Issue Paper

Sources and Uses of K-12 Education Funding Growth

1982-83 through 1991-92

EXECUTIVE SUMMARY

Over the past 10 years, total funding for K-12 education has increased significantly — growing from $12.7 billion in 1982-83 to $27 billion in 1991-92. After adjusting for inflation, the 1991 Budget Act results in a level of total funding per unit of average daily attendance (ADA) in 1991-92 that is 13 percent higher than the level of per-ADA funding in 1982-83, the year immediately prior to the enactment of SB 813 (the state's major school funding and reform measure). Put another way, the 1991 Budget Act provides a level of funding for K-12 education that exceeds by $3 billion the amount that would have been needed to keep pace with overall enrollment growth and inflation since 1982-83.

In this issue paper, which is a revised and expanded version of a piece we presented in our Analysis of the 1991-92 Budget Bill, *we identify the major sources of this education funding growth and the specific uses to which school districts have put these funds, focusing on those program areas that have grown at higher-than-average rates. In so doing, we hope to assist the Legislature in overseeing and understanding the evolution of funding for K-12 education programs, an area in which the state has taken an increasingly important role since the passage of Proposition 13 in 1978 and — more recently — Proposition 98 in 1988.*

Our findings indicate that, of the $3 billion net increase in education funding, approximately $2.5 billion (84 percent) is attributable to new state programs enacted since 1982-83. Examples of these programs include (1) incentive funding for increasing the length of the school day and year and for increasing beginning teachers' salaries, (2) reforms such as equalizing general-purpose spending per pupil, (3) other legislatively-enacted special programs such as the state school facilities aid program, and (4) voter-

EXECUTIVE SUMMARY CONT'D

approved initiatives such as the state lottery.

School district expenditure data for 1989-90 (the most recent year for which such data are available) indicate that roughly 80 percent of this additional funding had been used for employee compensation — a finding which, of itself, is not surprising, given the labor-intensive nature of school operations. These data also indicate, however, that in 1989-90:

- *Overall employee compensation-related expenditures had grown to a level 19 percent higher than the amount required to compensate for enrollment growth and inflation since 1982-83.*
- *Within the employee compensation category, the fastest growing components were spending for classified administrator salaries (39 percent above enrollment growth and inflation needs), teacher salaries (17 percent above enrollment growth and inflation needs), and employee benefits (32 percent above enrollment growth and inflation needs).*
- *The additional education funding had resulted in no net reduction in statewide pupil:teacher ratios.*
- *A significant portion of the additional funding had been spent on increasing average base teacher salaries — which in 1989-90 were 15 percent higher (after inflation) than in 1982-83. During this period, teachers' average salaries increased a bit more, in percentage terms, than did those of Californians generally.*

We estimate that, of the 15 percent increase in inflation-adjusted average teacher salaries, at least half was attributable to "higher pay for more work." The remainder represented a real increase in average teacher salaries beyond amounts needed to compensate for measurable changes in teacher quality, workload, and inflation. It is important to emphasize, however, that while these data provide information regarding salary trends, they say nothing about the appropriateness of teacher salary levels per se — that is, whether teacher salaries were "too low" or "too high" in either 1982-83 or 1989-90.

While not necessarily indicative of future behavior, our findings suggest that, given a choice between paying teachers higher salaries and reducing class sizes, school districts tend to choose the former option. Thus, if the Legislature wishes to encourage class size reduction as a strategy for educational improvement, it may need to continue to earmark funding specifically for this purpose (as it has done since 1990-91). ❖

INTRODUCTION

Total funding for K-12 education has increased significantly over the past 10 years. Specifically, we estimate that the 1991 Budget Act provides a level of funding for K-12 education in 1991-92 which exceeds by $3 billion (13 percent) the amount that would have been needed to keep pace with overall enrollment growth and inflation since 1982-83, the year immediately prior to the enactment of SB 813 (the major state education funding and reform measure).

