Grades 4-6	Grades 7-9	Grades 10-12
First	-19.4%	-348	-197	-215	-183
Second	-9.0	-307	-143	-110	-58
Third	-4.7	-139	-35	30	62
Fourth	-1.8	-99	-16	48	60
Fifth	0.9	-60	18	48	42
Sixth	3.9	-56	41	98	128
Seventh	6.6	-9	42	73	90
Eighth	10.1	10	66	67	22
Ninth	16.4	58	87	106	86
Tenth	41.7	144	141	92	72
Statewide	4.4%	-82	0	23	32

Source: Based on data from the Michigan State Department of Education.

Table A-10

Average Change in Student Enrollment by Grade Level Among Missouri School Districts by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment	Average Change in Student Enrollment Kindergarten	Grades 1-8	Grades 9-12
First	-17.1%	157	-503	268
Second	-10.0	88	-78	125
Third	-7.0	75	-8	64
Fourth	-4.2	71	-35	87
Fifth	-.8	53	39	62
Sixth	1.6	80	72	121
Seventh	4.2	87	107	129
Eight	8.4	79	144	149
Ninth	13.4	102	211	172
Tenth	29.0	102	383	281
Statewide	1.7%	89	33	146

Source: Based on data from the Missouri State Department of Education.

Table A-11

Average Change in Student Enrollment by Grade Level Among Washington School Districts by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment	Average Change in Student Enrollment		
		Kindergarten	Grades 1-6	Grades 7-12
First	-28.2%	-142	-562	-380
Second	-12.6	-11	-153	-90
Third	-8.6	51	-528	-62
Fourth	-5.6	-4	-166	11
Fifth	-2.2	-8	-71	29
Sixth	0.9	13	-88	81
Seventh	4.1	2	-53	136
Eighth	8.8	36	-1	205
Ninth	16.9	47	63	228
Tenth	46.3	50	89	133
Statewide	2.0%	8	-150	36

Source: Based on data from the Washington State Department of Education.

Table A-12

Percent Change in Student Enrollment Among Michigan School Districts, 1970-71 to 1974-75, for Seven Ranges of School District Student Enrollment

School District Student Enrollment	Percent Change in Student Enrollment, 1970-71 to 1974-75			
	Average	Minimum	Maximum	Standard Deviation
Under 500 (93 Districts)	9.1%	-48.5%	162.5%	32.7%
500-1000 (76 Districts)	6.4	-14.6	31.5	10.6
1000-2000 (133 Districts)	3.9	-25.9	36.4	10.2
2000-3000 (97 Districts)	6.4	-25.0	50.0	12.8
3000-5000 (90 Districts)	3.4	-22.5	148.2	21.1
5000-10,000 (62 Districts)	0.6	-27.2	39.2	12.8
Over 10,000 (32 Districts)	-4.3	-21.5	28.8	11.3
Statewide	4.4%	-48.5%	162.5%	18.3%

Source: Based on data from the Michigan State Department of Education.

Table A-13

Percent Change in Student Enrollment Among Missouri School Districts, 1970-71 to 1974-75, for Six Ranges of School District Student Enrollment

School District Student Enrollment	Percent Change in Student Enrollment, 1970-71 to 1974-75			
	Average	Minimum	Maximum	Standard Deviation
Under 175 (21 Districts)	-4.4%	-33.9%	18.0%	12.8%
175-375 (91 Districts)	0.3	-17.0	39.8	11.9
375-750 (128 Districts)	2.0	-34.4	116.5	15.4
750-1500 (98 Districts)	2.7	-27.7	47.7	11.7
1500-4500 (80 Districts)	3.8	-17.9	61.2	13.7
4500-10,000 (24 Districts)	3.4	-22.1	62.0	18.0
Over 10,000 (13 Districts)	-4.5	-21.1	19.2	12.9
Statewide (455 Districts)	1.7%	-34.4%	116.5%	13.8%

Source: Based on data from the Missouri State Department of Education.

