

**The State Auditor's Report  
on  
School Finance Reform  
in  
Massachusetts**

**Section 32 of Chapter 71  
of the Acts of 1993**

**August 1997**



**Office of the State Auditor  
Division of Local Mandates**

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**A. Joseph DeNucci, Auditor**

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## EXECUTIVE SUMMARY

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This report presents the results of the work of the Office of the State Auditor, Division of Local Mandates, assessing progress toward the goals established by the school finance reform initiative enacted as part of the Education Reform Act of 1993 (ERA).

The ERA school finance reform initiative rewrote Chapter 70 of the Massachusetts General Laws, the primary law governing state aid for public elementary and secondary education. The revised Chapter 70 expresses two clear goals and provides measures for evaluating progress toward these purposes. The first goal is to ensure an adequate level of spending in every school district. Adequacy is measured by the "Foundation Budget," a specific amount calculated annually for each district in light of local demographics – to allow for the basic day-to-day costs of providing classroom services. The second goal is to ensure that each community contributes a fair share of local fiscal resources to school support, in light of local wealth or "ability to pay." This goal is measured by calculating a specific fair amount annually for each city and town relative to property value and average personal income.

By comparing local school spending to each of these measures, the law designates each system as above or below Foundation, and above or below Effort. Based upon these designations, a series of calculations determines the annual amount of state aid and the minimum required local contribution for education. The overall goal is that by the year 2000, every school system will operate with at least an adequate budget, funded through a fair mix of state and local resources.

Toward these ends, the revised Chapter 70 has established an expectation that projected minimum spending for elementary and secondary education will increase over 1993 amounts by approximately 42%, or \$1.8 billion in the year 2000. Projected state aid is scheduled to support about 76% of the growth, with minimum local contributions supporting 24%. This effort would bring the annual total to almost \$6 billion, approximately \$6,562 per pupil. This per-pupil amount represents an increase of \$1,300 over the 1993 level, about 3.5% per year over the seven-year reform period.

The primary purpose of this study is to evaluate the amount of progress achieved through the investment of over \$1 billion in additional state and local resources through 1997. Further, in consideration of interests expressed during pre-study interviews with state and local officials involved in school finance, this study addresses two additional important concerns. First, we attempt to determine the purposes being served by the expenditure of additional school dollars. Finally, we review the status of other local government accounts to assess the stability of funding for non-school services in light of the current public interest in education reform.

This report is organized into six sections and a number of appendices. Chapter 70 is an inordinately complex law, invoking an array of interworking formulas and compound calculations. As few profess a full understanding of the school finance reform law, at the outset we attempt to explain its mechanics in terms useful to the reasonably interested party. Major findings of this work are highlighted below.

### **Survey of the Data: State and Local Contributions to School Support**

- In 1997 Chapter 70 state aid and minimum required local contributions are over \$1 billion more than 1993 appropriations, an increase of 23.7%. State aid of approximately \$772.7 million accounts for 76.6% of the increase. Cities and towns supported the balance, approximately \$236.6 million, so that 1997 spending approaches \$5.27 billion.
- State aid has grown by 60% over the four-year period. Minimum required local appropriations increased by almost 8%. This accelerated growth in the rate of state support has resulted in a substantial shift in the relatively low level of state contribution to school funding in Massachusetts. The state share has grown from about 30% in 1993 to 39% in 1997, appreciably closer to the national norm of 48%.
- Per-pupil spending is increasing at a slower rate than overall spending because enrollment growth diminishes the relative purchasing power of new appropriations.
- Most communities are spending more than strictly required under Chapter 70, approximately \$672 million more from 1994 to 1997.
- The majority (63%) of the \$772.7 million new Chapter 70 state aid was distributed to help below Foundation systems reach or progress to their adequate school spending targets. Minimum per-pupil aid guarantees consumed approximately 11%. Aid to address local effort, taxpayer equity concerns was about 14%. In sum, approximately 90% was distributed in furtherance of explicit reform goals. About 10% was based upon obligations outside the parameters of the school finance law: incentive aid for school district consolidation; school choice; and charter school reimbursements.
- Even though state school aid has grown substantially and the distribution to school districts is determined by an elaborate set of new formulas, aid distribution patterns do not differ appreciably from prereform experience. Below average wealth communities still receive approximately 67% of the aid. Average wealth areas still receive about 10%, and the share for above average wealth communities remains at 5%. Approximately 18% of school aid is distributed to regional school districts, similar to prereform patterns. See Appendix 1 for specific district data.

## **Progress Toward Adequate School Spending**

- Since 1994, the statewide Foundation Budget standard for adequate school spending has grown by approximately 16%, that is \$747.7 million for a total of \$5.3 billion in 1997. This rate of growth is 2 1/2 times greater than the rate of inflation over the period. Over the next three years, it is projected to increase by another \$700 million to exceed \$6 billion, a 32% increase over the reform schedule.
- *Required school spending* (from both state and local resources) has grown by nearly 19%, that is over \$837 million since the first year of the process.
- *Actual spending* (including local appropriations beyond the minimum required amounts) is projected to exceed the 1997 Foundation standard by approximately \$42 million. Chapter 70 calculations do not recognize this extra local effort.
- Although the overall statewide assessment appears to be positive, this view of the data does not show how above Foundation spending (more than adequate) in some areas offsets below Foundation spending (less than adequate) in others. Four years into reform, there are more districts (and more pupils) with less than adequate required spending, \$256.3 million under goal in 1997, or \$399 per pupil.
- Even so, this shortage is significantly less than after the first year of reform, when below Foundation systems spent nearly \$395 million, or \$775 per pupil less than adequate amounts. The gap between goal and required spending decreased by 35% over the period.
- In terms of *required school spending*, nearly 43% of the school districts either achieved Foundation (16) or at least got closer to goal (128). At the same time, almost 12% fell further below goal than at the beginning of the process (40). About 34% (115) were able to maintain their above foundation status, although most are not as far above target as in the beginning. Thirty-eight previously above Foundation systems fell below adequate spending levels. See Appendix II for specific district results.
- *Actual school spending* shows more positive results. By this measure, nearly 50% of school districts either achieved Foundation (37) or at least moved closer (126). Approximately 6% fell further below goal than at the beginning of the process (20). About 40% maintained their above Foundation status (142), and about 1/3 of these are not as far above target as in the beginning. Twelve previously above Foundation systems fell below. See Appendix III for specific district results.
- By either measure, negative results are strongly related to rapid enrollment growth and corresponding growth in Foundation Budgets. Positive results correlate strongly to declining

or moderately growing enrollments and Foundation targets. There is no consistent correlation between growth or decrease in Foundation Budgets and growth or decrease in required school spending. This dynamic works contrary to the ultimate goal of achieving at least adequate spending levels in every school district by the year 2000.

- Nonetheless, the historical breadth of the disparity in per-pupil expenditures found in wealthier and poorer communities is diminishing. See Appendix IV for specific district data.

### **Progress to the Fair Local Effort Goal**

- Under the theory of Chapter 70, the fair local effort problems are twofold. Some communities spend more than what is considered fair; they “work too hard” to support their schools. Others spend less than their fair amounts; they do not “work hard enough.”
- Consistent with the intent of Chapter 70, as a group 78 communities that were working too hard at the beginning of the process experienced decreases in their required local contributions by approximately \$21 million. Since the amount that is considered fair for these cities and towns increased by \$54 million over the period, only about \$15 million in excess effort remains.
- Also as intended, 169 communities that were not working hard enough and had less than adequate school spending experienced increases in their required local contributions, \$157 million for the group. However, since the fair amount for the group increased by \$151 million, the expenditure of \$157 million effectively bought only \$6 million worth of progress to goal.
- There were 104 municipalities that began the process \$730 million below fair local effort. Yet, because they had more than adequate school spending, Chapter 70 generally only requires this group to maintain local effort. Although required local contributions for this group increased by approximately \$100 million, the growth in the fair amount for this relatively wealthy group outpaced required local appropriations by \$156 million. Appendix V shows the results for each community.

### **School District Expenditure Patterns/What is the Money Buying?**

- Chapter 70 required spending (from state and local resources) in 1995, for a sample of 50 school districts, was approximately \$823 million, an increase of nearly \$71 million over 1993 prereform levels. New state aid supported over 68% of the increase. These districts serve about 146,000 pupils, 17% of the statewide enrollment.

- Per-pupil expenditures as determined from the End-of-Year Pupil and Financial Reports for the 50 districts increased approximately 15% from 1993 to 1995, from \$5,315 to \$6,121. The data shows that two years into reform there has been a slight shift of dollars away from noninstructional items to the instructional categories of spending.
- Instructional services comprised about 61.8% of per-pupil spending in 1993, and 64.2% in 1995. This 2.4 percentage point shift represents \$643 additional instructional services spending per pupil.
- Most of this amount is in teaching services (including salaries for teachers, aides, clerical and support staff, supplies, materials, and travel), which grew by \$516 per pupil. Also noteworthy is the increase in allocations to textbooks, by \$25 per pupil.
- Reported expenditures for noninstructional services decreased as a proportion of per-pupil spending, from 38.2% in 1993 to 35.8% in 1995. The bulk of this decrease was in the proportion for operations and maintenance, at \$14 less per pupil, and general administrative costs, at \$19 less per pupil.
- The End-of-Year Pupil and Financial Report format is not tailored to measure expenditures toward many of the academic objects of education reform. For example, it does not detail expenditures for curriculum development, instructional materials to support new curriculum frameworks, science laboratories, or foreign language classes.
- The 50-district sample is composed of 25 above Foundation systems and 25 below Foundation systems. Data for these two subsets shows significant differences in experience. The average per-pupil spending increase for the below Foundation group was 22% (\$1,043), for a 1995 total of \$5,705. This group has made greater changes in their spending patterns than the above Foundation group.
- The average per-pupil spending increase for the above Foundation group was \$388, or 6% over the two-year period, for a 1995 total of \$6,859. Typically, this group allocated greater portions of their prereform funds to direct/instructional services than the below Foundation group. The above Foundation group allocated about 65% of its per-pupil resources to instructional services in 1993, and 66% in 1995.
- For the below Foundation group, instructional services spending grew from 59.7% of total per-pupil amounts to 63.2%. This shift represents an additional \$819 per pupil, and brings the group allocation substantially closer to the prereform practice in the above Foundation group. Most of this additional spending is in teaching services, \$693 per pupil. The average reported below Foundation expenditure for textbooks increased by \$28 per pupil for a total of \$50 in 1995.

- Overall, the 50-district sample employed 10,100 teachers in 1995, 446 (4.6%) more than in 1993. About 242 teachers left these districts under an early retirement incentive program, so that new hires approached 688. The pupil/teacher ratio for the sample went from 16.1/1 in 1993 to 15.8/1 in 1995. For these districts, the additional teachers hired essentially worked to maintain prereform ratios.
- Within the 50-district sample, the 25 below Foundation systems increased their teaching staffs by 318, more than twice the rate of the 25 above Foundation group that hired 128 additional teachers.
- From 1993 to 1995, the statewide average teacher salary grew by 2.8%, \$1,065 for a total of \$38,521. This overall rate of growth is no greater than prereform experience.
- The data shows significant differences in the rates of growth in teacher salaries in the 25 above Foundation districts compared to the 25 below Foundation districts. Over the period, the average teacher salary in the above Foundation group increased by 2.4%, or \$903, bringing the 1995 group average to \$39,145. The increase for the below Foundation group was \$1,496 (4.2%), bringing the 1995 group average salary to \$37,459 – still less, but closer to the prereform level in the above Foundation group.

### **Non-School Spending/The Status of Other Local Government Accounts**

- Statewide municipal General Fund expenditures grew by almost \$680 million (7.8%) from 1993 through 1995 for a total of approximately \$9.4 billion. School spending accounts for about 64% of the growth, and non-school spending accounts for 36%.
- Net increases in direct distributions of state (Cherry Sheet) aid to cities and towns approached \$435 million over the two-year period, and supported approximately 64% of the overall growth in local spending. Of this amount, almost \$366 million was state aid for various school purposes (Chapter 70 and other school programs). About \$69 million was state assistance for general government purposes.
- Statewide local spending for education grew at over three times the 3.6% rate of inflation over the period, as did spending for public safety functions.
- Non-school spending exceeded the rate of inflation in 186 communities, and failed to keep pace with inflation in 164 cities and towns.
- For the group of communities where non-school spending grew at less than the inflation rate, the reasons were primarily reductions in snow removal costs, decreases in expenditures for debt service and fixed costs, and reallocation of the cost of certain school employee benefits

from non-school fixed costs to the education category of spending. Appendix VII shows the range of change in expenditures for non-school services from 1993 to 1995 for each city and town.

### **Concluding Comments**

- Chapter 70 has established an expectation that projected minimum spending for elementary and secondary education will increase over prereform (1993) amounts by about 42% or \$1.8 billion in the year 2000. Projected state aid is scheduled to support 76% of the growth, with minimum local contributions supporting 24%.
- To meet the school finance reform schedule, an additional \$791.2 million will be required to support Chapter 70 obligations over the next three years. Projected growth in minimum local contributions will support almost 1/4 of this amount, approximately \$64.5 million per year. New Chapter 70 aid will support the remainder, at about \$199.2 million per year.
- Factoring the sum of total (not just new) estimated annual spending over the seven-year period will bring the cumulative state and local investment to almost \$37 billion.
- Four years into reform, the growth in the level of actual school spending is resulting in considerable progress to the Foundation Budget goals. Required local contributions have decreased for many communities that were working too hard to support their schools. Local contributions have grown in most of the communities that did not work hard enough.
- Nonetheless, particularly where higher rates of enrollment growth cause higher rates of growth in Foundation Budget targets, minimum required spending does not always keep pace. As school finance reform moves forward, this is an issue that merits further consideration.
- Although the Legislature and cities and towns are meeting their obligations under the school finance reform schedule, key programmatic initiatives to foster improvement in student performance lag behind. This lack of progress frustrates the overall objectives of the Education Reform Act, and dilutes the value of the state and local investments made over the first four years of implementation.



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**OFFICE OF THE STATE AUDITOR  
DIVISION OF LOCAL MANDATES**

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**A. JOSEPH DeNUCCI, AUDITOR**

**AUGUST 1997**

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## INTRODUCTION

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This report presents the results of work of the Office of the State Auditor, Division of Local Mandates, assessing progress toward the goals established by the school finance reform initiative, enacted as part of the Education Reform Act of 1993 (ERA)<sup>1</sup>. The ERA was drafted, debated, and enacted against the backdrop of litigation challenging the constitutionality of public school finance in Massachusetts. While this challenge was originally filed in 1978, the case was twice informally placed on hold to allow for implementation and evaluation of legislative attempts to equalize educational resources across the state<sup>2</sup>. Fifteen years following the original complaint, the state Supreme Judicial Court issued its decision, *McDuffy v. Secretary of the Executive Office of Education*, 415 Mass. 545 (1993).

In *McDuffy*, the Supreme Judicial Court declared that the Commonwealth was not fulfilling its constitutional duty to educate all public school children, “. . . whether they be rich or poor and without regard to the fiscal capacity of the community or district in which such children live.”<sup>3</sup> While the Court allowed that the state may require cities and towns to participate in school finance, it emphasized that it is ultimately the obligation of the state “. . . to devise a plan and sources of funds sufficient to meet the constitutional mandate.”<sup>4</sup>

On June 18, 1993, three days after the *McDuffy* decision was issued, the ERA was signed into law. While the Chapter 70 school finance amendments are a significant part of the Act, the ERA is much more than a finance reform measure. It is a comprehensive plan to implement major changes in public education in this state. Toward the overall objective of improving student performance, the law provides for state standards of achievement, measures of competency, and an array of programs, regulations, and guidelines intended to foster improvement.

ERA programs span from early childhood to adult education services, from instructional technology to school-based human services centers. Among other things, the law calls for

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<sup>1</sup> The ERA became law by St. 1993, c. 71. Section 32 of the Act rewrote Chapter 70 of the General Laws, the primary law governing state aid for public elementary and secondary education.

<sup>2</sup> St. 1978, c. 367, s. 70C rewrote the then-existing version of Chapter 70 of the General Laws “. . . to promote the equalization of educational opportunity [and] to reduce the reliance upon the local property tax in financing public schools . . .” Seven years later, St. 1985, c. 188, s. 12 provided Equal Educational Opportunity Grants “. . . to accelerate the achievement of the objectives [of Chapter 70.]”

<sup>3</sup> *McDuffy v. Secretary of the Executive Office of Education*, 415 Mass. 545 (1993).

<sup>4</sup> *Id.*

statewide curriculum guidelines for core academic subjects, and statewide student testing that will serve as standards for awarding high school diplomas. It provides for teacher and administrator performance evaluations, professional development, and recertification of teachers every five years. Moreover, it establishes an evaluation process for each school, and provides for state receivership of any “chronically underperforming” school district.

While the ERA authorizes numerous categorical state grants for specific programs, the primary state contribution to the cost of public education is provided through Chapter 70 of the General Laws, as amended by the ERA. The revised Chapter 70 expresses the intent of the Legislature to provide school aid estimated to approach \$2.66 billion<sup>5</sup> by the year 2000, more than double the 1993 prereform amount. For the first time in Massachusetts, the law sets an annual “Foundation Budget” for each school district, to define an adequate level of school spending to be supported by a combination of state and local appropriations. Also for the first time, state law determines the annual minimum amount of local appropriations to be made for school support. The overall goal is that each school system will be spending at least its adequate Foundation Budget amount by the year 2000, through a fair mix of state and local resources.

This study of the school finance reform aspect of the ERA is designed to measure progress over the first four years of implementation, 1994 through 1997, toward the goals explicitly stated in Section 1 of the revised Chapter 70: fair and adequate funding for public schools. We did not attempt to determine whether any aspect of the ERA fulfills the constitutional standards articulated in the *McDuffy* decision, or to evaluate programmatic or student performance progress. While much of the work of the State Auditor’s Division of Local Mandates is to determine the financial impact of unfunded state mandates on cities and towns, the ERA was enacted notwithstanding the provisions of the Local Mandate Law<sup>6</sup>. Accordingly, this study was conducted under Chapter 126 of the Acts of 1984, a measure authorizing the State Auditor to review any law or regulation having a significant financial impact on cities and towns, and to submit a report on the results to the General Court.

The primary purpose of this report is to provide an evaluation of the amount of progress achieved through the investment of over \$1 billion in additional state and local resources through 1997. In Sections 1 and 2 of this work, we provide overviews of the mechanics of the school finance

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<sup>5</sup> Estimate by the state Department of Education.

<sup>6</sup> G. L. c. 29, s. 27C, the Local Mandate Law, generally provides that the Commonwealth shall assume the cost of state-mandated expenses. Nonetheless, the General court is free to override or suspend its application, and did so by including language to that effect in Section 67 of the ERA.

reform law and the related data. In Section 3, we report progress toward the first major goal of Chapter 70: to achieve adequate spending levels in every school district. Section 4 addresses the second major goal: to ensure that each community contributes a fair level of local resources for school support, relative to local wealth or “ability to pay” factors.

In light of interests expressed during pre-study interviews with a variety of state and local officials concerned with school finance, this study addresses two additional, important questions. In Section 5, we examine school district expenditure patterns prereform and two years into reform, and attempt to determine the purposes being served by the expenditure of additional school dollars. Finally, in Section 6, we review the status of other local government accounts to assess the stability of funding for non-school services in light of the current public interest in education reform.

### **Technical Notes**

Data for this study was provided by the Massachusetts departments of Education and Revenue, unless otherwise noted. Excepting citations to laws or other research sources, references to years are state fiscal years.

## **OVERVIEW OF THE MECHANICS OF THE SCHOOL FINANCE LAW / CHAPTER 70 OF THE GENERAL LAWS**

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As signed into law on June 18, 1993<sup>1</sup>, the revised Chapter 70 spans about 20 pages; 14 of these contain over 50 definitions. About half of the definitions relate to calculating Foundation Budgets, which establish adequate spending amounts for each school district. The other half relate to the various local and state financial obligations established by the law. A single definition may relate back to as many as six distinct formulas contained in other definitions. Six major Acts contain over 30 sections amending Chapter 70 or affecting its application<sup>2</sup>. Few profess a full understanding of this complex law designed to accomplish a very clear goal: fair and adequate public school spending.

This overview of the mechanics of Chapter 70 is an attempt to explain the broad concepts behind an array of interworking formulas in layman's terms. Using the law as in effect for the 1997 school aid distribution, we describe the major variables and outcomes that determine state and local contributions to school finance across the communities of the Commonwealth. With the aim of keeping this presentation as simple as possible, we do not describe every nuance and exception. For this reason, this overview omits any discussion of school choice and charter school financing<sup>3</sup>.

Using concepts both explicit and implicit in the law, Chapter 70 is presented as a series of four steps for determining state and local obligations. Step 1 is the calculation of the local Foundation Budget to define an adequate school spending target. Step 2 explains the local funding effort standards designed to equalize the burden of supporting schools amongst cities and towns with varying personal incomes and revenue bases. Step 3 shows preliminary calculations for state aid and local contribution amounts, and Step 4 describes the methods for determining final state and local contributions.

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<sup>1</sup> St. 1993, c. 71, s. 32.

<sup>2</sup> St. 1993, c. 151; St. 1993, c. 495; St. 1994, c. 60; St. 1995, c. 38; St. 1996, c. 151; St. 1996, c. 204.

<sup>3</sup> The School Choice Law is the topic of an upcoming report from this office.

## **The Foundation Budget, Adequate Per-Pupil Spending**

**STEP 1.** Each year the law sets a Foundation Budget, a minimum school spending target for each school system. Spending at the Foundation level satisfies the adequate per-pupil spending intent of the law. Nothing suggests that school systems are limited to this adequate standard, but state aid is not geared to supporting voluntary, above Foundation spending beyond certain minimum guarantees.

For initial Foundation Budgets, the law assigned generic cost values to various student enrollment categories related to grade level and type of program. For example, the allotment was \$4,203 for each elementary school pupil; \$4,408 for each middle school pupil; \$4,598 for each high school pupil; and \$7,214 for a vocational program student.

An in-house special needs pupil would add \$14,483 to the Foundation Budget<sup>4</sup>, while a bilingual pupil would add \$5,314. Depending upon grade level, each low-income pupil could add up to \$1,952 on top of the student's enrollment or program category assignment. Each of these cost values is derived from 19 distinct salary, equipment, maintenance, and program support items<sup>5</sup>. In general terms, the initial Foundation Budget for each community was the sum of these per-pupil cost values multiplied by the corresponding enrollment figures for the district.

For subsequent years, each school system's Foundation Budget is adjusted to reflect enrollment changes and inflation. In 1994, the statewide Foundation target was over \$4.57 billion, averaging \$5,572 per pupil. For 1997, the target rose by 16% to exceed \$5.3 billion, averaging \$6,048 per pupil. Since enrollment is the major variable determining the Foundation Budget for a particular community, those with greater enrollments generally have greater Foundation Budgets. For example, with Foundation Enrollment<sup>6</sup> at 60,614 pupils in 1997, Boston's Foundation Budget is about \$432 million. The next greatest Foundation Budget is in Springfield, about \$167.1 million. Springfield's 1997 Foundation Enrollment is 23,755 pupils. At the other end of the spectrum, the island community of Gosnold with only six pupils has the smallest Foundation Budget at \$24,374. The median 1997 Foundation target is about \$8.7 million; median enrollment is 1,512.

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<sup>4</sup> The law does not allow for the actual number of special needs students. It uses an "assumed" special needs enrollment, that may be greater or less than actual experiences.

<sup>5</sup> The law provides that salary items be adjusted for labor market area differences.

<sup>6</sup> In general terms, Foundation Enrollment is the head count of pupils for which a school district is financially responsible. Pupils attending regional schools are included in the Foundation Enrollment for the regional school district.



By comparing the prior year's required spending to the current year's Foundation Budget, the law designates each school system as either above or below Foundation—theoretically, either above or below “adequate” per-pupil spending. Depending upon this designation and the local funding effort designation described below, different mixes of state and local funding commitments may be required.

### **Local Effort, Taxpayer Fairness**

**STEP 2.** The law sets the Gross Standard of Effort (GSE) for each city and town, the maximum amount of school spending that will be required from revenues raised at the local level. Localities may spend more, but the law will not require more. The GSE serves to fill the local taxpayer fairness intent of the law, which is to equalize the burden of supporting schools amongst cities and towns. The GSE also serves as the local effort target, presuming that each municipality should contribute own-source revenues as if all were levying taxes for schools at the state-average rate. Although there are circumstances where a city or town will not be required to spend at its GSE level, the GSE is the initial measure to determine whether local contributions exceed or fall below what is fair in relation to other communities. For purposes of simplicity, we refer to the GSE as the “fair amount.”

The law established an initial fair amount for each municipality in 1994, by applying an assumed tax rate of \$9.40 to each \$1,000 unit of adjusted equalized property value<sup>7</sup>. For subsequent years, it is the prior year's fair amount multiplied by the municipality's Municipal Revenue Growth Factor (MRGF). The MRGF attempts to measure the growth in local resources from year to year, presuming that a fair portion of the growth should be available for school support.

By this measure, cities and towns together were theoretically capable of providing \$3.98 billion for the support of public schools in 1994. This figure increased over 9% for a 1997 statewide total exceeding \$4.34 billion. This capacity, however, is not spread equally across municipal borderlines.

For example, Boston has the greatest fair amount in 1997, about \$287 million, followed by Newton with nearly \$150.9 million. Rehoboth falls at the median level with approximately \$6.3 million. Small communities like New Ashford and Monroe complete the range with fair amounts of about \$163,000 and \$99,000, respectively<sup>8</sup>.

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<sup>7</sup> Equalized property value is adjusted by the ratio of the local average income to the state average income.

<sup>8</sup> For purposes of this discussion, we do not allocate “effort” to any regional school membership.

By comparing the prior year's required local contribution to schools (not total school spending, that would include Chapter 70 aid) to the current year's fair amount, the law designates each school system as either above or below Effort—theoretically, either contributing more or less than a fair share of local resources to school support relative to other communities.

## **Preliminary State and Local Contributions**

**STEP 3.** The law establishes preliminary minimum state aid and minimum local contribution amounts for the year. These initial minimums hold as final requirements, unless specific local variables generate a different result as happens in a majority of school systems. See Figure 1.1.

### **Preliminary State Contributions**

Regardless of the local status relative to adequate school spending and Effort, in general terms the law guarantees the prior year's Chapter 70 amount, as may be adjusted, plus an amount per pupil. The adjusted prior year's amount, Base Aid, does not include any prior Overburden or Equity Aid allotments, described below. The per-pupil amount, termed Minimum Aid, is \$75 for 1997<sup>9</sup>.

### **Preliminary Local Contributions**

The amount of the Preliminary Local Contribution depends upon the local status relative to the fair Effort and Foundation targets described above. By comparing the prior year's minimum required spending amounts to the current year's targets, each community is designated as above or below Effort and above or below Foundation. Three general rules flow from these designations.

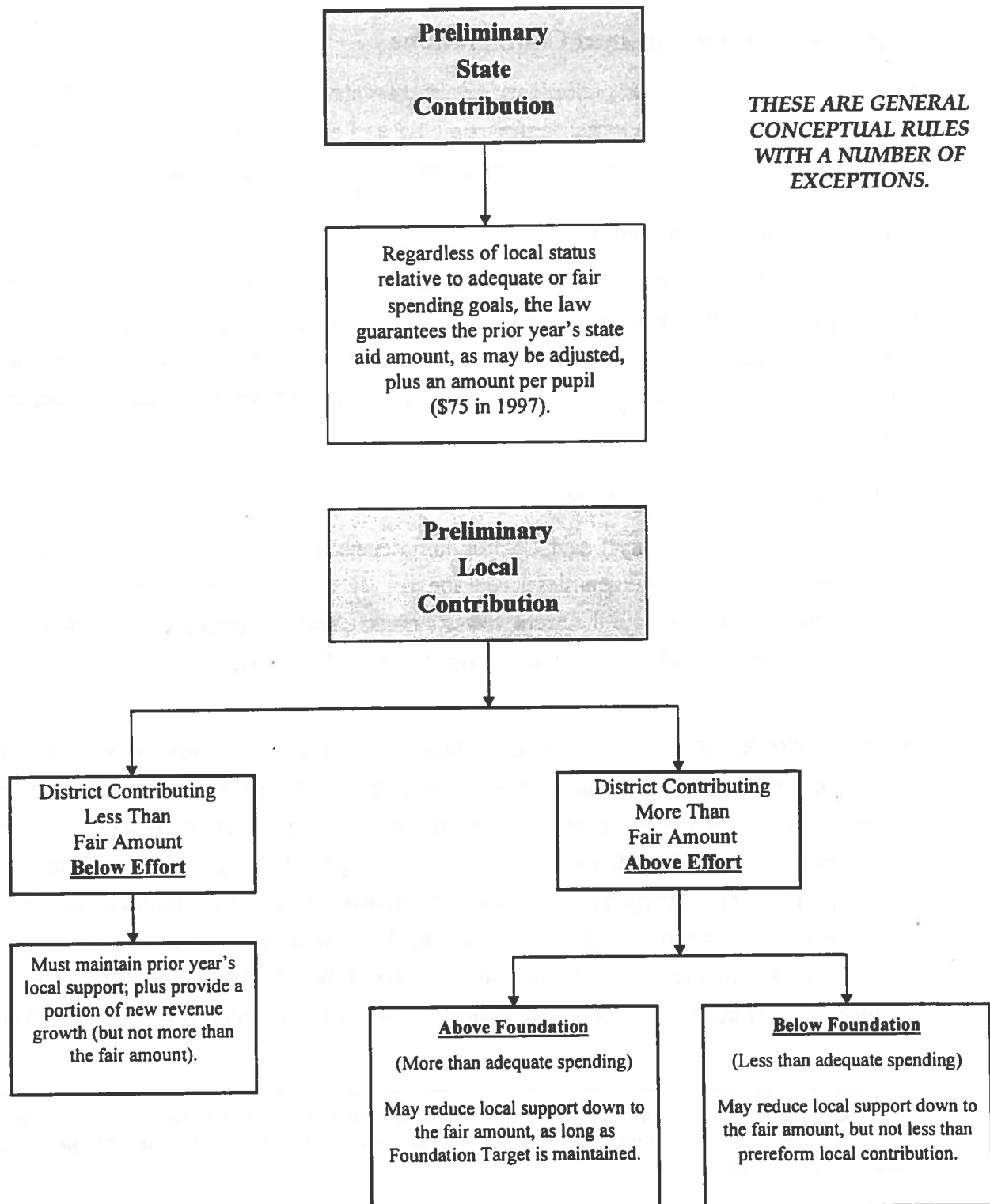
**A. Below Effort:** For districts that contribute less than a fair amount of local resources to schools, the law requires maintenance of last year's local support plus a portion of estimated new revenue growth, as determined by the MRGF. The MRGF is calculated for each community by the Department of Revenue, assuming a 2 ½% increase in the local levy limit, and estimating new property growth and unrestricted local receipts. Increases in state general revenue sharing are included as determined by the legislature from year to year. On average, the 1997 Preliminary Local Contribution for BELOW EFFORT districts requires a 2.49% increase over the 1996 local contribution. The 1997 MRGFs range from 7.38% to 0.00%.

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<sup>9</sup> 1994 Minimum Aid was \$50 per pupil; 1995 was \$25; and 1996 was \$75. Projections based upon a provision of the 1997 state budget (St. 1996, c. 151, s. 651) are that only \$53 of the \$75 Minimum Aid per pupil will be included in 1998 Base Aid.

Figure 1.1

**1997 Preliminary State and Local Contributions to School Support  
(Compare 1996 Spending to 1997 Goals)**



This preliminary rule applies to all BELOW EFFORT districts, regardless of their Foundation Budget status. If these calculations result in a Preliminary Local Contribution greater than the fair amount (see Step 2), only the fair amount will be required.

- B. Above Effort and Above Foundation:** In theory, the law sees these districts as spending more than adequate amounts, but dedicating local resources to schools at a rate greater than what is fair in relation to other communities. Accordingly, these districts may reduce their prior local contributions down to their fair amounts, but not to the extent that they would fall below their Foundation Budget amounts.
- C. Above Effort and Below Foundation:** These districts are viewed as contributing more than a fair share of local resources, yet still falling short of the adequate school spending standard. They may reduce their prior local contributions down to their fair amounts, but not less than their prereform local contributions.

## **Final State and Local Contributions**

**STEP 4.** For final calculations, the status of districts relative to Foundation and Effort targets are redetermined, comparing the current year's preliminary factors to the current year's goals. To redetermine Foundation status, the law tests whether the sum of preliminary state aid plus either the calculated Preliminary Local Contribution or the fair local share is sufficient to achieve or maintain the Foundation Budget. For certain communities where the calculated Preliminary Local Contribution is still less than the fair amount, the formula assumes the value of the fair amount for the Preliminary Local Contribution<sup>10</sup>. As shown in Figure 1.2, if preliminary state and calculated or assumed local contributions are sufficient to achieve or maintain the Foundation Budget (i.e. there is no Foundation Gap), then as a general rule the preliminaries become the final requirements<sup>11</sup>. If the preliminaries are insufficient to the Foundation target, these districts are again BELOW FOUNDATION, and further adjustments to the calculated preliminary state and local contributions will be made.

