PROFILE OF CHANGES IN COLORADO PUBLIC SCHOOL FUNDING

1988-89 TO 2001-02

Prepared for

THE COLORADO SCHOOL FINANCE PROJECT
Colorado Association of School Boards
Colorado Association of School Executives
Colorado BOCES Association
Colorado Education Association

Prepared by

John Augenblick, Robert Palaich, Justin Silverstein, and Jennifer Sharp
Augenblick, Palaich and Associates, Inc.
Denver, CO

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Introduction

This is the ninth in a series of annual "profile" reports that are designed to examine public school funding in Colorado.[1] The first report compared 1993-94 to 1988-89 using statewide average information.[2] Subsequent reports updated the first one by adding data as it became available year by year for 1994-95, 1995-96, 1996-97,1997-98, 1998-99, 1999-2000, and 2000-01.[3] This report examines data for 2001-02, comparing it to data for 1988-89 (the base year, which has remained consistent in all reports), 1999-2000, and 2000-01. The report is designed to fulfill one objective of the Colorado School Finance Project (CSFP): to monitor school funding using consistent, reliable data by tracking the level of state and local support for public schools, examining how funds are spent, and placing school funding into the larger state context of population and income.

Over the period of time that is covered in this report, the funding climate in Colorado has become more complicated. First, the passage of the TABOR Amendment in 1992 placed restrictions on the revenues and expenditures of school districts (and all other government service providers), some of which have been alleviated by local voter approval of amendments to ease revenue/expenditure constraints. Second, the current

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1 The report was prepared by Augenblick, Palaich and Associates, Inc. (APA), the same company that prepared all of the earlier reports for the Colorado School Finance Project when it was Augenblick & Myers, Inc. (A&M). The new name reflects the fact that Dr. Robert Palaich joined the firm when John Myers left it to pursue personal and professional interests.

2 "A Profile of the Fiscal Status of Public Schools in Colorado: Changes Between 1988-89 and 1993-94 and Comparisons to Other States" (Colorado School Finance Project, January 1996).

3 For example, see "Profile of Changes in Colorado School Funding, 1988-89 to 2000-2001 (Colorado School Finance Project, September 2002).

school finance system, passed in 1994, places its own limitations on the revenue generating ability of school districts in order to promote a high level of fiscal equity across school districts.

Third, in 2000, voters approved Amendment 23, which requires school funding to increase by the rate of growth in the student population and the rate of inflation plus one percentage point for ten years; following this procedure would close the funding gap that had been identified in earlier *Profile* reports, which would bring funding up to a level comparable to 1988. Amendment 23 assures funding at the rate of inflation after ten years. Amendment 23 also created an education fund, which receives a portion of state income tax receipts and was designed to serve as a significant source of revenue to meet its future obligations. The education fund has restricted uses and has yearly suggested spending limits based on prior years' spending from the education fund and the current and forecasted economic conditions of the state. It is worth noting that this is the first report that includes state revenue associated with Amendment 23.

Fourth, in 2001, the state agreed to provide more funding for school facilities as part of an agreement with plaintiffs who had sued the state over the way it allocated aid for school construction. Finally, following several years of state revenue growth (which required the return of revenues obtained in excess of constitutional standards), the state is now dealing with significant budget problems due to changes in economic conditions and state tax policies. Each of these circumstances affected every school district in some way in 2001-02, the focal year of this report.

The attached tables organize the data in a way that makes it relatively easy to compare the information included in previous reports. Readers should examine the

tables carefully to draw their own conclusions about what the data mean. The first group of tables (Tables 1-5) displays statewide averages and provides historical data for 1988-89, 1999-2000, 2000-01, and 2001-02 along with annual (or annualized) changes between those years. The second group of tables (Tables 6-8) displays data for 2001-02 disaggregated for school districts based on their size, change in enrollment (from 1988-89), and wealth. It should be noted that some data are provided for a school year (such as 2001-02) and other data are provided for a fiscal year (such as FY2002); for our purposes, we use the year 2001-02 as essentially the same as FY2002. Almost all data were collected by the Colorado Department of Education (CDE) based on the most recent audited information. We rely to a great extent on the CDE, which has been responsible for improving data collection procedures so that information is more accurate and available much sooner than ever before; CDE's willingness to organize information in response to our request serves is greatly appreciated. Some data, particularly those in Table 5, come from the Colorado Legislative Council.

Because the first few tables compare 2001-02 to other years, going back as far as 1988-89, we sometimes adjust the older data so that it is presented in current dollar terms. We do this by using an inflation adjustment, as is common in evaluating economic data over several years. We use the Consumer Price Index (CPI) for the Denver-Boulder Standard Metropolitan Statistical Area as the basis of the adjustment (this is the factor published by the Colorado Legislative Council and used by the legislature to make year to year changes in the allocation of some types of state support). The CPI indicates that inflation grew by 59.0 percent between 1988-89 and 2001-02, suggesting that whatever was purchased with $1.00 in 1988-89 would cost

$1.59 in 2001-02 (and that it is appropriate to adjust dollar amounts in 1988-89 by a factor of 1.59 to make them comparable to 2001-02 figures). Throughout the report this adjustment is made in order to compare revenues and expenditures in 2002 to those of prior years.

One new feature has been added to the report this year. In each of the previous *Profile* reports we have relied on the comparison of spending in the target year (2001-02 for this report) to spending in 1988-89 adjusted by inflation (and growth) to determine the status of funding for education in the target year – this has been expressed as a "gap" between the spending in the target year and the spending that would have been expected had revenues/expenditures kept pace with inflation and student growth. This year, we have added a second indicator of the "gap" based on the study of school finance adequacy we did for the CSFP in 2003.[4] The new approach is based on comparing actual spending in the target year to the spending that is projected to have been needed in order for school districts to meet state/federal student performance expectations (particularly those associated with the state's plan to fulfill the requirements of "No Child Left Behind" (NCLB), the federal legislation enacted in 2001). This will be discussed in relation to Table 3, which shows how the "gap" has changed over time when it is based on spending in 1988-89.

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[4] "Calculation of the Cost of An Adequate Education in Colorado Using the professional Judgement and the Successful School District Approaches" prepared by Augenblick & Myers, Inc. For the Colorado School Finance Project, January 2003.

Overview of Statewide Trends

The statewide average data (Tables 1-5) indicate a variety of important things about the level of support for education and how funds are spent by school districts.

