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#### ABSTRACT

Successfully educating at-risk populations depends in part upon adequate and equitable funding. This General Accounting Office (GAO) report examines the current status of and trends in public-education spending. National and state trends in education spending and revenues were examined using data from the Department of Education's National Center for Education Statistics (NCES) and other sources. Measures of states' ability and willingness to raise revenues for education were also developed. Findings show that since 1980, total real expenditures in public elementary and secondary schools have increased, while the average national per-pupil expenditure increased and then stabilized after 1989. Such leveling off is due, in part, to a leveling off in the states' share of education funding. In addition, the number of poor children is increasing at a higher rate. Education's share of state budgets decreased between fiscal years 1987 and 1994, while Medicaid and corrections increased their shares. States' willingness to raise revenues for education grew more slowly than willingness to raise revenues for overall spending. Ability and willingness to raise revenues also varied widely among states. Appendices describe the research design and present data on school-age population characteristics; expenditures; federal, state, and local revenue shares; education's share of state budgets; and states' ability and willingness to raise revenue. Fourteen figures, 15 tables, and a list of GAO contacts and acknowledgments are included. (LMI)



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# SCHOOL FINANCE

Trends in U.S. Education Spending

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United States General Accounting Office Washington, D.C. 20548

Health, Education, and Human Services Division

B-259607

**September 15, 1995** 

The Honorable Jeff Bingaman The Honorable Christopher Dodd The Honorable Paul Simon United States Senate

Education spending is an important part of the U.S. economy and traditionally has been the largest state expenditure. In school year 1993-94, expenditures in all elementary and secondary schools totaled an estimated 4.5 percent of the gross domestic product, or \$285 billion. Yet education, like many other budgetary items, faces tight fiscal constraints at federal, state, and local levels, while pressures for public funds are increasing.

As we reported last year,<sup>2</sup> our nation's school-age population became increasingly poor, racially and ethnically diverse, and at risk of school failure during the 1980s.<sup>3</sup> Schools have been addressing some needs of at-risk children through a variety of compensatory education and education reform efforts. Demands on funds authorized by the Elementary and Secondary Education Act (ESEA)—the federal government's primary funding source for addressing those needs—have increased due to higher numbers of at-risk children.<sup>4</sup> However, while states and localities face hard budget choices, the federal government may also be reducing future spending.

Successfully educating at-risk populations depends, in part, upon adequate and equitable funding.<sup>5</sup> For this reason, you asked us to examine the



<sup>&</sup>lt;sup>1</sup>Includes public and private elementary and secondary schools.

<sup>&</sup>lt;sup>2</sup>School-Age Children: Poverty and Diversity Challenge Schools Nationwide (GAO/HEHS-94-132, Apr. 29, 1994).

<sup>&</sup>lt;sup>3</sup>School-age children are children aged 5 to 17 living in families. Families are defined as households in which one or more people are related. We chose this population because it is the same population used in the Elementary and Secondary Education Act's (ESEA) Title 1 allocation formula.

<sup>\*</sup>We also reported on the poor condition of many of America's school facilities. For more information, see School Facilities: Condition of America's Schools (GAO/HEHS-95-61, Feb. 1, 1995) and School Facilities: America's Schools Not Designed or Equipped for the 21st Century (GAO/HEHS-95-95, Apr. 4, 1995).

<sup>&</sup>lt;sup>5</sup>Proponents of greater financial support for education would argue that the need for resources has increased in recent years due to (1) an increased number of at-risk children; (2) local, state, and federal support for higher academic standards related to education reform; and (3) a need for adequate facilities with greater technological capability to support education reform. Opponents of greater financial support for education would argue that increases in educational productivity have not followed previous increases in funding for education. However, both sides agree that looking at how funds are spent, as well as the overall level of education spending, is important.

current status and trends in public education spending. Specifically, you asked us to answer the following questions:

- What are the current expenditure levels for education and how have they changed over time?
- What roles do local, state, and federal governments play in financing education in the United States, and how have these roles changed over time?
- How do states differ in their capacity to provide resources for education and their relative tax effort?

To answer these questions, we examined national and state trends in education spending and revenues using data from the Department of Education's National Center for Education Statistics (NCES) and other sources. In addition, we developed measures of states' ability and willingness to raise revenues for education and examined trends using data from the Department of the Treasury. (See app. I for details.)

Several aspects of our analysis should be noted. First, all trend analyses comparing finance data for several years are in constant dollars. In addition, when reporting state trend data, we provided information on the 50 states; we did not include the District of Columbia. Second, data in this report represent varying time spans because we used the most recent actual and estimated NCES data. However, where possible, trend data in the report start in the 1960s to show long-term trends since ESEA's passage, which marked the beginning of a major federal role in education. Third, although we present some answers to the third research question you asked us to address, a separate report will discuss how individual states approach education funding, including the legal, budgetary, and legislative barriers they face.

We conducted our work between October 1994 and September 1995 in accordance with generally accepted government auditing standards.

### Results in Brief

Since 1980, total real expenditures (that is, expenditures in constant dollars) in public elementary and secondary schools have increased, while the average national per pupil expenditure increased then stabilized after 1989. From the 1979-80 school year to the 1992-93 school year, total public expenditures for elementary and secondary education increased by 40 percent to \$254.4 billion. In addition, since 1990, public school enrollments began to increase after a decade of decline in the 1980s, when public



school enrollment decreased to a low of 39.2 million children in the school year 1984-85. This upward trend is expected to continue, with public school enrollment increasing by 11 percent between school years 1993-94 and 2000-01 to about 48.3 million.

Moreover, the number of poor children is also increasing at a high rate. The cost of educating these and other at-risk children is generally higher than the cost of educating children not at risk. However, since 1989, after years of increase the average per pupil expenditure<sup>6</sup> for elementary and secondary education has leveled off. In school year 1992-93, the current average per pupil expenditure was \$5,296.

Such leveling off is due, in part, to a leveling off in the states' share of education funding. Beginning in the 1970s, the overall trend was for states to assume a greater and greater share of education funding until their share peaked at 49.7 percent in school year 1986-87. By school year 1989-90, it had decreased to 47.3 percent. By school year 1992-93, state and local shares of total education spending were roughly equal, estimated at 45.6 percent (\$1.13 billion) and 47.4 percent (\$1.18 billion), respectively.

In looking at trends in competition for state revenues, we found that education's share of state budgets decreased between fiscal years 1987 and 1994, while Medicaid, which provides medical care for the poor, and corrections, which builds and operates prisons, increased their shares. The portion of state budgets designated for elementary and secondary education decreased by about 11 percent, while Medicaid's share increased sharply by 90 percent and corrections' by 10 percent.

In addition, while states' ability to raise revenues for education grew more quickly from 1982 to 1992 than overall ability to raise revenues, states' willingness to raise revenues for education grew more slowly than willingness to raise revenues for overall spending. The ability of states to raise taxes and revenues on the basis of taxable resources (fiscal capacity) and each state's willingness to tax those resources (fiscal effort) vary widely. States also differ in ability and willingness to raise revenues for education and for overall government services.

State and local governments feel pressure from different sources, including growing numbers of students—especially at-risk students—those who want to improve America's schools through



<sup>&</sup>lt;sup>6</sup>This is the current average per pupil expenditure—that is, total expenditure, excluding capital outlay and interest on debt.

education reform, and state court challenges to school funding to increase education spending in less wealthy school districts. Education is losing its dominance of state budgets as it competes with other public services, such as Medicaid and corrections, for public funds.

## Background

America's elementary and secondary schools are funded primarily by state and local revenue sources. State revenues derive primarily from general sales, personal income, and corporate taxes. Localities raise revenues primarily through property taxes and, to a lesser extent, local sales and income taxes. Federal aid to education has historically been provided to supplement state and local funds for students with the greatest needs.

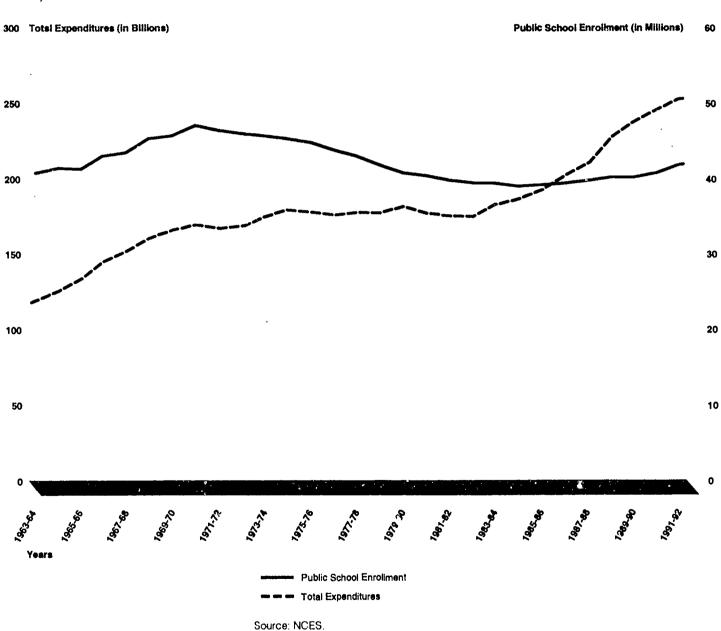
State school finance programs are meant to meet the educational needs of children, while considering budget priorities in each state. Finance programs vary in complexity as well as in the amount spent per pupil. Some of this variation in per pupil expenditures is accounted for by differences in the cost of educational services, the property wealth of the state, the amount the state is willing to spend for education, or the funding formula used by the state. In some states, this variation has led to lawsuits challenging funding formulas.

### Total Expenditures Have Increased Since 1979-80

From 1979-80 to 1992-93, total real expenditures for public elementary and secondary education increased by 40 percent to \$254.4 billion. Total expenditures have generally increased since the 1960s, except for a slight decline between 1977 and 1980. Between 1989-90 and 1992-93, expenditures increased by 6 percent, similar to the rate of increase in public school enrollment during this time. This increase in total expenditures contrasts with the levels in the 1970s, when the totals remained somewhat level until increasing to approximately \$189 billion in 1977-78 (see fig. 1).