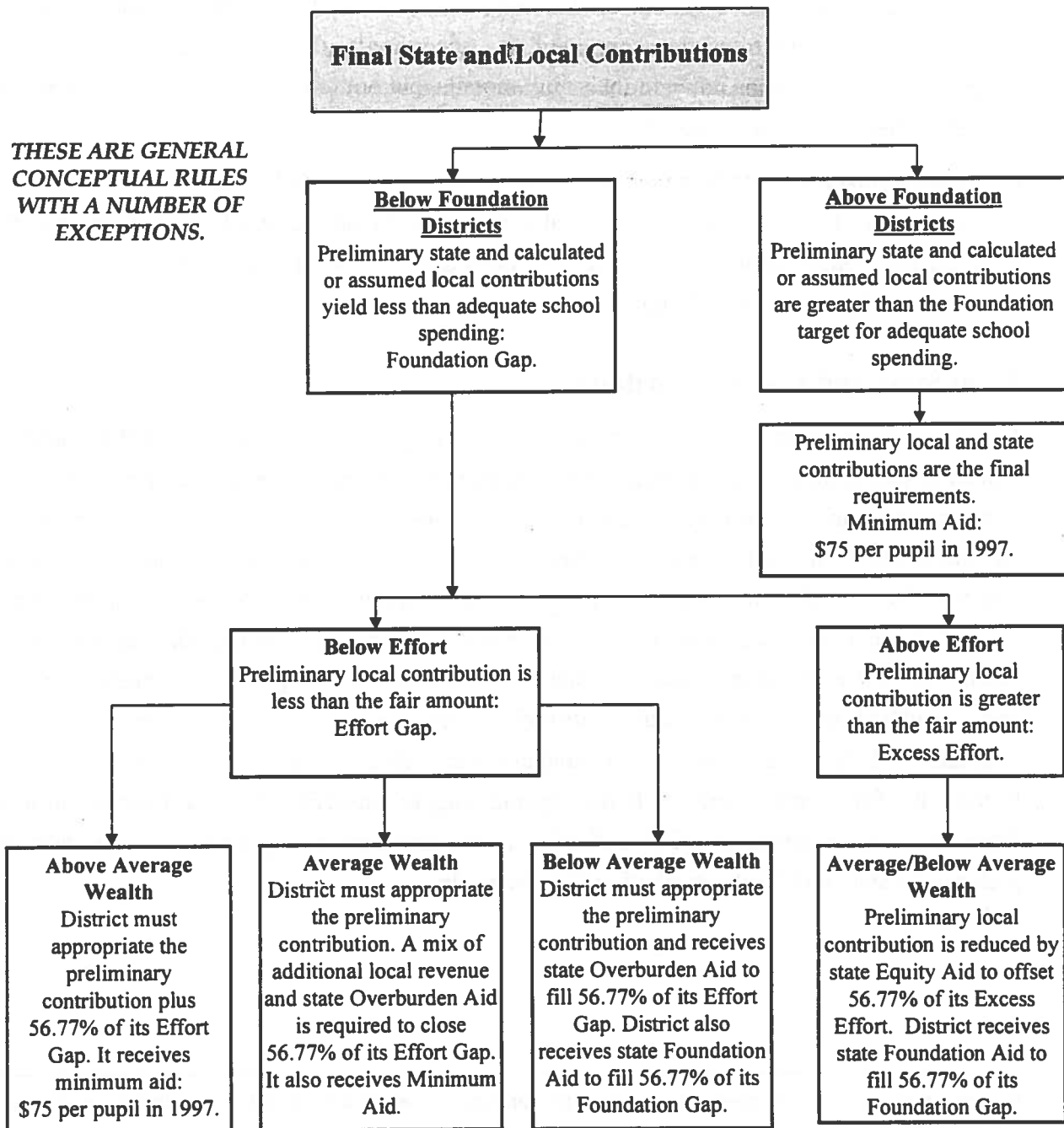
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<sup>10</sup> At this point, the formula uses either the total fair amount, or a lesser amount if less is necessary to achieve the Foundation Budget.

<sup>11</sup> As an exception to this general rule, a 1995 budget amendment provides Overburden Aid for certain communities in which the average personal income is less than the state average, even though they have no Foundation gap.

Figure 1.2

**1997 Final State and Local Contributions to School Support  
(Compare Preliminary 1997 Factors to 1997 Goals)**



*As explained in the narrative, all districts receive Base Aid in addition to the types shown here. All districts are guaranteed at least \$75 per pupil in Minimum Aid; this entitlement is offset by any Foundation Aid. Final local contributions may be further reduced by an excess construction debt factor, or a Department of Revenue waiver.*

These further adjustments are driven by the local Effort status, as redetermined, and the local wealth status. Effort status is redetermined by comparing the calculated Preliminary Local Contribution to the fair amount. Wealth status is measured by the ratio of the local adjusted equalized property valuation per pupil to the state average, \$452,908 for 1997. If the ratio is less than or equal to 95% of the state average, the community is considered below average wealth. If it is greater than 95% and less than 120%, the community is considered average. A ratio equal to or greater than 120% is above average.

Four general rules flow from various combinations of the redetermined Effort and wealth statuses for BELOW FOUNDATION districts. Three of these rules apply to BELOW FOUNDATION districts that are still BELOW EFFORT in light of Preliminary Local Contributions; these districts have an Effort Gap. The fourth rule applies to BELOW FOUNDATION districts that are still ABOVE EFFORT in light of the preliminaries; these districts have Excess Effort.

**A. *Below Effort, Above Average Wealth:*** In theory, these districts are spending below adequate levels, yet they have the local fiscal capacity to support their Foundation Budget targets. The law requires these districts to close their Effort Gaps—the difference between their Preliminary Local Contribution and their fair amount—by increments over the seven year education reform schedule, so they will reach their Foundation targets by the year 2000. The increment, known as the Foundation Percentage, is 56.77% for 1997<sup>12</sup>. Accordingly, these districts must appropriate an amount to support their Preliminary Local Contribution plus 56.77% of their Effort Gap for 1997. As they are deemed capable of supporting their schools with little state assistance, they receive only the Preliminary State Contribution: Base Aid and per-pupil Minimum Aid.

**B. *Below Effort, Average Wealth:*** The law considers these districts capable of reaching their Foundation Budget targets by the end of the education reform schedule, but recognizes the burden that would result if they were required to meet their fair Effort standards immediately. In this case, the district must appropriate its Preliminary Local Contribution plus a portion of the amount of its Effort Gap to be closed for the year (56.77% for 1997). On a sliding scale based on local wealth, the closer the district is to the above-average wealth benchmark, the greater the required local Effort. Along this scale, the district may be required to provide from a fraction of a percent up to 25% of the amount of the Effort Gap to be closed for the

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<sup>12</sup> The Foundation Percentage was 19.94% for 1994; 35.90% for 1995; and 44.85% for 1996.

year. State Overburden Aid provides the balance, between 99.99% and 75%. In sum, these districts receive Base Aid, Minimum Aid, and Limited Overburden Aid.

**C. *Below Effort, Below Average Wealth:*** Compared to the local fiscal capacity of others, these districts are considered least capable of achieving their fair Effort and adequate school spending targets without state assistance. In this case, the law requires only the Preliminary Local Contribution. The state provides Overburden Aid, assuming 100% of the Effort Gap to be filled for the year, as well as Foundation Aid to provide 100% of the Foundation Gap to be filled for the year (56.77% for 1997)<sup>13</sup>. Guaranteed Base Aid is also provided.

**D. *Above Effort, Average or Below Average Wealth:*** These BELOW FOUNDATION districts are viewed as incapable of reaching their adequate school spending targets, even though their local contributions exceed what is considered fair. In this case, state Equity Aid is provided to offset Excess Effort (56.77% in 1997), and the Preliminary Local Contribution is reduced by this amount. State Foundation Aid is provided to fill 56.77% of the Foundation Gap. Guaranteed Base Aid is also provided.

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“Final” required local contributions may be further reduced by an excess debt factor. Where the local long-term school construction debt (minus applicable state aid) per pupil exceeds the state average, \$106 for 1997, the required local contribution is reduced by the excess amount. The excess debt factor brings “final” required local contributions for 138 districts down by \$46.8 million in 1997. The reductions range from approximately \$11,600 to \$2.7 million, and average about \$340,000.

Note also that the Department of Revenue may allow requests for waivers to the “final” local contributions. Waivers may be granted to adjust for the impact of: nonrecurring revenues; extraordinary expenses; an excessive MRGF; or a first year school building assistance grant. Waivers are insignificant in terms of statewide spending, totaling about \$1.75 million in 1997 for eight communities. However, for a single community, a waiver may significantly reduce required local spending. The 1997 range spans from about \$5,200 to \$641,000. Throughout this report, we show local contribution amounts without factoring the impact of waivers. This is necessary to present a consistent and comparable set of data across the 1994 to 1997 reform period.

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<sup>13</sup> These districts do not receive Minimum Aid unless the Foundation Aid amount is less than \$75 per pupil in 1997.

Again, it must be emphasized that this section presents general rules defining state and local school finance obligations under Chapter 70. Exceptions are inherent in the nature of general rules. Accordingly, an attempt to describe every nuance of the law would take this overview beyond our purpose—to provide a general framework of understanding, against which the average interested party may assess the effectiveness of the law toward its basic goals.



## **SURVEY OF THE DATA: STATE AND LOCAL CONTRIBUTIONS TO SCHOOL SUPPORT**

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State and local contributions under Chapter 70 have grown by over \$1 billion since 1993. This section of the report explains the impact of these investments on overall school spending and spending on a per-pupil basis. Here we show how the accelerated growth in the rate of state aid results in less reliance upon local revenues, and brings Massachusetts closer to national norms for state shares of school support. Additionally, this section provides an accounting of how Chapter 70 aid is generally allocated to the adequate school spending and local taxpayer fairness objectives. Finally, we compare aid distribution patterns under the revised Chapter 70 to patterns under prior law, and demonstrate that the level of state aid and the explicit earmarking requirement are the elements of the new law most influential toward achieving its goals.

### **Net School Spending, Appropriations, and State and Local Shares**

The sum of the required state and local obligations under Chapter 70 is termed Net School Spending. Net School Spending amounts are earmarked; they must be spent for general education purposes<sup>1</sup>. In support of these obligations, local governments and the State have increased their commitments to schools by over \$1 billion, or 23.7% since 1993, the year preceding education reform. The state has provided almost \$772.7 million, 76.6% of the increase. Cities and towns provided the balance, about \$236.6 million, so that 1997 Net School Spending approaches \$5.27 billion. Table 2.1 shows the annual and cumulative amounts over the reform period.

Compared to similar prereform appropriations, state aid is up almost 60%, while required local contributions rose almost 8%. This accelerated growth in the rate of state support has resulted in a substantial shift in the historically low level of state contribution to school funding in Massachusetts. State aid at about \$1.29 billion supported 30% of 1993 Net School Spending. See Figure 2.1. Four years into reform, Chapter 70 aid exceeding \$2 billion supports 39% of Net School Spending.

The cumulative four year total state and local investment combined exceeds \$19.4 billion. Cumulative Chapter 70 aid approaches \$7 billion; municipalities have allocated over \$12.4 billion during the 1994 to 1997 reform period.

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<sup>1</sup> General education purposes do not include costs for long-term debt service, school lunches, transportation, or programs supported by certain state or federal grants.

**Table 2.1**

**1993 – 1997**  
**State and Local Shares of Net School Spending (NSS)**

<b>Fiscal Year</b>	<b>Minimum Local Contribution</b>	<b>% of NSS</b>	<b>Change Whole \$</b>	<b>Change %</b>
1993	\$2,970,346,457	69.74%		
1994	2,998,488,902	67.67%	\$28,142,445	0.95%
1995	3,125,452,718	65.82%	126,963,816	4.23%
1996	3,147,097,130	63.21%	21,644,412	0.69%
1997	3,206,974,180	60.87%	59,877,050	1.90%
1993 to 1997	<u>\$15,448,359,387</u>	-8.87%	<u>\$236,627,723</u>	7.97%
1994 to 1997	<u>\$12,478,012,930</u>	-6.80%	<u>\$208,485,278</u>	6.95%

<b>Fiscal Year</b>	<b>State Aid</b>	<b>% of NSS</b>	<b>Change Whole \$</b>	<b>Change %</b>
1993	\$1,288,915,996	30.26%		
1994	1,432,831,982	32.33%	\$143,915,986	11.17%
1995	1,622,681,878	34.18%	189,849,896	13.25%
1996	1,831,818,548	36.79%	209,136,670	12.89%
1997	2,061,593,704	39.13%	229,775,156	12.54%
1993 to 1997	<u>\$8,237,842,108</u>	8.87%	<u>\$772,677,708</u>	59.95%
1994 to 1997	<u>\$6,948,926,112</u>	6.80%	<u>\$628,761,722</u>	43.88%

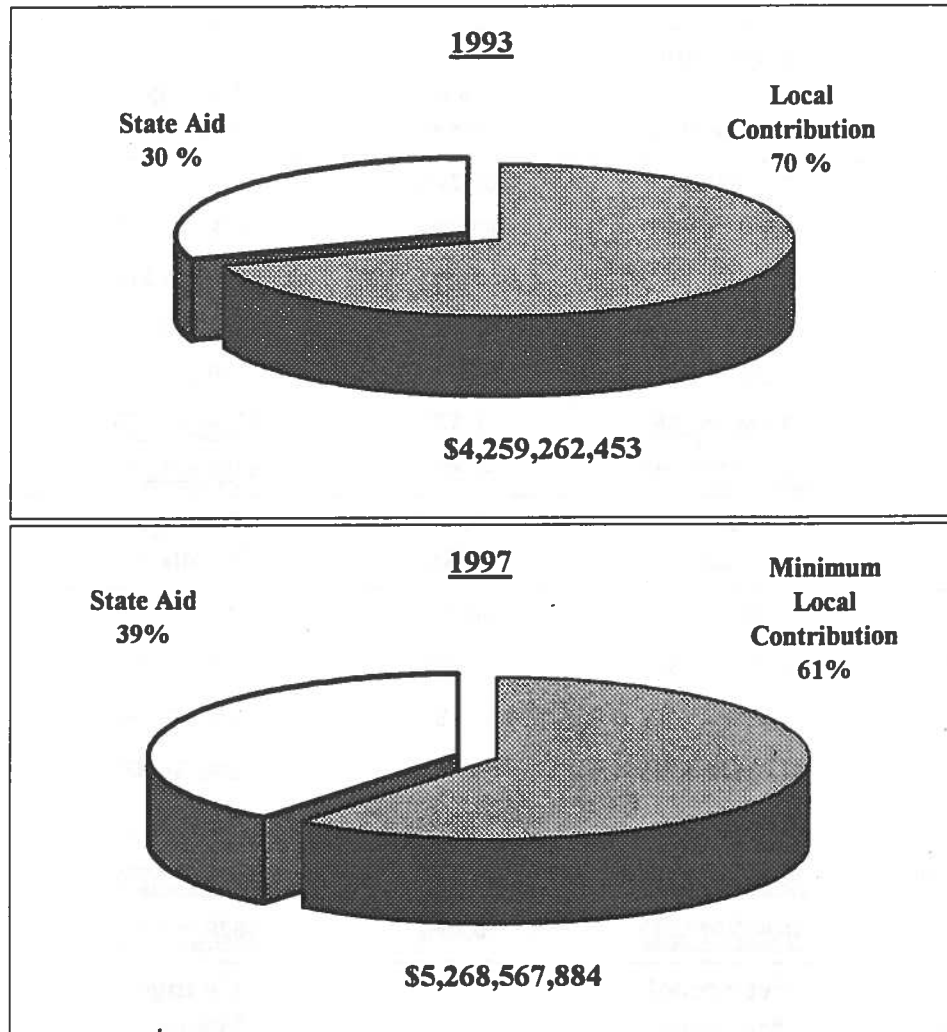
  

<b>Fiscal Year</b>	<b>Net School Spending</b>	<b>Change Whole \$</b>	<b>Change %</b>
1993	\$4,259,262,453		
1994	4,431,320,884	\$172,058,431	4.04%
1995	4,748,134,596	316,813,712	7.15%
1996	4,978,915,678	230,781,082	4.86%
1997	5,268,567,884	289,652,206	5.82%
1993 to 1997	<u>\$23,686,201,495</u>	<u>\$1,009,305,431</u>	23.70%
1994 to 1997	<u>\$19,426,939,042</u>	<u>\$837,247,000</u>	18.89%

**Figure 2.1**

**1993 and 1997  
State and Local Contributions to Net School Spending**

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**Enrollment Growth, Spending Per Pupil**

Foundation Enrollments increased from 809,477 pupils in 1993 to 879,473 in 1997. The public schools are now serving 69,996 more students, an increase of about 8.6%. Due to this significant growth, the rate of increase in per-pupil spending is less than the 23.7% overall increase in Net School Spending. See Table 2.2.

**Table 2.2**

1993 - 1997							
Enrollment Growth							
Local and State Shares of Required Per-Pupil Net School Spending (NSS)							
Fiscal Year	Found Enroll.	% Change	Min. Local	% of Total	State Aid	% of Total	Total NSS
1993	809,477		\$3,669	70%	\$1,593	30%	\$5,262
1994	820,430	1.4%	3,655	68%	1,746	32%	5,401
1995	836,478	2.0%	3,736	66%	1,940	34%	5,676
1996	860,301	2.8%	3,658	63%	2,129	37%	5,787
1997	879,473	2.2%	3,646	61%	2,345	39%	5,991
<b>Change</b>							
1993 to 1997	<u>69,996</u>	8.6%	\$ (23)	( 9%)	<u>\$ 752</u>	9%	<u>\$ 729</u>

Table 2.2 shows that since 1993, per-pupil Net School Spending statewide has grown by \$729, an increase of 13.85%, for a 1997 total of \$5,991. While state aid per pupil increased steadily over the period, an average of \$188 per year, statewide minimum required local contributions decreased on a per-pupil basis, down .63%. The shift in the state share of per-pupil spending parallels the shift in the state share of overall spending amounts, increasing from about 30% to 39% over the period.

### **Effect of Enrollment Growth and Inflation, Real Purchasing Power**

Per-pupil spending is increasing at a slower rate than overall Net School Spending because enrollment growth diminishes the relative purchasing power of reform appropriations, as does inflation. Approximately \$400 million would be required to serve the 69,996 new pupils at 1993 service levels. Moreover, we estimate that the effects of inflation consume approximately \$90 million<sup>2</sup>. That is, it would require about \$90 million more in terms of 1997 monetary values to maintain 1993 service levels for the then-existing student body. Together, enrollment growth and inflation consume approximately \$490 million or 49% of the \$1 billion additional state and

<sup>2</sup> Estimate based upon projections from U.S. Department of Commerce data, Implicit Price Deflator for State and Local Governments.

local appropriations since 1993. The \$510 million balance represents real new purchasing power, about \$580 more per pupil.

While most of this report focuses on school spending in terms of current dollars, it is important to keep real purchasing power in mind. To simplify the presentation, we refer only occasionally to inflationary factors.

### Actual Compared to Minimum Net School Spending

Due to a 1995 budget amendment<sup>3</sup>, the term Net School Spending is the sum of state Chapter 70 aid and the minimum required local contribution. Chapter 70 calculations do not include amounts communities may spend for general school purposes beyond the minimums. On a statewide basis, cities and towns have spent about \$672 million more than strictly required from 1994-1997, as shown in Table 2.3.

**Table 2.3**

#### 1994 – 1997 Minimum Required and Actual Local Contributions

<b>Fiscal Year</b>	<b>Required</b>	<b>Actual</b>	<b>Whole \$ Difference</b>	<b>% Difference</b>
1994	\$2,998,488,902	\$3,107,950,344	\$109,461,442	3.7%
1995	3,125,452,718	3,254,715,178	129,262,460	4.1%
1996	3,147,097,130	3,353,024,650 *	205,927,520	6.5%
1997	3,206,974,180	3,434,469,034 **	227,494,854	7.1%
<b>Total</b>	<b><u>\$12,478,012,930</u></b>	<b><u>\$13,150,159,206</u></b>	<b><u>\$672,146,276</u></b>	<b>5.4%</b>

\* 1996 Budgeted Amount  
\*\* 1997 Projected Amount

The apparent intent of the amendment was to remove a perceived disincentive to local appropriations exceeding the minimum. That is, if local budget makers were obligated to maintain voluntary additional spending in future years, they may be less likely to provide more than the minimum required amounts.

<sup>3</sup> St. 1995, c. 38, s. 265.

Nonetheless, using required Net School Spending as opposed to actual amounts artificially discounts local effort and progress towards the goals of the law. Factoring actual Net School Spending (Chapter 70 aid plus actual local contributions) into the analysis shows that the projected increase in appropriations statewide is 50% greater than Chapter 70 recognizes. While required Net School Spending went up just over \$1 billion, actual amounts grew by over \$1.6 billion, for projected 1997 spending approaching \$5.5 billion. On a statewide basis, this extra local effort effectively offsets the negative impact of enrollment growth and inflation on the real purchasing power of reform dollars reported above.

As notes to Table 2.3 indicate, however, we obtained limited final actual school spending data. Final figures are available for 1994 and 1995; 1996 numbers are amounts budgeted by school committees at the beginning of the fiscal year. Actual spending data for 1997 is projected. For this reason, some elements of analysis are limited to the parameters of minimum required Net School Spending. Later in this report, we apply Net School Spending and actual or budgeted spending (through 1996) to show the different results in measuring progress toward the Chapter 70 goals for specific school districts.

## **Chapter 70 Aid Components**

### **Hold-Harmless**

As previously explained, Chapter 70 aid is comprised of a number of components designed to assist distinct local circumstances. The starting point in the first year was the allocation of so-called “hold-harmless” aid, providing almost \$1.3 billion<sup>4</sup> to school districts according to the 1993 distribution schedule. Typical of many states’ reform efforts, the new law does not reach back to change distributions made on the basis of prior law. The purpose of such hold-harmless provisions is to ease the transition to a new program, and to counter the likely resistance to an aid plan that might provide decreased state assistance to any particular school district.

Accordingly, nearly 90% of 1994 Chapter 70 aid was distributed without regard to the adequate school spending and equity aims of the law. For example, 46% (\$84.8 million) of new school aid in 1993 was distributed without regard to local need or fiscal ability; each school system received \$100 per pupil out of this amount. As new state appropriations in support of the law grow, aid distributions should more closely mirror reform goals. In 1997, hold-harmless guarantees drive only 63% of the distribution. By the year 2000, this ratio should fall to about

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<sup>4</sup> \$1,288,915,966 is the sum of comparable prereform school aid appropriations.

45%. Since hold-harmless provisions slow the pace of progress to reform objectives, an assessment of this progress must focus on the new aid.

### **New Aid**

The five core components of Chapter 70 aid are described in Section 1 of this report. In summary, they are:

**BASE AID:** Every district receives its prior year's Chapter 70 amount, excluding any Overburden or Equity Aid allotments. The bulk of base aid is a reclassification of the prior year's aid components. "New" base aid, if any, is the result of adjustments.

**MINIMUM AID:** Every district is guaranteed new aid of at least a certain amount per pupil, \$75 in 1997.

**FOUNDATION AID:** The state aids certain average and below average wealth districts in reaching their adequate school spending targets.

**EQUITY AID:** The state provides aid to reduce local excess effort for below Foundation communities that provide more than a fair amount of school support.

**OVERBURDEN AID:** Due to local wealth factors, the law considers certain below Foundation, below Effort communities unable to contribute what would otherwise be fair. Overburden aid works toward closing the Effort Gaps for these localities over time<sup>5</sup>.

In addition to the above core aid components geared specifically to the adequate spending and equity aims of the law, the Chapter 70 appropriation includes amounts for certain state obligations for the School Choice and Charter School programs. The 1994 and 1995 appropriations included incentive aid to encourage the expansion or formation of regional school districts. The 1995 appropriation included a one-time adjustment for select districts.

Across the core component and other categories, the state distributed over \$772.7 million in new school aid since 1993. Table 2.4 shows the specific annual allocations.

The majority, 63%, of new Chapter 70 aid was distributed to help below Foundation systems reach their adequate school spending targets. These were primarily below average wealth communities. See Figure 2.2. Minimum per-pupil aid guarantees consumed over 11% of new amounts. Aid to address local effort, local taxpayer equity concerns was 14%. In sum, 90% was

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<sup>5</sup> Certain districts receive Overburden Aid in 1997, even though they have no Foundation gap. See prior section of this report.

distributed in furtherance of explicit reform goals. About \$75 million, or 10%, was based on obligations outside of the parameters of the school finance law.

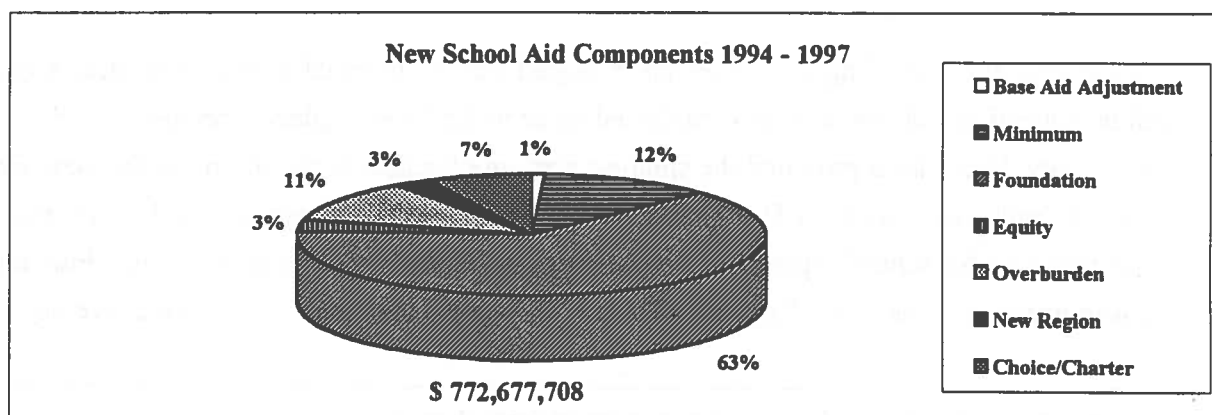
**Table 2.4**

**1994 - 1997  
New School Aid Components**

<b>Aid Component</b>	<b>1994 New Aid</b>	<b>1995 New Aid</b>	<b>1996 New Aid</b>	<b>1997 New Aid</b>	<b>1994 - 1997 Total New Aid</b>
Base Aid Adjustment	\$ 5,307,133	\$ (119,282)	\$ 2,179,826	\$ -----	\$ 7,367,677
Minimum	22,720,758	9,476,200	29,514,114	30,384,476	92,095,548
Foundation	60,861,072	124,353,853	144,080,416	156,370,299	485,665,640
Equity	14,732,662	16,531,187	(6,784,767)	1,676,773	26,155,855
Overburden	26,969,412	15,984,118	24,627,801	18,939,360	86,520,691
New Region	3,603,890	16,503,164	-----	-----	20,107,054
Choice / Charter	9,721,059	4,940,652	17,699,284	22,404,248	54,765,243
Aid Adjustment	-----	2,180,004	(2,180,004)	-----	-----
<b>TOTAL</b>	<b><u>\$143,915,986</u></b>	<b><u>\$189,849,896</u></b>	<b><u>\$209,136,670</u></b>	<b><u>\$229,775,156</u></b>	<b><u>\$772,677,708</u></b>

**Figure 2.2**

**Aid Categories as a % of  
Total New Chapter 70 Aid**





## The National Context

As stated earlier, the accelerated rate of the growth of state Chapter 70 aid has resulted in the Commonwealth paying a greater percentage of local school costs. To show this progress in context of national and regional norms, we contacted the Education Commission of the States, which provided data collected by the National Education Association on federal, state, and local shares of school support<sup>6</sup>. As this data includes elements of school spending that are not in the Chapter 70 definition of Net School Spending, the ratios presented here are different from those reported earlier. Nonetheless, because the elements are consistent across the states, the data provides useful comparisons. Since the recent trend of significant annual increases in school aid began in 1993, we compared 1992 national and regional variables to 1996, the most recent available data. For these two years, Table 2.5 shows the national average; the New England average; and Massachusetts' federal, state, and local shares of school support.

**Table 2.5**

### 1992 and 1996 Federal, State, and Local (%) Shares of School Support

	1992 Averages			1996 Averages		
	Federal	State	Local	Federal	State	Local
National	6.4	47.9	45.7	7.0	47.7	45.3
New England	4.8	33.6	61.6	5.1	36.0	58.9
Massachusetts	5.8	32.2	62.1	5.6	36.1	58.2

*Source: National Education Association, "Estimates of School Statistics"*  
*Items may not total to 100 due to rounding.*

As a group, the New England states have lagged behind national averages in state support of public education. Massachusetts contributed close to the New England average in both 1992 and 1996. New Hampshire provided the smallest portion of school support among the New England states in both years, about 7.8%. Also, in both years New Hampshire relied more heavily on local revenues for school support than any other state. Maine was the greatest New England state contributor to schools, providing about 48% in both years, just above the national average.

<sup>6</sup> Source: National Education Association, "Estimates of School Statistics."

While Massachusetts fell 15.7 percentage points behind the national average in 1992, this gap has narrowed to 11.6 percentage points in 1996. Massachusetts ranked 47<sup>th</sup> among the 50 states in state support of schools in 1992. In 1996 there were five states contributing a smaller share.<sup>7</sup>

### **Overall State Aid Distribution Patterns**

Prior to measuring progress toward the adequate and fair school spending goals of Chapter 70 (Sections 4 and 5 of this report), we questioned whether overall state aid distribution patterns now differ appreciably from prereform patterns. It is reasonable to expect that school finance reform would lead to some change in how the Commonwealth is spending, or allocating, its school aid investment. Anecdotal evidence suggests that the revised Chapter 70 provides less generous allocations to average and above average wealth communities than prior laws. Testing this theory, we found that aid distribution patterns three years into reform do not differ significantly from those over the three years preceding reform.

The 1991-1993 period contrasts sharply in the allocation formulas used and the levels of appropriations when compared to the early reform period. In 1991 and 1992, the comparable aid accounts were either reduced or level funded from prior years. Reductions were applied to previous distributions primarily determined by a so-called “needs based” formula. The formula factored weighted pupil enrollments, population density, road mileage, age of housing stock, local fiscal ability measures, and others. Amounts determined by the needs based formula were partially allocated as school aid. In 1993, comparable school aid accounts were increased by about \$185 million: \$100 million through Equal Educational Opportunity Grants for low-spending districts and \$85 million for all districts on the basis of \$100 per pupil. The significant changes to the school aid formulas contained in the revised Chapter 70 are described previously in this report.

To compare aid distribution patterns, we selected the 321 school districts that maintained the same operating structure across grade levels from 1991 through 1996. This selection process deletes districts that would skew the data with large shifts in aid due to withdrawal from or entry into a regional school district. For each district we combined the comparable school aid receipts over the 1991 through 1993 period, then for the 1994 through 1996 period<sup>8</sup>. Each of these sums

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<sup>7</sup> Hawaii led the 50 states in 1996, contributing 89.5% from state revenues, followed by New Mexico at 74.3%. After New Hampshire, South Dakota contributed the least at 25.8%.

<sup>8</sup> Combined 1994-1996 aid does not include allocations to support School Choice and Charter School reimbursements or regional school incentives. These allocations do not relate specifically to the finance reform goals, nor are they comparable to prereform allocations.

was then shown as a percentage of total aid for the respective period. Comparing each district's "piece of the pie" before and after reform, remarkably little change resulted in light of the major formula changes.

As shown in Table 2.6, the aid distribution share, that is "piece of the pie," was within a range of change of plus or minus one tenth of a percentage point for 308 of the 321 districts. The "piece of the pie" was no different for 139 of these 308. The data shows that the new distribution formulas made a difference greater than one-tenth of a percentage point for 13 of these districts. The greatest increase in a district's share was 0.48 of a percentage point; the greatest decrease was -0.41. The average change was zero.

**Table 2.6**

**1991 - 1993 versus 1994 - 1996  
Frequency Distribution Number of Districts Experiencing  
Change in Portion of State Aid**

<b>Percentage Point Change 1991 - 1993 to 1994 - 1996</b>	<b>Number of Districts</b>
0.40 to 0.49	2
0.30 to 0.39	2
0.20 to 0.29	3
0.10 to 0.19	3
0.00 to 0.09	160
0.00	139
-0.00 to -0.09	9
-0.10 to -0.19	1
-0.20 to -0.29	1
-0.30 to -0.39	1
-0.40 to -0.49	0

Table 2.7 shows the cumulative results over the two time periods for the 321 districts grouped by wealth status. Regional schools appear separately, as they have no property tax base for determining wealth status. As a group, below average wealth districts received 66.93% of the 1991-1993 aid; they received 66.96% of the 1994-1996 amounts; and 67.05% of the cumulative increase over the two periods. Above average wealth districts received a slightly greater portion of the 1994-1996 aid, 5.47% compared to 5% in the earlier period; they received 6.78% of the new increased aid. The results show similarly consistent patterns for average wealth districts and regional schools. Shares of state aid over the two periods and the percentage point change are shown in Appendix I for each of the 321 districts.

Hold-harmless aid, described above, influences these results. About 80% of the statewide cumulative 1994-1996 aid distribution was determined by hold-harmless principles. Even so, the combined distribution of over \$1 billion from 1994 through 1996 by the revised Chapter 70 formulas made little difference in the overall patterns of state aid distribution. This suggests that the old and new laws may have more in common than might be expected.

These commonalties can be seen in rather simple terms. Both prereform and reform mechanisms distribute the majority of aid in relation to the local “gap” between a defined fiscal need and a defined local fiscal ability to serve the need. The fact that the pre-reform measure of need included noneducational factors seems to make little difference in the outcomes. Both mechanisms embody hold-harmless principles, and guarantee minimum aid where no gap exists.

There are, however, significant differences in prereform and postreform school aid distributions. First, the state is providing significantly greater amounts of aid, decreasing the overall reliance on local revenues—primarily property taxes—for school support. Second, the state aid is explicitly earmarked for general education purposes, unlike prior distributions. Earmarking is accompanied by local maintenance of effort requirements intended to assure that new state aid supplements and does not supplant local appropriations.

In light of these differences, the next two sections of this report examine progress toward the adequate school spending and taxpayer equity goals of school finance reform.

