MASSACHUSETTS BUDGET AND POLICY CENTER

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EDUCATION IN MASSACHUSETTS

Governor Patrick's Education Proposals and the Current State of Massachusetts Primary and Secondary Education Funding

EXECUTIVE SUMMARY

In June, Governor Patrick announced an ambitious education agenda designed to transform the state's K to 12 education system into one that ranges from Pre-K to community college. The Governor has since appointed leaders from across the state to a task force called the "Readiness Project," that is charged with further developing the ideas in the Governor's plan. The Governor's proposals include:

- Universal early education and care
- Free community college education
- Longer school day
- Longer school year
- Universal full-day kindergarten

While there remain numerous unanswered questions about the Governor's proposal, we can begin to estimate the potential costs of these initiatives. This paper provides two cost estimates, a low end and high end, for each proposal. Each estimate is based on total incremental new cost for the state. The difference between our low and high estimates is driven in large part by whether or not the state chooses to focus its resources on its most needy students and their families.

We estimate the total costs of the governor's proposals at between $967.8 million and $2.303 billion per year. The actual cost to the state will be determined by decisions made by the Governor and the Legislature, based on recommendations from the Readiness Project. Our cost estimates are as follows:

- Universal early education and care-- $458.2 million to $693.5 million
- Free community college education-- $125.2 million to $543.2 million
- Longer school day-- $301.8 million to $616.6 million
- Longer school year-- $37.6 million to $446.5 million
- Universal full-day kindergarten-- $45 million to $127.3 million

When the Readiness Project was announced, it included the above items and an analysis of how to fund the education system adequately, equitably, and reliably. Fifteen years ago, the state established a funding system for public schools built on the Foundation Budget, which attempted

[1] This version is updated from initial release.

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to measure how much each district would have to spend to provide students with a quality education. While the Foundation Budget has been increased to account for inflation, it has never been updated to reflect the higher standards that children must now meet in order to graduate. Nor has it been updated to fund the implementation of strategies that research has demonstrated can improve educational outcomes, such as reducing class sizes.

Addressing these questions, with a comprehensive study of what it would cost to provide the quality of K-12 education students need to meet the new standards, should be part of any effort to design an education funding system for the future. States that have undertaken such studies have included broad input from education policy experts, principals and teachers, parents, and civic leaders. However, such a study is beyond the scope of this paper.

The costs of some or all of the Readiness Project proposals and updating the Foundation Budget would be significant. The people of Massachusetts will be confronted with important choices about how much of our resources we want to spend to educate our children and prepare them for the economy of the future.

In order to make these important resource allocation decisions, it is helpful to view Massachusetts' financial commitment to public education in a national context. State and local spending on primary and secondary education in Massachusetts amounted to 4.37 percent of total personal income (a measure of the total resources available) in FY 2005, which is the most recent data available. The national average was 4.65 percent and 28 states spent a larger share of their resources on primary and secondary education. If Massachusetts had just been at the national average for spending, an additional $800 million dollars would have flowed to primary and secondary education.

Massachusetts also lags behind the rest of the nation in higher education spending as a percentage of total personal income. In FY 2005, the national average was 0.6 percent, while Massachusetts spent just 0.4 percent of total personal income on public higher education. Just three states spent a smaller share of their resources on public higher education. If Massachusetts spending amounted to the national average, the state's public higher education system would have had an additional $550 million.[2]

In sum, if Massachusetts merely spent at the national average, our schools, colleges and universities would have received an additional $1.35 billion in FY 2005. These are sobering numbers and serve as a backdrop for examining the Governor's proposals to transform education in Massachusetts.

[2] Data for higher education spending comes from U.S. Census Bureau's 2007 Statistical Abstract, available at http://www.census.gov/compendia/statab/education/higher_education_finances_fees_and_staff/. This does not include state financial aid to students attending private institutions.

ESTIMATING THE COST OF GOVERNOR'S EDUCATION PROPOSALS

Speaking at the June graduation ceremony for the University of Massachusetts Boston, Governor Patrick announced a broad series of proposals for the state's public education system. In addition, the Governor announced the creation of the Readiness Project, a "review of the future of public education in the Commonwealth." It is expected that the members of the Readiness Project will be charged with developing further detail around the Governor's sweeping proposals. Following are the major components of Governor Patrick's education proposal.

- Universal pre-kindergarten education;
- Two years of free education at the state's community colleges;
- A longer school day and school year for K-12 schools; and,
- Universal full-day kindergarten.

The Governor's proposal includes additional policy recommendations such as "improved teacher certification" and "strengthen the high school curriculum," but these proposals may or may not involve significant new costs. Importantly, the Governor's proposals did not include a re-assessment of whether the current formula for determining the cost of an "adequate" education, the Foundation Budget formula, is still sufficient fifteen years after it was first implemented.

The Governor's proposals focus on what might be called add-ons to the school day. A more fundamental question persists, which is what is the cost of providing a quality education to all Massachusetts students. More specifically, what needs to happen during the typical school day so that all of our students succeed? As noted above, this system was designed well before the current standards and high stakes testing. This could, however, become a component of the Readiness Project's analysis.

Universal Pre-Kindergarten

Child development research has made clear the importance of early childhood education. The strong positive effects of early education are not limited to child development either. Not only do children who participate in high quality early education achieve at higher levels than their non-participating peers, but they are also are less likely to be dependent on welfare and have lower crime rates. These children also tend to have more positive health outcomes and higher earnings.[3]

[3] Reynolds, Arthur, Judy Temple, Dylan Robertson and Emily Mann. *Long-term Effects of an Early Childhood Intervention on Educational Achievement and Juvenile Arrest: A 15-Year Follow-up of Low-Income Children in Public Schools*. Journal of the American Medical Association. May 2001. Vol. 285, No. 18.
Reynolds, Arthur, PhD; Judy A. Temple, PhD; Suh-Ruu Ou, PhD; Dylan L. Robertson, PhD; Joshua P. Mersky, PhD; James W. Topitzes, PhD; Michael D. Niles, PhD. *Effects of a School-Based, Early Childhood Intervention on Adult Health and Well-being: A 19-Year Follow-up of Low-Income Families.* Archives of the Pediatrics and Adolescent Medicine 2007;161:730-739. Available at: http://archpedi.ama-assn.org/cgi/content/full/161/8/730

For the purpose of this report, we assume that universal means a program which is universally accessible, affordable and voluntary. Under such an assumption, the state would make early education services available to all families who want such services for their children. This does not imply that the state would pay the entire cost of the program, but that the program would be structured in such a way as to make the services affordable to all families. It is assumed that to do so the state would implement some form of a sliding scale subsidy similar to the current system used by the Department of Early Education and Care. This is different from the universality of K-12 education, which is compulsory and funded entirely by government revenues.

Key Questions

- Will the state pay the entire cost of a pre-kindergarten education for all families that want to enroll their children?
- If not, what type of sliding scale or fee structure will be used to determine the state's share versus the share paid by parents?
- Will the universal pre-kindergarten program be year-round or follow the school-year calendar?
- Will the state make quality improvement a centerpiece of this program?

Prior Estimates

In 2005, the Early Education for All Campaign commissioned Northeastern University's Center for Labor Market Studies to develop a comprehensive cost estimate for the implementation of universal early education and care in Massachusetts. This study found that, "To fulfill the Commonwealth's commitment to universal *access* to *high-quality* early education, it will cost [an additional] $600 million or just over $3,000 per child in 2006 dollars." This estimate was developed through a detailed analysis of the current provider system, the workforce development needs of the system, and the demand for services. This figure is based on an estimated $303 million in labor costs and quality enhancement costs[4] needed to provide "high quality early education" to those who choose to participate. An additional dollar for dollar match is included to "ensure that the… program is affordable to all families."

We have used, in our estimate, this $303 million figure as an accurate representation of the amount necessary to improve the quality of early education. In the calculations below we develop a new estimate of the costs of creating universal access to such services.

Cost Estimate

For purposes of estimating the cost of providing voluntary and universally accessible early education services in Massachusetts, we adopt an approach of estimating the total cost of such services, based on per day rates and assumptions about enrollment, and then estimate the portion of that total cost that would be covered by the state. We assume that parents will be required to pay a portion of the costs for their child depending on family income level. This estimation

[4] Quality enhancement costs represent 10% of this total and consist of items such as curriculum development and implementation, materials and equipment, data maintenance, etc.

approach, because it uses per day rates per child, is roughly similar to, though not as complex as, the foundation budget system used to calculate required spending for K-12 education in Massachusetts. Following are the key assumptions made in our estimate.

