School Funding Reality: A Bargain Not Kept

Prepared by **Ed Moscovitch**

President, Cape Ann Economics Chairman, Bay State Reading Institute for

The Boston Foundation and
The Massachusetts Business Alliance for Education





The Boston Foundation

The Boston Foundation, Greater Boston's community foundation, is one of the oldest and largest community foundations in the nation, with assets of \$733 million. In Fiscal Year 2010, the Foundation and its donors made more than \$82 million in grants to nonprofit organizations and received gifts of close to \$83 million. The Foundation is made up of some 900 separate charitable funds established by donors either for the general benefit of the community or for special purposes. The Boston Foundation also serves as a major civic leader, provider of information, convener, and sponsor of special initiatives designed to address the community's and region's most pressing challenges. For more information about the Boston Foundation, visit www.tbf.org or call 617-338-1700.

The Massachusetts Business Alliance for Education

The Massachusetts Business Alliance for Education (MBAE) is committed to a high quality public education system that will prepare all students to engage successfully in a global economy and society. MBAE brings together business and education leaders to promote education policies and practices based on measurable standards of achievement, accountability for performance, and equitable educational opportunities for all students in the Commonwealth.

UNDERSTANDING BOSTON is a series of forums, educational events, and research sponsored by the Boston Foundation to provide information and insight into issues affecting Boston, its neighborhoods, and the region. By working in collaboration with a wide range of partners, the Boston Foundation provides opportunities for people to come together to explore challenges facing our constantly changing community to develop an informed civic agenda. Visit www.tbf.org to learn more about Understanding Boston and the Boston Foundation.

Design: Kate Canfield, Canfield Design

Cover Photo: © Nancy Louie

School Funding Reality: A Bargain Not Kept

How is the Foundation Budget Working?

By

Edward Moscovitch CAPE ANN ECONOMICS

Prepared for the

Massachusetts Business Alliance for Education

Supported by

The Boston Foundation

December, 2010

INTRODUCTION

Massachusetts faces an unprecedented education funding crisis as the slow recovery of state revenues and a concurrent drop in municipal income are compounded by the impending end of federal stimulus funding. The immediate need for financial efficiency, and a recent resurgence of education reform efforts, makes this an opportune time to reexamine the school finance system and evaluate what changes are needed to achieve its goal – delivering high quality public education to all students.

In 1991, the Massachusetts Business Alliance for Education (MBAE) called for specific legislative action to reform both the education system and the way that it was financed. The so-called foundation budget, a key feature of that proposal, became part of the Education Reform Act of 1993 to provide a progressive plan for funding the state's schools based on a model of the way a school system really functions. The foundation budget set standards for student teacher ratios, maintenance expenditures, support personnel, teacher training, and budgets for educational supplies among other details. The formula also recognized the special needs of disadvantaged youth by providing for the services needed to close the achievement gap between low-income and affluent students.

The new law contained an inflation-adjustment mechanism designed to establish and preserve equity among districts, and to allow schools to continue to operate at the program levels envisioned in 1993. The expectation was that the dollar value of the foundation budget would keep pace with rising costs. Over time, this expectation has not been met as actual costs came to exceed the factor used to adjust the foundation budget. In particular, healthcare insurance expenditures for education employees have risen far faster than inflation, surpassing the foundation budget allowance in 2010 by almost \$1.7 billion dollars alone. As a result, while Massachusetts may spend on average \$10,700 per student per year on education, the percentage of that amount that directly affects what goes on in the classroom, as opposed to paying for administration, contractual obligations and health care, is much lower.

MBAE, with the support of The Boston Foundation, has undertaken this study to examine how the foundation budget has met original expectations as well as current needs. This is the first of a three-part series on school finance from MBAE. Next we will look at where opportunities can be found for savings through cost efficiencies and consolidation. The final phase of this work will review what other states and districts are doing to advance new paradigms of school finance that could both increase efficiency and achieve an increase in the quality and equality of education opportunities for students.

Our purpose is to identify where adjustments are needed in the way Massachusetts finances our schools, and to inform and promote policies that will provide sufficient funding for a world class school system that educates all children for success.

Linda Noonan, *Executive Director*Massachusetts Business Alliance for Education
December 2010

EXECUTIVE SUMMARY

The 1993 Massachusetts education reform law represented a "grand bargain" – high standards and accountability for student performance in return for equitable funding across districts. High standards were to be established through curriculum frameworks that specified what every child should learn. For their part, educators agreed to be held accountable for student achievement, including implementation of the Massachusetts Comprehensive Assessment System (MCAS) exams and graduation requirements linked to MCAS.

In return, the governor and the legislature, with broad support from the business community, agreed to make sure that every school district had sufficient funding to provide its students with the quality education needed to meet this consistent standard of academic achievement. This was intentionally designed to achieve equity for urban districts with large concentrations of minority and low-income students, which had traditionally been underfunded.

The accountability and the funding provisions were closely linked. Political and business leaders did not want to put additional resources into the schools without clear measures of educator accountability, and educators could not fairly be held accountable for student performance absent adequate funding.

At the heart of this historic bargain was the foundation budget – the new law's definition of what constituted adequate funding. Since 1993, successive governors and legislatures have lived up to their obligations under the Education Reform Act, making sure that all districts reached the foundation funding goal set by the law. Nonetheless, it is clear today to any reader of the state's newspapers that something is amiss. School districts across the state are laying off teachers and cutting back on book purchases, teacher training, library services, and athletic programs.

Having played a central role in forging and passing the 1993 historic bargain, MBAE has a sustained interest in the school finance debate today. The organization commissioned this paper together with the Boston Foundation to examine the apparent contradiction between the state government's adherence to the foundation budget requirements and the school funding challenges visible in so many school districts across the state.