- Enrollment levels in Colorado's public schools continued to grow in 2001-02 to 707,202 students; the rate of growth was higher than it had been in the previous year and close to the average rate of growth between 1988-89 and 1999-2000 (see Table 1, row [1]). The state serves 171,000 more students now than it did 13 years ago, which is the equivalent of adding districts the size of Jefferson County, Denver, and Westminster over that period (or adding a new district the size of Thompson R-2J [Loveland] every year) — the implications of this growth include the need to have hired about 9,500 more professional staff (assuming about one staff member for every 18 students) and the need to have built about 190 new schools (assuming about 900 students per school). In 2002 alone, it would have been necessary to hire about 750 additional teachers (at an added annual cost of about $28 million in salary and benefits assuming that only teachers with minimum credentials were hired) and to have built 15 new schools across the state (at a cost of something over $200 million), assuming the same ratios and an even pattern of growth.

- Enrollment of students with special education needs has stabilized at 11.3 percent of all students (or see Table 1, row [2]), which is below the national average of more than 13 percent. In 2001-02, school districts served 79,605 students in special education programs, or about 28,900 more than they served in 1988-89 (over the last 13 years, the number of students with special education needs has risen by 57.1 percent while overall enrollment grew by 31. 9 percent). Given an average cost of serving special education students at about 90 percent *more than* the cost of serving regular students (Center for Special Education Finance), the added cost of serving students in special education programs was about $440 million in 2001-02 (using a base cost of $6,146 as shown in Table 2, excluding transportation).
- The proportion of students from economically disadvantaged families, as reflected by eligibility for the federal free lunch program, is just over 21 percent of all students (see Table 1, row [3]), or about 151,000 students. In the last 13 years the number of such students rose by 56 percent, or about 54,200 students, representing three districts as large as Academy or Pueblo (city). Assuming that these students cost anywhere from 27-55 percent more than regular students (based on the 2003 study of adequacy referred to above, with cost depending on the size of the school district in which students from low income families are enrolled), school districts faced added costs of between $250.5 and $510.4 million in 2001-02

(assuming a base cost of $6,146 as shown in Table 2 and added costs between 27 and 55 percent of base costs). In 2002 the proportion of students eligible for free lunches rose a bit from the prior year, matching its level of 2000. It is worth noting that in many states, the proxy measure for "at-risk" students includes students eligible for free *and* reduced price meals, which may be a more accurate proxy for the number of students who require additional services in order to meet state performance expectations.[5]

- The rate of increase in the numbers of students with special needs far exceeds the rate of growth for students without such needs. Assuming that the number of students without special needs is the total number of students minus those with special education needs and those eligible for free lunch (which certainly is not a precise way to calculate them), then between 1988-89 and 2001-02 the number of students with special education needs rose by 54.6 percent, the number of students eligible for free lunch grew by 56.0 percent, and the number of students without special needs (all others) increased by 21.4 percent.

- Total current operating revenue per pupil rose by 5.2 percent between FY2001 and FY2002 (see Table 2, row [4]), a rate that exceeded inflation (the Denver-Boulder Consumer Price Index [CPI] rose by 4.7 percent in that one year period) and was higher than the average rate in the prior 12 years. Despite this level of growth in the past year, operating revenue has not kept up with the combination of inflation and enrollment change over the last 13 years; given revenue of $4,629 in 1988-89, $7,360 per pupil would have been needed in 2001-02, which exceeded actual revenue in that year by $401 per pupil.

- Local revenue per pupil rose by 0.9 percent in FY2002, a rate that was lower than the previous year and lower than the average of the 11 years between 1989 and 2000 (see Table 2, row [1]). It should be noted, however, that because local revenue did not keep pace with inflation and enrollment growth over the 13 year period, districts lost $633 million, or $895 per student, in 2001-02. In some sense, the $633 million represents the amount property taxpayers "saved" due to all of the restrictions that had been placed on property assessments, revenues, and rates – if half the amount were attributable to residential property taxes, the tax savings would have been $71 per capita in 2002.

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[5] In 2000, the Colorado School Finance Project undertook a study of the numbers of students eligible for free lunch and for reduced-price lunch and found that, at that time, the number of students eligible for reduced-price lunch was growing even when the number of students eligible for free lunch was decreasing.

- State revenue per pupil rose at a much faster rate in FY2002 than it had in FY2001 or than it had each year, on average, between 1989 and 2000 (see Table 2, row [2]). In part, the growth in 2002 reflects the impact of Amendment 23; in fact, state aid in 2002 was $23 per student more than the amount required to increase state aid in 2001 by student growth (2.0 percent), inflation (4.7 percent), and one percentage point (which, when added together was 7.7 percent). Interestingly, the level of state aid in 2002 reflected, on average, a compounding of 1.0 percent above inflation given the level it had been in CY1989. That is, if state aid had merely kept pace with inflation, it would have had to rise to $2,857 in 2002; the fact that state aid was $398 more than that, or about 13.9 percent, reflects an added one percent each year for 13 years. The problem is that the increase in state aid above inflation ($398 per student) was insufficient to overcome the loss in local taxes ($895 per student), leaving districts $497 per student, or $351.5 million, short.

- Federal revenue has been rising very rapidly in the past couple of years, providing about $94 per student, or $66.5 million, more than was required to keep up with enrollment growth and inflation over the 13 year period. Despite rapid growth, federal revenue did not go far to stanch the inflation-adjusted loss of local funds.

- Per pupil spending for "central" purposes (that is, spending for instruction, instructional support, administration, and plant maintenance/operation but excluding transportation, food services, community services, and capital) rose by 7.2 percent between 2000-01 and 2001-02 (see Table 2, row [5]) although, after taking inflation into consideration, per pupil spending in 2002 was about 3.8 percent lower than it had been a decade earlier (see the figures adjusted by inflation).

- Per pupil spending for other operating purposes (transportation, food services, and community services) did not rise enough in 2002 to keep up with inflation between 2001 and 2002 although the increase was greater than the average annual rise between CY1989 and FY2000 (see Table 2, row [6]). After adjusting for inflation, such spending was 5.3 percent lower than it had been in 1988-89.

- Central spending was about 88.5 percent of total spending for current operations in 2000-01, almost the same as it had been in 1988-89 (when the figure was 88.3 percent). This means that districts are spending about the same proportion of current spending for transportation, food services, and community services now as was the case 13 years ago.