Table 2.7

### State Aid Distribution Patterns (321 Districts)

	Combined Aid 1991 - 1993	Combined Aid 1994 - 1996	Share of State Aid 1991-1993	Share of State Aid 1994-1996	% Point Difference	Whole \$ Difference	% Change
<b>BELOW AVERAGE WEALTH STATUS</b>							
Count	125	125	125	125			
Average	\$ 18,379,657	\$ 25,007,045	0.54%	0.54%	.00	\$ 6,627,388	52.45%
Total	<u>\$2,297,457,171</u>	<u>\$3,125,880,673</u>				<u>\$ 828,423,502</u>	
% of Total State Aid			66.93%	66.96%			
% of Increase within Status Group							36.06%
% Share of Total Increased Aid							67.05%
<b>AVERAGE WEALTH STATUS</b>							
Count	35	35	35	35			
Average	\$ 9,320,757	\$ 13,167,216	0.27%	0.28%	.01	\$ 3,846,459	45.62%
Total	<u>\$ 326,226,491</u>	<u>\$ 460,852,555</u>				<u>\$ 134,626,064</u>	
% of Total State Aid			9.50%	9.87%			
% of Increase within Status Group							41.27%
% Share of Total Increased Aid							10.90%
<b>ABOVE AVERAGE WEALTH STATUS</b>							
Count	85	85	85	85			
Average	\$ 2,018,586	\$ 3,003,923	0.06%	0.06%	.01	\$ 985,337	96.10%
Total	<u>\$ 171,579,803</u>	<u>\$ 255,333,443</u>				<u>\$ 83,753,640</u>	
% of Total State Aid			5.00%	5.47%			
% of Increase within Status Group							48.81%
% Share of Total Increased Aid							6.78%
<b>REGIONAL SCHOOLS "NO WEALTH STATUS"</b>							
Count	76	76	76	76			
Average	\$ 8,386,306	\$ 10,869,583	0.24%	0.23%	(.01)	\$ 2,483,277	32.06%
Total	<u>\$ 637,359,239</u>	<u>\$ 826,088,324</u>				<u>\$ 188,729,085</u>	
% of Total State Aid			18.57%	17.70%			
% of Increase within Status Group							29.61%
% Share of Total Increased Aid							15.28%
<b>TOTAL (321 Districts)</b>							
Count	321	321	321	321			
Average	\$ 10,693,529	\$ 14,542,539	0.31%	0.31%	.00	\$ 3,839,010	58.44%
Total	<u>\$3,432,622,704</u>	<u>\$4,668,154,995</u>	100.00%	100.00%		<u>\$1,235,532,291</u>	
% Increase							35.99%



## **PROGRESS TOWARD ADEQUATE SCHOOL SPENDING**

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The first major goal of Chapter 70 is to achieve at least adequate school spending throughout the Commonwealth by the year 2000. As described in Section 1 of this report, the standard for adequate school spending is the Foundation Budget, calculated annually for each school district. There are a number of measures to evaluate progress toward this goal, and depending upon which measure is used, the results may appear to be more or less positive. In this section of the report, we show how the statewide Foundation standard has grown over time, and report progress toward this goal.

First we show progress in terms of the overall statewide experience, measured by the criterion defined in Chapter 70, minimum required spending. Minimum required spending includes expenditures made from state aid and local resources. Since districts spending above Foundation offset below Foundation spending in others at the statewide level, we next show the aggregate results after sorting districts into above and below Foundation groups. At the individual school district level, we report the extent that minimum required spending in each district has brought them closer to or further away from its Foundation Budget goal four years into reform.

It is important to evaluate progress to Foundation goals by the minimum required spending measure, because it is the criterion that sets into motion the various Chapter 70 state aid and local contribution calculations. Nonetheless, this measure does not always reflect the reality of actual local experience. As reported earlier, most school systems spend more than what is strictly required by the law. Accordingly, we next show progress to Foundation at the district level measured by actual school spending, a test that includes voluntary local school support above the mandatory minimums.

Also beyond the Chapter 70 criteria, the final exercise in this section compares the disparity in the range of per-pupil expenditures across the Commonwealth, prereform and currently. This analysis shows that the state's renewed commitment to school finance has significantly lessened the disparities between wealthier and poorer communities.

### **The Statewide Foundation Budget Standard**

It is important to note that prior to the Chapter 70 revisions, Massachusetts had no state standard for measuring the adequacy of school spending other than comparing specific local circumstances to state averages. Although the Foundation Budget benchmark is considered to

be a minimal measure of adequacy, not excellence, it has established an expectation that spending will grow significantly over the reform period. Table 3.1 shows that statewide Foundation Budgets have grown by about \$748 million, or 16.4% since 1994. The 1997 target exceeds \$5.3 billion. Because enrollment growth is the major factor driving Foundation Budget growth, the rate of increase in Foundation targets is 2 1/2 times greater than the estimated rate of inflation over the reform period. On a per-pupil basis, the adequacy standard is \$6,048 in 1997, an increase of \$476 or 8.5% since the first year of reform. Over the next three years, the standard is projected to increase by another \$700 million to exceed \$6 billion statewide in the year 2000<sup>1</sup>.

### **Required Net School Spending in Relation to Foundation Amounts**

Table 3.1 also shows how required spending (from both state and local resources) statewide falls short of the adequacy goal on a whole dollar and per-pupil basis. Contrary to the expectation that this deficit would shrink steadily over the reform schedule, during the third year (1996) it grew by over 40%. This is due to the amendment providing that voluntary local spending beyond the minimum requirements is not factored into Chapter 70 calculations<sup>2</sup>. Nonetheless, overall required spending grew in relation to the Foundation targets over the period from about 97% in 1994 to 99% in 1997. Statewide required school spending is now approximately \$50.7 million under goal. Actual spending (including local contributions beyond the minimum) is projected to exceed the 1997 Foundation Budget standard by about \$177 million.

While it is appropriate to assess the overall statewide spending status in relation to the Foundation standard, in this exercise below Foundation spending in specific school districts is offset by above Foundation spending in others. Although the net data shows statewide required school spending at 99% of target in 1997, specific school district experiences range from 65% of Foundation to over 200%<sup>3</sup>.

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<sup>1</sup> This projection is derived from inflation estimates and enrollment forecasts provided by the Massachusetts Institute for Social and Economic Research. It closely parallels projections by the Foundation Budget Review Commission in its "First Report," February 1996.

<sup>2</sup> See Section 2.

<sup>3</sup> Eight districts serving fewer than 20 pupils fall outside this range due to unique circumstances.



Table 3.1

**1994 - 1997**  
**Statewide Foundation Targets and Required Spending**

**FOUNDATION TARGETS**

Fiscal Year	Foundation Targets	Change		Per Pupil	Change	
		Whole \$	%		Whole \$	%
1994	\$4,571,643,817			\$ 5,572		
1995	\$4,827,959,836	\$256,316,019	5.6%	\$ 5,772	\$ 200	3.6%
1996	\$5,093,115,634	265,155,798	5.5%	\$ 5,920	148	2.6%
1997	\$5,319,295,365	226,179,731	4.4%	\$ 6,048	128	2.2%
(1994 - 1997 Change based on Total)		<u>\$ 747,651,548</u>	16.4%		<u>\$ 476</u>	8.5 %

**MINIMUM REQUIRED NET SCHOOL SPENDING**

Fiscal Year	Minimum Req'd. NSS	Change		Per Pupil	Change	
		Whole \$	%		Whole \$	%
1994	\$4,431,320,884			\$ 5,401		
1995	\$4,748,134,596	\$316,813,712	7.2%	\$ 5,676	\$ 275	5.1%
1996	\$4,978,915,678	230,781,082	4.9%	\$ 5,787	111	2.0%
1997	\$5,268,567,884	289,652,206	5.8%	\$ 5,991	204	3.5%
(1994 - 1997 Change based on Total)		<u>\$ 837,247,000</u>	18.9%		<u>\$ 590</u>	10.9%

**MINIMUM REQUIRED SPENDING COMPARED**  
**TO FOUNDATION TARGETS**

Fiscal Year	Amount Below Target	% of Target	Per Pupil \$ to Target	Per Pupil % of Target
1994	\$ (140,322,933)	96.9%	\$ (171)	96.9%
1995	\$ ( 79,825,240)	98.3%	\$ (96)	98.3%
1996	\$ (114,199,956)	97.8%	\$ (133)	97.8%
1997	\$ (50,727,481)	99.0%	\$ (57)	99.1%

## **Required Spending in Below Foundation Compared to Above Foundation Districts**

The “problem” Chapter 70 seeks to remedy is less than adequate school spending. At the end of the first year of reform, required spending in 204 districts was approximately \$394.8 million under goal. The 1994 average expenditure in these districts fell about \$1.9 million below target. These school systems served 62% of the total student population, and on average, spent \$775 less per pupil than adequate amounts. See Table 3.2.

**Table 3.2**

### **1994 and 1997 Required Spending Compared to Foundation Targets in Below Foundation and Above Foundation Districts**

<b>The Below Foundation Group</b>		
<b>Year</b>	<b>1994</b>	<b>1997</b>
# of Districts	204	219
Avg. Amount ( \$ Millions)	( \$ 1.9)	( \$ 1.2)
# of Pupils	511,722	641,999
Avg. Amount Per Pupil	(\$775)	(\$399)
% of All Pupils	62%	73%
Avg. Foundation Budget ( \$ Millions)	\$ 12.4	\$ 14.9

<b>The Above Foundation Group</b>		
<b>Year</b>	<b>1994</b>	<b>1997</b>
# of Districts	165	138
Avg. Amount ( \$ Millions)	\$ 1.5	\$ 1.5
# of Pupils	308,742	237,474
Avg. Amount Per Pupil	\$ 818	\$ 866
% of All Pupils	38%	27%
Avg. Foundation Budget ( \$ Millions)	\$ 12.4	\$ 14.9

Required spending in the 165 above Foundation districts exceeded goal by about \$254.5 million. The average above Foundation amount was \$1.5 million. These districts served 38% of the population, and on average spent \$818 per pupil more than the adequate amounts.

Four years into reform, there are more districts (and more pupils) with required spending falling short of their Foundation amounts, but as a group they are closer to a larger target. The disparity between goal and required spending decreased by \$138.5 million, so that below Foundation districts are \$256.3 million short in 1997. The average shortage for these systems is now about \$1.2 million or \$399 per pupil, \$376 closer to goal than in 1994. These districts serve approximately 73% of the population.

Above Foundation spending is now about \$205.6 million in 138 districts<sup>4</sup>. Average required spending for these districts exceeds their Foundation Budgets by approximately the same amount as in 1994, \$1.5 million, now about \$866 per pupil. In 1997 fewer pupils are attending school in districts with more than adequate spending, approximately 27% of the population compared to 38% in 1994.

Overall, the data indicates that required spending for the below Foundation group in 1997 is significantly closer to higher adequate spending goals than for the 1994 group. The 1997 group of above Foundation districts has maintained its pace of spending in relation to higher standards<sup>5</sup>. Note, however, that the 1994 above and below Foundation groups are not comprised of the same districts that fall into the 1997 above and below groups. When the progress assessment is taken down to the specific district level and measured over time, less positive results occur.

### **The Shift Over Time: Required School District Spending Relative to Foundation**

To evaluate progress to Foundation at the school district level, we examined the 337 districts that maintained the same operating structure across grade levels from 1994 through 1997. The results show each district's status in relation to its adequate school spending standard in 1994, after one year's operation of the finance reform law with the commensurate investment of state

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<sup>4</sup> Due to school district consolidation, there are 12 fewer districts in 1997 than there were in 1994.

<sup>5</sup> Even though there are more districts and more pupils in the 1997 below Foundation group, the group averages in relation to target reflect true progress toward the adequacy standard; this is because the group target is redefined annually in direct relation to enrollment changes. The same is true for the above foundation group; average amounts above Foundation are calculated in relation to targets reflecting their lower enrollments as a group.

and local dollars. This status is compared to the 1997 status, reflecting four full years of the new law and required spending levels<sup>6</sup>. For this evaluation, minimum required spending is used, as opposed to actual spending, because it is the criterion that sets into motion the various Chapter 70 state aid and local contribution calculations.

There are a number of possible outcomes along the continuum of below and above adequate spending. The most favorable is to see below Foundation systems reach and even exceed their targets. The next possible outcome is to see that above Foundation districts stay above, so that the ranks of those with less than adequate spending do not grow. Note, however, that the workings of Chapter 70 are not designed to keep these districts above target. As long as they stay above, the law is basically neutral, generally providing for maintenance of local effort and minimum state aid. Following this, the priority would be to see those districts still below Foundation at least gain ground in relation to their targets. The least desirable outcome is to see previously above Foundation systems fall below. The data shows that there are school districts experiencing each of these possible outcomes. The following discussion provides summary statistics for each outcome, and attempts to identify common variables for those in each category; Appendix II shows the results for each of the 337 districts. Table 3.3 provides summary data and characteristics for each outcome.

- *Sixteen districts shifted from below Foundation spending in 1994 to at or above in 1997. As a group, these are relatively small school systems. With the exception of Amherst and Beverly, these districts experienced significant enrollment declines, averaging about -9% and Foundation budget declines averaging -4%. As a group, these districts were spending about 92% of their Foundation amounts in 1994, and they have achieved almost 109% of their 1997 amounts. The group is predominately comprised of below average wealth communities.*
- *One hundred and fifteen districts that spent greater than their Foundation amounts in 1994 have stayed above target. Thirty-five of these are spending greater amounts in relation to Foundation now, 128%, as opposed to 119% in 1994. While most of the 35 are relatively small districts, about 1/3 are mid-sized; three are small cities: Melrose; Newburyport; and Waltham. About 1/2 experienced significant enrollment declines, with the group average at -1%. The few with enrollment growth saw only modest increases, considerably below the state average rate of*

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<sup>6</sup> Sections 1 and 2 of this report explain the mechanics of the Chapter 70 formulas and the state and local appropriations in support of the law.

7%. The group average Foundation target increased by approximately 5%. These 35 are primarily average and above average wealth communities.

**Table 3.3**

**1994 – 1997  
Required Net School Spending (NSS) Relative to Foundation Budgets  
Various Outcomes and Characteristics**

Outcome	Nature of Outcome	# In Group	1994 % of Foundation	1997 % of Foundation	% Change Foundation Enrollment Group Average	% Change Foundation Budget Group Average	% Change Req'd. NSS Group Average	Predominant Group Wealth Status
Below to Above	Positive	16	91.69%	108.73%	(9.15 %)	(3.66 %)	12.69%	Below Avg.
Stayed Above & Gained Ground	Neutral	35	119.34 %	128.38 %	(0.98 %)	5.26%	12.35%	Avg. and Above Avg.
Stayed Above & Lost Ground	Neutral	80	142.17%	117.53%	17.89%	27.67%	8.19%	Above Avg.
Stayed Below & Gained Ground	Positive	128	85.49%	93.07%	6.41%	14.47%	25.11%	Below Avg.
Stayed Below & Lost Ground	Negative	40	92.78%	89.02%	11.35%	19.37%	14.45%	Below Avg.
Fell Below	Negative	38	109.26%	92.91%	24.03%	31.30%	11.20%	Avg. & Above Avg.

*Outcomes: 144 Positive (serving 55% of the 1997 enrollment); 115 Neutral (serving 24% of the 1997 enrollment); and 78 Negative (serving 21% of the 1997 enrollment)*

- *Over the period, 80 of the 115 that stayed above their Foundation targets lost ground. As a group, these 80 experienced over twice the state average rate of enrollment growth, with only 3 having enrollment declines. Adequate school spending targets for the group increased by nearly 28%. While nearly 1/2 of them spent greater than 125% of their Foundation targets in 1994, about 1/4 exceed their adequate standard by 25% in 1997. The group average went from approximately 142% of Foundation to 118%. These are primarily small to mid-size districts, although the group includes Cambridge with over 8,000 pupils and Newton with over 10,000. The vast majority are above average wealth.*

- *One hundred and sixty-eight districts began the process below Foundation and remain below in 1997. Over 75%, that is 128 of these moved closer to their targets, as a group spending about 85% in 1994 and 93% in 1997. Enrollments grew at less than the state average rate in over 1/2 of these districts, while the group average rate of growth was about 6%. The group average Foundation budget change was + 14%. These are generally mid-sized to larger school systems, including 28 cities. The vast majority are below average wealth.*
- *Over 20%, or 40 of the districts that stayed below Foundation lost ground in relation to target, as a group spending almost 93% in 1994 and 89% in 1997. About 2/3 of this group are small to mid-sized districts. The average rate of enrollment growth for these systems is approximately 11%, exceeding the state average. On average, their Foundation targets grew by over 19%. The group is predominately below average wealth.*
- *Thirty-eight districts that were above Foundation in 1994 (109% group average) fell below their 1997 spending targets to approximately 93%. The group average rate of enrollment growth is over three times the state average, while their Foundation targets averaged a 31% increase. Most of this group is comprised of small to mid-sized school systems, although it includes 3 city districts. These are primarily average and above average wealth areas.*

### **Summary of the Results**

In relation to the “problem” Chapter 70 is designed to address – less than adequate school spending as measured by Foundation Budgets and required spending – the overall results at the school district level are not wholly positive. One hundred and forty-four districts experienced a positive result, either achieving their adequate standard (16) or at least making progress (128). This positive result is strongly related to enrollment declines or relatively modest enrollment growth, and the corresponding decline or relatively modest growth in Foundation Budgets. This result also strongly relates to the overall below average wealth nature of these districts, qualifying most of them for greater school aid amounts that support greater increases in school spending. In short, a slower growing target is easier to hit, particularly with state assistance.

Conversely, 78 districts experienced a negative result, either falling below their Foundation amounts (38) or finding themselves further from goal than at the beginning of the process (40).

This negative result correlates directly to greater than average enrollment growth (some cases more than three times the state average), and the corresponding greater than average growth in Foundation Budgets. Generally, average and above average wealth districts that fell below Foundation qualified for only minimal new school aid over the period. Although the 40 districts that fell further from goal were primarily below average wealth and generally received greater state aid, even with state help they could not keep pace with the growth in their Foundation standards. A rapidly growing target is more difficult to hit.

While 115 districts stayed above their Foundation amounts, 80 of these are not required to spend as much over Foundation as in 1994. This result correlates directly with enrollment growth over twice the average rate, and corresponding growth in their Foundation budgets. The 35 that stayed above and gained ground gained largely as a result of enrollment and target growth at less than state average rate. Nonetheless, as long as these districts stay above their Foundation amounts, the law is basically neutral, for the most part requiring only modest increases in local contributions and providing only minimum per-pupil aid. Per se, these districts are not within the “problem” Chapter 70 addresses.

### **The Shift Over Time: Actual School Spending Relative to Foundation Budget Goals**

It is important to evaluate the effectiveness of a law toward its goals in light of criteria defined in the law, yet the measurement standards of Chapter 70 do not always reflect the reality of actual local experience. As explained previously, the Chapter 70 measurement of progress to Foundation goals is required school spending amounts. When actual school spending – including state aid, minimum required local contributions, and voluntary local appropriations above the minimums – is used as the measure of progress, the results are more positive.

The most current data to reflect actual spending is amounts budgeted by school committees for 1996. Using the same 337 districts as in the previous part of this section, we compared each district’s 1994 status in relation to its 1994 Foundation targets and its 1996 status using budgeted school spending. For these districts, the budgeted amounts exceed minimum requirements by over \$203.7 million, a significantly greater local commitment to schools than Chapter 70 recognizes in its calculations. Overall, about 35% of the extra local effort served to

achieve adequate school spending in districts that would have remained below Foundation using the required school spending measure. Extra local effort of 24% brought other below Foundation districts closer to goal, and 41% enabled above Foundation systems to maintain and enlarge that status. Appendix III shows the result for each of these districts.

Specifically, by the 1996 actual school spending measure:

- *Thirty-seven districts shifted from below Foundation spending (about 94% of target as a group) in 1994 to above (about 108%) in 1996. This contrasts to the 1997 outcome using only minimum required spending amounts; 16 previously below Foundation districts achieve their adequacy standard.*
- *Ninety-three districts that stayed above Foundation gained in relation to their 1994 status. This group spent about 119% of their Foundation amounts in 1994, rising to 134% in 1996. This compares to the 1997 outcome on required school spending showing only 35 districts gaining ground.*
- *Forty-nine that stayed above Foundation lost ground, spending approximately 53% over Foundation in 1994 and about 24% over in 1996. The 1997 result on the required measure found 80 previously above Foundation districts losing ground.*
- *One hundred and twenty-six districts that stayed below Foundation in 1996 at least moved closer, as a group moving from 85% to 92% of Foundation targets. The 1997 outcome using required school spending shows 128 getting closer.*
- *Twenty below Foundation systems fell further from their targets, from an average of 93% down to 90%. Using the required school spending measure, 40 fell further below Foundation in 1997.*
- *Twelve districts that were above Foundation in 1994 (104% group average) fell below in 1996 to 94% of target. The 1997 required school spending measure of progress saw 38 fall below Foundation.*

### **Summary of Results**

Evaluating progress to Foundation Budget goals using actual school spending as the measure shows that 163 districts experienced positive results, either achieving the adequate spending



standard (37) or at least making progress toward it (126). This result is more favorable than shown by the minimum required spending measure established in Chapter 70; (144) districts achieve (16) or progress (128) to goal.

At the negative end of the spectrum, the actual spending measure shows that 32 districts regressed, falling below Foundation (12) or falling further away from target (20). By the Chapter 70 measure, this undesirable outcome is more prominent; over twice as many districts regress, with 38 falling below their Foundation amounts and 40 falling further from goal than at the beginning of the process.

Using the actual spending criteria for measuring progress, 142 districts maintain their above Foundation status over the period, although 49 of these are spending smaller percentages above Foundation. By the Chapter 70 measure, 115 districts maintain above Foundation status; 80 of these lose ground.

### **Progress Toward Equality of Per-Pupil Spending**

A basic measure of the equity of a school finance law is the disparity in per-pupil expenditures across school districts<sup>7</sup>. Unlike prior law, the revised Chapter 70 does not express an intent to reduce these disparities. Nonetheless, this portion of our report shows that the breadth of prior disparities found from relatively wealthy districts to relatively poor districts is diminishing over the reform period.

We compared the range of per-pupil expenditures in 1993, the year preceding reform and in 1996, the most current year that actual spending (as opposed to minimum required) data is available, reflected by amounts budgeted by school committees for the year. Academic districts were analyzed separately from the vocational and agricultural systems that, by their nature, have generally greater per-pupil costs. Again, we included only the districts that maintained the same operating structure across grade levels (321 for the 1993-1996 period), to delete districts that would skew the data. Ranked from highest to lowest on 1996 per-pupil expenditures, Appendix

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<sup>7</sup> See Odden, Allan and Picos, Lawrence (1992). School Finance: A Policy Perspective. New York: McGraw-Hill.

IV shows the 321 districts and the local wealth ratios for the municipal districts<sup>8</sup>, showing the change in per-pupil spending since reform.

While there is some statistical correlation between local wealth and per pupil-spending on a statewide basis<sup>9</sup>, the correlation is strong at the upper and lower ends of the per-pupil spending scale. The communities representing both extremes are Rowe (valuation ratio = 668.02), and Berkley (valuation ratio = 50.56). At \$18,778 per pupil, Rowe spends over 4 1/2 times more than Berkley, at \$4,040. By the Chapter 70 measure of local wealth, Rowe is 13 times wealthier than Berkley. For these two extremes, the gap between the high spender and low spender has grown nearly 50% over the reform period. When the analysis moves from the extremes to the moderate upper and lower ends of the scale, however, there are significant reductions in per-pupil spending disparities.

In the *McDuffy* school finance case<sup>10</sup>, the Supreme Judicial Court examined the disparities of educational resources found in seven “comparison districts.” While the focus was resources – such as class size, ability to attract professional staff, modern textbooks, libraries, and laboratories – and not dollars, per se, the comparison districts also had widely disparate per-pupil expenditures. Comparing 1993 and 1996 per-pupil expenditures in the *McDuffy* comparison districts provides a fair representation of the overall reduction of the disparities since reform.

Table 3.4 shows per-pupil expenditure and relative local wealth data for these districts. Brookline, Concord and Wellesley are the relatively wealthy school systems, with wealth ratios three and four times greater than statewide values. Lowell, Brockton, Leicester, and

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<sup>8</sup> Valuation ratio is the Chapter 70 measure of relative local wealth. For cities and towns, it is basically the ratio of the local equalized property valuation to the statewide average, adjusted upward or downward by the ratio of local average income to the state average. A value of .95 or less is considered below average wealth; over .95 and less than 120 is average; and 120 and over is above average. Valuation ratios are not calculated for regional school districts.

<sup>9</sup> Regression R Squared = .52835619854

<sup>10</sup> In *McDuffy v. Secretary of Education*, 415 Mass. 545 (1993), the Supreme Judicial Court ruled that the Commonwealth had failed in its constitutional duty to provide public education for all children, regardless of the fiscal capacity of the community where they may live. One basis for the ruling was the disparity of education resources, not dollars.

Winchendon are the relatively poor systems with less than 1/2 of the statewide valuation ratio. Over the reform period, per-pupil expenditures in the wealthier districts grew at about 1/2 the state average rate, if at all. In the poorer districts, per-pupil expenditure growth averaged over two times the statewide rate.

Table 3.4

**Per-Pupil Expenditures in 1993 and 1996**  
**The McDuffy Comparison Districts**

School District	Valuation Ratio	1993 Actual	1996 Budgeted	Difference	
				Whole \$	%
Brookline	308.40	\$7,772	\$8,242	\$ 470	6 %
Concord	336.91	\$7,512	\$8,033	\$ 521	7 %
Wellesley	416.68	\$7,334	\$7,289	\$ (45)	(1%)
<b>State Average</b>	<b>100.00</b>	<b>\$5,241</b>	<b>\$5,944</b>	<b>\$ 703</b>	<b>13 %</b>
Lowell	30.70	\$4,682	\$5,604	\$ 922	20 %
Brockton	34.73	\$4,090	\$5,524	\$ 1,434	35 %
Leicester	50.23	\$3,988	\$5,144	\$ 1,156	29 %
Winchendon	31.05	\$3,717	\$4,754	\$ 1,037	28 %

As a result, the gap between spending in the wealthier districts compared to that in the poorer districts has diminished significantly. In both years, Brookline had the highest per-pupil expenditure and Winchendon had the lowest. By the Chapter 70 measure, Brookline is almost ten times wealthier than Winchendon. In 1993, Brookline spent \$4,055 more than Winchendon, over twice as much per pupil. In 1996, Brookline spent \$3,488 more, approximately 1.7 times as much as Winchendon. In this comparison, the spread between the high and low spender decreased by \$567, nearly 14% over the three-year period. Comparing expenditures by any of the other "rich" to "poor" *McDuffy* districts shows similar if not greater reductions in prior disparities<sup>11</sup>.

<sup>11</sup> The aid distribution and enrollment growth patterns described earlier in this report greatly influence this result.

Whether a reduction in the disparity of dollars leads to a reduction in the disparity of educational resources is difficult to measure. Annual school system financial reports are not of sufficient detail to quantify expenditures toward the specific educational resources highlighted in the *McDuffy* decision. Nonetheless, this analysis indicates that per-pupil spending patterns are more equitable (excepting the rare, extreme instances) three years into school finance reform than prereform—even though this was not an explicit aim of the law.

### **Summary/Conclusion**

At the school district level, overall progress to Foundation goals is not wholly positive when measured by the Chapter 70 criterion, required Net School Spending. By this measure, there are more districts spending less than adequate amounts now than at the beginning of the reform process, although as a group, below Foundation systems are significantly closer to a larger spending goal. The results are more positive when progress is measured by actual school spending in 1996. From this perspective, there are fewer districts with less than adequate spending than at the beginning of the process, and more systems are even closer to the larger spending goals.

By either measure, negative results are due in great part to the rapid growth in Foundation targets correlated to rapid enrollment growth. Successes are largely related to declining or moderately growing Foundation targets and enrollments. Further, there is no consistent correlation between growth or decrease in target and growth or decrease in required school spending. Some districts with enrollment and Foundation budget reductions are required to increase school spending at greater rates than some with targets growing much faster than the state average rate. Should this dynamic continue, doubts arise as to the likelihood of every school system achieving its adequate school spending amount within the next three years.

Nonetheless, the historical breadth of the disparity in per-pupil expenditures found in wealthier and poorer areas of the state is diminishing (excepting rare and extreme instances). In the context of traditional school finance equity analysis, this is a positive result, even though not one expressly within the intent of the revised Chapter 70.

## PROGRESS TO THE FAIR LOCAL EFFORT GOAL

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The second goal of Chapter 70 is to remedy the disparity of the burden of school finance among municipalities. In theory, communities with relatively high property values can raise greater revenues with lower tax rates than those with relatively low property values. Particularly when a school finance plan depends heavily upon local resources, the variations in local revenue raising ability across communities can result in variations in the levels of per-pupil spending. Some communities exert relatively high tax efforts, yet still fall short of adequate school spending standards. Others exert relatively low efforts with more than adequate results. In basic terms, some cities and towns “work too hard” to support their schools while others do not “work hard enough.”

To address this disparity, Chapter 70 provides a standard for determining a fair level of school support for each community<sup>1</sup>. As explained in Section 1, the law provides for the calculation of an annual Gross Standard of Effort (GSE). In the first year, this standard was based upon adjusted equalized property value per pupil and the state average school tax rate; it is adjusted annually to reflect estimated local revenue growth. By comparing the previous year’s required local contributions<sup>2</sup> to the current year’s fair GSE, the law designates each community as either above or below Effort – that is, dedicating either more or less than a fair amount of local resources to school support. Required local contributions serve as the minimum amounts that cities and towns must spend in support of their schools. Chapter 70 adjusts these amounts annually, effectively establishing a “floor” for the least amount a community must spend. The overall test for achieving the fair local effort goal is to see local contributions decrease in above effort communities, and increase in below effort areas. By the year 2000, every municipality would be dedicating local resources to education at a rate considered fair relative to other cities and towns.

This section shows progress toward these goals on three levels. First, we show the overall statewide results. Second, because above effort spending in some communities offsets below effort spending in others, we show the net results for cities and towns sorted into above and below effort groups. Third, we show how the required local contribution in each community has or has not changed relative to the expectations set by the law.

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<sup>1</sup> Data in this section is presented on a municipal, as opposed to a district, basis to show a community’s obligations to schools within its borders and to any regional school district membership.

<sup>2</sup> Prior to an amendment affecting 1996 and future calculations, the law compared actual local contributions, which exceeded the minimum requirements in most cases.

## The Statewide Results

For the first year of reform, the statewide fair amount approached \$4 billion. See Table 4.1. That is, under the theory of the law, cities and towns had the fiscal ability to dedicate almost \$4 billion to school support. As 1993 local contributions totaled about \$3 billion, statewide local support for schools was approximately 75% of the 1994 fair amount. As shown in Table 4.1, four years into the reform process this effort disparity has grown by approximately \$125 million.

**Table 4.1**

### 1993 and 1997 Local Contribution Relative to Fair Spending Total Statewide Effort Status

1993	1997	1994-1997
1994 Total Statewide Fair Amount  \$3,978,121,617	1997 Total Statewide Fair Amount  \$4,339,407,950	Difference Total Statewide Fair Amount  \$361,286,333
(Less)	(Less)	(Less)
1993 Total Statewide Local Minimum Contribution  <u>2,970,346,457</u>	1997 Total Statewide Required Local Minimum Contribution  <u>3,206,974,180</u>	Difference Total Statewide Required Local Minimum Contribution  <u>236,627,723</u>
1993 Total Statewide Effort Status (Below)  <u><u>\$1,007,775,160</u></u>	1997 Total Statewide Effort Status (Below)  <u><u>\$1,132,433,770</u></u>	Difference Total Statewide Effort Status (Below)  <u><u>\$124,658,610</u></u>

The overall statewide fair amount is growing at a faster rate than the local contribution. Since 1994 the fair amount has grown by approximately \$361 million or 9%. Over the same period local contributions statewide were required to increase by \$237 million or 8%. Because the fair amount grew at a slightly higher rate than required local spending, cities and towns are further away from their fair effort goal than at the beginning of the process by \$125 million. Spending in 1997 is about 74% of what the law now considers to be fair. From a statewide perspective, communities have essentially only kept pace with the growth in the fair amount, and have not made any real progress toward reaching it. At the beginning of the process, 78 municipalities were at or above fair spending levels, compared to 53 communities in 1997. The number of below effort municipalities increased from 273 to 298 over the period.

In this exercise, above and below effort spending offset each other, so that the equity “problems” Chapter 70 seeks to remedy are not clearly defined. When cities and towns are sorted into above effort (working too hard) and below effort (not working hard enough) groups, the scope of these two distinct problems can be quantified.

As noted earlier, cities and towns often spend more than the minimum required local contribution. As shown in Table 2.3, we project statewide that, from the beginning of the process, communities spent \$672 million more than the required amounts. Statewide actual spending in 1997 is projected to be about 79% of the fair amount, compared to 74% based upon the minimum required spending measure. The data used in Table 2.3 was reported on a school district basis as opposed to a municipal basis. Because the data analyzed and presented in this section is on a municipal basis, it would be impractical to provide detailed results of actual local contributions compared to fair amounts at the community level. Therefore, the remainder of this section concerns only the minimum required local contribution established by Chapter 70.

#### **Required Spending in Below Effort Municipalities Compared to Above Effort Municipalities**

The equity problems Chapter 70 seeks to remedy are twofold: (1) municipalities spending more than their fair amount; and (2) cities and towns spending less than their fair amount. Over time the law allows above effort municipalities to reduce their spending down to their fair amount, provided they do not fall below their Foundation Budget target. Conversely, the law requires communities spending below their fair share to increase their local contributions. At the beginning of the first year of reform, required spending in 273 municipalities was approximately \$1.1 billion below the fair amount. The median expenditure for this group was about \$1.5 million below effort. Local education spending in the 78 above effort municipalities exceeded the fair amount by approximately \$90 million. The median above effort amount for this group was \$182,000. See Table 4.2.

Four years into reform, there are more cities and towns spending below their fair amount, and, as a group, they are further away from the fair spending standard than they were at the beginning, by approximately \$55 million. Collectively, below effort municipalities are \$1.2 billion below in 1997. However, the median amount below effort is now about \$1.3 million, approximately \$200,000 closer to the fair amount than in 1994. In 1997, there are 53 communities spending approximately \$20 million more than what the law considers fair. The median excess spending amount for the group is now about \$50,000, that is, \$131,000 closer to their goal. See Table 4.2.