Figure 1: Coth Total Expenditures and Public School Enrollment Levels Increased During the 1990s (in Constant 1993 Dollars)





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Public School Enrollment Has Grown Since 1990 and Is Expected to Grow More in the Future Since 1990, enrollment has begun growing after generally leveling off in the 1980s. In 1980-81, public school enrollment was 40.9 million; it declined to a low of 39.2 million in 1984-85. Thereafter, public school enrollment began growing slowly and in 1989-90 reached 40.5 million. From 1989-90 to 1992-93, public school enrollment increased by 6 percent, to 42.8 million. By the school year 2000-01, this enrollment is projected to increase to 48.3 million (see fig. 1).

In addition, the number of at-risk children in all categories has increased since 1980. Between 1980 and 1990, the number of poor school-age children increased by about 6 percent to 7.6 million, while the overall school-age population declined. The numbers of other types of at-risk students, such as those with limited English proficiency (LEP), immigrants, and students needing special education, have all increased at similar or higher rates (see app. II, table II.2). We also examined data on all children under age 18, school age and nonschool age, because they provide a more comprehensive measure of the number of children expected to enroll in school currently and in the future. From 1980 to 1993, the number of poor children under age 18 in families increased by 35 percent, from 11.1 million to 15 million (see app. II, fig. II.4).

The growth in these at-risk populations has increased the demand for specialized classroom services. Regular classroom services increasingly include special education for the physically and mentally challenged, compensatory education for the economically disadvantaged, and language services for LEP students. In addition, many schools will have to address the needs of other at-risk students, such as children who change schools frequently and are, therefore, more likely to be low achievers and have other difficulties such as health and nutrition problems.

Because of the additional services associated with educating poor and other at-risk students, many schools face elevated cost requirements and must find ways to stretch current funding levels to pay for these services. This is more difficult in areas with high concentrations of poverty because such areas are frequently limited in their ability to raise revenues. This limitation is partially offset, in many states, by federal and state categorical education programs.



<sup>&</sup>lt;sup>7</sup>Projections of Education Statistics to 2005, NCES, U.S. Department of Education (NCES-95-169) (Washington, D.C.: Jan. 1995).

<sup>&</sup>lt;sup>8</sup>School-Age Children: Poverty and Diversity Challenge Schools Nationwide.

<sup>&</sup>lt;sup>9</sup>Elementary School Children: Many Change Schools Frequently, Harming Their Education (GAO/HEHS-94-45, Feb. 4, 1994).

#### Per Pupil Expenditures Have Recently Leveled Off

After decades of increase (with one plateau in the late 1970s), per pupil expenditures for elementary and secondary education leveled off beginning in 1989-90, increasing less than 1 percent, on average, each year until 1992-93 (see app. III, fig. III.1). This leveling off of per pupil expenditures is due, in part, to the increased number of children who enrolled in our nation's schools since 1990 and the effects of the 1990-91 recession. Before the 1990s, education spending—measured as current per pupil expenditures—rose steadily. Data going back to the 1960s show a rapid increase in expenditures—up 69 percent for the decade, with a slower rate of increase in the 1970s—35 percent—and a similar increase in the 1980s—33 percent. 10

For the nation, the average total per pupil expenditure for 1992-93, using fall enrollment as a measure, was \$5,296, although per pupil expenditures vary throughout the United States. In 1992-93, per pupil expenditures for the states ranged from \$3,700 to \$10,100 (see app. III, table III.2). From 1981-82 to 1992-93, on average, most states' per pupil expenditure increased between 25 and 50 percent (see app. III, fig. III.2).

Per pupil expenditures may vary substantially within a state. For example, in Texas, some school districts spent more than twice as much on total operating expenditures per pupil than others. While districts at the low end, the 5th percentile, spent \$3,650 per pupil, high-spending districts, at the 95th percentile, spent \$7,928 per pupil in 1993-94. These differences may exist, in part, however, because of geographic cost-of-living differences and differences in pupil needs.

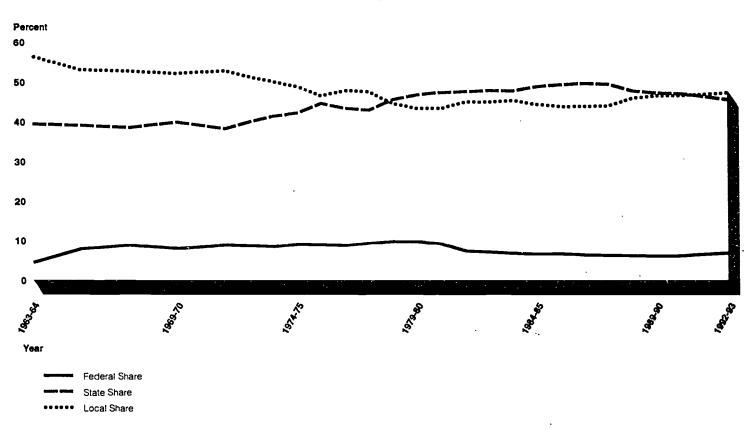
### State Share for Education Spending Leveled Off

The previously increasing state share of education spending leveled off beginning in 1989-90 (see fig. 2). Since the early 1970s, the states had provided an increasingly larger share of education spending. In 1969-70, the state share was 39.9 percent, and it increased by 17 percent to 46.8 percent in 1979-80. In 1986-87, the state share had peaked at 49.7 percent. By 1990, the state share had decreased to 47.3 percent. In 1992-93, the state and local shares were roughly equal, with localities contributing a slightly larger share (47.4 percent or \$118 billion) than states (45.6 percent or \$113 billion). Some states' shares declined further.



 $<sup>^{10}\</sup>mbox{Declining enrollments}$  in the 1970s and 1980s may have contributed to increases in per pupil expenditures.





Source: NCES

Although localities had historically been the major contributors for education revenues, states began playing a larger role in funding education in the 1970s and 1980s. During this time, states sought to reduce the fiscal disparities among districts and became more involved in education reform efforts.

Localities' share decreased by 17 percent from 52.1 percent in 1969-70 to 43.4 percent in 1979-80. During the 1980s, the localities' share leveled off. It rose slightly from 1988-89 to 1992-93—from 46 to 47.4 percent.



During the 1970s, the federal share also began to rise, largely as a result of the increased number of programs for at-risk children. In 1969-70, the federal share was 8 percent, increasing to 9.8 percent in 1979-80. Thereafter, during the 1980s, the federal share decreased and reached a low of 6.1 percent in 1989-90. In 1992-93, the federal share increased to 6.9 percent or \$17 billion.

State, local, and federal shares for education spending vary by state. In 1991-92, state contributions ranged from a high of 73.8 percent in New Mexico to a low of 8.5 percent in New Hampshire, where citizens regard education as a local responsibility. Most states contribute between 30 and 70 percent. Local contributions range from 14 to 88 percent, and the federal contributions per state range from 3 to 17 percent (see app. IV, table IV.2).

### Elementary and Secondary Education's Share of State Budgets Decreased

Between fiscal years 1987 and 1994, the relative share of elementary and secondary education spending in state budgets<sup>12</sup> decreased by 11 percent. In fiscal year 1987, education accounted for 22.8 percent of total state spending but decreased to 20.3 percent by fiscal year 1994 (see app. V, fig. V.1). This decrease in the percent of states' budgets spent for education occurred, in part, because of increased spending for Medicaid<sup>13</sup> and corrections (see fig. 3). State shares for education and other government services declined because of relatively weak economic growth as well as the budget effects of state and federal mandates.<sup>14</sup>



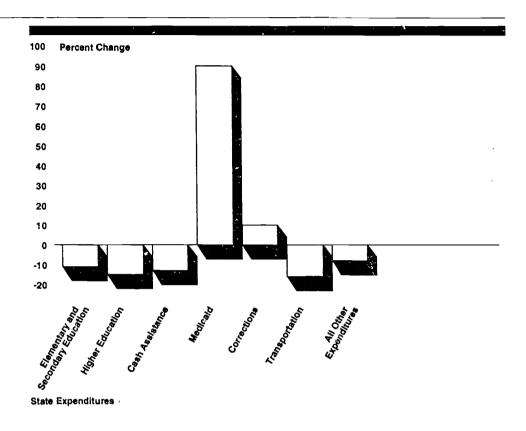
<sup>&</sup>lt;sup>11</sup>Hawaii contributes 90.3 percent, but the state differs from the others because it is the school district, funding and operating all public schools.

<sup>&</sup>lt;sup>12</sup>State budgets include general and other state, federal, and bond funds. Trends were generally similar when considering changes in shares of the general fund alone.

<sup>&</sup>lt;sup>13</sup>The federal government provides a large portion of the funds for Medicaid.

<sup>&</sup>lt;sup>14</sup>State and Local Finances: Some Jurisdictions Confronted by Short- and Long-Term Problems (GAO/HEHS-94-1, Oct. 6, 1993).

Figure 3: Education's Share of State Budgets Decreased, While Corrections' and Medicaid's Shares Increased, Fiscal Years 1987-1994



Source: National Association of State Budget Officers.

State education needs compete for funds with other state services, and relative budget shares have shifted since fiscal year 1987. Between fiscal years 1987 and 1994, Medicaid's share of states' budgets increased sharply by 90 percent, from 10.2 to 19.4 percent. In addition, corrections' share increased by 10 percent, from 3 to 3.3 percent. Meanwhile, elementary and secondary education's and higher education's shares decreased by 11 percent and 15 percent, respectively. In fiscal year 1990, Medicaid surpassed higher education as the second largest state program; in fiscal year 1994, Medicaid was nearly equal to elementary's and secondary's share of 20.3 percent (see fig. V.1). Medicaid spending, which provides medical care for the poor and is mandated by the federal government and administered by states, has been absorbing the bulk of additional revenue generated in many states. Twenty-four states experienced double-digit growth in total Medicaid spending between fiscal years 1993 and 1994.



