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ABSTRACT

As a base for evaluating the need for further federal involvement in school finance, this study examines changes that have taken place in the distribution of resources within the states. It examines the effectiveness of school finance reform solely in terms of results--the resource levels made available in the school districts of a state and the relation between resources and local wealth. The section dealing with the changes in disparity is organized around three questions: What changes have taken place between 1970 and 1975 in overall disparities in the states? What kinds of districts have gained and lost from those changes? What are the costs of further equalization? The section discussing the reform states summarizes the results in all twenty states and then discusses the characteristics of the reforms in each state. Although reform efforts appear to have been swimming against a national tide of increasing disparity, most of the states in which disparities showed substantial increases were nonreform states, most of the states in which disparities were substantially reduced were reform, and most of the states in which resources to low-wealth and urban districts decreased were nonreform. (Author/IRT)

Technical Analysis Paper

SCHOOL FINANCE REFORM IN THE SEVENTIES

ACHIEVEMENTS AND FAILURES

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School Finance Reform in the Seventies: Achievements and Failures

Abstract

The 1970's have marked a time in which increased attention has been directed to disparities in resources among districts in the States. These disparities generally arise because education revenues depend heavily on the local property tax; and, because local wealth varies sharply in different places in a State, so do educational revenues. In this period, some 20 States — in many cases, prompted by their State courts — have reformed their school finance programs.

The school finance reform movement has been studied intensively. Thus far, there has been only scattered evidence of the impact of reform in the nation as a whole, because most studies focus on one or a few States. The present study examines changes between 1970 and 1975 in the distribution of educational resources within all the States, with particular reference to those that effected some kind of reform. The analysis considered both the disparities in expenditures and the relation between disparities and local wealth. The costs of achieving a range of equalization goals are also presented.

The perception of the extent of expenditure disparities depends on the measure employed. This study uses two measures: (1) the ratio of expenditures at the 95th percentile of students to expenditures at the 5th percentile; and (2) the average variation (standard deviation) expressed as a percentage of average expenditures. Results according to the two measures are very similar in ranking States with respect to one another. The prevalence of interdistrict disparities in per-pupil expenditures in 1975 was found to be as follows:

- In 40 States, high-spending districts spent at least 50 percent more per pupil than the low-spending districts.
- In 4 States, high-spending districts spent at least twice as much per pupil as low-spending districts in 1975.
- In 18 States the average variation in per-pupil expenditures was at least 20 percent.

Disparities are only one criterion on which to judge the equity of school finance arrangements. Another is the extent to which per-pupil expenditures depend on local wealth, a dependence that some State courts have insisted must be reduced or eliminated. Resources to low-wealth districts increased in 23 States between 1970 and 1975; but in almost all the States the low-wealth districts remain at a distinct disadvantage relative to wealthier places.

Viewing the nation as a whole in 1975, then, substantial disparities remain, and their link to local wealth continues. We should expect that a different picture would emerge when we focus on the 20 States that passed school finance reform legislation. In fact, however, in 12 of these States disparities actually increased between 1970 and 1975. Of the other 8, most were already fairly well equalized.

Center city districts have expressed concerns that school finance reform may do them harm if it is aimed at removing the link between expenditures and local property wealth. Our analysis confirms that these fears are justified; most center cities do have more than average property wealth per pupil. In this regard, it is noteworthy that in 8 of the 20 reform States the center city districts received a lesser share, relative to districts of other kinds, in 1975 than in 1970. Our findings also suggest, however, that the resource advantage of the cities may be more apparent than real: center city advantages are reduced considerably when the measure of fiscal capacity is shifted from property per pupil to property per capita, which is an approximate way of reflecting the service burden placed on cities by all sectors of the population. Center cities may have less to fear from reforms that take these added burdens into account.

The lack of overall progress does not mean that school finance reform efforts were entirely without effect. Reform efforts appear to have been swimming against a national tide of increasing disparities. Specifically:

- Of the States in which disparities showed substantial increases, most are non-reform States.
- Of the States in which disparities were substantially reduced, more were reform than were non-reform.
- The States that reformed were, in 1970, those most in need of reform. By 1975, however, the reform States had reversed the situation, and the non-reform States exhibited the greatest disparities as a group.
- Of the States in which resources to low-wealth or urban districts decreased, most were non-reform States.

The costs of equalization obviously depend on the level of disparities that are to be permitted. Leveling up all lower spending districts to achieve a 40 percent disparity in each State would have cost $2.5 billion in 1975; leveling up to a 10 percent maximum disparity would have cost four times as much, $10.4 billion. For all levels of equalization, costs as a percent of current State and local outlays have risen between 1970 and 1975. Equalization is now a relatively more expensive proposition because disparities have increased slightly over the five-year period in question. The results of this comparison confirm our earlier conclusion that there has been no progress in the nation as a whole in closing disparity gaps.

CONTENTS

I. INTRODUCTION

The Problem in Brief

Although almost every State constitution makes education a State responsibility, in practice much of the responsibility is delegated to local school districts. By virtue of proximity to the point at which educational services are delivered, the school system is presumably in the best position to make decisions on the form of education appropriate to the needs and preferences of its community. But its decisions are also subject to the constraints imposed by the level of resources that the community can make available for education. That level is determined, for the most part, by taxation on property wealth; and property wealth is distributed nonuniformly throughout the districts in each State. A number of State courts have ruled that substantial disparities in educational resources, when traceable to varying levels of local ability to pay, violate their constitutions by failing to provide equality of educational opportunity to all children.

The Congress has already recognized the national importance of this issue in several ways. The long-standing Federal Impact Aid Program reimburses localities for the costs of educating children of Federally connected workers. Within that program, regulations now permit States that have adequate school finance equalization programs to count as State aid a school district's impact aid grant. More recently, the Congress has authorized grants to assist States in planning for equalization. It is not clear what further role the Federal government ought to play in school

finance within the States. From at least one perspective, however, there is a potential motivation stemming from the Federal drive to eliminate discrimination in schooling and to reduce the effects of educational disadvantage; these programs would be of little avail if the educational system suffers a broader and more pervasive form of shortfall — in resources available to children in less wealthy districts. Moreover, the drive to eliminate discrimination in the core program is consistent with the current Federal focus on equalization of opportunity.

This study examines changes that have taken place in recent years in the distribution of resources within the States, to serve as a base for evaluating the possible need for further Federal involvement in school finance.1/*

Structure of the Study

States have reacted in various ways to the concern for equalization. Some have modified the basic form of their school finance system, others have increased the percentage of total funds that is collected by the State rather than by the localities, and others are studying the problem. Out of this mix of activities, it is difficult to discern the effectiveness of school finance reform. This study examines the effectiveness of school finance reform solely in terms of results — the resource levels made available in the school districts of a State and the relation between resources and local wealth. In contrast to other analyses, the present study examines all the States.2/

* Notes appear at the end of the paper.

A snapshot of the distribution of resources at a single time could, however, be misleading. At least as important is the extent to which the situation has changed over time. If the situation has improved, it may not be unreasonable to assume that it will continue to do so. If there has been little change and if there are severe disparities at present, there may be need for stronger remedial action.

This study therefore describes not only the recent situation but also the changes that have taken place over the past. Ideally, for such a study there would be data available for each of a number of years including the most recent. The real world never makes such data available; but for the purposes of this analysis there are two comparable data bases — one for 1970 and the other for 1975 — that contain generally adequate data for all the States.3/ The movement to reform State school finance programs did not get under way until after 1970, and its initial impacts could be expected to have registered by 1975.

The study begins by examining, in Section II, the changes in disparity in the States, the beneficiaries and losers from the changes, and the costs of further equalization. In Section III we relate the changes in resource allocation to activities that various States have taken in a presumed effort to reform their school financing arrangements. A summary of the findings and conclusions is presented in Section IV.

II. DISPARITY CHANGES: 1970 to 1975

This section presents the changes that have taken place between 1970 and 1975 in the distribution of educational resources. The discussion is organized around three basic questions:

- What changes have taken place between 1970 and 1975 in overall disparities in the States?
- What kinds of districts have gained and lost from those changes?
- What are the costs of further equalization?

To be able to address these questions, two methodological matters must be decided: (1) how resources are to be defined and (2) how disparities are to be measured. The first part of this section addresses these matters.

Methodology

Definition of Resources

Resources are defined here as the portion of current operating expenditures (COE) per pupil that is supported by non-Federal sources. COE is chosen for several reasons: it is a comprehensive measure of educational resources; it excludes capital outlays, which could otherwise make resources appear to be very high in the year of outlay; and it is readily available in national data bases. COE as reported in the data files are based on revenues collected from several sources, including the Federal government. Since the purpose of this study is to examine the distribution of local and State funds, it is necessary to adjust COE to remove Federal revenue.4/ The exception is Federal impact aid, which is treated here as local revenue.5/

Although many analysts have employed expenditures as though they were equivalent with resources, they are not the same. The difference arises principally from the fact that a dollar buys different levels of real educational resources in different parts of a State. Techniques are now under study for identifying and adjusting for the varying costs of education throughout a State, but it has not been possible to apply them in the present study.6/ This shortcoming affects the analyses discussed below differentially, as will be pointed out in the review of the results.

All district expenditure figures are stated on a per-pupil basis. The States count pupils in various ways. Some use average daily attendance (ADA), some use average daily membership (ADM), and some use a combination.7/ Rather than impose one or the other of these measures on all States, this study employs whatever measure the State has used.

Measures of Disparity

Several methods are used to display the effect of resource allocations in the States.

First, it is helpful to have a simple measure for assessing overall disparity in a State — that is, how much disparity there is, without reference to the incidence or causes of the disparity. There is no wholly satisfactory measure of disparity, and the perceived inequality can depend, sometimes quite strongly, on the measure employed. This study employs two measures:

> 95:5 Percentile. The ratio of expenditures at the 95th percentile of students to expenditures at the 5th percentile. The measure is employed here because it is a measure of extreme expenditure disparities and

because it is currently incorporated in Federal regulation. The exclusion of the highest and the lowest five percent is intended to account for circumstances that might justify some extreme unevenness in the distribution of resources.8/ A value of, say, 2.5 means that students at the 95th percentile receive two and one-half times the expenditures per pupil of those at the 5th percentile.

Coefficient of Variation. This measure, which is the standard deviation expressed as a percentage of the mean, provides a statistically meaningful characterization of the entire distribution of expenditures in a State. Although it is more complex than the 95:5 measure, it has a relatively simple interpretation: a value of, say, 12.4, means that approximately one-sixth of the students in the State receive at least 12.4 percent more expenditures than the State average and one-sixth receive at least 12.4 percent less than the average.