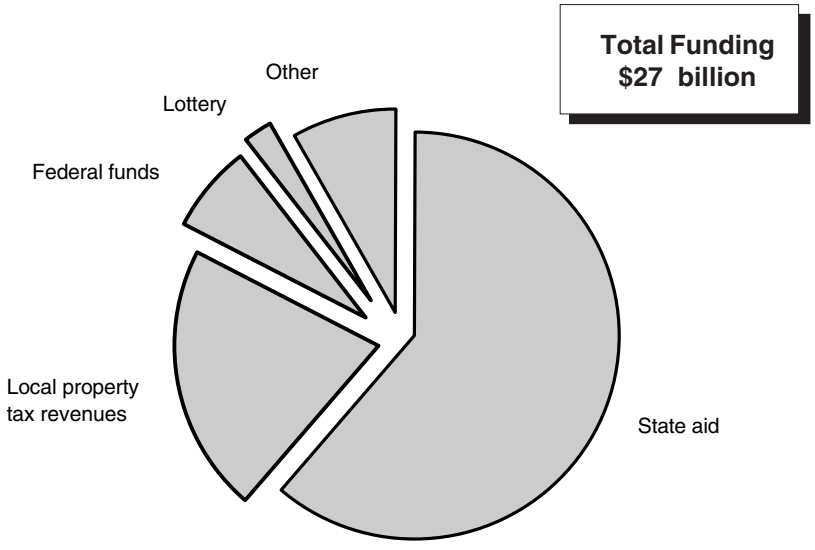
Where has all of this additional funding come from and where has it gone? In this issue paper, we identify the specific sources of this funding growth, and those education programs in which funding has grown at rates significantly higher than that needed in order to keep pace with overall enrollment growth and inflation. We also describe the specific uses to which school districts have put these funds, focusing on those areas that have grown at higher-than-average rates. In so doing, we hope to assist the Legislature in overseeing and understanding the evolution of funding for K-12 education programs, an area in which the state has taken an increasingly important role since the passage of Proposition 13 in 1978 and — more recently — Proposition 98 in 1988. (These measures provided for reductions in local property taxes and a minimum funding guarantee for K-14 education, respectively.)

HOW MUCH FUNDING IS PROVIDED FOR K-12 EDUCATION IN 1991-92?

In 1991-92, funding for K-12 education from all sources — state, local, and federal — will total $27 billion, making it the single largest program area in the state budget. This amount represents an increase of $1.6 billion, or 6.2 percent, over what was available in 1990-91. Figure 1 shows that K-12 total funding consists primarily of $16.5 billion (61 percent) in state aid and $5.7 billion (21 percent) from local property tax revenues. The state aid amount represents an increase of $928 million, or 6 percent, above the 1990-91 level.

Figure 1

The 1991 Budget Act
Sources of K-12 Education Funding[a]



[a] Figures exclude funding for library programs and the proceeds of state general obligation bond issues for school facilities aid. They do include, however, General Fund payments for debt service on these bonds.

"In 1991-92, funding for K-12 education from all sources ... represents an increase of $1.6 billion, or 6.2 percent, over what was available in 1990-91."

Proposition 98 Funding

Of the $27 billion in total funding for K-12 education in 1991-92, $20.7 billion (77 percent) is state and local funding that counts towards meeting constitutional minimum funding requirements established by Proposition 98. This measure, the "Classroom Instructional Improvement and Accountability Act of 1988," provides K-12 schools and community colleges with a guaranteed minimum level of funding in 1988-89 and thereafter.

Figure 2 summarizes state and local funding for Proposition 98 in 1990-91 and 1991-92.

How the Funding Formula Works. In *normal or high* revenue-growth years, the Proposition 98 funding guarantee is based on the *greater* of:

- ***Test 1 — Percent of General Fund Revenues.*** This is defined as the 1986-87 percentage of General Fund tax revenues provided to K-14 education — about 40 percent.
- ***Test 2 — Maintenance of Prior-Year Service Levels.*** This is defined as the prior-year level of total funding for K-14 education from state and local sources, adjusted for enrollment growth and inflation.

In *low* revenue-growth years (defined to be when General Fund revenue growth per capita is more than 0.5 percentage point below growth in per capita personal income), the Proposition 98 funding guarantee is based on:

Figure 2

Proposition 98 Education Funding

1990-91 and 1991-92 (in millions)

	1990-91	1991-92	CHANGE AMOUNT	CHANGE PERCENT
State aid:				
K-12 schools	$14,924	$15,428	$504	3.4%
Community colleges	1,691	1,696	5	0.3
Other purposes[a]	63	65	2	2.7
Subtotals	**$16,678**	**$17,189**	**$511**	**3.1%**
"Shift" across fiscal years[b]	-$1,366	$1,233	$2,599	—[c]
Subtotals, state aid	**$15,312**	**$18,422**	**$3,110**	**20.3%**
Local property taxes:				
K-12 schools	$4,952	$5,310	$358	7.2%
Community colleges	793	854	61	7.7
Subtotals, local property taxes	**$5,745**	**$6,164**	**$419**	**7.3%**
Totals	**$21,057**	**$24,586**	**$3,529**	**16.8%**

[a] Includes Department of Developmental Services, California Youth Authority, state special schools, Indian education centers, and employee compensation.
[b] See text for discussion.
[c] Not a meaningful figure.