Key Findings

1. **Health Care Costs:** The explosive growth in the cost of health care for school employees has caused a major funding shortfall. From 2000 to 2007, costs rose by 13.6 percent per year, while the overall inflation adjustment was growing at only 3.4 percent. **Over this period, annual health care costs in**

school budgets grew by 1.0 billion – 300 million more than the increase in Chapter 70 aid.

- 2. Impact on Teachers, Education Materials, Training: With health care costs rising rapidly but overall district spending increasing at more modest rates, there has been relatively little left over for other areas of the school budget that directly affect student learning -- teachers, instructional materials, and teacher training. Since 2000, per-pupil spending statewide on these key elements of school budgets, adjusted for inflation, has been falling. From 2000 to 2007, spending on books fell by more than half and spending on teacher training by almost a quarter.
- 3. **Inflation Adjustment Falls Short:** The price indicator used to adjust the foundation budget to keep it in line with inflation has increased much more slowly than the actual cost of running schools in Massachusetts only 3.4 percent a year from 2000 to 2007. As a result, the foundation budget, and the state aid and local spending requirements that depend on it, have failed to keep up with rising costs. **The foundation budget shortfall was \$1.2 billion in 2007 and is now almost \$1.7 billion.**
- 4. Equity Not Achieved: Over the 17 years since the Education Reform Act passed, there has been virtually no equalization in spending or state aid between rich districts and poor. The gains made by the neediest districts in the years before 2000 have been all but nullified by losses in the years since.

 With growth of only 2.3 percent per year from 2007 to 2010, the per-pupil spending in needy districts was a full percentage point less than the wealthiest suburban districts (3.4 percent). As a result, they made very little progress relative to the foundation goal, properly adjusted for inflation. Poor districts were 21 percent below in 1993, rose to within 3 percent of the goal in 2000, and were back down to 6 percent below in 2010.

In addition to the impact of skyrocketing healthcare costs for their own employees, school districts are also hurt by soaring increases in Medicaid and health insurance for state employees – increases that are crowding out all other areas of the state budget. From 2000 to 2010, health care consumed two thirds of the entire increase in state spending. Controlling health care costs has therefore become a critical education issue.

The inability to increase state aid, and the resulting cuts in spending, particularly in the neediest districts, call into question the historic bargain created in the Education Reform Act of 1993. If we cannot bring resources in the classroom to the foundation goal – either by increasing state assistance or reducing costs in health care, student transportation, school operations, central administration, and other areas that don't directly impact teaching and learning in classrooms – we cannot in good faith

continue to hold teachers and principals accountable for reaching the reform law's performance goals.

THE CENTRAL ROLE OF THE FOUNDATION BUDGET

The school funding side of the 1993 "grand bargain" was codified by the reform law's spending goal – the foundation budget. This consisted of a specific set of resources that were to be made available to every school. It included class size goals (22 for elementary school, 25 for middle school), additional teachers for music, art, libraries, and physical education, funding goals for teacher professional development, and funds for books, software, and other educational materials. The foundation budget rises (and falls) with changes in enrollment, and provides additional resources for districts with high percentages of low-income students and students who are not fluent in English. This approach was considered a radical change at the time because instead of basing state aid on available funds, regardless of whether this was enough to educate students properly, the new law began by defining what schools needed, and then allocating funds accordingly.

The school funding formula was set up to ensure that over the first seven years of the reform period, every district's spending would be brought up to the foundation level and be maintained there as the foundation itself was adjusted for inflation. This was done by keying both state aid and required local support to the foundation budget spending goal.

Adjusting for Inflation

Prices and wages rise over time. Unless adjusted to reflect rising costs, the dollar amounts established in 1993 would quickly become too low to maintain the class size, book purchase, and professional development goals set in the 1993 bargain. For this reason, an inflation adjustment was included in the 1993 statute. As we've seen, the price index used for this adjustment – a national index of the cost of operating state and local governments – has not kept pace with the actual cost of running Massachusetts schools. As a practical matter, this has meant that neither state aid nor required local contributions have risen sufficiently to allow districts to meet the 1993 class size, book purchase, and professional development goals.

Many districts, mainly wealthier suburban districts, have chosen to spend more than the statutory minimums. But other districts, usually inner-city districts with low property wealth and high percentages of needy students, have spent at or near the minimum required. Such districts are now spending well below the programmatic levels envisioned in the 1993 bargain.

The basic idea behind the state aid formula established in 1993 is simple enough. There's a target for how much each district should be spending (the foundation budget) and a formula for determining how much each district should contribute in the way of local funds, taking into account personal income and property wealth in equal measure. If the foundation budget is greater than what a district can reasonably be expected to fund on its own, the difference is made up with state education aid. A similar approach is used in the vast majority of states across the country.

Had the foundation budget increased at the rate necessary to cover districts' rising costs – or if those costs had risen at the same rate as the formula's inflation adjustment, as was the case from 1993 to 2000 – most of the complaints about the funding formula would disappear.

The Chapter 70 formula is designed to keep districts at the foundation budget, regardless of whether that budget is itself keeping up with actual costs. The only way to fix this problem is to control costs and/or add revenue. Intellectually, this solution is much simpler than redesigning the formula's underlying algebra. Politically, it's much more difficult.

Organization of the Paper

The conclusions summarized above are spelled out in more detail below, using a series of charts to illustrate the key points graphically. The paper begins by looking at the statewide increase in school spending over the reform period and where it went (teachers, book purchases, school operation, employee health insurance). This is done first in current dollars, then in real, inflation-adjusted dollars. The next section goes beyond the statewide totals to look at how the neediest districts with large percentages of low-income and minority students and with low property wealth have fared, and how their spending trends compare to the more well-off districts. The concluding section looks at the impact of health care costs on the state budget as a whole.