**Table 4.2**

**1993 and 1997  
Minimum Required Local Contribution Relative to Fair Spending  
Below Effort and Above Effort Municipalities**

**The Below Effort Group**

<b>Year</b>	<b>1993</b>	<b>1997</b>	<b>1993 - 1997</b>
# of Municipalities	273	298	
% of 351 Municipalities	77.8 %	84.9 %	
Average Amount Below (Median)	\$ 1,456,785	\$ 1,268,552	\$ (188,233)
Total Amount Below	<u>\$ 1,097,906,837</u>	<u>\$ 1,152,536,618</u>	<u>\$ 54,629,781</u>

**The Above Effort Group**

<b>Year</b>	<b>1993</b>	<b>1997</b>	<b>1993 - 1997</b>
# of Municipalities	78	53	
% of 351 Municipalities	22.2 %	15.1 %	
Average Amount Above (Median)	\$ 181,591	\$ 50,279	\$ (131,312)
Total Amount Above	<u>\$ 90,131,677</u>	<u>\$ 20,102,848</u>	<u>\$ (70,028,829)</u>

Particularly for the above effort group, the data shows significant progress toward the Chapter 70 fair local effort or equity goal. There are 25 fewer communities spending in excess of their fair amounts; together, the group is approximately \$70 million closer to the goal than at the beginning of the process. For the below effort group, the overall results are less positive. There are 25 more municipalities contributing less than a fair share of local resources to schools; together, this group is \$55 million further from the goal. Nonetheless, the median shortage for the group is now approximately \$1.3 million, \$200,000 closer to target. When the progress assessment is taken down to the specific community level and measured over time, more positive results occur.



## Progress at the Municipal Level

To evaluate progress towards equity at the municipal level, we sorted the 351 cities and towns into three groups, each having distinct characteristics at the beginning of the process. Chapter 70 sets different expectations for reducing or increasing local effort for each group<sup>3</sup>.

**Table 4.3**

### Three Groups of Cities and Towns Having Distinct Characteristics at the Beginning of the Process

Group #	Characteristic	c.70 Implicit Expectation
1.	Above Effort at beginning of process. More or Less than adequate school spending.	Reduce Local Effort.
2.	Below Effort at beginning of process. Less than adequate school spending.	Increase Local Effort.
3.	Below Effort at beginning of process. More than adequate school spending.	Maintain Effort.

As Table 4.3 indicates, Group 1 is above effort at the beginning of the process. This group is considered to be “working too hard” to support their schools. Excess effort is the “problem” for Group 1, regardless of whether the community has adequate school spending. Therefore, these communities are expected to reduce their local contributions. Group 2 is below effort at the beginning of the process, and has less than adequate school spending. This group is considered to be “not working hard enough” to support their schools. Therefore, these municipalities are expected to increase their local contributions. Finally, Group 3 is below effort at the beginning of the process, and has more than adequate school spending. This group is considered to be “not working hard enough,” but because they have adequate school spending, they are essentially expected to maintain their local effort<sup>4</sup>. To test progress toward these expectations, we compared

<sup>3</sup> These expectations are implicitly related to the group characteristics, but are not plainly stated in the law.

<sup>4</sup> Maintenance of effort is accomplished by increasing the prior year’s local contribution according to the Municipal Revenue Growth Factor.

the difference between local contributions and fair amounts at the beginning of the process to the 1997 results. Table 4.4 shows the overall results relative to expectations for each group. Appendix V shows the specific results for each community within each group, and the difference in required local contributions over the period.

**Table 4.4**

**1993 - 1997**  
**Local Contribution Relative to Fair Spending**  
**Above and Below Effort Municipalities by Group**  
**(in Billions of Dollars)**

<u>Group 1. Reduce Local Effort</u>		
	1993	1997
Local Contribution	\$0.765	\$0.744
(less)		
Fair Amount	<u>0.675</u>	<u>0.729</u>
Total Local Contribution excess of Fair Amount	<u>\$0.090</u>	<u>\$0.015</u>
<u>Group 2. Increase Local Effort</u>		
	1993	1997
Fair Amount	\$ 1.508	\$ 1.659
(less)		
Local Contribution	<u>1.140</u>	<u>1.297</u>
Total Local Contribution below Fair Amount	<u>\$ 0.368</u>	<u>\$ 0.362</u>
<u>Group 3. Maintain Effort</u>		
	1993	1997
Fair Amount	\$ 1.795	\$ 1.951
(less)		
Local Contribution	<u>1.065</u>	<u>1.165</u>
Total Local Contribution below Fair Amount	<u>\$ 0.730</u>	<u>\$ 0.786</u>

**Group 1**

At the beginning of the process, the 78 municipalities in Group 1 were above effort by approximately \$90 million. In 1997, excess spending in these communities is about \$15 million, a reduction of approximately \$75 million. However, this reduction is not solely the result of decreasing local contributions. Rather, it is accounted for by a combination of a \$21 million decrease in required local contributions, and a \$54 million increase in the Chapter 70 fair

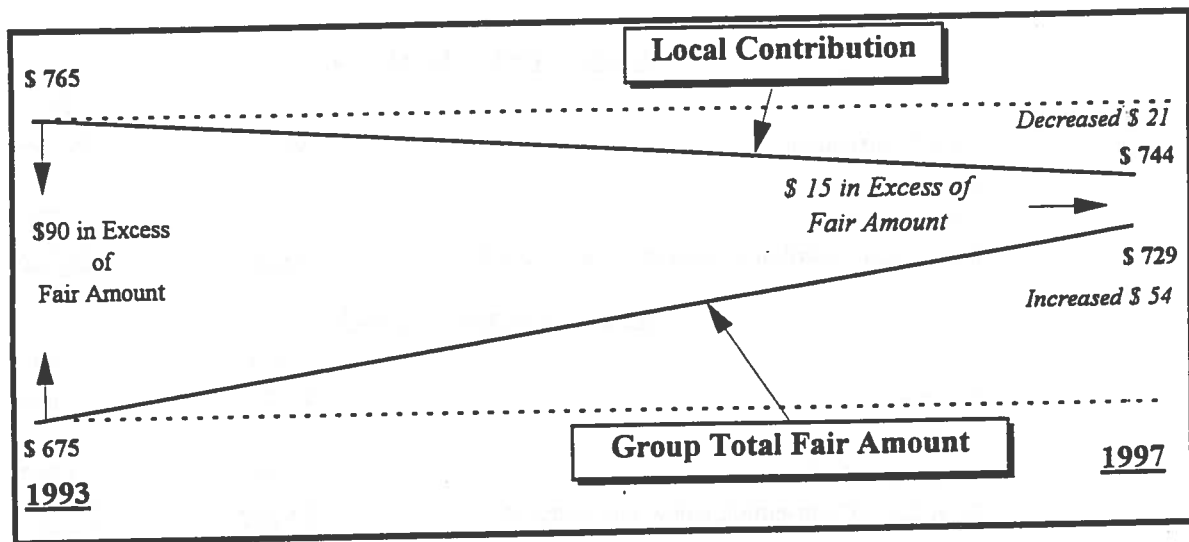
amounts. Figure 4.1 illustrates that the growth in the fair amounts effectively erases more than half of the \$90 million excess spending that existed at the beginning of the period.

**Figure 4.1**

### Above Effort Municipalities \$75 Million Reduction in Excess Spending

*The growth in the fair amount effectively erases more than ½ of the \$90 million excess spending that existed at the beginning of the period.*

(Amounts in Millions of Dollars)



Over two-thirds of the of the municipalities in this group did experience a decline in their required contributions. The median decrease was about \$151,000 or 9.1%. Decreases ranged from approximately \$1,000 to \$14 million. Collectively, local contributions were 113.3% of their fair amount at the beginning of the process, and 102.1% of their fair amount in 1997.

The remaining communities in this group, however, experienced varying rates of increases in their required local contributions, primarily because at some point in the process they achieved their fair amounts and now must maintain them. The average increase was approximately \$125,000 or 8.5%. Increases ranged from about \$665 to \$1.9 million. The cities and towns in this Group are predominantly below average wealth municipalities.

## **Group 2**

At the beginning of the process, 169 municipalities, with less than adequate school spending, were below effort by approximately \$368 million. In 1997, the group is below effort by \$362 million, that is, \$6 million closer to their fair amounts. See Table 4.4. Because the fair amount grew by \$151 million over the period, the \$157 million increase in local contributions effectively bought only \$6 million worth of progress to goal. Ninety percent of the municipalities in this group did experience increases in their required contributions. Over the period, the average increase was about \$689,000, or 26.5%. Increases ranged from approximately \$981 to \$5.1 million. Together, required contributions were 75.6% of the fair amount at the beginning of the process, and 78.2% in 1997.

Ten percent of the communities in Group 2 saw decreases in their required local contributions, primarily as a result of amendments to Chapter 70 affecting the calculation of minimum required local contributions and allowing for excess debt adjustments<sup>5</sup>. The average decrease was about \$57,000, or 20.8%. Decreases range from approximately \$20,000 to \$427,000. The cities and towns in this group are a mix of above average, average, and below average wealth municipalities.

## **Group 3**

At the beginning of the process 104 municipalities, with more than adequate school spending, were below effort by approximately \$730 million. In 1997, this group is below effort by about \$786 million, that is, \$56 million further from their fair amounts than at the beginning of the process. See Table 4.4. Because the fair amount grew by \$156 million over the period, a \$100 million increase in local contributions did not keep pace with the growth in the fair amount. Eighty-five percent of the communities in Group 3 experienced an increase in their local contributions. Over the period the median increase was about \$824,000, or 5.2%. Increases ranged from \$6,000 to \$6.7 million. Similar to the Group 2 experience, 15% of the Group 3 municipalities saw decreases in their required local contributions, primarily as a result of the Chapter 70 amendments affecting the calculation of minimum required local contributions and excess debt adjustments. The median decrease was about \$109,000, or 3.5%. Decreases ranged from \$16,000 to \$1.3 million. Because these municipalities have more than adequate school spending, they are not within the scope of the “problems” Chapter 70 addresses. Accordingly,

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<sup>5</sup> The minimum local contribution amendment is explained in Section 2. The excess debt adjustment is described in Section 1.

they are only required to maintain effort levels. The cities and towns in this group are predominantly above average wealth communities.

### **Summary/Conclusion**

At the statewide level, progress toward fair local effort is not positive when measured by the Chapter 70 standard. By this measure, cities and towns are further away from their fair effort goal in 1997 than they were at the beginning of the process. This occurs because the annual fair amounts are ever-growing standards, and the growth in local contributions is sufficient only to keep pace with the growth in the fair amounts, but not to make any real progress toward them.

When required spending in below and above effort municipalities is compared, the overall results are somewhat positive. Although the below effort group is further away from their fair spending standard, the average (median) for the group is closer to the fair amount in 1997. The above effort group has made significant progress toward the Chapter 70 equity goal. In 1997 there are fewer communities spending in excess of their fair share. As a group, reductions in their local contributions have brought them closer to their fair amount.

Most of the cities and towns that were “working too hard” to support their schools have reduced their excess considerably, and are closer to their fair amount, consistent with the intent of the law. However, a substantial amount of the reduction is due to the growth in the fair amount, rather than decreases in the minimum required local contributions. Similarly, nearly all of the communities that were “not working hard enough” are dedicating a substantial amount of additional local resources to schools; most are making progress to their fair amount as intended by the law. However, the progress made by the allocation of additional local resources is minimized because of considerable growth in the fair amount. The ever-increasing fair amount causes progress toward equity for communities with excess local spending, yet frustrates the progress for those that must increase their local contribution. The majority of municipalities that were only expected to maintain local effort have done so.



## **SCHOOL DISTRICT EXPENDITURE PATTERNS/WHAT IS THE MONEY BUYING?**

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### **Scope and Methodology**

As reform efforts generally create an expectation of change, we questioned whether school districts are spending their funds in ways different from prereform experience. The primary reporting document on school system expenditures is the annual "End-of-Year Pupil and Financial Report." Schedule 1 of this report shows school expenditures allocated among numerous categories that may be broadly defined as instructional or noninstructional services. Instructional services directly impact the daily classroom experience, e.g., expenditures related to teaching, supervision and management, textbooks, educational media, and guidance. Noninstructional services have an indirect impact, e.g., spending for athletics, health, transportation, and building maintenance.

As a single End-of-Year Pupil and Financial Report for one school district contains well over 158,000 data items, we sought to narrow the scope, and requested a data file from the Department of Education containing selected expenditure categories for each school district for 1993, (the year preceding reform) and 1995, which was the most recent data available at the time of this review. This focus resulted in a data base containing over 30,000 rows of school expenditure items.

Confirming anecdotal evidence, we found that the 1993 and 1995 reports were not consistent, making fair and full comparisons between the two periods impracticable. Accordingly, our first step was to delete from both years the data files for approximately 100 Reports with material inconsistencies. The remainder was sorted into above and below Foundation groups; and each group was ranked by Foundation Enrollment. From here 25 districts from each group across five enrollment clusters were randomly selected. This subset of data for 50 districts is the basis for our analysis of school spending patterns the year preceding and two years into education reform.

### **Characteristics of the 50 Districts**

Required Net School Spending for the 50 districts in 1995 was approximately \$823 million, about 17% of the statewide total. Required spending for the group increased by nearly \$71 million over the first two years of reform. New state aid supported over 68% of the increase, approaching \$48.5 million. Foundation enrollment for these systems was approximately 146,000, 17% of the statewide total.

Even though the random-selection process to choose 25 below and 25 above Foundation districts was conducted across enrollment clusters for each group, the general statewide contrasts between these two classes of school systems are reflected in the final sample. Required spending for the 25 below Foundation districts approached \$487 million in 1995, about a \$54 million increase. State aid supported approximately 80% of this growth. The 25 below Foundation systems are predominately below average wealth, serving over 93,500 pupils. For the group, 1995 required spending was about 90% of the group Foundation target.

Required spending for the 25 above Foundation districts was approximately \$336 million in 1995, or a \$16 million increase. State aid supported about 29% of this growth. The 25 above Foundation systems are predominantly above average wealth, serving nearly 52,500 pupils. For the group, 1995 required spending was approximately 117% of the group Foundation Budgets.

### **Overall School Spending Patterns**

A comparison of the various elements of spending itemized in 1993 End-of-Year Pupil and Financial Reports to those in the 1995 reports for these districts disclosed some change in how districts allocate available money. Table 5.1 shows various elements of per-pupil spending as a percentage of total per-pupil spending in 1993 and 1995.

It is important to note that total spending reported in End-of-Year Pupil and Financial Reports is more encompassing than the Chapter 70 Net School Spending measure shown previously in this report. Total spending includes additional items such as transportation, long-term debt service, and maintenance<sup>1</sup>. This more encompassing view of the data provides a better picture of how dollars are allocated to direct/instructional services and indirect/noninstructional items. Table 5.1 shows that two years into reform, there is a slight shift of dollars away from the noninstructional items to the instructional services categories of spending. Instructional services shifted from 61.8% of total per-pupil spending in 1993 to 64.2% in 1995. This 2.4 percentage point increase represents \$643 in additional instructional services spending per pupil. Most of this amount is in teaching services<sup>2</sup>, which grew by \$516, shifting from 50.5% of per pupil spending to 52.3%. Also noteworthy is the increase in allocations to textbooks, by \$25 per pupil, a shift from 0.4% to 0.8% of per-pupil spending. Although expenditures for instructional

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<sup>1</sup> Accordingly, per-pupil spending averages in this section are significantly greater than in earlier portions of this report.

<sup>2</sup> The End-of-Year Pupil and Financial Report format includes more than teacher salaries in "teaching services," i.e., salaries for teacher aides, clerical and support staff, supplies, materials, and travel.



hardware/software and professional development were not distinct items in the 1993 reports, 1995 data shows spending at \$12 and \$33 per pupil, respectively.

Table 5.1

**1993 and 1995  
Elements of Per-Pupil Spending  
50 Districts**

	1993 Spending Per Pupil	% of Total	1995 Spending Per Pupil	% of Total
<b>Instructional Services</b>				
Teaching	\$ 2,685	50.5%	\$ 3,201	52.3%
Principal	254	4.8%	272	4.4%
Supervisory	89	1.7%	96	1.6%
Guidance	117	2.2%	138	2.2%
Psychological	58	1.1%	60	1.0%
Textbooks	23	0.4%	48	0.8%
Educational Media	62	1.1%	71	1.2%
Inst. Hardware & Software	NA	NA	12	0.2%
Professional Development	NA	NA	33	0.5%
<b>Subtotal Inst. Services</b>	<b><u>3,288</u></b>	<b>61.8%</b>	<b><u>3,931</u></b>	<b>64.2%</b>
<b>Noninstructional Services</b>				
General Administration	264	5.0 %	245	4.0%
Health Services	33	0.6 %	42	0.7%
Operations and Maintenance	573	10.8 %	559	9.1%
Transportation	198	3.7 %	208	3.4%
Debt Service	266	5.0 %	286	4.7%
Athletics	49	0.9 %	55	0.9%
Activities	15	0.3 %	16	0.3%
Other*	631	11.9 %	779	12.7%
<b>Subtotal Noninstructional Services</b>	<b><u>2,029</u></b>	<b>38.2 %</b>	<b><u>2,190</u></b>	<b>35.8 %</b>
<b>Total Spending Per Pupil</b>	<b><u>\$ 5,317</u></b>		<b><u>\$ 6,121</u></b>	
<b>Change in Spending Per Pupil</b>	<b>\$ 804</b>	<b>15.1%</b>		

\* Other includes attendance, food services, custodial, fixed charges, recreation, asset liquidation, and payments to other districts.

Reported expenditures for noninstructional services in 1995 are 2.4 percentage points less than in 1993, even though overall spending in this category grew by \$161 per pupil. Expenditures for operations and maintenance carried the bulk of the decrease, going from 10.8% of per-pupil spending to 9.1%, \$14 less per pupil. General administrative costs decreased by \$19 per pupil, a shift from 5% to 4% of total spending per pupil. Most of the \$161 increase in noninstructional services was for fixed charges and payments to other districts.

Generally, it appears that even a small shift toward direct instructional services spending—including doubled per-pupil spending for textbooks and a decrease in allocations to administrative functions—is a positive result. The data examined reflects only two years of reform experience, and shows local spending decisions made without the guidance of a number of significant state standards yet to be promulgated, e.g., full curriculum frameworks and high school graduation criteria. Nonetheless, the End-of-Year Pupil and Financial Report format is inadequate to serve as a measure of expenditures toward many of the academic goals of education reform. While the present reporting document is expansive, containing over 150,000 data items, it does not detail expenditures; for example, for curriculum development, instructional materials to support new curriculum frameworks, science laboratories, or foreign language classes. As the Commonwealth continues to assume a growing portion of school costs, the state's interest in how the money is spent is likely to grow. Should this occur, the format of school system financial reporting will need to be reworked.

### **Spending Patterns in Above Compared to Below Foundation Districts**

The overall differences in experience in above compared to below Foundation districts are also apparent in school spending patterns. The average per-pupil spending increase in the 25 below Foundation systems was 22% (\$1,043), and these districts have made greater changes in their spending patterns than the 25 in the above Foundation group. Typically, the above Foundation districts allocated greater portions of their prereform dollars to direct/instructional services, and received minimal state aid during the first two years of reform. For this group, per-pupil spending grew by 6%, or \$388 over the period. Starting the process with a lower base and generally receiving greater state aid over the period, overall expenditure patterns in 1995 in the below Foundation group appear to be reaching the overall allocation patterns found in the above Foundation group in 1993.

As shown in Table 5.2, in the above Foundation group per-pupil spending for instructional services shifted from 64.6% of total per pupil spending in 1993 to 65.8% in 1995. This 1.2 percentage point increase represents \$338 additional direct service expenditures per pupil. Of this amount, \$207 is in teaching services. Textbook allocations increased by \$18 per pupil,

shifting from 0.4% to 0.6% of total per-pupil amounts. The above Foundation group dedicated \$14 per pupil for instructional hardware/software, and \$51 for professional development. Spending for non-instructional services decreased by 1.3 percentage points, so these expenditures are 34.2% of total per-pupil spending in 1995. The greatest shift in indirect services spending for the above Foundation group was in operations and maintenance, decreasing by \$242 per pupil.

**Table 5.2**

**1993 and 1995  
Categories of Spending Per Pupil for the  
25 Above Compared to the 25 Below Foundation Districts**

	Above Foundation				Below Foundation			
	1993 Spending Per Pupil	% of Total	1995 Spending Per Pupil	% of Total	1993 Spending Per Pupil	% of Total	1995 Spending Per Pupil	% of Total
<b>Instructional / Direct Services</b>								
Teaching	\$ 3,387	52.34%	\$ 3,594	52.40%	\$ 2,288	49.08%	\$ 2,981	52.25%
Principal	300	4.64%	318	4.64%	227	4.87%	246	4.31%
Supervisory	140	2.16%	141	2.06%	60	1.29%	71	1.24%
Guidance	156	2.41%	165	2.41%	94	2.02%	123	2.16%
Psychological	68	1.05%	78	1.14%	52	1.12%	49	0.86%
Textbooks	26	0.40%	44	0.64%	22	0.47%	50	0.88%
Educational Media	100	1.55%	110	1.60%	41	0.87%	50	0.88%
Instr. Hardware & Software	NA	NA	14	0.20%	NA	NA	7	0.12%
Professional Development	NA	NA	51	0.74%	NA	NA	26	0.46%
<b>Instructional Services Subtotal</b>	<b><u>4,177</u></b>	<b>64.55%</b>	<b><u>4,515</u></b>	<b>65.83%</b>	<b><u>2,784</u></b>	<b>59.72%</b>	<b><u>3,603</u></b>	<b>63.16%</b>
<b>Noninstructional / Indirect Services</b>								
General Administration	\$ 267	4.13%	\$ 338	4.93%	\$ 355	7.61%	\$ 392	6.87%
Health Services	50	0.77%	56	0.82%	31	0.66%	39	0.68%
Operation & Maintenance	889	13.74%	647	9.43%	552	11.84%	583	10.22%
Transportation	222	3.42%	219	3.19%	230	4.93%	238	4.17%
Debt Service	639	9.88%	819	11.94%	444	9.52%	444	7.78%
Athletics	83	1.29%	88	1.28%	40	0.87%	50	0.88%
Activities	15	0.23%	18	0.26%	12	0.26%	14	0.25%
Other *	129	1.99%	159	2.32%	214	4.59%	342	5.99%
<b>Noninstructional Services Subtotal</b>	<b><u>2,294</u></b>	<b>35.45%</b>	<b><u>2,344</u></b>	<b>34.17%</b>	<b><u>1,878</u></b>	<b>40.28%</b>	<b><u>2,102</u></b>	<b>36.84%</b>
<b>Total Spending Per Pupil</b>	<b><u>\$ 6,471</u></b>		<b><u>\$ 6,859</u></b>		<b><u>\$ 4,662</u></b>		<b><u>\$ 5,705</u></b>	
<b>Change in Spending Per Pupil</b>			<b>\$ 388</b>	<b>6.00%</b>			<b>\$ 1,043</b>	<b>22.37%</b>

\* Other includes attendance, food services, custodial, fixed charges, recreation, asset liquidation, and payments to other districts.

In the below Foundation group, instructional services spending grew from 59.7% of total per-pupil amounts in 1993 to 63.2% in 1995. This 3.5 percentage point shift represents an additional \$819 per pupil, and brings the group allocation substantially closer to the prereform practice in the above Foundation group. Most of this additional spending is in teaching services, \$693 per pupil. Below Foundation textbook expenditures increased by \$28 for a total of \$50 per pupil in 1995. These systems reported instructional hardware/software spending at \$7 per pupil, and professional development spending at \$26 in 1995, both categories about half the rate of spending in the above Foundation group.

### **Instructional Personnel, Pupil/Teacher Ratios<sup>3</sup>**

Although the growth in per-pupil expenditures in the 50 districts closely parallels statewide experience, these systems did not hire new teachers at nearly the statewide rate. The data indicates that there were 58,700 public school teachers in 1995, 8,193 or 16% more than in 1993. Over the same period 1,327 teachers left school systems under an early retirement incentive program. To replace these retirees and realize a 16% increase in teaching staff required about 9,500 new hires over the period. Despite enrollment growth at about 4%, the increase in teachers statewide brought the average pupil/teacher ratio down from 17.4 to 15.6, that is, almost two fewer pupils per teacher<sup>4</sup>.

The 50 districts employed 10,100 teachers in 1995, 446 or 4.6% more than in 1993. About 242 teachers in these districts opted for the early retirement incentive, so that new hires approached 688. The overall pupil/teacher ratio for these districts in 1993 was 16.1 to 1. In 1995 it dropped to 15.8 pupils per teacher, a decrease of 0.3. For the 50 district group, the additional teachers hired over the two years essentially worked to maintain prereform ratios.

Within the 50, the 25 below Foundation districts increased their teaching staffs by 318, more than twice the rate of the 25 above Foundation districts with an increase of 128 teachers. In both cases, additional staff resulted in fractional decreases in pupil/teacher ratios. The below Foundation group ratio dropped from 16.4 pupils per teacher to approximately 16. The above Foundation group ratio fell from 15.6 to 15.3.

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<sup>3</sup> Data for this discussion and the following discussion of average teacher salaries is not from the End-of-Year Pupil and Financial Report. The State Department of Education provided separate data bases for this analysis.

<sup>4</sup> Note that pupil/teacher ratios do not necessarily reflect average class sizes, that typically vary by grade level and program.

## Average Teacher Salaries

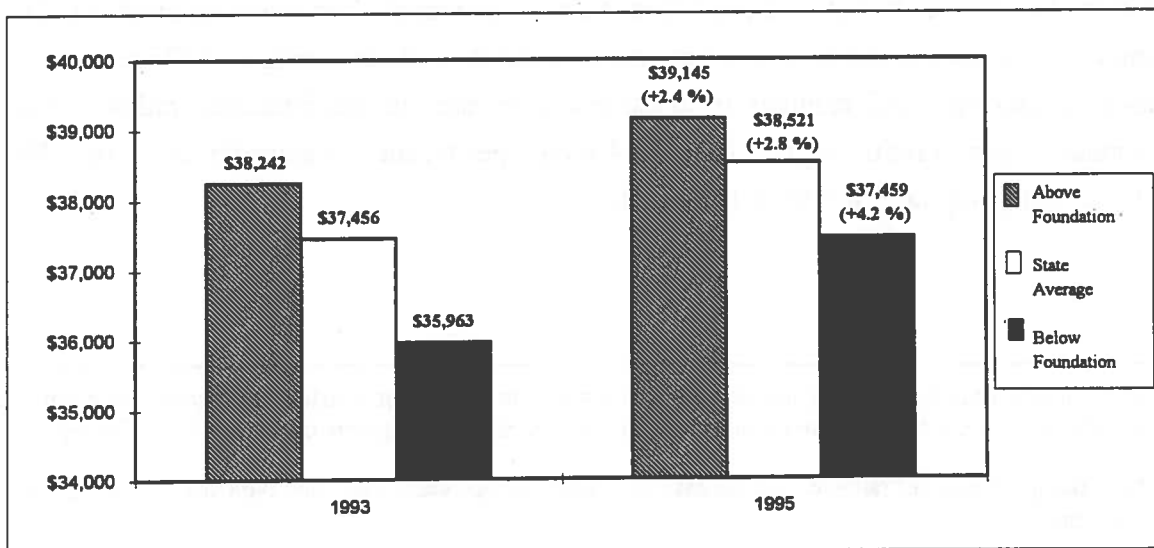
From 1993 to 1995, the statewide average teacher salary grew by 2.8%, \$1,065, for a total of \$38,521. Contrary to some expectations, this overall rate of growth is no greater than prereform experience. Moreover, average salaries decreased in a number of school systems, due in large part to the impact of the early retirement incentive program. Typical retirees were earning at the upper end of salary ranges due to length of service. Losing even a few of these higher salaried employees can pull an average down substantially.

Overall data for the 50 districts closely reflects the statewide experience. Most significant, however, is the differing rates of growth in average salaries in the 25 above Foundation and the 25 below Foundation districts. See Figure 5.1.

**Figure 5.1**

### 1993 and 1995 Average Teacher Salaries 25 Above and 25 Below Foundation Districts

	<u>Above Foundation Districts</u>		<u>State Average</u>	<u>Below Foundation Districts</u>	
	Average Salary	% of State Average		Average Salary	% of State Average
1993	\$ 38,242	102.1 %	\$ 37,456	\$ 35,963	96.0 %
1995	\$ 39,145	101.6 %	\$ 38,521	\$ 37,459	97.2 %
Change \$	\$ 903	84.8 %	\$ 1,065	\$ 1,496	140.5 %
Change %	2.4 %		2.8 %	4.2 %	



Over the two-year period, the average teacher salary in the above Foundation districts increased by 2.4%, or \$903. This brings the 1995 group average to \$39,145. For the below Foundation group, the average salary increased by 4.2%, or \$1,496. This brings the below Foundation group average to \$37,459. The averages for both groups are slightly closer to the state average salary rate in 1995 than in 1993.

Accordingly, the extent that average teacher salaries are greater for the above Foundation group than for the below Foundation group is diminishing. In 1993, the average salary for the 25 above Foundation districts was \$2,279 greater than in the 25 below Foundation systems. Two years into the reform process, the below Foundation group average is about 26% closer to the above Foundation norm, so that the difference is \$1,686. This change is potentially important progress toward improving the ability of the below Foundation districts to compete for professional staff.

### **Summary/Conclusions**

Although the existing format for school system financial reporting is not designed to monitor expenditures toward the specific academic objectives of education reform, data from these reports does show a slight change in the way the sample school districts manage their money. While the overall shift from noninstructional items to instructional services may not appear to be significant, the larger shift in the below Foundation group of districts may be approaching meaningful change for these systems. Not only are they spending more money, they are allocating a greater portion of per-pupil spending to direct student services.

The data also indicates that the sample districts are hiring additional teachers at a rate to keep pace with enrollment growth, a practice that may not have been possible without the additional state aid over the period. Overall, average teacher salaries grew moderately, but not at a rate greater than prereform experience. The growth in the average rate of pay in the below Foundation group should enhance their ability to compete for professional staff. The sample districts slightly decreased the portion of per-pupil spending for general administrative purposes, and doubled the portion for textbooks. Particularly for the below Foundation group, the overall results suggest positive change in how the sample districts allocate resources among the various elements of per-pupil spending.

## **NON-SCHOOL SPENDING THE STATUS OF OTHER LOCAL GOVERNMENT ACCOUNTS**

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### **Scope and Methodology**

During our pre-study interviews, local government representatives expressed concern that the financial commitments required by the Education Reform Act may lead to deterioration of other essential local services. For the first time, state government is mandating minimum levels of local support for education. Also for the first time, state school aid is explicitly earmarked and cannot be spent for other purposes. In the revised Chapter 70, the Commonwealth has made major commitments to continue increasing school aid through the year 2000. As these commitments to education consume significant portions of the annual growth in state revenue, certain municipal officials question the future stability of other local programs. In this context, it is important to assess the status of non-school services as we progress through the stages of education reform.

For this purpose, we obtained local expenditure data from the Department of Revenue's (DOR) Municipal Data Bank on-line service for 1993, the year preceding education reform, and 1995, the most recent and complete data set available<sup>1</sup>. This data base details General Fund expenditures<sup>2</sup> by 13 functions as reported by each city and town. The functions may be broadly viewed in three categories: (1) education, typically the largest single item of local spending; (2) other direct public services, most notably including expenditures for police, fire, and public works departments; and (3) indirect public services, including such expenses as general government operations and debt service. Appendix VI shows the various local departments and types of expenses comprising each of the 13 functions.

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<sup>1</sup> The data file does not contain entries for the town of West Stockbridge for 1995. Accordingly, it is not included in this analysis, and our total number of communities in this section of the report is 350, not 351.

<sup>2</sup> General Fund expenditures account for nearly three-fourths of overall municipal spending. Included in this Fund is spending for the following 13 functions: education; police; fire; public works-highways; other public safety; other public works; health and welfare; culture and recreation; debt service; general government; intergovernmental; fixed costs; and other. Remaining funds not analyzed include Special Revenue, Capital Projects, Enterprise, and Trust Funds, which are mainly supported by state and federal grants, user fees, bonds and other non-tax sources that are specifically targeted for particular purposes.

*Important notes:* The term “education” spending in the DOR data base differs significantly from the term “net school spending” used in earlier sections of this report. Among others, three important differences are as follows. DOR education figures include any regional school district costs and expenses for school transportation. Additionally, DOR assigns costs for school department employee benefits to a non-school expenditure category (fixed costs). For the purposes of Chapter 70, net school spending does not include transportation expenses, and may include benefits for school employees, depending upon local accounting methods. Finally, we added any local expenditures from state Equal Educational Opportunity Grants and Per-Pupil Grants to the 1993 education data taken from the DOR on-line service. This makes the 1993 figures more comparable to the 1995 data for our purposes.

Based upon this revised data base, in this section we assess the status of local expenditures for non-school functions two years into reform at two levels. First, we show the statewide experience in terms of the overall growth in General Fund expenditures, and how this growth is allocated generally among education and other local accounts. Here, we also show the extent that state aid has supported the increase in local spending. This is followed by a more detailed review of the 13 basic components of local spending, again from a statewide perspective.

Second, we report results separately for the group of communities where non-school spending grew at or greater than the rate of inflation over the period, and the group where funding for other municipal accounts did not keep pace with inflation. At this level, we show the change in allocations to school and non-school municipal accounts for each group, and identify the specific categories of non-school spending growing at less than the rate of inflation.

### **Statewide Municipal General Fund Expenditures**

Reported statewide municipal General Fund expenditures grew by almost \$680 million or 7.8% over the period, increasing from about \$8.7 billion in 1993 to \$9.4 billion in 1995. According to the data, school spending accounts for approximately \$436 million, or 64% of the growth. Overall non-school spending increased by over \$244 million, about 36% of the growth.

