

November 2006

PUBLIC SCHOOL FUNDING IN MASSACHUSETTS Where We Are, What Has Changed, and Options Ahead

By Noah Berger and Jeff McLynch

Executive Summary

The fiscal year 2007 budget makes major changes in how Chapter 70 education aid is calculated. This paper explains those changes, examines the issues they are intended to address, and describes the costs of each reform. It also discusses challenges that have not been addressed and provides national data to describe how education funding in Massachusetts compares to other states.¹

The changes made this year focus primarily on correcting perceived inequities in the relative amounts of state and local education spending that will be required in various communities. The reforms include changing the way local fiscal capacity is calculated, updating the data used in determining the allocation of education funding, providing a new type of aid for growing communities, and providing additional aid for those communities with the highest incomes and property values.

The reforms do not significantly change the per pupil foundation budget, which is the amount that state law establishes as the minimum amount – from state and local sources – that school districts are required to spend to provide every child with an adequate education.

The foundation budget was developed as part of the Education Reform Act of 1993, before the implementation of state education standards and the Massachusetts Comprehensive Assessment System (MCAS) exam that measures student progress towards those standards. In the 13 years since that law was enacted, the state has not systematically reformed the original foundation budget to ensure that students receive the support they need to meet the new state standards.

The amount appropriated for Chapter 70 education funding in the FY 2007 budget, though higher than the level in FY 2006, remains well below the amount appropriated in FY 2002, after accounting for inflation using the measure identified in Chapter 70. Specifically, Chapter 70 identifies a particular measure of inflation – the implicit price deflator for state and local government – as the best estimate of the changes in the cost of providing public education.

¹ This paper's analysis of the Chapter 70 reforms in the final budget builds on the analysis of proposals by the House, Senate, and Governor that was provided in MBPC's June 2006 publication, *Public School Funding in Massachusetts: Putting Recent Reform Proposals in Context*, available at

http://www.massbudget.org/Public_School_Funding_in_MA.pdf. This paper also reproduces the analysis of US Census Bureau data contained in that publication.

Using that measure of inflation, the FY 2007 appropriation of \$3.506 billion is worth \$491 million less than the amount appropriated in FY 2002.

To help put current funding levels and the implications of various reform proposals in context, this paper also examines how the financing of primary and secondary education in the Commonwealth compares to other states. When that comparison is made, it becomes clear that Massachusetts lags behind other states in two key respects: the relative contribution that state government makes to financing public primary and secondary education and the share of available economic resources it devotes to such purposes. More specifically, annual U.S. Census Bureau data on public primary and secondary education financing show that:

- Local governments provided the largest share of revenue for public elementary and secondary education in Massachusetts for FY 2004 53.6 percent. (FY 2004 is the most recent year for which such data are available on a fifty-state basis.) State government provided 39.8 percent of such revenue, while the federal government supplied just 6.5 percent.
- Massachusetts continues to rely more than most states on local governments to generate revenue for public primary and secondary education. Among local governments, those in Massachusetts produced the 7th largest share of total public elementary and secondary education revenue in FY 2004. Local governments across the United States provided 43.9 percent of revenue for public primary and secondary education that year.
- In FY 2004, state and local spending on public primary and secondary education in Massachusetts equaled 4.2 percent of state personal income, putting the Commonwealth in 35th place nationally. (This figure excludes spending enabled by federal education aid.) The comparable amount for the country as a whole was 4.6 percent; thus, if state and local spending in Massachusetts in FY04 had been at the same level as the national mark, the Commonwealth and its municipalities would have dedicated an additional \$1 billion to educating its children that year.



Introduction

This paper examines the education funding reforms implemented in the FY 2007 budget. Those reforms significantly alter the distribution of state aid among communities and the requirements for local spending, but do not squarely confront a question that is central to the long term debate about adequate funding for education: what would it cost to provide all children in Massachusetts with access to the education they need to build successful and fulfilling lives in the modern economy?

While significant reforms were included in the FY 2007 budget, the process of updating the Chapter 70 education funding formula may continue over the coming years. The legislature chose not to change the general laws to reflect the new formulas used in this year's budget. This means that while these reforms do shape the allocations of education aid this year, the legislature may continue to consider new options for distributing education aid in future years.

In examining the reforms adopted in the FY 2007 budget, this paper will seek to explain clearly what each reform does and to consider how it addresses the goals of making the education financing system less complicated, providing needed resources, and targeting resources in a manner that is likely to close the achievement gaps still found across the state.

This paper also puts the discussion of reforming education finance laws into a broader context by using US Census Bureau data to examine how education funding in Massachusetts compares to funding in other states and how this has changed over time. This analysis looks both at the share of overall resources that Massachusetts spends on education and at the balance between state and local revenues used to fund education.

The evidence shows that after a decade in which Massachusetts was one of the most aggressive tax cutting states in the country,² the Commonwealth responded to the fiscal crisis caused by the combination of those tax cuts and the national recession of 2001 by reducing state funding for education and other vital public services. In addition to reducing the overall share of resources being used to support public education, this state policy shifted more of the costs of funding schools onto localities in the years between 2002 and 2004.

The Structure of the Original Chapter 70 Education Funding Formula

In recent years there has been increasing public interest in updating the Chapter 70 formula.³ Several problems have emerged: the original formula may have treated some communities inequitably; the data used by the formula have not been updated; and state aid cuts have taken away funding on which communities had relied.

³ Chapter 70 of the general laws contains the formulas that determine how much state education aid each community receives and how much each community must contribute towards its schools from local resources.



² Zahradnik, Robert, *Tax Cuts and Consequences: The States That Cut Taxes the Most During the 1990s Have Suffered Lately*, Center on Budget and Policy Priorities (Washington, DC), January 12, 2005.

Perhaps most significantly, the Chapter 70 formula's definition of adequate funding has not been comprehensively updated in 13 years. Thus it reflects an assessment of the costs of education in a very different system – one without the curriculum frameworks and without the high standards and high stakes mandated by the Education Reform Act of 1993. One objective of reforming the education funding system could be to align the funding formula with the needs of schools that are seeking to help students to meet the state's high standards. This is not, however, the primary objective of the proposals included in this year's budget.

This section will describe the changes in education funding that shaped the allocations of education aid in the FY 2007 budget. These changes fall into three major categories: changes in calculating the costs of education; changes in calculating minimum required local contributions; and changes in allocating state aid for education.

To make sense of the proposed changes it is important to understand the system created by the Education Reform Act. While the formula is quite complex, it seeks to implement a few simple principles, embodied in a three step process:

- 1. The state determines the minimum level of spending that is required to educate all of the students in each district. This amount is called the foundation budget.
- 2. The state sets a minimum required local contribution for each community. These amounts were initially calculated in 1993 by a formula that was intended to reflect a locality's resources. The formula was based on local property values, local incomes, and historic education funding levels. It aimed to require, in general, that each community would contribute the same share of local resources to its schools.
- 3. The state provides each community enough Chapter 70 education aid to fill the gap between its foundation budget and its minimum required local contribution.

In practice, the formula includes many additional complicating factors.⁴ In the discussion of proposed changes that follows, those complicating factors will be described when relevant. In general, however, understanding the basic outlines of the existing system is enough to make sense of the proposed changes. It is also important to note that in recent years significant elements of the original formula were not followed as annual state budgets substituted a requirement that most communities simply increase their prior year local contribution by their "municipal revenue growth factor," which measures the growth in local revenue.