- ***Test 3 — Adjustment Based on Available Revenues.*** This is defined as the prior-year total level of funding for K-14 education from state and local sources, adjusted for enrollment growth and for growth in General Fund tax revenues, *plus* 0.5 percent of the prior-year funding level.

1990-91 Funding Level. When the Legislature passed the 1990-91 budget in July 1990, it approved a total level of *state* funding for schools and community colleges under Proposition 98 of $17.1 billion. This amount, which was subsequently reduced by gubernatorial vetoes to the $16.7 billion total shown in Figure 2, was based on the assumption that the minimum funding guarantee for 1990-91 would be determined by Test 2 (the maintenance of prior-year service levels criterion). Since that time, however, estimated 1990-91 General Fund tax revenues decreased by $4.3 billion and, as a result, the basis for computing the Proposition 98 guarantee shifted from Test 2 to Test 3 (the adjustment based on available revenues). Absent any further legislative action, the level of funding already appropriated for K-14 education in 1990-91 would have exceeded the Test 3 minimum requirement by $1,366 million. In order to avoid this outcome, the Legislature enacted legislation to:

- Count $133 million of this $1.4 billion amount towards fulfilling remaining amounts owed schools for the 1989-90 Proposition 98 guarantee.
- Reduce funding for education in 1990-91 by the remaining $1,233 million of the $1.4 billion amount, while simultaneously providing an equivalent loan in 1990-91 from funds counting towards the 1991-92 guarantee (in effect, "shifting" across fiscal years the remaining $1,233 million in excess of the 1990-91 minimum guarantee, in order to satisfy 1991-92 funding requirements).

1991-92 Funding Level. As noted earilier, state and local funding counting towards meeting K-12 education's 1991-92 Proposition 98 minimum funding requirements totals $20.7 billion. The *state* contribution to the total Proposition 98 guarantee in the 1991 Budget Act, as shown in Figure 2, is $18.4 billion. It is based on Test 2 (the maintenance of prior-year service levels requirement), and consists primarily of the following:

- $15.4 billion for K-12 education programs.
- $1.7 billion for community college programs.
- $1.2 billion loaned to K-12 schools and community colleges for 1990-91 expenditures (as noted above).

(Elsewhere in this analysis, all figures showing school funding reflect amounts *received* in each fiscal year — rather than how these funds were *counted* for purposes of satisfying Proposition 98; thus, K-12 education's share of the $1.2 billion loan is included in the totals for *1990-91*.)

WHAT ARE THE MAJOR SOURCES AND USES OF K-12 FUNDING GROWTH?

As noted, we estimate that the 1991 Budget Act results in a level of total funding per unit of average daily attendance (ADA) in 1991-92 that is 13 percent higher — *after adjusting for inflation* — than the level of per-ADA funding in 1982-83. In other words, the total level of funding for K-12 education is 13 percent higher than the amount that would have been needed to keep pace with overall enrollment growth and inflation-driven cost increases since 1982-83.

Our analysis of the major sources and uses of this funding growth is presented below. First, however, it is important to comment on both (1) our selection of 1982-83 as the "base year"

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from which to measure funding growth and (2) our choice of a reasonable measure of educational funding "need" to use in the context of analyzing funding growth.

1982-83 as the Base Year

In looking at changes in the level of funding for K-12 education programs over time, one practical problem involves the choice of a reasonable year on which to base comparisons. For purposes of this analysis, we focus on the period 1982-83 through 1991-92. We do so for two reasons:

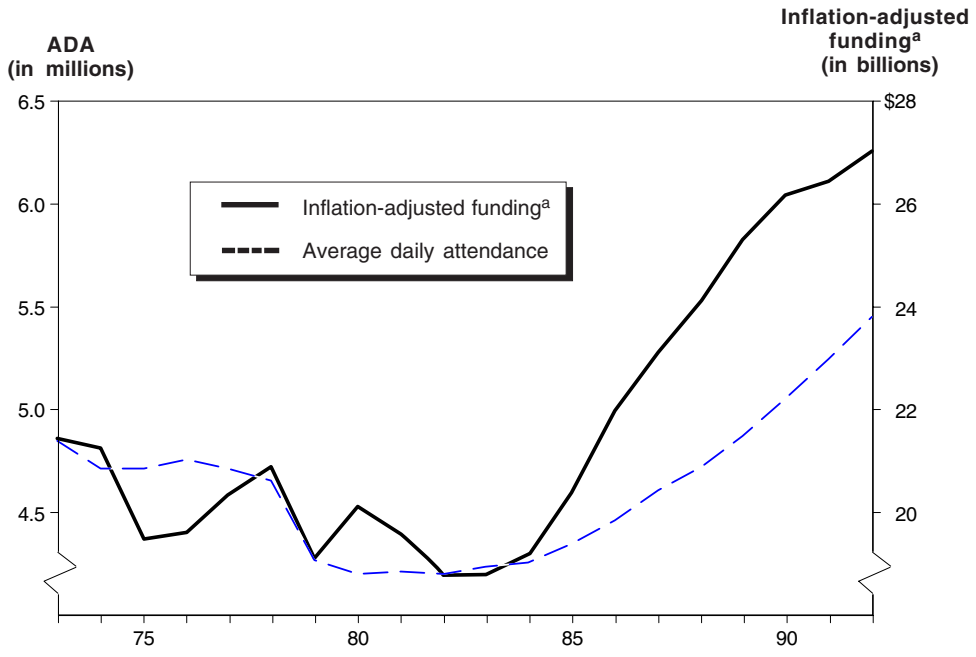
- ***First,*** the period 1982-83 through 1991-92 covers a full decade of funding history, thereby allowing sufficient time to discern significant trends in funding.
- ***Second,*** as noted earlier, 1982-83 was the last year prior to the enactment of SB 813, California's major school funding and reform measure. Thus, 1982-83 provides a reasonable base against which to judge the impacts of the educational reforms and infusions of additional funding for K-12 education that accompanied SB 813.

Figure 3 puts the year 1982-83 into a broad historical context, comparing total funding for

Figure 3

Inflation-Adjusted K-12 Education Funding and Enrollment[a]

1972-73 through 1991-92[b]



[a] Dollar amounts shown represent constant (1991-92) dollars, as adjusted by the GNP deflator for state and local government purchases of goods and services.

[b] Data are for fiscal years ending in years specified.

K-12 education in real (inflation-adjusted) dollars to total K-12 enrollment over a 20-year period beginning in 1972-73. (Although the data are shown using two different scales, both series begin at the same point in the figure; consequently, the lines can be used to show how changes in funding have compared to changes in enrollment since 1972-73.)

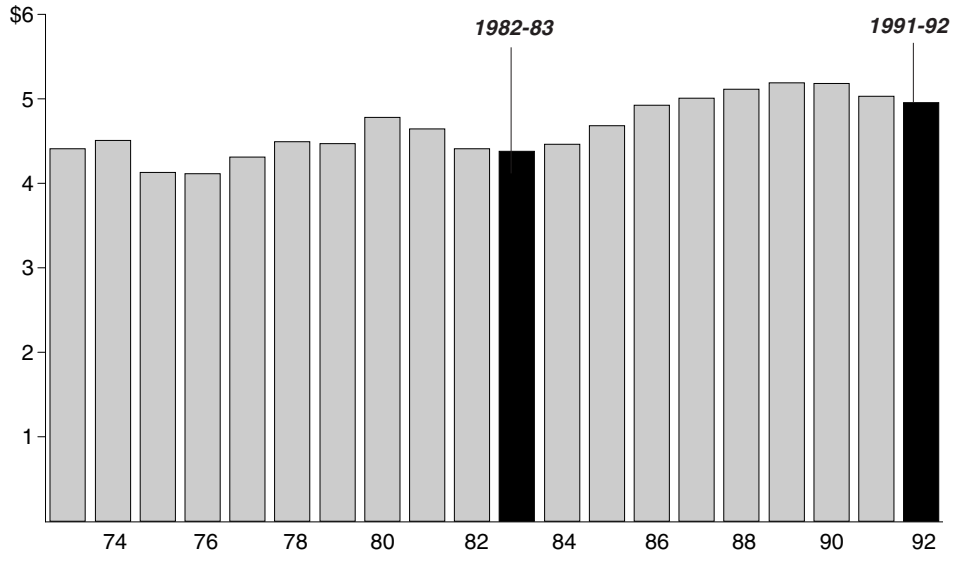
Figure 3 shows that, over the 10-year period from 1972-73 through 1981-82, inflation-adjusted funding first dipped below and then rose above the amount needed to compensate for enrollment changes. By the end of this period, however, real total funding had returned to a level which almost exactly compensated for enrollment changes since 1972-73. From 1982-83 through 1991-92, though, the story has been quite different. Beginning in 1983-84, real total funding for K-12 education began to outpace the rate of enrollment growth, reaching a maximum differential in 1988-89. And, while the "gap" between the two lines has closed somewhat since then, real total funding is still nearly $3 billion higher than the amount that would have been needed to keep pace with enrollment growth and inflation since 1972-73.