Table A-14

Percent Change in Student Enrollment Among South Dakota School Districts, 1970-71 to 1974-75, for Six Ranges of School District Student Enrollment

School District Student Enrollment	Percent Change in Student Enrollment, 1970-71 to 1974-75			
	Average	Minimum	Maximum	Standard Deviation
Under 150 (19 Districts)	-3.8%	-37.5%	60.0%	26.1%
150-299 (44 Districts)	-9.5	-28.1	16.0	10.4
300-499 (54 Districts)	-9.1	-30.3	8.1	7.7
500-999 (45 Districts)	-2.5	-22.3	235.4	37.2
1000-9999 (25 Districts)	-4.3	-18.5	24.3	9.5
Over 10,000 (2 Districts)	-8.3	-10.9	-5.8	3.6
Statewide	-6.4%	-37.5%	235.4%	21.1%

Source: Based on data from the South Dakota State Department of Education.

Table A-15

Percent Change in Student Enrollment Among Washington School Districts, 1970-71 to 1974-75, for Seven Ranges of School District Student Enrollment

School District Student Enrollment	Percent Change in Student Enrollment, 1970-71 to 1974-75			
	Average	Minimum	Maximum	Standard Deviation
Under 300 (91 Districts)	3.2%	-85.9%	204.6%	38.9%
300-500 (34 Districts)	3.7	-20.0	48.6	17.6
500-1000 (52 Districts)	1.1	-18.3	29.8	11.2
1000-3000 (60 Districts)	1.6	-19.0	29.6	11.0
3000-5000 (23 Districts)	2.0	-11.4	15.5	9.2
5000-10,000 (20 Districts)	1.6	-17.0	38.7	13.9
Over 10,000 (17 Districts)	-4.2	-19.1	17.2	10.6
Statewide	2.0%	-85.9%	204.3%	23.8%

Source: Based on data from the Washington State Department of Education.

Table A-16

Descriptive Statistics of School District Student Enrollment Among Michigan School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	School District Student Enrollment, 1974-75			
		Average	Minimum	Maximum	Standard Deviation
First	-19.4%	4,787	13	20,196	4,993
Second	-9.0	8,662	23	260,905	34,183
Third	-4.7	4,087	224	31,909	5,680
Fourth	-1.8	3,111	35	23,153	3,974
Fifth	0.9	2,729	20	17,239	3,288
Sixth	3.9	3,173	40	36,291	6,309
Seventh	6.6	2,690	17	21,996	3,477
Eighth	10.1	2,486	23	9,525	2,197
Ninth	16.4	2,340	31	10,003	2,111
Tenth	41.7	2,386	9	26,347	4,057
Statewide	4.4%	3,655	9	260,905	11,650

Source: Based on data from the Michigan State Department of Education.

Table A-17

Descriptive Statistics of School District Student Enrollment, Among Missouri School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	School District Student Enrollment, 1974-75			
		Average	Minimum	Maximum	Standard Deviation
First	-17.1%	4,382	87	77,807	13,275
Second	-10.0	2,098	14	14,123	3,509
Third	-7.0	1,398	128	19,264	2,996
Fourth	-4.2	1,574	80	22,192	3,637
Fifth	-0.8	1,039	138	5,569	1,043
Sixth	1.6	1,503	126	21,552	3,225
Seventh	4.1	1,531	178	9,817	1,878
Eighth	8.4	1,415	93	9,054	1,752
Ninth	13.4	1,604	151	11,325	2,256
Tenth	29.0	2,080	145	21,775	4,234
Statewide	1.7%	1,865	80	77,807	5,066

Source: Based on data from the Missouri State Department of Education.

Table A-18

Descriptive Statistics of School District Student Enrollment Among South Dakota School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	School District Student Enrollment, 1974-75			
		Average	Minimum	Maximum	Standard Deviation
First	-24.8%	273	83	540	163
Second	-17.6	599	82	2,857	608
Third	-14.0	671	46	3,544	876
Fourth	-11.5	1,403	111	17,286	3,869
Fifth	-9.6	424	125	1,622	309
Sixth	-7.7	643	171	2,667	543
Seventh	-5.7	1,531	23	13,128	2,912
Eighth	-2.7	949	87	6,184	1,441
Ninth	1.3	830	171	3,065	860
Tenth	28.3	584	18	1,786	543
Statewide	-6.4%	794	18	17,286	1,687

Source: Based on data from the South Dakota State Department of Education.