⁴ These factors are explained in more detail in a prior edition of this report – *Public School Funding in Massachusetts: How It Works, Trends Since 1993* – available at: <u>http://www.massbudget.org/Public School Funding FY03.pdf</u>.



Overview of New Funding in the FY 2007 Budget

To examine the cost of Chapter 70 reforms in this year's budget, the first step is to divide new Chapter 70 spending into two categories: the cost of paying for inflation and enrollment increases and the cost of new initiatives, as seen in Figure 1 below. Had the state made no changes to the Chapter 70 formula, it would have to spend an additional \$74 million in FY 2007 (relative to FY 2006) to cover the costs of inflation, as defined by law, enrollment changes, and to make sure that no town's aid would be reduced.⁵ This amount appears as "FY 2007 Baseline" in Figure 1.

Figure 1.

	FY07	FY07	Difference due to	Difference due	Total
FY06	Baseline	Final	baseline costs	to new initiatives	Difference
3,288.6	3,362.5	3,505.2	73.9	142.7	216.6

All figures are in millions of dollars.

The increase of \$143 million above baseline is due to a series of specific alterations to the Chapter 70 formula that was used to create the FY 2007 budget. The table below describes the amount of the increase attributable to each change. The sections that follow describe each of the changes, providing information about the perceived problems each change attempts to resolve and about the types of communities where each change is likely to have the greatest effect.⁶

⁶ Clearly identifying the amount of the Chapter 70 aid increase attributable to each change poses serious technical challenges, because the effects of reforms often overlap and there is no simple way to sort them out. For example, the initiative to move all districts towards receiving at least 17.5 percent of their foundation budget in state aid is implemented as part of the calculations of foundation aid, down-payment aid, and growth aid. Thus to determine the cost of this initiative, it is necessary to calculate what the cost of each of the other components would have been without the change and what the costs are with the change. That difference is the cost of the initiative. For the other reforms, this paper follows the methodology in publicly available Department of Education spreadsheets, calculating changes in the foundation budget first, then changes related to the new target shares, then down payment aid, then growth aid, and minimum aid last.



⁵ As will be explained below, this baseline cost does not actually account for the full costs of inflation because the Chapter 70 formula caps inflation related spending at a level below this year's inflation rate.

Figure 2.

Components of Difference due to New Initiatives	FY07 Cost
Consolidate foundation budget categories	0.8
Change low-income, and ELL components of foundation budget	4.5
Remove cap on inflation adjustment of foundation budget	47.4
Effect of new target local share on foundation aid	21.7
Growth aid	38.5
Down payment aid	11.5
Special minimum aid for high income and high wealth communities	17.4
Other minimum aid (\$50/pupil)	1.0
Difference due to new initiatives	142.7

All figures are in millions of dollars.

The FY 2007 Budget Makes Modest Changes in the Foundation Budget

The FY 2007 budget does not include any significant reevaluation of the adequacy of the foundation budget. It does, however, make a significant technical change in how the foundation budget is calculated. It also makes two very modest changes in the amount of the foundation budget. Most importantly, it allows the foundation budget in FY 2007 to grow at the actual rate of inflation – as defined in Chapter 70 – notwithstanding an arbitrary cap that exists in law.

The foundation budget is built by estimating the actual cost of running a public school and educating students. The original law built the foundation budget amount by first identifying costs in eighteen different categories (such as teachers at various grade levels, books and equipment, special education, professional development, etc.). The FY 2007 budget streamlines this process by using only eleven categories. The eleven categories more closely match how districts actually track and report spending to the Department of Education. While these changes do not significantly change the overall state-wide value of the foundation budget, they do affect the amount of the foundation budget in particular communities. In particular, the changes increase the foundation budget amount for high schools while reducing it for junior high and middle schools. This reduces the overall foundation budget for districts that don't include a high school students. For example, the change would have a significant effect in any area where there are local town elementary schools and a regional high school.⁷

⁷ These changes are explained in greater detail in a the Department of Education publication, *Reconstituting the Foundation Budget*, available at: <u>http://finance1.doe.mass.edu/chapter70/chapter 07p_change_detail.pdf</u>



The FY 2007 budget also makes small increases in two specific elements of the foundation budget. It increases the allocation for the expanded program allotment, which is "the amount allotted within a district's foundation budget for providing expanded educational services for low-income students."⁸ It also modestly increases the funding for the additional costs of teaching English language learners. Together these two changes add \$4.5 million to the total amount of Chapter 70 education funding distributed in FY 2007.

The FY 2007 budget includes one other policy change that affects the foundation budget. Chapter 70 calls for the foundation budget to be updated each year to account for the effects of inflation. It identifies a particular measure of inflation as most accurately reflecting the costs of running a school system. This measure, which is calculated by the U.S. Bureau of Economic Analysis, is called the Implicit Price Deflator for State and Local Government Services. While Chapter 70 directs that the foundation budget should be increased in line with this measure of inflation, it also caps the annual inflation increase at 4.5 percent. In the period that was used to adjust the foundation budget for FY 2007, this inflation measure showed an increase of 5.9 percent. The FY 2007 budget allows the foundation budget to grow by the full rate of inflation. This has the effect of increasing aid by \$47 million.

These changes should make the system somewhat less complicated, as the foundation budget categories will be easier to track. In addition removal of the inflation cap will both provide needed resources and eliminate an arbitrary provision. Finally, the particular items in the foundation budget that were increased are likely to have the largest effect in the schools that have the greatest needs, but that effect will be modest as this type of new aid accounts for just over 3 percent of the new aid being distributed.

The FY 2007 Budget Creates a New "Target Local Share"

What the "target local share" measures

Like the Education Reform Act's local spending requirements, the "target local share" is a measure of how much each community should be expected to contribute towards its public schools and is based on local property values and incomes. It uses a different method, however, to combine property values and incomes and weights both equally in determining local contributions. It is important to note that in recent years the statutory formula has not been used, as annual state budgets have simply required all districts to increase their education spending by the rate that their local revenue increases (a rate referred to as the municipal revenue growth factor).

The formula introduced in the FY 2007 budget, like the original law, requires communities with higher incomes and property values to make larger local contributions. While each community would be responsible for a different share of the education costs of its students, the state average would be 41 percent from the state and 59 percent from local communities.

⁸ Section 2 of Chapter 70 of the general laws.



The new formula would also update property value and income data annually, unlike the existing law. The existing law calculated local capacity in 1993. It then required increases in local spending each year based on the growth in local revenues, without updating the underlying calculation of local property values and incomes.

The effects of all of these changes in local contribution requirements are muted somewhat because the new formula does not actually require communities spending below their "target local share" to increase their spending to that level. Instead, it requires these communities to increase their contribution each year by their municipal revenue growth factor. This is essentially the same requirement they faced previously. Both the new formula and the old operate in this manner partly because the constraints of Proposition 2 ¹/₂ make it very difficult to require significant increases in local spending even for those communities that are failing to meet their target local share.

When would this change lead to more state aid for a community?

Like the existing law, the reform initiatives in the FY 2007 budget require the state to provide "foundation aid" to fill the gap between each community's foundation budget amount and its required local contribution. As a result of this rule, if a community's required local contribution falls (because the contribution is more than the target local share) and such a reduction would leave total spending below the foundation budget level, then the state is required to fill the gap. When that happens, communities would get more state foundation aid as a result of being able to reduce their local contribution.

When would the new target local share lead to less required total funding for a community's schools?