Figure 4 presents these data in a slightly different way, showing inflation-adjusted funding *per pupil* over the 20-year period. As the figure shows, the lowest levels of per-pupil funding were in the mid 1970s. Following this, per-pupil funding rose for several years but then turned down again in the early 1980s. The year 1982-83 — which is the base year for our analysis — constituted something of a relative "low water mark" for educational funding, with inflation-adjusted per-pupil funding at its lowest level since 1976-77 and 8 percent below its previous "peak" in 1979-80. Per-pupil funding then rose again and peaked in 1988-89, but has since declined somewhat. Figure 4 also shows that, in spite of year-to-year fluctuations, there has been a general *long-term upward trend* in the level of inflation-adjusted per-pupil funding over the total period shown, at least up until 1989-90.

Figure 4

K-12 Education Funding per ADA in Constant (1991-92) Dollars[a]

1972-73 through 1991-92[b] (in thousands)



[a] As adjusted by the GNP deflator for state and local government purchases of goods and services.
[b] Data are for fiscal years ending in years specified.

Measuring Funding Growth"Needs"

A second issue involves determining the amount of funding growth "needed" for K-12 education. In this analysis, we use overall enrollment growth, in lieu of program-specific workload measures, to measure increases in "need" since 1982-83. While this approach has the advantages of simplicity and consistency (avoiding the necessity to compute separate workload measures for each of the more than 50 "categorical" education programs), it is important to note that it also may provide an inaccurate picture of actual program "needs" in those programs where actual workload has grown at rates significantly different from that of overall K-12 enrollment. (For example, even though funding for state-subsidized child care programs has generally kept pace with overall K-12 enrollment growth, it has lagged behind "need" as measured by growth in the number of children from low-income families who are actually eligible for such programs. On the other hand, funding for state-mandated local education programs has outpaced overall enrollment growth not because funding for the programs that existed in 1982-83 has been "excessive," but because a number of *new* programs have been enacted since that time.) In addition, this approach does not account for the difficult-to-quantify workload implications of changes such as the increasing ethnic and socioeconomic diversity among students — changes which may have significant impacts on workload.

"Of the $3 billion net increase in funding above that needed to keep pace with enrollment growth and inflation, approximately $2.5 billion (84 percent) is attributable to new state programs enacted since 1982-83."

Major Sources of Growth in Education Funding

Earlier in this analysis, we identified the sources of K-12 education funding in terms of the level of government from which they flowed — state aid, local property taxes, federal funds, and lottery revenues. Another way of looking at sources of education funding is in terms of the *programmatic purposes* for which they are provided. Using this approach, Figure 5 identifies the major areas of K-12 education funding growth, and our estimates of the amounts by which the 1991-92 funding levels exceed the amounts that would have been needed to keep pace with overall enrollment growth and inflation since 1982-83. As the figure shows, we estimate that total funding for K-12 education in 1991-92 will exceed by *$3 billion* (13 percent) the amount that would have been needed in order to maintain 1982-83 funding levels, after adjusting for enrollment growth and inflation.

Figure 5 shows that, of the $3 billion net increase in funding above that needed to keep pace with enrollment growth and inflation, approximately $2.5 billion (84 percent) is attributable to new state programs enacted since 1982-83. Examples of these programs include (1) incentive funding for increasing the length of the school day and year, for increasing beginning teachers' salaries, for operating schools year-round, and for reducing class sizes; (2) reforms such as revenue limit equalization aid and funding for supplemental (nonremedial) summer school; (3) other legislatively enacted special programs such as the state school facilities aid program, the mentor teacher program, and the supplemental grants program; and (4) voter-approved initiatives, such as the state lottery.

Figure 5 also shows the following additional programs with 1991-92 funding levels that significantly exceed the amounts that would have been needed in order to keep pace with enrollment growth and inflation:

- ***Programs funded with local miscellaneous revenues.*** These programs, which include developer fee-funded school facilities projects, experienced an estimated $584 million (36 percent) increase above amounts needed for enrollment growth and inflation. (Much of this funding growth has resulted from statutory authorization, granted in 1986, for districts to levy developer fees for funding school facilities.)

- ***Special education.*** Here there was a $513 million (39 percent) increase above amounts needed for enrollment growth and inflation, for programs serving disabled students.