- The major purposes for which districts allocate resources has remained fairly constant for the last three years although the distribution is

somewhat different from what it had been in 1989 (see Table 2, row [7]) -- while about the same proportion of "central" spending is for instruction (nearly two-thirds of central spending), the proportion for administration has gone down (from 9.4 percent to 9.1 percent – this means that school districts are spending about $13.0 million less on administration in 2000-01 than would have been the case had they been spending at the same proportion as they were in 1988-89), a lower share is being spent on the operation and maintenance of school buildings (a drop from 11.7 percent to 9.6 percent of central spending, which translates into a decrease of $91.3 million), and a higher share is being spent for student and staff support (such as professional development, guidance, and psychological services), which rose from 12.7 percent of central spending in 1988-89 to 15.2 percent of central spending in 2001-02, reflecting increased spending of $108.7 million for those purposes).

- After adjusting for inflation, "central" spending was $245 per pupil, or $173 million, lower than it had been in 1988-89 (see Table 3). The size of the gap between the spending necessary to keep up with inflation and enrollment growth and actual spending continues to decrease steadily over time (in 1995-96, the gap was $543 per pupil). In fact, the reduction in the gap from 2001 to 2002 of $134 per student (from $379 in 2001 to $245 in 2002) is the largest annual change in the last six years, which is partially explained by the impact of Amendment 23. Analysis shows that actual spending accounted for about 90 percent of the increase needed to meet inflation and about 96 percent of the amount needed for enrollment growth. In essence, these figures suggest that current spending, excluding transportation and food services, should have been $6,391 per student in 2002 ($6,146 from Table 2 ,row [5] plus the $245 gap).

- As mentioned above, the CFSP undertook a new study of school funding adequacy this year in order to estimate the cost of meeting state/federal student performance expectations. That study concluded that, for the state as a whole, the cost in 2001-02 would have been $6,522 per student; this amount is $131, 2.0 percent, higher than projected spending based on 1988-89 – or $376 per student, 6.1 percent, more than actual spending. The study's figure is based on using a base cost of $4,800 (the cost of serving students with no special needs attending school in districts with no cost-related characteristics) and adjustments for students/districts with special needs that added an average of $1,722 to the cost of every student. The study's base cost figure for 2001-02 was set based on the relationship between the proportion of students meeting state standards and the cost associated with all students meeting standards (as required by the NCLB federal law in 2013-14); the study found that the base cost would need to have been $6,815 in 2002 if all students needed to meet standards and that about 70 percent of students did meet the standards at

that time. This figure was consistent with the base cost level found using a second approach that examined the actual spending of districts that appear to have met state standards in 2001-02. The relationships between the three different ways of looking at spending, and the two different "gaps" that are produced in comparing actual spending to the alternative approaches to estimating what spending should have been, are shown in Graph 1.

- Between 1988-89 and 2001-02, school districts more than doubled their spending on teachers (based on multiplying numbers of total teachers times actual average salaries in both years, from $.923 billion to $1.856 billion). This increase reflects a dramatic rise in the number of total teachers (including classroom teachers, special education teachers, and other teachers who provide service but may not be assigned to one classroom) while keeping changes in salary below inflation. As shown in Table 4 (row [2]), the number of total teachers per 1,000 students rose from 58.1 to 64.5 (which translates from about 31,100 teachers to about 45,600 teachers). At the same time, average salary levels fell from $47,086 to $40,695 after adjusting for inflation (given that the characteristics of teachers were not the same in 2001-02 as they had been in 1988-89, salaries did not decrease quite that much). Therefore, it appears that school districts, on average, made a trade-off between hiring more teachers and paying them less (had districts paid comparable salaries in 2001-02 as they had in 1988-89 based on inflation and an adjustment for teacher characteristics, the cost would have been $2.2 billion, or almost $350 million more than they actually spent). It should be noted that as part of the adequacy study discussed above, no adjustment was made in teacher salaries because they compared favorably to those of neighboring states in 2001-02.

- Colorado's population grew by 2.4 percent between 2000-01 and 2001-02 to 4.43 million people (see Table 5, row [1]). In fact, this rate of growth has been consistent over the last 13 years. Between 1988-89 and 2001-02, the state added 1,159,600 people, or 35.4 percent. This growth rate was just slightly higher than the growth in students attending public schools (31.9 percent) and suggests either that nearly19,000 students are being educated elsewhere (home schools, private schools, etc.) or that the demographic make-up of the population has changed resulting in a lower ratio of public K-12 students to total population..

- The assessed value of property grew dramatically in 2001-02, consistent with expectations when property is reassessed (see Table 5, row [2]). Had property valuation increased in relation to both population growth and the change in inflation during the same period, it would have been

$71.563 billion, about 23.4 percent higher than it actually was in 2001-02. In per student terms, property valuation has risen from about $62,000 to $82,000, or only a 32.3 percent increase in 13 years.

- The growth in aggregate personal income slowed dramatically in 2001-02, to 3.6 percent (as shown in Table 5, row [3]), which was far lower than it had been between 1988-89 and 2000-01 (when it averaged almost 8.5 percent each year). Still, in 2001-02, personal income was 27.6 percent higher than it would have been if it had only risen as much as population and inflation. In per capita terms, personal income grew from $16,500 in 1988-89 to about $33,500 in 2001-02, or about 5.6 percent annually.

- One way to evaluate the burden placed on people to pay for services is to examine the proportion of personal income devoted to that service (even though some revenue source other than income taxes, such as property or sales taxes, is actually used to pay for the service). The figures in rows 4 and 5 of Table 5 indicate the proportion of personal income that is effectively devoted to supporting public schools from local and state sources (row 4 is relative to property taxes and row 5 is relative to state general fund support, which is derived primarily from income and sales taxes). Clearly, a lower proportion of income was devoted to public schools from both local and state sources in 2001-02 than was the case in 1988-89 -- combining local and state, in 1988-89, about 3.89 percent of personal income was used to support K-12 education while in 2001-02 only 2.68 percent of personal income was used for that purpose. Had the same proportion of income been used to support public schools in 2001-02 as had been used in 1988-89, about $1.8 billion more revenue would have been available (see row [6]), which would have been ten times as much as required to eliminate the spending gap of $173 million) and still have provided over $1.6 billion in tax relief (or about $405 per person). In 2001-02, because of the slowdown in the rise of personal income, education consumed a slightly higher proportion of personal income than had been the case in 2000-01 and about equivalent to the proportion consumed in 1999-2000. Put another way, the amount needed in 2001-02 to fully fund the gap of $173 million that existed that year was the equivalent of collecting .12 percent (.0012) more personal income (or about $39 per person).