- The state's universal early education and care program will be available to three, four and non-K eligible five year olds
- The percent of three to five year olds participating in the program will be between 80 percent and 90 percent. Approximately 70 percent of Massachusetts three to five year olds are already in structured programs, so it is reasonable to expect a fairly high take-up rate if the Massachusetts program includes all children age three through five.
- The school year for the universal early education and care program will be either the 185 days of the current K-12 school year or 240 days to reflect a full-year program
- For this analysis we utilize weighted measures of the 75th percentile of cost for full-time center-based care. This methodology is used to avoid estimating costs separately for each region, and takes the average of the 75th percentile costs, weighted by the population of three to five year olds in each region. This yields a rate of $47 per child per day.[5] It should be noted that the state's current payment rates are well below the median cost, as reported in the most recent market survey. We use the 75th percentile as our cost basis because it follows the federal government's suggestions for access as specified in Child Care and Development Fund's final rule.[6]
- Parents will be expected to contribute to the cost of their children's early education using a sliding scale mechanism based on family income. In order to estimate the costs to parents, we utilize the sliding scale currently in use by the Department of Early Care and Education, with some modification. Our estimate assumes that the state would pay a portion of the costs for those up to 125% of state median income. In addition, we use average daily co-pay for families within each income band (less than 50% of SMI; 50-85% of SMI; 85-125% of SMI). It is important to note that families pay a fixed co-payment as determined by their income, as opposed to a set percentage of the service cost.
- In FY 2007, Massachusetts spent $261.5 million on early education for three to five year olds. This sum includes both direct financial assistance and quality grant programs for preschool programs and universal pre-kindergarten. An additional $97 million was spent for Head Start. Combining these two categories, governments in Massachusetts spent $358.5 million for the education of three to five year olds. .[7]

[5] Data for median and 75th percentile is taken from 2006 Massachusetts Department of Early Education and Care's *Market Rate Survey*, which is higher than the current EEC rate of $34.75 per day. This figure was chosen because it comports with the federal Child Care and Development Fund's regulations.

[6] 75th percentile recommendation is part of CCDF's final rule, downloaded from http://www.acf.hhs.gov/programs/ccb/law/finalrul/fr072498.pdf

[7] Current state spending data is for FY 2007 and comes from Massachusetts Department of Early Education and Care email correspondence.

	Low	High
3 - 5 year olds in Massachusetts (estimate)	184,431	
Take-Up Rate	80%	90%
School Year (days)	185	240
Daily Rate per Child	$47	$47
Access Cost of Universal Early Education and Care	$1,283	$1,872
Quality Cost of Universal Early Education and Care	$303	$303
Total Cost of Universal Early Education and Care	$1,586	$2,175
Parent Share of Total Cost	$769.3	$1,123
Remaining Costs (state share)	$816.7	$1,052
Current Government Spending for 3-5 Year Old Services	$358.5	$358.5
Net New State Costs for Universal Program	**$458.2**	**$693.5**

Note: Dollar amounts in millions

With a participation rate of between 80 and 90 percent, we estimate that between 126,000 and 142,000 three to five year olds would participate in the universal early education and care program. The school year for the universal program will be between 185 and 240 days and the program will cost $47 per child per day of programming. Under these circumstances, the total cost of a universal pre-kindergarten program will be between $1.586 billion, for an 80% take up rate and 185 school days, and $2.175 billion, for a 90% take up rate and 240 school days. Assuming parents will be responsible for a share of costs, depending on income, the state's share of the universal program would be between $816.7 million and $1.052 billion. With the state and federal governments currently spending $358.5 million on early education and care for three to five year olds, the net new state cost for early education services would be between $458.2 million and $693.5 million per year.

If the universal program is implemented with a sliding scale fee structure similar to that of the Community Partnerships for Children program, we estimate that parents' contribution to the universal program will be between $769.3 million and $1.123 billion per year. The amount contributed by parents would only increase if the participation rate increases significantly. With more children participating, the amount paid by parents would rise. If a sliding scale fee structure is used to reduce state costs for a universal early education program, then the state's resources are being used to support families in the bottom half of the income distribution. Alternatively, if the state were to take-on the entire cost of a universal early education and care program, the net new cost to the state, less the $358.5 million the state and federal governments already spend, would be between $1.228 billion and $1.817 billion per year.

These estimates assume that early education and care services could be provided for around $47 per day, per child. Such an assumption may, in fact, underestimate the actual cost for providing these services. As noted above, the state's current reimbursement payments are actually lower than the median cost, as represented in the market survey.

In addition, we assume that $303 million would be adequate to improve the quality of early education. These quality enhancements would include teachers with four year degrees and specialization in early education, high quality professional development and curriculum

development. It would also provide resources for child assessments, transitions to kindergarten and technical assistance.

Free Community College Education

One of the Governor's most discussed proposals is to provide a free community college education to high school graduates. One objective of this effort would be to shift the state's educational system from kindergarten to 12th grade to pre-kindergarten to 14th grade. The universal community college program would, like early education, be universally accessible. Obviously not all high school graduates would take advantage of this program because some would immediately enroll in public or private four-year colleges and universities.

Key Questions

- Would all tuition and mandatory fees be free or only tuition?
- Would the state cover costs after students obtain all other available forms of financial aid such as Pell Grants or would the state cover all tuition and fees without regard for other forms of financial aid?
- Would such a proposal dramatically increase demand for slots in community colleges, requiring investment in expanded capacity?
- Would the state provide assistance with non-curricular costs (child care, transportation, books, etc.) for low-income students?
- Will the program be structured in such a way as to take advantage of Federal tax credits for education costs (the Hope and Lifetime Learning credits)?

Prior Estimates

The Board of Higher Education has calculated the cost of providing free tuition and fees for Pell Grant eligible students at $16 million. The Board also estimates that it would cost an additional $14 million, for a total of $30 million, to include all direct costs, including tuition, fees, books and supplies for Pell eligible students. Pell Grant eligibility ends at approximately $40,000 of family income, depending on the size of the family. While implementing this type of plan would not make community college free for everyone, it would dramatically increase access for those facing the greatest barriers and would so at a relatively modest cost.

The Board's estimate is the incremental new cost, assuming current financial aid and grants remain constant. This also assumes no changes in enrollment. However, if this program is successful in expanding access, we can expect costs to rise over time.

Cost Estimate

For estimating the total cost of providing a free community college education, we examine the total operating expenses of the state's community colleges and divide that amount by the full-time equivalent (FTE) number of students to get the total cost of education per FTE. There are two possibilities for how the state could approach providing a free community college education.

First, the state might simply pay the full cost of education for everyone attending community colleges. In this case, the total cost to the state would be the total full-time equivalent enrollment multiplied by the total cost of education per FTE. Alternatively, the state might provide funding of "last resort," paying the remaining cost of education for all students after other forms of financial aid, such as Federal Pell grants, have been exhausted, such as the case with the Board of Higher Education's proposal. We estimate the cost of this proposal under both scenarios.

The critical variable for determining the net new state cost for a free community college education is by what percentage the number of FTEs will increase as a result of the program. This will be influenced by whether or not the program is restricted to recent high school graduates or is open to any resident of the state. Following are the key assumptions in our estimate.

- Total operating expenses per FTE is a better measure of the cost of education at the state's community colleges than tuition and fees.
- The state may or may not structure the program to take advantage of non-state financial aid.
- If the program does leverage non-state financial aid, such as Pell grants, then we assume that non-state financial aid, discounts and allowances, and Federal grants and contracts will increase in proportion to the increase in enrollment.
- The program will provide a free community college education to high school graduates regardless of income.
- The largest increase in enrollment that is likely to occur (given the limited number of new high school graduates each year) is 40 percent, which would boost Massachusetts community college enrollments by about 20,500 FTE students.[8]

	Low	**High**
Full-time Equivalent Enrollment (04-05)	50,813	
Operating Expenditures per FTE	$10,665/student	
FTE Increase as a Result of Free Comm. College Program	0%	40%
Total Cost for Community Colleges	$541.9	$758.6
Total Financial Aid, Discounts, and Federal Grants	$201.3	
Current State Appropriations for Comm. Colleges (FY05)	$192.8	
State Scholarship Assistance to Comm. College students	$22.6	
Net New State Costs for Free Community College	**$125.2**	**$543.2**

Note: Dollar amounts in millions unless otherwise noted.

Providing a universally accessible and free community college education to high school graduates would cost the state between $125 million and $543 million beyond what is already spent on community colleges. The lower estimate would be realized if the program does not result in any increase in community college enrollment and the state designs the program to take advantage of existing non-state financial aid; the higher estimate assumes the FTE enrollment of the state's community colleges would increase by 40 percent and the state would cover the total

[8] A 40% increase represents half of the graduating classes of 2004-06 who did not plan to attend post-secondary institutions. Data is from MA Department of Education *Plans of High School Graduates Report* and can be found at http://profiles.doe.mass.edu/plansofhsgrads.aspx.

cost of education for all students. It is worth noting that Massachusetts' appropriations for, and scholarships to, the community colleges already account for about 40 percent of the total cost of education.