Net increases in direct distributions of state aid to cities and towns approached \$435 million<sup>3</sup> over the same period, so that the Commonwealth supported approximately 64% of the growth in

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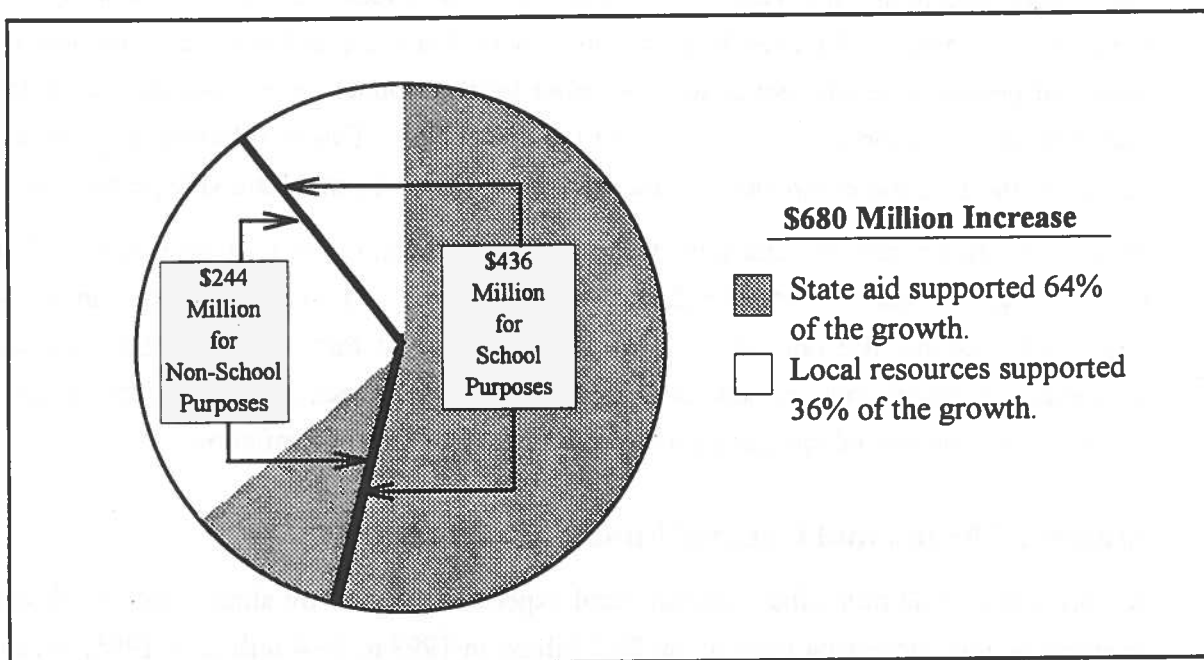
<sup>3</sup> This amount reflects state aid accounts detailed on the annual DOR “Notice to Assessors of Estimated Receipts to be Used in Determining the Tax Levy,” also known as “Cherry Sheets.” The amount does not include offset items that do not support General Fund expenditures. The amount includes aid to support regional school programs.



local spending. Of this amount, almost \$366 million was state aid for various school purposes, and about \$69 million was state assistance for general government purposes. Accordingly, state aid to cities and towns supported approximately 84% of the \$436 million growth in school spending, and 28% of the \$244 million increase in non-school spending. Figure 6.1 illustrates how the increase in local spending was allocated among school and other government accounts, and the level of state assistance for each.

**Figure 6.1**

**1993 – 1995**  
**Growth in Municipal General Fund Expenditures**  
**For School and Non-School Purposes**



Financed primarily from the accelerated rate in the growth of state aid for education, local school spending increased by 11.4% over the two-year period. Non-school spending grew by approximately 5%. As a result, education comprised about 45.4% of local General Fund expenditures in 1995, an increase of 1.5 percentage points over the 1993 proportion. Non-school accounts comprised 54.6%, a decrease of 1.5 percentage points from the 1993 allocations. The proportion of General Fund expenditures for education funded from local resources decreased from approximately 59.6% to 55.1%.

Table 6.1 itemizes the statewide distribution of municipal General Fund expenditures across the 13 functional components in 1993 and 1995, separating non-school items into other direct and indirect public service categories.

**Table 6.1**

**1993 and 1995  
Municipal General Fund Expenditures by Function  
(350 Cities and Towns)**

Function	1993	1993 % of Total Expenditure	1995	1995 % of Total Expenditure	\$ Change 1993-1995	% Change 1993-1995
<b>Education</b>	<b><u>\$3,825,311,583</u></b>	<b>43.91%</b>	<b><u>\$4,261,068,576</u></b>	<b>45.37%</b>	<b><u>\$435,756,993</u></b>	<b>11.39%</b>
<b>Other Direct Public Services:</b>						
Police	634,305,146	7.28%	712,781,000	7.59%	78,475,854	12.37%
Fire	512,818,841	5.89%	562,127,431	5.98%	49,308,590	9.62%
Other Public Safety	129,779,246	1.49%	142,079,148	1.51%	12,299,902	9.48%
Public Works -Highways	333,951,967	3.83%	316,176,960	3.37%	(17,775,007)	-5.32%
Other Public Works	382,415,511	4.39%	395,076,685	4.21%	12,661,174	3.31%
Health & Welfare	283,111,832	3.25%	312,011,565	3.32%	28,899,733	10.21%
Culture & Recreation	184,097,759	2.11%	205,547,667	2.19%	21,449,908	11.65%
<b>Subtotal</b>	<b><u>2,460,480,302</u></b>	<b>28.24%</b>	<b><u>2,645,800,45</u></b>	<b>28.17%</b>	<b><u>185,320,154</u></b>	<b>7.53%</b>
<b>Indirect Public Services:</b>						
Debt Service	533,715,439	6.13%	550,472,796	5.86%	16,757,357	3.14%
Fixed Costs	1,115,836,922	12.81%	1,117,637,443	11.90%	1,800,521	0.16%
General Government	425,142,008	4.88%	456,092,777	4.86%	30,950,769	7.28%
Intergovernmental	300,198,466	3.44%	312,106,449	3.32%	11,907,983	3.97%
Other	51,317,410	0.59%	48,745,961	0.52%	(2,571,449)	-5.01%
<b>Subtotal</b>	<b><u>2,426,210,245</u></b>	<b>27.85%</b>	<b><u>2,485,055,426</u></b>	<b>26.46%</b>	<b><u>58,845,181</u></b>	<b>2.43%</b>
<b>State Total</b>	<b><u>\$8,712,002,130</u></b>		<b><u>\$9,391,924,458</u></b>		<b><u>\$679,922,328</u></b>	<b>7.80%</b>

The inflation rate from 1993 to 1995 was 3.6%<sup>4</sup>. As shown in Table 6.1, on a statewide basis the increase in local General Fund expenditures for education was just over three times the rate of inflation. With the exception of the public works categories, every item of direct public service spending also grew at about three times the inflation rate. While public safety expenditures increased by approximately \$140 million, or 11%, expenditures for public works-highways decreased by about 5% over the period, by approximately \$18 million statewide. This reduction was at least partially due to the relatively mild winter of 1994-1995, when statewide snow removal costs were over \$50 million less than in the severe winter of 1993-1994.

Among the indirect public services accounts, increased spending for general government operations was twice the rate of inflation; intergovernmental assessments grew just over the rate of inflation. While debt service expenditures grew by about 3%, fixed costs increased a fraction of one percent. Other miscellaneous expenses, including payments for adverse court judgments, fell by 5%.

Table 6.1 also shows each of the 13 functional categories as a percentage of total General Fund expenditures. As noted above, education consumed 1.5 percentage points more of total spending in 1995 than in 1993. This shift was primarily offset in the fixed costs category of non-school services, which represents nearly 1% less (0.91) of total expenditures in 1995. The remainder of the shift was spread fractionally among the public works and other indirect public service accounts.

### **The Range of Community Experience: Above and Below Inflation Growth in Non-School Services**

Beyond the statewide view of the data, a more detailed review of spending patterns at the community level reveals a wide range of experience. See Appendix VII. Comparing 1993 to 1995, there were 186 municipalities where non-school spending increased at or above the 3.6% inflation rate. This group (Group 1) includes 29 of the 41 cities in Massachusetts in 1995, and about one-half of the towns. These localities serve about 62% of the statewide population, approximately 3.7 million residents. While Group 1 includes a range of types of cities and towns, the general character is more urban, suburban, and growth oriented than the group in which non-school spending failed to keep pace with inflation (Group 2).

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<sup>4</sup> Source: United States Department of Commerce, Implicit Price Deflator for State and Local Government Services.

Group 2 includes 164 municipalities: the remaining 12 cities and about one-half of the towns. This group serves approximately 38% of the population, approximately 2.3 million residents. Like Group 1, Group 2 includes a range of types of communities, but it is overall less urban and more rural and resort-oriented.

Table 6.2 shows the distribution of General Fund expenditures across the 13 functional categories in 1993 and 1995 for Group 1.

**Table 6.2**

**1993 and 1995  
General Fund Expenditures by Function  
Group 1: Municipalities Where Non-School Spending Grew At  
or Above the Rate of Inflation ( 186 Cities and Towns )**

<b>Function</b>	<b>FY 1993</b>	<b>FY 1995</b>	<b>\$ Change</b>	<b>% Change</b>
<b>Education</b>	<b><u>\$2,391,021,349</u></b>	<b><u>\$2,645,135,386</u></b>	<b><u>\$254,114,037</u></b>	<b>10.63%</b>
<b>Other Direct Public Services:</b>				
Police	421,652,228	481,557,891	59,905,663	14.21%
Fire	337,998,667	376,858,244	38,859,577	11.50%
Other Public Safety	96,863,054	107,573,670	10,710,616	11.06%
Public Works -Highways	195,678,397	193,307,510	(2,370,887)	-1.21%
Other Public Works	251,342,177	267,472,444	16,130,267	6.42%
Health & Welfare	247,076,305	274,006,185	26,929,880	10.90%
Culture & Recreation	120,876,005	136,384,359	15,508,354	12.83%
<b>Subtotal</b>	<b><u>1,671,486,833</u></b>	<b><u>1,837,160,303</u></b>	<b><u>165,673,470</u></b>	<b>9.91%</b>
<b>Indirect Public Services:</b>				
Debt Service	336,687,039	370,611,231	33,924,192	10.08%
Fixed Costs	713,879,005	745,582,675	31,703,670	4.44%
General Government	266,005,998	291,324,461	25,318,463	9.52%
Intergovernmental	198,618,496	215,746,247	17,127,751	8.62%
Other	29,993,443	37,670,479	7,677,036	25.60%
<b>Subtotal</b>	<b><u>1,545,183,981</u></b>	<b><u>1,660,935,093</u></b>	<b><u>115,751,112</u></b>	<b>7.49%</b>
<b>Group Total</b>	<b><u>\$5,607,692,163</u></b>	<b><u>\$6,143,230,782</u></b>	<b><u>\$535,538,619</u></b>	<b>9.55%</b>

Total General Fund expenditures for this group grew at a greater rate than the statewide results, increasing 9.6% or \$536 million over the two-year period. Of this amount, about \$281 million (52%) was for non-school accounts, and \$254 million (48%) was for school purposes.

While allocations for education increased by approximately 10.6%, expenditures for non-school services grew by 8.7%. Due to the greater rate in the growth of school spending, education comprised about 43% of total General Fund expenditures in 1995, almost one-half of a percentage point more than in 1993. Fractional reductions in the proportions of spending dedicated to public works and fixed costs offset the shift in the proportion dedicated to school services.

With the exception of public works, Group 1 spending in every functional category increased above the rate of inflation. Among the direct public services items, spending for public safety grew by nearly \$109.5 million, or 12.8%. With the exception of fixed costs, every category of indirect public services spending increased at more than twice the rate of inflation.

By definition, as the group of communities where non-school spending grew at less than the rate of inflation, total expenditures in Group 2 increased at a slower rate than the statewide experience. As shown in Table 6.3, General Fund expenditures for Group 2 grew by approximately \$144 million, or 4.7% from 1993 to 1995. This amount reflects an increase of over \$181 million in spending for school purposes, and a decrease in non-school services exceeding \$37 million.

For Group 2, school spending increased by nearly 12.7%, while non-school spending decreased by 2.2%. These differing rates of growth (or decline) resulted in education consuming 3.5 more percentage points of total General Fund expenditures in 1995 than in 1993, moving from 46.2% to 49.7%. This increase in the school proportion of total spending was partially offset by a nearly 1% decrease in the portion dedicated to public works. The remainder was offset by decreases in other indirect service categories of spending.

Collectively, the communities in Group 2 increased spending for public safety purposes by about \$30.6 million, or 7.3% over the two-year period. With the exception of public works, every other direct services account grew well over the rate of inflation. The data indicates that there were two primary reasons for below inflation spending growth in non-school services. First was the reduction in public works costs due mainly to the relatively mild winter of 1994-1995. Without this factor, the sum of other direct public service accounts grew by 7.4%, two times the rate of inflation. Second was reductions in indirect service accounts: debt service; fixed costs; intergovernmental assessments; and other miscellaneous items.

**Table 6.3**

**1993 and 1995  
General Fund Expenditures by Function  
Group 2: Municipalities Where Non-School Spending  
Grew Less Than the Rate of Inflation ( 164 Cities and Towns )**

<b>Function</b>	<b>FY 1993</b>	<b>FY 1995</b>	<b>\$ Change</b>	<b>% Change</b>
<b>Education</b>	<b><u>\$1,434,290,234</u></b>	<b><u>\$1,615,933,190</u></b>	<b><u>\$181,642,956</u></b>	<b>12.66%</b>
<b>Other Direct Public Services:</b>				
Police	212,652,918	231,223,109	18,570,191	8.73%
Fire	174,820,174	185,269,187	10,449,013	5.98%
Other Public Safety	32,916,192	34,505,478	1,589,286	4.83%
Public Works -Highways	138,273,570	122,869,450	(15,404,120)	-11.14%
Other Public Works	131,073,334	127,604,241	(3,469,093)	-2.65%
Health & Welfare	36,035,527	38,005,380	1,969,853	5.47%
Culture & Recreation	63,221,754	69,163,308	5,941,554	9.40%
<b>Subtotal</b>	<b><u>788,993,469</u></b>	<b><u>808,640,153</u></b>	<b><u>19,646,684</u></b>	<b>2.49%</b>
<b>Indirect Public Services:</b>				
Debt Service	197,028,400	179,861,565	(17,166,835)	-8.71%
Fixed Costs	401,957,917	372,054,768	(29,903,149)	-7.44%
General Government	159,136,010	164,768,316	5,632,306	3.54%
Intergovernmental	101,579,970	96,360,202	(5,219,768)	-5.14%
Other	21,323,967	11,075,482	(10,248,485)	-48.06%
<b>Subtotal</b>	<b><u>881,026,264</u></b>	<b><u>824,120,333</u></b>	<b><u>(56,905,931)</u></b>	<b>-6.46%</b>
<b>Group Total</b>	<b><u>\$3,104,309,967</u></b>	<b><u>\$3,248,693,676</u></b>	<b><u>\$144,383,709</u></b>	<b>4.65%</b>

Appendix VII shows the change in expenditures for non-school services for each city and town from 1993 to 1995, detailing the change for the direct and indirect categories of spending. As this appendix indicates, there is a wide range of variation in the specific community experiences that generate the changes discussed above. There is also a wide range of reasons for growth or decline in spending for non-school services. Although making a precise determination of the reasons for each city and town was beyond the scope of this study, changes in service

management and accounting procedures may account for some decreases in local General Fund expenditures for non-school purposes.

For example, some communities have recently established self-supporting enterprise funds for certain public works functions, so that these expenses are no longer supported from revenues deposited to the local General Fund. Shortly following enactment of the ERA, some municipalities that had previously accounted for certain school employee benefits in the non-school fixed costs category transferred these expenses to the education category of spending. Although these types of changes can result in decreases in allocations from the General Fund, negative values do not necessarily indicate a reduction in local services in every case.

### **Summary/Conclusion**

Statewide municipal General Fund expenditures for education grew significantly over the 1993 to 1995 period, over three times the rate of inflation. Since most of this growth was supported by various state school aid programs, the recent emphasis on education reform does not appear to have adversely impacted the overall stability of funding for other local public services. Spending for public safety functions statewide grew at three times the rate of inflation. At this level, expenditures for debt service, fixed costs, and other items, such as court judgments, lagged behind inflation.

When community data is reviewed at the above and below inflation non-school spending group levels, the overall results are still positive. The data indicates that expenditures for most other direct public services – for the consumer-oriented, day-to-day business of local governments – grew at least two times the rate of inflation in both groups. For the group of communities where non-school spending did not keep pace with inflation, the reasons were primarily reductions in snow removal costs and decreases in debt service and fixed costs, rather than direct public services.

Beyond these group changes, there is a wide range of specific community experience. Although some reductions in non-school spending accounts are due to changes in local service management or accounting procedures, it will be important to continue to monitor the stability of funding for non-school services.





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## CONCLUDING COMMENTS

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Chapter 70 is an inordinately complex law, yet its goals are clear – adequate and fair public school spending.

Toward these ends, the law has established an expectation that projected spending (minimum Net School Spending) for elementary and secondary education will increase over prereform amounts by about 42%, or \$1.8 billion in the year 2000. Projected state aid<sup>1</sup> is scheduled to support about 76% of the growth, with minimum local contributions supporting 24%<sup>2</sup>. This effort would bring the annual total to almost \$6 billion, bringing projected minimum Net School Spending per pupil to \$6,562. This amount represents an increase of \$1,300 over 1993 levels, or about 3.5% per year over the seven-year reform period.

To meet the reform schedule, an additional \$791.2 million will be required to support Chapter 70 obligations over the next three years. Projected growth in minimum local contributions will support almost 1/4 of this amount, approximately \$64.5 million per year. New Chapter 70 state aid will support the remainder, at about \$199.2 million per year. At this rate, statewide Net School Spending would exceed projected statewide Foundation Budgets by about \$60 million. Factoring the sum of total (not just new) estimated annual spending over the seven-year period brings the cumulative state and local investment to almost \$37 billion.

Four years into reform, the accelerated growth in the rate of state support has resulted in a substantial shift in the relatively low level of state contribution to school funding in Massachusetts. While comparable 1993 aid supported about 30% of Net School Spending, 1997 Chapter 70 appropriations provide 39%. The scheduled level of state aid for the year 2000 would bring the state share to approximately 43%, more in line with the existing national average of about 48%. The net result will be relief to property taxpayers and less reliance upon local wealth factors for school support. The broader-based state taxes will play a greater role.

It is important to recognize that the focus of Chapter 70 is to remedy below Foundation, less than adequate school spending. It is not tailored to help systems with more than adequate spending maintain those levels. Particularly where higher rates of enrollment growth cause higher rates of

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<sup>1</sup> In addition to Chapter 70 commitments, the Board of Education projects that state obligations for specific program initiatives will approach \$200 million by the year 2000.

<sup>2</sup> State aid is projected by the Department of Education. Minimum local contribution projections are based upon a least squares trend analysis.

growth in Foundation Budget targets, minimum required spending under the law does not always keep pace. This dynamic has a negative impact for school districts with greater than average enrollment growth. As school finance reform moves forward, this is an issue that merits further consideration.

More important than the array of inter-working formulas and compound calculations to determine how many school systems may have or have not achieved their Foundation Budgets or fair local contributions to school support, Chapter 70 provides a vehicle for a more balanced state and local partnership – a shared responsibility – in supporting the cost of education in the Commonwealth. Because of this, we can already observe a reduction in the disparity of per-pupil expenditures across property-rich and property-poor communities. Important progress is underway toward assuring that adequate financial resources are available to every student. The Legislature is standing by its commitment, and most cities and towns are doing more than the law requires.

The Education Reform Act also contemplates a greater state role in shaping the day-to-day classroom experience. It provides for statewide curriculum guidelines for core academic subjects to expose every student, regardless of where they live, to a consistent body of academic content. The act calls for statewide testing and achievement standards for high school graduation intended to ensure the basic competencies of every graduate. The Commonwealth's commitment to these and other objectives is sealed with the promise of state take-over of any school district that consistently falls short of state standards.

The first competency diplomas are scheduled to be awarded to the high school graduating class of 1999, based upon performance on the statewide test intended to be administered to tenth grade pupils. Members of the class of 1999 are now completing their junior year. The full set of state curriculum guidelines has not been developed. The test to measure their competency for graduation was field-tested in April and May of this year. Although the Legislature and cities and towns are meeting their obligations under the school finance reform schedule, implementation of key initiatives intended to foster improvement in student performance lag behind. This lack of progress frustrates the overall objectives of the Education Reform Act, and dilutes the value of the state and local investments made over the first four years of the reform schedule.

## APPENDIX I

### *School Aid Distribution Patterns Three Years Before and Three Years Into Reform Percentage Point Change in "Piece of the Pie" for 321 School Districts (See Section 2)*

School District	Share of School Aid 1991 - 1993	Share of School Aid 1994 - 1996	% Point Difference 91-93 to 94-96	Whole \$ Difference 91-93 to 94-96
Abington	0.31%	0.26%	(0.05)	\$ 1,541,764
Acton	0.05%	0.05%	0.01	897,469
Acushnet	0.15%	0.17%	0.02	2,756,872
Agawam	0.51%	0.42%	(0.09)	2,198,450
Amesbury	0.36%	0.34%	(0.02)	3,407,716
Amherst	0.23%	0.22%	(0.02)	2,209,427
Andover	0.13%	0.14%	0.01	2,056,455
Arlington	0.21%	0.19%	(0.02)	1,749,015
Ashland	0.04%	0.05%	0.01	878,432
Attleboro	0.85%	0.85%	(0.00)	10,588,875
Auburn	0.21%	0.17%	(0.04)	673,328
Avon	0.02%	0.02%	0.00	299,575
Ayer	0.26%	0.22%	(0.04)	1,505,357
Barnstable	0.09%	0.12%	0.03	2,583,512
Bedford	0.05%	0.05%	0.00	806,710
Belchertown	0.17%	0.24%	0.07	5,362,630
Bellingham	0.34%	0.28%	(0.06)	1,458,640
Belmont	0.07%	0.08%	0.01	1,387,005
Berkley	0.07%	0.10%	0.03	2,269,735
Berlin	0.02%	0.02%	(0.00)	77,359
Beverly	0.25%	0.25%	(0.00)	3,105,742
Billerica	0.41%	0.48%	0.07	8,501,383
Boston	4.67%	4.99%	0.32	73,804,272
Bourne	0.07%	0.10%	0.03	2,496,280
Boxborough	0.00%	0.01%	0.00	144,358
Boxford	0.01%	0.01%	0.01	376,935
Boylston	0.01%	0.01%	(0.00)	56,363
Braintree	0.12%	0.13%	0.01	2,107,660

72 *Districts where share of school aid is shown as zero received less than 1/100<sup>th</sup> of a percent of the aid that period.*

*School Aid Distribution Patterns Three Years Before and Three Years Into Reform*  
*Percentage Point Change in "Piece of the Pie" for 321 School Districts (See Section 2)*

School District	Share of School Aid 1991 - 1993	Share of School Aid 1994 - 1996	% Point Difference 91-93 to 94-96	Whole \$ Difference 91-93 to 94-96
Brewster	0.01%	0.01%	0.00	\$ 252,267
Brimfield	0.03%	0.03%	0.01	736,954
Brockton	2.95%	3.06%	0.11	42,571,517
Brookfield	0.05%	0.06%	0.01	925,641
Brookline	0.10%	0.13%	0.03	2,597,430
Burlington	0.11%	0.11%	0.00	1,576,740
Cambridge	0.15%	0.19%	0.04	3,680,855
Canton	0.06%	0.07%	0.01	1,192,710
Carlisle	0.01%	0.01%	0.00	263,220
Chatham	0.00%	0.01%	0.00	204,200
Chelmsford	0.16%	0.20%	0.04	3,733,602
Chelsea	1.03%	1.11%	0.08	16,576,412
Chicopee	1.35%	1.29%	(0.05)	14,532,412
Clarksburg	0.05%	0.04%	(0.00)	419,788
Clinton	0.32%	0.31%	(0.01)	3,440,441
Cohasset	0.03%	0.04%	0.00	520,875
Concord	0.03%	0.04%	0.01	758,620
Conway	0.01%	0.01%	0.00	249,413
Danvers	0.07%	0.09%	0.02	1,653,138
Dartmouth	0.28%	0.28%	0.01	3,798,564
Dedham	0.10%	0.10%	0.00	1,277,885
Deerfield	0.03%	0.02%	(0.01)	13,557
Douglas	0.09%	0.13%	0.04	2,815,616
Dover	0.00%	0.00%	0.00	183,729
Dracut	0.39%	0.41%	0.02	5,925,094
Duxbury	0.08%	0.08%	(0.00)	934,835
East Bridgewater	0.24%	0.26%	0.02	4,069,019
Eastham	0.00%	0.00%	0.00	160,290

*Districts where share of school aid is shown as zero received less than 1/100<sup>th</sup> of a percent of the aid that period.*

## APPENDIX I

### *School Aid Distribution Patterns Three Years Before and Three Years Into Reform Percentage Point Change in "Piece of the Pie" for 321 School Districts (See Section 2)*

School District	Share of School Aid 1991 - 1993	Share of School Aid 1994 - 1996	% Point Difference 91-93 to 94-96	Whole \$ Difference 91-93 to 94-96
Easthampton	0.42%	0.35%	(0.07)	\$ 1,863,443
East Longmeadow	0.13%	0.13%	(0.01)	1,298,711
Easton	0.27%	0.23%	(0.04)	1,582,910
Edgartown	0.00%	0.01%	0.00	183,370
Erving	0.01%	0.01%	0.00	224,820
Essex	0.01%	0.01%	0.00	205,631
Everett	0.15%	0.32%	0.17	9,998,159
Fairhaven	0.24%	0.24%	0.00	3,151,567
Fall River	3.58%	3.33%	(0.25)	33,206,359
Falmouth	0.10%	0.13%	0.03	2,766,623
Fitchburg	1.17%	1.16%	(0.02)	13,956,779
Florida	0.00%	0.01%	0.01	368,405
Foxborough	0.21%	0.19%	(0.03)	1,356,442
Framingham	0.19%	0.21%	0.02	3,432,615
Franklin	0.32%	0.35%	0.04	5,776,882
Freetown	0.05%	0.04%	(0.01)	186,348
Gardner	0.50%	0.52%	0.02	7,296,498
Georgetown	0.09%	0.09%	(0.00)	1,080,452
Gloucester	0.10%	0.16%	0.06	3,989,572
Grafton	0.17%	0.17%	(0.00)	1,938,110
Granby	0.11%	0.11%	(0.01)	1,090,983
Granville	0.01%	0.01%	0.00	257,545
Greenfield	0.44%	0.41%	(0.03)	4,172,592
Hadley	0.01%	0.01%	0.00	268,680
Halifax	0.08%	0.08%	(0.01)	754,105
Hancock	0.00%	0.00%	0.00	31,250
Hanover	0.08%	0.09%	0.01	1,407,349
Harvard	0.06%	0.04%	(0.02)	(51,064)

74 *Districts where share of school aid is shown as zero received less than 1/100<sup>th</sup> of a percent of the aid that period.*

*School Aid Distribution Patterns Three Years Before and Three Years Into Reform*  
*Percentage Point Change in "Piece of the Pie" for 321 School Districts (See Section 2)*

School District	Share of School Aid 1991 - 1993	Share of School Aid 1994 - 1996	% Point Difference 91-93 to 94-96	Whole \$ Difference 91-93 to 94-96
Harwich	0.02%	0.02%	0.01	\$ 490,166
Hatfield	0.03%	0.02%	(0.00)	210,443
Haverhill	0.89%	1.08%	0.19	20,081,030
Hingham	0.09%	0.10%	0.01	1,428,240
Holbrook	0.24%	0.21%	(0.03)	1,607,380
Holland	0.01%	0.01%	0.01	385,830
Holliston	0.16%	0.17%	0.01	2,586,176
Holyoke	2.16%	2.40%	0.23	38,309,452
Hopedale	0.06%	0.09%	0.03	2,011,573
Hopkinton	0.04%	0.05%	0.01	1,084,580
Hudson	0.31%	0.26%	(0.05)	1,477,482
Hull	0.12%	0.13%	0.00	1,763,983
Ipswich	0.05%	0.06%	0.01	969,890
Kingston	0.06%	0.06%	0.01	998,344
Lakeville	0.05%	0.05%	0.00	688,991
Lanesborough	0.03%	0.02%	(0.01)	58,850
Lawrence	3.11%	3.41%	0.30	53,165,160
Lee	0.09%	0.07%	(0.02)	245,240
Leicester	0.29%	0.25%	(0.04)	1,796,703
Lenox	0.06%	0.05%	(0.01)	338,955
Leominster	0.82%	0.84%	0.02	11,367,845
Leverett	0.00%	0.00%	0.00	138,789
Lexington	0.13%	0.14%	0.01	2,087,578
Lincoln	0.00%	0.01%	0.01	368,940
Littleton	0.03%	0.03%	0.00	485,810
Longmeadow	0.14%	0.13%	(0.01)	1,233,615
Lowell	2.63%	3.11%	0.48	55,834,105
Ludlow	0.32%	0.32%	0.01	4,345,992

*Districts where share of school aid is shown as zero received less than 1/100<sup>th</sup> of a percent of the aid that period.*

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### *School Aid Distribution Patterns Three Years Before and Three Years Into Reform Percentage Point Change in "Piece of the Pie" for 321 School Districts (See Section 2)*

School District	Share of School Aid 1991 - 1993	Share of School Aid 1994 - 1996	% Point Difference 91-93 to 94-96	Whole \$ Difference 91-93 to 94-96
Lunenburg	0.14%	0.13%	(0.01)	\$ 1,288,617
Lynn	2.21%	2.59%	0.38	45,850,295
Lynnfield	0.05%	0.05%	0.00	791,274
Malden	0.93%	0.80%	(0.13)	5,526,710
Manchester	0.02%	0.02%	0.00	388,114
Mansfield	0.10%	0.14%	0.04	3,281,843
Marblehead	0.05%	0.06%	0.01	1,152,586
Marion	0.00%	0.01%	0.00	142,350
Marlborough	0.10%	0.12%	0.01	1,967,482
Marshfield	0.30%	0.34%	0.04	5,744,874
Mashpee	0.01%	0.03%	0.02	1,241,618
Mattapoisett	0.01%	0.01%	0.00	184,937
Maynard	0.09%	0.08%	(0.01)	580,655
Medfield	0.04%	0.06%	0.01	1,134,400
Medford	0.63%	0.51%	(0.12)	2,457,170
Medway	0.12%	0.14%	0.02	2,359,413
Melrose	0.27%	0.23%	(0.04)	1,667,395
Methuen	0.64%	0.71%	0.06	11,097,458
Middleborough	0.49%	0.53%	0.04	8,053,203
Middleton	0.01%	0.01%	0.01	389,977
Milford	0.54%	0.49%	(0.05)	4,426,480
Millbury	0.24%	0.19%	(0.05)	777,457
Millis	0.07%	0.06%	(0.00)	737,958
Milton	0.06%	0.08%	0.02	1,569,765
Monson	0.17%	0.18%	0.01	2,597,256
Nahant	0.01%	0.01%	0.00	173,890
Nantucket	0.01%	0.01%	0.00	315,189
Natick	0.11%	0.12%	0.00	1,652,885

***School Aid Distribution Patterns Three Years Before and Three Years Into Reform  
Percentage Point Change in "Piece of the Pie" for 321 School Districts (See Section 2)***

School District	Share of School Aid 1991 - 1993	Share of School Aid 1994 - 1996	% Point Difference 91-93 to 94-96	Whole \$ Difference 91-93 to 94-96
Needham	0.09%	0.10%	0.01	\$ 1,709,675
New Bedford	4.26%	3.86%	(0.41)	34,597,319
Newburyport	0.13%	0.12%	(0.01)	1,312,508
Newton	0.22%	0.26%	0.04	4,596,590
Norfolk	0.06%	0.07%	0.01	1,267,342
North Adams	0.62%	0.56%	(0.06)	4,884,859
Northampton	0.46%	0.34%	(0.12)	164,819
North Andover	0.10%	0.10%	0.01	1,654,556
North Attleborough	0.45%	0.42%	(0.03)	4,328,309
Northborough	0.08%	0.08%	(0.00)	912,690
Northbridge	0.31%	0.32%	0.00	4,066,663
North Brookfield	0.13%	0.14%	0.01	2,255,766
North Reading	0.05%	0.06%	0.01	1,108,892
Norton	0.29%	0.29%	(0.01)	3,381,373
Norwell	0.06%	0.06%	0.00	773,970
Norwood	0.10%	0.11%	0.01	1,637,495
Oak Bluffs	0.00%	0.00%	0.00	105,362
Orange	0.16%	0.18%	0.02	3,069,680
Orleans	0.00%	0.00%	0.00	133,420
Oxford	0.31%	0.31%	(0.00)	3,726,926
Palmer	0.24%	0.30%	0.06	5,782,438
Peabody	0.54%	0.47%	(0.07)	3,396,674
Pelham	0.00%	0.00%	0.00	31,554
Pembroke	0.15%	0.15%	(0.00)	1,842,638
Petersham	0.00%	0.00%	0.00	62,616
Pittsfield	1.34%	1.21%	(0.13)	10,636,216
Plainville	0.05%	0.05%	(0.00)	424,300
Plympton	0.01%	0.02%	0.01	391,983

*Districts where share of school aid is shown as zero received less than 1/100<sup>th</sup>  
of a percent of the aid that period.*



## APPENDIX I

### *School Aid Distribution Patterns Three Years Before and Three Years Into Reform Percentage Point Change in "Piece of the Pie" for 321 School Districts (See Section 2)*

School District	Share of School Aid 1991 - 1993	Share of School Aid 1994 - 1996	% Point Difference 91-93 to 94-96	Whole \$ Difference 91-93 to 94-96
Provincetown	0.01%	0.01%	0.00	\$ 161,300
Quincy	0.62%	0.55%	(0.07)	4,535,356
Randolph	0.36%	0.34%	(0.02)	3,464,892
Reading	0.11%	0.13%	0.02	2,294,286
Revere	0.56%	0.61%	0.05	9,282,545
Richmond	0.01%	0.01%	(0.00)	72,418
Rochester	0.03%	0.03%	0.00	396,405
Rockland	0.39%	0.39%	(0.01)	4,599,333
Rockport	0.02%	0.02%	0.00	445,775
Rowe	0.00%	0.00%	0.00	35,895
Salem	0.27%	0.30%	0.03	4,855,614
Sandwich	0.08%	0.12%	0.03	2,642,607
Saugus	0.12%	0.12%	0.00	1,634,361
Savoy	0.01%	0.01%	(0.00)	150,222
Scituate	0.09%	0.09%	0.00	1,215,660
Seekonk	0.16%	0.12%	(0.03)	412,907
Sharon	0.16%	0.15%	(0.01)	1,481,152
Sherborn	0.00%	0.01%	0.00	186,364
Shirley	0.11%	0.11%	0.00	1,506,347
Shrewsbury	0.19%	0.19%	(0.00)	2,352,996
Shutesbury	0.00%	0.01%	0.01	393,465
Somerset	0.06%	0.10%	0.04	2,769,136
Somerville	1.03%	0.85%	(0.19)	4,204,328
Southampton	0.05%	0.05%	(0.00)	506,463
Southborough	0.02%	0.02%	0.00	358,319
Southbridge	0.57%	0.57%	(0.00)	7,017,618
South Hadley	0.28%	0.24%	(0.04)	1,642,651
Spencer	0.01%	0.01%	(0.00)	(43,278)