Differences Across Districts Based on Three Key Characteristics

The disaggregated data indicate a variety of important things about the differences between school districts that are associated with district enrollment level (Table 6), change in district enrollment (Table 7), and district property wealth (Table 8), which are discussed below.

Differences Based on Enrollment Level

In Table 6, districts have been grouped into five categories based on their level of enrollment. The vast majority of districts in the state (106 of the 178 operating in 2001-02), had fewer than 1,000 pupils although the nine largest districts enrolled about 52.5 percent of all pupils. There was no relationship between size and rate of overall growth in enrollment (it is interesting that 42 percent of all enrollment growth between 1988-89 and 2001-02 took place in the seven districts with between 20,000 and 50,000 students in 2001-02). However, the proportion of students in special education programs decreased slightly as district size increased up to 50,000 students (from 12 percent of all students in the smallest districts to about 11 percent in districts with between 20,000 and 50,000 students). The 106 smallest and the two largest districts had the highest proportions of pupils from low income families; however, while the proportion of students from low income families rose in districts with more than 10,000 students, it remained constant in districts with 1,000 to 10,000 students and decreased in districts with fewer than 1,000 students.

The very smallest districts employed many more teachers per 1,000 students than moderate size or large districts; between 1988-89 and 2001-02 the number of

teachers relative to students increased in districts of all sizes but particularly those with between 10,000 and 50,000 students. The average salary level of teachers was directly related to the size of districts, rising from less than $32,000 in the smallest districts to more than $43,000 in the largest districts although the change in average salary over the previous 13 years was inversely related to district size (as exemplified by the fact that average salary in the smallest districts rose by 46.4 percent while the average salary in the largest districts grew by 32.0 percent); therefore, over time, the difference between salary levels in the largest and smallest districts was decreasing (in 1988-89, average salaries in the largest districts were 51 percent higher than those in the smallest districts while in 2001-02 average salaries in the largest districts were 36 percent greater than those in the smallest districts). Interestingly, while the average number of years of teaching experience tended to be higher in larger districts in 1988-89, in 2001-02 the opposite was the case. At the same time, the smallest districts had the lowest proportion of teachers with at least a masters degree in 2001-02, although the difference in that proportion between the smallest districts and large districts (those with over 20,0000 students) decreased between 1988-89 and 2001-02.

The relationship between per student central spending (excluding capital, transportation, and food services) and district size would appear to look like a version of a “swoosh” (✔) if it were graphed; that is, the smallest districts spent the most while districts with between 1,000 and 10,000 students spend the least and larger districts spent more, but not as much as the smallest districts. Districts with below 20,000 students tended to see larger increases in spending between 1988-89 and 2001-02 than districts with more than 20,000 students. The spending pattern was very similar

across districts of all sizes, although smaller districts tended to spend a higher proportion on administration and plant maintenance and operation while larger districts tended to spend more on support services. In per pupil terms, the 106 smallest districts spent about $347 per student more than the nine largest districts for administration and about $170 more for plant maintenance and operation while they spent about $277 less on pupil and staff support.

In FY2002, districts with more than 20,000 students tended to rely more on local revenue, and to obtain less from state sources, than districts with less than 20,000 students. While it is difficult to evaluate this phenomenon it is interesting that districts with less than 10,000 students are wealthier than their larger peers and that their property values have grown more rapidly than larger districts – while wealth is an important determinant of state aid, there are other factors, such as district size or cost of living, that have an impact on the distribution of state support as well as factors, such as local levy over-rides that affect the availability of local support. In fact, state aid has grown dramatically in both the very smallest and very largest districts over the past 13 years. The revenue gap in 2001-02 was much greater in the nine largest districts, particularly in the two largest districts, than it was in the remaining 169 districts; the gap was actually negative, on average, in the very smallest districts and in districts with between 10,000 and 20,000 students.

Differences Across Districts Based on Change in Enrollment

In Table 7, districts have been organized into five groups based on the change in enrollment between 1988-89 and 2001-02. During that 13 year period, enrollment

decreased in 34 districts (by 2,669 students or 6.8 percent); however, in 45 districts enrollment rose by 87.2 percent, accounting for more than half of the entire enrollment increase of 173,676 students during the period. While the proportion of students in special education did not vary too much across districts regardless of enrollment growth, it is worth noting that districts with decreasing enrollment had the highest proportion of students in special education (12.5 percent) and districts with the fastest growth had the lowest proportion of students in special education (10.3 percent). Similarly, districts with declining enrollment had the highest proportion of students from low income families (38.2 percent) while those districts with the largest growth in enrollment had the lowest proportion of students from low income families (8.8 percent).

Districts in which enrollment declined employed more teachers per 1,000 pupils than districts that had increasing enrollments and districts with enrollment declines paid a lower average salary than districts with enrollment growth. As might be expected, districts with declining enrollment had the highest levels of teacher experience although, at the same time, they had the lowest proportions of teachers with at least a masters degree.

Districts that saw enrollment decreases had slightly higher spending per student and the largest increases in per student spending while districts with the largest growth had the lowest spending (although only marginally lower) and the slowest increase in spending per student. The spending patterns of districts were remarkably similar regardless of enrollment change although districts with declining enrollment spent a slightly lower proportion on instruction and slightly higher proportions on administration and plant maintenance and operation.

Districts with decreasing enrollment relied less on local support and more on state support in 2001-02, consistent with their having low property wealth per student. Districts with the fastest rise in student population had the largest increase in state aid per student. But districts with the largest growth also had the largest spending gaps while the spending gap was negative in districts with enrollment decline.

Differences Across Districts Based on Wealth

In Table 8, Colorado's school districts are grouped into five categories, each with about the same number of students, based on their property wealth per pupil. On average, property wealth varies by more than four times between the wealthiest 48 districts and the least wealthy 44 districts. While the growth in property wealth over the past 13 years was similar among all districts with less than $107,000 in wealth per student, growth was about twice as much in districts with more than $107,000 of wealth per student.