Analysis Before and After 2000

Financial trends since 1993 are best understood by looking separately at the periods before and after FY 2000 (fiscal year 2000, which was school-year 1999-2000). From 1993 to 2000, the spending increases envisioned in the foundation budget were phased in gradually. During this period there were relatively larger increases in state aid to bring districts up to foundation and increases in costs were roughly in line with the foundation budget inflation adjustments, so the process went quite smoothly.

_

¹ The provisions that govern state school aid and required local contributions in support of the schools appear in Chapter 70 of the general laws; for convenience the school aid formula is often referred to as "Chapter 70" or the "Chapter 70 formula".

Once districts reached foundation budget levels in 2000, there was no longer the need to increase state aid payments at levels substantially above the inflation rate. Since 2000, the cost of employee health care has risen dramatically; and the problems have been compounded by two periods of overall state budget shortfalls. As a result, much of the progress made in the earlier years has been lost over the past 10 years.

Ideally, we would look at trends from 1993 to 2000 and then from 2000 to 2010. Data is available over this entire period for actual school spending, the foundation budget, and district enrollment.² To understand what has happened, we need to be able to look at spending by area of expenditure – most importantly, by separating out spending on employee health care. However, information at this level of detail for spending and enrollment is available only for 1996, 2000, and 2007. Where possible, the analysis that follows runs from 1993 to 2010; where necessary, it is limited to the periods 1996 to 2000 and 2000 to 2007.

-

² Spending data for FY 2010 is for budgeted rather than actual spending.

PART 1: WHERE THE MONEY WENT

Overall Spending Increase

In school year 1995-96 (FY 96), net school spending in Massachusetts was \$5.2 billion.³ Of this total, \$233 million was spent on tuition for students who were the financial responsibility of the district but actually attended school elsewhere – primarily out-of-district spending for special education students, but also students using the school choice law or attending charter schools. The remaining \$5.0 billion was spent in the district's schools in support of local students.⁴

Of the \$5.0 billion spent in-district, \$546 million went to support employee benefits, mainly health care, leaving \$4.4 billion available to operate and staff the district's schools.⁵

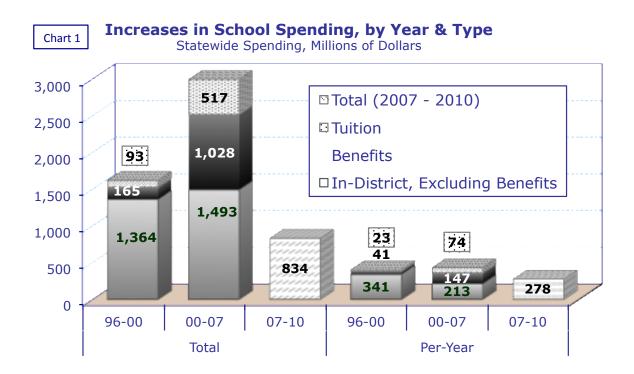
By FY 2000 spending had increased by \$1.6 billion to \$6.8 billion; it increased by another \$3 billion over the following seven years, reaching \$9.9 billion in FY2007. As we see in the left-hand portion of Chart 1 below, the increases in tuition and health care costs between 1996 and 2000 were relatively small. Most of the new funds - \$1.4 billion – were available to support teachers, book purchase, and other programs within the schools.

_

³ Net school spending – the definition of spending used consistently in the paper - is used by DESE for comparison with the foundation budget goal. It excludes revenues other than those from state and local governments (such as money paid by students for school lunches and funds from federal grants); it also excludes the cost of student transportation.

⁴ Funds received from other districts for incoming choice students are not counted.

⁵ The budget category for which data is available includes all employee benefits (this would include employee life insurance), but the greatest portion of this money goes to employee health insurance, and this insurance certainly accounts for almost all of the increases seen.



After 2000 the picture is very different. A third of the overall increase in school spending over this period went to cover the increased cost of employee health care. The increase in tuition paid reflected a large increase in the number of students going to charter schools or using school choice programs. When account is taken of the decreased number of students the statewide impact of the increased tuition payments on per-pupil funding for in-district programs is relatively small, although it may be quite large in particular districts.⁶

Annual Changes in Spending

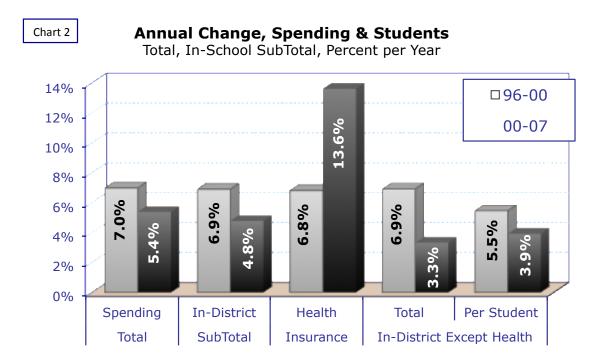
These trends are best understood by looking at spending trends on an annual basis, as shown in the right-hand side of Chart 1. With health care costs rising by an additional \$100 million a year (\$147 million after 2000, against only \$41 million before), the increases remaining for in-district programs fell dramatically – from \$341 million before 2000 to only \$213 million after.

In the three years since 2007, annual spending has grown by an even smaller amount – only \$278 million a year. Employee health care data for this period is not available yet, but based on information from the state's Group Insurance Commission, a reasonable assumption would be that the increase continued at \$147 million a year. Even without further increases in tuition payments, this would leave only \$131

⁶ Per-pupil spending for all students grew by 5.7 percent per year over this period; spending indistrict for in-district students rose by 5.4 percent.

million more each year for school operation – barely more than half the increase from 2000 to 2007 and a reduction of almost two-thirds from the pace prior to 2000.