To measure change for either of these measures, the value in 1975 is simply divided by the value in 1970. Thus, a value of 85 would indicate that the 1975 disparity is 85 percent of the 1970 disparity.

To address the second question — the gainers and losers from changes between the two years — school districts are grouped according to each of two characteristics. A principal issue in school finance is the extent to which expenditures depend on a locality's wealth or ability to pay. School districts are therefore grouped into those with the least ability to pay, those with the most, and those in the middle.9/ Their expenditures are then compared by reference to the average expenditures in the State. School districts are also grouped according to whether they are center cities in an SMSA, other districts in an SMSA, or not in an SMSA.10/ Again, the expenditures for each such grouping are then compared to the State average.

One final note on the method by which school districts are compared. The resources in each distict are compared to the (pupil-weighted) average in a State of all districts. In some States, every district serves children in both elementary and secondary grades. In others, some districts serve only elementary or only secondary grades. Between elementary districts and secondary districts there are often striking differences in the expenditure levels per pupil, differences that are usually justified in terms of the higher levels of expenditure incurred in advanced courses in high school. In this study no account is taken (or "credit" given) for such differences; the disparities as stated here may therefore overestimate disparities in some States (while possibly underestimating disparities in others).11/

Using these measures and presentation methods, changes in resource distribution between 1970 and 1975 are presented in three sections:

- The first analysis is of variations in resources within each State, without reference to characteristics of the districts.
- The second is of the characteristics of the districts that have gained or lost from 1970 to 1975.
- The third section presents estimates of the costs of further equalization.

Changes in Overall Disparity

Table I presents, for each State, the disparity in 1975 and the percentage change in disparities between 1970 and 1975. Column 1 lists the disparity ratio in 1975 as calculated by the 95:5 measure, and column 2 shows the ratio of the 1975 value to the 1970 value; a ratio greater than 1.0 shows that the disparity in 1975 was greater than in 1970. Columns 3 and 4 present similar calculations for the coefficient of variation. Column 5 summarizes the results of columns 2 and 4, indicating whether or not the change from 1970 to 1975 appears to exhibit an equalizing trend.

Several characteristics of the behavior of the two measures should first be noted. The disparities according to the two measures (columns 1 and 3) are broadly in agreement, although not in every instance. When either measure shows a clear indication of disparity, the other also does. The percentages of change according to the two measures (columns 2 and 4) are also in close agreement, except for Alaska (which is an outlier in both the geographic and the statistical sense) and Delaware. When one measure is close to 100 percent, however, the other sometimes indicates a change in the opposite direction. Finally, the percent change in either direction usually appears greater under the coefficient of variation: If the 95:5 measure shows 102, the coefficient of variation may show 133 (as it does for Idaho), while if the 95:5 measure shows 89 the coefficient of variation may show 63 (as it does for Kansas).

TABLE I: Within-State Disparities, 1975, and Disparity Changes, 1970 to 1975, (Ranking by 95:5 Measure)

	95:5 Percentile		Coefficient of Variation		Disparities Increased or Decreased?*
	1975 (1)	1975/1970 (2)	1975 (3)	1975/1970 (4)	(5)
Georgia	2.41	130	0.28	138	INC
Connecticut	2.29	103	0.21	91	--
Massachusetts	2.19	112	0.23	122	INC
California	2.02	109	0.21	99	--
Vermont	1.99	59	0.21	57	DEC
Montana	1.97	103	0.21	111	INC
New Jersey	1.95	101	0.20	104	--
Illinois	1.90	93	0.22	95	DEC
Tennessee	1.90	99	0.21	91	--
Kentucky	1.86	109	0.20	119	INC
New York	1.85	113	0.23	140	INC
Washington	1.83	110	0.18	108	INC
Wyoming	1.82	116	0.21	125	INC
Mississippi	1.80	105	0.17	103	INC
Texas	1.79	94	0.20	87	DEC
Arkansas	1.78	92	0.18	99	--
New Hampshire	1.78	94	0.16	95	DEC
Ohio	1.78	100	0.20	105	--
Virginia	1.78	108	0.27	123	INC
Colorado	1.77	101	0.18	110	--
Maryland	1.77	111	0.20	139	INC
Missouri	1.73	94	0.24	96	DEC
Nebraska	1.73	106	0.19	127	INC
Arizona	1.71	91	0.17	81	DEC
Michigan	1.71	95	0.17	88	DEC
Delaware	1.70	82	0.18	112	--
Maine	1.67	107	0.16	101	--
Kansas	1.65	89	0.14	63	DEC
S. Carolina	1.65	99	0.14	104	--
Minnesota	1.62	111	0.15	116	INC
Wisconsin	1.59	100	0.16	96	--
Rhode Island	1.58	90	0.13	70	DEC
Pennsylvania	1.57	100	0.17	104	--
North Dakota	1.53	79	0.14	82	DEC
Idaho	1.51	102	0.16	133	INC
N. Carolina	1.51	101	0.12	103	--
Oklahoma	1.51	91	0.20	102	--
Indiana	1.50	94	0.13	99	--
Oregon	1.50	100	0.14	118	--
South Dakota	1.50	88	0.13	74	DEC
West Virginia	1.49	100	0.13	91	--
Alabama	1.43	100	0.12	103	--
New Mexico	1.41	94	0.13	91	DEC
Iowa	1.34	74	0.09	51	DEC
Louisiana	1.32	99	0.10	104	--
Florida	1.30	85	0.09	67	DEC
Alaska	1.29	99	0.16	211	--
Utah	1.27	100	0.09	101	--
Nevada	1.18	98	0.07	96	DEC
Hawaii	1.00	--	0.00	--	--

*Determined by two or more percentage point change according to both measures (columns 2 and 4).

The States with the greatest disparities (columns 1 and 3) show no regional patterns, including States from every part of the country. They do include, however, several of the nation's largest States. The 12 States with greatest disparities enroll approximately 38 percent of the nation's public school students. At the opposite end of the ranking, States with the least disparity tend to be those with the smallest populations, the only exception being Florida. It is noteworthy that the six States with the least disparity also operate relatively few school systems.12/

Columns 2 and 4 show the change from 1970 to 1975, as a percent. Among the 12 States with the greatest disparities, only Vermont exhibits a large decrease in disparities --but it must be pointed out that Vermont's starting point in 1970 was extremely unequalized.*

Column 5 of the table is an attempt to use the information in columns 2 and 4 to arrive at a summary of progress. Such a judgment depends, of course, on how much of a change is required to indicate progress. We use the following criterion: if a State's disparities increased or decreased by two or more percentage points on both measures, it is marked as INC or DEC, respectively; otherwise, it is considered indeterminate. On this criterion, disparities decreased in 15 States, increased in 13 States, and were indeterminate in the remainder. The mixed nature of the results is not strongly dependent on the two-percent criterion; as inspection of the table

* In Vermont in 1970, the 95:5 measure showed a disparity ratio of 3.36, and the coefficient of variation was 0.38, higher figures than for any other State in that year.

will show, the use of five percentage points would result in 13 States decreasing and 10 States increasing disparities.

Of course, column 5 does not summarize all the information in Table I, since the judgments on disparity increases or decreases did not take account of the level of disparity in 1975 (columns 1 and 3). We should not be overly concerned if, for instance, disparities increased somewhat in a State that was already well equalized. In fact, this is not what has happened. Almost all of the disparity increases occurred in the 25 States with the most disparity; these States enroll 67 percent of the nation's public school districts. Almost all of the disparity decreases, in contrast, occurred in the other 25 States, those with least disparity in 1975.

Thus far, the study has described the disparities in the States without addressing the question, How much disparity is too much? In considering this question, it is helpful to characterize two views that represent the ends of a spectrum.

Some argue that local control of the schools is essential to effective delivery of education services and that localities must be free to choose the level and types of resources appropriate to the community's needs and desires. They would argue, on principle, that any constraint on a locality's freedom to use its own wealth to support education is counter to the spirit of the free enterprise system — and, on practical grounds, that imposition of such a constraint would lead to a "wealth flight" from public schools like the "white flight" that is sometimes claimed to follow school desegregation.

In opposition, others would hold that — aside from justifiable differences arising from the costs of education or differing pupil needs — there is no reason to permit any variation. They would point to decisions by State courts in school finance cases for support of the view that a State is, in effect, a large school district that establishes local school districts for purposes of educational effectiveness and administrative convenience but not in order to permit school resources to vary from place to place.

These views do not exhaust the issues that arise in considering the extent of permissible variations within a State. It has been argued, for instance, that the costs of equalizing constitute a burden that the already hard-pressed educational system is not equipped to bear; the last part of this section derives estimates of these costs for varying levels of equalization.

It is not the purpose of this study to evaluate these views. It suffices that disparities have been and are a concern not only of the State courts but also of the Federal government. How much disparity, then, is too much? One source of guidance is a criterion set by the Office of Education in determining how a State can qualify to be able to count Federal impact aid as State aid.13/ The State must be operating an effective school finance system, when effectiveness is determined by whether or not its 95:5 measure shows a disparity no greater than 25 percent. According to the results in Table I, only two States, Hawaii and Nevada, could meet this requirement in 1975. The Office of Education

test excludes from the disparity test the spending made for special needs, while the present study has not separately identified such funds. Moreover, these results are based on approximate measures and on a sample of districts. Nonetheless, it is difficult to believe that more precise measurements would result in more than a handful of additional States qualifying in 1975.

Disparities throughout the distribution of a State's districts are not the only concern in school finance. The courts and legislatures have also been concerned about the types of districts that benefit and lose from present distributions. The next part of this section reviews the study's findings about two issues: The relation between expenditures and wealth — a principal concern of school finance cases — and the relative expenditures and wealth available to city districts.

The Incidence of Disparities: Gainers and Losers

The analysis in the preceding section portrays the extent to which overall disparities are being reduced. This is of course not the only criterion on which to judge the equity of a particular school finance arrangement. The principal fault found by State courts is that the level of per-pupil resources depends on the ability of localities to raise revenues to support education; we therefore want to examine the incidence of disparities in places that vary in local wealth per pupil. A second issue arises in connection with the cities. Many have argued that redistribution of educational resources to eliminate the effects of property

wealth would harm the cities, because these areas generally have high property wealth. The second analysis therefore examines the resources available in cities relative to other places. Both analyses examine not only the status in 1975 but also the change from 1970.