*School Aid Distribution Patterns Three Years Before and Three Years Into Reform*  
*Percentage Point Change in "Piece of the Pie" for 321 School Districts (See Section 2)*

School District	Share of School Aid 1991 - 1993	Share of School Aid 1994 - 1996	% Point Difference 91-93 to 94-96	Whole \$ Difference 91-93 to 94-96
Springfield	7.59%	7.28%	(0.31)	\$ 81,034,190
Stoneham	0.06%	0.07%	0.01	1,282,841
Stoughton	0.42%	0.38%	(0.05)	3,142,899
Sturbridge	0.04%	0.04%	0.00	525,812
Sudbury	0.04%	0.05%	0.01	908,130
Sunderland	0.03%	0.03%	(0.00)	311,375
Sutton	0.10%	0.10%	0.01	1,524,341
Swampscott	0.05%	0.05%	0.01	919,575
Swansea	0.28%	0.21%	(0.07)	357,484
Taunton	1.45%	1.25%	(0.20)	8,964,204
Tewksbury	0.41%	0.39%	(0.02)	4,242,645
Tisbury	0.00%	0.00%	0.00	129,944
Topsfield	0.00%	0.01%	0.00	260,739
Truro	0.00%	0.00%	0.00	52,383
Tyngsborough	0.12%	0.13%	0.01	2,108,649
Tyringham	0.00%	0.00%	0.00	12,250
Uxbridge	0.15%	0.17%	0.02	2,820,805
Wakefield	0.16%	0.15%	(0.01)	1,564,755
Wales	0.02%	0.03%	0.01	528,171
Walpole	0.13%	0.15%	0.02	2,561,022
Waltham	0.23%	0.22%	(0.01)	2,545,085
Ware	0.24%	0.23%	(0.00)	2,771,180
Wareham	0.30%	0.34%	0.03	5,435,153
Watertown	0.06%	0.07%	0.01	1,234,210
Wayland	0.06%	0.06%	0.01	997,660
Webster	0.34%	0.31%	(0.03)	2,929,646
Wellesley	0.06%	0.08%	0.01	1,425,400
Wellfleet	0.00%	0.00%	0.00	91,145

*Districts where share of school aid is shown as zero received less than 1/100<sup>th</sup>  
of a percent of the aid that period.*

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### *School Aid Distribution Patterns Three Years Before and Three Years Into Reform Percentage Point Change in "Piece of the Pie" for 321 School Districts (See Section 2)*

School District	Share of School Aid 1991 - 1993	Share of School Aid 1994 - 1996	% Point Difference 91-93 to 94-96	Whole \$ Difference 91-93 to 94-96
Westborough	0.06%	0.07%	0.01	\$ 1,044,195
West Boylston	0.05%	0.05%	(0.01)	428,042
West Bridgewater	0.09%	0.08%	(0.02)	476,866
Westfield	0.87%	0.94%	0.07	14,218,683
Westford	0.09%	0.11%	0.02	1,956,098
Westhampton	0.00%	0.01%	0.00	212,270
Weston	0.02%	0.02%	0.00	457,278
Westport	0.16%	0.13%	(0.02)	827,708
West Springfield	0.40%	0.42%	0.01	5,712,778
Westwood	0.05%	0.06%	0.00	851,990
Weymouth	0.87%	0.79%	(0.08)	7,206,290
Whately	0.00%	0.00%	0.00	33,323
Williamsburg	0.02%	0.02%	(0.01)	2,113
Williamstown	0.05%	0.04%	(0.01)	130,730
Wilmington	0.09%	0.10%	0.01	1,389,025
Winchendon	0.28%	0.29%	0.02	4,220,424
Winchester	0.09%	0.09%	0.00	1,347,965
Winthrop	0.21%	0.18%	(0.03)	1,145,842
Woburn	0.12%	0.13%	0.01	2,128,055
Worcester	4.37%	4.23%	(0.15)	48,296,158
Wrentham	0.07%	0.09%	0.02	1,930,238
Acton Boxborough	0.14%	0.12%	(0.02)	809,689
Adams Cheshire	0.45%	0.41%	(0.03)	4,013,754
Amherst Pelham	0.35%	0.32%	(0.03)	2,908,513
Ashburnham Westminster	0.35%	0.34%	(0.01)	3,941,995
Assabet Valley	0.21%	0.16%	(0.05)	453,016
Athol Royalston	0.54%	0.60%	0.06	9,670,787
Berkshire Hills	0.13%	0.14%	0.01	2,152,409

80 *Districts where share of school aid is shown as zero received less than 1/100<sup>th</sup> of a percent of the aid that period.*

*School Aid Distribution Patterns Three Years Before and Three Years Into Reform*  
*Percentage Point Change in "Piece of the Pie" for 321 School Districts (See Section 2)*

School District	Share of School Aid 1991 - 1993	Share of School Aid 1994 - 1996	% Point Difference 91-93 to 94-96	Whole \$ Difference 91-93 to 94-96
Berlin Boylston	0.05%	0.04%	(0.01)	\$ 172,447
Blackstone Millville	0.42%	0.37%	(0.05)	2,963,147
Blackstone Valley	0.26%	0.23%	(0.04)	1,528,707
Blue Hills	0.24%	0.19%	(0.05)	564,565
Bristol County	0.08%	0.08%	(0.01)	791,929
Bristol Plymouth	0.27%	0.23%	(0.04)	1,484,056
Cape Cod	0.13%	0.10%	(0.03)	233,336
Central Berkshire	0.33%	0.30%	(0.03)	2,799,273
Chesterfield Goshen	0.02%	0.02%	0.00	292,862
Concord Carlisle	0.08%	0.07%	(0.01)	381,646
Dennis Yarmouth	0.27%	0.25%	(0.02)	2,516,663
Dighton Rehoboth	0.55%	0.44%	(0.12)	1,522,171
Dover Sherborn	0.05%	0.05%	(0.01)	336,641
Dudley Charlton	0.57%	0.59%	0.02	8,141,964
Essex County	0.17%	0.18%	0.02	2,856,297
Franklin County	0.13%	0.11%	(0.02)	649,880
Freetown Lakeville	0.26%	0.24%	(0.02)	2,439,607
Frontier	0.05%	0.05%	(0.00)	504,498
Gateway	0.29%	0.28%	(0.01)	3,041,101
Gill Montague	0.29%	0.27%	(0.02)	2,876,671
Greater Fall River	0.38%	0.40%	0.02	5,672,470
Greater Lawrence	0.57%	0.52%	(0.05)	4,881,438
Greater Lowell	0.74%	0.68%	(0.05)	6,826,805
Greater New Bedford	0.70%	0.66%	(0.04)	6,964,097
Groton Dunstable	0.18%	0.18%	(0.00)	2,112,502
Hamilton Wenham	0.13%	0.13%	(0.00)	1,507,520
Hampshire	0.10%	0.08%	(0.02)	455,851
Hawlemont	0.02%	0.02%	0.01	534,795

*Districts where share of school aid is shown as zero received less than 1/100<sup>th</sup> of a percent of the aid that period.*

## APPENDIX I

### *School Aid Distribution Patterns Three Years Before and Three Years Into Reform Percentage Point Change in "Piece of the Pie" for 321 School Districts (See Section 2)*

School District	Share of School Aid 1991 - 1993	Share of School Aid 1994 - 1996	% Point Difference 91-93 to 94-96	Whole \$ Difference 91-93 to 94-96
King Philip	0.23%	0.19%	(0.04)	\$ 1,036,111
Lincoln Sudbury	0.10%	0.08%	(0.02)	406,066
Martha's Vineyard	0.03%	0.03%	(0.00)	313,440
Masconomet	0.12%	0.10%	(0.02)	572,328
Mendon Upton	0.19%	0.17%	(0.02)	1,379,411
Minuteman	0.18%	0.13%	(0.04)	285,020
Montachusett	0.36%	0.31%	(0.05)	2,382,113
Mount Greylock	0.13%	0.10%	(0.03)	289,739
Narragansett	0.32%	0.30%	(0.02)	3,129,803
Nashoba Valley	0.14%	0.11%	(0.03)	300,345
Nauset	0.09%	0.08%	(0.01)	782,673
New Salem Wendell	0.02%	0.03%	0.01	571,487
Norfolk County	0.04%	0.04%	(0.01)	302,918
North Middlesex	0.72%	0.72%	(0.00)	8,886,449
North Shore	0.08%	0.07%	(0.02)	340,234
Northampton Smith	0.02%	0.05%	0.03	1,495,614
Northborough Southborough	0.08%	0.07%	(0.01)	390,470
Northeast Metropolitan	0.25%	0.22%	(0.03)	1,750,683
Northern Berkshire	0.15%	0.13%	(0.02)	904,062
Old Colony	0.15%	0.12%	(0.03)	533,150
Old Rochester	0.07%	0.07%	(0.00)	845,937
Pathfinder	0.12%	0.11%	(0.01)	1,019,910
Pioneer	0.08%	0.14%	0.06	3,648,507
Quabbin	0.47%	0.47%	0.00	6,052,576
Quaboag	0.33%	0.31%	(0.02)	3,388,707
Ralph C. Mahar	0.18%	0.16%	(0.02)	1,534,621
Shawsheen Valley	0.24%	0.19%	(0.05)	709,713
Silver Lake	0.47%	0.41%	(0.07)	2,850,470

82 *Districts where share of school aid is shown as zero received less than 1/100<sup>th</sup> of a percent of the aid that period.*

*School Aid Distribution Patterns Three Years Before and Three Years Into Reform  
Percentage Point Change in "Piece of the Pie" for 321 School Districts (See Section 2)*

School District	Share of School Aid 1991 - 1993	Share of School Aid 1994 - 1996	% Point Difference 91-93 to 94-96	Whole \$ Difference 91-93 to 94-96
South Middlesex	0.18%	0.14%	(0.04)	\$ 330,111
South Shore	0.12%	0.09%	(0.03)	193,215
Southeastern	0.45%	0.41%	(0.05)	3,548,241
Southern Berkshire	0.07%	0.07%	0.01	1,113,324
Southern Worcester	0.28%	0.25%	(0.03)	2,061,773
Southwick Tolland	0.38%	0.31%	(0.07)	1,358,988
Spencer East Brookfield	0.72%	0.58%	(0.14)	2,061,773
Tantasqua	0.20%	0.20%	(0.00)	2,450,686
Tri County	0.17%	0.14%	(0.04)	517,798
Upper Cape Cod	0.08%	0.08%	(0.00)	956,188
Whitman Hanson	0.43%	0.85%	0.41	24,944,077
Whittier	0.35%	0.27%	(0.08)	513,770
Worcester Trade	0.18%	0.41%	0.23	13,111,742

*Districts where share of school aid is shown as zero received less than 1/100<sup>th</sup>  
of a percent of the aid that period.*

## APPENDIX II

### Change in Foundation Status 1997 Compared to 1994

#### Required Spending as a Percentage of Foundation

(337 Districts that maintained the same operating structure 1994 - 1997) (See Section 3)

School District	FY 97 Valuation Ratio	FY 94 % of Foundation	Whole Change Foundation Enrollment	% Change Foundation Enrollment	% Change Foundation Budget	% Change Required NSS	FY 97 % of Foundation
<b><u>16 Districts Went From Below to Above</u></b>							
Amherst	45.16%	89.67%	137	8.43%	13.64%	26.73%	100.00%
Ayer	75.63%	67.10%	(684)	-36.54%	-27.84%	15.17%	107.09%
Becket	121.29%	84.40%	0	0.00%	-2.45%	30.14%	112.59%
Beverly	111.53%	97.66%	282	6.35%	13.13%	17.19%	101.17%
Freetown	65.99%	90.97%	(2)	-0.36%	9.47%	21.44%	100.93%
Goshen	96.09%	84.53%	(4)	-40.00%	-41.47%	7.10%	154.68%
Lanesborough	91.53%	91.52%	(13)	-4.39%	-2.35%	13.28%	106.17%
Monroe	132.38%	92.15%	(4)	-17.39%	-8.33%	8.51%	109.08%
Northampton	87.93%	99.59%	(9)	-0.30%	7.09%	10.88%	103.13%
Spencer	45.53%	97.53%	(21)	-23.08%	-18.13%	5.80%	126.05%
Swansea	72.10%	98.76%	(63)	-2.73%	4.97%	8.69%	102.27%
Bristol Plymouth		96.46%	(18)	-2.40%	7.17%	11.61%	100.46%
Chesterfield Goshen		94.09%	(21)	-10.55%	-11.25%	0.26%	106.29%
Montachusett		98.03%	(33)	-3.34%	4.78%	9.21%	102.18%
Southern Worcester		89.33%	(44)	-5.18%	-5.46%	5.99%	100.15%
Worcester Trade		95.17%	(173)	-14.90%	-1.56%	11.10%	107.41%
<b>Average</b>		<b>91.69%</b>	<b>(42)</b>	<b>-9.15%</b>	<b>-3.66%</b>	<b>12.69%</b>	<b>108.73%</b>

#### **35 Districts Stayed Above and Gained Ground**

Auburn	88.66%	101.73%	37	1.70%	9.07%	13.11%	105.51%
Avon	124.97%	118.81%	(42)	-6.92%	2.15%	6.04%	123.33%
Berlin	133.83%	103.09%	9	5.29%	13.04%	18.43%	108.01%
Chatham	605.82%	157.78%	(4)	-0.65%	6.61%	12.34%	166.25%
Duxbury	145.31%	102.19%	1	0.04%	7.93%	12.87%	106.87%
East Brookfield	60.65%	113.53%	1	4.76%	11.59%	40.95%	143.39%
Edgartown	614.95%	138.57%	29	7.49%	15.08%	15.16%	138.66%

***Change in Foundation Status 1997 Compared to 1994  
Required Spending as a Percentage of Foundation  
(337 Districts that maintained the same operating structure 1994 - 1997) (See Section 3)***

School District	FY 97 Valuation Ratio	FY 94 % of Foundation	Whole Change Foundation Enrollment	% Change Foundation Enrollment	% Change Foundation Budget	% Change Required NSS	FY 97 % of Foundation
Erving	100.69%	100.96%	(30)	-10.79%	-0.96%	22.76%	125.13%
Framingham	123.73%	102.50%	(45)	-0.61%	8.68%	10.19%	103.92%
Hingham	194.50%	100.26%	195	6.59%	10.15%	10.18%	100.28%
Lincoln	585.06%	172.30%	14	3.14%	1.64%	2.29%	173.40%
Mattapoisett	165.86%	107.93%	15	2.98%	11.12%	12.53%	109.30%
Melrose	121.54%	102.41%	(102)	-2.96%	4.17%	8.59%	106.76%
Newburyport	117.46%	107.53%	19	0.84%	8.10%	15.73%	115.12%
Norwell	163.30%	114.14%	46	2.83%	10.25%	11.18%	115.10%
Norwood	131.27%	109.01%	77	2.24%	10.28%	12.41%	111.11%
Petersham	136.73%	101.18%	(9)	-9.38%	-3.45%	18.46%	124.14%
Provincetown	408.37%	195.99%	(13)	-4.68%	3.48%	6.51%	201.74%
Rowe	720.49%	185.44%	(8)	-16.00%	-29.68%	-3.14%	255.44%
Saugus	115.99%	104.32%	(175)	-5.24%	2.77%	4.06%	105.63%
Seekonk	102.28%	105.14%	49	2.33%	8.60%	13.32%	109.71%
Somerset	102.44%	102.42%	(131)	-4.89%	2.61%	18.05%	117.82%
Stoneham	119.28%	103.18%	17	0.65%	8.26%	9.60%	104.46%
Tyringham	489.37%	144.80%	6	14.29%	16.62%	19.85%	148.81%
Wakefield	119.17%	104.90%	(45)	-1.34%	6.01%	11.17%	110.00%
Waltham	149.48%	118.65%	(166)	-3.02%	5.97%	14.77%	128.50%
West Bridgewater	99.64%	102.09%	(30)	-2.96%	1.84%	8.47%	108.73%
Williamsburg	98.06%	102.84%	(31)	-13.90%	-15.60%	13.56%	138.36%
Williamstown	95.40%	103.53%	24	4.68%	10.83%	11.65%	104.29%
Woburn	142.20%	100.61%	14	0.32%	9.56%	11.59%	102.48%
Acton Boxborough		126.54%	101	6.15%	14.13%	15.02%	127.52%
Blue Hills		101.92%	(27)	-2.97%	5.22%	6.58%	103.24%
Cape Cod		115.35%	(16)	-3.02%	4.11%	10.54%	122.48%
Minuteman		190.98%	(51)	-10.47%	-2.03%	6.80%	208.19%
Northborough Southborough		114.43%	(6)	-0.72%	5.91%	10.73%	119.64%
<b>Average</b>		<b>119.34%</b>	<b>(8)</b>	<b>-0.98%</b>	<b>5.26%</b>	<b>12.35%</b>	<b>128.38%</b>



## APPENDIX II

### *Change in Foundation Status 1997 Compared to 1994*

### *Required Spending as a Percentage of Foundation*

*(337 Districts that maintained the same operating structure 1994 - 1997) (See Section 3)*

School District	FY 97 Valuation Ratio	FY 94 % of Foundation	Whole Change Foundation Enrollment	% Change Foundation Enrollment	% Change Foundation Budget	% Change Required NSS	FY 97 % of Foundation
<b><u>80 Districts Stayed Above and Lost Ground</u></b>							
Andover	176.24%	108.03%	411	8.49%	16.13%	10.89%	103.15%
Arlington	197.03%	125.35%	259	7.22%	15.57%	9.04%	118.27%
Ashland	120.28%	101.80%	238	14.70%	22.18%	21.99%	101.64%
Bedford	217.19%	137.15%	140	8.41%	16.17%	13.46%	133.95%
Belmont	236.40%	124.40%	327	11.65%	21.57%	9.41%	111.96%
Blackstone	39.29%	115.59%	4	80.00%	75.53%	56.83%	103.27%
Braintree	120.29%	102.55%	188	4.29%	13.31%	10.77%	100.26%
Brookline	308.18%	144.69%	311	5.88%	13.18%	3.13%	131.84%
Burlington	147.21%	120.94%	185	5.65%	12.55%	10.53%	118.78%
Cambridge	240.43%	166.73%	385	5.04%	16.94%	5.64%	150.62%
Canton	173.48%	118.93%	209	8.64%	15.47%	6.28%	109.47%
Cohasset	277.12%	112.55%	57	5.28%	13.81%	9.77%	108.56%
Concord	329.55%	138.97%	125	7.90%	15.75%	9.01%	130.87%
Danvers	140.48%	124.00%	344	11.21%	20.28%	10.88%	114.30%
Dedham	147.55%	117.98%	115	4.34%	12.37%	9.31%	114.77%
Dover	485.82%	157.52%	59	15.69%	21.87%	13.79%	147.06%
Eastham	235.44%	122.37%	39	12.62%	20.40%	17.82%	119.76%
Hancock	222.10%	117.35%	6	6.98%	18.98%	6.16%	104.70%
Harvard	115.58%	118.80%	100	11.88%	19.88%	15.35%	114.30%
Harwich	203.02%	110.94%	121	8.95%	17.79%	10.90%	104.44%
Hinsdale	58.16%	732.63%	2	200.00%	383.76%	1.51%	153.73%
Ipswich	135.60%	121.69%	269	18.65%	28.78%	11.90%	105.74%
Lee	99.17%	110.96%	4	0.53%	9.10%	6.25%	108.06%
Lenox	141.35%	143.76%	10	1.47%	5.87%	-8.42%	124.34%
Lexington	264.72%	139.82%	472	10.85%	19.68%	7.18%	125.22%
Littleton	122.89%	118.31%	198	20.14%	29.44%	15.65%	105.71%
Longmeadow	159.71%	128.24%	169	6.55%	13.36%	11.24%	125.84%

*Change in Foundation Status 1997 Compared to 1994**Required Spending as a Percentage of Foundation**(337 Districts that maintained the same operating structure 1994 - 1997) (See Section 3)*

School District	FY 97 Valuation Ratio	FY 94 % of Foundation	Whole Change Foundation Enrollment	% Change Foundation Enrollment	% Change Foundation Budget	% Change Required NSS	FY 97 % of Foundation
Lynnfield	198.56%	113.15%	77	4.72%	12.57%	10.92%	111.49%
Manchester	410.90%	124.07%	60	9.38%	16.51%	10.83%	118.02%
Marblehead	311.28%	124.46%	218	9.32%	17.37%	4.05%	110.34%
Marion	226.62%	114.63%	34	8.27%	15.73%	9.89%	108.85%
Marlborough	112.21%	100.69%	287	7.67%	16.33%	15.69%	100.14%
Medford	122.38%	105.58%	173	3.37%	12.18%	9.93%	103.47%
Nantucket	808.41%	169.31%	135	15.05%	22.43%	11.59%	154.32%
Natick	171.10%	129.92%	440	13.10%	20.89%	10.96%	119.26%
Needham	275.64%	120.21%	229	6.43%	15.00%	6.90%	111.74%
New Ashford	118.94%	110.76%	2	8.00%	13.94%	10.84%	107.75%
Newton	295.47%	132.58%	1,060	11.36%	23.66%	10.27%	118.22%
Orleans	382.75%	145.19%	95	38.31%	46.28%	6.22%	105.42%
Peru	33.90%	527.52%	3	300.00%	285.22%	1.83%	139.44%
Richmond	167.73%	113.38%	45	18.00%	25.32%	21.23%	109.68%
Scituate	145.48%	105.13%	209	8.41%	16.22%	10.59%	100.03%
Sherborn	357.70%	112.96%	10	2.54%	9.95%	9.31%	112.30%
Somerville	88.46%	100.81%	191	3.09%	14.49%	14.41%	100.75%
Swampscott	179.93%	123.42%	172	9.44%	17.54%	11.93%	117.53%
Tisbury	251.92%	135.62%	60	16.95%	24.23%	17.69%	128.48%
Truro	443.15%	187.14%	92	55.42%	69.85%	-7.47%	101.95%
Watertown	212.88%	150.03%	124	4.78%	14.38%	-5.81%	123.55%
Wayland	266.61%	133.79%	172	8.41%	17.07%	5.26%	120.28%
Wellesley	435.00%	140.54%	225	7.75%	16.04%	7.86%	130.63%
Wellfleet	308.18%	127.26%	(24)	-12.77%	-4.23%	-23.57%	101.56%
Westborough	127.45%	124.20%	499	22.87%	30.71%	6.25%	100.96%
Weston	666.72%	166.23%	173	12.55%	20.78%	10.96%	152.71%
Westwood	217.30%	159.04%	423	24.62%	33.33%	10.41%	131.70%
Winchester	273.62%	124.72%	189	6.88%	13.52%	10.51%	121.40%
Amherst Pelham		121.04%	245	15.71%	34.34%	16.81%	105.25%

## APPENDIX II

### *Change in Foundation Status 1997 Compared to 1994*

#### *Required Spending as a Percentage of Foundation*

*(337 Districts that maintained the same operating structure 1994 - 1997) (See Section 3)*

School District	FY 97 Valuation Ratio	FY 94 % of Foundation	Whole Change Foundation Enrollment	% Change Foundation Enrollment	% Change Foundation Budget	% Change Required NSS	FY 97 % of Foundation
Assabet Valley		116.26%	65	9.64%	18.23%	8.65%	106.83%
Berkshire Hills		112.44%	10	0.65%	8.50%	4.55%	108.35%
Berlin Boylston		160.42%	28	9.18%	18.19%	9.44%	148.53%
Bristol County		137.57%	57	22.53%	24.93%	8.78%	119.78%
Concord Carlisle		181.76%	58	7.32%	14.80%	-3.42%	152.90%
Dover Sherborn		186.57%	207	35.20%	43.78%	7.42%	139.39%
Farmington River		126.46%	41	14.34%	21.19%	8.23%	112.93%
Franklin County		113.53%	50	12.72%	22.38%	9.53%	101.61%
Frontier		105.44%	49	8.35%	13.55%	10.00%	102.14%
Hamilton Wenham		119.52%	160	9.96%	17.71%	9.75%	111.44%
Hampshire		110.63%	83	12.08%	19.63%	11.69%	103.29%
Lincoln Sudbury		185.59%	(7)	-0.80%	6.24%	5.60%	184.47%
Martha's Vineyard		183.11%	99	21.06%	31.62%	-19.40%	112.13%
Masconomet		127.31%	184	16.15%	24.16%	11.91%	114.75%
Mount Greylock		154.85%	55	9.29%	16.92%	9.57%	145.11%
Nashoba Valley		110.84%	56	13.66%	23.28%	14.22%	102.70%
Norfolk County		174.66%	35	21.74%	28.01%	-10.41%	122.23%
Northampton Smith		137.38%	9	5.23%	9.51%	-15.35%	106.20%
Old Colony		127.26%	79	22.83%	22.42%	1.31%	105.32%
Old Rochester		125.29%	46	4.75%	13.45%	7.26%	118.46%
Pathfinder		119.32%	39	10.03%	9.48%	-0.93%	107.98%
Ralph C. Mahar		102.32%	(9)	-1.14%	7.04%	5.09%	100.46%
Shawsheen Valley		117.47%	134	13.05%	21.78%	10.38%	106.48%
South Middlesex		138.25%	62	9.28%	15.54%	6.81%	127.81%
<b>Average</b>		<b>142.17%</b>	<b>150</b>	<b>17.89%</b>	<b>27.67%</b>	<b>8.19%</b>	<b>117.53%</b>

#### *128 Districts Stayed Below and Gained Ground*

Abington	62.52%	87.56%	29	1.33%	6.07%	17.03%	96.60%
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*Change in Foundation Status 1997 Compared to 1994**Required Spending as a Percentage of Foundation**(337 Districts that maintained the same operating structure 1994 - 1997) (See Section 3)*

School District	FY 97 Valuation Ratio	FY 94 % of Foundation	Whole Change Foundation Enrollment	% Change Foundation Enrollment	% Change Foundation Budget	% Change Required NSS	FY 97 % of Foundation
Acushnet	51.06%	70.92%	(18)	-1.34%	6.13%	35.83%	90.77%
Amesbury	55.99%	86.32%	238	9.67%	19.02%	28.88%	93.47%
Attleboro	52.37%	83.95%	383	6.70%	11.37%	24.47%	93.82%
Barnstable	156.86%	94.66%	446	7.09%	13.63%	15.30%	96.05%
Belchertown	49.51%	77.20%	131	6.43%	14.35%	31.12%	88.52%
Bellingham	75.96%	92.93%	321	15.14%	21.91%	22.60%	93.45%
Berkley	49.17%	67.87%	100	12.17%	18.22%	49.56%	85.86%
Billerica	71.19%	89.67%	79	1.37%	8.81%	15.03%	94.80%
Bourne	110.84%	85.23%	10	0.43%	8.11%	13.18%	89.23%
Brockton	33.95%	76.51%	1,342	10.10%	24.06%	44.77%	89.28%
Carver	38.18%	87.09%	136	6.95%	15.85%	23.32%	92.71%
Chelmsford	106.90%	95.33%	74	1.42%	9.25%	14.25%	99.69%
Chelsea	27.26%	79.96%	763	19.98%	30.18%	46.01%	89.68%
Chicopee	50.45%	89.44%	679	10.01%	17.41%	24.70%	94.99%
Clarksburg	32.61%	87.62%	31	12.81%	22.92%	32.06%	94.14%
Clinton	53.22%	82.58%	125	7.01%	17.58%	33.82%	93.99%
Cummington	71.99%	84.60%	3	30.00%	41.25%	48.53%	88.96%
Dartmouth	94.25%	88.17%	(48)	-1.23%	5.18%	15.40%	96.74%
Douglas	46.70%	79.26%	150	15.11%	20.97%	34.09%	87.85%
Dracut	59.23%	81.74%	431	12.10%	21.32%	33.09%	89.66%
East Bridgewater	49.11%	81.78%	11	0.48%	7.18%	22.75%	93.66%
Easthampton	61.28%	89.61%	68	3.38%	10.11%	15.12%	93.69%
East Longmeadow	82.33%	92.03%	143	6.17%	14.05%	18.16%	95.34%
Easton	79.27%	93.71%	169	5.32%	11.91%	13.96%	95.42%
Essex	146.28%	95.88%	38	8.39%	17.12%	20.37%	98.54%
Everett	90.62%	83.61%	130	3.07%	14.27%	30.02%	95.13%
Fairhaven	63.20%	88.00%	(78)	-3.54%	12.71%	20.74%	94.27%
Fall River	28.74%	78.23%	575	4.81%	14.24%	33.84%	91.66%
Fitchburg	36.27%	82.15%	457	9.69%	19.42%	32.33%	91.03%

## APPENDIX II

### *Change in Foundation Status 1997 Compared to 1994*

#### *Required Spending as a Percentage of Foundation*

*(337 Districts that maintained the same operating structure 1994 - 1997) (See Section 3)*

School District	FY 97 Valuation Ratio	FY 94 % of Foundation	Whole Change Foundation Enrollment	% Change Foundation Enrollment	% Change Foundation Budget	% Change Required NSS	FY 97 % of Foundation
Franklin	77.77%	81.04%	627	17.01%	25.14%	34.57%	87.15%
Gardner	38.45%	74.27%	238	9.38%	11.56%	33.85%	89.11%
Grafton	76.31%	89.37%	(40)	-2.11%	4.78%	13.39%	96.71%
Granby	68.76%	87.50%	(6)	-0.68%	4.90%	15.98%	96.74%
Greenfield	52.16%	87.91%	1	0.04%	7.65%	17.15%	95.66%
Halifax	50.43%	80.18%	8	1.22%	8.17%	16.53%	86.37%
Hanover	92.15%	92.71%	58	2.66%	9.68%	13.32%	95.78%
Haverhill	50.05%	78.33%	641	8.88%	16.74%	38.87%	93.19%
Holbrook	73.87%	91.35%	(88)	-6.27%	2.41%	11.27%	99.25%
Holliston	89.94%	90.09%	124	4.94%	13.19%	18.27%	94.13%
Holyoke	25.56%	72.56%	34	0.45%	10.36%	36.48%	89.74%
Hopkinton	124.36%	97.06%	503	33.38%	46.20%	46.24%	97.09%
Hull	88.25%	87.06%	67	4.54%	11.32%	26.45%	98.89%
Kingston	79.89%	80.33%	107	11.93%	20.47%	34.26%	89.53%
Lakeville	80.31%	81.54%	62	11.29%	21.13%	23.38%	83.06%
Lawrence	12.97%	73.11%	1,874	19.47%	33.15%	60.04%	87.87%
Leicester	49.99%	80.67%	(15)	-0.89%	5.77%	21.54%	92.69%
Leominster	63.16%	80.54%	562	11.20%	22.28%	29.18%	85.09%
Lowell	30.39%	74.96%	2,100	15.89%	27.82%	55.58%	91.24%
Ludlow	54.61%	88.02%	95	3.23%	12.13%	20.67%	94.72%
Lunenburg	78.55%	94.48%	82	5.59%	11.84%	16.60%	98.50%
Lynn	32.86%	79.66%	1,648	14.23%	22.76%	41.25%	91.66%
Malden	81.09%	89.69%	(156)	-2.89%	6.42%	13.72%	95.85%
Marshfield	93.30%	86.59%	285	7.47%	14.78%	20.88%	91.19%
Medway	72.48%	95.59%	233	12.45%	20.64%	21.22%	96.05%
Methuen	62.02%	85.32%	312	5.46%	14.61%	24.25%	92.50%
Middleborough	44.80%	74.14%	116	3.51%	9.75%	39.09%	93.97%
Milford	66.40%	93.66%	267	7.05%	14.72%	17.52%	95.94%
Millis	100.17%	98.23%	64	5.97%	14.28%	14.53%	98.44%

***Change in Foundation Status 1997 Compared to 1994******Required Spending as a Percentage of Foundation******(337 Districts that maintained the same operating structure 1994 - 1997) (See Section 3)***

School District	FY 97 Valuation Ratio	FY 94 % of Foundation	Whole Change Foundation Enrollment	% Change Foundation Enrollment	% Change Foundation Budget	% Change Required NSS	FY 97 % of Foundation
Monson	47.52%	79.11%	131	10.63%	18.64%	33.42%	88.97%
Mount Washington	643.23%	89.07%	2	14.29%	32.12%	37.74%	92.85%
Nahant	186.59%	86.38%	30	7.06%	16.20%	24.58%	92.61%
New Bedford	28.38%	79.24%	108	0.80%	9.92%	27.28%	91.76%
Norfolk	85.96%	84.46%	112	12.25%	21.25%	21.78%	84.83%
North Adams	25.88%	78.51%	113	5.57%	12.96%	32.03%	91.77%
North Andover	133.21%	98.94%	404	12.20%	20.30%	20.74%	99.29%
North Attleborough	71.05%	85.80%	324	8.68%	15.31%	19.00%	88.55%
Northbridge	41.69%	80.36%	210	11.04%	20.04%	36.41%	91.32%
North Brookfield	42.36%	75.68%	12	1.49%	8.54%	36.69%	95.30%
Norton	58.83%	81.27%	131	5.49%	13.02%	29.98%	93.47%
Orange	22.90%	70.71%	13	1.62%	10.64%	41.02%	90.11%
Oxford	43.88%	81.18%	(97)	-4.60%	1.99%	19.17%	94.85%
Palmer	50.68%	68.51%	89	4.72%	5.91%	29.56%	83.80%
Pembroke	67.12%	83.76%	88	5.45%	10.58%	24.62%	94.40%
Pittsfield	58.04%	91.65%	582	9.15%	17.17%	18.42%	92.63%
Plainville	77.98%	90.13%	51	8.60%	14.36%	21.35%	95.64%
Plymouth	79.51%	92.92%	313	3.87%	11.47%	14.11%	95.12%
Plympton	68.00%	81.99%	9	3.32%	11.53%	23.31%	90.65%
Revere	63.57%	86.29%	514	10.94%	22.13%	30.98%	92.54%
Rockland	56.47%	84.08%	16	0.61%	9.03%	24.83%	96.27%
Salem	90.69%	96.57%	504	11.81%	23.07%	24.17%	97.44%
Shirley	57.97%	79.39%	64	9.10%	18.13%	37.71%	92.56%
Southbridge	34.30%	82.46%	79	3.19%	10.75%	24.49%	92.69%
South Hadley	70.51%	96.40%	144	6.55%	16.22%	16.34%	96.50%
Springfield	29.86%	87.40%	632	2.73%	14.91%	24.01%	94.32%
Stoughton	77.27%	91.20%	(136)	-3.38%	4.25%	9.51%	95.79%
Sturbridge	71.20%	96.01%	(5)	-0.58%	5.10%	5.31%	96.21%
Sutton	66.45%	80.64%	85	6.93%	13.71%	26.23%	89.52%