Chart 2 shows the spending change not in total dollars but in percent per year.



Total spending growth fell from 7.0 percent prior to 2000 to 5.4 percent afterwards. In-district spending grew by somewhat less – 4.8 percent from 2000 to 2007. With health care costs rising at 13.6 percent per year, the amount left for everything else grew by only 3.3 percent – less than half the rate in the earlier period. In-district enrollment grew at 1.4 percent prior to 2000; it fell by .6 percent a year over the next 7 years. As a result, spending per-student grew at 3.9 percent.

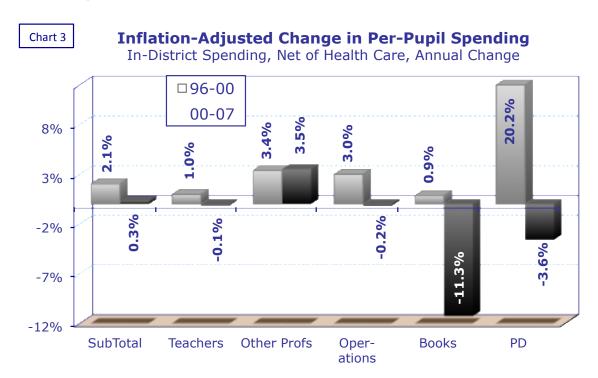
As a practical matter, per-pupil costs tend to rise when enrollment falls, as it is difficult for districts to cut fixed costs. The spending "pain" – and the impact on spending in the classroom – of the reduced spending growth after 2000 are therefore somewhat understated by the per-student analysis.

Spending by Type

The goal of the 1993 reform was to make possible major improvements in student performance, particularly low-income and minority students whose performance has traditionally lagged behind more affluent peers. While closing the gap involves more than money alone, the 1993 historic bargain was based on the premise that spending matters and that high-poverty districts needed to spend somewhat more than the wealthy districts because of their needier student bodies. The foundation budget was

structured to make sure that class sizes in inner-city schools were reasonable and that funds were available for necessary increases in spending on teacher professional development and on acquisition of books, software, and other instructional material. There is overwhelming evidence that research-based instructional materials and training for teachers in such areas as using data to drive instruction, differentiating instruction and practice to make sure each student is challenged at his/her own level, and knowing how to develop students' oral language, vocabulary, and higher-order thinking skills are essential to closing the achievement gap.

Unfortunately, inflation-adjusted, per-pupil spending in these key areas has actually been falling since 2000, as shown in Chart 3.



When adjusted for changes in teachers' salaries and the cost of operating schools and buying books, the 3.9 percent increase in nominal in-district per-pupil spending (net of health insurance for school employees) from 2000 to 2007 becomes an annual decrease of 0.3 percent. The brunt of this decrease comes in two areas critical to school transformation: materials and educator professional development. Spending on instructional materials adjusted for inflation fell by 11.3 percent per year, an overall decrease of 57 percent. Put another way, schools statewide are buying fewer than half the books they bought just 10 years ago and spending on teacher professional development has been falling at 3.6 percent per year.

Teachers and Teacher Salaries

A surprising finding from this analysis is that, despite the almost \$5 billion increase in total school spending from 1996 to 2007, there has been almost no change in the number of teachers or in average class sizes. This occurred because the increase in funds available for teachers was small, not because teacher salaries rose at an unreasonable rate. On average, teacher salaries have risen in line with the cost of living. Average salaries were up 3.4 percent a year from 1996 to 2000, while the Boston CPI rose 2.8 percent. From 2000 to 2007, average salaries rose 3.2 percent per year while the CPI was up 3.3 percent.

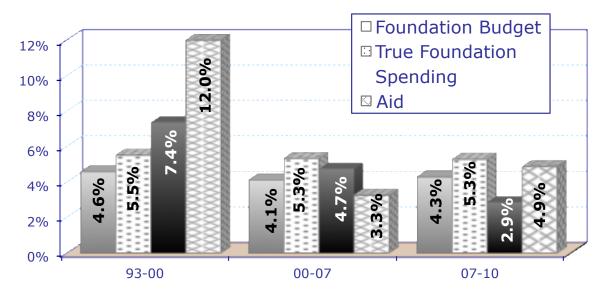
In the earlier period, funds available for classroom and other teachers rose by 5.9 percent a year. This was well above the increase in salaries; the number of teachers districts could afford went up from 63,900 to 70,200. From 2000 to 2007, however, funds available for teachers rose by only 2.5 percent per year, below the increase in average salaries. The number of teachers fell back to 66,800. In short, about half the gains from 1996 to 2000 were erased by 2007; given the even lower growth in school spending since 2007, these declines have almost certainly continued.

Under-Adjusting for Inflation

The foundation budget was the central element in the financial portion of the 1993 reform law. It set a spending goal – actually, a spending minimum – for each district, based on its enrollment and the percent of its students who are low-income. Recognizing that prices and wages rise over time, the law provided that this foundation budget would be adjusted each year to reflect the impact of inflation; the price index chosen for this purpose is a national index that purports to measure changes in operating state and local governments. In practice, that index has not reflected increases in the actual cost of operating schools in Massachusetts.

Chart 4 compares the statewide increase in the foundation budget with the increases in a hypothetical "true cost" foundation, where the inflation adjustment reflected the actual cost of running Massachusetts schools. The true cost foundation uses the actual costs of tuition payments and health care. Other costs are increased over time to reflect changes in in-district enrollment and are adjusted by the change in statewide average teacher wage rates (for teachers and other professionals) and by appropriate national indicators for the cost of fuel and books for, respectively, school operations and purchases of educational materials.