Table A-19

Descriptive Statistics of School District Student Enrollment Among Washington School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	School District Student Enrollment, 1974-75			
		Average	Minimum	Maximum	Standard Deviation
First	-28.2%	3,809	4	65,089	12,559
Second	-12.6	1,684	12	11,065	2,363
Third	-8.6	5,766	78	34,329	9,472
Fourth	-5.6	2,328	8	15,262	3,092
Fifth	-2.2	1,774	87	8,860	2,156
Sixth	0.9	2,402	117	16,483	4,264
Seventh	4.1	1,913	47	15,634	3,426
Eighth	8.8	2,334	17	14,520	3,524
Ninth	16.9	2,207	22	17,339	3,459
Tenth	46.3	838	12	8,021	1,693
Statewide	2.0%	2,510	4	65,089	5,776

Source: Based on data from the Washington State Department of Education.

Table A-20

Average Adjusted School Tax Rates and Assessed Valuation Per Pupil Among Michigan School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Average Adjusted School Tax Rates, 1974-75*		Average Adjusted Assessed Valuation Per Pupil, 1974-75*	
		Average	Standard Deviation	Average	Standard Deviation
First	-19.4%	26.0 mills	6.5 mills	$33,023	$19,721
Second	-9.0	26.1 mills	4.4 mills	26,143	12,833
Third	-4.7	25.5 mills	3.9 mills	25,301	14,437
Fourth	-1.8	23.8 mills	3.4 mills	21,550	9,440
Fifth	0.9	23.2 mills	3.9 mills	21,750	7,796
Sixth	4.0	23.5 mills	3.2 mills	23,204	17,129
Seventh	6.6	22.7 mills	4.4 mills	26,317	25,204
Eighth	10.4	22.7 mills	3.3 mills	26,258	20,927
Ninth	16.4	22.6 mills	2.6 mills	22,451	8,411
Tenth	41.7	22.1 mills	6.0 mills	37,867	47,379
Statewide	4.4%	23.8 mills	4.5 mills	$26,389	$21,814

*Assessed valuations and tax rates have been adjusted by official state assessment ratios in order to obtain comparable levels.

Source: Based on data from the Michigan State Department of Education.

Table A-21

Average Adjusted School Tax Rates and Assessed Valuation Per Pupil Among Missouri School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Average Adjusted School Tax Rates, 1974-75*		Average Adjusted Assessed Valuation Per Pupil, 1974-75*	
		Average	Standard Deviation	Average	Standard Deviation
First	-17.1%	$2.40	$0.80	$24,980	$10,329
Second	-10.0	2.20	0.80	21,466	11,943
Third	-7.0	1.90	0.50	22,677	7,939
Fourth	-4.2	1.80	0.40	20,430	8,709
Fifth	-0.8	1.80	0.40	19,107	7,660
Sixth	1.6	1.80	0.50	19,379	9,967
Seventh	4.1	1.80	0.50	19,090	9,362
Eighth	8.4	2.00	0.60	17,987	11,831
Ninth	13.4	2.00	0.70	16,921	7,077
Tenth	29.0	2.10	0.70	17,529	7,479
Statewide	1.7%	$2.00	$0.60	$19,965	$9,577

*Assessed valuations and tax rates have been adjusted by official state assessment ratios in order to obtain comparable levels.

Source: Based on data from the Missouri State Department of Education.