Districts in both the wealthiest quintile and in the least wealthy quintile had the highest proportions of students in special education programs and students from low income families, which suggests that property wealth is not strongly correlated with the socio-economic characteristics of districts.

Districts in the wealthiest group had the highest number of teachers per 1,000 students but teachers in those districts were not the highest paid. Moderate wealth districts actually had the lowest number of teachers relative to students although teachers in those districts were paid at the highest level among the five groups.

There is a definite link between the wealth of districts and their per student

spending for central purposes. The wealthiest districts spend about 16 percent more than the least wealthy districts, which is within the 20 percent range that the state permits. Interestingly, the growth in per student spending between 1988-89 and 2001-02 was highest in the two lower wealth quintiles and lowest in the highest wealth quintile (theoretically, the spending difference between the highest and lowest wealth quintiles was about 25 percent 13 years ago).

There is no obvious relationship between district wealth and the way districts spend their revenues; to some small extent, wealthier districts spend a lower proportion of their central spending on plant maintenance and operation and a higher proportion of their central expenditures on pupil and staff support. In dollar terms, wealthier districts (those in the top two quintiles) spend about $14 more per student on plant maintenance and operation and about $175 per student more on pupil and student support as compared to less wealthy districts (those in the bottom two quintiles).

As would be expected, districts with higher wealth relied to a greater extent on local support and to a lesser extent on state aid than was true for lower wealth districts. But while the wealthiest districts are more than four times as wealthy as the least wealthy districts, they only rely on local revenues about twice as much as least wealthy districts; similarly the least wealthy districts only receive about 2.3 times as much state aid as the wealthiest districts despite having only 23 percent as much wealth. Between 1988-89 and 2001-02, local support increased the least, and state support rose the most, in the wealthiest group.

The revenue gap has decreased over the last few years for all wealth groups. However, the gap is less than $100 in the two lowest wealth groups, about $250 for the

middle wealth group and the second highest wealth group, and rises to about $600 in the wealthiest group. This suggests several possibilities: first, that the wealthiest districts had been spending at very high levels in 1988-89 and have been unable to maintain those levels over time; second, that local funds have been insufficient to allow the wealthiest districts to maintain previous revenue levels; or, third, that some combination of factors, involving prior high spending, constraints on local revenue, and low state aid are responsible for the spending gap in the wealthiest districts.

TABLE 1

COMPARISON OF CHANGE IN NUMBER OF PUPILS, PUPILS ENROLLED IN SPECIAL EDUCATION, AND PUPILS FROM LOW INCOME FAMILIES BETWEEN 1988-89 AND 2001-02

		Year			
		1988-89	1999-2000	2000-01	2001-02
(1)	**All Pupils (FTE)**	**536,196**	**681,743**	**693,644**	**707,202**
	Change from Earlier Year		*2.2%**	*1.7%*	*2.0%*
(2)	**Pupils in Special Education (Head Count)**	**50,681**	**76,505**	**78,334**	**79,605**
	Percentage of All Pupils	*9.5%*	*11.2%*	*11.3%*	*11.3%*
(3)	**Pupils from Low Income Families (Free Lunch Program Head Count)**	**96,812**	**144,926**	**143,498**	**150,982**
	Percentage of All Pupils	*18.1%*	*21.3%*	*20.7%*	*21.3%*

* This figure is the average change for each year from 1988-89 through 1999-2000.

TABLE 2

COMPARISON OF CHANGE IN PER PUPIL REVENUES AND EXPENDITURES BETWEEN 1988-89 AND 2001-02

		Year			
		CY1989	FY2000	FY2001	FY2002
	Current Operating Revenues:				
(1)	**Local**	**$2,602**	**$3,076**	**$3,213**	**$3,242**
	Change from Earlier Year		*1.5%**	*4.5%*	*0.9%*
(2)	**State**	**$1,797**	**$2,857**	**$3,001**	**$3,255**
	Change from Earlier Year		*4.3%**	*5.0%*	*8.5%*
(3)	**Federal**	**$226**	**$366**	**$399**	**$453**
	Change from Earlier Year		*4.5%**	*9.0%*	*13.5%*
(4)	**Total**	**$4,629**	**$6,299**	**$6,613**	**$6,959**
	Change from Earlier Year		*2.8%**	*5.0%*	*5.2%*

* This figure is the average change for each year from 1988-89 through 1998-99.

TABLE 2 (Continued)

		Year			
		CY1989	FY2000	FY2001	FY2002
	Current Operating Expenditures:				
(5)	**"Central" per Pupil**	**$4,020**	**$5,439**	**$5,731**	**$6,146**
	Change from Earlier Year		*2.8%**	*5.4%*	*7.2%*
	Adjusted by CPI[1] to FY2001	$6,392	$5,923	$6,000	$6,146
(6)	**Other Operating per Pupil**	**$532**	**$718**	**$770**	**$801**
	Change from Earlier Year		*2.8%**	*7.2%*	*4.0%*
	Adjusted by CPI[1] to FY2001	$846	$782	$806	$801
(7)	**Distribution by Function:**				
	Instruction	**66.2%**	**66.1%**	**65.8%**	**66.1%**
	Plant Operation	**11.7%**	**9.6%**	**10.0%**	**9.6%**
	Administration	**9.4%**	**9.2%**	**8.9%**	**9.1%**
	Support	**12.7%**	**15.1%**	**15.2%**	**15.2%**

* This figure is the average change for each year from 1988-89 through 1998-99.

1 To get to FY2002, multiply: FY2002 by 1.000; FY2001 by 1.047; FY2000 by 1.089; and CY1989 by 1.590.

TABLE 2 (Continued)

Central Spending*:

Instruction - Activities associated with providing classroom instruction. It includes special education costs when related to providing instruction. It also includes paraprofessionals in the classroom and co-curricular activities.

Plant Operation - Activities related to the maintenance and up-keep of buildings. It also includes the cost of maintaining safety in buildings. Does not include major remodeling.

Administration - Activities of both the district–level and school–level administration and clerical support for these positions.
District–level administration includes the school board and superintendent's office.
School–level administration includes principals, assistant principals, school secretaries, and attendance clerks.

Support – Activities associated with assisting students and staff. These include counseling services, psychological services, speech therapy services, media services, and staff development. It also includes business services for the district.

* Central spending excludes spending for capital purposes, transportation, food services, and community services.