Alternatively, the state could chose to structure the program in a way that makes access universal, though not free for everyone. Such a program, like the one described at the beginning of this section, could make community college free for lower income students who are able to take advantage of Pell Grants. It would leave some costs for higher income students, but it is important to recognize that in many cases these students are eligible for federal tax benefits (the HOPE and Lifetime Learning credits) that could significantly reduce the costs they would face if they were charged modest tuitions and fees. [9]

Our estimate does not include any costs that would be associated with increasing campus capacities to accommodate more students. A 40 percent increase in FTE enrollment would amount to another 20,500 full-time equivalent students on the state's community college campuses and existing facilities may be insufficient for such an expansion. However, because this estimate is based on the colleges' total operating expenditures, we believe it is an accurate assessment of how much it would cost for services and personnel to serve an expanded population of students (e.g. campuses would have more resources to hire additional faculty or staff as needed to accommodate more students).

Longer School Day and Year

As the accountability and standards movement has taken root in Massachusetts public education over the last decade, there has been a push for students to spend more time on subjects included in the high stakes testing regime. This has led to the replacement of non-tested subjects such as art and music. Increasingly, however, there have been calls for longer school days or longer school years in order to add time to the educational calendar. There are at least two motivations for this call for more time in school: 1) the desire for more time to work on core subjects in order to improve outcomes in these areas; and, 2) the desire to bring back to the curriculum subjects such as art and music that have been marginalized in the presence of high-stakes testing. While the research is still relatively limited, there is evidence that providing greater learning time improves student outcomes.[10]
The Readiness Project's agenda for Massachusetts education includes proposals to lengthen both the school day and the school year. State law presently provides the following requirements for school year length and learning time.

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[9] The HOPE credit is available to most students and their families (if a dependent child) who are in their first two years of post-secondary education and are enrolled at least half-time and in a degree program. The amount of the credit is as follows: 100% of the first $1,100 of qualified expenses; 50% of the next $1,100 of qualified expenses. The amount of the credit is phased out between $45,000 and $55,000 of modified adjusted gross income (or, $90,000 and $110,000 if filing jointly). The Lifetime Learning Credit provides up to a $2,000 credit for educational expenses at an eligible institution. There is no requirement that such expenses be part of a degree program, nor is there an enrollment requirement. The credit is unavailable to those with an MAGI of $55,000 or more ($110,000 if married filing jointly). A student, or family, may not claim both credits for the same qualified expenses. Neither credit is refundable.

[10] See, for example, *Time for a Change: The Promise of Extended-Time Schools for Promoting Student Achievement*, available at http://www.mass2020.org/full_report.pdf.

- Districts must schedule a school year of at least 185 days and school must be in session for at least 180 days.
- Elementary school students must receive at least 900 hours of structured learning time per year which does not include breakfast, lunch, recess, or passing between classes. This amounts to 5 hours per day in a 180 day school year.
- Secondary school students must receive at least 990 hours of structured learning time per year which does not include breakfast, lunch, recess, homeroom, or passing between classes. This is 5.5 hours per day in a 180 day school year.

It is unclear whether the Governor will propose amending the General Laws to change state requirements for length of year and day or implement an optional program that districts and schools may opt into. Our estimates here assume that districts or schools will have a choice about whether to opt into these programs.

Key Questions

- Will length of day and length of year requirements in the law be amended or will the program be optional for districts and schools?
- How will additional funding be distributed to districts (e.g. through a modification of the foundation formula or as grants)?
- Will the state pay the entire cost of the longer day and year or will the cost be split between the state and localities as is the case with the foundation budget?

Longer School Day Cost Estimate

The state currently has an extended learning time grant program that has provided grants to districts and schools to plan for and implement a lengthened school day. The grant provides $1,300 per pupil in schools implementing a lengthened school day and the grant requires a minimum 30 percent increase in structured learning time. This would mean that an elementary school with an extended day would provide at least 6.5 hours of structured learning time and a secondary school would provide slightly more than 7 hours of structured learning time. Following are the assumptions used in estimating the cost of an extended school day.

- The $1,300 per pupil per year provided in the state's current extended time learning grant program is sufficient funding to increase learning time by 30 percent.
- Not every district or school will choose to participate in this program.
- The state will pay the entire cost of the longer school day program.

	Low	**High**
Cost of Extended Learning Time per Pupil	$1,300	
Total Massachusetts Public School Enrollment	968,661	
Percent of Schools/Districts Opting into Program	25%	50%
Total Cost of Longer School Day Program	$314.8	$629.6
Current State Spending on Extended Learning Time	$13.0	
Net New State Costs for a Longer School Day	**$301.8**	**$616.6**

Note: Dollar amounts in millions unless otherwise noted.

Implementing a longer school day in Massachusetts public schools would cost between $302 million and $617 million per year if between 25 percent and 50 percent of the state's students are in schools or districts that opt into the program. Because of existing after school programs and activities, it is unclear how many schools and districts are interested in implementing a longer school day. If the state were to mandate a longer school day for every child in every school, the additional costs of a longer school day would exceed $1 billion per year.

Longer School Year Cost Estimate

Extending the school year would likely be administratively more complex than lengthening the school day. Parents, teachers, and students have become accustomed to and build schedules around the assumption of a two-month break in July and August. Changing that would have implications for union negotiations, vacations and the tourism industry, summer camps, and more. In addition, many school facilities are not well-suited to being open and in operation during the hottest months of the year because they lack air conditioning and are not easily ventilated.

We rely on the state's foundation budget to construct a cost estimate for a longer school year. Dividing the total foundation budget by the days in the school year provides an estimate of the total cost of public education in Massachusetts per day. We use two different estimates of this cost, one dividing the entire foundation budget by the number of school days and the other dividing the seasonal part of the foundation budget by the number of school days. This latter method excludes from our calculation the cost of administration, professional development, instructional equipment and technology, operations and maintenance, and employee benefits because these can reasonably be considered year-round costs that would not change with a longer school year. Following are the assumptions used in estimating the cost of a longer school year.

- The foundation budget, either with or without year-round costs, divided by the number of school days is a relatively good measure of the cost of public education in Massachusetts per day.
- Not all schools and districts will opt into a longer school year.
- The state may or may not pay the entire additional cost associated with a longer school year. If it simply increases the size of the foundation budget, one could assume that cities and towns will pay a portion of the costs.

	Low	**High**
Foundation Budget per Day	$30.0	$44.7
Days Added to the School Year	10	20
Percent of Districts Opting into Program	25%	50%
Total Cost of a Longer School Year	$75.1	$446.5
Percent of Costs Paid by the State	50%	100%
Net New State Costs for a Longer School Year	**$37.6**	**$446.5**

Note: Dollar amounts in millions unless otherwise noted.

Because there are numerous variables that can be adjusted, the cost of implementing a longer school year in Massachusetts ranges from $38 million – if year-round costs are excluded, only 10 days are added to the school year, only 25 percent of districts opt-in, and the state only pays 50 percent of the costs – to $447 million – if all costs are included, 20 days are added to the school year, 50 percent of districts opt into the program, and the state pays 100 percent of the costs. The likely result will be somewhere between these two estimates. In a scenario not presented above, but perhaps more likely than the two extremes, if the state paid 100 percent of the costs of a longer school year and 25 percent of districts added 20 days to their school year, it would cost the state an additional $150 million per year.

Universal Full-Day Kindergarten

Finally, Governor Patrick has proposed universal full-day kindergarten. In October 2006, 27,695 Massachusetts children were enrolled in half-day kindergarten and an additional 827 English Language Learners were enrolled in half-day kindergarten, while 34,690 students were enrolled in full-day kindergarten. In addition, the U.S. Census Bureau reported that 11,890 children were in private kindergartens in Massachusetts in 2005. As with universal early education and care, we assume that the Governor's proposal means universally available full-day kindergarten. The Governor's proposal, in addition to necessitating additional funds, would require increased staffing and facility capacity.

Key Questions

- Would the program exist only through public school districts or would the state provide support for families obtaining full-day kindergarten services from a private provider?
- Would the state pay the entire cost of full-day kindergarten or would the costs be a component of districts' foundation budget and thus be shared by the state and localities?
- How much would demand for public services increase if universal availability is promised?
- What would be the impact of the proposal on private providers?

Cost Estimate

Because the state's Foundation Budget, used for calculating total required spending in each district, has a required amount for each full-day kindergarten pupil, it is relatively simple to estimate the cost of converting the remaining part-day kindergarten classrooms to full-day. It is less clear how many children currently enrolled in private kindergartens would switch with universal full-day kindergarten in every public district. Following are the assumptions built into our estimate.

- All children currently enrolled in public, part-day kindergarten classrooms would be switched to full-day kindergarten.
- The state may or may not pay the entire cost of the new full-day classrooms.
- Some portion of children enrolled in private kindergartens may switch to public with the universal availability of full-day programs.