Table A-22

Average Adjusted School Tax Rates and Assessed Valuation Per Pupil Among South Dakota School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Average Adjusted School Tax Rates, 1974-75*		Average Adjusted Assessed Valuation Per Pupil, 1974-75*	
		Average	Standard Deviation	Average	Standard Deviation
First	-24.8%	37.2 mills	7.3 mills	$22,204	$9,967
Second	-17.6	37.8 mills	5.2 mills	18,526	5,555
Third	-14.0	39.0 mills	6.8 mills	18,816	4,479
Fourth	-11.5	37.5 mills	6.3 mills	19,079	5,742
Fifth	-9.6	36.6 mills	6.0 mills	16,993	2,988
Sixth	-7.7	36.1 mills	6.6 mills	19,514	8,051
Seventh	-5.7	38.6 mills	6.8 mills	15,040	5,006
Eighth	-2.7	37.5 mills	9.9 mills	18,391	8,043
Ninth	1.3	39.3 mills	6.4 mills	13,698	4,187
Tenth	28.3	38.5 mills	9.4 mills	16,070	8,463
Statewide	-6.4%	37.8 mills	7.1 mills	$17,827	16,854

*Assessed valuations and tax rates have been adjusted by official state assessment ratios in order to obtain comparable levels.

Source: Based on data from the South Dakota State Department of Education.

Table A-23

Average Adjusted School Tax Rates and Adjusted Assessed Valuation Per Pupil Among Washington School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Average Adjusted School Tax Rates, 1974-75*		Average Adjusted Assessed Valuation Per Pupil, 1974-75*	
		Average	Standard Deviation	Average	Standard Deviation
First	-28.2%	3.8 mills	2.9 mills	$369,946	$706,245
Second	-12.6	5.2 mills	2.7 mills	108,607	121,232
Third	-8.6	4.9 mills	2.6 mills	87,307	70,548
Fourth	-5.6	4.1 mills	2.2 mills	146,844	301,836
Fifth	-2.2	3.1 mills	2.3 mills	80,127	53,031
Sixth	0.9	4.2 mills	3.2 mills	95,514	67,660
Seventh	4.1	3.2 mills	2.5 mills	116,532	127,776
Eighth	8.8	4.0 mills	2.7 mills	85,833	75,538
Ninth	16.9	3.3 mills	2.7 mills	105,771	176,198
Tenth	46.3	2.2 mills	2.0 mills	141,117	210,170
Statewide	2.0%	3.8 mills	2.7 mills	$134,073	$276,647

*Assessed valuations and tax rates have been adjusted by official state assessment ratios in order to obtain comparable levels.

Source: Based on data from the Washington State Department of Education.

Table A-24

Average Revenue Per Pupil by Source Among Michigan School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Average Revenue Per Pupil, 1974-1975			
		Local Sources	State Sources	Federal Sources	Other Sources
First	-19.4%	$873	$326	$24	$1
Second	-9.0	760	431	17	2
Third	-4.7	726	455	18	1
Fourth	-1.8	603	484	7	1
Fifth	0.9	580	475	6	1
Sixth	4.0	611	500	16	2
Seventh	6.6	632	485	29	1
Eighth	10.1	650	455	13	1
Ninth	16.4	597	448	10	1
Tenth	41.7	750	373	14	2
Statewide	4.4%	$679	$443	$15	$1

Source: Based on data from the Michigan State Department of Education.

Table A-25

Average Revenue Per Pupil by Source Among Missouri School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Average Revenue Per Pupil, 1974-75			
		Local Sources	County Sources	State Sources	Federal Sources
First	-17.1%	$625	$97	$445	$81
Second	-10.0	504	96	498	92
Third	-7.0	460	112	455	46
Fourth	-4.2	408	104	487	54
Fifth	-.8	374	90	492	44
Sixth	1.6	374	90	510	53
Seventh	4.2	362	95	500	50
Eighth	8.4	360	98	509	44
Ninth	13.4	350	77	517	40
Tenth	29.0	375	75	506	41
Statewide	1.7%	$420	$94	$492	$54

Source: Based on data from the Missouri State Department of Education.