From 1993 to 2000, the actual foundation budget used to increase state aid payments and to set required levels of local contribution rose at 4.6 percent per year – only slightly less than the 5.5 percent actual increase in cost. State school aid rose by 12.0 percent, as this was a period of large increases to bring districts to foundation, and actual school spending rose by 7.4 percent.

After 2000 the picture is much different. The foundation budget used in the state budget increased by 4.1 percent, while actual costs rose by 5.3 percent. Over this period, total school spending rose by 4.7 percent so spending was failing to keep up with rising costs. At 3.3 percent per year, state aid was rising much more slowly than school costs. Over the past 3 years, the actual increase in school spending, at 2.9 percent per year, fell even further behind the increase in actual costs (5.3 percent).

Chart 4 sums up the basic problem – over 17 years the actual cost of running state schools has risen more rapidly than the foundation budget allocations for school spending.

PART 2 - NEEDY VS. WELL-OFF DISTRICTS

MBAE's report *Every Child a Winner*, released in 1991, paved the way for the 1993 reform law. As its title suggests, this was an effort to help every child perform at high levels. As numerous studies have shown, minority and low-income students are far more likely to be struggling in school. The heaviest concentrations of these needy students are in the older, low-income cities, in communities that also lack the tax base to support the larger faculties and special programs necessary to address the needs of children who come to school with limited vocabularies and language skills.

The 1993 reform, then, was not just about overall school spending levels across the state – it was also about meeting the educational needs of students in low-wealth cities and towns. To understand how we have failed these students, we need to look separately at spending trends in different types of districts across the state.

To this end, this report divides all Massachusetts school districts into seven groups, based on the percent of needy students they serve and on their property tax wealth. Because minority status, low income (as measured by reduced-cost lunch eligibility), and limited English-language ability each are predictive – on average – of lower academic performance, districts have been divided into high, medium, and low need according to the combined percentage of students in each of these categories. An analysis of district spending showed that district property wealth (but not district personal income) was highly predictive of overall spending; districts were therefore also divided into low, medium, and high property wealth (EQV) 8.).

As a practical matter, there are no high-need, high-wealth cities nor any low-need, low-wealth towns. That leaves seven district types; these are listed below with a few of the largest communities in each group:

- **High Need, Low Wealth:** Springfield, Worcester, Brockton, Lowell, Lynn, Lawrence, New Bedford, Chicopee, Malden, Leominster, Revere, Chelsea, Fitchburg, Southbridge
- **High Need, Medium Wealth:** Boston, Framingham, Cambridge, Everett, Somerville, Salem, Waltham, Randolph
- **Medium Need, Low Wealth:** Taunton, Haverhill, Pittsfield, Westfield, Attleboro, Dudley-Charlton, Agawam, West Springfield, Quabbin Regional
- **Medium Need, Medium Wealth:** Quincy, Methuen, Weymouth, Peabody, Shrewsbury, Bridgewater-Raynham, Medford, Marlboro
- Medium Need, High Wealth: Newton, Plymouth, Brookline, Lexington, Barnstable, Braintree, Natick, Arlington, Woburn, Dartmouth
- Low Need, Medium Wealth: Wachusett Regional, Franklin, Billerica, Mansfield, North Attleboro, Tewksbury, North Middlesex, Easton

⁷ Students can be double- or triple-counted, so the maximum possible percentage is 300. At 193 percent, Chelsea has the highest percentage of needy students, followed closely by Lawrence (188 percent), Springfield (174 percent), and Boston (164 percent).

⁸ The abbreviation EQV refers to equalized property values – assessed property values reported by each city and town and then adjusted by the state Department of Revenue to reflect actual market values, thereby compensating for differences in assessed-to-market ratios across towns.

• Low Need, High Wealth: Andover, Chelmsford, Westford, Needham, Wellesley, Marshfield, North Andover, Reading, Winchester, Hingham

Expenditure Trends by District Type

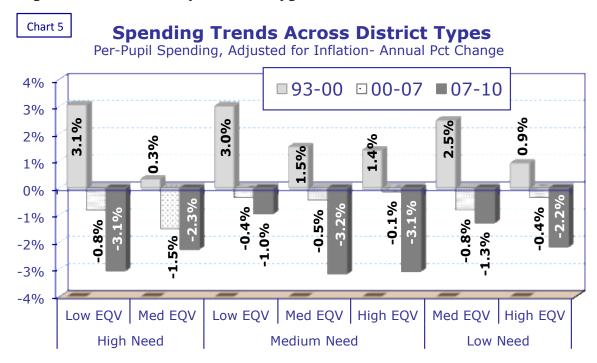


Chart 5 shows annual changes in per-pupil spending, adjusted for changes in the cost of running schools. The adjustment is calculated using the true cost foundation budget. For example, the actual per-pupil spending for high-need, low-EQV districts (the first bar at the left on the chart) was 6.4 percent; the cost of running those schools (including tuition for out-placed students, health insurance for school employees, increases in teacher salaries, and increases in the costs of books and fuel oil) increased at 3.4 percent. The inflation-adjusted increase – the difference between the nominal increase of 6.4 percent and the inflation index of 3.4 percent - was 3.1 percent, as shown on the chart.

The light grey bars, representing the period from 1993 to 2000, show that inflation-adjusted spending increased in all district types, although the gain in the high-need, medium wealth cities (Boston, Cambridge, for example – cities that already had very high per-pupil spending) was quite modest. The largest increases came in the neediest districts, exactly as the law intended.