	Low	High
Foundation Budget per Half-Day Kindergarten Pupil	$3,131/pupil	
Enrollment in Public Half-Day Kindergarten	27,695	
Foundation Budget per Half-Day ELL Kindergarten Pupil	$4,002/pupil	
ELL Enrollment in Public Half-Day Kindergarten	827	
Foundation Budget per Full-Day Kindergarten Pupil	$6,262/pupil	
Enrollment in Private Kindergarten	11,890	
Percent of Private Children Switching to Public	0%	50%
Total Cost of Universal Full-Day Kindergarten	$90	$127.3
Percent of Costs Paid by the State	50%	100%
Net New State Costs for Universal Full-Day K	**$45**	**$127.3**

Note: Dollar amounts in millions unless otherwise noted.

The cost to the state of universal full-day kindergarten ranges between $45 million and $127.3 million. The most significant variable in determining total state costs will be whether or not the cost of full-day kindergarten is split between the state and localities or is covered entirely by the state. Currently, primary and secondary education in Massachusetts is funded through a combination of local revenues and state aid. The state usually pays only about 40 percent of the total costs for public primary and secondary education. If universal full-day kindergarten is implemented under the current funding scheme, one could expect that at least half of all costs would have to be paid by cities and towns.

Summary

Governor Patrick's education proposals that are being considered by the Readiness Project would transform education in Massachusetts. An education from age three through the 14th grade would be available to any Massachusetts resident who wanted it and students would spend significantly more time in school. However, the proposals are not without cost. If all the Governor's proposals were implemented using all the lowest cost options, we estimate the programs should collectively cost $967.8 million per year. On the other hand, if the programs are implemented at the highest possible cost they could require $2.303 billion per year in new state spending. The wide range results from many choices that have not yet been made.

Proposal	Low-End	High-End
Universal Early Education and Care	$458.2	$693.5
Free Community College	$125.2	$543.2
Longer School Day	$301.8	$616.6
Longer School Year	$37.6	$446.5
Universal Full-Day Kindergarten	$45	$127.3
Total	**$967.8**	**$2,302.9**

Note: Dollar amounts in millions.

EDUCATION FINANCING IN MASSACHUSTTES AND THE FIFTY STATES, FY 2005

While it is important to understand the potential costs of the Governor's proposals for education in Massachusetts, it is equally important to understand how the state's present support for primary and secondary education compares to other states and the national average. As has been observed in prior analyses, Massachusetts lags behind other states in the share of resources devoted to public education and in the contribution of the state, as opposed to localities, to total funding for public primary and secondary education.

For this analysis, we rely on data from the U.S. Census Bureau for fiscal years from 1993 to 2005 – the most recent year for which such data are available. We rely on three key measures to make comparisons between Massachusetts and the rest of the country both for the FY 2005 fiscal year and over time.

1. The share of overall primary and secondary education revenue derived from state sources as opposed to local or Federal sources;
2. Spending on primary and secondary public education as a share of personal income;
3. Spending on public higher education as a share of personal income[11]; and,
4. Cost-adjusted spending per pupil.[12]

The first measure attempts to quantify the extent to which the Commonwealth has assumed responsibility for providing adequate funding across local districts; the second and third measures gauge the share of total economic resources within the state that is dedicated to primary and secondary education and public higher education; and, the fourth measure adjust nominal per pupil spending figures to account for changes in the cost of living and in student enrollment.

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 2005 relative to other states, as well as higher education support. Of note:

- Local governments provided the largest share of revenue for public elementary and secondary education in Massachusetts for FY 2005 – 51.8 percent. State government

[11] Data on higher education spending were taken from U.S. Census Bureau's 2007 Statistical Abstract, downloaded from http://www.census.gov/compendia/statab/education/higher_education_finances_fees_and_staff/. This data set includes all 50 states, but excludes the District of Columbia.

[12] Data on 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/school.html. 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/regional/index.htm#state. 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 rather than out of the complete 50 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.

provided 42.2 percent of such revenue, while the Federal government supplied just 5.9 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 11th largest share of total public elementary and secondary education revenue in FY 2005. Local governments across the United States provided 43.9 percent of revenue for public primary and secondary education, by comparison, Massachusetts cities and towns provided 51.8 percent of primary and secondary education revenue.

- Massachusetts also depends less on Federal aid than the vast majority of states – the share of total revenue that Federal aid comprised in Massachusetts in FY 2005 was 47th in the country. This is 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 districts and schools, where the needs are greatest."[13] According to data from the U.S. Census Bureau's American Community Survey, in 2005, only 10 states had a lower child poverty rate than Massachusetts, where it was 13.6 percent.

- Massachusetts spent less of its personal income on public higher education than all but three states in FY 2005. State and local support for public higher education amounted to just 0.4 percent of state personal income. The national average was 0.61 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 2005, total spending on public primary and secondary education in Massachusetts amounted to 4.6 percent of personal income, earning the Commonwealth a rank of 37th. Nationally, total spending on public primary and secondary education constituted 5.1 percent of personal income in FY 2005, roughly 10 percent more than in Massachusetts.

[13] *National Assessment of Title I Interim Report: Executive Summary*. Washington, D.C.: U.S. Department of Education, Institute of Education Sciences, 2006, p. 1.

- 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 2005, state and local spending on public primary and secondary education in Massachusetts equaled 4.4 percent of total personal income, putting Massachusetts in 29th place nationally. The comparable amount for the country as a whole was 4.7 percent; thus, if state and local spending in Massachusetts in FY 2005 had been at the same level as the national mark, the Commonwealth and its municipalities would have dedicated nearly $800 million more to educating its children in that year.

- When operating and capital costs are combined and adjusted for state cost-of-living differences, total spending per pupil in Massachusetts was $9,973 in FY 2005, leaving the Commonwealth 13th in the country and modestly above the overall U.S. mark of $9,610.

Current Spending

- When measured as a share of income, current spending for public elementary and secondary education in Massachusetts ranked 27th in the nation in FY 2005. A total of 4.2 percent of personal income was devoted to current spending that year.

- On a per pupil basis, when adjusted for cost-of-living differences, current spending in Massachusetts was 10th highest in the country in FY 2005. The Commonwealth spent $9,096 per pupil or 10.1 percent more than the comparable national amount.

- Approximately 63 percent of current spending in Massachusetts in FY 2005 was used for instruction. Just four states – led by New York with 69 percent – dedicated a larger share of current spending to teaching in 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 34.3 percent to support services.

Capital Spending

The Census data show that capital spending for primary and secondary education in Massachusetts ranked in the lower quarter of states in FY 2005. All capital projects performed by state and local entities are included in the capital outlay figures.

- Massachusetts allocated a cost-adjusted amount of $644 per pupil to capital outlays in FY 2005, leaving it 36th out of the 48 states for which cost-adjusted data are available.

- Measured as a share of income, Massachusetts was 43rd in the country in spending for capital outlays, allocating 0.30 percent of personal income to such outlays in FY 2005. The national average for capital spending – 0.56 percent of personal income – was nearly twice that of Massachusetts.

Education Financing Trends over Time

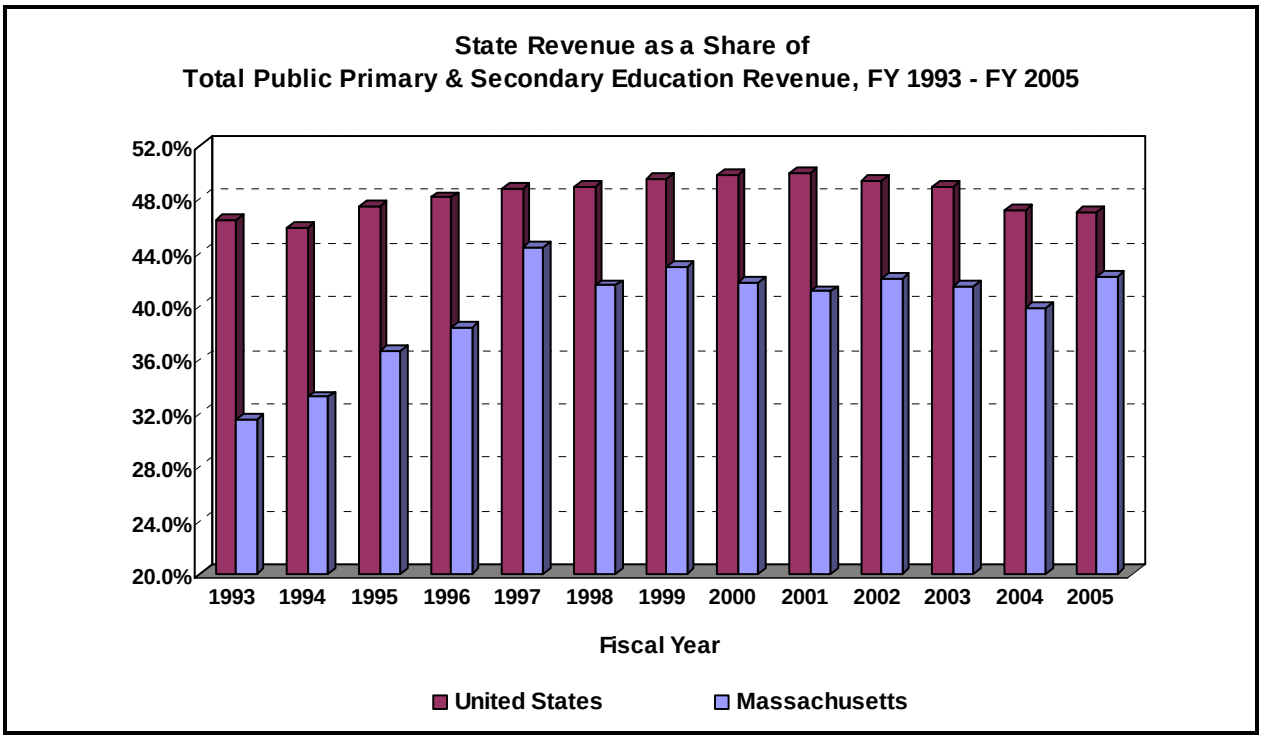
Just as it is worth considering how financing of primary and secondary education in the Commonwealth currently compares to other states, it is also helpful to understand how education financing in Massachusetts has changed over time and, in particular, how it has changed as a result of the Commonwealth's fiscal crisis from FY 2002 to FY 2005. 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 a 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 tax cuts put in place in Massachusetts during the prior decade.