Table A-26

Average Revenue Per Pupil by Source Among South Dakota School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change Student Enrollment, 1970-71 to 1974-75	Average Revenue Per Pupil, 1974-75				
		Local Sources	County Sources	State Sources	Federal Sources	Other Sources
First	-24.8%	$933	$8	$269	$94	$36
Second	-17.6	788	7	198	88	13
Third	-14.0	839	10	209	67	17
Fourth	-11.5	803	11	201	71	7
Fifth	-9.6	738	9	218	60	8
Sixth	-7.7	777	12	203	81	12
Seventh	-5.7	650	9	206	165	4
Eighth	-2.7	764	9	205	107	13
Ninth	1.3	603	10	225	147	33
Tenth	28.3	703	12	204	114	30
Statewide	-6.4%	$759	$10	$214	$100	$17

Source: Based on data from the South Dakota State Department of Education.

Table A-27

Average Revenue Per Pupil by Source Among Washington School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Average Revenue Per Pupil, 1974-75				
		Local Sources	County Sources	State Sources	Federal Sources	Other Sources
First	-28.2%	$1,497	$79	$1,165	$204	$164
Second	-12.6	620	48	672	106	86
Third	-8.6	461	50	694	103	87
Fourth	-5.6	434	62	689	93	78
Fifth	-2.2	328	56	673	210	83
Sixth	0.9	409	70	626	133	87
Seventh	4.1	392	49	654	174	82
Eighth	8.8	365	55	654	202	93
Ninth	16.9	345	46	652	119	69
Tenth	46.3	326	68	792	123	83
Statewide	2.0%	$518	$58	$728	$147	$54

Source: Based on data from the Washington State Department of Education.

Table A-28

Averages for Total, Instructional and Administrative Expenditures Per Pupil Among Missouri School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change Student in Enrollment, 1970-71 to 1974-75	Average Total Current Operational Expenditures Per Pupil, 1974-75	Average Instructional Salary Expenditures Per Pupil, 1974-75	Average Administrative Expenditures Per Pupil, 1974-75
First	-17.1%	$1,211	$655	$118
Second	-10.0	1,149	640	107
Third	-7.0	1,054	575	95
Fourth	-4.2	1,004	536	103
Fifth	-.8	955	525	83
Sixth	1.6	975	532	81
Seventh	4.1	962	528	75
Eighth	8.4	955	514	91
Ninth	13.4	951	522	85
Tenth	29.0	935	526	74
Statewide	1.7%	$1,015	$555	$91

Source: Based on data from the Missouri State Department of Education.

Table A-29

Averages for Total, Instructional and Administrative Expenditures Per Pupil Among Michigan School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change Student in Enrollment, 1970-71 to 1974-75	Average Total Current Operational Expenditures Per Pupil, 1974-75	Average Instructional Salary Expenditures Per Pupil, 1974-75	Average Percent Increase in Instructional Salary Expenditures Per Pupil, 1970-71 to 1974-75	Average Administrative Expenditures Per Pupil, 1974-75	Average Percent Increase in Administrative Expenditures Per Pupil, 1970-71 to 1974-75
First	-19.4%	$1,162	$683	41%	$103	61%
Second	-9.0	1,146	652	40	104	49
Third	-4.7	1,147	658	38	98	40
Fourth	-1.8	1,028	590	37	85	37
Fifth	0.9	1,011	579	36	84	45
Sixth	3.9	1,048	600	37	86	39
Seventh	6.6	1,057	593	34	91	40
Eighth	10.1	1,009	583	38	87	38
Ninth	16.4	985	554	35	86	41
Tenth	41.7	1,011	551	24	97	49
Statewide	4.4%	$1,063	$603	36%	$92	44%

Source: Based on data from the Michigan State Department of Education.

Table A-30

Averages for Total, Instructional and Administrative Expenditures Per Pupil and Pupil-Teacher Ratios Among South Dakota School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change Student in Enrollment, 1970-71 to 1974-75	Average Current Operational Expenditures Per Pupil, 1974-75	Average Instructional Salary Expenditures Per Pupil, 1974-75	Average Administrative Expenditures Per Pupil, 1974-75	Average Pupil-Teacher Ratio, 1974-75
First	-24.8%	$1,269	$744	$93	12
Second	-17.6	1,085	638	62	14
Third	-14.0	1,073	628	63	16
Fourth	-11.5	1,086	690	77	14
Fifth	-9.6	983	617	67	14
Sixth	-7.7	1,047	659	59	14
Seventh	-5.7	1,012	608	47	16
Eighth	-2.7	1,029	610	62	15
Ninth	1.3	965	569	60	16
Tenth	28.3	964	501	64	17
Statewide	-6.4%	$1,051	$626	$65	15

Source: Based on data from the South Dakota State Department of Education.