## APPENDIX II

### *Change in Foundation Status 1997 Compared to 1994*

#### *Required Spending as a Percentage of Foundation*

*(337 Districts that maintained the same operating structure 1994 - 1997) (See Section 3)*

School District	FY 97 Valuation Ratio	FY 94 % of Foundation	Whole Change Foundation Enrollment	% Change Foundation Enrollment	% Change Foundation Budget	% Change Required NSS	FY 97 % of Foundation
Taunton	48.02%	84.87%	422	6.36%	14.48%	26.05%	93.44%
Tewksbury	95.96%	87.85%	17	0.45%	8.85%	11.26%	89.80%
Uxbridge	59.05%	85.23%	241	16.11%	23.88%	33.91%	92.13%
Wales	37.89%	80.82%	15	8.72%	9.15%	26.52%	93.68%
Walpole	113.05%	92.27%	324	10.60%	18.04%	22.12%	95.46%
Ware	47.64%	77.94%	40	3.14%	11.17%	34.92%	94.59%
Wareham	59.50%	81.31%	232	7.61%	16.45%	32.15%	92.28%
Webster	64.53%	83.47%	(7)	-0.35%	5.11%	17.99%	93.69%
Westfield	49.44%	81.61%	396	6.84%	16.30%	29.93%	91.17%
Westport	121.08%	98.74%	(2)	-0.11%	7.68%	8.11%	99.13%
West Springfield	85.55%	90.31%	78	2.12%	18.84%	21.41%	92.27%
Weymouth	100.35%	93.47%	112	1.78%	10.81%	13.53%	95.77%
Wilmington	102.65%	99.05%	130	4.40%	12.39%	13.22%	99.79%
Winchendon	29.98%	83.31%	287	19.37%	40.44%	49.87%	88.90%
Worcester	41.12%	87.61%	2,514	12.16%	25.45%	33.24%	93.06%
Wrentham	67.80%	77.44%	144	16.46%	25.08%	45.91%	90.34%
Adams Cheshire		83.86%	(31)	-1.68%	-2.01%	13.61%	97.23%
Ashburnham Westminster		83.61%	149	6.61%	11.21%	20.69%	90.74%
Athol Royalston		73.07%	89	4.09%	12.90%	32.33%	85.64%
Blackstone Millville		87.39%	184	9.28%	16.22%	23.38%	92.78%
Dighton Rehoboth		95.30%	27	0.96%	5.93%	8.22%	97.35%
Dudley Charlton		75.05%	69	2.08%	8.58%	29.71%	89.65%
Freetown Lakeville		91.59%	(17)	-0.98%	5.23%	9.50%	95.31%
Gateway		97.64%	94	5.66%	14.54%	14.56%	97.66%
Gill Montague		83.17%	(47)	-3.16%	4.17%	18.04%	94.25%
Greater Fall River		73.27%	87	8.15%	16.24%	34.90%	85.03%
Greater Lawrence		94.92%	67	4.44%	15.22%	19.17%	98.18%
Greater Lowell		94.21%	184	9.80%	20.11%	24.00%	97.26%
Greater New Bedford		81.38%	18	1.08%	8.77%	22.22%	91.44%

***Change in Foundation Status 1997 Compared to 1994  
Required Spending as a Percentage of Foundation  
(337 Districts that maintained the same operating structure 1994 - 1997) (See Section 3)***

School District	FY 97 Valuation Ratio	FY 94 % of Foundation	Whole Change Foundation Enrollment	% Change Foundation Enrollment	% Change Foundation Budget	% Change Required NSS	FY 97 % of Foundation
Hawlemont		81.43%	(7)	-4.02%	-0.02%	15.41%	94.00%
Mendon Upton		95.27%	207	16.47%	25.15%	28.06%	97.49%
Narragansett		88.09%	44	3.26%	11.19%	16.53%	92.32%
New Salem Wendell		86.03%	26	15.12%	15.66%	16.29%	86.50%
North Middlesex		83.38%	299	6.97%	15.05%	24.54%	90.26%
Quabbin		83.74%	106	4.17%	12.28%	25.18%	93.36%
Quaboag		79.67%	145	9.99%	11.92%	22.86%	87.45%
Southeastern		92.08%	62	5.02%	12.23%	17.30%	96.24%
Spencer East Brookfield		91.07%	(175)	-7.49%	-1.12%	5.13%	96.83%
Upper Cape Cod		96.81%	66	14.73%	14.05%	14.28%	97.01%
Whitman Hanson		85.43%	(28)	-0.68%	5.92%	16.78%	94.18%
<b>Average</b>		<b>85.49%</b>	<b>217</b>	<b>6.41%</b>	<b>14.47%</b>	<b>25.11%</b>	<b>93.07%</b>

***40 Districts Stayed Below and Lost Ground***

Agawam	67.17%	96.36%	291	7.35%	15.79%	6.67%	88.77%
Boxford	171.44%	86.04%	220	30.86%	40.58%	35.46%	82.91%
Brimfield	43.98%	94.07%	3	0.89%	7.89%	0.39%	87.54%
Brookfield	31.83%	86.51%	18	5.52%	12.95%	10.07%	84.29%
Chesterfield	63.32%	87.91%	3	27.27%	41.36%	39.15%	86.53%
Conway	76.05%	81.51%	15	8.24%	17.51%	-5.13%	65.81%
Florida	48.47%	94.58%	23	21.30%	49.22%	42.42%	90.27%
Foxborough	89.68%	94.80%	263	11.10%	19.29%	15.90%	92.11%
Georgetown	77.94%	97.81%	122	11.64%	20.58%	19.16%	96.66%
Gloucester	101.71%	97.37%	363	10.17%	18.36%	17.91%	97.00%
Holland	63.78%	96.14%	19	8.15%	18.94%	18.54%	95.81%
Hopedale	54.96%	90.81%	170	19.61%	29.12%	23.97%	87.19%
Hudson	82.75%	98.74%	127	5.44%	14.64%	12.44%	96.84%
Leverett	82.93%	88.87%	7	3.85%	20.70%	15.96%	85.38%



## APPENDIX II

### *Change in Foundation Status 1997 Compared to 1994*

#### *Required Spending as a Percentage of Foundation*

*(337 Districts that maintained the same operating structure 1994 - 1997) (See Section 3)*

School District	FY 97 Valuation Ratio	FY 94 % of Foundation	Whole Change Foundation Enrollment	% Change Foundation Enrollment	% Change Foundation Budget	% Change Required NSS	FY 97 % of Foundation
Mansfield	80.64%	96.98%	645	22.90%	32.49%	29.15%	94.53%
Mashpee	130.34%	95.10%	388	27.58%	25.03%	14.24%	86.88%
Medfield	129.97%	99.98%	359	19.48%	27.94%	21.07%	94.62%
Millbury	64.32%	96.14%	122	7.88%	16.21%	14.78%	94.96%
Millville	37.58%	84.55%	1	50.00%	46.06%	41.05%	81.65%
Northborough	111.20%	95.80%	164	10.70%	17.04%	15.51%	94.54%
North Reading	110.32%	99.85%	216	11.97%	20.40%	15.43%	95.72%
Randolph	79.34%	95.54%	197	5.43%	15.68%	15.50%	95.39%
Reading	108.64%	97.10%	294	8.47%	15.89%	13.06%	94.72%
Rochester	69.32%	87.50%	4	0.96%	9.93%	1.01%	80.40%
Sharon	123.02%	98.61%	168	6.20%	14.96%	12.83%	96.79%
Shrewsbury	117.57%	98.66%	338	9.85%	17.42%	16.12%	97.56%
Shutesbury	57.97%	82.64%	27	13.24%	17.44%	3.28%	72.67%
Southampton	65.67%	76.85%	6	1.28%	3.16%	2.84%	76.61%
Sunderland	68.44%	84.87%	(17)	-7.05%	-7.35%	-12.83%	79.86%
Tyngsborough	61.02%	88.33%	240	16.81%	26.04%	23.78%	86.75%
Westford	108.29%	98.70%	407	13.90%	22.62%	18.14%	95.09%
Westhampton	65.45%	85.91%	6	4.00%	6.17%	-5.44%	76.52%
Whately	110.65%	92.59%	(41)	-26.62%	-21.96%	-24.61%	89.45%
Blackstone Valley		93.32%	93	13.15%	19.38%	17.22%	91.63%
Central Berkshire		96.14%	133	5.95%	13.30%	12.30%	95.29%
Dennis Yarmouth		99.20%	166	3.91%	11.40%	11.20%	99.02%
Essex County		90.07%	171	23.01%	32.59%	27.91%	86.89%
North Shore		96.72%	43	11.17%	18.44%	3.12%	84.22%
Pentucket		92.55%	331	13.53%	20.90%	17.56%	90.00%
Pioneer		96.02%	150	14.85%	26.57%	20.91%	91.73%
Average		92.78%	156	11.35%	19.37%	14.45%	89.02%

***Change in Foundation Status 1997 Compared to 1994******Required Spending as a Percentage of Foundation******(337 Districts that maintained the same operating structure 1994 - 1997) (See Section 3)***

School District	FY 97 Valuation Ratio	FY 94 % of Foundation	Whole Change Foundation Enrollment	% Change Foundation Enrollment	% Change Foundation Budget	% Change Required NSS	FY 97 % of Foundation
<b><u>38 Districts Fell Below Foundation</u></b>							
Acton	145.22%	101.04%	233	13.17%	22.22%	15.80%	95.73%
Boston	98.08%	100.78%	5,187	9.36%	21.51%	15.41%	95.72%
Boxborough	139.78%	100.27%	162	54.18%	70.96%	29.67%	76.05%
Boylston	130.74%	112.91%	42	14.89%	26.36%	5.77%	94.51%
Brewster	153.93%	100.55%	21	3.05%	9.19%	-15.38%	77.93%
Carlisle	285.69%	111.07%	61	10.95%	18.42%	2.29%	95.94%
Deerfield	94.43%	100.20%	29	7.55%	15.16%	-2.10%	85.19%
Falmouth	164.60%	101.68%	500	12.17%	19.36%	15.52%	98.40%
Gosnold	4507.52%	136.38%	4	200.00%	108.59%	43.54%	93.85%
Granville	64.18%	101.08%	63	27.75%	40.28%	18.53%	85.41%
Hadley	120.28%	128.41%	83	16.27%	34.74%	3.97%	99.09%
Hatfield	109.66%	103.14%	16	3.64%	21.04%	13.51%	96.73%
Maynard	101.48%	110.54%	238	20.99%	30.33%	17.78%	99.90%
Middleton	132.27%	121.01%	258	75.66%	84.18%	5.47%	69.30%
Milton	138.80%	102.95%	433	13.77%	22.28%	16.66%	98.22%
Oak Bluffs	269.11%	142.41%	132	46.15%	52.94%	-6.38%	87.17%
Peabody	102.81%	100.81%	388	6.86%	14.40%	12.50%	99.15%
Pelham	74.77%	110.76%	27	22.69%	31.13%	5.42%	89.05%
Quincy	120.24%	106.49%	816	10.79%	20.03%	10.58%	98.10%
Rockport	168.01%	111.51%	107	11.48%	20.86%	4.52%	96.44%
Sandwich	90.36%	112.58%	531	18.10%	25.95%	8.37%	96.86%
Savoy	47.44%	100.14%	23	26.74%	34.68%	33.57%	99.32%
Southborough	194.10%	116.55%	147	18.44%	27.49%	7.03%	97.84%
Sudbury	231.23%	111.92%	325	17.58%	24.93%	6.64%	95.53%
Topsfield	168.83%	100.36%	140	29.54%	38.56%	22.49%	88.72%
West Boylston	98.64%	103.58%	98	11.85%	18.25%	14.08%	99.92%
Winthrop	90.30%	100.73%	118	5.87%	12.77%	8.03%	96.50%

## APPENDIX II

### *Change in Foundation Status 1997 Compared to 1994*

#### *Required Spending as a Percentage of Foundation*

*(337 Districts that maintained the same operating structure 1994 - 1997) (See Section 3)*

School District	FY 97 Valuation Ratio	FY 94 % of Foundation	Whole Change Foundation Enrollment	% Change Foundation Enrollment	% Change Foundation Budget	% Change Required NSS	FY 97 % of Foundation
Groton Dunstable		112.18%	675	49.96%	59.97%	21.68%	85.33%
King Philip		101.67%	110	7.75%	14.85%	10.80%	98.09%
Nauset		119.06%	294	19.93%	28.66%	-1.81%	90.86%
Northeast Metropolitan		104.15%	235	23.74%	35.80%	23.75%	94.91%
Northern Berkshire		108.76%	46	12.37%	30.00%	15.18%	96.36%
Silver Lake		100.17%	225	9.57%	19.05%	15.13%	96.87%
South Shore		144.45%	166	51.71%	62.15%	6.81%	95.16%
Southern Berkshire		108.52%	43	4.11%	22.50%	-7.88%	81.60%
Southwick Tolland		101.66%	167	11.25%	20.65%	14.01%	96.07%
Tantasqua		100.76%	77	5.41%	13.36%	7.48%	95.54%
Tri County		100.66%	53	7.86%	15.75%	7.27%	93.28%
<b>Average</b>		<b>109.26%</b>	<b>323</b>	<b>24.03%</b>	<b>31.30%</b>	<b>11.20%</b>	<b>92.91%</b>

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### APPENDIX III

#### *Change in Foundation Status 1996 Compared to 1994* *Actual Spending as a Percentage of Foundation (See Section 3)*

School District	1994 % of Foundation	1996 % of Foundation	Result
Abington	87.56%	99.29%	Stayed Below, Gained Ground
Acton	101.04%	101.58%	Stayed Above, Gained Ground
Acushnet	70.92%	87.62%	Stayed Below, Gained Ground
Agawam	96.36%	96.16%	Stayed Below, Lost Ground
Amesbury	86.32%	91.55%	Stayed Below, Gained Ground
Amherst	89.67%	111.03%	Went Above
Andover	108.03%	110.73%	Stayed Above, Gained Ground
Arlington	125.35%	130.43%	Stayed Above, Gained Ground
Ashland	101.80%	105.04%	Stayed Above, Gained Ground
Attleboro	83.95%	92.38%	Stayed Below, Gained Ground
Auburn	101.73%	105.45%	Stayed Above, Gained Ground
Avon	118.81%	120.68%	Stayed Above, Gained Ground
Ayer	67.10%	84.50%	Stayed Below, Gained Ground
Barnstable	94.66%	99.86%	Stayed Below, Gained Ground
Becket	84.40%	210.11%	Went Above
Bedford	137.15%	140.49%	Stayed Above, Gained Ground
Belchertown	77.20%	87.40%	Stayed Below, Gained Ground
Bellingham	92.93%	94.57%	Stayed Below, Gained Ground
Belmont	124.40%	116.32%	Stayed Above, Lost Ground
Berkley	67.87%	80.01%	Stayed Below, Gained Ground
Berlin	103.09%	105.12%	Stayed Above, Gained Ground
Beverly	97.66%	100.95%	Went Above
Billerica	89.67%	99.91%	Stayed Below, Gained Ground
Blackstone	115.59%	185.70%	Stayed Above, Gained Ground
Boston	100.78%	105.79%	Stayed Above, Gained Ground
Bourne	85.23%	87.58%	Stayed Below, Gained Ground
Boxborough	100.27%	85.08%	Fell Below
Boxford	86.04%	80.76%	Stayed Below, Lost Ground
Boylston	112.91%	103.67%	Stayed Above, Lost Ground
Braintree	102.55%	101.23%	Stayed Above, Lost Ground
Brewster	100.55%	100.61%	Stayed Above, Gained Ground
Brimfield	94.07%	98.33%	Stayed Below, Gained Ground
Brockton	76.51%	86.19%	Stayed Below, Gained Ground
Brookfield	86.51%	91.37%	Stayed Below, Gained Ground
Brookline	144.69%	143.38%	Stayed Above, Lost Ground
Burlington	120.94%	120.60%	Stayed Above, Lost Ground
Cambridge	166.73%	153.83%	Stayed Above, Lost Ground
Canton	118.93%	112.49%	Stayed Above, Lost Ground
Carlisle	111.07%	124.47%	Stayed Above, Gained Ground
Carver	87.09%	90.95%	Stayed Below, Gained Ground
Chatham	157.78%	170.80%	Stayed Above, Gained Ground
Chelmsford	95.33%	99.75%	Stayed Below, Gained Ground
Chelsea	79.96%	84.83%	Stayed Below, Gained Ground

***Change in Foundation Status 1996 Compared to 1994***  
***Actual Spending as a Percentage of Foundation (See Section 3)***

School District	1994 % of Foundation	1996 % of Foundation	Result
Chesterfield	87.91%	83.05%	Stayed Below, Lost Ground
Chicopee	89.44%	90.56%	Stayed Below, Gained Ground
Clarksburg	87.62%	93.69%	Stayed Below, Gained Ground
Clinton	82.58%	94.83%	Stayed Below, Gained Ground
Cohasset	112.55%	126.36%	Stayed Above, Gained Ground
Concord	138.97%	149.59%	Stayed Above, Gained Ground
Conway	81.51%	99.16%	Stayed Below, Gained Ground
Cummington	84.60%	80.52%	Stayed Below, Lost Ground
Dalton	587.77%	143.81%	Stayed Above, Lost Ground
Danvers	124.00%	120.11%	Stayed Above, Lost Ground
Dartmouth	88.17%	94.61%	Stayed Below, Gained Ground
Dedham	117.98%	119.39%	Stayed Above, Gained Ground
Deerfield	100.20%	114.11%	Stayed Above, Gained Ground
Douglas	79.26%	86.95%	Stayed Below, Gained Ground
Dover	157.52%	145.92%	Stayed Above, Lost Ground
Dracut	81.74%	87.25%	Stayed Below, Gained Ground
Duxbury	102.19%	110.77%	Stayed Above, Gained Ground
East Bridgewater	81.78%	94.42%	Stayed Below, Gained Ground
East Brookfield	113.53%	98.63%	Fell Below
Eastham	122.37%	110.75%	Stayed Above, Lost Ground
Easthampton	89.61%	91.65%	Stayed Below, Gained Ground
East Longmeadow	92.03%	97.97%	Stayed Below, Gained Ground
Easton	93.71%	96.40%	Stayed Below, Gained Ground
Edgartown	138.57%	156.02%	Stayed Above, Gained Ground
Erving	100.96%	121.52%	Stayed Above, Gained Ground
Essex	95.88%	98.07%	Stayed Below, Gained Ground
Everett	83.61%	94.49%	Stayed Below, Gained Ground
Fairhaven	88.00%	95.81%	Stayed Below, Gained Ground
Fall River	78.23%	87.00%	Stayed Below, Gained Ground
Falmouth	101.68%	99.57%	Fell Below
Fitchburg	82.15%	90.04%	Stayed Below, Gained Ground
Florida	94.58%	93.34%	Stayed Below, Lost Ground
Foxborough	94.80%	105.64%	Went Above
Framingham	102.50%	120.43%	Stayed Above, Gained Ground
Franklin	81.04%	86.51%	Stayed Below, Gained Ground
Freetown	90.97%	100.64%	Went Above
Gardner	74.27%	84.97%	Stayed Below, Gained Ground
Georgetown	97.81%	99.76%	Stayed Below, Gained Ground
Gloucester	97.37%	102.88%	Went Above
Goshen	84.53%	90.37%	Stayed Below, Gained Ground
Gosnold	136.38%	303.64%	Stayed Above, Gained Ground
Grafton	89.37%	97.66%	Stayed Below, Gained Ground
Granby	87.50%	93.76%	Stayed Below, Gained Ground

### APPENDIX III

#### *Change in Foundation Status 1996 Compared to 1994 Actual Spending as a Percentage of Foundation (See Section 3)*

School District	1994 % of Foundation	1996 % of Foundation	Result
Granville	101.08%	107.53%	Stayed Above, Gained Ground
Greenfield	87.91%	92.99%	Stayed Below, Gained Ground
Hadley	128.41%	114.60%	Stayed Above, Lost Ground
Halifax	80.18%	91.26%	Stayed Below, Gained Ground
Hancock	117.35%	130.92%	Stayed Above, Gained Ground
Hanover	92.71%	97.94%	Stayed Below, Gained Ground
Harvard	118.80%	121.83%	Stayed Above, Gained Ground
Harwich	110.94%	118.41%	Stayed Above, Gained Ground
Hatfield	103.14%	107.44%	Stayed Above, Gained Ground
Haverhill	78.33%	88.23%	Stayed Below, Gained Ground
Hingham	100.26%	106.34%	Stayed Above, Gained Ground
Hinsdale	732.63%	105.65%	Stayed Above, Lost Ground
Holbrook	91.35%	97.35%	Stayed Below, Gained Ground
Holland	96.14%	104.42%	Went Above
Holliston	90.09%	105.71%	Went Above
Holyoke	72.56%	82.39%	Stayed Below, Gained Ground
Hopedale	90.81%	88.37%	Stayed Below, Lost Ground
Hopkinton	97.06%	103.92%	Went Above
Hudson	98.74%	105.05%	Went Above
Hull	87.06%	98.86%	Stayed Below, Gained Ground
Ipswich	121.69%	111.21%	Stayed Above, Lost Ground
Kingston	80.33%	87.86%	Stayed Below, Gained Ground
Lakeville	81.54%	84.82%	Stayed Below, Gained Ground
Lanesborough	91.52%	111.86%	Went Above
Lawrence	73.11%	84.34%	Stayed Below, Gained Ground
Lee	110.96%	117.62%	Stayed Above, Gained Ground
Leicester	80.67%	95.77%	Stayed Below, Gained Ground
Lenox	143.76%	162.79%	Stayed Above, Gained Ground
Leominster	80.54%	77.03%	Stayed Below, Lost Ground
Leverett	88.87%	101.85%	Went Above
Lexington	139.82%	139.62%	Stayed Above, Lost Ground
Lincoln	172.30%	237.04%	Stayed Above, Gained Ground
Littleton	118.31%	112.61%	Stayed Above, Lost Ground
Longmeadow	128.24%	124.98%	Stayed Above, Lost Ground
Lowell	74.96%	83.58%	Stayed Below, Gained Ground
Ludlow	88.02%	92.89%	Stayed Below, Gained Ground
Lunenburg	94.48%	94.31%	Stayed Below, Lost Ground
Lynn	79.66%	87.08%	Stayed Below, Gained Ground
Lynnfield	113.15%	116.02%	Stayed Above, Gained Ground
Malden	89.69%	101.12%	Went Above
Manchester	124.07%	149.40%	Stayed Above, Gained Ground
Mansfield	96.98%	96.12%	Stayed Below, Lost Ground
Marblehead	124.46%	123.68%	Stayed Above, Lost Ground

*Change in Foundation Status 1996 Compared to 1994*  
*Actual Spending as a Percentage of Foundation (See Section 3)*

School District	1994 % of Foundation	1996 % of Foundation	Result
Marion	114.63%	124.97%	Stayed Above, Gained Ground
Marlborough	100.69%	107.27%	Stayed Above, Gained Ground
Marshfield	86.59%	91.99%	Stayed Below, Gained Ground
Mashpee	95.10%	86.69%	Stayed Below, Lost Ground
Mattapoisett	107.93%	111.55%	Stayed Above, Gained Ground
Maynard	110.54%	105.97%	Stayed Above, Lost Ground
Medfield	99.98%	100.50%	Went Above
Medford	105.58%	108.43%	Stayed Above, Gained Ground
Medway	95.59%	95.36%	Stayed Below, Lost Ground
Melrose	102.41%	109.93%	Stayed Above, Gained Ground
Methuen	85.32%	90.29%	Stayed Below, Gained Ground
Middleborough	74.14%	88.40%	Stayed Below, Gained Ground
Middleton	121.01%	85.93%	Fell Below
Milford	93.66%	99.89%	Stayed Below, Gained Ground
Millbury	96.14%	96.97%	Stayed Below, Gained Ground
Millis	98.23%	106.44%	Went Above
Millville	84.55%	115.96%	Went Above
Milton	102.95%	101.38%	Stayed Above, Lost Ground
Monroe	92.15%	96.78%	Stayed Below, Gained Ground
Monson	79.11%	86.91%	Stayed Below, Gained Ground
Mount Washington	89.07%	85.54%	Stayed Below, Lost Ground
Nahant	86.38%	98.05%	Stayed Below, Gained Ground
Nantucket	169.31%	187.93%	Stayed Above, Gained Ground
Natick	129.92%	129.57%	Stayed Above, Lost Ground
Needham	120.21%	130.62%	Stayed Above, Gained Ground
New Ashford	110.76%	131.95%	Stayed Above, Gained Ground
New Bedford	79.24%	88.91%	Stayed Below, Gained Ground
Newburyport	107.53%	115.17%	Stayed Above, Gained Ground
Newton	132.58%	119.92%	Stayed Above, Lost Ground
Norfolk	84.46%	90.58%	Stayed Below, Gained Ground
North Adams	78.51%	89.54%	Stayed Below, Gained Ground
Northampton	99.59%	106.63%	Went Above
North Andover	98.94%	103.41%	Went Above
North Attleborough	85.80%	85.93%	Stayed Below, Gained Ground
Northborough	95.80%	97.06%	Stayed Below, Gained Ground
Northbridge	80.36%	93.57%	Stayed Below, Gained Ground
North Brookfield	75.68%	87.46%	Stayed Below, Gained Ground
North Reading	99.85%	102.32%	Went Above
Norton	81.27%	91.73%	Stayed Below, Gained Ground
Norwell	114.14%	124.55%	Stayed Above, Gained Ground
Norwood	109.01%	109.41%	Stayed Above, Gained Ground
Oak Bluffs	142.41%	144.46%	Stayed Above, Gained Ground
Orange	70.71%	84.19%	Stayed Below, Gained Ground



### APPENDIX III

#### *Change in Foundation Status 1996 Compared to 1994 Actual Spending as a Percentage of Foundation (See Section 3)*

School District	1994 % of Foundation	1996 % of Foundation	Result
Orleans	145.19%	130.71%	Stayed Above, Lost Ground
Oxford	81.18%	90.49%	Stayed Below, Gained Ground
Palmer	68.51%	82.97%	Stayed Below, Gained Ground
Peabody	100.81%	106.54%	Stayed Above, Gained Ground
Pelham	110.76%	114.58%	Stayed Above, Gained Ground
Pembroke	83.76%	93.45%	Stayed Below, Gained Ground
Peru	527.52%	98.14%	Fell Below
Petersham	101.18%	112.80%	Stayed Above, Gained Ground
Pittsfield	91.65%	88.52%	Stayed Below, Lost Ground
Plainville	90.13%	93.21%	Stayed Below, Gained Ground
Plymouth	92.92%	99.02%	Stayed Below, Gained Ground
Plympton	81.99%	86.14%	Stayed Below, Gained Ground
Provincetown	195.99%	207.58%	Stayed Above, Gained Ground
Quincy	106.49%	97.27%	Fell Below
Randolph	95.54%	94.96%	Stayed Below, Lost Ground
Reading	97.10%	100.56%	Went Above
Revere	86.29%	90.70%	Stayed Below, Gained Ground
Richmond	113.38%	105.27%	Stayed Above, Lost Ground
Rochester	87.50%	104.55%	Went Above
Rockland	84.08%	94.75%	Stayed Below, Gained Ground
Rockport	111.51%	109.01%	Stayed Above, Lost Ground
Rowe	185.44%	388.10%	Stayed Above, Gained Ground
Salem	96.57%	94.01%	Stayed Below, Lost Ground
Sandwich	112.58%	104.38%	Stayed Above, Lost Ground
Saugus	104.32%	105.90%	Stayed Above, Gained Ground
Savoy	100.14%	109.75%	Stayed Above, Gained Ground
Scituate	105.13%	103.80%	Stayed Above, Lost Ground
Seekonk	105.14%	108.82%	Stayed Above, Gained Ground
Sharon	98.61%	105.02%	Went Above
Sherborn	112.96%	128.34%	Stayed Above, Gained Ground
Shirley	79.39%	87.46%	Stayed Below, Gained Ground
Shrewsbury	98.66%	101.22%	Went Above
Shutesbury	82.64%	100.76%	Went Above
Somerset	102.42%	126.80%	Stayed Above, Gained Ground
Somerville	100.81%	107.19%	Stayed Above, Gained Ground
Southampton	76.85%	87.72%	Stayed Below, Gained Ground
Southborough	116.55%	116.85%	Stayed Above, Gained Ground
Southbridge	82.46%	85.80%	Stayed Below, Gained Ground
South Hadley	96.40%	96.91%	Stayed Below, Gained Ground
Spencer	97.53%	99.23%	Stayed Below, Gained Ground
Springfield	87.40%	88.79%	Stayed Below, Gained Ground
Stoneham	103.18%	104.93%	Stayed Above, Gained Ground
Stoughton	91.20%	97.72%	Stayed Below, Gained Ground

*Change in Foundation Status 1996 Compared to 1994*  
*Actual Spending as a Percentage of Foundation (See Section 3)*

School District	1994 % of Foundation	1996 % of Foundation	Result
Sturbridge	96.01%	111.84%	Went Above
Sudbury	111.92%	115.95%	Stayed Above, Gained Ground
Sunderland	84.87%	113.62%	Went Above
Sutton	80.64%	88.53%	Stayed Below, Gained Ground
Swampscott	123.42%	127.63%	Stayed Above, Gained Ground
Swansea	98.76%	103.39%	Went Above
Taunton	84.87%	91.07%	Stayed Below, Gained Ground
Tewksbury	87.85%	90.82%	Stayed Below, Gained Ground
Tisbury	135.62%	138.40%	Stayed Above, Gained Ground
Topsfield	100.36%	95.34%	Fell Below
Truro	187.14%	150.89%	Stayed Above, Lost Ground
Tyngsborough	88.33%	91.21%	Stayed Below, Gained Ground
Tyringham	144.80%	144.59%	Stayed Above, Lost Ground
Uxbridge	85.23%	89.15%	Stayed Below, Gained Ground
Wakefield	104.90%	113.06%	Stayed Above, Gained Ground
Wales	80.82%	91.36%	Stayed Below, Gained Ground
Walpole	92.27%	97.49%	Stayed Below, Gained Ground
Waltham	118.65%	129.66%	Stayed Above, Gained Ground
Ware	77.94%	94.78%	Stayed Below, Gained Ground
Wareham	81.31%	88.46%	Stayed Below, Gained Ground
Watertown	150.03%	124.05%	Stayed Above, Lost Ground
Wayland	133.79%	140.85%	Stayed Above, Gained Ground
Webster	83.47%	90.90%	Stayed Below, Gained Ground
Wellesley	140.54%	132.46%	Stayed Above, Lost Ground
Wellfleet	127.26%	132.03%	Stayed Above, Gained Ground
Westborough	124.20%	126.36%	Stayed Above, Gained Ground
West Boylston	103.58%	103.16%	Stayed Above, Lost Ground
West Bridgewater	102.09%	113.35%	Stayed Above, Gained Ground
Westfield	81.61%	91.56%	Stayed Below, Gained Ground
Westford	98.70%	96.82%	Stayed Below, Lost Ground
Westhampton	85.91%	93.22%	Stayed Below, Gained Ground
Weston	166.23%	182.99%	Stayed Above, Gained Ground
Westport	98.74%	100.00%	Stayed Below, Gained Ground
West Springfield	90.31%	91.52%	Stayed Below, Gained Ground
Westwood	159.04%	148.41%	Stayed Above, Lost Ground
Weymouth	93.47%	96.45%	Stayed Below, Gained Ground
Whately	92.59%	123.19%	Went Above
Williamsburg	102.84%	114.03%	Stayed Above, Gained Ground
Williamstown	103.53%	111.76%	Stayed Above, Gained Ground
Wilmington	99.05%	105.63%	Went Above
Winchendon	83.31%	89.07%	Stayed Below, Gained Ground
Winchester	124.72%	121.81%	Stayed Above, Lost Ground
Winthrop	100.73%	101.19%	Stayed Above, Gained Ground