If required education spending in a given community (including both state aid and local contributions) is above the district foundation budget level, then a reduction in local spending requirements may not lead to new state foundation in some circumstances. The new formula allows communities that are above the required local share to reduce spending to the new requirement – but only by 20 percent of that difference each year. As a result, some communities will be able to reduce local spending, but by an amount that would not bring their total spending below the foundation budget level and thus would not trigger new state foundation aid.

The FY 2007 Budget Creates "Down Payment Aid"

The FY 2007 budget makes an additional change to allow more communities that are spending above the target local share to receive new state aid right away. This change helps those communities that, for the reasons described above, are not helped by the new target aid.



The formula calculates this category of state aid by determining what total spending in each community would be if those spending over the target local share were allowed to reduce their spending all the way to the target share (not just 20 percent of the way). It then provides aid equal to 20 percent of the gap between the amount of foundation aid the community would get under the new formula and the amount it received in the prior year.

Figures 3 and 4 provide examples of how these aid calculations would work for two hypothetical communities, one of which would get extra foundation aid as a result of the new target shares and another that would only get down payment aid. Figure 3 shows a community that would receive new foundation aid as a result of the new state and local target shares. The foundation budget for this community is \$34.5 million. The preliminary local contribution for this community is \$23.1 million (in the old law and the new, the preliminary local contribution is determined by increasing the prior year required local contribution by the municipal revenue growth factor). As can be seen in column A, under the old law, this community would have received \$600,000 in new foundation aid in FY 2007, because that would be the increase in state aid needed to keep the district at foundation.

The new formula will allow this community to spend less local money and receive more state aid. Specifically, the FY 2007 budget begins a five year phase in of a plan to allow each community spending over the new target aid amount to reduce local spending to that amount while the state will provide the new aid needed to allow the schools in those districts to continue to be funded at the foundation level. Column C shows the new target state and local shares. By comparing the fiscal capacity of this community to state averages, the formula sets the ultimate responsibility of this local government at \$17.7 million for the cost of its local schools. This is 51 percent of the cost of the foundation budget. The state share is simply defined as the remainder: 49 percent in this case. (This hypothetical district has somewhat less fiscal capacity than the state average, which is why the formula calls for a contribution that is 51 percent of the foundation budget while the state average is 59 percent.) The new formula does not, however, immediately provide the full 49 percent (\$16.8 million) because the statewide cost of doing that is more than the state budget could fund this year.

This year's budget began a process of phasing in the new aid. As column B indicates, the community is allowed to reduce its local contribution by one fifth of the amount by which the preliminary local contribution exceeds that target local share. Since this gap was \$5.4 million the town is allowed to reduce local spending by just under \$1.1 million. The state, in turn, increases its contribution by that amount to keep the community from falling below the foundation budget level (Figure 4 shows, however, that when a community is already spending above the foundation budget level the local reduction may not lead to a commensurate state increase).





How New Target Shares Affect Foundation Aid

Figure 4 shows a community that would not get any new aid in the first year as a result of the phase in of new target contribution and aid shares. This community has significantly greater fiscal capacity than the statewide average, so the formula sets its target local share at 73 percent, above the state average of 59 percent. As column A indicates, this community's local contribution has been more than both the new target amount and more than is required to maintain a funding level of the foundation budget amount. As column B shows, even if the community reduces its local contribution by \$4.1 million, which is the allowable 20 percent of the amount over the target share, total spending in the district will still be over the foundation budget amount. Because no additional aid would be required to keep the district at the foundation budget level, no new aid would be provided. The result of the reduction in local contribution, if the town were to make that reduction when the requirement was reduced, would simply be less money for local schools.

The final budget, however, includes additional provisions to help the communities that face this problem. An additional aid category of "Down Payment Aid" was created to provide aid to communities that will still be spending above the foundation budget level even after they reduce their local contribution by the allowed amount. This aid is calculated by determining how far below foundation a community would be if it reduced its local contribution to the local share amount and then having the state provide 20 percent of that amount in new FY 2007 aid, as a



"down payment" on the aid that the community will eventually get when it is allowed to reduce spending all the way to the target local share amount.

Column C in Figure 4 shows how this works for this community. Eventually the community will be allowed to reduce its contribution from \$71 million to the target local share of \$50.3 million. If it were to do that, the district would be \$10.5 million below the foundation budget level and the state would have to fill that gap. Therefore, in the first year this community will receive 20 percent of that amount (\$2.1 million) in down payment aid. As column D shows, however, even in the fifth year the state will not provide aid equal to the total reduction in required local contribution – it will provide only the amount needed to keep the district at foundation. Thus, if the community chooses to reduce its local funding by the full amount that it will be allowed to, then total education funding in the district will fall to the foundation level.



Figure 4.

The changes related to the new target shares and down payment aid are likely to make the system somewhat less complicated as the manner of combining income and property wealth measures is simpler and the updating of data makes the process somewhat more transparent. The calculation of down payment aid, however, is a new and complex element in the formula. It is also not clear that this set of reforms will have a significant effect on overall education spending, as local contributions will be allowed to drop as state aid increases – and local communities spending far below their target shares will not be forced to eliminate that gap. Finally, there is no clear correlation between the communities that will benefit from these changes and the communities that are facing the greatest challenges in helping all of their students to meet the state's high stakes standards.



The FY 2007 Budget Creates a New Category of "Growth Aid"

What is "growth aid"?

Growth aid is granted to communities where the district foundation budget is increasing. This can occur either because of enrollment growth or because of inflation. Each community receives growth aid to pay for a specific share of any increase in the foundation budget. The amount of growth aid for each town is determined by multiplying the increase in the foundation budget by the target aid share. The total cost attributable to the growth aid distributed in the FY 2007 budget is \$38.5 million.

What is the "target aid share"?

The target aid share is based on the target local share described in the preceding section. The target aid share is simply 100 percent less the target local share. For example, if the target local share for a given community is 65 percent, then the target aid share is 35 percent. Because it is derived from the target local share formula, the target aid share is higher in communities with low incomes and low property values and lower in more affluent communities.

What are the effects of distributing "growth aid" in this manner?

While growth aid does provide new state funding for districts with increasing costs, it does so in a manner that is not fully coordinated with the target local share calculation and therefore could create concerns about inequity among towns. Specifically, a community that is making a local contribution significantly below its target local share could receive a windfall of growth aid if it increases enrollments. In comparison, a community with the same fiscal capacity that had an enrollment that was already at the higher level, and which had already been spending at the target local share, would not get new aid. This other district would be forced to spend more of its local resources even though the two districts have the same number of students and the same capacity as measured by wealth and income. By focusing on whether a district is growing, rather than whether it is already contributing above or below its capacity, this new growth aid could exacerbate inequalities among local communities. Mitigating this danger, however, is the fact that growth aid is distributed using that target aid calculation – so those communities with the least capacity get the largest amounts of growth aid per student.

Growth aid would also be provided to some communities where enrollments are declining. The reason for this is that the total foundation budget amount can increase for two reasons: inflation and rising enrollments. If enrollment is declining in a community, but not quickly enough to offset the effects of inflation, then that community would be eligible for growth aid. Providing growth aid to these communities serves as a type of hold harmless provision that allows communities that would lose foundation aid because of their declining enrollments to receive some state aid in the form of growth aid.



It is important to note, also, that the original Chapter 70 formula did address the issue of increasing enrollments – at least in a significant number of districts. Because local contributions were based on local capacity and the state was required to fill the gap between the required local contribution and the total district foundation budget, when enrollments grew the state was responsible for filling the growing gap between the local contribution and the cost of educating all of the students in a community. This formula did not, however, help many of those communities where spending was already above the foundation requirements and existing aid would be enough to keep them above the per student foundation amount even if they were adding students.