- ***Desegregation aid.*** Here there was a $247 million (93 percent) increase above amounts needed for enrollment growth and inflation, to reimburse school district costs of

Figure 5

K-12 Education
Major Sources of Funding Growth[a]

1982-83 through 1991-92 (in millions)

PROGRAM AREA	ACTUAL 1982-83 FUNDING	1991-92 FUNDING "NEEDED"[b]	ACTUAL 1991-92 FUNDING	FUNDING IN EXCESS OF "NEED"[b] AMOUNT	FUNDING IN EXCESS OF "NEED"[b] PERCENT
I MAJOR PROGRAM AREAS GROWING SIGNIFICANTLY FASTER THAN ENROLLMENT PLUS INFLATION					
Revenue limits	$7,825	$14,767	$15,866	$1,099	7.4%
*(Longer school day/year)	—	—	(680)	(680)	—[c]
*(Equalization aid)	—	—	(416)	(416)	—[c]
*(Supplemental summer school)	—	—	(79)	(79)	—[c]
*(Beginning teacher salaries)	—	—	(30)	(30)	—[c]
(Other)	(7,825)	(14,767)	(14,660)	(-107)	(-0.7)[c]
*California State Lottery	—	—	614	614	—[c]
Local miscellaneous revenues[d]	871	1,644	2,228	584	35.6
Special education	702	1,325	1,838	513	38.7
*School facilities: state debt service on bonds	—	—	343	343	—[c]
Desegregation	141	266	513	247	92.8
*Supplemental grants	—	—	185	185	—[c]
Education mandates	24	45	175	130	289.0
*Year-round school incentives	—	—	93	93	—[c]
*Mentor teacher program	—	—	70	70	—[c]
*Proposition 98 reserve	—	—	69	69	—[c]
*Class size reduction	—	—	31	31	—[c]
II MAJOR PROGRAM AREAS GROWING SIGNIFICANTLY SLOWER THAN ENROLLMENT PLUS INFLATION					
Home-to-school transportation	$262	$494	$344	-$150	-30.4%
School facilities: local debt service on bonds	450	849	303	-546	-64.3
III ALL OTHER PROGRAMS	**$2,387**	**$4,505**	**$4,262**	**-$243**	**-5.4%**
TOTALS	**$12,662**	**$23,894**	**$26,933**	**$3,039**	**12.7%**

[a] Asterisk denotes new state program enacted after 1982-83; funding for such programs totals $2.5 billion in 1991-92. Details may not add to totals due to rounding.

[b] "Need" is defined here as the amount necessary to keep pace with growth in total average daily attendance and inflation (as measured by the GNP Price Deflator for State and Local Government Purchases of Goods and Services).

[c] Not a meaningful figure.

[d] Includes developer fees.

voluntary and court-ordered desegregation programs. (Much of this funding growth has resulted from new districts filing claims for reimbursement of desegregation costs.)

- ***Education mandates.*** These increased by $130 million (289 percent) above amounts needed for enrollment growth and inflation, to reimburse school district costs of state-mandated local programs. (As noted, much of this funding growth has resulted from an increase in the number of such state-mandated programs.)

Finally, Figure 5 shows two major areas in which funding levels have *not* kept pace with overall enrollment growth and inflation: (1) home-to-school transportation aid and (2) local debt service on school facilities bonds. (The decrease in local funding for school facilities is primarily due to a prohibition, enacted by Proposition 13 in 1978, on the issuance of any new property tax-secured local debt; this prohibition was subsequently repealed by Proposition 46 in 1986.)

School Districts' Uses of Additional Funding

Figure 6 shows the *purposes* to which school districts have put the additional funding described above. Specifically, the figure shows the relative growth, by object of expenditure (salaries for teachers, administrators, and other employees; employee benefits; books and supplies; capital outlay; and other purposes), of school districts' expenditures from their local general funds. (The local general fund is the fund into which school districts deposit unrestricted revenues, and accounts for over 85 percent of all school district spending; the remaining funding is deposited in a variety of special-purpose, restricted funds.)

"Within the employee compensation category, the fastest-growing components were spending for classified (non-certificated) administrator salaries ... and employee benefits."

Figure 6 shows that, in 1989-90 (the most recent year for which data are available), school districts' local general fund expenditures were $3.2 billion (20 percent) higher than the amounts needed to keep pace with enrollment growth and inflation needs since 1982-83. In this year, expenditures for employee compensation had grown to a level 19 percent higher than enrollment- and inflation-adjusted "needs," accounting for $2.6 billion (80 percent) of the $3.2 billion in additional expenditures.