Disparities and the Ability to Pay

For this analysis we divide each State's student population into three groups: the 25 percent of the students attending school in districts with the lowest property valuation per pupil, the 25 percent in districts with the highest property valuation, and the middle 50 percent. For each of these groups we have calculated the level of resources relative to the State average.

Table II shows the relation between expenditures and property wealth for each of the three groups. Entries in the table can be understood by reference to Arizona: the 25 percent of the children in districts having the lowest property valuation per pupil (EPV/PUP) received 95 percent of the State's average expenditure in 1975; this represents 118 percent of the level of resources received by the lowest quartile in 1970. Data for this analysis are not available for Alaska and Hawaii; data for 1970 are not available for Alabama and Louisiana. In addition, results for a few of the less populous States are influenced by the sample. It is doubtful, for instance, that the children in Vermont's wealthiest districts received, in 1975, only 93 percent of that State's average expenditure; this problem can be discerned in the results for Montana and Tennessee as well. For most States, however, the results are believed to be a valid approximation to the actual situation.

TABLE II: Resources and Change in Resources, 1970-1975 for Districts of Varying Per-Pupil Property Valuation (Expenditures Relative to State Average)

	Low 25% EPV/PUP		Mid 50% EPV/PUP		High 25% EPV/PUP	
	1975 EXP/PUP	1975/1970	1975 EXP/PUP	1975/1970	1975 EXP/PUP	1975/1970
Alabama	0.95	*	1.01	*	1.02	*
Alaska	*		*		*	
Arizona	0.95	118	0.95	94	1.15	99
Arkansas	0.90	107	0.97	98	1.17	99
California	0.88	101	0.98	102	1.15	95
Colorado	0.86	102	0.94	96	1.26	104
Connecticut	0.90	110	1.04	104	1.02	86
Delaware	0.89	103	1.03	104	1.05	91
Florida	0.92	106	1.01	101	1.07	94
Georgia	0.83	96	0.95	102	1.27	100
Hawaii	*		*		*	
Idaho	0.94	102	0.99	98	1.07	102
Illinois	0.87	105	1.04	102	1.06	92
Indiana	0.90	100	1.00	97	1.10	105
Iowa	0.95	94	1.00	102	1.04	102
Kansas	0.91	104	0.97	103	1.16	93
Kentucky	0.82	99	0.98	98	1.22	105
Louisiana	0.96	*	1.01	*	1.03	*
Maine	0.93	103	1.00	100	1.07	98
Maryland	0.82	88	0.97	102	1.23	106
Massachusetts	0.88	101	1.03	103	1.05	93
Michigan	0.90	105	0.99	102	1.13	94
Minnesota	0.90	96	0.99	98	1.13	109
Mississippi	0.93	107	0.95	100	1.17	96
Missouri	0.86	103	1.00	103	1.13	93
Montana	0.95	114	1.05	111	0.95	75
Nebraska	0.90	98	0.97	98	1.15	105
Nevada	0.99	95	0.98	103	1.04	100
N. Hampshire	0.91	93	1.02	104	1.04	98
New Jersey	0.92	106	0.99	99	1.10	97
New Mexico	1.01	114	0.97	98	1.04	91
New York	0.78	88	0.97	96	1.24	112
N. Carolina	0.93	98	0.97	94	1.12	114
N. Dakota	0.97	117	0.98	94	1.06	98
Ohio	0.83	102	1.00	102	1.16	94
Oklahoma	0.91	110	0.97	101	1.15	93
Oregon	0.91	97	1.00	97	1.08	109
Pennsylvania	0.87	98	1.00	103	1.14	98
Rhode Island	0.92	104	0.99	102	1.11	94
S. Carolina	0.90	104	1.02	102	1.05	93
S. Dakota	0.92	103	0.99	95	1.09	108
Tennessee	0.85	102	0.97	88	1.20	124
Texas	0.85	103	1.00	102	1.15	96
Utah	0.95	102	1.00	99	1.05	100
Vermont	0.92	105	1.07	116	0.93	73
Virginia	0.87	102	0.91	96	1.31	104
Washington	0.92	105	0.97	96	1.13	103
W. Virginia	0.91	97	0.97	103	1.14	97
Wisconsin	0.93	98	1.01	105	1.04	93
Wyoming	0.95	111	0.94	98	1.17	96

* Data Not Available.

The table confirms the well-known association between resources and wealth. In every State except New Mexico, children in low-wealth districts receive less than the State average. In general, the middle 50 percent of the children receive about the average, and the children in high-wealth districts receive more — sometimes much more, as in Colorado, Georgia, Kentucky, Maryland, New York, Tennessee, and Virginia, all of which make at least 20 percent more than the State average available to children in high-wealth districts.

The second column under each EPV grouping reflects the change in expenditures, where a figure of more than 100 percent indicates that the group received higher levels in 1975 than in 1970. A comparison of these columns across the three groupings reflects a positive change in 14 States in reducing the link between expenditures and property evaluation; that is, in 14 States the low-wealth children gained at least a percentage point per year between 1970 and 1975. This is seen particularly in New Mexico, where the low-wealth children received 114 percent of the expenditures in 1975 than that quartile received in 1970, while its high-wealth children received 91 percent of the 1970 levels. Somewhat the same patterns can be seen in Connecticut, Delaware, Rhode Island, South Carolina, and Wyoming. In several States, the low-wealth children gained but at the expense of the middle 50 percent of the children rather than at the expense of the high-wealth children; this pattern is seen to some extent in South Dakota, Arizona, North Dakota, Washington, and Virginia.

Disparities and Urban Status

Administrators in center city school districts have expressed a concern that school finance reform, if aimed at removing the link between expenditures and wealth, may harm the cities, which generally have more than average property wealth per pupil. They argue that not as much of the wealth can actually be applied to education as in other places because cities bear disproportionately higher burdens for other municipal functions. They also argue that a comparison based on expenditures is open to question, because it does not take into account the higher costs of educational resources in the cities. There are therefore two questions of interest: how do expenditures in center city districts compare with expenditures in other districts, and what is the apparent wealth in these places?

Table III examines expenditures in center city districts in Standard Metropolita Statistical Areas (SMSAs), other districts in SMSAs, and districts not in SMSAs. For each district grouping there are two columns: the 1975 expenditures relative to the State average and the change in expenditures over the time under study (the 1975 value divided by the 1970 value).

Center city districts in most States spend at or above the State average; in half the States, spending in such districts is at least six percent higher than the State average. Only in Maryland are center city districts well below the average for all places; presumably, this result is dominated by Baltimore. Other districts in SMSAs spend at about the State average, and districts not in SMSAs generally spend less than the average for their States.

TABLE III: Expenditures, 1975, and Expenditure Changes, 1970 to 1975, by Urban Type
(Expenditures Relative to State Average)

	Center Cities in SMSAs		Other in SMSA		Not in SMSA	
	EXP/PUP 1975 (1)	1975/1970 (2)	EXP/PUP 1975 (3)	1975/1970 (4)	EXP/PUP 1975 (5)	1975/1970 (6)
Alabama	1.02	98	1.03	104	0.98	99
Alaska	-- *	--	-- *	--	1.00	100
Arizona	1.01	87	0.99	101	0.98	111
Arkansas	1.17	95	0.94	102	0.98	101
California	1.04	99	0.98	101	0.93 *	100
Colorado	1.16	106	0.96	102	0.91	93
Connecticut	1.03	101	1.01	99	0.94	102
Delaware	1.27	102	1.01	98	0.90	104
Florida	0.97	104	1.04	101	0.96	100
Georgia	1.24	101	1.06	102	0.86	95
Hawaii	1.00	100	-- *	--	-- *	--
Idaho	1.21	109	0.83 *	101	0.98	99
Illinois	1.15	103	0.98	99	0.85	100
Indiana	1.07	98	0.95	99	0.97	102
Iowa	1.01	87	0.97	103	1.00	104
Kansas	0.98	107	0.94	96	1.03	98
Kentucky	1.14 *	91	1.20	108	0.91	100
Louisiana	1.01	96	1.01	103	0.99	102
Maine	0.99	98	1.11	97	0.99	101
Maryland	0.83	87	1.08	102	0.90	106
Massachusetts	1.14	116	0.97	96	0.90	93
Michigan	1.04	96	1.02	99	0.93	108
Minnesota	1.17	111	0.97	95	0.97	100
Mississippi	1.29 *	104	0.93 *	99	0.98	100
Missouri	1.06	111	1.05	96	0.91	102
Montana	1.10	114	0.82 *	78	0.97	96
Nebraska	1.00	99	0.90	100	1.02	100
Nevada	0.98	93	0.98	103	1.07	99
N. Hampshire	0.95	100	0.90 *	91	1.02	101
New Jersey	0.94	102	1.01	99	1.01	102
New Mexico	0.98	100	-- *	--	1.01	100
New York	1.17	113	0.95	95	0.79	89
N. Carolina	1.15	100	1.00	109	0.95	99
N. Dakota	1.22 *	92	0.99 *	96	0.98	101
Ohio	1.14	99	1.00	99	0.86	103
Oklahoma	1.09	97	0.94	107	0.97	98
Oregon	1.08	110	0.98	98	0.97	96
Pennsylvania	1.09	94	1.00	102	0.90	101
Rhode Island	1.12	95	0.93	104	1.02	103
S. Carolina	1.28 *	115	0.98	96	0.99	101
S. Dakota	1.03	96	0.94 *	84	1.00	101
Tennessee	1.21	98	0.99	86	0.89	108
Texas	0.99	101	0.98	102	1.04	96
Utah	1.07	102	0.95	99	1.08	103
Vermont	-- *	--	-- *	--	1.00	100
Virginia	1.10	104	1.11	104	0.85	90
Washington	1.19	101	0.98	97	0.91	105
W. Virginia	1.10 *	93	1.13	99	0.95	102
Wisconsin	1.09	107	1.02	96	0.93	99
Wyoming	-- *	--	-- *	--	1.00	100

*Less than 10 percent of the State's pupils are in districts of this urban type.

It is appropriate to recall here the claim that the apparent advantage of the center cities would diminish if a measure were employed that was sensitive to the cost differences between urban and other places. This claim can reasonably be directed to columns 1, 3, and 5 in the table, which are based on expenditures in a given year, unadjusted for cost differences. The estimates of change presented in columns 2, 4, and 6 are much less affected by the lack of a cost adjustment; that is, the change in resources, however resources are measured, should provide meaningful information. Overall, center cities were gainers in half the States and losers in the others. If attention is directed solely to the States in which there are substantial numbers of population in center cities, however, it can be seen that the center-city districts generally kept about even or bettered their status from 1970 to 1975. Of course, it is necessary to view gains and losses in the perspective of where center cities stand in 1975; the center cities in Ohio, for instance, did not improve their status over this five-year period, but their 1975 expenditures were 1.14 of Ohio's average.