The addition of growth aid introduces yet another element into the education funding formula and therefore will not simplify it. It will increase the state resources available for education in growing districts. This will likely lead both to some increased total spending on education and to some reductions in local spending on education, compared to what would have occurred without this new state aid. Finally, growth aid has some provisions that help distribute aid in a manner that could help close the achievement gap: specifically, those communities with the least fiscal capacity will get the largest amounts of aid per new student. On the other hand, most of the poorest districts are not growing, and for those that are, the old system places most of the responsibility for funding those new costs on the state.

The FY 2007 Budget Creates a New Type of Minimum Aid for Districts with the Highest Incomes and Property Values

The FY 2007 budget begins to phase in a new requirement that, within five years, every district, regardless of need, will receive at least 17.5 percent of its foundation budget amount in state aid. This reform will provide significant amounts of aid to those districts with the highest incomes and property values. This aid is specifically targeted at districts that have the lowest levels of need as measured by the income and wealth measures used in the funding formula. This reform accounts for \$17.4 million of the new aid distributed in the FY 2007 budget.

While these districts do pay a higher share of the costs of operating their schools than do less wealthy districts, required local education spending in these communities is a smaller share of incomes and property values than in other communities. Because the people in these towns have higher incomes and own more valuable properties, they can contribute a smaller share of their resources than less affluent people and still provide a larger total contribution. As Figure 5 shows, in the ten districts that receive the largest per pupil allocations of this aid,⁹ required local spending on education is equivalent to 2.34 percent of the income earned by the residents of these towns. Alternatively, it is the equivalent of 0.46 percent of property values (meaning a property tax of \$4.60 per thousand dollars of property value would raise the required local contribution in these communities). The state averages for required local spending are higher than the requirements in these communities: 2.80 percent of income or, as an alternative, 0.58 percent of property values (which would translate into a tax rate of \$5.80 per thousand dollars of property value for education).

⁹ This calculation excludes districts with fewer than 20 students and regional school districts.







This new type of aid conflicts with the basic principles of the needs based formula and, by adding an extra element, makes the formula more complex. As many of the districts that will receive this aid already spend above the required amount, it is not clear whether this new aid will increase funding for education or just allow higher income communities to reduce their use of local resources for education. Finally, this new form of aid will target resources at the districts with the greatest wealth and property values – which are unlikely to be the communities where the largest numbers of students are in need of extra help to close the achievement gap.

The FY 2007 Budget Provides Minimum Aid of an Additional \$50 Per Student

To protect all of those communities that would not receive any new state aid under the new formula, the budget includes a special provision that simply requires that every district receive at least \$50 per student in new education aid in 2007. The budget distributes just under \$1 million of this "minimum aid." As a result of this provision, there would be aid increases even for communities where enrollments are declining more rapidly than inflation is increasing costs.

This change does not make the system any more rational. It could lead to increased total spending on education or reduced local spending and it benefits communities that the needs-based elements of the formula suggest don't have the greatest needs.

The Road Not Taken: The State Could Raise the Foundation Budget to Ensure that All Schools Have the Resources to Help Their Students Meet the New High Standards

The state could begin a new process of education funding reform by first asking the basic question, "What resources are actually needed to give schools the capacity to help all students to meet the state's high standards and develop the skills they will need to make Massachusetts a leader in the economy of the future?" After determining the answer to that question as accurately as possible, the state could set the foundation budget at that level.



Rather than spending significant resources to provide extra aid to communities with the greatest local capacity, the Commonwealth could focus new state aid on ensuring that each community has the resources that it needs to meet the new foundation budget requirements. This would mean targeting state aid at those communities where the gap between local capacity and the total foundation budget for their schools is greatest.

State Education Aid and Inflation

In understanding trends in state education funding it is important to examine the role of inflation. Because costs increase, if state aid does not increase at the same pace, schools will be forced either to cut back on services to students or to seek additional local money from sources such as the property tax.

This reality was recognized in the Education Reform Act, which called for state aid to increase each year to account for inflation. This annual inflation adjustment was in addition to the substantive increases also called for in that law.

Chapter 70 identifies a specific measure of inflation as the appropriate adjustment factor to reflect changes in the costs faced by public schools. This measure is "the implicit price deflator for state government services as published by the United States department of commerce." The text below is what appears in state law (references to additional increases have been removed because they refer to years that have already passed). The language in this section is essentially a technical way of saying that Chapter 70 aid should increase each year by the rate of inflation, using the particular measure of inflation identified. As discussed earlier, it also places a cap on the required inflation increase.

Section 12. (a) Subject to appropriation ... the amounts appropriated for state school aid in any given year shall be the amount of state aid appropriated in the previous fiscal year, multiplied by an annual adjustment factor equal to the ratio of (i) the implicit price deflator for state government services as published by the United States department of commerce for the first quarter of the prior fiscal year to (ii) the same deflator one year earlier In no case shall the annual adjustment factor exceed one hundred and four percent.¹⁰

Figure 6 shows the amount by which state aid to education has been cut below the levels called for by state law in each of the past five years (including appropriated spending for FY 2007).¹¹ Because the spending requirements in Chapter 70 are "subject to appropriation" it is probably legal for the legislature not to appropriate the amount called for in law. Nonetheless, it is

¹¹ The estimates presented in Figure 6 differ from those presented in an earlier version of this table (Figure 3 in the June 2006 version of this paper). The principal reason for those differences is that the earlier version of the table used values for the implicit price deflator for state and local government purchases that had been continuously updated by the Bureau of Economic Analysis. Figure 6, in contrast, uses implicit price deflator values that were known at the time each fiscal year's budget was being formulated, in order to better reflect policymakers' decisions in appropriating funds for Chapter 70.



¹⁰ M.G.L, Ch. 70, Sec. 12.

valuable to compare the level of Chapter 70 appropriations resulting from this year's budget process to the amounts called for by state law. As Figure 6 indicates, the FY 2007 budget established a funding level that is \$177 million below the amounts called for in Section 12 of Chapter 70 of the general laws.

Figure 6.

Fiscal Year	Amount Appropriated	Amount Called For	Difference (Called For - Appropriated)
2002	3,213	3,213	0
2003	3,259	3,275	16
2004	3,111	3,319	208
2005	3,183	3,413	230
2006	3,289	3,540	252
2007	3,506	3,682	177 (242)

All figures are in millions of dollars; figure in parentheses for FY07 reflects difference if the maximum adjustment factor for Chapter 70 were not capped at 4.0 percent

Another set of comparisons that can help to shed light on the size of the cuts to Chapter 70 since FY 2002 is to compare recent years' spending to FY 2002 spending adjusted for inflation.

Figure 7 provides three sets of numbers. The first set of numbers (after the year) is simply the nominal dollars appropriated for Chapter 70 that year. The second set expresses those appropriations in constant FY 2007 dollars, using the Consumer Price Index for All Urban Consumers (or CPI-U). The third set of numbers adjusts each year's appropriations by the inflation factor that Chapter 70 identifies as the most accurate measure of the changes in the costs of operating public schools; it uses the same inflation index as Figure 6, but with a few differences.¹²

What Figure 7 shows is that \$491 million has been cut from the amount that schools would need to maintain the services provided in 2002, according to the measure of inflation that the state law selected. It should also be noted that there were years prior to 2003 in which increases exceeded the amounts required by law. The law does not, however, identify such increases as a justification for future cuts.