Table A-31

Averages for Total, Instructional and Administrative Expenditures Per Pupil Among Washington School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change Student in Enrollment, 1970-71 to 1974-75	Average Current Operational Expenditures Per Pupil, 1974-75	Average Instructional Salary Expenditures Per Pupil, 1974-75	Average Percent Increase in Instructional Salary Expenditures Per Pupil, 1970-71 to 1974-75	Average Administrative Expenditures Per Pupil, 1974-75	Average Percent Increase in Administrative Expenditures Per Pupil, 1970-71 to 1974-75
First	-28.2%	$3,033	$1,872	123%	$185	191%
Second	-12.6	1,492	992	58	86	92
Third	-8.6	1,401	982	47	69	79
Fourth	-5.6	1,353	942	47	67	44
Fifth	-2.2	1,312	909	45	61	67
Sixth	0.9	1,348	894	45	86	60
Seventh	4.1	1,336	885	50	74	105
Eighth	8.8	1,336	872	43	75	39
Ninth	16.9	1,280	880	54	61	35
Tenth	46.3	1,343	830	33	67	40
Statewide	2.0%	$1,525	$1,007	55%	$83	75%

Source: Based on data from the Washington State Department of Education.

Table A-32

Average Pupil-Teacher Ratios and Average Teacher Salaries Among Michigan School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Average Pupil-Teacher Ratios, 1974-75	Average Change in Pupil-Teacher Ratios, 1970-71 to 1974-75	Average Teacher Salaries, 1974-75	Average Change in Teacher Salaries, 1970-71 to 1974-75
First	-19.4%	21.0	-2.4	$14,789	$2,567
Second	-9.0	21.3	-1.8	13,145	2,409
Third	-4.7	21.8	-1.5	13,191	2,758
Fourth	-1.8	21.9	-2.0	12,184	2,170
Fifth	0.9	22.5	-1.7	12,417	2,221
Sixth	3.9	22.2	-2.2	12,006	2,409
Seventh	6.6	22.8	-0.9	12,460	2,488
Eighth	-10.1	22.6	-1.8	12,241	2,207
Ninth	16.4	23.2	-1.3	11,980	2,293
Tenth	41.7	22.8	0.8	12,245	2,293
Statewide	4.4%	22.2	-1.4	$12,637	$2,382

Source: Based on data from the Michigan State Department of Education.

Table A-33

Average Pupil-Teacher Ratios and Average Teacher Salaries Among Missouri School Districts, 1974-75, by Deciles of Percent Change in Students, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Average Pupil-Teacher Ratios, 1974-75	Average Teacher Salaries, 1974-75
First	-17.1%	16	$8,988
Second	-10.0	16	8,537
Third	-7.0	16	8,099
Fourth	-4.2	17	8,156
Fifth	-0.8	18	8,106
Sixth	1.6	17	8,126
Seventh	4.2	18	8,252
Eighth	8.4	18	8,262
Ninth	13.4	18	8,166
Tenth	29.0	19	8,124
Statewide	1.7%	17	$8,282

Source: Based on data from the Missouri State Department of Education.