Increased corrections spending is due, in part, to court orders imposed on states requiring the relief of overcrowded prisons or improved prison conditions as well as to an increased number of prisoners.

## States' Ability and Willingness to Raise Revenues Vary Widely

We developed a measure of a state's ability<sup>15</sup> to raise taxes and revenue based on taxable resources, accounting for differences among states in purchasing power and population (see app. I). In 1992, states with high ability to raise revenue were usually resource rich, had populations with high incomes and high property values, or had large tourist industries. The seven states that have very high ability to raise revenue overall—that is, 115 percent or more of the U.S. average—are Alaska, Connecticut, Delaware, Hawaii, Massachusetts, New Jersey, and New York. Those with very low ability to raise revenue overall—that is, below 85 percent of the U.S. average—are Alabama, Arizona, Arkansas, Idaho, Kentucky, Mississippi, Montana, New Mexico, Oklahoma, South Carolina, Utah, and West Virginia. (See app. VI and figs. VI.1 and VI.2.)

We also examined each state's ability to raise revenue for kindergarten to twelfth grade education using a cost-adjusted measure of total taxable resources per child enrolled in public schools. Six of the seven states with very high ability to raise revenue overall also had very high ability to raise revenue for education (115 percent or more of the U.S. average): Connecticut, Delaware, Hawaii, Massachusetts, New Jersey, and New York. Eight states had very low ability to raise revenue for education (less than 85 percent of the U.S. average): Arizona, Arkansas, Idaho, Mississippi, Montana, New Mexico, Utah, and West Virginia. (See app. VI, fig. VI.2 and table VI.1.) These 8 states are among the 12 with very low ability to raise revenue overall.

States, however, vary in their willingness to raise revenue, which we measured as actual state revenue relative to the state's ability to raise revenue. Some states tax heavily because their citizens have a strong preference for public services; other states tax lightly, reflecting a preference for a smaller public sector. <sup>16</sup> States with very high willingness to raise revenue for education include Alaska, Maine, Michigan, Montana, New Jersey, Oregon, Vermont, West Virginia, Wisconsin, and Wyoming. States with very low willingness to raise revenue, according to our



<sup>&</sup>lt;sup>15</sup>Our measures of states' ability and willingness to raise revenues account for the revenues available to, or raised by, localities as well as states.

<sup>&</sup>lt;sup>16</sup>RTS 1991: State Revenue Capacity and Effort, Advisory Commission on Intergovernmental Relations (Washington, D.C.: Sept. 1993).

measure, for education include Alabama, Delaware, Hawaii, Nevada, and Tennessee. (See app. VI, figs. VI.3 and VI.4.)

### Conclusions

Recent trends in U.S. education finance reveal the leveling off of per pupil spending for education combined with increasing enrollment in public elementary and secondary schools. Meanwhile, the schools face an increasing number of at-risk children whose education costs may be generally greater than average. Moreover, education's share of state budgets has declined, and federal education funding faces tight fiscal constraints. If these trends continue, America may be less able to adequately provide educational services for many of our school-age children or make necessary improvements in the educational system.

## **Agency Comments**

Officials from the Department of Education's National Center for Education Statistics and education finance experts reviewed a draft of this report and provided us with technical comments, which we incorporated as appropriate.

We are sending copies of this report to appropriate House and Senate committees and other interested parties. Please call Eleanor L. Johnson on (202) 512-7209 if you or your staff have any questions. Major contributors to this report are listed in appendix VII.

Linda G. Morra

Director, Education and Employment Issues

Linda & Mora



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#### Abbreviations

ACIR	Advisory Commission on Intergovernmental Relations
ESEA	Elementary and Secondary Education Act
GSP	gross state product
LEP	limited English proficiency
NCES	National Center for Education Statistics
PCPI	per capita personal income
TTR	total taxable resources



## Scope and Methodology

## Education Spending Trends

To determine the national and state trends in education spending, we analyzed fiscal data from the Department of Education's National Center for Education Statistics (NCES). In addition, we reviewed data from the National Association of State Budget Officers and other published works by education finance experts. We used the most recent actual and estimated NCES data; therefore, the time spans of the data in our figures and tables vary.

When reporting state trend data, we provided information on all 50 states; we did not include the District of Columbia. When reporting finance data for a number of years, we provided data in constant dollars for greater comparability. In cases when NCES data were not in constant dollars, we used the price index developed by the Department of Commerce's Bureau of Economic Analysis for state and local government purchases of goods and services to make adjustments. When comparing per pupil expenditure data at the state and national level, we used fall enrollments as the pupil measure. When we compared federal, state, and local shares of education revenues, we combined the local share with intermediate and private funds. Intermediate and private funds included a relatively small amount from nongovernmental sources, such as gifts and tuition from patrons.

### Measures of Ability and Willingness to Raise Revenue

We have developed two measures of ability to raise revenue. One, which we call ability to raise revenue overall, measures the ability of states to finance public services, accounting for the costs of the services as well as a rudimentary measure of need for services—total population. The Advisory Commission on Intergovernmental Relations (ACIR) defines ability to raise revenue similarly, "as the hypothetical ability of a state and its local governments to raise revenue to provide public services in the state relative to the need for those services." We have also developed a measure of ability to raise revenue that estimates a state's ability to finance educational services, which we call ability to raise revenue for education. This measure accounts for the number of school-age children and the costs of providing educational services in the state as measured by average teacher salaries.

Both measures of ability to raise revenue that we have developed use total taxable resources (TTR) as a component that assesses a state's ability to finance services. TTR, defined and compiled by the Department of the Treasury, is the average of per capita personal income (PCPI) produced in a state and per capita gross state product (GSP). As noted in an earlier report,



<sup>&</sup>lt;sup>17</sup>RTS 1991: State Revenue Capacity and Effort, ACIR (Washington, D.C.: Sept. 1993), p. 5.

Appendix I Scope and Methodology

"GSP measures all income produced within a state, whether received by residents, nonresidents, or retained by business corporations." ITTR is a more comprehensive indicator of taxable resources than PCPI alone, in part, because it also considers income produced in a state but received by nonresidents. The Congress has included TTR in the allocation formula for the Alcohol, Drug Abuse, and Mental Health Block Grant.

We have also developed two measures of willingness to raise revenue: an overall measure and one for education. Willingness to raise revenue overall can be determined by comparing a state's actual revenue with its capacity to raise revenue. Willingness to raise revenue for education is determined similarly but focuses on spending for kindergarten to twelfth grade public education alone rather than all public services. For each of our "willingness measures," as well as our two "ability measures," we have developed an index by comparing the state figure to that of the whole nation. The following describes each of these indexes.

#### Ability to Raise Revenue Overall

Our index of ability to raise revenue overall has two components. The first component is TTR per capita for a state divided by TTR per capita for the nation. This provides an index of nominal ability to raise revenue. Our second component, a cost index or purchasing power adjustment, provides a common measurement for states with greatly varying costs. This cost index is based on the work of Department of the Treasury analysts. Robert Rafuse developed a state level labor-input-cost index for 1986 based on the mean annual earnings of males 45 to 54 years old who worked 40 or more weeks per year, accounting for seven different levels of education. This work was later replicated by Kiran Duwadi for 1990. Dividing the first component, an index of nominal ability to raise revenue



<sup>&</sup>lt;sup>18</sup>State and Local Finances: Some Jurisdictions Confronted by Short- and Long-Term Problems (GAO/HRD-94-1, Oct. 6, 1993), p. 102.

<sup>&</sup>lt;sup>19</sup>Mike Springer, Estimating Total Taxable Resources, memorandum, Department of the Treasury (Washington, D.C.: July 22, 1991).

<sup>&</sup>lt;sup>20</sup>See Robert W. Rafuse, Jr., Representative Expenditures: Addressing the Neglected Dimension of Fiscal Capacity, ACIR (Washington, D.C.: Dec. 1990). On the basis of information provided by Rafuse on the percent of males aged 45 to 54 in each of seven education groups, we developed a similar set of cost estimates for 1979.

<sup>&</sup>lt;sup>21</sup>Robert W. Rafuse, Jr., "Memorandum for Participants in Brainstorming Session On Estimation of Representative Expenditures," Department of the Treasury (Washington, D.C.: Nov. 9, 1992).

by the cost index results in a cost-adjusted measure of ability to raise revenue overall.<sup>22</sup>

## Ability to Raise Revenue for Education

Our index for ability to raise revenue for education parallels that for ability to raise revenue overall. Again, the index has two components. The first is TTR per school-age child in the state divided by that for the nation. The second component is a cost index based on average teacher salaries for each state, adjusted for average levels of teacher experience for each state. Using a methodology developed by F. Howard Nelson along with information on teacher experience from the Department of Education's 1990-91 Schools and Staffing Survey, we found that teacher salaries increase about 2.33 percent, on average for the nation, for each year of teacher experience.

We then adjusted average teacher salaries for each state, a measure of the costs of providing educational services in each state, to account for differences among states in average levels of teacher experience. For example, we found that the average teacher salary in Oklahoma for 1991-92 was \$26,514 and that the average number of years of teaching experience was 12.9, about 2.2 years below the national average of 15.1 years. If Oklahoma were to be able to attract teachers with comparable years of experience as the nation as a whole, it would cost the state, we estimate, an additional \$618 for each year of teaching experience or about \$1,359 for 2.2 years. Therefore, we estimate that the experience-adjusted average teacher salary for Oklahoma would be about \$27,873, still well below the average for the nation, \$34,213. Consequently, while our measure of the cost of educational services in Oklahoma is still low, it does account for Oklahoma's costs being somewhat higher were it to have levels of teaching experience comparable to the U.S. average.

To illustrate how the index of ability to raise revenue for education was developed, consider again the example of Oklahoma. Oklahoma has a relatively low TTR per school-age child, about 73 percent of the U.S. average, or \$104,693 per child compared with \$143,178 per child for the United States. This stems from two factors: (1) relatively low TTR and (2) relatively high proportions of school-age children. While Oklahoma's nominal ability to raise revenue for education is low, its cost of providing



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<sup>&</sup>lt;sup>22</sup>In Representative Expenditures: Addressing the Neglected Dimension of Fiscal Capacity, Robert Rafuse calculates that 50 percent of all direct expenditures relate to employee compensation costs. Since the costs of employee compensation vary by state (for example, they are higher in New York State than in Mississippi), we cost adjusted 50 percent of expenditures. Other expenditures, such as for equipment, are less likely to vary by state because national markets exist for such items.