¹² Chapter 70 calls for each year's appropriation to be increased by an inflation factor that is known with some certainty at the time the budget is being drafted (specifically, the change in the implicit price deflator for state and local government services in the first quarter of the current fiscal year over the first quarter of the prior fiscal year). For obvious practical reasons, that time lag is needed when drafting a budget; the data presented in Figure 6 reflect that lag. In adjusting the numbers for prior years, however, Figure 7 uses a combination of actual inflation rates (for FY 2002 through FY 2006) and projected rates (for FY 2007). Chapter 70 also includes a cap of 4.0 percent on any year to year increase due to inflation; Figure 7 does not.



Figure 7.

Fiscal Year	Nominal \$	Constant FY07\$ (CPI)	Constant FY07\$ (IPD)				
2002	3,213	3,696	3,997				
2003	3,259	3,668	3,911				
2004	3,111	3,427	3,603				
2005	3,183	3,404	3,492				
2006	3,289	3,388	3,403				
2007	3,506	3,506	3,506				
Difference							
FY02 to FY07	292	(190)	(491)				

All figures are in millions of dollars.

Education Financing in Massachusetts and the Fifty States for FY 2004

As important as it may be to understand the implications of various proposals to reform the Chapter 70 funding formula for specific municipalities, it is also worth considering how the financing of primary and secondary education in the Commonwealth compares to other states, since that comparison can help to inform decisions not only about the allocation of responsibility for education funding between the Commonwealth and its localities but also about the aggregate level of state and local education spending generally. When that comparison is made, it becomes clear that Massachusetts lags behind other states in two key respects: the contribution that state government – as opposed to local government – makes to financing public primary and secondary education and the share of available economic resources – in the form of personal income – it devotes to such purposes.

More specifically, this paper uses data from the U.S. Census Bureau for fiscal years 1993 through 2004 – the most recent year for which such data are available – to calculate three key measures and, in turn, to make comparisons between Massachusetts and the rest of the country, both for fiscal year 2004 and over time. The three measures are as follows: (1) the share of overall primary and secondary education revenue derived from state sources (as opposed to federal or local ones); (2) spending on primary and secondary education as a share of personal income; and (3) cost-adjusted spending per pupil.¹³ The first measure attempts to quantify the

Data on state personal income is compiled by the U.S. Commerce Department, Bureau of Economic Analysis and can be obtained at http://www.bea.gov/bea/regional/statelocal.htm; these data have been adjusted to reflect state fiscal years.



¹³ Data on public primary and secondary education spending and on student enrollment were taken from U.S. Census Bureau, Governments Division, *Public Education Finances*, downloaded from

http://www.census.gov/govs/www/school04.html, March 2004. Please note that *Public Education Finances* is one of two sources of education finance data available from the Census Bureau. The other source is the Bureau's *State and Local Government Finances* series; the MBPC's forthcoming *Measuring Up – FY 2004* will be based on this second source of data. Statistics generated from these two sources of data will likely differ due to differences in the data collection techniques employed in constructing each source.

extent to which the Commonwealth has assumed responsibility for providing adequate funding across local districts; the second measure gauges the share of total economic resources within the state that is dedicated to primary and secondary education; and the third measure adjusts nominal per pupil spending figures to account for changes in the cost of living and in student enrollment.

To be sure, state spending on public primary and secondary education has risen in Massachusetts since FY 2004, climbing from \$3.42 billion to \$4.04 billion for FY 2007. Consequently, it is possible that Massachusetts' standing relative to other states has improved since FY 2004, but without comprehensive data from states and their localities – such as that provided by the Census Bureau – it would be difficult to assess with any accuracy how much – if at all – the Commonwealth's relative standing has changed. Thus, this paper relies on the most recent data available from the Census Bureau – for FY 2004 – for its analysis.

State and Local Contributions

The Census Bureau's data offer some insight into the way in which responsibility for financing public primary and secondary education was shared in Massachusetts in FY 2004 relative to other states. Of note:

- Local governments provided the largest share of revenue for public elementary and secondary education in Massachusetts for FY 2004 53.6 percent. State government provided 39.8 percent of such revenue, while the federal government supplied just 6.5 percent.
- Consequently, Massachusetts continues to rely more than most states on local governments to generate revenue for public primary and secondary education. Among local governments, those in Massachusetts produced the 7th largest share of total public elementary and secondary education revenue in FY 2004. Local governments across the United States provided 43.9 percent of revenue for public primary and secondary education that year.
- In addition, Massachusetts depends less on federal aid than the vast majority of states the share of total revenue that federal aid comprised in Massachusetts in FY 2004 was 43rd in the country. This is most likely attributable to the manner in which federal education aid is distributed. Funds available under Title I, the "largest federal program supporting elementary and secondary education" are targeted "primarily to high-poverty

Finally, cost-adjusted per pupil spending is derived by using the revised 2004 version of the Berry-Fording-Hanson state cost of living index originally found in Berry, William, D., Richard C. Fording, and Russell L. Hanson, "An Annual Cost of Living Index for the American States, 1960-95," *Journal of Politics,* vol. 60, no. 2, May 2000: 550-67. The revised version of the index is available at http://webapp.icpsr.umich.edu/coccoon/ICPSR-PRA/01275.xml. The index is set so that the cost of living in each state is measured as a percentage of the cost of living in the two median states – Kansas and Indiana – in 2003. Please note that this index is different from the one used in prior editions of this report; consequently, figures regarding cost adjusted per pupil spending on primary and secondary education can not be compared across reports. In addition, this index has been modified, per the authors' April 2006 communication with Berry, to include data for 2004.



districts and schools, where the needs are greatest."¹⁴ According to data from the US Census Bureau's American Community Survey, in 2004, only 8 states had a lower child poverty rate than Massachusetts, where it was 12.5 percent.

Total Spending

Under the Census Bureau's system of classification, total spending on education is made up of current spending and capital spending. Current spending includes all those expenditures necessary for day-to-day operations – pencils, books, teacher salaries, etc. Capital spending is defined as "direct expenditure for construction of buildings … and other improvements" as well as "for purchases of equipment, land, and existing structures…" It does not include building maintenance or repairs – those expenses are categorized as current spending.

- Relative to its capacity to finance public primary and secondary education (as expressed by state personal income), Massachusetts' total spending (from federal, state, and local sources) on primary and secondary education was considerably less than the majority of states. In FY 2004, total spending on public primary and secondary education in Massachusetts amounted to 4.5 percent of personal income, earning the Commonwealth a rank of 38th. Nationally, total spending on public primary and secondary education constituted 5.0 percent of personal income in FY04, roughly 12 percent more than in Massachusetts.
- If one were to exclude the amount of spending enabled by federal education aid to the states from total spending and, thus, to examine state and local spending on public primary and secondary education in isolation Massachusetts' relative standing does improve slightly. That is, in FY 2004, state and local spending on public primary and secondary education in Massachusetts equaled 4.2 percent, putting Massachusetts in 35th place nationally.¹⁵ The comparable amount for the country as a whole was 4.6 percent; thus, if state and local spending in Massachusetts in FY04 had been at the same level as the national mark, the Commonwealth and its municipalities would have dedicated an additional \$1 billion to educating its children that year.