TABLE 3

COMPARISON OF ANTICIPATED AND ACTUAL CHANGE IN CURRENT OPERATING EXPENDITURES BETWEEN CY1989 AND FY2002

	Change in Revenue Due to:		
	Inflation	Growth	Inflation and Growth
CY1989 to FY2001			
Anticipated Increase in Revenue	**$1,271,634,416**	**$1,092,939,008**	**$2,364,573,424**
Actual Increase in Revenue	**$1,140,337,475**	**$1,051,065,133**	**$2,191,402,608**
Difference (Gap = Actual - Anticipated)	**- $131,296,941**	**- $41,873,875**	**- $173,170,816**
Per Pupil Gap	**- $186**	**- $59**	**- $245**

Change in Average Per Pupil Gap by Year

FY1994	**- $496**
FY1995	**- $507**
FY1996	**- $543**
FY1997	**- $526**
FY1998	**- $483**
FY1999	**- $471**
FY2000	**- $437**
FY2001	**- $379**
FY2002	**-$245**

Note: Inflation is calculated using the Denver-Boulder Consumer Price Index (CPI), which grew by the following amounts between CY1989 and: FY1994, 19.3%; FY1995, 24.6%; FY1996, 29.9%; FY1997, 34.4%, FY1998, 38.8%, FY1999, 42.1%, FY2000, 46.2%; FY2001, 52.0%; and FY2002, 59.0%.

TABLE 4

COMPARISON OF CHANGE IN NUMBERS AND CHARACTERISTICS OF TEACHERS BETWEEN 1988-89 AND 2001-02

	Year			
	1988-89	1999-2000	2000-01	2001-02
(1) Classroom Teachers per 1,000 Pupils	51.7	52.9	49.3	57.1
(2) Total Teachers per 1,000 Pupils	58.1	59.5	60.2	64.5
(3) Average Teacher Salary	$29,614	$38,191	$39,211	$40,695
Adjusted to CPI[1] to FY2001	$47,086	$41,590	$41,054	$40,695
(4) Average Number of Years of Experience	13	[2]	11	11
(5) Percentage of Teachers with at Least a Masters Degree	47.3%	[2]	45.1%	43.0%

[1] To get to 2002, multiply: 2002 by 1.000; 2001 by 1.047; 2000 by 1.087; and 1988-89 by 1.59.

[2] Teachers' years of experience and educational history was not available for this year.

TABLE 5

COMPARISON OF CHANGE IN STATEWIDE POPULATION, PROPERTY VALUE, AND PERSONAL INCOME BETWEEN 1988-89 AND 2000-01

		Year			
		1988-89	1999-2000	2000-2001	2001-02
(1)	**Population**	**3,271,400**	**4,226,000**	**4,326,800**	**4,431,000**
	Change from Earlier Year		*2.4%**	*2.4%*	*2.4%*
(2)	**Property Valuation (millions)**	**$33,241**	**$46,287**	**$48,300**	**$58,013**
	Change from Earlier Year		*3.1%**	*4.3%*	*20.1%*
(3)	**Aggregate Personal Income (millions)**	**$53,966**	**$128,386**	**$143,043**	**$148,239**
	Change from Earlier Year		*8.2%**	*11.4%*	*3.6%*
(4)	**Proportion of Personal Income Consumed by Current Operating Support for K-12 Education:**				
	Local Property Taxes:				
	Total (millions)	**$1,131**	**$1,486**	**$1,545**	**$1,668**
	Percentage of Aggregate Personal Income	**2.10%**	**1.16%**	**1.08%**	**1.13%**

* This figure is the average change for each year from 1988-89 through 1998-99.

TABLE 5 (Continued)

	Year			
	1988-89	1999-2000	2000-2001	2001-02
(5) Proportion of Personal Income Consumed by Current Operating Support for K-12 Education:				
State General Fund Aid:				
Total (millions)	**$964**	**$1,948**	**$2,082**	**$2,302**
Percentage of Aggregate Personal Income	**1.79%**	**1.52%**	**1.46%**	**1.55%**
(6) Amount of Revenue that Would have been Collected Above what was Actually Collected if Local and State Tax Effort had been the Same as it was in 1988-89 (3.89% of Personal Income)				
In Millions	**-**	**$1,560.2**	**$1,937.4**	**$1,796.7**

Source: "Focus Colorado: Economic & Revenue Forecast, 2003-2008" (Legislative Council, June 2003)

Note: Some figures are different from those used in earlier reports due to revisions by the Legislative Council.

TABLE 6

PROFILE OF SCHOOL FINANCE CHANGE, 1988-89 TO 2001-02
DISTRICTS GROUPED BY ENROLLMENT

	Enrollment Category				
	Less Than 1,000	1,000-9,999	10,000-19,999	20,000-49,999	More Than 50,000
Group Characteristics:					
Number of Districts	106	54	9	7	2
2001-02 Enrollment	38,963	156,707	139,995	218,706	152,830
Average Enrollment	368	2,902	15,555	31,244	76,415
Change in Pupils 1988-89 to 2001-02:					
Change in Total Enroll.	6,825	40,921	26,048	71,928	25,283
% Change	*21.2%*	*35.3%*	*22.9%*	*49.0%*	*19.8%*
% Spec. Ed. 1988-89	10.5%	10.0%	9.3%	9.2%	9.0%
% Spec. Ed. 2001-02	12.0%	11.6%	11.1%	11.0%	11.2%
% Free Lunch 1988-89	30.2%	21.1%	18.8%	11.7%	19.0%
% Free Lunch 2001-02	26.1%	21.0%	23.7%	13.5%	29.6%
Teachers					
2001-02 Tchrs./1,000 Pupils	84.9	65.4	63.9	63.1	61.0
Change in Tchrs./1,000	*3.1*	*6.4*	*8.0*	*7.6*	*4.9*
2001-02 Average Salary	$31,863	$37,359	$40,348	$43,647	$43,456
Change in Salary	*46.4%*	*39.0%*	*38.5%*	*36.7 %*	*32.0%*
Years of Experience:					
1988-89	10.9	12.6	13.2	12.8	14.5
2001-02	11.5	11.5	11.1	11.6	9.2
% with Masters or More:					
1988-89	24.9%	38.9%	48.1%	51.5%	58.2%
2001-02	28.5%	43.2%	44.8%	49.4%	45.5%

TABLE 6 (Continued)