Appendix I Scope and Methodology

educational services, that is, adjusted average teacher salaries, is also low, at about 81 percent of the U.S. average. When we applied a cost adjustment to reflect the purchasing power in each state, we calculated an index of .86, which reflects Oklahoma's ability to raise revenue for education—less than the average for the nation as a whole of 1.00.<sup>23</sup>

#### Willingness to Raise Revenue Overall

Our index of willingness to raise revenue overall is based on a state's total state and local revenue divided by the state's TTR. This number is divided by total state and local revenue in the nation (or all states), divided by the nation's TTR, to provide an index. For example, if the index is 1.10, then we know that the state's willingness to raise revenue overall is 10 percent greater than that for the whole nation. Conversely, if the state's index of willingness to raise revenue overall is only 90 percent of that for the whole nation.

#### Willingness to Raise Revenue for Education

Similarly, our index of willingness to raise revenue for education is based on actual state and local revenue for kindergarten to twelfth grade public education divided by the state's TTR. As an example, the index of willingness to raise revenue for education for Wyoming was 1.31 for 1991-92, substantially over the 1.00 index for the nation. Adjusting the two measures of willingness to raise revenue for differences in purchasing power by state is not necessary because such measures would be in both the numerator and denominator and therefore would cancel each other out.

Changes in Ability and Willingness to Raise Revenue for Education and Overall From 1981-82 to 1991-92

We also examined changes in the levels of ability to raise revenue and willingness to raise revenue over time—from 1981-82 to 1991-92. For this analysis we determined the measures as described above, except that we did not put the measures in index form—that is, relative to the U.S. average. When we examined the change for the nation as a whole, we determined that ability to raise revenue for education, a measure of the nation's revenue base per child, was \$143,178 in 1991-92. The nation's ability to raise revenue for education in 1981-82 in unadjusted and therefore noncomparable 1981-82 dollars was \$77,412.



<sup>&</sup>lt;sup>23</sup>States face different levels of purchasing power for teacher compensation, that is, it costs more to attract teachers to work in some states than others. Personnel-related costs make up 84.8 percent of current expenditures and 75.5 percent of total expenditures. To account for cost differences in personnel-related costs, we cost adjusted 75.5 percent of our measure of ability to raise revenue. See Stephen M. Barro, Cost-of-Education Differentials Across the States, Department of Education, NCES, Working Paper No. 94-05 (Washington, D.C.: July 1994), pp. 29-30.

Appendix I Scope and Methodology

To provide comparability, we adjusted each total used in the two measures of ability to raise revenue, for education and overall, so that they would each be in 1987 dollars, using a deflator developed by the Department of Commerce's Bureau of Economic Analysis. This deflator was developed specifically for state and local government purchases of goods and services. After the figures were adjusted, we found that the nation's ability to raise revenue for education had increased 26.6 percent from 1981-82 to 1991-92, from \$94,752 to \$119,915. We conducted similar analyses to determine changes over time in the measure of ability to raise revenue overall. We also determined changes over time in our two measures of willingness to raise revenue, for education and overall.



## Data—School-Age Population Characteristics

This appendix provides additional data on the increase in public school levels as well as the number of at-risk students. Following are the tables and figures presented in this appendix in order of appearance.

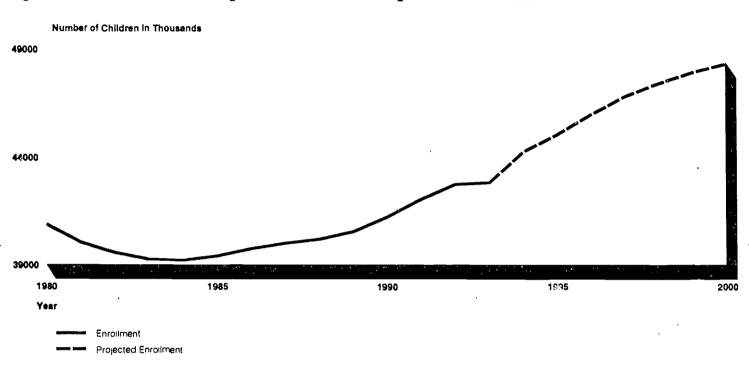
- Figure II.1 shows public school enrollment levels from 1980 projected to the year 2000.
- Table II.1 presents the data points for figure II.1.
- Table II.2 shows the growth in specific at-risk populations of children (poor, special education, limited English proficient, and immigrant), 1980 to 1990.
- Figure II.2 shows changes in enrollment by state.
- Table II.3 presents the data points for figure II.2.
- Figure II.3 shows changes in numbers of children in poverty by state.
- Table II.4 presents the data points for figure II.3.
- Figure II.4 compares the percent change among all children under 18 and poor children under 18, 1980 to 1993. We chose the under-18 age group to provide a more comprehensive measure of the number of children who are, or will soon be, attending school.
- Table II.5 presents the data points for figure II.4.



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Appendix II
Data—School-Age Population
Characteristics

Figure II.1: Enrollment Levels Have Begun to Increase After Reaching a Low in the Mid 1980s



Source: National Center for Education Statistics.



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## Table N.1: Public School Enrollment Levels, 1980-81 to 2000-01

Year	Total enrollment (thousands)
1980-81	40,877
1981-82	40,044
1982-83	39,568
1983-84	39,252
1984-85	39,208
1985-86	39,422
1986-87	39,753
1987-88	40,008
1988-89	40,189
1989-90	40,543
1990-91 ,	41,217
1991-92	42,047
1992-93	42,816
1993-94 estimated	43,353
1994-95 projected	44,237
1995-96 projected	45,037
1996-97 projected	45,960
1997-98 projected	46,79
1998-99 projected	47,40
1999-2000 projected	47,91
2000-2001 projected	48,32

Source: National Center for Education Statistics.

## Table ii.2: Numbers of Various Types of At-Risk Children in 1980 and 1990

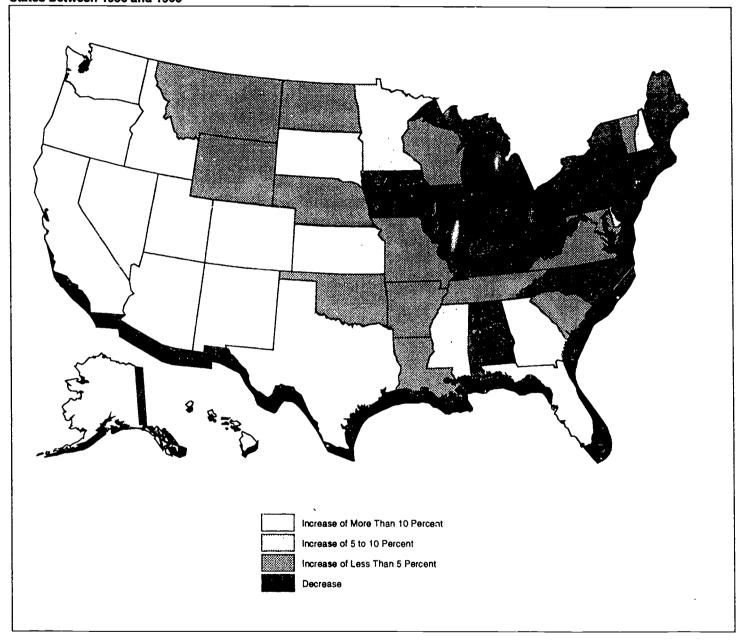
Student type	School year 1980 (thousands)	School year 1990 (thousands)	Increase over decade (percent)
Poor school-age	7,200	7,600	6
Special education <sup>a</sup>	4,142	4,762	15
Limited English proficient	1,839	2,311	26
Immigrant	1,872	2,320	24

aChildren 0 to 21 years old served in federally supported programs for the disabled.



Appendix II
Data—School-Age Population
Characteristics

Figure II.2: Changes in Enrollment Varied by State, Although Most Increases Occurred in the Southwestern and Western States Between 1980 and 1993



Source: National Center for Education Statistics



Table II.3: Changes in Public School Enrollment by State Between 1980 and 1993

24-4-	Enrollment in 1980 Enro	allment in 1902	Percent change in enrollment between 1980 and 1993
State		730,509	-3.72
Alabama	758,721		45.14
Alaska	86,514	125,564	30.30
Arizona	513,790	669,459 450,672	
Arkansas	447,700		
California	4,076,421	5,285,000	14.47
Colorado.	546,033	625,062	
Connecticut	531,459	493,500	-7.14
Delaware	99,403	105,547	6.18
Florida	1,510,225	2,039,385	35.04
Georgia	1,068,737	1,235,304	15.59
Hawaii	165,068	179,876	8.97
Idaho	203,247	236,774	16.50
Illinois	1,983,463	1,886,947	-4.87
Indiana	1,055,589	961,534	
lowa	533,857	497,912	
Kansas	415,291	458,538	10.41
Kentucky	669,798	639,200	
Louisiana	777,560	799,917	2.88
Maine	222,497	212,245	4.6
Maryland	750,665	772,638	2.93
Massachusetts	1,021,885	878,734	
Michigan	1,797,052	1,613,700	
Minnesota	754,318	807,760	7.00
Mississippi	477,059	503,374	5.5
Missouri	844,648	870,086	3.0
Montana	155,193	162,891	4.9
Nebraska	280,430	284,458	1.4
Nevada	149,481	. 235,800	57.7
New Hampshire	167,232	182,385	9.0
New Jersey	1,246,008	1,152,205	-7.5
New Mexico	271,198	321,164	
New York	2,871,724	2,746,200	
North Carolina	1,129,376	1,123,636	
North Dakota	116,885	118,500	
Ohio	1,957,381	1,812,300	
Oklahoma	577,807	598,000	
Ontariorna	0,,100,		(continued
			100



Appendix II
Data—School-Age Population
Characteristics

State	Enrollment in 1980	Enrollment in 1993	Percent change in enrollment between 1980 and 1993
Oregon	464,599	516,610	11.19
Pennsylvania	1,909,292	1,745,230	-8.59
Rhode Island	148,956	145,676	-2.20
South Carolina	619,223	636,297	2.76
South Dakota	128,507	151,073	17.56
Tennessee	853,569	857,051	0.41
Texas	2,900,073	3,616,457	24.70
Utah	343,618	468,675	36.39
Vermont	95,815	100,000	4.37
Virginia	1,010,371	1,045,472	3.47
Washington	757,639	916,928	21.02
West Virginia	383,503	313,750	-18.19
Wisconsin	830,247	841,856	1.40
Wyoming	98,305	100,899	2.64

Source: National Center for Education Statistics.