The second issue of interest in center-city districts is the extent to which property valuation may present a misleading estimate of a district's ability to support education. Table IV presents, for the three district groupings, property valuation per pupil (EPV/PUP) and property valuation per capita (EPV/CAP), the latter being used here as an approximate surrogate of the burden of municipal functions other than education. Both EPV/PUP and EPV/CAP are expressed relative to the State's average. The perception of a center-city district's ability to support

TABLE IV: District Wealth by Urban Type, for Two Measures, 1975

	Center City in SMSA		Other in SMSA		Not in SMSA	
	EPV/PUP	EPV/CAP	EPV/PUP	EPV/CAP	EPV/PUP	EPV/CAP
Alabama	1.25	1.17	1.04	1.07	0.84	0.87
Alaska	n/a	n/a	n/a	n/a	n/a	n/a
Arizona	1.05	0.87	0.88	1.11	1.04	1.26
Arkansas	1.41	1.10	0.82	1.06	0.96	0.96
California	0.89	0.90	1.05	1.05	1.17	1.10
Colorado	1.45	1.05	0.75	0.93	1.00	1.03
Connecticut	1.01	0.81	1.00	1.09	0.99	1.14
Delaware	1.13	0.86	1.15	1.13	0.72	0.83
Florida	0.69	0.67	1.20	1.11	0.89	1.02
Georgia	1.41	1.19	0.95	0.99	0.85	0.90
Hawaii	n/a	n/a	n/a	n/a	n/a	n/a
Idaho	1.05	0.91	0.6 *	1.17	1.01	1.01
Illinois	0.78	0.78	1.19	1.10	0.89	1.06
Indiana	1.12	0.97	0.91	1.04	0.96	1.00
Iowa	0.88	0.78	0.83	0.96	1.08	1.10
Kansas	0.76	0.65	0.79	0.89	1.15	1.16
Kentucky	1.55 *	1.33	1.28	1.21	0.84	0.87
Louisiana	1.43	1.27	0.73	0.75	0.79	0.86
Maine	1.24	0.92	1.16	1.17	0.95	0.99
Maryland	0.63	0.54	1.15	1.18	0.86	0.95
Massachusects	0.79	0.64	1.04	1.12	1.17	1.23
Michigan	1.07	0.81	1.01	1.08	0.94	1.08
Minnesota	1.55	0.98	0.90	1.10	0.88	0.93
Mississippi	2.36 *	1.69	0.79 *	1.06	0.89	0.90
Missouri	1.20	0.94	1.07	1.18	0.79	0.87
Montana	0.88	0.91	1.02 *	1.20	1.05	1.03
Nebraska	1.02	0.88	0.60	1.07	1.08	1.09
Nevada	1.19	1.07	0.89	0.92	1.10	1.15
N. Hampshire	1.00	0.89	0.78 *	0.91	1.02	1.04
New Jersey	0.58	0.63	1.10	1.02	1.02	1.16
New Mexico	0.76	0.73	*		1.13	1.13
New York	1.33	0.94	0.89	1.10	0.66	0.93
N. Carolina	1.45	1.31	0.97	0.99	0.86	0.89
N. Dakota	1.03 *	0.77	1.38 *	1.51	0.89	1.01
Ohio	1.11	0.87	1.02	1.11	0.84	0.95
Oklahoma	1.48	1.26	0.68	0.84	0.82	0.85
Oregon	1.30	1.04	0.83	0.88	0.97	1.09
Pennsylvania	1.22	0.92	1.02	1.10	0.73	0.88
R. Island	1.13	0.94	0.89	1.02	1.12	1.06
S. Carolina	1.11 *	0.83	1.03	1.04	0.97	1.00
S. Dakota	0.82	0.77	1.03 *	1.27	1.02	1.03
Tennessee	1.34	1.13	1.01	1.10	0.82	0.88
Texas	0.95	0.84	0.82	1.01	1.29	1.34
Utah	1.44	0.83	0.80	0.98	1.20	1.26
Vermont	*		*	*	1.00	1.00
Virginia	0.98	0.75	1.07	1.17	0.94	1.00
Washington	1.49	1.00	0.79	0.93	1.01	1.09
W. Virginia	1.45 *	1.15	1.30	1.21	0.87	0.92
Wisconsin	1.03	0.87	1.10	1.19	0.92	1.00
Wyoming	*		*		1.00	1.00

*Less than 10 percent of the State's children are in districts of this grouping.

education varies sharply under the two measures. When EPV/PUP is employed, center cities in most States have higher — in many instances, much higher — wealth than other districts. When EPV/CAP is used, the apparent disadvantage is considerably diminished. The use in this comparison of total population as a base does not imply that it is preferred to the better known measure of valuation per pupil; it is used to demonstrate the sensitivity of results to the measure selected.

The Costs of Further Equalization

The third question addressed here is, What are the costs of further equalization? For two reasons, these costs are calculated for a range of disparity levels. First, there is no consensus on what degree of disparity should be tolerated, and second, the extent of disparity that will be tolerated is in all probability going to depend on perceptions of what can be afforded. Table V shows the costs of leveling each State up to a selected disparity ratio in 1975. The disparity ratio used here is the 95:5 measure. The method used is to increase the spending in districts at the low end, while keeping other districts at their spending levels. Nationally, the costs of leveling up to a disparity ratio of 1.4 in each State would have been $2.55 billion, and the costs to achieve the Office of Education's disparity ratio of 1.25 would have been $5.4 billion. Costs increase fairly proportionately to decreases in the ratio. It is noteworthy that, of the $2.55 billion required to decrease disparity in each State to 1.4, approximately 32 percent is accounted for by the nation's two most populous States, California and New York, which enroll some 16 percent of the nation's elementary and secondary school students.

The costs of equalization have, of course, increased from 1970 to 1975, as Table VI shows for the nation as a whole. A large part of the increase is attributable to inflation; the more meaningful figures in the table are the equalization costs in each year as a percentage of budget in the year, which in effect cancels the impact of inflation. As can be seen, this percentage in 1975 is very close to the percentage in 1970, confirming the

TABLE V: Cost to Level Each State to Selected Disparity Ratios, 1975
(Millions of Dollars)

	95:5 Disparity Ratio						
	1.40	1.30	1.25	1.20	1.15	1.10	1.05
Alabama	1	7	14	24	38	54	73
Alaska	1	1	3	6	9	12	17
Arizona	20	35	45	61	80	101	125
Arkansas	23	39	49	61	75	90	107
California	468	792	989	1,218	1,470	1,753	2,067
Colorado	29	58	78	100	126	155	187
Connecticut	68	108	133	162	198	239	284
Delaware	6	12	17	22	28	35	42
Florida	-	3	7	15	29	64	109
Georgia	210	275	311	352	396	445	498
Hawaii	0	0	0	0	0	0	0
Idaho	2	5	8	12	16	22	28
Illinois	168	272	338	415	503	603	720
Indiana	8	21	33	50	71	100	143
Iowa	2	3	6	12	23	41	67
Kansas	9	24	39	57	78	102	128
Kentucky	31	51	64	80	98	118	142
Louisiana	0	1	5	13	26	43	66
Maine	5	10	15	21	28	36	46
Maryland	87	138	178	222	270	321	378
Massachusetts	262	375	442	514	595	684	783
Michigan	83	161	229	308	401	515	647
Minnesota	25	53	77	108	148	191	240
Mississippi	34	55	67	81	96	114	134
Missouri	35	63	82	106	137	177	221
Montana	12	20	25	33	42	51	62
Nebraska	9	16	23	33	45	59	74
Nevada	-	-	1	1	3	8	14
N. Hampshire	7	13	18	24	31	38	47
New Jersey	130	212	267	333	414	507	612
New Mexico	-	2	3	6	12	22	33
New York	339	529	647	783	940	1,121	1,325
N. Carolina	9	35	59	91	126	168	217
N. Dakota	1	4	6	9	13	18	24
Ohio	97	172	221	275	342	425	521
Oklahoma	3	11	19	27	39	53	72
Oregon	4	12	17	25	37	52	71
Pennsylvania	97	93	134	187	255	338	436
R. Island	3	7	11	16	22	30	41
S. Carolina	11	26	37	53	71	92	115
South Dakota	1	3	6	10	15	21	28
Tennessee	57	87	104	124	150	180	214
Texas	86	153	207	277	358	453	565
Utah	0	0	-	3	11	21	32
Vermont	8	12	15	18	22	26	32
Virginia	78	120	148	180	217	258	303
Washington	50	91	116	147	182	221	267
W. Virginia	2	6	11	18	27	38	50
Wisconsin	16	37	53	77	107	145	190
Wyoming	13	20	24	29	34	40	46
U.S.	2,552	4,243	5,401	6,800	8,455	10,401	12,644

Note: Figures may not add due to rounding.

evidence presented earlier: for the nation as a whole, relatively little change has taken place in this period and the change appears to have been in the wrong direction.

Table VI. National Equalization Costs, 1970 and 1975, at Selected Disparity Ratios

	95:5 Disparity Ratio						
	1.40	1.30	1.25	1.20	1.15	1.10	1.05
1970							
Eq. Cost ($M)	1,259	2,221	2,894	3,715	4,763	6,005	7,421
% of 1970 Budget	4.4	7.7	10.0	12.9	16.5	20.8	25.7
1975							
Eq. Costs ($M)	2,552	4,243	5,401	6,800	8,455	10,401	12,644
% of 1975 Budget	5.3	8.7	11.1	14.0	17.4	21.4	26.0

Added importance must therefore be attached to the actions of reform States, to which we now turn.

III. THE REFORM STATES

In the course of the school finance reform movement in the early 1970's, some twenty States enacted changes in their program, earning the designation "reform States." 14/ This section relates the results of the preceding section to the actions taken by these States. The first part summarizes the results for all twenty States. The second discusses in somewhat more detail the characteristics of the reform in each State.

Summary of the Methods and Effects of Reform

Reform came about from many causes, not all existing or carrying equal weight in each State. The two strongest forces were the increasing number of challenges in State courts to the then existing aid programs and the growing resistance to school property tax changes. In others, a growing awareness of the deficiencies in existing State aid programs, coupled with demand for reforms, may have been the catalytic agents.