	Enrollment Category				
	Less Than 1,000	1,000-9,999	10,000-19,999	20,000-49,999	More Than 50,000
Spending					
FY2002 Total "Central" Per Pupil	$6,795	$5,850	$5,906	$6,234	$6,379
% Change CY1989 to FY2002 (Denver-Boulder CPI = 59.0%)	*60.3%*	*55.0%*	*60.7%*	*49.8%*	*47.2%*
Percentage of Total "Central" by Function:					
Instruction					
CY1989	66.8%	66.3%	66.4%	65.5%	66.4%
FY2002	64.7%	66.0%	66.6%	67.0%	64.9%
Administration					
CY1989	14.2%	10.9%	8.5%	8.8%	8.5%
FY2002	13.4%	9.4%	8.3%	8.8%	9.1%
Plant M&O					
CY1989	12.4%	12.1%	12.0%	11.4%	11.3%
FY2002	11.3%	10.6%	9.1%	9.1%	9.2%
Pupil/Staff/ Other Support					
CY1989	6.6%	10.7%	13.1%	14.3%	13.8%
FY2002	10.7%	13.9%	16.0%	15.0%	16.8%
Revenue					
Total "Central" Spending as a Percent of Total Operating Revenue					
CY1989	80.5%	86.2%	87.5%	88.9%	86.3%
FY2002	84.2%	86.4%	92.2%	88.8%	88.0%

TABLE 6 (Continued)

	Enrollment Category				
	Less Than 1,000	1,000-9,999	10,000-19,999	20,000-49,999	More Than 50,000
Revenue (Continued)					
FY2002 Percent of Total Operating Revenue:					
Local	39.1%	45.8%	35.6%	51.2%	52.4%
State	56.0%	47.0%	56.9%	44.0%	39.7%
Federal	4.9%	7.2%	7.5%	4.8%	7.9%
Change in Operating Revenue per Pupil CY1989 to FY2002:					
Local	9.5%	31.8%	26.3%	31.7%	14.2%
State	111.8%	77.2%	68.1%	74.7%	104.0%
Federal	56.8%	109.8%	103.6%	84.2%	122.9%
Revenue Gap per Pupil (Note that group members may change slightly over time):					
FY1996 vs. CY1989	$465	$402	$308	$707	$705
FY1997 vs. CY1989	$394	$372	$350	$675	$683
FY1998 vs. CY1989	$136	$280	$331	$634	$720
FY1999 vs. CY1989	$101	$281	$261	$539	$863
FY2000 vs. CY1989	$130	$284	$200	$434	$902
FY2001 vs. CY1989	$130	$251	$96	$485	$609
FY2002 vs. CY1989	- $56	$149	- $62	$382	$511
Assessed Valuation					
2001-02 per Pupil	$101,769	$101,940	$54,200	$77,277	$88,887
% Change from CY1989	*42.7%*	*61.2%*	*35.8%*	*24.1%*	*14.1%*

TABLE 7

PROFILE OF SCHOOL FINANCE CHANGE, 1988-89 TO 2001-02
DISTRICTS GROUPED BY CHANGE IN ENROLLMENT

	Enrollment Change Category				
Group Characteristics:	Decrease	Up to 16.8%	16.9%-28.6%	28.7%-48.9%	More Than 48.9%
Number of Districts	34	37	27	31	45
2001-02 Enrollment	36,830	108,395	252,221	117,998	191,759
Average Enrollment	1,083	2,930	9,342	3,806	4,261
Change in Pupils 1988-89 to 2001-02:					
Change in Total Enroll.	- 2,669	8,459	43,886	32,014	89,317
% Change	*- 6.8%*	*8.5%*	*21.1%*	*37.2%*	*87.2%*
% Spec. Ed. 1988-89	9.5%	10.5%	9.3%	9.2%	8.9%
% Spec. Ed. 2001-02	12.5%	11.0%	11.9%	11.3%	10.3%
% Free Lunch 1988-89	34.3%	20.5%	18.8%	16.3%	9.5%
% Free Lunch 2001-02	38.2%	27.1%	27.9%	17.2%	8.8%
Teachers					
2001-02 Tchrs./1,000 Pupils	71.4	65.0	61.9	67.7	64.5
Change in Tchrs./1,000	*8.5*	*6.7*	*5.2*	*9.3*	*6.1*
2001-02 Average Salary	$35,263	$39,086	$42,233	$41,226	$40,480
Change in Salary	*33.9%*	*30.9%*	*37.3%*	*43.6%*	*38.4%*
Years of Experience:					
1988-89	13.8	13.7	13.7	12.3	11.5
2001-02	12.1	11.3	10.4	11.6	10.8
% with Masters or More:					
1988-89	40.2%	50.4%	50.4%	46.4%	42.1%
2000-01	38.9%	40.8%	43.9%	48.0%	47.3%

TABLE 7 (Continued)

	Enrollment Change Category				
	Decrease	Up to 16.8%	16.9%-28.6%	28.7%-48.9%	More Than 48.9%
Spending					
FY2002 Total "Central" Per Pupil	$6,303	$6,124	$6,180	$6,192	$6,057
% Change CY1989 to FY2002 (Denver-Boulder CPI = 59.0%)	*62.9%*	*56.6%*	*50.6%*	*58.0%*	*47.9%*
Percentage of Total "Central" by Function:					
Instruction					
CY1989	65.6%	66.6%	66.0%	67.1%	65.5%
FY2002	63.7%	67.4%	65.3%	66.8%	66.6%
Administration					
CY1989	10.9%	9.2%	8.9%	9.9%	9.9%
FY2002	10.1%	9.3%	9.0%	9.2%	9.1%
Plant M&O					
CY1989	12.1%	11.4%	11.4%	11.2%	12.9%
FY2002	10.8%	9.6%	9.4%	9.1%	9.9%
Pupil/Staff/ Other Support					
CY1989	11.4%	12.8%	13.8%	11.8%	11.7%
FY2002	15.4%	13.6%	16.4%	14.9%	14.4%
Revenue					
Total "Central" Spending as a Percent of Total Operating Revenue					
CY1989	86.1%	85.2%	86.9%	86.9%	88.4%
FY2002	87.5%	87.5%	87.3%	93.5%	87.3%

TABLE 7 (Continued)