Figure II.3: Greatest Growth in School-Age Poverty Population Between 1980 and 1990 Occurred in Southwestern and Western States

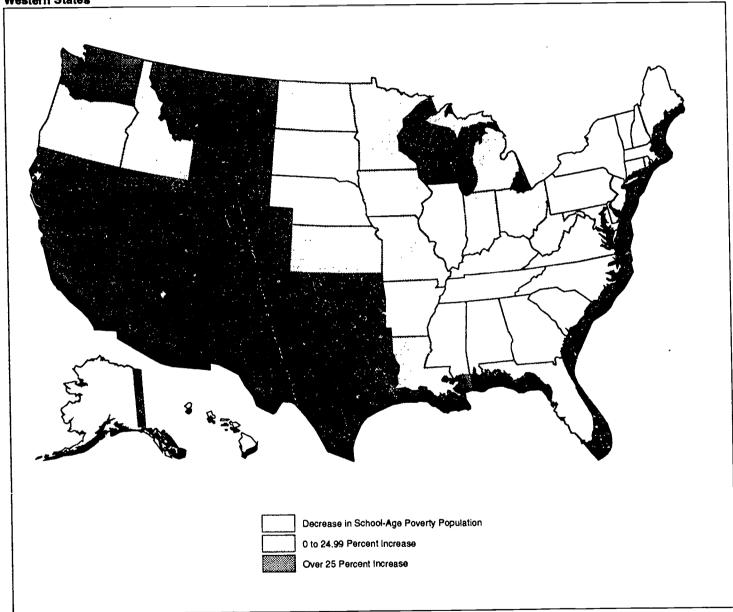




Table II.4: Percent Change in Number of Poor School-Age Children, 1980-90, and 1990 School-Age Poverty Rates by State

·	Number of poor s		Percent change	School- age poverty rate (percent)
State	1980	1990	1980-1990	1990
Alabama	198,674	178,559	-10.1	23.3
Alaska	10,207	10,910	6.9	9.6
Arizona	90,072	136,626	51.7	20.3
Arkansas	111,691	107,170	-4.0	23.8
California	651,039	897,104	37.8	17.3
Colorado	63,062	82,083	30.2	13.8
Connecticut	65,610	50,611	-22.9	9.8
Delaware	18,098	12,342	-31.8	11.0
Florida	311,021	344,969	10.9	17.5
Georgia	249,998	229,402	-8.2	18.9
Hawaii	22,721	20,316	-10.6	10.5
ldaho	28,254	32,279	14.2	14.5
Illinois	336,783	328,801	-2.4	15.9
Indiana	130,984	132,837	1.4	12.8
lowa	64,847	65,378	0.8	12.7
Kansas	49,397	59,578	20.6	12.8
Kentucky	168,030	161,587	-3.8	23.3
Louisiana	221,714	267,555	20.7	30.4
Maine	36,249	26,853	-25.9	12.4
Maryland	104,310	82,612	-20.8	10.5
Massachusetts	140,978	112,691	-20.1	12.2
Michigan	254,479	288,557	13.4	16.7
Minnesota	80,983	93,242	15.1	11.4
Mississippi	180,439	177,895	-1.4	32.7
Missouri	139,765	150,951	8.0	16.3
Montana	21,083	29,340	39.2	18.4
Nebraska	37,105	36,655	-1.2	12.0
Nevada	14,653	23,065	57.4	11.8
New Hampshire	17,314	12,117	-30.0	6.4
New Jersey	202,184	134,371	-33.5	10.8
New Mexico	64,849	82,984	28.0	26.4
New York	626,784	531,845	-15 1	18.1
North Carolina	221,699	180,954	-18.4	16.0
North Dakota	18,941	19,931	5.2	
				(continued

(continued)



	Number of poor s	•	Percent change	School- age poverty rate (percent)
State	1980	1990	1980-1990	1990
Ohio	279,040	322,358	15.5	16.2
Oklahoma	92,894	120,018	29.2	19.9
Oregon	55,332	67,926	22.8	13.4
Pennsylvania	310,663	284,692	8.4	14.5
Rhode Island	23,353	19,306	-17.3	12.4
South Carolina	143,925	131,053	-8.9	20.0
South Dakota	28,336	26,501	-6.5	18.8
Tennessee	194,569	169,437	_12.9	19.5
Texas	573,661	794,774	38.5	23.4
Utah	33,895	49,183	45.1	10.9
Vermont	14,048	10,695	-23.9	10.7
Virginia	158,083	129,565	-18.0	12.5
Washington	84,403	111,198	31.8	12.8
West Virginia	74,934	79,980	6.7	24.1
Wisconsin	96,167	121,585	26.4	13.4
Wyoming	7,515	12,443	65.6	12.7
United States	7,152,784*	7,571,259b	5.9	17.1

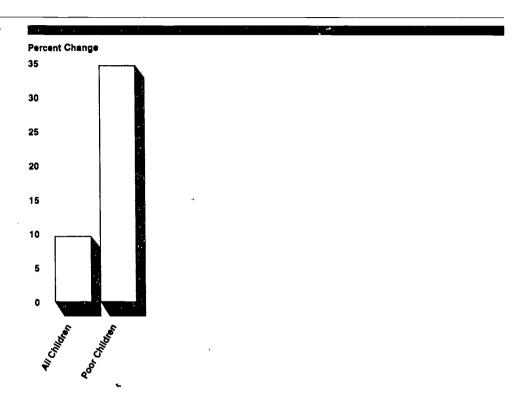
<sup>\*</sup>Includes 27,949 poor children from the District of Columbia.



Pincludes 18,375 poor children from the District of Columbia.

Appendix II
Data—School-Age Population
Characteristics

Figure II.4: Numbers of Children Under 18 in Families—Especially Poor Children—Have Increased Between 1980 and 1993



Source: U.S. Department of Commerce, Bureau of the Census, Current Population Survey Reports.

Table II.5: Numbers of Children Under 18 In Families and in Poor Families in 1980 and 1993

		* **	· • • • • • • • • • • • • • • • • • • •	
	Number of childre familie		Change in children families, 198	
	1980	1993	Number	Percent
All children	62,168,000	68,040,000	5,872,000	9.4
Poor children	11,114,000	14,961,000	3,847,000	34.6

Source: U.S. Department of Commerce, Bureau of the Census, Current Population Survey Reports.



## Data—Expenditures

This appendix provides additional data about total expenditures. Following are the tables and figures presented in this appendix in order of appearance.

- Table III.1 presents the data points for figure 1.
- Table III.2 shows the total per pupil expenditures from the perspective of between-state comparisons.
- Figure III.1 shows national averages of current per pupil expenditures from 1963-64 to 1992-93.
- Table III.3 presents the data points for figure III.1 and shows the range of per pupil current expenditures, 1963-64 to 1992-93.
- Table III.4 shows the range in per pupil expenditures within each state for 1989-90, using school districts at the 5th and 95th percentiles.
- Figure III.2 shows the percentage increase in per pupil expenditures by state between 1981-82 and 1992-93.
- Table III.5 presents the data points for figure III.2.



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Table III.1: Both Total Expenditures and Public School Enrollment Increased During the 1990s (in Constant 1993 Dollars)

	Total expenditures	Public school enrollment
Year	(dollars in billions)	(thousands)
1963-64	117	41,025
1964-65	127	42,280
1965-66	137	42,068
1966-67	146	43,042
1967-68	155	43,890
1968-69	161	44,903
1969-70	168	45,550
1970-71	173	46,894
1971-72	171	46,071
1972-73	174	45,726
1973-74	177	45,445
1974-75	182	45,073
1975-76	180	44,816
1976-77	177	44,311
1977-78	180	43,577
1978-79	179	42,561
1979-80	182	41,861
1980-81	179	40,877
1981-82	177	40,044
1982-83	177	39,566
1983-84	183	39,252
1984-85	187	39,208
1985-86	195	39,422
1986-87	204	39,753
1987-88	211	, 40,008
1988-89	226	40,189
1989-90	239	40,543
1990-91	248	41,21
1991-92	253	42,04
1992-93	254	42,810

Source: National Center for Education Statistics.

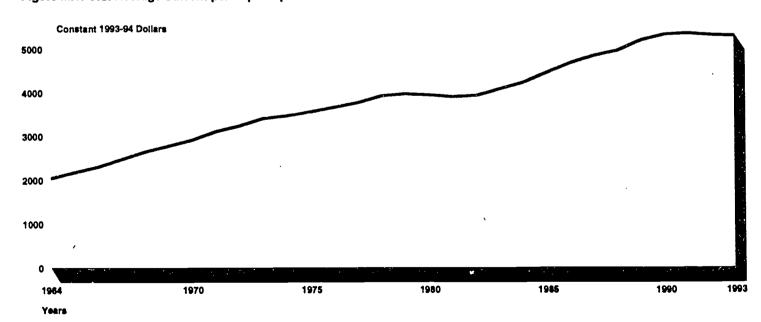


Table III.2: States' Total per Pupil Expenditures Ranged Between \$3,700 and \$10,100 for 1992-93

Per pupii expenditure range (in dollars)	States
\$9,000 and above	Alaska, New Jersey, New York
8,000 - 8,999	Connecticut
7,000 - 7,999	Maryland, Michigan, Pennsylvania, Rhode Island, Vermont, Wisconsin
6,000 - 6,999	Delaware, Florida, Hawaii, Illinois, Maine, Massachusetts, Minnesota, Nevada, Oregon, Washington, West Virginia, and Wyoming
5,000 - 5,999	Arizona, California, Colorado, Georgia, Indiana, Iowa, Kansas, Kentucky, Missouri, Montana, Nebraska, New Hampshire, North Carolina, Ohio, South Carolina, Texas, Virginia
4,000 - 4,999	Alabama, Arkansas, Idaho, Louisiana, New Mexico, North Dakota, Oklahoma, South Dakota, Tennessee
3,000 - 3,999	Mississippi, Utah

Source: National Center for Education Statistics.