Table VII summarizes a variety of information about the principal effects and means of achieving reform for the twenty States. The first two columns reflect results from Section II on disparity reduction and improving resource levels in low-wealth districts, the two objectives most commonly associated with court cases in school finance. A State is said to have decreased disparities if both measures of disparity (Table I) decreased by two or more percentage points. A State is classified as having increased resources to low-wealth districts if resources in such districts, relative to the State average, increased by five or more percent.*

* The five-percent criterion is about as restrictive as the criterion for disparity, which requires that each of two measures have decreased by two percent.

TABLE VII: Principal Effects and Means of Achieving Reforms in Reform States, 1975-1976

State	Reduced Expenditure Disparities a/	Increased Resources to Low Property Wealth Districts b/	Property Tax Relief c/	Increased Education Expenditures d/	Increased State Share e/	Pupil Weightings Utilized	Rigid Rate or Levy Ceilings	Disadvantaged Pupil Weights
Arizona	X	X		X	X(3%)			
California			X		X(5%)			
Colorado			X	X	X(10%)			
Connecticut		X		X	X(1%)			
Florida	X	X		X		X	X	
Illinois	X	X	X		X(8%)			X
Indiana			X		X(8%)	X	X	X
Iowa	X		X		X(9%)	X	X	
Kansas	X		X	X	X(13%)		X	
Maine			X		X(13%)		X	
Michigan	X	X	X		X(6%)			
Minnesota			X		X(10%)			X
Montana		X		X	X(34%) f/			
New Mexico	X	X				X	X	
North Dakota	X	X		X	X(23%) f/			
Ohio			X		X(8%)			
Texas	X			X				
Utah				X	X(3%)	X		
Wisconsin	X			X	X(3%)			

a/ A State is classified as having reduced expenditure disparities if both measures of disparity in Table I decreased by two or more percent.

b/ States were classified as having increased the resources of low property wealth districts if there was at least a 5 percent increase between 1970 and 1975 in these districts relative (to State average) expenditures.

c/ States are classified as having provided property tax relief if total per pupil expenditures (from non-Federal sources) relative to the national average did not increase and if the State's share of expenditures increased between 1970 and 1975. For some States information on property tax relief was obtained directly from State education officials.

d/ States are classified as having increased education expenditures if State education expenditures relative to the national average increased between 1970 and 1975.

e/ Figures in parentheses refer to increases in percentage share of education revenues from the State, between 1970 and 1975.

f/ County revenues for education are now counted as part of the State contribution in Montana and South Dakota.

NOTE: New Jersey is not listed here because its reform program was not funded until the 1976-77 school year.

Evidence of property tax relief (column 3) was based, for some States, on information provided directly by State officials and, for others, on inferences from data in the Digest of Education Statistics for 1971 and 1976. The inferences are based on the following consideration. In California, for example, per-pupil expenditures declined from 102.4 percent of the national average in 1970-1971 to 95.1 percent by 1975-1976. At the same time, the State's share of total revenues rose from 35.2 percent to 40.4 percent of current school dollars. An increase in the State share accompanied by a relative decline in total school expenditures would seem to indicate that some local tax relief occurred.15/ An entry in column 4 indicates that a State's education expenditures, relative to the national per-pupil average, increased from 1970 to 1975. Increasing expenditures can be thought of as a goal in itself (particularly if a State perceives itself as lagging behind others) or as a move that is needed to be able to achieve other goals, such as equalization. The remaining data are from Public School Finance Programs, 1975-76.

The table suggests that some reform goals were achieved through tradeoffs with others. Property tax relief was obtained in a number of States at the expense of added education dollars. Improved equalization occurred in some States in which average per-pupil expenditures lagged. In other States, higher education expenditures did little to alter the equalization status. Some property tax relief may have occurred in other States, though the evidence is not entirely clear from available data.

Of the twenty reform States, ten reduced expenditure disparities. In eight of the reform States, resources of low-wealth districts showed

relative improvement; six of these States also reduced expenditure disparities. At least ten States provided property tax relief. And in ten States, education expenditures increased relative to the national average. Only four of the States with improved equalization (either in reducing disparities or in increasing resources to low-wealth districts) also showed evidence of property tax relief. Of the twelve that improved in either of the equalization goals, five had rigid level or rate ceilings. None of the reform States succeeded in making progress in all four of the goals set out in the table.

Almost invariably, reform led to an increase in the share of school revenues derived from State sources. Only in New Mexico and Texas did the State share remain unchanged and in Florida, the State's share declined modestly. However, only in Texas was the reform undertaken to increase the State share of education costs; in New Mexico and Florida the reforms were designed to alter the distribution of funds among school districts based on perceived pupil needs. In States showing the largest increase in State education revenues, Montana and North Dakota, the change was principally due to the designation of county revenues as part of the State contribution to the basic aid program.

In five of the reform States, pupil weightings were introduced as a method for counting students and calculating State aid. In all five, a foundation aid program constituted the basic distribution mechanism. In six States, a guaranteed yield or variable guarantee formula was adopted in which State aid varied with district tax choice and district wealth. This type of reform was prevalent in the midwest — namely, in

Illinois, Kansas, Michigan, Ohio, and Wisconsin. It also constituted the principal reform measure in Colorado and part of the reform programs in Maine and Montana, where a guaranteed yield program was included as a supplementary aid measure. A modest guaranteed yield program constitutes the reform in Connecticut and supplements the basic flat grants available in that State. Along with other changes in the program seven of the States enacted rigid revenue/expenditure curbs which were designed to limit the growth in education costs, reduce expenditure disparities among school districts, and provide some property tax relief.

No magic formula could be identified as a reform measure to the exclusion of all others. Any aid vehicle could be utilized to achieve greater State participation in the financing of public schools, improve equalization, increase education expenditures, or result in property tax relief. Although the presence of rigid rate or levy ceilings was one structural change that appeared to be somewhat associated with reduced educational disparities, it is equally clear that in most States a more important factor contributing to reform was the commitment of additional resources for education. The principal exception to this general rule occurred in New Mexico, where reform legislation focused on the redistribution of program dollars. The additional monies generally emanated from the State coffers, though one or two States increased their reliance on local revenues. Without additional funds, any reform other than resource redistribution seems to have been virtually impossible.

Before proceeding with the description of the reform programs in each of the reform States, it may be instructive to place the preceding

discussions of the effects of these various changes in proper perspective.

We noted at the conclusion of Section II that the costs of equalizing every State, expressed as a percentage of the budgets in 1970 and 1975, have increased and therefore that, if anything, disparities are greater now than before. It is possible to use the data that entered into the calculation to evaluate reform versus non-reform States.

Table VIII presents these data, in the same form as in Table VI (for simplicity of presentation, only three ratios are shown).

Table VIII: Equalization Costs for Reform and Non-Reform States, 1970 and 1975, for Selected Disparity Ratios

	95:5-Disparity Ratio		
	1.40	1.25	1.10
Reform States			
1970: Equalization Costs ($M).....	806	1,781	3,584
As Percent of Budget.....	5.2	11.5	23.1
1975: Equalization Costs ($M).....	1,228	2,772	5,543
As Percent of Budget.....	4.7	10.6	21.2
Non-Reform States			
1970: Equalization Costs ($M).....	452	1,113	2,421
As Percent of Budget.....	3.4	8.4	18.2
1975: Equalization Costs ($M).....	1,325	2,629	4,858
As Percent of Budget.....	5.9	11.7	21.6

The cost of equalization serves, in effect, as an indicator of disparity, and when compared over time, serves as an indicator of progress. From this perspective, the States that reformed were, as a group, those most

in need of reform in 1970. For all three disparity ratios, the equalization costs in these States were greater in 1970 than in the other States. By 1975, however, the reform States had reversed the situation, for it is the non-reform States that now would have to apply a greater proportion of their budgets to equalize. These data do not alter the conclusions throughout this report that, for the nation as a whole, disparities have worsened; but they explain the phenomenon. The meaning seems clear. Even though, as a group, the reform States may have accomplished relatively little towards equalization, they have been swimming against a national current toward greater disparities.

Reform and non-reform States can also be compared with respect to improvement in the school resources available to low tax base districts. Fourteen States showed some significant improvement based on the 1975/1970 percentage changes in Table II, where the criterion for significant improvement is an increase of at least five percent in resources for such districts. Nine of the twenty reform States and five of the non-reform States show improvement when measured against this criterion. Hence, there is a substantial difference between reform and non-reform States in this regard. When a looser criterion, two percent increase is used, fourteen reform States and fifteen others have made some improvement. The reader is reminded that these findings relate to change and not to status; to see the importance of the distinction, note that Minnesota's low-wealth districts fell four percent behind their 1970 status and South Carolina's advanced four percent, yet low-wealth districts in both States were receiving ten percent less than their State average in 1975.

We turn now to a discussion of the school finance program in each reform State.

Principal Features of Reform in Each Reform State

Arizona altered its school aid program in 1974 by consolidating its substantial flat-grant subsidy with its financial assistance program (equalized) thereby increasing the portion of STate funds distributed through an equalizing foundation aid formula. The annual budget increase for each district is limited to 7 percent of the Statewide average. This provision gives low-spending districts the option of raising their budget for the subsequent year by more dollars than the high-spending districts, which are constrained by the 7 percent Statewide average. However, districts may vote to increase this leeway, which can reduce the equalization aim of the budget ceiling.

Arizona was successful in reducing expenditure disparities by channeling a greater share of the basic support program through an equalization formula. Contributing factors were the new expenditure lid as well as the increased funding for the programs. Because substantial amounts of new monies were provided, pupil education expenditures rose from $808 or 94.1 percent of the mean national expenditure in 1970-71 to $1,415 or 101.9 percent of the mean national expenditure in 1975-76. The State share of education revenues increased modestly during the period from 44.6 percent to 47.8 percent. The reform legislation had a pronounced effect on low wealth districts, which experienced a relatively greater growth in expenditures than did the median or high wealth districts.

California. The reform legislation, S.B. 90, failed to improve the State's equalization position and was rejected by the State Supreme Court as inadequate in the second Serrano decision. Equalization aid more than doubled between 1970-71 and 1975-76 in current dollars while the flat grant payment of $125 per pupil remained unchanged. A revenue limit is in effect which curbs the growth in district revenues to a percentage figure set by the State. Despite these features, the program failed to improve equalization for the following reasons: (1) Continued heavy reliance on unequalized local revenues reduces the equalization impact of the State equalization program. (2) The flat grants siphon substantial sums of State money (an estimated $633 million in 1975-76) without changing expenditure disparities in the State. (3) The revenue limit allows the same percentage change in district revenue for all districts, which converts to more dollars in high-spending districts than in low-spending ones. (4) The possibility for unlimited voter overrides reduces the equalization thrust of any revenue limit.