Figure 6 also shows that, within the employee compensation category, the fastest-growing components were spending for classified (non-certificated) administrator salaries (39 percent above enrollment growth and inflation needs), teacher salaries (17 percent above enrollment growth and inflation needs), and employee benefits (32 percent above enrollment growth and inflation needs). (Because statewide data do not exist on the portion of employee benefits spending attributable to specific categories of employees, it is not possible to determine the relative growth in total compensation costs — salary plus benefits — for each of these categories.)

As the figure indicates, *total* spending on classified administrator salaries has increased dramatically. (Classified administrators typically include positions within districts' business offices such as the business manager, controller, and chief accountant.) Because comparable statewide data do not exist on growth in the *numbers* of such administrators, however, it is not possible to determine the extent to which this reflects increases in *average* administrator salaries. It *is* possible, though, to provide additional insights into spending on teacher salaries — a subject to which we now turn.

Figure 6

K-12 Education
School District Expenditure Growth, By Object[a]
Local General Fund

1982-83 through 1989-90 (in millions)

OBJECT OF EXPENDITURE	ACTUAL 1982-83 EXPENDITURES	1989-90 EXPENDITURES "NEEDED"[b]	ACTUAL 1989-90 EXPENDITURES	FUNDING IN EXCESS OF "NEED"[b] AMOUNT	FUNDING IN EXCESS OF "NEED"[b] PERCENT
EMPLOYEE COMPENSATION					
Salaries					
• Teachers	$4,520	$7,231	$8,445	$1,214	16.8%
• Administrators	607	971	1,113	142	14.6
School site administrators	(354)	(567)	(633)	(66)	(11.6)
Other certificated administrators[c]	(176)	(282)	(309)	(27)	(9.6)
Classified administrators	(77)	(123)	(171)	(48)	(39.0)
• Other classified	1,646	2,633	3,053	420	15.9
• Other certificated	391	627	726	99	15.8
Subtotals, salaries	**($7,164)**	**($11,461)**	**($13,337)**	**($1,876)**	**(16.4%)**
Benefits	$1,424	$2,278	$3,006	$728	32.0%
Subtotals, employee compensation	**($8,588)**	**($13,739)**	**($16,343)**	**($2,604)**	**(19.0%)**
BOOKS AND SUPPLIES	$455	$728	$851	$123	16.9%
OTHER SERVICES	728	1,165	1,458	293	25.2
CAPITAL OUTLAY	151	241	458	217	90.0
TOTALS	**$9,922**	**$15,873**	**$19,110**	**$3,237**	**20.4%**

[a] Details may not add to totals due to rounding.

[b] "Need" is defined here as the amount necessary to keep pace with growth in total average daily attendance and inflation (as measured by the GNP Price Deflator for State and Local Government Purchases of Goods and Services).

[c] Includes superintendents, supervisors, and other administrators.

Spending on Teacher Salaries

As noted in Figure 6, total spending on teacher salaries from 1982-83 through 1989-90 outpaced enrollment growth and inflation by $1.2 billion (17 percent). Some of this $1.2 billion increase is due to funding provided for supplemental summer school ($65 million in 1989-90) and the mentor teacher program ($61 million in 1989-90) — items that are typically "add-ons" to base teacher salaries. After adjusting for these factors, the data imply a net increase of $1.1 billion (15 percent) in spending on base teacher salaries. As with spending on classified administrators, this finding does not necessarily imply that the *average* teacher salary increased by 15 percent after inflation. In theory, at least, it is possible that some of the increase in spending on teacher salaries could have been the result of hiring more teachers than would have been needed to keep pace with overall enrollment growth (thereby reducing the average pupil:teacher ratio). Our review indicates, however, that the statewide average pupil:teacher ratio in 1989-90 was *unchanged* from the ratio in 1982-83. Thus, the additional spending on teacher salaries *does* appear to reflect an increase of 15 percent in the average, real (inflation-adjusted) teacher salary.

Why Have Teacher Salaries Risen?

We have identified three possible reasons for the increase in the statewide average teacher salary:

- ***Higher teacher quality.*** Some of the increase in average teacher salary may have been due to increases in the average levels of teacher quality, as measured by experience or education. (These are the two primary factors used by school districts to determine teachers' salaries.) Our review indicates, however, that the average level of teacher experience actually *decreased* slightly during this period (dropping from 11.9 to 11.7 years), while the percentage of teachers with at least a bachelor's degree plus 30 additional semester units (the "standard" for a person with a teaching credential) also decreased, from 90 percent to 85 percent.