Figure III.1: U.S. Average Current per Pupil Expenditures Have Leveled off Since 1990



Source: National Center for Education Statistics



Table III.3: National Current Expenditures per Pupil Enrolled for 1963-64 to 1992-93 (in Constant 1993-94 Dollars)

Year	Average per pupil expenditure (in dollars)
1963-64	2,031
1964-65	2,160
1965-66	2,288
1966-67	2,461
1967-68	2,633
1968-69	2,768
1969-70	2,903
1970-71	3,099
1971-72	3,225
1972-73	3,392
1973-74	3,453
	3,551
1975-76	3,653
1976-77	3,759
1977-78	3,914
1978-79	3,961
1979-80	3,934
1980-81	3,895
1981-82	3,923
1982-83	4,077
1983-84	4,223
1984-85	4,455
1985-86	4,675
1986-87	4,840
1987-88	4,956
1988-89	5,197
1989-90	5,327
1990-91	5,352
1991-92	5,314
1992-93	5,296

Source: National Center for Education Statistics.

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Table III.4: Within-State Differences Between High-Spending and Low-Spending School Districts, 1989-1990

State	Low-spending <sup>s</sup> district <sup>e</sup> per pupil expenditure (dollars)	High-spending <sup>b</sup> district <sup>c</sup> per pupil expenditure (dollars)	
Alabama	2,674	3,741	
Alaska	6,115	19,155	
Arizona	2,704	5,262	
Arkansas	2,543	3,705	
California	3,669	5,079	
Colorado	3,924	5,587	
Connecticut	5,523	8,304	
Delaware	4,249	5,805	
Florida	3,910	5,457	
Georgia	3,000	4,322	
Hawaii	4,288	4,288	
Idaho	2,441	4,332	
Illinois	2,672	4,239	
Indiana	3,335	4,980	
lowa	3,593	4,700	
Kansas	3,357	5,715	
Kentucky	2,509	3,520	
Louisiana	2,902	4,463	
Maine	3,910	5,473	
	4,532	6,246	
Massachusetts	3,807	7,182	
Michigan	3,224	5,609	
Minnesota	3,729	5,479	
Mississippi	2,478	3,596	
Missouri	2,803	4,557	
Montana	3,579	6,970	
Nebraska	3,530	6,048	
Nevada	3,691	6,672	
New Hampshire	3,604	5,914	
New Jersey	5,162	8,462	
New Mexico	3,460	6,577	
New York	5,439	11,725	
North Carolina	3,505	4,925	
North Dakota	2,995	5,356	
Ohio	3,1 17	5,606	
Oklahoma	2,583	3,972	
		(continued	





State	Low-spending <sup>a</sup> district <sup>e</sup> per pupil expenditure (dollars)	High-spending <sup>b</sup> district <sup>c</sup> per pupil expenditure (dollars)
Oregon	3,879	6,078
Pennsylvania	3,794	7,058
Rhode Island	4,953	6,646
South Carolina	3,369	4,852
South Dakota	2,833	5,052
Tennessee	2,268	3,036
Texas	3,035	5,452
Utah	2,381	4,257
Vermont	4,168	6,701
Virginia	3,642	6,058
Washington	3,760	6,144
West Virginia	3,160	4,023
Wisconsin	4,289	6,545
Wyoming	4,464	8,091

Note: Wayne Riddle and Liane White of the Congressional Research Service are currently updating their analysis of disparities within states with more recent data.

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Source: Wayne Riddle and Liane White, "Variations in Expenditures Per Pupil Among Local Educational Agencies Within the States," memorandum, Congressional Research Service, July 26, 1993.



<sup>&</sup>lt;sup>a</sup>5th percentile.

<sup>&</sup>lt;sup>b</sup>95th percentile.

<sup>&</sup>lt;sup>e</sup>Data listed are for unified school districts. See the source for additional data on elementary school districts and secondary school districts.

<sup>&</sup>lt;sup>d</sup>Hawaii has only one school district.

Figure III.2: Most States' per Pupil Expenditure Increased by at Least 25 Percent Between 1981-82 and 1992-93 (in Constant 1992-93 Dollars)

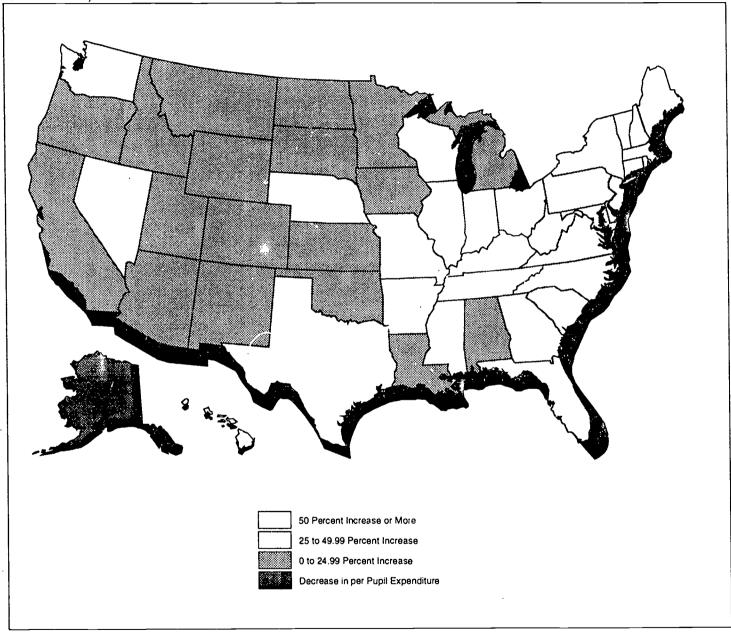


Table III.5: Data Points for Figure III.2, Percentage of Increase in per Pupil Expenditures by State

	Per pu	pii expenditure		
State	1981-82 (in constant 1992-93 doilars)*	1992-93	Percent change between 1981-82 and 1992-93	
Alabama	3,032	3,572	18	
Alaska	9,598	7,901	-18	
Arizona	3,598	4,088	14	
Arkansas	2,737	3,859	41	
California	4,198	4,614	10	
Colorado	4,365	4,766	9	
Connecticut	4,836	7,652	58	
Delaware	4,583	5,750	25	
Florida	3,780	4,876	29	
Georgia	2,963	4,368	47	
Hawaii	4,137	5,332	29	
Idaho	2,874	3,471	21	
Illinois	4,056	5,307	31	
Indiana	3,295	4,995	52	
lowa	4,296	4,970	16	
Kansas	4,034	4,926	22	
Kentucky	2,784	4,311	55	
Louisiana	3,760	4,010	7	
Maine	3,275	5,624	72	
Maryland	4,525	6,060	34	
Massachusetts	4,469	6,141	37	
Michigan	4,793	5,945	24	
Minnesota	4,393	5,210	19	
Mississippi	2,530	3,159	25	
Missouri	3,318	4,318	30	
Montana	4,314	4,907	14	
Nebraska	4,052	5,064	25	
Nevada	3,538	4,645	3	
New Hampshire	3,595	5,368	49	
New Jersey	5,385	8,770	63	
New Mexico	3,826	3,929		
New York	5,836	7,770	33	
North Carolina	3,129	4,426	4	
North Dakota	4,138	4,284		
Ohio	3,634	5,332	4	
= · · · <del>-</del>		<u> </u>	(continued	



	Per pu	pil expenditure	
State	1981-82 (in constant 1992-93 dollars)*	1992-93	Percent change between 1981-82 and 1992-93
Oklahoma	3,972	4,090	3
Oregon	4,685	5,585	19
Pennsylvania	4,441	6,372	43
Rhode Island	4,355	6,501	49
South Carolina	2,851	4,204	47
South Dakota	3,450	4,109	19
Tennessee	2,811	3,674	31
Texas	3,204	4,270	33
Utah	2,789	2,967	6
Vermont	4,197	6,342	51
Virginia	3,507	5,066	44
Washington	3,892	5,220	34
West Virginia	3,789	5,108	35
Wisconsin	4,217	5,974	42
Wyoming	5,047	5,462	

Note: Beginning in 1988-89, data reflect new survey collection procedures and may not be entirely comparable with figures for earlier years.

\*Based on an index for state and local government purchases of goods and services prepared by the Bureau of Economic Analysis, U.S. Department of Commerce. These data do not reflect differences in inflation rates from state to state.

Source: National Center for Education Statistics.



## Data—Federal, State, and Local Revenue Shares

This appendix provides additional data on the federal, state, and local shares of education revenues. Following are the tables and figures presented in this appendix in order of appearance.

- Table IV.1 presents the data points for figure 2.
- Table IV.2 presents the federal, state, and local contributions by state, 1991-1992.