¹⁵ This measure is derived by reducing total state and local spending on public primary and secondary education spending as a share of personal income by the share of total revenue that federal funds comprise in each state. For instance, in FY 2004, 6.5 percent of total public primary and secondary education revenue in Massachusetts came from federal sources, while total public primary and secondary education spending as a share of personal income was 4.5 percent of personal income. Thus, 93.5 percent of 4.5 percent.



¹⁴ National Assessment of Title I Interim Report: Executive Summary. Washington, DC: U.S. Department of Education, Institute of Education Sciences, 2006, p. 1.

When operating and capital costs are combined and adjusted for state cost-of-living differences, total spending per pupil in Massachusetts was \$9,680 in FY 2004, leaving the Commonwealth 17th in the country and modestly above the overall U.S. mark of \$9,474 per pupil.¹⁶

Current Spending

- When measured as a share of income, current spending for public elementary and secondary education in Massachusetts ranked 30th in the nation in FY 2004. A total of 4.1 percent of personal income was devoted to this expenditure category that year.
- On a per pupil basis, when adjusted for cost-of-living differences, current spending in Massachusetts was the 12th highest in the country in FY 2004. The Commonwealth spent \$8,901 per pupil or 9.4 percent more than the comparable national amount.
- Approximately 64 percent of current spending in Massachusetts in FY 2004 was used for instruction. Just five states – led by New York with 69 percent – dedicated a larger share of current spending to teaching that year. Almost all remaining current spending in Massachusetts – roughly one-third – went to support services. By comparison, the fifty states, when taken together, devoted 60.5 percent of current spending to instruction and 34.2 percent to support services.¹⁷
- Cost-adjusted per pupil spending on instruction in Massachusetts totaled \$5,674 in • FY 2004, putting it in 7th place.

Capital Spending

The Census data show that capital spending for primary and secondary education in Massachusetts ranked in the lower tenth of states in FY 2004.¹⁸ All capital projects performed by state and local entities are included in the capital outlay figures.

Massachusetts allocated a cost-adjusted amount of \$471 per pupil to capital outlays in FY • 2004, leaving it 46^{th} out of the 48 states for which cost-adjusted data are available.

understate the Commonwealth's level of capital expenditures relative to other states.



¹⁶ The state cost of living index developed by Berry, Fording, and Hanson and used in this report does not include data for Alaska and Hawaii; consequently, all rankings contained in this paper based on cost-adjusted per pupil spending are out of a possible 48 states. It also does not include a value for the United States in the aggregate; consequently, the values for the United States in Figure 2 – and in subsequent discussions of cost-adjusted spending - are based on a weighted average of the cost of living for each of the 48 states in the index.

¹⁷ Under the Census Bureau's classification scheme, instruction expenditure "includes payments from all funds for salaries, employee benefits, supplies, materials, and contractual services [and] covers regular, special, and vocational programs offered in both the regular school year and summer school." Support services expenditure includes general administrative costs (such as for boards of education and principals' offices); curriculum development; media, library, audiovisual, television, and computer-assisted instructional services; building services (such as heating and electricity, security, and upkeep of grounds); student counseling; dental, nursing, psychological, and speech services; and transportation of students. ¹⁸ Due to differences among the states in their reporting of capital expenditures, the Census Bureau's data may

• Measured as a share of income, Massachusetts was 49th in the country in spending for capital outlays, allocating 0.22 percent of personal income to such outlays in FY04. The national average for capital spending – 0.56 percent of personal income – was more than twice that of Massachusetts.

Education Financing Trends over Time

Just as it is worth considering how the financing of primary and secondary education in the Commonwealth currently compares to other states, it is also helpful to understand how education financing in Massachusetts has changed over time and, in particular, how it has changed as a result of Commonwealth's fiscal crisis from FY 2002 through FY 2004. In brief, over the course of the 1990s – due largely to the enactment of the landmark Education Reform Act in 1993 – Massachusetts substantially increased the amount of state revenue dedicated to primary and secondary education. Yet, that progress has all but come to halt in recent years, as the Commonwealth has adopted nearly \$3 billion in budget cuts, including substantial cuts to education, as a consequence of both the 2001 national recession and the billions of dollars worth of tax cuts put in place in Massachusetts during the prior decade.

As the following examination of the Census Bureau's data from FY 1993 to FY 2004 indicates, the share of total primary and secondary education revenue furnished by the state fell between FY 2002 and FY 2004, while state revenue allocated to primary and secondary education, after adjusting for inflation, declined, both in the aggregate and on a per pupil basis, over the same span. Relative to personal income, state revenue allocated to primary and secondary education dropped as well between FY 2003 and FY 2004. As a result, localities have been forced to boost the already considerable share of primary and secondary education funding that they provide.

State and Local Contributions

• Between FY 2002 and FY 2004, the Commonwealth's share of the total amount of revenue dedicated to public and primary secondary education in Massachusetts declined from 42.1 percent to 39.8 percent, thus reversing some of the progress that had been made in this area over the course of the 1990s. That is, as Figure 8 suggests, the state share of public primary and secondary education revenue in Massachusetts climbed almost continuously from FY 1993 to FY 1999, fluctuated somewhat between FY 1999 and FY 2002, and has dropped since then.¹⁹ Overall, though, between FY 1993 and FY 2004, the share of primary and secondary education revenue flowing from the state's coffers grew from 31.5 percent to 39.8 percent. This nearly one-quarter increase was the eighth largest increase of its kind among the 50 states.

¹⁹ Figure 8 shows a spike in state revenue as a share of total public and primary secondary education revenue – and a trough in local revenue – in FY 1997, when those forms of revenue comprised 44.4 percent and 51.1 percent of total revenue respectively. However, in that year, the Census Bureau's data include a value of \$727.8 million for a subcategory of state revenue listed as "other and nonspecified state aid." This is at least \$400 million above the values listed for the same subcategory in either FY 1996 or FY 1998. If this \$400 million value were reallocated, Figure 8 would show a much smoother progression for both forms of revenue between FY 1996 and FY 1998.



• As noted earlier, in FY 2004, cities and towns in Massachusetts provided 53.6 percent of all revenue for primary and secondary education. As Figure 8 demonstrates, this is the largest share of total revenue that municipalities have produced in Massachusetts since FY 2001, though the local share of primary and secondary education revenue in Massachusetts is still well below its FY 1993 level, when it stood 63.5 percent, a greater percentage than in all but two states – New Hampshire and Michigan.

Figure 8.



State & Local Shares of Total Public Primary & Secondary Education Revenue in Massachusetts, FY 1993 - FY 2004

Total Spending

The growth in the Commonwealth's responsibility for education financing over the course of the 1990s was accompanied by a sizable increase in total spending on primary and secondary education, but, between FY 2002 and FY 2004, spending for those purposes has declined.²⁰

²⁰ Previous MBPC publications have cited a December 2003 study by University of Wisconsin professor Andrew Reschovsky which indicated that that the Commonwealth reduced real state spending per pupil more than any other state in the nation between FY 2002 and FY 2004. The Reschovsky study used the most current data available at the time of its publication, including an unpublished National Conference of State Legislatures (NCSL) survey from the start of FY 2004 and projections of student enrollment for FY 2004, to arrive at its findings. The Census Bureau data employed in this paper were collected via cooperation agreements with state education agencies at the end of FY04. When these more recently available data are used to examine the same issues explored in the Reschovsky study, a different result emerges: real state spending per pupil fell more in Massachusetts than in most states between FY02 and FY04, but not more than any other state.