As the following summary of the Census Bureau's data from FY 1993 to FY 2005 indicates, the share of total primary and secondary education revenue furnished by the state grew dramatically in the 1990s, but then fell as a result of budget cuts between FY 2002 and FY 2004. Data for FY 2005 reflects the state's efforts to restore some of the state funding cut in the prior three years. Likewise, aggregate and cost-adjusted per pupil spending on primary and secondary education grew in the 1990s and then fell with budget cuts. Aggregate and per pupil spending grew in FY 2005, but remain below the FY 2002 level that was achieved before budget cutting began.

State and Local Contributions

- Between FY 2002 and FY 2004, the Commonwealth's share of the total amount of revenue dedicated to public primary and 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. However, in FY 2005 the state share rose to 42.2 percent as the state began to replace cuts made between FY 2002 and FY 2004. Between FY 1993 and FY 2005, the share of primary and secondary education revenue flowing from state coffers grew from 31.5 percent to 42.2 percent, a dramatic increase of nearly one-third.

- While the share of all revenue for primary and secondary education in the state paid for by cities and towns rose from 52.5 percent in FY 2002 to 53.6 percent in FY 2004, the share declined to 51.8 percent in FY 2005. This is the lowest share paid by cities and towns in Massachusetts since FY 1997 and reflects efforts to restore funding cuts made between FY 2002 and FY 2004.

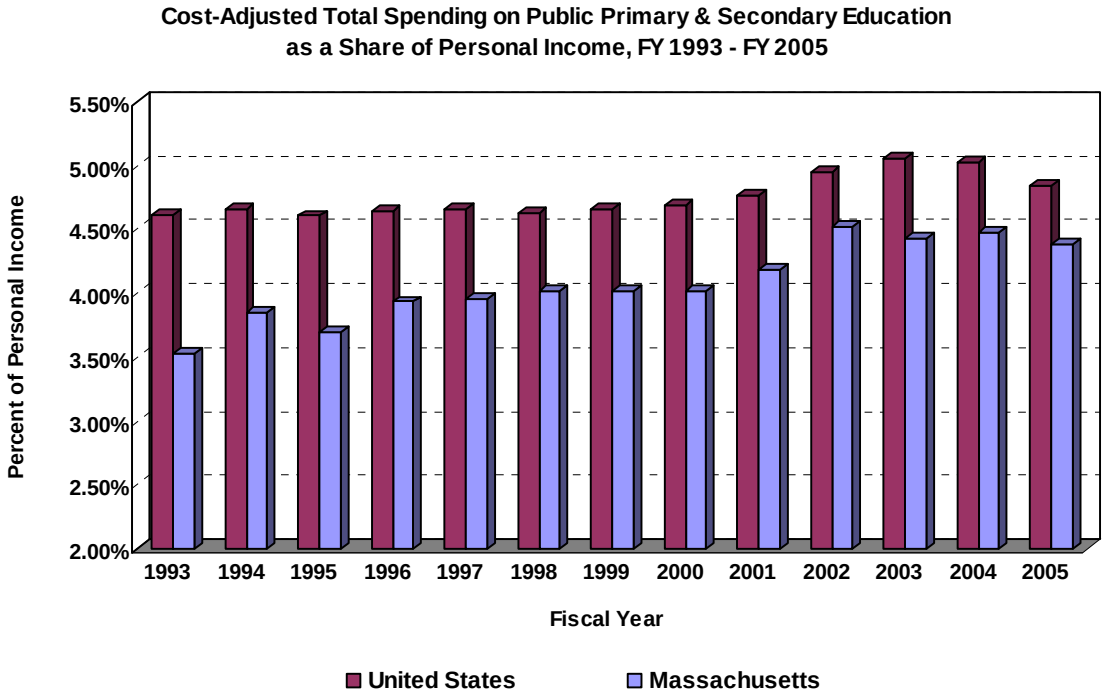


Total Spending

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

- In FY 1993, state and local spending on primary and secondary education in Massachusetts totaled 3.4 percent of state personal income; by FY 2005 that figure was 4.37 percent of state personal income. However, this figure remains below the national average of 4.65 percent of state personal income.

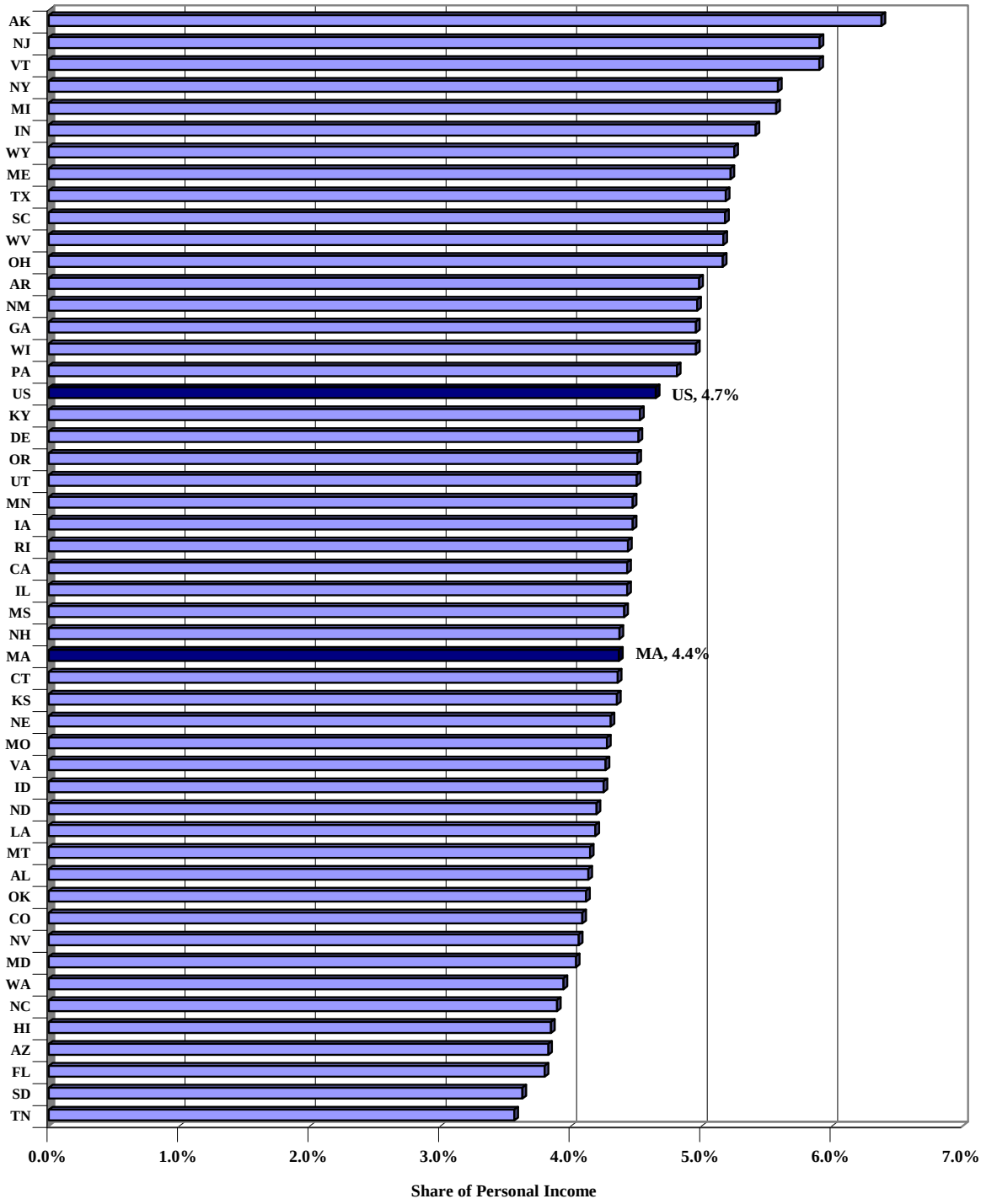
- Cost-adjusted per pupil spending on primary and secondary education is also down in FY 2005 relative to FY 2002. In FY 2002 spending per pupil in Massachusetts was $9,999, but total spending per pupil fell to $9,431 in FY 2003. Since that time spending per pupil has rebounded to $9,680 in FY 2004 and $9,973 in FY 2005, but remains below the FY 2002 level.