In the years from 2000 to 2007, and again from 2007 to 2010, inflation-adjusted spending fell across all district types. Again using the neediest (high-need, low-

wealth) districts as an example, nominal spending (not shown on the chart) increased at 4.5 percent, down substantially from the 6.4 percent increases in the earlier period, while costs rose at 5.4 percent, pushing down inflation-adjusted spending by 0.8 percent per year.

Looking across the chart, we see that the decreases in this period were roughly the same for all district types.⁹

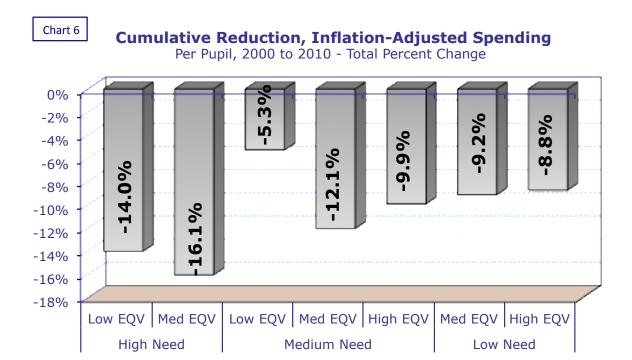
The decline has been even more severe since 2007. The nominal increase in spending for the neediest districts fell to only 2.3 percent per year. The data to calculate the true foundation is not yet available for 2010, but it's reasonable to assume that costs continued to rise at the same annual rate as in earlier years – for these districts, 5.4 percent a year. ¹⁰

Inflation-adjusted spending in the neediest districts, then, fell by 3.1 percent in the period from 2007 to 2010. The cumulative reduction in per-pupil spending in these neediest districts was 17.7 percent over the years from 2000 to 2010. Although all district types have experienced decreases, the cutbacks in districts with the highest proportion of low-income and minority students (left-hand side of the chart) have been almost twice as great as the reductions in districts with very few needy children (rightmost two bars).

_

⁹ The particularly large drop in non-health-care spending in the neediest district is <u>not</u> the result of differences in health-care cost change across districts. The increases in employee health care costs were actually slightly less in the high need, low wealth districts than in the rest of the state. Rather spending net of health care fell more in these districts because overall state aid and total spending grew less than in other districts.

¹⁶ As indicated above, the most important cost driver has been employee health insurance. Data from the Group Insurance Commission (GIC), which insures state employees, shows that annual increases in premiums were actually larger after 2007 than in the years just before.

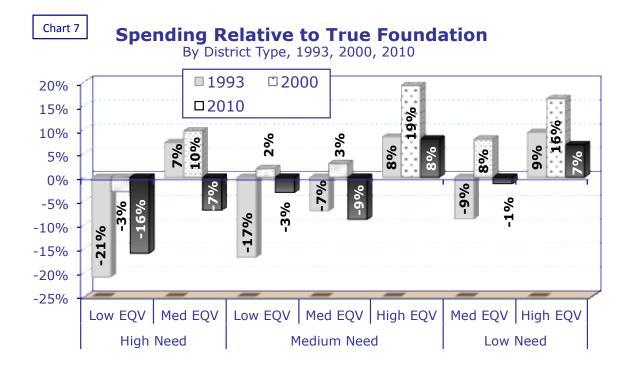


Using Foundation to Measure Adequacy

Jack Rennie, MBAE's founder and the driving force behind the 1993 education reforms, liked to say that the new law reversed traditional school finance. Instead of basing state aid on available funds, regardless of whether this was enough to educate students properly, the new law began by defining what schools needed, and then spending accordingly. Since many districts were spending far less than the foundation budget in 1993 – particularly districts in low-income cities – the long-term funding goal set in 1993 was not simply to help districts keep up with inflation, but to raise spending by more than the inflation rate in those districts that had not previously met their students' needs.

As we've seen, the inflation indicator used in the foundation budget did not accurately reflect the increasing cost of running Massachusetts schools. As a result, although all districts have reached foundation, they have not necessarily been able to increase spending to the levels needed to reach the programmatic goals (class-sizes, purchase of educational materials) envisioned in 1993.

Using the true cost foundation budget, we can measure the extent to which districts in each of our seven district types have, or have not, kept up with the 1993 goal, as shown in Chart 7.



In 1993, the last year before the reform, the high-need, low wealth districts were spending at 21 percent below foundation (actual and true cost foundation were identical in 1993). The years of large aid increases and modest growth in health care costs brought them almost to true cost foundation; they were just 3 percent below in 2000. By 2010, however, budgeted spending was 16 percent below true cost foundation. In short, most of the gains made in these neediest districts over the first seven years of reform have been lost over the last 10 years.

The wealthiest districts – those with high EQV – have managed to keep spending 7 or 8 percent above the true cost foundation. Spending in these districts, then, exceeds the spending goals set in 1993. While these districts have lost ground since 2000, their spending relative to true cost foundation is unchanged since 1993. The districts with very low poverty and medium property wealth are essentially at the true cost foundation goal (1 percent below). Thus, the most comfortable districts, with high property wealth and/or very low populations of needy students, remain at or above the inflation-adjusted foundation goal; none of the other district types are so fortunate, and the very neediest districts are the farthest below the spending goal.

Chart 8 shows per-pupil spending in relation to the foundation budget as used in the state budget and the true cost foundation budget for all district types in 2010. Except for the low-wealth, high-need inner city districts, all other district types were spending at levels that met the foundation budget as published by the state. However, as shown in Chart 7, most districts are spending well below the true cost foundation. Massachusetts is living up to the letter of the 1993 reform, but not its spirit.