- In FY 1993, state and local spending on primary and secondary education in Massachusetts totaled 3.4 percent of state personal income; by FY 2004, that figure was 4.2 percent of state personal income. This change amounts to the largest increase of its kind among the fifty states over this time period; as a result, Massachusetts' national ranking improved from 49th to 35th by this measure.
- Here, too, though, there has been somewhat of a drop off since FY 2002. State and local spending on primary and secondary education, as a share of personal income, reached a high of 4.28 percent in FY02, fell to 4.15 percent in FY03, and rebounded slightly in FY04 to 4.19 percent. This modest recovery has occurred despite a decline in the share of economic resources committed by state government to primary and secondary education: between FY03 and FY04, state revenue devoted to such purposes fell from 1.89 percent of personal income to 1.80 percent.
- Since FY 2002, cost-adjusted per pupil spending on primary and secondary education in Massachusetts has fallen as well. Once interstate cost-of-living differences are taken into account, spending per pupil in Massachusetts dropped from \$9,999 to \$9,431 between FY02 and FY03 and, while it climbed to \$9,680 in FY04, remains below that FY02 level.

Figure 9.





• Overall, spending on primary and secondary education, when measured on a costadjusted, per-pupil basis grew between FY 1993 and FY 2004. In FY 1993, total per pupil spending for primary and secondary education was \$6,666; again, that figure was \$9,680 in FY 2004. Consequently, Massachusetts' national ranking for total costadjusted per-pupil spending (among the 48 states for which such data are available) climbed from 33rd to 17th.



Figure 10.

Spending on Public Primary and Secondary Education as a Share of Personal Income, FY 2004

	Total Spending		State and Local Spending		Current Spending		Capital Spending	
	United States	5.0%	United States	4.6%	United States	4.3%	United States	0.56%
1	Alaska	7.6%	Alaska	6.1%	Alaska	6.2%	Alaska	1.17%
2	Vermont	6.2%	Vermont	5.7%	Vermont	5.8%	New Mexico	0.92%
3	New York	6.1%	New Jersey	5.7%	New York	5.4%	Utah	0.77%
4	New Mexico	6.0%	New York	5.6%	West Virginia	5.3%	Nevada	0.77%
5	New Jersey	5.9%	Michigan	5.5%	New Jersey	5.3%	California	0.76%
6	Michigan	5.9%	Maine	5.3%	Maine	5.2%	Wyoming	0.75%
7	Maine	5.8%	Ohio	5.1%	Michigan	5.0%	South Carolina	0.75%
8	West Virginia	5.7%	Indiana	5.1%	New Mexico	5.0%	Texas	0.72%
9	Texas	5.7%	Wyoming	5.1%	Wyoming	4.9%	Georgia	0.69%
10	Wyoming	5.7%	West Virginia	5.1%	Ohio	4.8%	Michigan	0.66%
11	South Carolina	5.5%	Texas	5.1%	Wisconsin	4.7%	Florida	0.64%
12	Ohio	5.5%	South Carolina	5.0%	Montana	4.7%	Ohio	0.61%
13	Indiana	5.5%	Wisconsin	4.9%	Rhode Island	4.6%	Iowa	0.61%
14	Georgia	5.4%	New Mexico	4.9%	South Carolina	4.6%	Washington	0.59%
15	Wisconsin	5.3%	Georgia	4.9%	Georgia	4.6%	Minnesota	0.58%
16	Pennsylvania	5.2%	Pennsylvania	4.7%	Indiana	4.6%	New Jersey	0.56%
17	Arkansas	5.1%	Arkansas	4.7%	Texas	4.6%	Delaware	0.55%
18	Mississippi	5.1%	Minnesota	4.6%	Arkansas	4.5%	New York	0.55%
19	Oregon	5.0%	Oregon	4.6%	Mississippi	4.5%	Illinois	0.54%
20	Montana	5.0%	Iowa	4.5%	Pennsylvania	4.4%	Nebraska	0.54%
21	California	4.9%	Rhode Island	4.5%	Louisiana	4.4%	Colorado	0.53%
22	Utah	4.9%	Illinois	4.5%	North Dakota	4.3%	Arkansas	0.53%
23	Minnesota	4.9%	Utah	4.4%	Kansas	4.3%	Arizona	0.53%
24	North Dakota	4.9%	Kansas	4.4%	Idaho	4.2%	North Dakota	0.53%
25	Iowa	4.9%	California	4.4%	Kentucky	4.2%	Idaho	0.51%
26	Illinois	4.9%	Nebraska	4.4%	Oklahoma	4.2%	Indiana	0.50%
27	Idaho	4.9%	Idaho	4.4%	Iowa	4.2%	Maine	0.49%
28	Nebraska	4.8%	New Hampshire	4.3%	Illinois	4.2%	Pennsylvania	0.48%
29	Kansas	4.8%	Mississippi	4.3%	Nebraska	4.2%	Mississippi	0.47%
30	Rhode Island	4.8%	Connecticut	4.3%	Massachusetts	4.1%	South Dakota	0.46%
31	Kentucky	4.8%	Delaware	4.3%	Hawaii	4.1%	Oregon	0.46%
32	Louisiana	4.8%	Kentucky	4.2%	California	4.1%	Kentucky	0.46%
33	Delaware	4.7%	Montana	4.2%	New Hampshire	4.1%	New Hampshire	0.43%
34	Oklahoma	4.6%	Missouri	4.2%	Minnesota	4.1%	Virginia	0.43%
35	New Hampshire	4.6%	Massachusetts	4.2%	Delaware	4.1%	Missouri	0.43%
36	Missouri	4.6%	North Dakota	4.1%	Utah	4.1%	Vermont	0.40%
37	Connecticut	4.5%	Louisiana	4.1%	Connecticut	4.1%	West Virginia	0.40%
38	Massachusetts	4.5%	Virginia	4.0%	Missouri	4.0%	North Carolina	0.39%
39	Alabama	4.4%	Oklahoma	4.0%	Alabama	4.0%	Connecticut	0.38%
40	Hawaii	4.4%	Nevada	4.0%	Oregon	4.0%	Alabama	0.36%
41	South Dakota	4.4%	Washington	4.0%	South Dakota	3.8%	Kansas	0.35%
42	Washington	4.4%	Colorado	4.0%	Virginia	3.8%	Tennessee	0.34%
43	Virginia	4.3%	Hawaii	3.9%	Maryland	3.8%	Oklahoma	0.34%
44	Nevada	4.3%	Alabama	3.9%	North Carolina	3.7%	Wisconsin	0.32%
45	Arizona	4.3%	North Carolina	3.8%	Washington	3.6%	Louisiana	0.31%
46	North Carolina	4.2%	Maryland	3.8%	Arizona	3.6%	Hawaii	0.30%
47	Colorado	4.2%	Arizona	3.8%	Tennessee	3.5%	Maryland	0.27%
48	Florida	4.1%	Florida	3.7%	Colorado	3.5%	Montana	0.26%
49	Maryland	4.1%	South Dakota	3.7%	Florida	3.4%	Massachusetts	0.22%
50	Tennessee	3.9%	Tennessee	3.5%	Nevada	3.3%	Rhode Island	0.08%



Figure 11.



State and Local Spending on Public Primary and Secondary Education, FY 2004

Share of Personal Income



Figure 12.