Cost-Adjusted Total Spending on Public Primary & Secondary Education
as a Share of Personal Income, FY 1993 - FY 2005
Percent of Personal Income
5.50%
5.00%
4.50%
4.00%
3.50%
3.00%
2.50%
2.00%
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
Fiscal Year
United States
Massachusetts

Spending on Public Primary and Secondary Education as a Share of Personal Income, FY2005

	Total Spending		State and Local Spending		Current Spending		Capital Spending	
	United States	5.11%	United States	4.65%	United States	4.40%	United States	0.56%
1	Alaska	7.87%	Alaska	6.38%	Alaska	6.49%	Alaska	1.21%
2	Vermont	6.39%	New Jersey	5.91%	Vermont	5.99%	New Mexico	0.92%
3	New Jersey	6.16%	Vermont	5.90%	West Virginia	5.57%	Wyoming	0.89%
4	Michigan	6.07%	New York	5.59%	New Jersey	5.45%	South Carolina	0.83%
5	New York	6.02%	Michigan	5.57%	New York	5.44%	Texas	0.81%
6	New Mexico	5.92%	Indiana	5.41%	Maine	5.28%	California	0.81%
7	West Virginia	5.89%	Wyoming	5.25%	Michigan	5.18%	Utah	0.74%
8	Texas	5.82%	Maine	5.22%	New Mexico	4.93%	Nevada	0.74%
9	Wyoming	5.80%	Texas	5.19%	Arkansas	4.93%	Georgia	0.68%
10	Indiana	5.77%	South Carolina	5.18%	Wyoming	4.88%	Florida	0.67%
11	South Carolina	5.76%	West Virginia	5.17%	Ohio	4.84%	Kentucky	0.66%
12	Maine	5.73%	Ohio	5.16%	Indiana	4.79%	Michigan	0.60%
13	Arkansas	5.62%	Arkansas	4.98%	Wisconsin	4.79%	New Jersey	0.60%
14	Ohio	5.57%	New Mexico	4.97%	South Carolina	4.73%	Washington	0.60%
15	Georgia	5.47%	Georgia	4.96%	Georgia	4.72%	Iowa	0.59%
16	Wisconsin	5.27%	Wisconsin	4.96%	Mississippi	4.70%	Delaware	0.59%
17	Pennsylvania	5.24%	Pennsylvania	4.81%	Rhode Island	4.68%	Ohio	0.58%
18	Mississippi	5.20%	Kentucky	4.53%	Texas	4.61%	Colorado	0.56%
19	Kentucky	5.14%	Delaware	4.52%	Montana	4.60%	Arkansas	0.56%
20	California	5.03%	Oregon	4.51%	Pennsylvania	4.56%	Arizona	0.52%
21	Utah	5.02%	Utah	4.50%	Louisiana	4.50%	Indiana	0.52%
22	Oregon	5.01%	Minnesota	4.47%	North Dakota	4.46%	South Dakota	0.52%
23	North Dakota	5.00%	Iowa	4.47%	Kentucky	4.35%	Minnesota	0.51%
24	Delaware	4.90%	Rhode Island	4.44%	Oklahoma	4.34%	Illinois	0.48%
25	Louisiana	4.88%	California	4.43%	Delaware	4.26%	North Dakota	0.48%
26	Montana	4.87%	Illinois	4.43%	Nebraska	4.24%	Idaho	0.48%
27	Iowa	4.87%	Mississippi	4.41%	Massachusetts	4.23%	Nebraska	0.47%
28	Illinois	4.86%	New Hampshire	4.37%	Illinois	4.23%	Pennsylvania	0.46%
29	Nebraska	4.81%	Massachusetts	4.37%	Kansas	4.23%	New York	0.45%
30	Rhode Island	4.81%	Connecticut	4.36%	Iowa	4.21%	Virginia	0.44%
31	Oklahoma	4.78%	Kansas	4.35%	Connecticut	4.20%	Maryland	0.43%
32	Minnesota	4.77%	Nebraska	4.30%	New Hampshire	4.19%	Missouri	0.41%
33	Idaho	4.76%	Missouri	4.28%	Idaho	4.18%	Mississippi	0.41%
34	Kansas	4.75%	Virginia	4.27%	Utah	4.17%	Alabama	0.40%
35	Missouri	4.67%	Idaho	4.25%	Alabama	4.15%	Oklahoma	0.40%
36	Alabama	4.66%	North Dakota	4.20%	Hawaii	4.14%	Kansas	0.36%
37	Massachusetts	4.64%	Louisiana	4.19%	Missouri	4.12%	New Hampshire	0.35%
38	New Hampshire	4.63%	Montana	4.15%	California	4.12%	Oregon	0.33%
39	Connecticut	4.60%	Alabama	4.13%	Oregon	4.07%	Maine	0.33%
40	Virginia	4.58%	Oklahoma	4.12%	Minnesota	4.04%	Vermont	0.32%
41	Colorado	4.39%	Colorado	4.09%	Virginia	4.04%	North Carolina	0.31%
42	Nevada	4.39%	Nevada	4.06%	North Carolina	3.88%	Connecticut	0.31%
43	South Dakota	4.36%	Maryland	4.04%	Maryland	3.85%	Massachusetts	0.30%
44	Arizona	4.35%	Washington	3.94%	South Dakota	3.75%	West Virginia	0.30%
45	Maryland	4.33%	North Carolina	3.89%	Arizona	3.68%	Louisiana	0.29%
46	North Carolina	4.33%	Hawaii	3.85%	Tennessee	3.67%	Tennessee	0.28%
47	Washington	4.32%	Arizona	3.83%	Colorado	3.63%	Wisconsin	0.27%
48	Hawaii	4.29%	Florida	3.80%	Washington	3.57%	Montana	0.23%
49	Florida	4.22%	South Dakota	3.63%	Florida	3.45%	Hawaii	0.15%
50	Tennessee	4.03%	Tennessee	3.57%	Nevada	3.41%	Rhode Island	0.05%

State and Local Spending on
Public Primary and Secondary Education, FY 2005



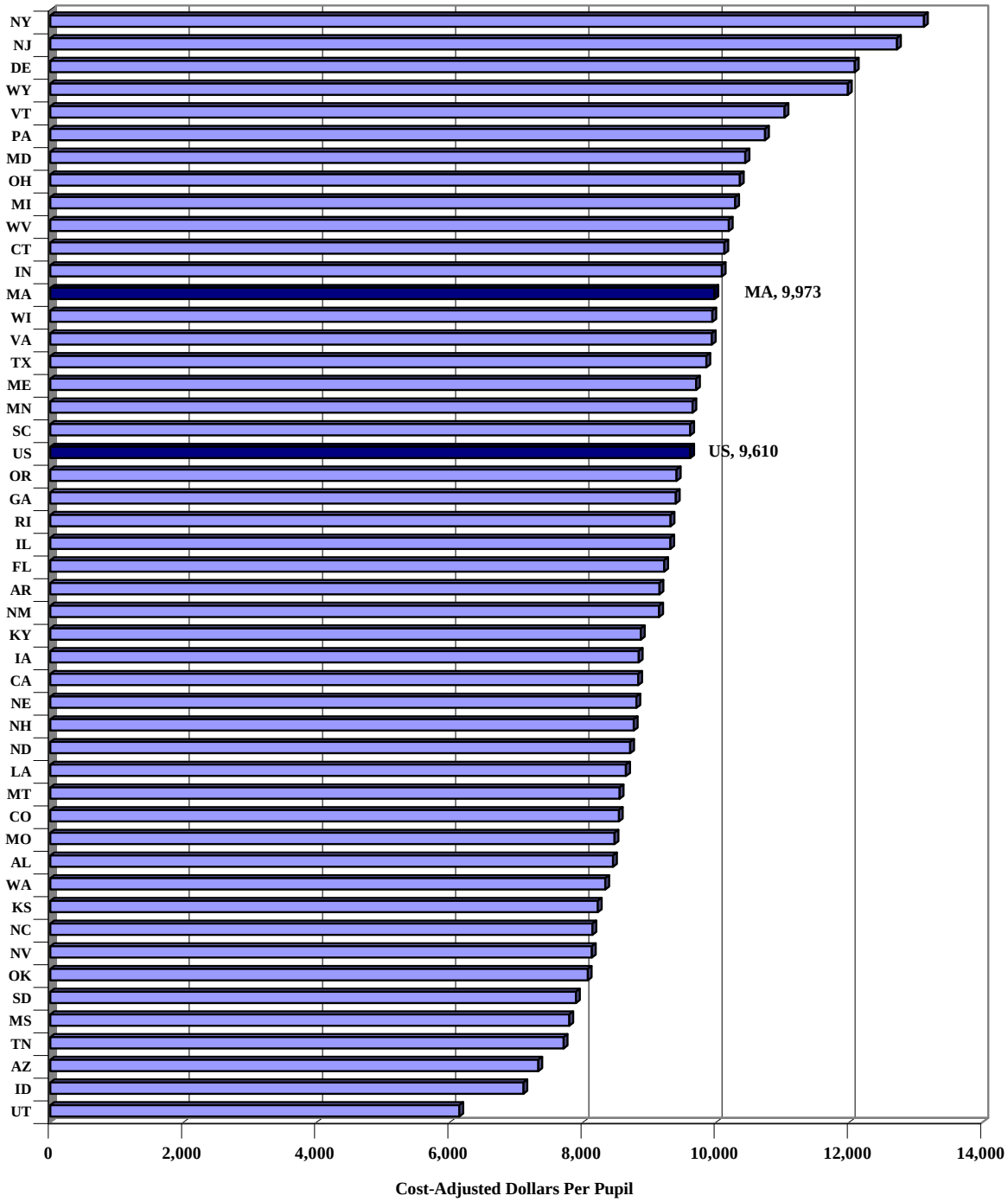
Spending Per Pupil on Public Primary and Secondary Education, FY2005