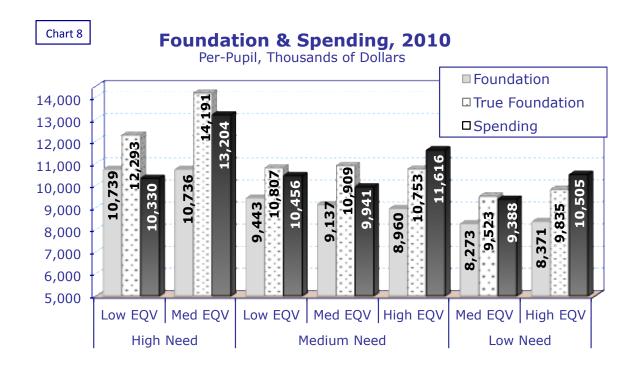


Chart 8 also shows us how the foundation budget for districts with needy students – just over \$10,700 per student in 2010 -- is much higher than for districts with few needy students – about \$8,300. In practice, the reform goal of spending more per student in the neediest districts has not been realized. At \$10,300, actual per-pupil spending in the older urban centers with low property wealth (Holyoke and Lawrence, but not Boston and Cambridge) in 2010 was slightly less than spending in the highwealth, low-need suburbs (\$10,500) – despite disparities in costs for the additional teachers, counselors, interventions, and training necessary to meet the needs of their very challenging student bodies.

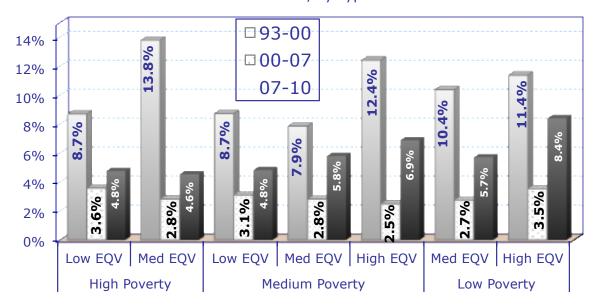
State Aid Not Meeting Equity Goal

The neediest districts receive the great majority of their school funding from the state government. In 2010, for example, state aid supplied 82 percent of school spending in the low-wealth, high-need districts. It follows, then, that the large decline in their spending relative to true cost foundation from 2000 to 2010 reflects much slower increases in state aid. In the last 3 years, aid growth was up slightly for needy districts but doubled for wealthy districts.

Chart 9

Increases in Chapter 70 State Aid, Per Pupil

Annual Increases, by Type of District



As we see in Chart 9, there has not been a period when aid to the high need districts grew at rates well above those to low-need districts. From 1993 to 2000, aid to all groups of districts was growing rapidly – somewhere from 8 percent to 14 percent a year. From 2000 to 2007 the growth in aid was much lower and almost universally low – ranging from 2.5 percent to 3.6 percent a year.

The Two Drivers of Aid Increases

Two key factors determine how much aid grows under the Chapter 70 formula. For low-wealth, high-need communities, aid is determined primarily by the difference between the spending goal – the district's foundation budget – and the amount its member towns are expected to raise locally, based on personal income and property wealth. Had the foundation budget increased at rates that reflected the actual increases in school costs (the rates shown here as the true cost foundation), we would have seen much greater increases in aid to the neediest districts.

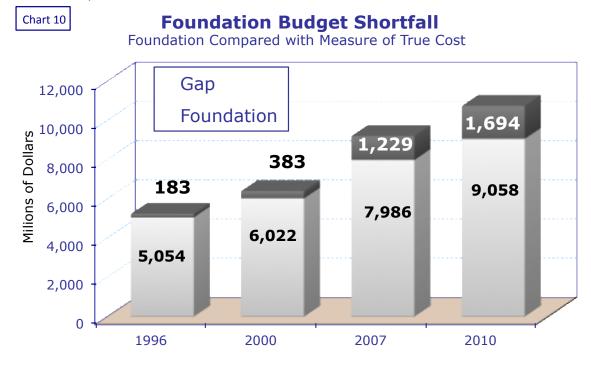
To assure that wealthier districts receive at least some state assistance, the revised aid formula sets as a goal that all districts should receive Chapter 70 aid equal to at least 17.5 percent of their foundation budgets. How quickly the aid increases needed to meet this goal are phased in determines how much aid to these districts increases. The fact that aid to the wealthier districts has grown more rapidly in recent years than

¹¹ Significant revisions to Chapter 70 were passed in the spring of 2006, including the "minimum aid" goal for wealth towns. There were changes in how the foundation budget was calculated, but no major changes to its bottom line.

aid to older cities reflects the high priority given to meeting this "minimum aid" provision even in a period of fiscal austerity.

Foundation Budget Shortfall

Chart 8 demonstrated that the true cost foundation was higher than the actual foundation. By 2010, this gap, totaled across all district types, amounted to almost \$1.7 billion, as shown in Chart 10 below.

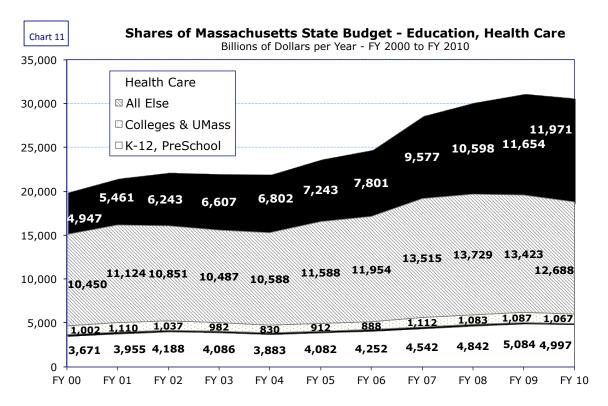


Any effort to close this gap would require both an increase in state aid but also an increase in local support of schools. In the neediest districts, all or almost all of the cost of any increase in the foundation budget would come from additional state aid. As we saw in Chart 8, the wealthiest districts, taken as a whole, are already spending more than the true foundation; in most cases, then, there would be no required increase in local spending. In wealthy districts not at the increased foundation, most of the adjustment would come through a required increase in local tax effort. A reasonable estimate is that it would cost the state government somewhere between \$800 million and \$1 billion a year in increased state aid payments to raise the foundation budget by \$1.7 billion.