Spending Per Pupil on Public Primary and Secondary Education, FY 2004 (in dollars; adjusted for interstate cost-of-living differences)

	Total Spending		Current Spending		Capital Spending	
	United States	9,474	United States	8,129	United States	1,049
1	New York	12,709	New York	11,231	Wyoming	1,473
2	New Jersey	12,349	New Jersey	10,956	Nevada	1,437
3	Delaware	11,720	Delaware	10,220	New Mexico	1,407
4	Wyoming	11,026	Vermont	10,013	Delaware	1,394
5	Vermont	10,848	Wyoming	9,498	Florida	1,375
6	Pennsylvania	10,613	West Virginia	9,401	California	1,326
7	Michigan	10,378	Pennsylvania	9,139	South Carolina	1,268
8	Ohio	10,359	Maryland	9,027	Texas	1,242
9	West Virginia	10,146	Ohio	8,938	Georgia	1,212
10	Connecticut	9,979	Connecticut	8,937	Minnesota	1,167
11	Texas	9,814	Rhode Island	8,916	New Jersey	1,166
12	Maryland	9,791	Massachusetts	8,901	New York	1,154
13	Maine	9.775	Wisconsin	8.823	Michigan	1.152
14	Indiana	9.769	Michigan	8.804	Ohio	1.152
15	Wisconsin	9.765	Maine	8.743	Washington	1.115
16	Minnesota	9,749	Virginia	8,395	lowa	1,087
17	Massachusetts	9,680	Indiana	8,139	Colorado	1,060
18	Virginia	9,577	Minnesota	8,134	Illinois	1,045
19	Georgia	9,439	Georgia	8,110	Nebraska	1,004
20	Illinois	9,428	Illinois	8,105	Pennsylvania	997
21	Oregon	9,403	Montana	8,019	Virginia	958
22	South Carolina	9,371	Texas	7,897	Utah	955
23	Rhode Island	9,224	Louisiana	7,840	North Dakota	930
24	New Mexico	9,110	South Carolina	7,783	Arizona	901
25	Nebraska	8,958	Nebraska	7,770	Indiana	885
26	Florida	8,944	New Hampshire	7,702	Arkansas	878
27	Iowa	8,744	North Dakota	7,592	Oregon	852
28	New Hampshire	8,701	New Mexico	7,588	Connecticut	846
29	California	8,661	lowa	7,534	Maine	835
30	North Dakota	8,625	Kentucky	7,525	New Hampshire	822
31	Louisiana	8,557	Arkansas	7,476	South Dakota	819
32	Montana	8,545	Oregon	7,395	Kentucky	811
33	Kentucky	8,542	Kansas	7,364	Missouri	790
34	Arkansas	8,536	Florida	7,363	Idaho	743
35	Colorado	8,417	Missouri	7,342	North Carolina	741
36	Missouri	8,341	Alabama	7,242	Mississippi	724
37	Kansas	8,258	California	7,176	West Virginia	709
38	Washington	8,230	Oklahoma	7,088	Vermont	702
39	Nevada	8,073	North Carolina	7,075	Tennessee	673
40	Alabama	8,068	Tennessee	7,025	Alabama	666
41	North Carolina	8,060	Colorado	6,991	Maryland	654
42	Tennessee	7,868	Mississippi	6,920	Kansas	597
43	Mississippi	7,796	Washington	6,810	Wisconsin	586
44	South Dakota	7,756	South Dakota	6,771	Oklahoma	563
40 40		7,730	Nevada	0,212		559
40	Arizona	7,316	idano	0,1//	wassachusetts	4/1
4/	Idaho	7,075	Arizona	6,165	Montana	445
48 40	utan	6,102	Utan	5,011	Knode Island	151
49 50	ліазка Намаїі	IN/A	Hawaii	IN/A	Alaska Hawaii	IN/A
~~	iawan	11/7	i i awaii	11/7	nawan	11/74



Figure 13.

Total Spending Per Pupil on Public Primary and Secondary Education, FY 2004

(in dollars; adjusted for interstate cost-of-living differences; excludes Alaska and Hawaii)



Cost-Adjusted Dollars Per Pupil



Figure 14.

Composition of Public Primary and Secondary Education Revenue, FY 2004

State Revenue Local Revenue **Federal Revenue** Share of Share of Share of Total Total Total Revenue Rank Revenue Rank Revenue Rank **United States** 8.9% 47.1% 43.9% Hawaii 86.6% 1 2.4% 50 11.1% 15 Arkansas 75.3% 2 16.1% 48 13.1% 8 Minnesota 71.4% 3 22.6% 47 6.0% 47 2 New Mexico 69.7% 4 13.1% 49 17.2% 5 46 33 Vermont 68.0% 23.9% 8.0% Delaware 64.0% 6 27.9% 44 8.1% 31 Michigan 62.0% 7 30.0% 41 7.9% 34 61.8% 8 29.7% 42 8.5% 28 Washington Nevada 60.4% 9 32.4% 37 7.2% 39 West Virginia 60.0% 10 28.7% 43 11.3% 14 38 19 Idaho 58.2% 11 31.6% 10.2% North Carolina 57.9% 12 32.5% 36 9.7% 23 Kentuckv 57.8% 13 30.4% 39 11.8% 10 Alabama 55.5% 14 32.8% 35 11.7% 12 Utah 55.3% 15 34.7% 33 10.0% 21 Alaska 54.9% 16 25.7% 45 19.4% 1 6 Mississippi 54.9% 17 30.3% 40 14.9% California 54.8% 18 34.3% 34 11.4% 13 Oregon 52.7% 19 38.2% 30 9.1% 24 Wisconsin 52.2% 20 41.7% 26 6.1% 46 Wyoming 52.1% 21 38.0% 31 9.9% 22 40.8% 27 Kansas 51.4% 22 7.8% 36 Oklahoma 51.1% 23 36.1% 32 12.8% 9 Indiana 49.6% 24 44.0% 23 6.4% 44 Louisiana 48.0% 25 38.2% 29 13.8% 7 30 46.2% 26 45.5% 22 8.3% lowa 27 43.6% 10.4% 18 South Carolina 46.0% 24 28 New Hampshire 45.8% 48.6% 16 5.6% 48 29 43.3% Arizona 44.9% 25 11.8% 11 Georgia 44.8% 30 46.7% 18 8.5% 29 Montana 44.4% 31 40.4% 28 15.2% 5 44.4% 32 45.6% 21 20 Florida 10.1% 44.2% 33 47.9% 17 7.9% 35 Missouri Ohio 43.9% 34 49.2% 14 6.9% 41 Colorado 43.7% 35 49.6% 13 6.7% 42 New York 43.6% 36 48.9% 15 7.5% 37 37 Tennessee 43.4% 45.6% 20 11.0% 16 38 50 New Jersev 42.4% 53.3% 8 4.3% 40.7% 39 8.9% 26 Maine 50.4% 11 Rhode Island 40.5% 40 52.3% 10 7.2% 38 Massachusetts 39.8% 41 53.6% 6.5% 43 7 38.7% 42 6 7.0% 40 Virginia 54.3% North Dakota 38.1% 43 46.7% 19 15.2% 4 Maryland 44 55.9% 5 6.4% 45 37.7% Texas 36.8% 45 52.7% 9 10.5% 17 3 Pennsylvania 35.9% 46 56.1% 8.0% 32 27 Illinois 35.5% 47 56.0% 4 8.6% 49 Connecticut 35.3% 48 5.0% 59.7% 1 South Dakota 34.2% 49 50.3% 12 15.6% 3 25 Nebraska 32.8% 50 58.2% 2 9.0%

states listed by order of state revenue as a share of total revenue



Figure 15.



Composition of Public Primary and Secondary Education Revenue, FY 2004 States ranked by state revenue as share of total revenue