Table IV.1: Federal, State, and Local Shares of Total Elementary and Secondary Education Revenues Between 1963-64 and 1992-93

	Shares			
Year	Federal (percent)	State (percent)	Local	
1963-64	4.4	39.3	56.3	
1965-66	7.9	39.1	53.0	
1967-68	8.8	38.5	52.7	
1969-70	8.0	39.9	52.1	
1970-71	8.4	39.1	52.5	
1971-72	8.9	38.3	52.8	
1972-73	8.7	40.0	51.3	
1973-74	8.5	41.4	50.1	
1974-75	9.0	42.2	48.8	
1975-76	8.9	44.6	46.5	
1976-77	8.8	43.4	47.8	
1977-78	9.4	43.0	47.6	
1978-79	9.8	45.6	44.6	
1979-80	9.8	46.8	43.4	
1980-81	9.2	47.4	43.4	
1981-82	7.4	47.6	45.0	
1982-83	7.1	47.9	45.0	
1983-84	6.8	47.8	45.4	
1984-85	6.6	48.9	44.4	
1985-86	6.7	49.4	43.9	
1986-87	6.4	49.7	43.9	
1987-88	6.3	49.5	44.	
1988-89	6.2	47.8	46.0	
1989-90	6.1	47.3	46.	
1990-91	6.2	47.2	46.	
1991-92	6.6	46.4	47.0	
1992-93	6.9	45.6	47.	

Source: National Center for Education Statistics.

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Table IV.2: Federal, State, and Local Contributions by State, 1991-1992

State	Federal (percent)	State (percent)	Local* (percent)
Alabama	11.4	58.8	29.8
Alaska	11.5	68.0	20.5
Arizona	8.8	42.4	48.8
Arkansas	10.8	59.9	29.3
California	7.5	65.9	26.6
Colorado	5.0	42.8	52.3
Connecticut	3.2	40.7	56.0
Delaware	7.6	65.9	26.5
Florida	7.3	48.4	44.3
Georgia	7.7	. 47.7	44.6
Hawaii	7.5	90.3	2.2
Idaho	8.1	61.8	30.1
Illinois	6.8	28.9	64.2
Indiara	5.3	52.9	41.8
lowa	5.3	47.3	47.4
Kansas	5.5	42.4	52.1
Kentucky	10.1	67.0	22.9
Louisiana	10.8	54.7	34.4
Maine	5.9	49.8	44.3
Maryland	5.1	38.2	56.7
Massachusetts	5.3	30.7	64.0
Michigan	6.2	26.6	67.2
Minnesota	4.5	51.6	<u>44.0</u>
Mississippi	17.0	53.5	29.
Missouri	6.4	38.0	55.
Montana	8.8	41.8	49.
Nebraska	6.2	34.3	59.
Nevada	4.2	38.7	57.
New Hampshire	3.1	8.5	88.
New Jersey	4.1	42.2	53.
New Mexico	12.4	73.8	13.
New York	5.6	40.3	54.
North Carolina	7.2	64.6	28.
North Dakota	11.1	44.8	44.
Ohio	5.9	40.8	53.
Oklahoma	4.6	62.2	33.
Oregon	6.4	30.6	63.
			(continued



Appendix IV
Data—Federal, State, and Local Revenue
Shares

State	Federal (percent)	State (percent)	Local* (percent)
Pennsylvania	5.7	41.4	52.8
Rhode Island	6.0	38.5	55.5
South Carolina	9.0	. 48.3	42.6
South Dakota	11.1	27.0	62.0
Tennessee	10.5	42.2	47.3
Texas	6.6	43.4	50.0
Utah	6.9	57.2	35.8
Vermont	5.1	31.6	63.3
Virginia	5.8	31.1	63.1
Washington	5.7	71.6	22.6
West Virginia	7.6	67.2	25.2
Wisconsin	4.4	39.4	56.2
Wyoming	5.3	52.5	42.2

<sup>\*</sup>Includes revenues from gifts and tuition and fees from patrons.

Source: National Center for Education Statistics.

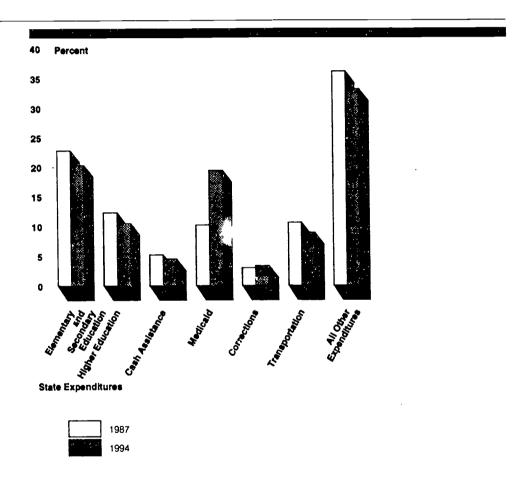


## Data—Education Share of State Budget

This appendix provides additional data on changes in the apportionment of state budgets. Following are the tables and figures presented in this appendix in order of appearance.

- Figure V.1 compares the apportionment of state budget shares in 1987 and 1994.
- Table V.1 presents the data points for figures 3 and V.1.

Figure V.1: Apportionment of State Budget Shares in 1987 and 1994



Source: 1994 State Expenditure Report, National Association of State Budget Officers, April 1995.



Table V.1: Changes in Apportionment of State Budgets From 1987 to 1994

	The state of the state of	•	
	Percent of fisc budget	Percent	
Budget sector	1987	1994	change
Elementary/ secondary education	22.8	20.3	-11.0
Higher education .	12.3	10.5	-14.6
Cash assistance	5.2	4.5	-13.5
Medicaid	10.2	19.4	90.1
Corrections	3.0	3.3	10.0
Transportation	10.6	8.9	-16.0
All other	. 36.1	33.1	-8.3

Source: 1994 State Expenditure Report, National Association of State Budget Officers, April 1995.



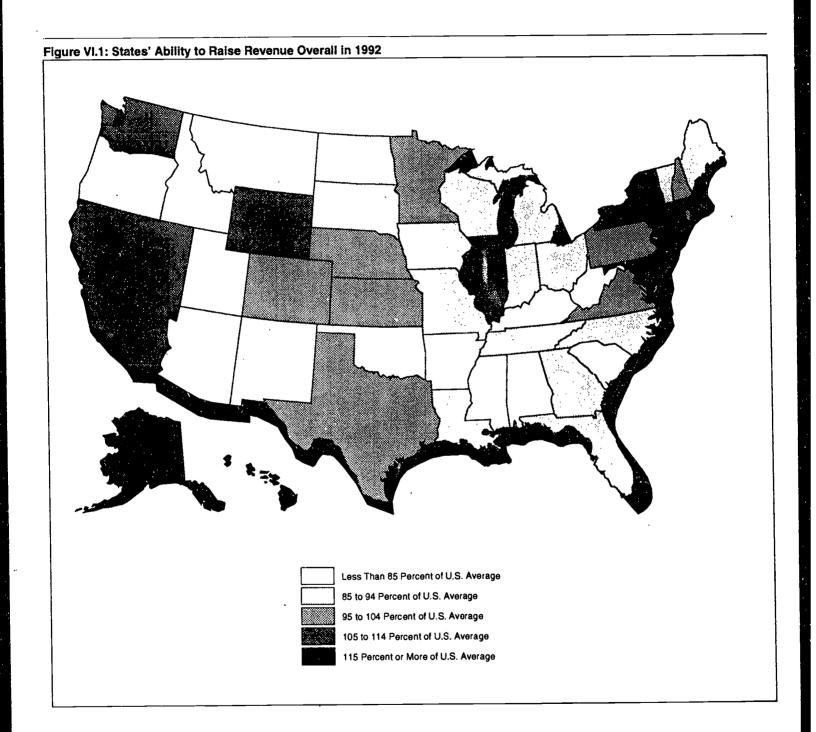
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## Data—Ability and Willingness to Raise Revenue

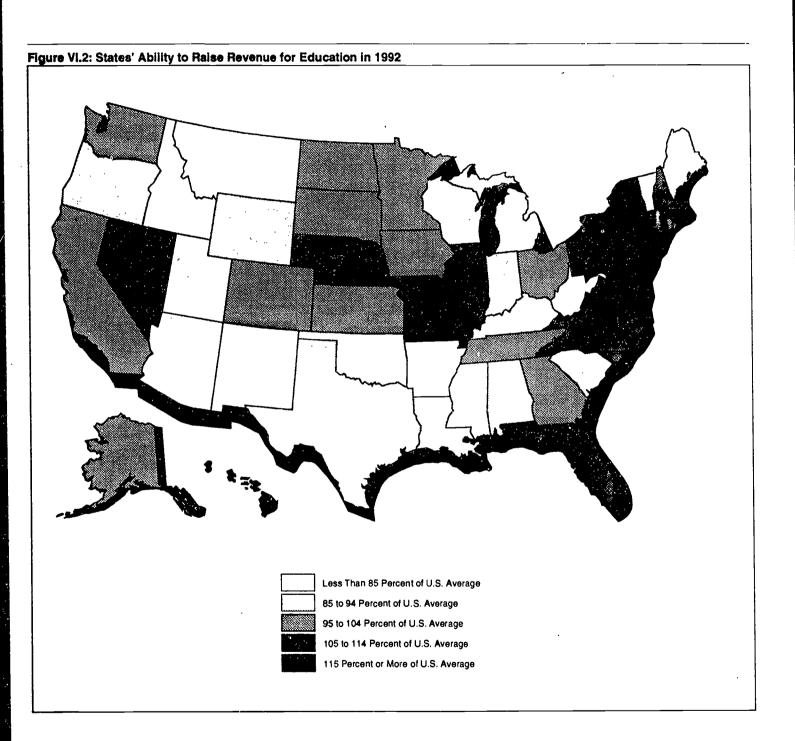
This appendix provides additional data on ability and willingness to raise revenue overall and for education. Following are the tables and figures presented in this appendix in order of appearance.

- Figure VI.1 shows ability to raise revenue overall in each state in 1992.
- Figure VI.2 shows ability to raise revenue for education in each state in
- Figure VI.3 shows willingness to raise revenue overall in 1992.
- Figure VI.4 shows states' willingness to raise revenue for education in 1992.
- Table VI.1 gives the data points for figures VI.1, VI.2, VI.3, and VI.4. (See app. I for a description of how these indexes were derived.)
- Table VI.2 provides information on the change in states' willingness and ability to raise revenue overall and for education between 1982 and 1992.