The growth in per pupil expenditures in California did not keep pace with national changes. In 1970-71, California spent $879 per pupil or 102.4 percent of the national average; by 1975-76 per pupil expenditures amounted to $1,320 or 95.1 percent of the national mean. However, the State share of school revenues rose from 35.2 percent to 40.4 percent by 1975-76, which suggests that some property tax relief occurred. When districts are grouped by wealth, the pattern of expenditure changes was remarkably stable for the five-year period, except that high wealth districts lost some ground. This group was probably constrained by the State revenue

limits where overrides were rejected by voters. The reform law did not change perceptively expenditure patterns when districts are grouped by urban type.

Colorado provided substantial new money for education which more than doubled between 1970-71 and 1975-76. However, Colorado's reform program was hampered in part because existing revenue differentials among school districts were frozen into the aid distribution system. The State guarantees a tax base per pupil with the maximum equalized mills guaranteed to yield the authorized revenue base (ARB) for each district. ARB is the revenues raised by a district for the equalization program in the previous year plus any State allowed percentage increase. A substantial flat grant is included in the equalization entitlement program since no district receives less than $10.35 per mill per pupil, regardless of district wealth. A revenue limit allows low-spending districts a greater percentage increase in authorized revenue growth over the previous year than it does for the high-spending districts (112% down to 107%). Despite this cap, the revenue bases of the big spending districts were able to produce enough new dollars enabling them to maintain or even increase the dollar spread in revenues among districts. District voters also have an unlimited override option which can enhance interdistrict disparities. Districts are also unrestricted in the amounts that can be raised outside the equalization program. In Colorado, high and low wealth districts made modest gains in relative expenditures during this period, while medium wealth districts lagged slightly behind. When districts are compared on the basis of urban type, the center city of the State's SMSA (Denver) was the biggest gainer while the rural districts appear to have lost some ground.

The new program failed to reduce expenditure disparities. Nevertheless, average per pupil expenditures increased sharply, rising from $780 or 90.9 percent of the national mean in 1970-71 to $1,422 or 102.4 percent of the national average by 1975-76. At the same time, the State share of revenue grew from 30.3 percent to 39.8 percent. A State official has indicated that substantial property tax relief occurred in low-wealth districts.

Connecticut enacted in 1975 a supplementary program of State equalization aid which guarantees the tax base of the town at the 85th percentile. A town's wealth base is modified by an income factor, namely the town's median family income. In addition, the wealth base is calculated on a per capita rather than on a per pupil basis. In its first year of operation, 1975-76, the program's funding restricted each town to a maximum of 5 percent of its flat grant entitlement of $250 per pupil. As a result, 143 out of the 169 towns received supplemental aid equal to $12.50 per pupil. The funding for the program is provided by an "Instant Lottery" which is scheduled twice a year in the State.

Education expenditures per pupil have grown in the State, regardless of the supplementary equalization program rising from $997 or 116.2 percent of the mean national average in 1970-71 to $1,659 or 119.5 percent of the national mean in 1975-76. State revenues which accounted for 26.3 percent in the earlier year rose slightly to 27.7 percent of the total. Connecticut continues to rely heavily on local resources for its education program.

Florida enacted major changes in its school aid program in 1973, the purpose of which was to guarantee to each pupil educational programs appropriate to his needs and substantially equal to those available to

similar students regardless of geographic location and district wealth. In calculating State aid, pupil weights were introduced for pupils in the regular, special and vocational programs. Locational features were recognized through a cost of living adjustment, a feature which is still unique in State aid programs. District wealth differences were minimized by placing a rigid lid on the amount of leeway dollars that could be raised locally which were limited to 1.707 mills, following a series of changes in the law.

As a result of the additional funds made available for education, Florida's mean expenditures rose from $776 or 90.4 percent of the national average in 1970-71 to $1,381 or 99.4 percent of the national average in 1975-76. Interestingly enough, the State's share of the available revenues including Federal revenues for education fell slightly from 56.0 percent in 1970-71 to an estimated 54.6 percent in 1975-76. Indeed, the data indicate that the (relatively) higher level of funding was due to increased local contributions to the foundation program. In 1971-72 the locally required millage levy was 4.5 mills. Under the new program in 1975-76, this requirement had risen to 6.2931 mills. This increased chargeback required the districts to finance a larger share of the foundation program. Despite this increased local financial contribution, the State provides relatively more funds than the national mean State contribution. The State's improved equalization position probably stems from the local leeway millage rate lid currently in effect.

The growth in expenditures among districts varied inversely with district wealth, which is further evidence of Florida's progress towards equalization. When comparisons are made by urban type, it becomes clear that there were no losers in the State; expenditures grew only slightly faster in the SMSA's cities than elsewhere.

Illinois was one of the first States to enact a guaranteed yield program, known as the Resource Equalizer. However, school districts' retained as an option applying for State aid under the existing foundation program. Under the foundation aid option, the guarantee level of $520 was retained. In addition, minimum aid of $60 per elementary pupil and $75 per high school pupils were guaranteed under either aid option. The new formulas provides a variable pupil weighting for Title I eligible pupils. Under the guaranteed yield programs, the State guarantees a tax base of $42,000 for K-12 districts for levies up to 30 mills, a tax base of $64,615 with a rate limit of 19.5 mills for K-8 districts and up to 10.5 mills on a tax base of $120,000 for 9-12 districts. A phase-in feature restricts the growth in State aid to any school district to 25 percent of its prior year aid irrespective of its calculated entitlement. In effect, the State guaranteed a maximum of $1,260 per pupil while average expenditures amount to $1,452 in 1975-76. This new Resource Equalizer program is more advantageous for most districts, and nearly 900 of the over 1,200 districts utilize this approach.

The new Resource Equalizer program managed to reduce expenditure disparities existing in the State between 1970 and 1975. At the same time, a sharp increase in State revenues for education occurred rising from 38.2 percent to 46.2 percent. This suggests that substantial property tax relief probably occurred in the low-wealth districts under the resource equalizer program. The Title I weighting added substantially to State resources going to Chicago, where between the Fall of 1971 and 1975 current expenditures rose from $1,240 to $1,941 per ADA. The minimum aid guarantee along with local leeway tax options with no recapture provisions are other features which tend to perpetuate expenditure disparities under the Illinois school finance plan.

Between 1970-71 and 1975-76 per pupil expenditures as a percent of mean national expenditures declined from 109.2 percent to 104.6 percent. In current dollars, the change was from $937 to $1,452.

School resources in low wealth districts grew at a faster pace than they did for medium wealth districts. Highest wealth districts registered the lowest growth. This suggests that the lowest wealth districts benefitted the most from the new State aid program. When districts are compared by urban type, changes in expenditures were fairly consistent throughout.

Indiana adopted a school finance plan in 1975 which introduced a series of pupil weights for program cost differentials for special and vocational education and a modest weight of .2 for compensatory education. For 1975-76, the foundation aid formula guarantee was set at $690. Average current expenditures were $1,160 in that year, and required substantial local expenditures. The State sought to lessen reliance on local property taxes

by freezing the local levies to the lesser of a district's normal levy or 30 mills on the 1974-75 adjusted assessed valuation in each district.

With its new law, Indiana succeeded both in reducing somewhat expenditure disparities and providing some property tax relief as evidenced by the growth in the State share of school revenues, estimated at 32.5 percent in 1970-71 and at 40.6 percent in 1975-76. At the same time, average per pupil expenditures lagged further behind mean national expenditures. In 1970-71, these were $770 or 89.7 of the mean national average of $858; by 1975-76, the State mean expenditure of $1,160 amounted to 83.5 percent of the national average of $1,388. It appears likely then that the equalization goals and local property tax relief were achieved in part by restricting the aggregate growth in education expenditures.

The relative change in resources lagged only for medium wealth districts, when the change in resources are compared among school districts. High wealth districts maintained a slight edge. The rigid levy controls may have worked to the disadvantage of medium wealth school districts, whose levies were probably frozen at lower levels than high wealth districts. When districts are classified by urban type, the relative changes in revenues were not pronounced.

Iowa is engaged in a long-term restructuring of the financing of its public schools aimed at achieving State participation equal to 80 percent of the Statewide average cost by 1982. In 1975-76, the State foundation aid guarantee was set at $857 which equalled 73 percent of the State cost per pupil of $1,174. The State foundation guarantee rises each year by one percent of the State average cost as determined by the State comptroller. Each district's allowable annual budget growth is restricted to a percentage

increase specified by the State. (For districts spending below the State average cost, the allowable growth is subject to further limitations.) A minimum State aid level guarantees to each district $200 per pupil.

Iowa improved its equalization position by annually raising its foundation dollar guarantee, thereby enabling those low-spending districts which are poor to both increase their expenditures and to rely more heavily on State resources. A budget lid, equal to 5 percent of the State's average cost per pupil in 1975-76, placed an upper limit on high-spending districts. This lid was restrictive enough to curb the growth in expenditures, for Iowa's per pupil expenditures have declined from 110.0 percent of the mean national average, in 1970-71 to 104.8 percent in 1975-76. The resulting growth in State participation is apparent by figures revealing percentage growth in State revenues for education from 29.2 percent to 38.0 percent between 1970-71 and 1975-76. This relative growth in State revenues, combined with the decline in educational expenditures relative to the national mean, suggests that substantial property relief has occurred.

The relative growth in resources of low wealth districts lagged behind other districts and may be related to a provision in the program that restricts historically low spending districts to a smaller percentage growth in expenditures. Although data are not available to support the conjecture, it is not unreasonable to suggest that many low-wealth districts are also low spenders; to the extent that this is so, the restriction is clearly disequalizing.

Kansas enacted a new school finance program in 1973 in response to the State court ruling in Caldwell v. Kansas declaring the existing program

unconstitutional. The new program guarantees a budget for each district which is based on the district's enrollment size, its current budget and its local tax effort. A budget limit is in effect which limits a district's budget growth to 10 percent of the median budget for its enrollment category. Districts spending below the median may increase their budget as much as 15 percent over the prior year up to the median budget expenditure. As a result, each district has a distinct guaranteed budget level and the State share of this budget varies by district wealth and the local tax effort. Kansas is one of the few States that includes income in calculating local wealth.