Table A-34

Average Pupil-Staff Ratios and Average Teacher Salaries Among Washington School Districts, 1974-75, by Deciles of Percent Change in School Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Average Pupil-Staff Ratio, 1974-75	Average Change in Pupil-Staff Ratios, 1970-71 to 1974-75	Average Teacher Salaries, 1974-75	Average Change in Teacher Salaries, 1970-71 to 1974-75
First	-28.2%	12.8	-2.4	$10,689	$2,139
Second	-12.6	15.9	-2.0	11,249	1,604
Third	-8.6	16.4	-1.3	11,910	2,255
Fourth	-5.6	16.5	-1.6	11,471	2,028
Fifth	-2.2	17.6	-0.8	11,612	2,114
Sixth	0.9	17.2	-0.9	11,273	2,070
Seventh	4.2	18.3	-0.2	11,044	2,035
Eighth	8.8	18.5	0.4	11,426	2,209
Ninth	16.9	19.8	-0.3	11,093	1,946
Tenth	46.3	19.0	1.9	10,022	1,624
Statewide	2.0%	17.2	-0.7	$11,178	$2,004

Source: Based on data from the Washington State Department of Education.

Table A-35

Averages for Selected Expenditures Per Pupil Among Michigan School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent in Student Enrollment, 1970-71 to 1974-75	Average Transportation Expenditures Per Pupil, 1974-75	Average Operation and Maintenance of Plant Expenditures Per Pupil, 1974-75	Average Fixed Charges Per Pupil, 1974-75
First	-19.4%	$42	$178	$61
Second	-9.0	57	171	63
Third	-4.7	61	165	66
Fourth	-1.8	72	147	58
Fifth	0.9	76	136	57
Sixth	3.9	90	147	60
Seventh	6.6	91	140	61
Eighth	10.1	83	143	55
Ninth	16.4	87	129	58
Tenth	41.7	98	137	52
Statewide	4.4%	$75	$149	$59

Source: Based on data from the Michigan State Department of Education.

Table A-36

Averages for Selected Expenditures Per Pupil Among Missouri School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Average Transportation Expenditures Per Pupil, 1974-75	Average Operation and Maintenance of Plant Expenditures Per Pupil, 1974-75	Average Fixed Charges Per Pupil, 1974-75
First	-17.1%	$79	$140	$89
Second	-10.0	82	129	84
Third	-7.0	93	120	75
Fourth	-4.2	83	115	73
Fifth	-0.8	90	104	68
Sixth	1.6	91	106	67
Seventh	4.2	90	108	66
Eighth	8.4	83	110	66
Ninth	13.4	84	113	66
Tenth	29.0	81	102	67
Statewide	1.7%	$86	$115	$72

Source: Based on data from the Missouri State Department of Education.

Table A-37

Averages for Selected Expenditures Per Pupil Among South Dakota School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent in Student Enrollment, 1970-71 to 1974-75	Average Transportation Expenditures Per Pupil, 1974-75	Average Operation and Maintenance of Plant Expenditures Per Pupil, 1974-75	Average Fixed Charges Per Pupil, 1974-75	Average Other Expenditures Per Pupil, 1974-75
First	-24.8%	$105	$145	$125	$23
Second	-17.6	83	111	95	11
Third	-14.0	83	114	97	13
Fourth	-11.5	76	115	105	12
Fifth	-9.6	77	110	93	13
Sixth	-7.7	81	120	97	12
Seventh	-5.7	71	102	83	19
Eighth	-2.7	78	112	91	15
Ninth	1.3	70	97	82	15
Tenth	28.3	56	86	75	18
Statewide	-6.4%	$78	$111	$94	$15

Source: Based on data from the South Dakota State Department of Education.

Table A-38

Averages for Selected Expenditures Per Pupil Among Washington School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent In Student Enrollment, 1970-71 to 1974-75	Average Transportation Expenditures Per Pupil, 1974-75	Average Operation and Maintenance of Plant Edpenditures Per Pupil, 1974-75
First	-28.2%	$337	$499
Second	-12.6	113	221
Third	-8.6	92	184
Fourth	-5.6	97	176
Fifth	-2.2	92	181
Sixth	0.9	111	183
Seventh	4.1	116	175
Eighth	8.8	117	202
Ninth	16.9	102	168
Tenth	46.3	208	179
Statewide	2.0%	$139	$217

Source: Based on data from the Washington State Department of Education.