PART 3 - THE LARGER PROBLEM OF HEALTH CARE COSTS

The problem of rising health care costs goes far deeper than education alone. Over the past 10 years, from FY 2000 to FY 2010, health care costs consumed 66 percent - fully two-thirds – of the entire increase in state spending. This included

Medicaid, the Group Insurance Commission (which provides health care to state employees) and, more recently, the cost of the state's universal health care law. This is shown in Chart 11 below.



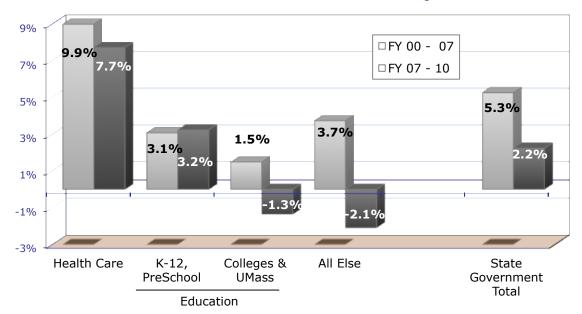
This extraordinary increase is primarily related to the overall cost increases in health care, rather than the adoption of the new Massachusetts health-care law. From 2000 to 2006 – before the new law was enacted – health care costs consumed 59 percent of all new spending. The problem is particularly difficult in hard budget times; from 2007 to 2010, health care costs in the state budget rose by \$2.4 billion while the total budget rose by only \$2 billion.

With revenues for everything other than health care caught in a squeeze between very high growth in health care costs and relatively small growth in overall revenues, there is no way to provide larger increases to state education. This is illustrated in Chart 12 below:

Chart 12

Average Annual Percent Change, FY 2000 to FY 2010

Elements of Massachusetts State Budget



Over the last 3 years, health care costs have risen at 7.7 percent per year while total spending has gone up at 2.2 percent. Pre-school and K-12 education saw an increase of 3.2 percent, reflecting the priority given to this area by the governor and the legislature. Higher education spending fell at 1.3 percent per year; taken together, all other areas of state government saw spending decline at 2.1 percent annually. These figures are in nominal dollars; adjusted for inflation, the annual changes would be even less.

Even these figures understate the problem, since, as we've seen, health care is itself a major component within K-12 spending. From FY 2000 to FY 2007 Chapter 70 education aid rose by \$700 million a year. Over this same period, school spending on employee health care rose by \$1 billion. In effect, schools had a net loss in state aid over these seven years.

CONCLUSIONS

Since 1993, successive governors and legislatures have faithfully worked to meet the school funding commitments as defined by the Commonwealth's historic education reform bargain – high standards and accountability for performance in return for equitable distribution of resources to meet these benchmarks. Educators have kept their part of the agreement and today Massachusetts students, on average, outperform the nation.

Yet, if the letter of the funding law has been honored, why are we are falling short in meeting the programmatic goals of the historic bargain as school systems grapple with huge budget shortfalls and student achievement gaps persist? The results of this analysis show that health care costs and other overhead expenses are crowding out classroom expenditures directly affecting student learning.

Controlling the overall cost of health care in Massachusetts is now the ultimate education issue. Absent a major change in the trend of health care costs, it is impossible to see how the state can keep all districts at foundation or cover the costs of the classroom resources promised in 1993. Even if a new source of revenue or significant change in employee health care costs or other expenses were to provide short term relief, these gains would be quickly lost if health care costs continue to rise at 10 percent or so each year.

Reducing school costs outside of the classroom is an imperative for schools and districts. Immediate steps at the state level include granting Massachusetts municipalities the ability to move employee health care benefits to lower-cost alternatives such as the state Group Insurance Commission, switch eligible retirees to federal Medicare or achieve savings through more efficient operation of school buildings, merging administrative costs across smaller districts, or other steps to gain efficiencies.

While spending alone does not guarantee high performance, it is clear that education services and outcomes will suffer if the gap between funds available and the actual foundation costs continues to grow. Since a \$1 billion increase in state aid is highly unlikely anytime soon, and since a \$1 billion savings from cost reduction (that is, lower health insurance costs, more fuel-efficient buildings, lower overhead) also seems unrealistic, every combination of options to address the problem must be considered.

Only then will Massachusetts have a school finance system that lives up to the vision first articulated by MBAE 20 years ago, a system that funds the educational programs and supports necessary to ensure that all students achieve at high levels and every student graduates prepared for success in college, career, and citizenship.

Acknowledgements

Edward Moscovitch of Cape Ann Economics and the Bay State Reading Institute developed the original foundation formula for MBAE in 1991 and 1992, conducted the analysis of current data, and is the author of this report. We thank him for bringing his unique perspective and expertise to this work and for his thorough and understandable review of the foundation budget's history and effectiveness.

MBAE is grateful for the support of The Boston Foundation, which funded this study. It was originally issued as part of the Foundation's *Understanding Boston* series.

This project was undertaken at the initiative of MBAE's Advisory Council. Advisory Council members **Jose Alvarez** and **Chris Gabrieli**, joined by MBAE Board members **Michael Widmer**, **Peter Nessen** and **Joseph Esposito**, provided guidance and direction to ensure that the right questions were asked and that the best evidence was assembled to produce valid findings and conclusions. We appreciate the great knowledge, experience and dedication to results-driven reform that all of these business leaders brought to this project.