Kansas managed to reduce expenditure disparities under this program and assume a greater burden of the cost of education. The State share of school revenues rose from 31.2 percent in 1970-71 to 43.8 percent in 1975-76. This sharp rise in State revenues provided tax relief for low wealth districts. Equally dramatic was the growth in average per pupil expenditures, which rose from $771 to $1,475 during the same period, or from 89.8 percent of the mean national average to 106.2 percent in the later year.

During this period, the changes in resources in the high wealth districts lagged behind all others and may be attributed primarily to the provision limiting district budget growth which is more restrictive for high-spending districts. Expenditures grew most rapidly in SMSA cities when districts were compared by urban type.

Maine enacted legislation which was designed primarily to lessen reliance on local property taxes by increasing the State's share for financing public schools. The law explicitly alters the mix of taxes for

public school support, i.e., local property taxes and State sales and income taxes. In 1971-72, the State was committed to paying one-third of the school costs; under the new law State revenues were to cover 50 percent of costs in 1975-76. A Statewide property tax was enacted which provides the balance of taxes due. Maine is one of the three States which have Statewide property taxes for education. School property taxes which were previously retained by the districts are now transferred to the State. In turn, the State forwarded to each district its entitlement of $694 for elementary pupils and $1,078 for high school pupils under the 1975-76 guarantee level. Additional allocations were paid to districts in amounts which varied with the sums spent by districts in the 1973-74 base year.

The 2-1/2 mill lid on optional local leeway dollars guaranteed $125 per pupil. In addition, districts spending below the State average are allowed to raise additional local dollars up to the State average.

Maine did not enhance its equalization status with its new program. The intricate hold-harmless guarantees undoubtedly help perpetuate disparities. Also, Maine operates on a reimbursement basis, with State aid based on expenditures two years prior to the date of aid disbursements. Initially, therefore, districts must raise through local taxes any amount eligible for State reimbursements two years later. Initial reliance on local taxes may effectively inhibit districts that are spending below the State guarantees from increasing their educational outlays. Maine is not unique in distributing its aid through reimbursements, and the same difficulty may be encountered by districts in others States that provide aid under similar reimbursement schedules.

By increasing the State share of the cost, less reliance was placed on property taxes, resulting in some property tax relief. At the same time, Maine's average per-pupil expenditures slipped from 88.9 percent of national average, $763 in 1970-71, to 86.2 percent in 1975-76 when they stood at $1,197 and the national mean was $1,388. Meanwhile, the State share of education revenues rose from 31.9 percent to 44.6 percent.

In the five-year period, school resources grew the most in low wealth districts and the least in high wealth districts. Additional equalized State revenues as well as the ceiling on local leeways were probably chiefly responsible for the differential growth patterns.

Michigan turned to a guaranteed yield program in 1973 in response to a State court decision (subsequently reversed) in Milliken v. Green which declared the previous financing system unconstitutional. The new State school aid program provided a two-tiered aid system in 1975-76 which guaranteed $42.40 per mill for 20 mills and $38.25 per mill for an additional 7 mills. This total guarantee is equal to $1,116 in State and local funds for any district levying the full 27 mills. (State average expenditures per pupil were $1,366 in that year). A municipal overburden feature primarily benefits Detroit by providing additional funds for school districts with non-school operating levies 25 percent above the Statewide average.

Michigan's new program reduced expenditure disparities and increased the State share of revenues for education from 45.5 percent in 1970-71 to 51.7 percent in 1975-76. However, local tax leeways and the absence of a recapture of any dollars raised in excess of the guaranteed amount does perpetuate some of the expenditure gap among districts. The guaranteed

yield program indisputedly provided property tax relief to low wealth/high effort districts. Yet the guaranteed dollar amounts were insufficient to entice many local districts to raise local millages in order to qualify for additional State dollars. In 1975-76, out of 529 districts, 394 districts levied less than 27 mills. Between 1970-71 and 1975-76, average State per-pupil expenditures ($937) have slipped from 109.2 percent of the mean national per-pupil expenditure to $1,366, to only 98.4 percent of the national average in 1975-76. The data suggest that Michigan has bought property tax relief at the expense of its education program outlays.

The guaranteed yield program had a somewhat larger impact on the lowest wealth districts, where resources grew the fastest. When districts are compared by urban type, the SMSA center cities fared the least well while rural districts showed distinct gains in school expenditures. The poor performance of the guaranteed yield program in Michigan's cities probably results from a variety of causes including those related to municipal overburden, perhaps to a low demand for education services, and even to the urban wealth bases themselves.

Minnesota was the first State to enact school finance reform legislation in the seventies by raising substantially the foundation support level to an amount approximating the Statewide average per pupil expenditure. The principal purpose of the law was to lessen reliance on property taxes by increasing the State share of education costs. Property tax relief was also provided through a program of homestead credits and other minor State aids to school districts.

A minimum of .5 for each AFDC pupil was added to the district's pupil count. Higher weightings are allowed for districts with high concentrations of AFDC pupils. A hold harmless guarantee is also in effect. In 1975-76, the foundation program guaranteed $900 (a somewhat lesser amount for historically low spending districts) for pupils in grades 1-6 and $1,260 for pupils in grades 7-12.

The new funding program has led to a decrease in school expenditures with average per-pupil expenditures ($1,021 in 1970-71) falling from 118.9 percent of mean national average in 1970-71 to 109.2 percent in 1975-76 when they amounted to $1,516. At the same time, the State accounted for a larger share of education revenues which rose from 44.4 percent to 54.7 percent of the total. Expenditure disparities were not reduced during the period, which may be due as much to the additional weightings provided for AFDC children as to unlimited leeway options for raising revenue and the hold-harmless provision which is in effect.

The high wealth districts were the principal gainers in school resources while the poorest districts gained the least. When districts are compared by urban type, school expenditures grew fastest in SMSA center cities. These data suggest that the center cities are among the high wealth districts, which benefit from State aid provided as a result of the AFDC pupil weights.

Montana altered its school finance program in 1973 at a time when there was a growing concern that the then existing aid formula could not survive close judicial scrutiny. The new law provided that county levies for schools be collected as Statewide taxes, thereby dramatically increasing

the State share of educational revenues from 24.0 percent in 1970-71 to 57.6 percent in 1975-76. Each district is also guaranteed 25 percent of its foundation program amount where districts levy an additional 9 mills in elementary school districts or 6 mills in high school districts.

The new funding formula has led to relatively larger increases in education expenditures. In 1970-71, Montana's per-pupil expenditures ($866) were 100.9 percent of national average; by 1975-76, they amounted to 112.0 percent of the national expenditures, rising to $1,554.

Expenditure disparities persist, however, and may be due to continued heavy reliance on local taxes. Differences in local wealth bases as well as the possibility of unlimited voter leeway options may also account for the growth in such disparities. School resources grew fastest for low and medium wealth districts while the growth in resources for districts in the wealthiest quartile were substantially below average.

New Jersey. In a landmark decision, Robinson v. Cahill, the New Jersey Supreme Court ruled in 1973 that the State's system of supporting public schools violated the State constitution because "the State has never spelled out the content of the educational opportunity the constitution requires" in meeting the mandate that there be maintained a "thorough and efficient system of free public schools." The Court ordered the State to develop a plan for financing public schools which meets the mandate. Accordingly, a "Public School Education Act of 1975" was enacted which among other provisions spelled out a method of distributing State aid.

Under the new law's provisions, each district is guaranteed a State support ratio which is the lesser of its prior year budget or the State support limit. For each district, the State's support ratio is derived by dividing a district's equalized valuation per pupil by the State's guaranteed valuation and subtracting the quotient from 1.000. The State's guaranteed valuation was set at 1.3 times the State average valuation per pupil for 1976-77. A hold-harmless provision guarantees each district a minimum of 10 percent of the State support limit. Cost factors were introduced which provided additional aid guarantees to special needs pupil populations. In addition, a spending limit was incorporated to prevent districts that received the largest increases in State aid from spending all the new funds on their education program without providing some property tax relief. The expenditure limit varies inversely with district expenditures. An appeals procedure was established which allows districts to seek relief from their expenditure caps.

The new law required an increase in State funds for implementation of well over $150 million which were not forthcoming until a gross income tax law was passed in July 1976. As a result, the new equalization law was not implemented until the 1976-77 school year. Continued funding of the new program rests upon the renewal of the income tax law, which is due to expire two years after its enactment.

New Mexico in 1973 replaced a school aid program based on instructional units with an aid program based on pupil weights and required a uniform millage levy. Optional local leeway levies are not allowed and 95 percent

of the required millage as well as Federal monies including Impact Aid are counted as the local contribution to the State Equalization Guarantee Distribution.

With this program, New Mexico succeeded in reducing expenditure disparities which was accomplished both as a result of the rigid ceiling on local levies and by counting Federal dollars as part of the required local contribution. Despite the major redistribution of dollars which occurred between 1970-71 and 1975-76, New Mexico did not alter its share of school revenues, which stood at 63.4 percent of total revenues in both years. In addition, State average per-pupil expenditures as a percent of the national average were also remarkably stable going from 90.4 percent in the earlier year to 90.8 percent ($1,261) in 1975-76.

New Mexico's reform program undoubtedly helped most the lowest wealth districts, which experienced the fastest growth in school resources. For high wealth districts the resource growth was slowest.

North Dakota added substantial new money to its foundation support program which guaranteed $640 per pupil in 1975-76. A schedule of pupil weightings for district grade span, sparsity and class size accompany the basic guarantee. County school taxes were henceforth earmarked for the foundation program and a district millage requirement was introduced. In effect, county revenues are now considered part of the State contribution and district taxes are no longer optional but are required in order for a district to qualify for State foundation aid. The district tax requirement led wealthier districts to support a larger share of the foundation program.

The program appears to have been designed primarily to increase financial support for public schools. On that score, the new program was successful in raising average per-pupil expenditures from $689 (80.3 percent of the national mean average in 1971-72) to $1,207 (87.0 percent of the national mean in 1975-76). Some additional equalization has also occurred with the new program. The increased share of State education revenues — from 25.8 percent in 1970-71 to 48.8 percent in 1975-76 — reflects the designation of county taxes as State taxes. The new program in North Dakota had by far the greatest impact on low wealth districts which benefitted the most from the higher foundation support levels.

Ohio added a guaranteed yield program to its foundation program and raised the guaranteed foundation level. The State guaranteed a program of $1,380 per ADM in 1975-76 for any district levying 30 equalized mills ($48 per mill for the first 20 mills and $42 for each additional mill up to a maximum of 10 mills). Under its current law, districts must levy a minimum of 20 mills, equalized, whereas no minimum district requirement had previously existed.