	Enrollment Change Category				
	Decrease	Up to 16.8%	16.9%-28.6%	28.7%-48.9%	More Than 48.9%
Revenue (Continued)					
FY2002 Percent of Total Operating Revenue:					
Local	35.7%	40.7%	46.0%	52.7%	49.7%
State	54.9%	51.8%	46.3%	40.2%	46.8%
Federal	9.4%	7.5%	7.7%	7.1%	3.5%
Change in Operating Revenue per Pupil CY1989 to FY2002:					
Local	38.6%	24.6%	17.1%	34.6%	20.0%
State	69.4%	76.5%	92.2%	55.1%	103.4%
Federal	128.4%	106.6%	128.2%	123.8%	46.6%
Revenue Gap per Pupil (Note that group members may change slightly over time):					
FY1996 vs. CY1989	$290	$454	$559	$525	$733
FY1997 vs. CY1989	$318	$438	$541	$477	$740
FY1998 vs. CY1989	$179	$278	$537	$436	$745
FY1999 vs. CY1989	$169	$171	$631	$385	$647
FY2000 vs. CY1989	$205	$153	$630	$268	$613
FY2001 vs. CY1989	$119	$124	$502	$198	$673
FY2002 vs. CY1989	- $150	$94	$346	$39	$456
Assessed Valuation					
2001-02 per Pupil	$63,792	$67,763	$75,282	$111,983	$84,050
% Change	*51.8%*	*27.3%*	*16.8%*	*71.4%*	*19.3%*

TABLE 8

PROFILE OF SCHOOL FINANCE CHANGE, 1988-89 TO 2001-02
DISTRICTS GROUPED BY PROPERTY WEALTH PER PUPIL

	Property Wealth Category				
Group Characteristics	Less Than $46,500	$46,501-$67,200	$67,201-$70,500	$70,501-$107,000	More Than $107,000
Number of Districts:	44	47	10	29	48
2001-02 Enrollment:	142,776	138,940	144,468	140,188	140,832
Average Enrollment	3,245	2,956	14,447	4,834	2,934
Change in Pupils 1988-89 to 2001-02:					
Change in Total Enroll.	32,456	30,201	19,172	58,069	31,110
% Change	*29.4%*	*27.8%*	*15.3%*	*70.7%*	*28.4%*
% Spec. Ed. 1988-89	9.9%	10.1%	9.0%	8.4%	9.6%
% Spec. Ed. 2001-02	12.4%	11.4%	9.9%	10.5%	12.1%
% Free Lunch 1988-89	25.6%	19.8%	9.2%	10.5%	24.5%
% Free Lunch 2001-02	26.7%	24.6%	13.0%	9.7%	32.8%
Teachers					
2001-02 Tchrs./1,000 Pupils	63.1	64.6	59.5	65.5	70.0
Change in Tchrs./1,000	*4.5*	*5.7*	*7.0*	*8.5*	*6.4*
2001-02 Average Salary	$38,534	$38,371	$43,449	$42,346	$40,843
Change in Salary	*42.4%*	*38.8%*	*29.2%*	*40.3%*	*37.9%*
Years of Experience					
1988-89	12.9	12.4	14.1	12.0	13.5
2001-02	11.7	11.1	10.2	11.1	10.8
% with Masters or More					
1988-89	40.3%	41.7%	59.1%	43.9%	50.2%
2001-02	44.1%	39.4%	47.6%	48.8%	44.0%

TABLE 8 (Continued)

	Property Wealth Category				
	Less Than $46,500	$46,501-$67,200	$67,201-$70,500	$70,501-$107,000	More Than $107,000
Spending					
FY2002 Total "Central" Per Pupil	$5,747	$5,995	$6,056	$6,272	$6,668
% Change CY1989 to FY2002 (Denver-Boulder CPI = 59.0%)	*56.7%*	*56.6%*	*52.5%*	*53.5%*	*45.8%*
Percentage of Total "Central" by Function:					
Instruction					
CY1989	67.0%	65.5%	65.8%	65.3%	67.0%
FY2002	66.5%	66.1%	66.3%	66.7%	65.1%
Administration					
CY1989	9.5%	10.0%	8.4%	9.1%	10.1%
FY2002	9.0%	9.3%	9.4%	8.4%	9.6%
Plant M&O					
CY1989	12.3%	11.3%	11.7%	12.7%	11.0%
FY2002	10.1%	9.6%	10.1%	9.2%	9.1%
Pupil/Staff/ Other Support					
CY1989	11.2%	13.2%	14.2%	13.0%	12.0%
FY2002	14.4%	14.9%	14.3%	15.7%	16.3%
Revenue					
Total "Central" Spending as a Percent of Total Operating Revenue					
CY1989	87.7%	86.9%	88.3%	88.2%	83.8%
FY2002	89.3%	86.5%	89.1%	90.2%	86.8%

TABLE 8 (Continued)

	Property Wealth Category				
	Less Than $46,500	$46,501-$67,200	$67,201-$70,500	$70,501-$107,000	More Than $107,000
Revenue (Continued)					
FY2002 Percent of Total Operating Revenue:					
Local	28.1%	35.2%	49.2%	52.9%	64.8%
State	64.2%	57.1%	45.9%	42.6%	27.4%
Federal	7.7%	7.6%	4.9%	4.4%	7.8%
Change in Operating Revenue per Pupil CY1989 to FY2002:					
Local	20.4%	26.6%	38.9%	21.9%	15.5%
State	69.7%	78.8%	61.1%	100.0%	155.5%
Federal	99.2%	97.6%	123.3%	133.1%	86.2%
Revenue Gap per Pupil (Note that group members may change slightly over time):					
FY1996 vs. CY1989	$352	$375	$641	$623	$749
FY1997 vs. CY1989	$310	$381	$545	$653	$778
FY1998 vs. CY1989	$266	$236	$491	$611	$851
FY1999 vs. CY1989	$224	$304	$396	$519	$948
FY2000 vs. CY1989	$155	$313	$435	$454	$868
FY2001 vs. CY1989	$101	$320	$263	$449	$799
FY2002 vs. CY1989	$83	$90	$256	$223	$603
Assessed Valuation					
2001-02 per Pupil	$38,041	$53,249	$69,111	$81,642	$168,670
% Change	*22.1%*	*23.5%*	*25.1%*	*20.6%*	*46.5%*

GRAPH 1 ACTUAL SPENDING, COMPARED TO TWO ALTERNATIVE APPROACHES OF ESTIMATING NEEDED SPENDING, 1993-94 TO 2001-02