Table A-39

Descriptive Statistics for Percent Minority Students Among Michigan School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Percent Minority Students, 1974-75			
		Average	Minimum	Maximum	Standard Deviation
First	-19.4%	8.2%	0%	84.6%	17.0
Second	-9.0	11.6	0	71.8	19.6
Third	-4.7	6.9	0.2	92.7	14.4
Fourth	-1.8	3.4	0	18.9	4.2
Fifth	0.9	4.7	0	92.5	12.7
Sixth	4.0	3.3	0	42.0	6.8
Seventh	6.6	4.2	0	24.3	5.9
Eighth	10.2	4.4	0	52.4	8.4
Ninth	16.4	2.4	0	16.3	3.2
Tenth	41.7	2.3	0	22.2	4.3
Statewide	4.4%	5.2%	0%	92.7%	11.4

Source: Based on data from the Michigan State Department of Education.

Table A-40

Descriptive Statistics for Percent Minority Students Among Missouri School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Percent Minority Students, 1974-75			
		Average	Minimum	Maximum	Standard Deviation
First	-17.1%	36.1%	2.9%	98.0%	27.7
Second	-10.0	18.5	1.9	66.2	21.5
Third	-7.0	1.9	1.9	1.9	0
Fourth	-4.2	6.2	0	14.2	5.9
Fifth	-0.8	17.6	15.2	20.0	3.4
Sixth	1.6	5.5	5.5	5.5	0
Seventh	4.1	8.7	0	15.6	5.9
Eighth	8.4	2.9	1.8	3.9	1.5
Ninth	13.4	11.8	1.9	21.7	14.0
Tenth	29.0	1.9	1.0	2.5	.8
Statewide	1.7%	18.2%	0%	98.0%	22.1

Source: Based on data from the Missouri State Department of Education.

Table A-41

Descriptive Statistics for Percent Minority Students Among South Dakota School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Percent Minority Students, 1974-75			
		Average	Minimum	Maximum	Standard Deviation
First	-24.8%	3.5%	0%	20.2%	6.3
Second	-17.6	1.5	0	13.2	3.3
Third	-14.0	2.7	0	19.2	5.0
Fourth	-11.5	1.4	0	7.2	2.4
Fifth	-9.6	1.6	0	10.7	2.5
Sixth	-7.7	2.7	0	22.8	5.0
Seventh	-5.7	11.8	0	80.6	24.1
Eighth	-2.7	7.1	0	33.6	10.5
Ninth	1.3	7.8	0	35.1	11.7
Tenth	28.3	6.2	0	84.9	19.3
Statewide	-6.4%	4.7%	0%	84.9%	11.8

Source: Based on data from the South Dakota State Department of Education.

Table A-42

Descriptive Statistics for Percent Minority Students Among Washington School Districts, 1974-75, by Deciles of Percent Change in Student Enrollment, 1970-71 to 1974-75

Decile	Average Percent Change in Student Enrollment, 1970-71 to 1974-75	Percent Minority Students, 1974-75			
		Average	Minimum	Maximum	Standard Deviation
First	-28.2%	4.8%	0%	25.9%	6.4
Second	-12.6	9.2	0	64.5	14.7
Third	-8.8	10.3	0.5	56.4	11.8
Fourth	-5.6	7.5	0	57.9	14.3
Fifth	-2.2	11.8	0	88.2	19.4
Sixth	0.9	7.0	0	71.8	13.2
Seventh	4.1	7.6	0	41.5	10.4
Eighth	8.8	5.9	0	20.1	4.4
Ninth	16.9	8.2	0	97.2	17.8
Tenth	46.3	11.4	0	92.9	20.0
Statewide	2.0%	8.4%	0%	97.2%	14.1

Source: Based on data from the Washington State Department of Education.

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Education Commission of the States

The Education Commission of the States is a nonprofit organization formed by interstate compact in 1966. Forty-five states, Puerto Rico and the Virgin Islands are now members. Its goal is to further a working relationship among governors, state legislators and educators for the improvement of education. This report is an outcome of one of many Commission undertakings at all levels of education. The Commission offices are located at 300 Lincoln Tower, 1860 Lincoln Street, Denver, Colorado 80203.