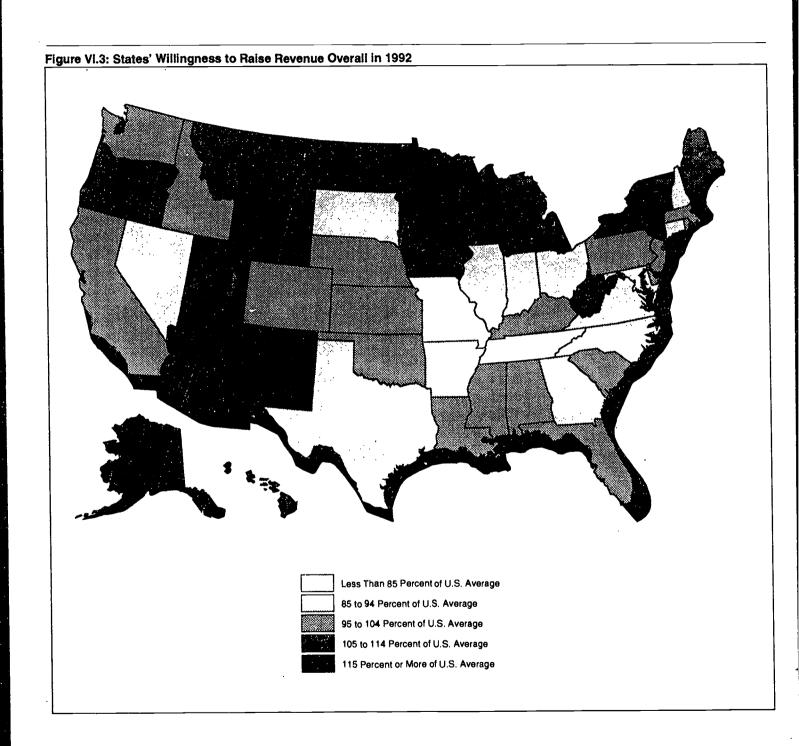












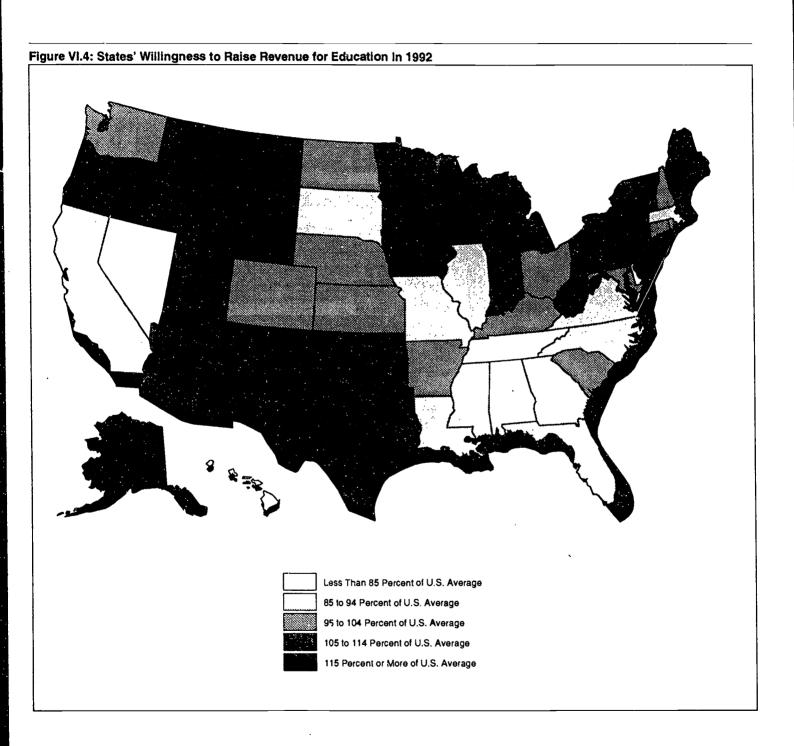


Table VI.1: Ability and Willingness to Raise Revenue Overall and for Education in 1992, by State (Index: U.S. = 1.00)

	Ability to rais	Ability to raise revenue		Willingness to raise revenue	
State	Overali	Education	Overali	Education	
Alabama	0.81	0.90	0.95	0.81	
Alaska	1.55	1.02	2.07	1.27	
Arizona	0.84	0.84	1.06	1.07	
Arkansas	0.77	0.79	0.91	1.03	
California	1.09	0.96	0.99	0.87	
Colorado	1.01	0.99	0.98	0.97	
Connecticut	1.33	1.23	0.92	1.00	
Delaware	1.21	1.39	0.99	0.79	
Florida	0.91	1.10	1.03	0.93	
Georgia	0.93	0.96	0.92	0.91	
Hawaii	1.15	1.24	1.14	0.82	
Idaho	0.82	0.76	1.03	1.07	
Illinois	1.08	1.08	0.87	0.87	
Indiana	0.91	0 59	0.94	1.09	
lowa	0.90	0.97	1.07	1.05	
Kansas	0.95	1.00	0.95	1.04	
Kentucky	0.83	0.85	0.98	1.01	
Louisiana	0.89	0.94	0.97	0.91	
Maine	0.87	0.89	1.10	1.30	
Maryland	. 1.09	1.09	0.92	0.97	
Massachusetts	1.17	1.35	0.95	0.89	
Michigan	0.94	0.85	1.07	1.20	
Minnesota	1.03	1.02	1.15	1.08	
Mississippi	0.71	0.79	0.97	0.88	
Missouri	0.93	1.06	0.82	0.90	
Montana	0.80	0.81	1.13	1.31	
Nebraska	0.97	1.08	0.99	0.99	
Nevada	1.10	1.06	0.88	0.84	
New Hampshire	1.03	1.08	0.90	1.00	
New Jersey	1.26	1.32	1.01	1.21	
New Mexico	0.82	0.82	1.19	1.08	
New York	1.19	1.16	1.26	1.12	
North Carolina	0.93	1.05	0.89	0.85	
North Dakota	0.85	0.97	1.10	1.00	
Ohio	0.93	0.99	0.94	1.02	
Oklahoma	0.82	0.86	0.99	1.07	
				(continued	



	Ability to raise revenue		Willingness to raise revenue	
State	Overall	Education	Overall	Education
Oregon	0.91	0.89	1.14	1.16
Pennsylvania	0.99	1.10	1.00	1.08
Rhode Island	0.97	1.03	0.99	1.03
South Carolina	0.82	0.87	0.97	1.03
South Dakota	0.87	1.01	0.89	0.94
Tennessee	0.89	1.03	0.83	0.68
Texas	0.96	0.86	0.90	1.08
Utah	0.80	0.60	1.06	1.14
Vermont	0.91	0.88	1.14	1.39
Virginia	1.03	1.10	0.90	0.93
Washington	1.05	1.00	1.01	1.03
West Virginia	0.75	0.81	1.05	1.39
Wisconsin	0.94	0.94	1.10	1.19
Wyoming	1.09	0.88	1.18	1.31

Table VI.2: Changes in Ability and Willingness to Raise Revenue Overall and for Education From 1982 to 1992, by State

	Percent change in ability to raise revenue		Percent change in willingness to raise revenue	
State	Overail	Education	Overall	Education
Alabama	26.5	40.5	8.4	26.5
Alaska	-18.3	-3.4	-36.2	15.3
Arizona	15.3	21.1	12.8	2.3
Arkansas	21.3	19.7	14.8	20.3
California	15.5	11.7	11.0	32.0
Colorado	10.3	20.8	15.8	0.3
Connecticut	35.5	15.6	18.3	17.2
Delaware	40.7	54.9	0.6	-22.8
Florida	20.9	17.5	30.4	7.1
Georgia	29.2	39.4	4.4	2.3
Hawaii	31.9	57.8	13.2	-6.0
Idaho	22.3	34.1	19.0	5.6
Illinois	22.7	32.0	6.3	-6.1
Indiana	23.3	35.7	18.4	14.7
lowa .	12.6	22.4	14.6	4.0
Kansas	10.8	8.8	9.2	4.7
Kentucky	19.3	24.2	27.5	24.1
Louisiana	-3.5	5.4	14.1	43.3
				(continued)



	Percent change in ability to raise revenue		Percent change in willingness to raise revenue	
State	Overali	Education	Overali	Education
Maine	29.4	27.5	22.8	22.6
Maryland	29.9	42.5	-4.9	-8.2
Massachusetts	34.3	55.7	6.4	-20.5
Michigan	22.2	44.1	-2.0	-3.6
Minnesota	22.9	32.4	7.3	-14.0
Mississippi	17.7	19.6	7.9	8.7
Missouri	19.4	25.2	17.3	6.9
Montana	1.4	13.6	7.0	13.0
Nebraska	18.7	18.9	10.5	6.5
Nevada	18.1	15.8	0.6	32.3
New Hampshire	29.5	20.4	24.8	6.4
New Jersey	32.7	38.5	19.3	9.8
New Mexico	2.6	23.9	-2.3	1.9
New York	31.0	36.5	8.5	5.4
North Carolina	34.0	53.7	11.0	-1.7
North Dakota	-1.0	0.9	8.2	32.2
Ohio	19.7	30.3	15.8	10.8
Oklahoma	-7.6	1.1	17.4	29.8
Oregon	22.2	31.4	5.0	-5.4
Pennsylvania	26.2	29.6	14.5	4.7
Rhode Island	29.1	31.1	-4.6	3.1
South Carolina	30.4	42.4	8.6	6.3
South Dakota	24.2	33.4	-5.5	1.9
Tennessee	30.6	48.2	9.0	-13.4
Texas	2.5	4.6	22.7	28.9
Utah	16.2	23.0	3.7	-0.2
Vermont	26.6	5.2	18.7	37.7
Virginia	26.0	37.4	14.3	2.7
Washington	23.9	39.8	10.0	10.7
West Virginia	11.6	33.6	13.6	27.8
Wisconsin	18.6	22.4	6.9	11.1
Wyoming	-12.9	-7.3	-11.3	70.2
United States	20.5	26.6	10.8	8.4



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