(in dollars, adjusted for interstate cost-of-living differences)

	Total Spending		Current Spending		Capital Spending	
	United States	9,610	United States	8,260	United States	1,048
1	New York	13,121	New York	11,849	Wyoming	1,848
2	New Jersey	12,717	New Jersey	11,248	Florida	1,470
3	Delaware	12,082	Delaware	10,514	Delaware	1,456
4	Wyoming	11,979	Vermont	10,340	New Mexico	1,420
5	Vermont	11,028	Wyoming	10,084	California	1,416
6	Pennsylvania	10,734	West Virginia	9,636	South Carolina	1,377
7	Maryland	10,439	Pennsylvania	9,337	Texas	1,371
8	Ohio	10,354	Maryland	9,281	Nevada	1,365
9	Michigan	10,284	Connecticut	9,244	New Jersey	1,238
10	West Virginia	10,190	Massachusetts	9,096	Georgia	1,165
11	Connecticut	10,122	Rhode Island	9,062	Washington	1,150
12	Indiana	10,086	Wisconsin	9,033	Kentucky	1,144
13	Massachusetts	9,973	Ohio	8,993	Colorado	1,086
14	Wisconsin	9,941	Maine	8,943	Ohio	1,079
15	Virginia	9,934	Michigan	8,770	Iowa	1,071
16	Texas	9,854	Virginia	8,758	Maryland	1,036
17	Maine	9,699	Indiana	8,369	Minnesota	1,029
18	Minnesota	9,644	Minnesota	8,166	Michigan	1,024
19	South Carolina	9,610	Illinois	8,115	New York	982
20	Oregon	9,407	Georgia	8,110	Virginia	959
21	Georgia	9,394	Montana	8,073	Pennsylvania	949
22	Rhode Island	9,317	Arkansas	8,033	South Dakota	939
23	Illinois	9,312	Louisiana	7,982	Illinois	926
24	Florida	9,220	New Hampshire	7,919	Indiana	915
25	Arkansas	9,150	South Carolina	7,895	Arkansas	905
26	New Mexico	9,145	Texas	7,798	Utah	902
27	Kentucky	8,868	Nebraska	7,763	Arizona	885
28	Iowa	8,836	North Dakota	7,762	Nebraska	867
29	California	8,828	Oregon	7,645	North Dakota	831
30	Nebraska	8,803	Iowa	7,637	Missouri	744
31	New Hampshire	8,763	New Mexico	7,614	Alabama	733
32	North Dakota	8,710	Florida	7,540	Idaho	709
33	Louisiana	8,646	Alabama	7,531	Connecticut	690
34	Montana	8,552	Kentucky	7,499	Oklahoma	671
35	Colorado	8,540	Missouri	7,487	New Hampshire	656
36	Missouri	8,475	Oklahoma	7,329	Massachusetts	644
37	Alabama	8,449	Kansas	7,313	Kansas	624
38	Washington	8,335	North Carolina	7,293	Oregon	615
39	Kansas	8,224	California	7,234	Mississippi	608
40	North Carolina	8,141	Colorado	7,071	North Carolina	590
41	Nevada	8,133	Mississippi	7,042	Vermont	560
42	Oklahoma	8,074	Tennessee	7,018	Maine	554
43	South Dakota	7,894	Washington	6,894	Tennessee	529
44	Mississippi	7,792	South Dakota	6,797	West Virginia	518
45	Tennessee	7,711	Nevada	6,326	Louisiana	511
46	Arizona	7,331	Idaho	6,244	Wisconsin	505
47	Idaho	7,106	Arizona	6,204	Montana	408
48	Utah	6,144	Utah	5,102	Rhode Island	106

Total Spending Per Pupil on
Public Primary and Secondary Education, FY 2005

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



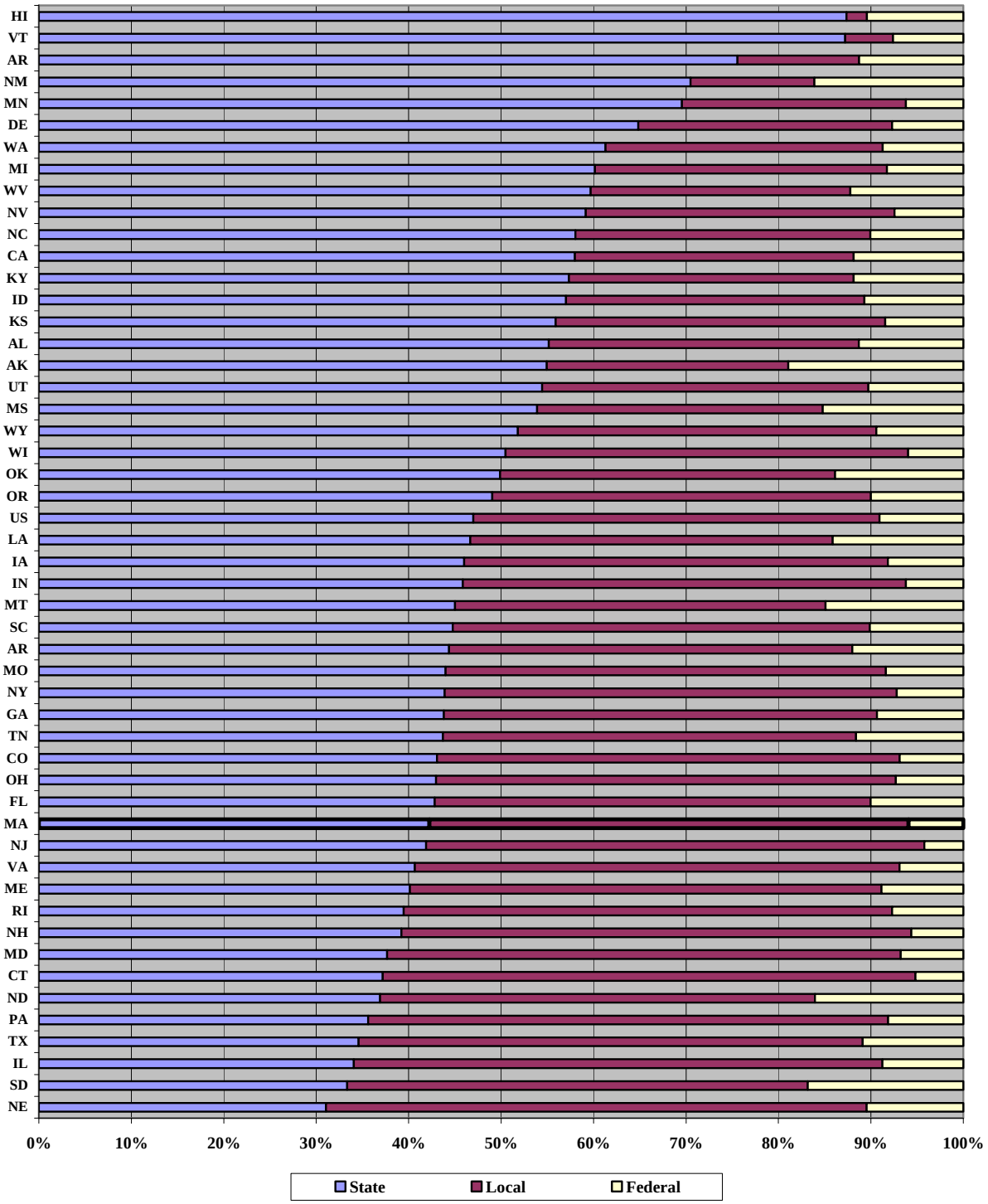
Composition of Public Primary and Seconday Education Revenue, FY 2005