Despite the higher guarantee levels, average per-pupil expenditures have remained relatively unchanged as a percent of the national average. In 1970-71, mean per-pupil expenditures in Ohio amounted to $778 or 90.6 percent of the national average; by 1975-76 the State's mean expenditures were $1,264 or 91.1 percent of the national average. The new program has had no discernible impact on equalization in the State. Under the new law, Ohio has raised the State share of education revenues from 28.8 percent in 1970-71 to 36.6 percent in 1975-76. It is likely that the new program provided some property tax

relief with this growth in State revenues. There was no perceptible differences in the growth in school resources for low and medium wealth districts during this period while some lag in resource growth occurred among high wealth districts. Rural districts appear to have experienced a slight edge in the growth in school expenditures while changes among the SMSA districts were indistinguishable.

Texas retained its foundation aid program with significant modifications. A law enacted in 1975 substantially raised the level of foundation support. The wealth measure in calculating the local contribution shifted to assessed property valuations from an index of ability to pay. A uniform requirement of 30 mills was enacted as the local contribution to the foundation program. However, a hold-harmless guarantee provision assures each district a minimum 1.04 percent of State aid received during 1974-75. A new program ($25.4 million) earmarked funds for compensatory education and a supplementary equalization program ($50.0 million) was also enacted.

As a result of these new features, the new Texas program was more equalizing. The share of education revenues derived from the State remained virtually unchanged between 1970-71 and 1975-76, going from 49.3 percent of total revenues to 50.1 percent in the latter year. However, some improvement did occur in average per pupil expenditures, which rose from $636 or 74.1 percent of the national average to $1,094 or 78.8 percent of the national mean during this same period. Resource growth lagged for high wealth districts while expenditures in the SMSA districts outpaced slightly those for rural districts. Within the SMSAs, changes in expenditure growth pattern were barely discernible.

Wisconsin's program guarantees a wealth base per pupil, the size of which depends upon each district's grade level, with the guarantee level set at $1,405 per pupil in 1975-76. The guarantee varies for each district, reflecting actual district expenditures. A secondary equalization aid equal to a smaller amount is guaranteed for districts spending above the $1,405 level with the actual amount again depending on district grade span, wealth, and actual spending. In effect, then, Wisconsin operates under a non-linear guaranteed yield program. Recapture provisions which were due to become effective were nullified by the State courts.

Transitional aid is provided to districts too wealthy to share in equalization aid, the actual amount diminishing from year to year. A ceiling on the annual growth in district expenditures equal to 110 percent of the Statewide average is also in effect.

Between 1970-71 and 1975-76, per-pupil expenditures rose faster in Wisconsin than for the nation as a whole, rising from $977 or 113.9 percent of the national average in 1970-71 to $1,618 or 116.6 percent of the national average. At the same time, the State share of school revenues rose modestly from 29.3 percent to 32.1 percent of the total. The pattern of expenditure disparities persists, however, and may be due to the modified hold harmless provision as well as to provision allowing generous district expenditure growth. The heavy reliance on local revenues may also be contributing to interdistrict expenditure disparities.

Medium-wealth districts showed the greatest gain in resources while high-wealth districts were slowed. The expenditure limit was probably responsible for this differential growth. Expenditures grew fastest in SMSA

center cities, while the lag appeared greatest in other SMSA districts. It is likely then that many of these latter districts are among the high-wealth districts being affected by the expenditure limits.

IV. SUMMARY AND CONCLUSIONS

When disparity is measured by the ratio of expenditure in high-spending districts to expenditures in low-spending districts (omitting the very highest and very lowest districts to account for possibly justifiable variations), 39 States exhibited disparities of 1.5 or more in 1970. That is to say, some children in a State received at least half again more than others. In four States, the disparity ratio was 2.0 or higher. These disparities were strongly related, in almost every State, to variations in property wealth among districts. Historically, the schools have been supported by the local property tax; districts with high property valuation per pupil not only can raise more money for education, they can do so with less tax effort. These inequalities have led to demands by State courts that disparities be lessened and that the link between expenditures and local wealth be weakened or eliminated.

By 1975, disparities in the nation as a whole actually increased, with 40 States exhibiting disparities of 1.5 or greater. Only in 20 States did disparities appear to decrease at all. Low-wealth districts improved their status somewhat over this five-year period, although in most States they still spent considerably less than their State's average.

These results are surprising in view of the fact that a school finance reform movement was under way in the 1970's, involving 20 States. Many of these States were those most in need of reform — in 1970, only two of them showed a disparity ratio less than 1.5. By 1975, 8 of the 20 States had substantially reduced disparities, but 6 exhibited greater disparity

than in 1970. (Some States apparently set reform objectives other than disparity reduction, most notably the relief of property tax burdens.) Even though, as a group, these States have made less progress in reducing disparity than might have been hoped for out of a reform movement, they were swimming against a national current towards greater disparity.

Central city districts are of particular interest in school finance reform, because such districts typically spend more per pupil and have higher property valuation per pupil. The study has not investigated the claim that higher spending is justified by higher costs for educational services and greater needs of many of its students. It has investigated the claim that property valuation per pupil fails to reflect the greater burden that cities bear in supporting municipal functions in addition to education. When district wealth is calculated with population rather than pupils as a base (an approximate way to account for total service burden), the advantage of central city districts considerably diminishes. These findings suggest that the impact of school finance reforms will depend quite strongly on the way in which costs, needs, and ability to pay are defined.

If the education system is to reduce core program disparities in the future, a decision must be made as to the extent of disparity that can be tolerated. As in most policy decisions, this one entails consideration of principles and practical constraints. Too loose a criterion might violate principles of equal educational opportunity; a very strict criterion could call for funds that might not, in practice, become available. The costs of equalizing so that each State met a disparity criterion of

1.25 — a ratio employed in an Office of Education regulation relating to Federal Impact Aid — would have been $5.4 billion in 1975. Half that amount would have been required for all States to meet a 1.40 criterion. These are substantial amounts, but unless action is taken toward greater reform, the amounts in the future will apparently become greater — not only because of inflation but also because of an apparent trend toward increasing disparity in America's schools.

NOTES

1. The present report presents preliminary results from a study sponsored by the Office of the Assistant Secretary for Planning and Evaluation, Department of Health, Education, and Welfare.

2. As an example of other recent comparative studies, see Handbook for State Legislators, National Conference of State Legislatures, Washington, D.C., 1976.

3. The data bases for the two years are composite collections from several sources. School data are from the ELSEGIS (Elementary and Secondary Education General Information System) data bases collected by the National Center for Education Statistics for schools years 1969-70 and 1974-75. Data from the 1970 Census was added to the files for both years. Property valuation as of 1970 was added to the 1969-70 files; property valuation as of 1973-74 was added to the 1974-75 file. The samples are approximately 4,550 for 1969-70 and 5,800 for 1974-75.

4. The COE reported for each school district is multiplied by the ratio of (1) local and State revenues plus impact aid to (2) total revenues.

5. The treatment of Federal impact aid, or SAFA, as local revenue is based on the rationale that these funds are intended to offset the loss in local revenues occasioned by the tax-exempt status of Federal property, an approach that is consistent with the fact that the funds are for general support rather than for Federally defined programs. The ideal treatment of SAFA would be to count as local revenue only that fraction that is equalized, in accordance with Federal regulations; but the data bases do not permit this calculation.

6. Under contracts with the National Center for Education Statistics and the National Institute of Education, Killalea Associates, Incorporated, is developing prototype cost-of-education indexes.

7. The choice of pupil counting method can make a difference, as has been pointed out by a number of analysts. In particular, places with high absentee rates would generally suffer in the allocation of State funds if the State used average daily attendance.

8. The 95:5 measure is subject to several criticisms. In analyzing within-State disparities, it seems appropriate to disregard highly unusual circumstances that may justify high expenditures, such as the ranch school districts in certain States. When applied to all States, however, it assumes that each State has circumstances which justify variations in expenditures, which seems unlikely. Moreover, there is considerably less justification for excepting the lowest-spending districts than for excepting the highest-spending districts.

9. Students are grouped into quartiles according to their districts' property valuation per pupil: the fourth of a State's students that are in districts with the lowest valuation per pupil, the fourth that are in districts with the highest, and the two middle quartiles (combined into one group for ease of presentation). As can be expected, some districts (particularly very large ones) have students in two quartiles; in such cases, a district's students are all "tagged" with the same property valuation and then distributed across the quartiles; they are also tagged with the district-wide average expenditures per pupil. It is then possible to compute the (pupil-weighted) average expenditures in the quartiles. The expenditures in the quartile are then expressed as a percentage of State average expenditures.

10. An SMSA is an area that includes at least one city with 50,000 or more inhabitants or a city with 25,000 or more inhabitants which, with contiguous places, makes a single community of at least 50,000. For a precise definition, see Statistical Abstract of the United States: 1975, Bureau of the Census.

11. It is difficult to determine how an adjustment factor should be calculated. Actual differences in expenditure levels between elementary and secondary districts in a State could be used, but this would be tantamount to assuming no discrimination. Moreover, such an adjustment might gloss over the equally interesting differences in expenditures between low-wealth and high-wealth secondary districts. The ideal resolution, for a disparity analysis, is to associate each elementary district with the secondary district to which it sends its students; then, under the reasonable assumption that parents would not discriminate against their younger children in favor of the older, the average expenditure in this aggregation of districts produces a figure that can validly be compared with unified districts. Unfortunately, the data required for this aggregation are not available.

12. It should be noted that this kind of result might be thought to support the view that States operating many districts could improve their equity status through district consolidation. Whether or not their status would improve depends on the measure of equity, as has often pointed out (see, for example, Inequality in California School Finance, Rand Corporation, March 1975). Moreover, it could raise new questions about the unit of observation; for very large districts, equity considerations might involve intradistrict disparities, which are not analyzed here.

13. The requirement is specified in 45 CRF 115.63. States have also set their own requirements. The California Supreme Court has required that, after a period of years of phased-in reform, the State's system should exhibit a disparity no greater than $100 per pupil from place to place. California's expenditures (as defined in this study) averaged $1,095 in 1975, and accordingly the court criterion is even more limiting than that set by the Office of Education.

14. See National Conference of State Legislatures, School Finance Reform: Legislator's Handbook; and Education Commission of the States, School Finance Reform in the States, 1976-77.

15. An alternative indicator of local relief might merely be an increase in the State's share of school revenues. This increase would fail to differentiate between increases in the State's share that went to raise total school expenditures and those that provided local tax relief.