- ***Increased teacher workload.*** Another possibility is that some of the increase in the average teacher salary is attributable to "higher pay for more work." In particular, school districts in 1989-90 received approximately $617 million attributable to incentives for increasing the length of the school day and year. Of this amount, we estimate that about $550 million was needed in order to fully compensate teachers for the amount of actual, additional work time required to meet the minimum longer day and year targets. In addition, however, districts may have negotiated additional workload increases beyond these minimum target levels, and other factors such as increasing ethnic and socioeconomic diversity among students may have resulted in additional, unquantifiable workload increases. The above implies that *at least* 7.6 percent of the 15 percent increase in average teacher salaries was attributable to increased workload.

- ***Higher pay for the same work.*** Finally, school districts simply may have granted certain salary increases in excess of amounts needed to compensate for inflation, workload, and teacher quality. Based on the information presented above, this appears to have been the case. Specifically, we estimate that average teacher salaries increased by *up to* 7.4 percent in excess of amounts needed to compensate for identifiable changes in

Figure 7

Growth in Average Teacher Salaries Compared With Inflation and Per Capita Personal Income Growth

	PERCENT INCREASE
Growth in teacher salaries:	
Actual average	54.6%
Workload-adjusted[a] average	up to 44.3
Inflation:	
GNP Deflator for State and Local Government Purchases	34.4
California Consumer Price Index	34.1
Growth in per capita personal income (wages and salaries):	
Actual average	50.8
Workload-adjusted average	—[b]

[a] Adjusted to reflect longer school day and year.
[b] No comparable figure available.

teacher quality, measurable workload changes, and inflation. The extent to which this reflects fundamental underlying supply-demand forces in the labor market for teachers, versus other factors such as the collective bargaining environment, is unknown.

Figure 7 summarizes our findings regarding increases in average teacher salaries, and compares these increases to inflation and per capita personal income growth of Californians generally. As the figure shows, our analysis indicates that, during the period 1982-83 through 1989-90, actual average teacher salaries increased by nearly 55 percent. During this same period, inflation was approximately 34 percent, while the average personal income (from wages and salaries) of all Californians (including teachers) also outpaced inflation, growing by about 51 percent. Thus, teachers' average salaries increased a bit more, in percentage terms, than did those of the population generally.

We further estimate that, after taking account of increases in the length of the school day and year, workload-adjusted average teacher salaries increased by up to about 44 percent. (There is no comparable figure available for workload-adjusted per capita personal income.)

It is important to stress that, while these data indicate that teachers' salaries outpaced inflation during the period 1982-83 through 1989-90, they say nothing about the appropriateness of teacher salary *levels* per se. An assessment of this would, at a minimum, need to consider such factors as the quality and productivity of existing teachers, the compensation levels (adjusting for actual length of work year as well as other important working conditions) of alternative career opportunities available to teachers, and the numbers of qualified candidates available for openings within the teaching profession. All of these issues are beyond the scope of this analysis. In addition, the significance of the fact that average teacher salaries have increased somewhat faster than per capita income for the population as a whole is unclear, given the differing natures of the labor markets involved.

Of the 15 percent average real increase in base teacher salaries, at least half was attributable to "higher pay for more work," while the remainder represented a real increase beyond amounts needed to compensate for measurable changes in workload, teacher quality and inflation.

CONCLUSION

The purpose of this analysis has been to identify the magnitude and major sources of educational funding growth during the past 10 years, and the specific ways school districts have used their addtional funds.

In sum, our review indicates that the 1991 Budget Act provides a level of total funding for K-12 education that is $3 billion (13 percent) higher than the amount that would have been needed in order to keep pace with overall enrollment growth and inflation since 1982-83.

Based on school district expenditure data in 1989-90, it appears that this additional funding had resulted in no net reduction in pupil:teacher ratios, and that a significant portion of the additional funding had been spent on increasing average base teacher salaries — which in 1989-90 were 15 percent higher (after inflation) than in 1982-83. We further estimate that, of this 15 percent increase, at least half was attrib-

utable to "higher pay for more work," while the remainder represented a real increase in teacher salaries beyond amounts needed to compensate for measurable changes in teacher quality, workload, and inflation. Teachers' average salaries increased a bit more, in percentage terms, than did those of the population generally, although these data say nothing regarding the appropriateness of teacher salary *levels* per se.

While not necessarily indicative of future behavior, our findings suggest that, given a choice between paying teachers higher salaries and reducing class sizes, school districts tend to choose the former option. Thus, *if* the Legislature wishes to encourage class size reduction as a strategy for educational improvement, it may need to continue to earmark funding specifically for this purpose (as it has done since 1990-91). ❖

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