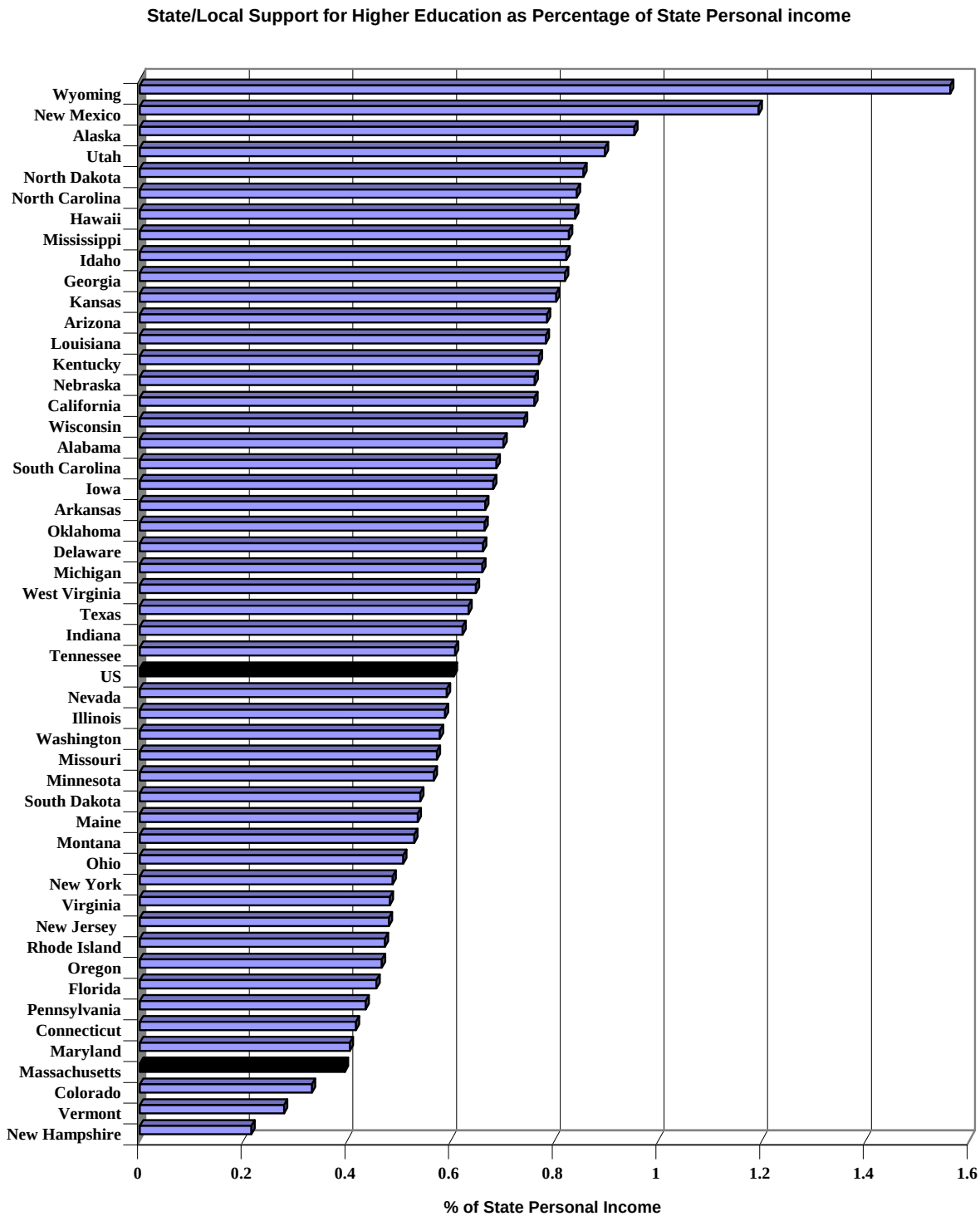
states listed by order of state revenue as a share of total revenue

	State Revenue		Local Revenue		Federal Revenue	
	Share of Total Revenue	Rank	Share of Total Revenue	Rank	Share of Total Revenue	Rank
United States	47.0%		43.9%		9.1%	
Hawaii	87.4%	1	2.2%	50	10.4%	19
Vermont	87.2%	2	5.2%	49	7.6%	37
Arkansas	75.6%	3	13.2%	48	11.3%	15
New Mexico	70.5%	4	13.4%	47	16.1%	3
Minnesota	69.6%	5	24.2%	46	6.2%	44
Delaware	64.8%	6	27.4%	44	7.7%	35
Washington	61.3%	7	30.0%	42	8.7%	29
Michigan	60.1%	8	31.6%	38	8.3%	32
West Virginia	59.7%	9	28.1%	43	12.2%	9
Nevada	59.2%	10	33.4%	35	7.4%	38
North Carolina	58.0%	11	31.9%	37	10.1%	22
California	58.0%	12	30.1%	41	11.9%	11
Kentucky	57.3%	13	30.8%	40	11.9%	12
Idaho	57.0%	14	32.3%	36	10.7%	17
Kansas	55.9%	15	35.7%	32	8.5%	30
Alabama	55.2%	16	33.5%	34	11.3%	14
Alaska	54.9%	17	26.1%	45	18.9%	1
Utah	54.4%	18	35.3%	33	10.3%	20
Mississippi	53.9%	19	30.9%	39	15.2%	5
Wyoming	51.8%	20	38.8%	30	9.4%	25
Wisconsin	50.5%	21	43.5%	26	6.0%	46
Oklahoma	49.9%	22	36.2%	31	13.9%	8
Oregon	49.0%	23	41.0%	27	10.0%	24
Louisiana	46.7%	24	39.2%	29	14.1%	7
Iowa	46.0%	25	45.8%	22	8.2%	33
Indiana	45.9%	26	47.9%	17	6.2%	45
Montana	45.0%	27	40.1%	28	14.9%	6
South Carolina	44.8%	28	45.1%	23	10.1%	21
Arizona	44.4%	29	43.6%	25	12.0%	10
Missouri	44.0%	30	47.6%	18	8.4%	31
New York	43.9%	31	48.9%	16	7.2%	40
Georgia	43.8%	32	46.8%	21	9.3%	26
Tennessee	43.7%	33	44.7%	24	11.6%	13
Colorado	43.1%	34	50.1%	13	6.9%	42
Ohio	42.9%	35	49.8%	15	7.3%	39
Florida	42.8%	36	47.1%	19	10.0%	23
Massachusetts	42.2%	37	51.8%	11	5.9%	47
New Jersey	41.9%	38	53.9%	8	4.2%	50
Virginia	40.7%	39	52.4%	10	6.9%	41
Maine	40.1%	40	51.0%	12	8.9%	27
Rhode Island	39.5%	41	52.8%	9	7.7%	36
New Hampshire	39.2%	42	55.2%	6	5.6%	48
Maryland	37.7%	43	55.5%	5	6.8%	43
Connecticut	37.2%	44	57.6%	2	5.2%	49
North Dakota	36.9%	45	47.0%	20	16.1%	4
Pennsylvania	35.6%	46	56.2%	4	8.1%	34
Texas	34.6%	47	54.5%	7	10.9%	16
Illinois	34.1%	48	57.2%	3	8.7%	28
South Dakota	33.4%	49	49.8%	14	16.8%	2
Nebraska	31.1%	50	58.5%	1	10.5%	18

Composition of Primary and Secondary Education Revenue, FY 2005

States ranked by state revenue as a share of total revenue




State/Local Support for Higher Education as Percentage of State Personal income
Wyoming
New Mexico
Alaska
Utah
North Dakota
North Carolina
Hawaii
Mississippi
Idaho
Georgia
Kansas
Arizona
Louisiana
Kentucky
Nebraska
California
Wisconsin
Alabama
South Carolina
Iowa
Arkansas
Oklahoma
Delaware
Michigan
West Virginia
Texas
Indiana
Tennessee
US
Nevada
Illinois
Washington
Missouri
Minnesota
South Dakota
Maine
Montana
Ohio
New York
Virginia
New Jersey
Rhode Island
Oregon
Florida
Pennsylvania
Connecticut
Maryland
Massachusetts
Colorado
Vermont
New Hampshire
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
% of State Personal Income