### APPENDIX III

#### *Change in Foundation Status 1996 Compared to 1994 Actual Spending as a Percentage of Foundation (See Section 3)*

School District	1994 % of Foundation	1996 % of Foundation	Result
Woburn	100.61%	105.05%	Stayed Above, Gained Ground
Worcester	87.61%	92.43%	Stayed Below, Gained Ground
Wrentham	77.44%	92.29%	Stayed Below, Gained Ground
Acton Boxborough	126.54%	128.51%	Stayed Above, Gained Ground
Adams Cheshire	83.86%	92.67%	Stayed Below, Gained Ground
Amherst Pelham	121.04%	126.52%	Stayed Above, Gained Ground
Ashburnham Westminster	83.61%	94.11%	Stayed Below, Gained Ground
Assabet Valley	116.26%	130.84%	Stayed Above, Gained Ground
Athol Royalston	73.07%	84.30%	Stayed Below, Gained Ground
Berkshire Hills	112.44%	144.33%	Stayed Above, Gained Ground
Berlin Boylston	160.42%	163.54%	Stayed Above, Gained Ground
Blackstone Millville	87.39%	89.51%	Stayed Below, Gained Ground
Blackstone Valley	93.32%	99.99%	Stayed Below, Gained Ground
Blue Hills	101.92%	111.58%	Stayed Above, Gained Ground
Bristol County	137.57%	136.29%	Stayed Above, Lost Ground
Bristol Plymouth	96.46%	105.86%	Went Above
Cape Cod	115.35%	118.53%	Stayed Above, Gained Ground
Central Berkshire	96.14%	97.69%	Stayed Below, Gained Ground
Chesterfield Goshen	94.09%	113.85%	Went Above
Concord Carlisle	181.76%	180.26%	Stayed Above, Lost Ground
Dennis Yarmouth	99.20%	105.30%	Went Above
Dighton Rehoboth	95.30%	103.98%	Went Above
Dover Sherborn	186.57%	153.87%	Stayed Above, Lost Ground
Dudley Charlton	75.05%	85.87%	Stayed Below, Gained Ground
Essex County	90.07%	97.72%	Stayed Below, Gained Ground
Farmington River	126.46%	110.49%	Stayed Above, Lost Ground
Franklin County	113.53%	116.68%	Stayed Above, Gained Ground
Freetown Lakeville	91.59%	95.23%	Stayed Below, Gained Ground
Frontier	105.44%	118.96%	Stayed Above, Gained Ground
Gateway	97.64%	97.29%	Stayed Below, Lost Ground
Gill Montague	83.17%	96.38%	Stayed Below, Gained Ground
Greater Fall River	73.27%	82.48%	Stayed Below, Gained Ground
Greater Lawrence	94.92%	97.10%	Stayed Below, Gained Ground
Greater Lowell	94.21%	92.16%	Stayed Below, Lost Ground
Greater New Bedford	81.38%	86.98%	Stayed Below, Gained Ground
Groton Dunstable	112.18%	95.57%	Fell Below
Hamilton Wenham	119.52%	126.12%	Stayed Above, Gained Ground
Hampshire	110.63%	108.94%	Stayed Above, Lost Ground
Hawlemont	81.43%	103.00%	Went Above
King Philip	101.67%	107.11%	Stayed Above, Gained Ground
Lincoln Sudbury	185.59%	210.55%	Stayed Above, Gained Ground
Martha's Vineyard	183.11%	204.07%	Stayed Above, Gained Ground
Masconomet	127.31%	126.42%	Stayed Above, Lost Ground

*Change in Foundation Status 1996 Compared to 1994*  
*Actual Spending as a Percentage of Foundation (See Section 3)*

School District	1994 % of Foundation	1996 % of Foundation	Result
Mendon Upton	95.27%	93.90%	Stayed Below, Lost Ground
Minuteman	190.98%	230.02%	Stayed Above, Gained Ground
Montachusett	98.03%	100.00%	Went Above
Mount Greylock	154.85%	148.98%	Stayed Above, Lost Ground
Narragansett	88.09%	88.60%	Stayed Below, Gained Ground
Nashoba Valley	110.84%	103.18%	Stayed Above, Lost Ground
Nauset	119.06%	127.29%	Stayed Above, Gained Ground
New Salem Wendell	86.03%	92.38%	Stayed Below, Gained Ground
Norfolk County	174.66%	160.32%	Stayed Above, Lost Ground
North Middlesex	83.38%	87.67%	Stayed Below, Gained Ground
North Shore	96.72%	97.48%	Stayed Below, Gained Ground
Northampton Smith	137.38%	177.76%	Stayed Above, Gained Ground
Northborough Southborough	114.43%	129.12%	Stayed Above, Gained Ground
Northeast Metropolitan	104.15%	91.84%	Fell Below
Northern Berkshire	108.76%	91.84%	Fell Below
Old Colony	127.26%	124.88%	Stayed Above, Lost Ground
Old Rochester	125.29%	134.53%	Stayed Above, Gained Ground
Pathfinder	119.32%	109.00%	Stayed Above, Lost Ground
Pentucket	92.55%	97.75%	Stayed Below, Gained Ground
Pioneer	96.02%	96.35%	Stayed Below, Gained Ground
Quabbin	83.74%	90.73%	Stayed Below, Gained Ground
Quaboag	79.67%	88.68%	Stayed Below, Gained Ground
Ralph C. Mahar	102.32%	117.59%	Stayed Above, Gained Ground
Shawsheen Valley	117.47%	115.31%	Stayed Above, Lost Ground
Silver Lake	100.17%	96.65%	Fell Below
South Middlesex	138.25%	137.68%	Stayed Above, Lost Ground
South Shore	144.45%	109.85%	Stayed Above, Lost Ground
Southeastern	92.08%	94.16%	Stayed Below, Gained Ground
Southern Berkshire	108.52%	115.49%	Stayed Above, Gained Ground
Southern Worcester	89.33%	96.66%	Stayed Below, Gained Ground
Southwick Tolland	101.66%	101.47%	Stayed Above, Lost Ground
Spencer East Brookfield	91.07%	100.73%	Went Above
Tantasqua	100.76%	111.62%	Stayed Above, Gained Ground
Tri County	100.66%	97.75%	Fell Below
Upper Cape Cod	96.81%	100.52%	Went Above
Worcester Trade	95.17%	94.17%	Stayed Below, Lost Ground

## APPENDIX IV

### *1996 Actual Per-Pupil Expenditures Ranked From Highest to Lowest With 1993 Comparisons (290 Academic Districts and 31 Vocational and Agricultural Districts) (See Section 3)*

School District	FY 1996 Valuation Ratio	FY 1996 Per-Pupil Spending	FY 1996 Ranked by Per-Pupil Spending	FY 1993 Per-Pupil Spending	FY 1993 Ranked by Per-Pupil Spending	Change 1993 - 1996 Whole \$	%
Rowe	688.02%	\$ 18,778	1	\$ 12,951	1	\$ 5,827	45%
Lincoln	602.80%	12,544	2	10,118	4	2,426	24%
Lincoln Sudbury		12,145	3	9,435	10	2,710	29%
Provincetown	354.74%	12,052	4	10,640	3	1,412	13%
Martha's Vineyard		10,543	5	10,075	5	468	5%
Concord Carlisle		10,300	6	9,781	7	519	5%
Weston	670.38%	10,067	7	9,061	11	1,006	11%
Cambridge	233.08%	9,970	8	9,644	8	326	3%
Nantucket	826.38%	9,493	9	7,960	13	1,533	19%
Berlin Boylston		8,758	10	7,682	17	1,076	14%
Chatham	595.14%	8,683	11	7,251	25	1,432	20%
Dover Sherborn		8,565	12	9,804	6	(1,239)	-13%
Lenox	137.40%	8,503	13	6,927	31	1,576	23%
Brookline	308.40%	8,242	14	7,772	14	470	6%
Westwood	225.88%	8,034	15	8,453	12	(419)	-5%
Concord	336.91%	8,033	16	7,512	18	521	7%
Waltham	148.46%	7,893	17	6,623	41	1,270	19%
Bedford	219.17%	7,876	18	7,456	19	420	6%
Lexington	268.43%	7,823	19	7,374	23	449	6%
Wayland	276.39%	7,754	20	7,008	29	746	11%
Edgartown	632.51%	7,714	21	6,798	35	916	13%
Berkshire Hills		7,712	22	6,161	54	1,551	25%
Manchester	406.89%	7,697	23	7,415	22	282	4%
Mount Greylock		7,681	24	7,760	15	(79)	-1%
Dover	476.66%	7,615	25	7,725	16	(110)	-1%
Truro	487.65%	7,507	26	9,631	9	(2,124)	-22%
Boston	100.41%	7,347	27	6,592	42	755	11%
Wellesley	414.68%	7,289	28	7,334	24	(45)	-1%
Arlington	197.57%	7,235	29	6,881	32	354	5%
Acton Boxborough		7,219	30	6,709	38	510	8%
Needham	281.78%	7,199	31	6,332	49	867	14%

**1996 Actual Per-Pupil Expenditures Ranked From Highest to Lowest With 1993 Comparisons  
(290 Academic Districts and 31 Vocational and Agricultural Districts) (See Section 3)**

School District	FY 1996 Valuation Ratio	FY 1996 Per-Pupil Spending	FY 1996 Ranked by Per-Pupil Spending	FY 1993 Per-Pupil Spending	FY 1993 Ranked by Per-Pupil Spending	Change 1993 - 1996 Whole \$	%
Natick	181.40%	\$ 7,189	32	\$ 6,851	34	\$ 338	5%
Oak Bluffs	278.30%	7,167	33	7,432	21	(265)	-4%
Amherst Pelham		7,163	34	6,976	30	187	3%
Watertown	207.28%	7,160	35	7,454	20	(294)	-4%
Newton	292.65%	7,116	36	7,190	26	(74)	-1%
Somerville	88.57%	7,093	37	6,444	44	649	10%
Framingham	123.61%	7,078	38	5,861	69	1,217	21%
Northborough Southborough		7,043	39	5,825	72	1,218	21%
Old Rochester		6,984	40	6,372	47	612	10%
Ralph C. Mahar		6,977	41	5,539	87	1,438	26%
Erving	95.51%	6,975	42	5,807	73	1,168	20%
Tisbury	252.48%	6,938	43	6,635	40	303	5%
Cohasset	289.38%	6,820	44	5,675	79	1,145	20%
Masconomet		6,734	45	6,641	39	93	1%
Norwell	164.54%	6,724	46	5,789	75	935	16%
Burlington	145.23%	6,689	47	6,407	45	282	4%
Carlisle	296.79%	6,654	48	6,007	60	647	11%
Sherborn	357.33%	6,652	49	5,717	78	935	16%
Harvard	121.50%	6,646	50	7,185	27	(539)	-8%
Winchester	272.13%	6,639	51	6,189	52	450	7%
Wellfleet	303.49%	6,634	52	6,862	33	(228)	-3%
Westborough	134.63%	6,629	53	6,788	36	(159)	-2%
Hancock	224.46%	6,622	54	6,285	50	337	5%
Dedham	146.88%	6,592	55	6,401	46	191	3%
Nauset		6,588	56	4,112	246	2,476	60%
Nashoba		6,584	57	7,168	28	(584)	-8%
Swampscott	181.71%	6,546	58	5,802	74	744	13%
Lee	94.59%	6,537	59	5,861	70	676	12%
Avon	121.79%	6,496	60	5,989	62	507	8%
Hamilton Wenham		6,446	61	5,453	96	993	18%
Somerset	98.84%	6,445	62	5,878	65	567	10%

## APPENDIX IV

### *1996 Actual Per-Pupil Expenditures Ranked From Highest to Lowest With 1993 Comparisons (290 Academic Districts and 31 Vocational and Agricultural Districts) (See Section 3)*

School District	FY 1996 Valuation Ratio	FY 1996 Per-Pupil Spending	FY 1996 Ranked by Per-Pupil Spending	FY 1993 Per-Pupil Spending	FY 1993 Ranked by Per-Pupil Spending	Change 1993 - 1996 Whole \$	%
Marblehead	310.93%	\$ 6,425	63	\$ 6,181	53	\$ 244	4%
Medford	117.82%	6,400	64	6,067	57	333	5%
Belmont	231.34%	6,398	65	6,728	37	(330)	-5%
Marion	238.26%	6,367	66	5,604	82	763	14%
Orleans	379.30%	6,345	67	5,845	71	500	9%
Longmeadow	157.98%	6,322	68	6,100	56	222	4%
Southborough	196.73%	6,310	69	6,274	51	36	1%
Littleton	123.87%	6,302	70	6,333	48	(31)	0%
Lynnfield	195.25%	6,295	71	5,929	64	366	6%
Wakefield	120.13%	6,290	72	5,630	81	660	12%
Danvers	142.98%	6,289	73	6,045	58	244	4%
Amherst	43.78%	6,284	74	6,511	43	(227)	-3%
Sudbury	235.65%	6,277	75	5,770	77	507	9%
Springfield	29.19%	6,261	76	5,467	95	794	15%
Canton	171.57%	6,199	77	6,129	55	70	1%
Frontier		6,177	78	5,553	85	624	11%
Norwood	128.38%	6,176	79	5,986	63	190	3%
Marlborough	113.08%	6,150	80	5,546	86	604	11%
Southern Berkshire		6,143	81	5,378	101	765	14%
Newburyport	116.95%	6,135	82	5,320	104	815	15%
Malden	79.28%	6,122	83	5,045	129	1,077	21%
Maynard	103.16%	6,107	84	5,489	93	618	11%
Whately	106.73%	6,107	85	5,036	130	1,071	21%
Tantasqua		6,096	86	5,260	110	836	16%
West Bridgewater	99.06%	6,059	87	5,218	113	841	16%
Quincy	116.25%	6,044	88	5,866	68	178	3%
Melrose	116.65%	6,043	89	5,344	103	699	13%
Harwich	203.60%	6,021	90	5,583	83	438	8%
Woburn	139.82%	6,006	91	5,998	61	8	0%
King Philip		6,000	92	5,437	98	563	10%
Chelsea	28.49%	5,993	93	5,269	107	724	14%

*1996 Actual Per-Pupil Expenditures Ranked From Highest to Lowest With 1993 Comparisons  
(290 Academic Districts and 31 Vocational and Agricultural Districts) (See Section 3)*

School District	FY 1996 Valuation Ratio	FY 1996 Per-Pupil Spending	FY 1996 Ranked by Per-Pupil Spending	FY 1993 Per-Pupil Spending	FY 1993 Ranked by Per-Pupil Spending	Change 1993 - 1996 Whole \$	%
Holyoke	24.88%	\$5,990	94	\$ 4,318	223	\$1,672	39%
Worcester	40.92%	5,988	95	5,062	127	926	18%
Duxbury	143.00%	5,955	96	5,112	123	843	16%
Lawrence	13.35%	5,955	97	4,031	252	1,924	48%
Everett	91.36%	5,948	98	4,880	154	1,068	22%
Sunderland	69.14%	5,942	99	4,375	218	1,567	36%
Hadley	121.70%	5,934	100	5,164	118	770	15%
Foxborough	90.78%	5,911	101	5,065	126	846	17%
Hudson	81.72%	5,907	102	4,894	149	1,013	21%
Andover	177.94%	5,904	103	5,435	99	469	9%
Hull	89.71%	5,865	104	5,120	121	745	15%
Salem	88.75%	5,847	105	5,506	91	341	6%
Northampton	87.06%	5,837	106	5,028	131	809	16%
Stoneham	117.64%	5,831	107	5,231	112	610	11%
Wilmington	103.56%	5,822	108	5,481	94	341	6%
Lynn	33.51%	5,811	109	4,862	157	949	20%
Saugus	111.63%	5,810	110	5,440	97	370	7%
Ipswich	136.96%	5,810	111	5,781	76	29	1%
Hingham	194.53%	5,802	112	5,050	128	752	15%
Peabody	102.64%	5,796	113	5,431	100	365	7%
Ashland	119.61%	5,765	114	5,529	88	236	4%
Holliston	89.48%	5,758	115	4,502	201	1,256	28%
Millis	100.89%	5,753	116	5,094	124	659	13%
Hatfield	109.12%	5,751	117	4,793	169	958	20%
Pelham	83.10%	5,747	118	5,154	119	593	12%
Sharon	124.95%	5,732	119	4,906	148	826	17%
Hopkinton	130.54%	5,725	120	4,881	153	844	17%
Deerfield	99.91%	5,712	121	10,999	2	(5,287)	-48%
Gloucester	102.03%	5,705	122	4,659	185	1,046	22%
Gill Montague		5,701	123	4,556	194	1,145	25%
New Bedford	27.83%	5,686	124	4,415	215	1,271	29%



## APPENDIX IV

### *1996 Actual Per-Pupil Expenditures Ranked From Highest to Lowest With 1993 Comparisons (290 Academic Districts and 31 Vocational and Agricultural Districts) (See Section 3)*

School District	FY 1996 Valuation Ratio	FY 1996 Per-Pupil Spending	FY 1996 Ranked by Per-Pupil Spending	FY 1993 Per-Pupil Spending	FY 1993 Ranked by Per-Pupil Spending	Change 1993 - 1996 Whole \$	%
Berlin	128.28%	\$ 5,686	125	\$ 5,149	120	\$ 537	10%
Williamsburg	88.46%	5,683	126	4,885	151	798	16%
Winthrop	89.40%	5,681	127	6,011	59	(330)	-5%
Clinton	54.31%	5,669	128	4,624	189	1,045	23%
Rockport	170.46%	5,669	129	5,521	90	148	3%
Milford	66.38%	5,658	130	4,803	166	855	18%
Fall River	28.40%	5,654	131	4,820	161	834	17%
Scituate	148.86%	5,652	132	5,264	108	388	7%
Ware	47.52%	5,648	133	4,143	242	1,505	36%
Braintree	119.39%	5,643	134	5,352	102	291	5%
Fitchburg	37.16%	5,641	135	4,309	225	1,332	31%
Revere	64.44%	5,640	136	4,959	142	681	14%
Lowell	30.70%	5,604	137	4,682	183	922	20%
Silver Lake		5,587	138	5,207	115	380	7%
Dennis Yarmouth		5,580	139	4,870	155	710	15%
North Reading	112.03%	5,577	140	4,989	138	588	12%
Holbrook	70.21%	5,572	141	4,802	167	770	16%
Sturbridge	70.27%	5,557	142	4,924	145	633	13%
Eastham	233.93%	5,549	143	5,497	92	52	1%
Chicopee	50.83%	5,547	144	5,026	132	521	10%
Savoy	50.68%	5,542	145	4,061	249	1,481	36%
Billerica	70.42%	5,536	146	4,631	188	905	20%
Mattapoisett	163.23%	5,535	147	5,115	122	420	8%
North Andover	135.34%	5,531	148	4,787	172	744	16%
Auburn	87.68%	5,528	149	5,262	109	266	5%
Brockton	34.73%	5,524	150	4,090	247	1,434	35%
Beverly	110.90%	5,519	151	4,921	146	598	12%
Weymouth	98.88%	5,518	152	4,762	176	756	16%
Lanesborough	82.74%	5,516	153	4,933	144	583	12%
Milton	139.98%	5,510	154	5,277	106	233	4%
Greenfield	50.70%	5,510	155	4,707	182	803	17%

***1996 Actual Per-Pupil Expenditures Ranked From Highest to Lowest With 1993 Comparisons  
(290 Academic Districts and 31 Vocational and Agricultural Districts) (See Section 3)***

School District	FY 1996 Valuation Ratio	FY 1996 Per-Pupil Spending	FY 1996 Ranked by Per-Pupil Spending	FY 1993 Per-Pupil Spending	FY 1993 Ranked by Per-Pupil Spending	Change 1993 - 1996 Whole \$	%
Williamstown	95.92%	\$ 5,507	156	\$ 4,793	170	\$ 714	15%
Reading	109.52%	5,500	157	4,789	171	711	15%
Randolph	79.01%	5,490	158	5,167	117	323	6%
Spencer East Brookfield		5,490	159	4,158	241	1,332	32%
Chesterfield Goshen		5,487	160	3,917	262	1,570	40%
Florida	48.63%	5,480	161	3,898	265	1,582	41%
Stoughton	75.70%	5,471	162	4,557	193	914	20%
Rockland	55.96%	5,466	163	4,620	190	846	18%
Seekonk	100.77%	5,449	164	4,539	197	910	20%
Medfield	133.05%	5,446	165	5,205	116	241	5%
West Springfield	86.58%	5,432	166	4,028	254	1,404	35%
Acton	146.57%	5,429	167	5,528	89	(99)	-2%
Southwick Tolland		5,427	168	4,852	159	575	12%
Farmington River		5,414	169	5,872	66	(458)	-8%
Dighton Rehoboth		5,403	170	4,735	179	668	14%
Hampshire		5,396	171	5,217	114	179	3%
Freetown	63.64%	5,394	172	4,028	253	1,366	34%
Chelmsford	105.89%	5,387	173	4,669	184	718	15%
Taunton	49.10%	5,382	174	4,855	158	527	11%
Mansfield	83.08%	5,380	175	5,251	111	129	2%
Whitman Hanson		5,379	176	4,218	233	1,161	28%
Shrewsbury	118.82%	5,377	177	4,833	160	544	11%
West Boylston	101.02%	5,357	178	4,998	137	359	7%
Georgetown	78.76%	5,353	179	4,779	175	574	12%
Petersham	117.27%	5,335	180	5,671	80	(336)	-6%
North Adams	25.71%	5,331	181	4,337	221	994	23%
Pittsfield	56.43%	5,324	182	4,868	156	456	9%
New Salem Wendell		5,320	183	4,521	198	799	18%
Richmond	161.79%	5,319	184	4,804	165	515	11%
Wareham	60.25%	5,317	185	4,420	214	897	20%
Webster	61.67%	5,313	186	4,985	139	328	7%

## APPENDIX IV

### 1996 Actual Per-Pupil Expenditures Ranked From Highest to Lowest With 1993 Comparisons (290 Academic Districts and 31 Vocational and Agricultural Districts) (See Section 3)

School District	FY 1996 Valuation Ratio	FY 1996 Per-Pupil Spending	FY 1996 Ranked by Per-Pupil Spending	FY 1993 Per-Pupil Spending	FY 1993 Ranked by Per-Pupil Spending	Change 1993 - 1996 Whole \$	%
Gateway		\$ 5,308	187	\$ 4,457	210	\$ 851	19%
Millbury	66.27%	5,293	188	4,888	150	405	8%
Boylston	133.65%	5,293	189	5,279	105	14	0%
Central Berkshire		5,290	190	4,960	141	330	7%
Walpole	114.10%	5,289	191	4,808	164	481	10%
Falmouth	164.76%	5,282	192	5,025	133	257	5%
Southbridge	32.96%	5,271	193	5,013	136	258	5%
Hanover	92.16%	5,260	194	4,780	173	480	10%
Holland	63.98%	5,244	195	4,188	238	1,056	25%
Swansea	70.55%	5,231	196	4,779	174	452	9%
Barnstable	159.48%	5,224	197	4,048	250	1,176	29%
Granville	66.65%	5,215	198	4,727	181	488	10%
Abington	62.99%	5,215	199	4,469	208	746	17%
Westford	112.40%	5,214	200	4,819	163	395	8%
Bellingham	77.44%	5,197	201	4,457	209	740	17%
Sandwich	93.10%	5,196	202	4,963	140	233	5%
Westport	120.78%	5,194	203	4,634	187	560	12%
Groton Dunstable		5,183	204	4,883	152	300	6%
Pentucket		5,156	205	5,872	67	(716)	-12%
Rochester	67.77%	5,153	206	4,286	228	867	20%
Leverett	81.32%	5,146	207	4,517	199	629	14%
Leicester	50.23%	5,144	208	3,988	256	1,156	29%
Northbridge	44.04%	5,138	209	3,687	279	1,451	39%
Haverhill	50.21%	5,138	210	4,255	231	883	21%
Grafton	74.72%	5,135	211	4,193	236	942	22%
South Hadley	68.35%	5,135	212	4,914	147	221	4%
Westfield	49.59%	5,123	213	4,160	240	963	23%
Orange	22.97%	5,121	214	3,788	273	1,333	35%
Medway	70.89%	5,121	215	5,084	125	37	1%
Mendon Upton		5,119	216	4,747	178	372	8%
Attleboro	52.69%	5,093	217	4,515	200	578	13%

*1996 Actual Per-Pupil Expenditures Ranked From Highest to Lowest With 1993 Comparisons  
(290 Academic Districts and 31 Vocational and Agricultural Districts) (See Section 3)*

School District	FY 1996 Valuation Ratio	FY 1996 Per-Pupil Spending	FY 1996 Ranked by Per-Pupil Spending	FY 1993 Per-Pupil Spending	FY 1993 Ranked by Per-Pupil Spending	Change 1993 - 1996 Whole \$	%
Middleborough	44.03%	\$ 5,090	218	\$ 3,657	281	\$ 1,433	39%
Shutesbury	59.07%	5,083	219	4,496	203	587	13%
Fairhaven	60.06%	5,082	220	4,499	202	583	13%
Ayer	57.79%	5,077	221	4,218	232	859	20%
Easthampton	59.68%	5,075	222	4,639	186	436	9%
Marshfield	93.22%	5,059	223	4,322	222	737	17%
Amesbury	56.74%	5,057	224	4,470	207	587	13%
East Longmeadow	81.89%	5,053	225	4,563	192	490	11%
Pioneer		5,045	226	4,935	143	110	2%
Essex	153.45%	5,034	227	4,552	196	482	11%
Methuen	62.80%	5,029	228	4,315	224	714	17%
Norton	60.38%	5,024	229	4,409	217	615	14%
Agawam	67.37%	5,023	230	4,759	177	264	6%
Brewster	152.95%	5,018	231	4,796	168	222	5%
Pembroke	65.74%	5,004	232	4,424	213	580	13%
East Bridgewater	49.20%	4,999	233	4,285	229	714	17%
Oxford	42.71%	4,988	234	3,849	270	1,139	30%
Mashpee	135.22%	4,981	235	5,024	134	(43)	-1%
Tewksbury	90.19%	4,981	236	4,480	205	501	11%
Northborough	111.02%	4,980	237	4,728	180	252	5%
Ludlow	54.36%	4,964	238	4,279	230	685	16%
Adams Cheshire		4,950	239	4,411	216	539	12%
Easton	79.94%	4,931	240	4,484	204	447	10%
Ashburnham Westminster		4,931	241	4,121	245	810	20%
Brookfield	32.99%	4,931	242	3,996	255	935	23%
Granby	65.35%	4,928	243	4,160	239	768	18%
Wrentham	68.62%	4,919	244	3,789	272	1,130	30%
Quabbin		4,912	245	4,122	244	790	19%
Tyngsborough	63.22%	4,911	246	4,306	227	605	14%
Freetown Lakeville		4,910	247	4,348	219	562	13%
Brimfield	42.33%	4,891	248	3,871	267	1,020	26%

## APPENDIX IV

### 1996 Actual Per-Pupil Expenditures Ranked From Highest to Lowest With 1993 Comparisons (290 Academic Districts and 31 Vocational and Agricultural Districts) (See Section 3)

School District	FY 1996 Valuation Ratio	FY 1996 Per-Pupil Spending	FY 1996 Ranked by Per-Pupil Spending	FY 1993 Per-Pupil Spending	FY 1993 Ranked by Per-Pupil Spending	Change 1993 - 1996 Whole \$	%
Athol Royalston		\$ 4,878	249	\$ 3,885	266	\$ 993	26%
Dartmouth	92.63%	4,863	250	3,920	261	943	24%
Quaboag		4,861	251	4,438	212	423	10%
Shirley	55.00%	4,851	252	3,526	283	1,325	38%
North Brookfield	38.85%	4,846	253	3,514	284	1,332	38%
Hopedale	55.85%	4,844	254	4,819	162	25	1%
Lunenburg	73.54%	4,833	255	4,581	191	252	5%
Conway	79.06%	4,797	256	4,338	220	459	11%
Clarksburg	32.74%	4,794	257	3,376	287	1,418	42%
Topsfield	170.50%	4,783	258	4,553	195	230	5%
North Middlesex		4,774	259	3,921	260	853	22%
Uxbridge	59.28%	4,768	260	4,088	248	680	17%
Norfolk	86.25%	4,768	261	3,904	263	864	22%
Wales	37.26%	4,759	262	3,452	285	1,307	38%
Dracut	60.30%	4,757	263	3,869	268	888	23%
Winchendon	31.05%	4,754	264	3,717	276	1,037	28%
Kingston	80.68%	4,729	265	3,789	271	940	25%
Franklin	80.99%	4,723	266	3,975	258	748	19%
Narragansett		4,713	267	4,131	243	582	14%
Halifax	50.48%	4,708	268	3,367	288	1,341	40%
Nahant	185.99%	4,632	269	4,448	211	184	4%
Bourne	104.42%	4,631	270	4,211	234	420	10%
Plainville	77.37%	4,622	271	4,188	237	434	10%
Boxborough	141.99%	4,621	272	5,555	84	(934)	-17%
Gardner	38.05%	4,617	273	3,852	269	765	20%
Monson	47.17%	4,607	274	3,714	277	893	24%
Plympton	64.57%	4,603	275	4,042	251	561	14%
Sutton	68.10%	4,602	276	3,709	278	893	24%
Douglas	47.92%	4,588	277	3,899	264	689	18%
Westhampton	62.84%	4,585	278	3,980	257	605	15%
Blackstone Millville		4,584	279	4,473	206	111	2%

***1996 Actual Per-Pupil Expenditures Ranked From Highest to Lowest With 1993 Comparisons  
(290 Academic Districts and 31 Vocational and Agricultural Districts) (See Section 3)***

School District	FY 1996 Valuation Ratio	FY 1996 Per-Pupil Spending	FY 1996 Ranked by Per-Pupil Spending	FY 1993 Per-Pupil Spending	FY 1993 Ranked by Per-Pupil Spending	Change 1993 - 1996 Whole \$	%
Dudley Charlton		\$ 4,550	280	\$ 3,687	280	\$ 863	23%
Belchertown	49.78%	4,543	281	3,751	274	792	21%
Southampton	66.14%	4,538	282	3,398	286	1,140	34%
Acushnet	50.98%	4,536	283	3,150	289	1,386	44%
Lakeville	80.32%	4,512	284	3,620	282	892	25%
Palmer	49.45%	4,468	285	3,727	275	741	20%
North Attleborough	70.84%	4,374	286	3,971	259	403	10%
Leominster	62.53%	4,365	287	4,309	226	56	1%
Middleton	141.98%	4,362	288	5,020	135	(658)	-13%
Boxford	179.38%	4,055	289	4,195	235	(140)	-3%
Berkley	50.56%	4,040	290	3,108	290	932	30%
<b>Average</b>		<b>\$ 5,908</b>		<b>\$ 5,280</b>		<b>\$ 628</b>	<b>13%</b>

## APPENDIX IV

### *1996 Actual Per-Pupil Expenditures Ranked From Highest to Lowest With 1993 Comparisons (290 Academic Districts and 31 Vocational and Agricultural Districts) (See Section 3)*

School District	FY 1996 Per-Pupil Spending	FY 1996 Ranked by Per-Pupil Spending	FY 1993 Per-Pupil Spending	FY 1993 Ranked by Per-Pupil Spending	Change 1993 - 1996 Whole \$	%
Minuteman	\$ 20,427	1	\$ 13,917	1	\$ 6,510	47%
Northampton Smith	14,857	2	13,009	3	1,848	14%
Norfolk County	14,452	3	13,296	2	1,156	9%
South Middlesex	12,267	4	11,265	5	1,002	9%
Assabet Valley	11,585	5	9,113	10	2,472	27%
Bristol County	11,505	6	10,880	6	625	6%
Franklin County	10,388	7	10,048	8	340	3%
Old Colony	10,007	8	10,277	7	(270)	-3%
Shawsheen Valley	9,887	9	8,826	11	1,061	12%
Blue Hills	9,702	10	8,098	14	1,604	20%
Cape Cod	9,502	11	9,390	9	112	1%
South Shore	9,412	12	12,441	4	(3,029)	-24%
Pathfinder	9,155	13	8,489	12	666	8%
Bristol Plymouth	9,054	14	7,268	24	1,786	25%
Nashoba Valley	8,981	15	7,968	17	1,013	13%
Worcester Trade	8,898	16	7,357	23	1,541	21%
Whittier	8,883	17	8,353	13	530	6%
Greater Lawrence	8,823	18	7,657	20	1,166	15%
Montachusett	8,701	19	7,096	28	1,605	23%
Blackstone Valley	8,606	20	6,482	29	2,124	33%
Tri County	8,410	21	7,739	18	671	9%
North Shore	8,278	22	7,393	22	885	12%
Upper Cape Cod	8,227	23	8,037	16	190	2%
Northeast Metropolitan	8,189	24	7,723	19	466	6%
Greater Lowell	8,086	25	7,196	26	890	12%
Southern Worcester	8,066	26	7,197	25	869	12%
Northern Berkshire	7,975	27	8,052	15	(77)	-1%
Essex County	7,900	28	7,620	21	280	4%
Southeastern	7,842	29	7,143	27	699	10%
Greater New Bedford	7,615	30	6,479	30	1,136	18%
Greater Fall River	7,120	31	6,025	31	1,095	18%
Average	\$ 9,768		\$ 8,769		\$ 999	11%

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## APPENDIX V

### *Progress Toward the Three Chapter 70 Goals for Fair Local Effort (See Section 4)*

Municipality	1994 \$ Amount Above/(Below) Fair Amount	1994 %Amount Above/ Below Fair Amount	1997 \$ Amount Above/(Below) Fair Amount	1997 %Amount Above/Below Fair Amount	\$ Difference 1993 – 1997 Required Local Contribution	% Difference 1993 – 1997 Required Local Contribution
<b><u>Group 1. Above Effort at beginning of process. Reduce Local Effort (78 Municipalities).</u></b>						
Abington	\$ 92,242	101.5%	\$ (20,994)	99.7%	\$ 613,593	9.6%
Agawam	179,453	101.4%	(1,605,744)	88.4%	(653,912)	-5.1%
Amherst	6,475,249	201.4%	2,396,339	133.4%	(3,300,522)	-25.7%
Barre	25,813	101.8%	0	100.0%	174,063	11.7%
Belchertown	613,496	112.8%	(426,295)	92.1%	(441,253)	-8.2%
Bernardston	75,027	108.4%	0	100.0%	3,631	0.4%
Billerica	2,403,756	111.0%	74,653	100.3%	(108,924)	-0.4%
Boston	38,405,850	114.0%	10,754,927	103.7%	(14,124,012)	-4.5%
Brimfield	740,750	154.3%	127,093	108.8%	(527,636)	-25.1%
Brookfield	767,783	193.9%	95,609	111.2%	(635,309)	-40.1%
Buckland	156,416	120.2%	1,436	100.2%	(119,079)	-12.8%
Carver	3,296,156	189.5%	980,062	123.6%	(1,845,041)	-26.4%
Charlemont	121,482	125.3%	11,895	102.3%	(61,613)	-10.3%
Chelsea	163,054	102.6%	(51,251)	99.3%	524,447	8.1%
Chester	51,521	109.5%	0	100.0%	13,174	2.2%
Chesterfield	133,879	127.0%	43,116	108.2%	(60,729)	-9.7%
Chicopee	840,766	104.9%	0	100.0%	1,036,342	5.8%
Clarksburg	201,124	148.4%	62,817	113.6%	(93,269)	-15.1%
Colrain	293,906	149.7%	78,967	112.8%	(187,342)	-21.2%
Conway	25,155	102.9%	(164,356)	82.8%	(96,166)	-10.8%
Dalton	253,842	108.0%	(14,283)	99.6%	15,997	0.5%
East Bridgewater	1,166,022	121.9%	374,143	106.7%	(501,074)	-7.7%
Erving	337,615	127.5%	280,095	121.8%	0	0.0%
Everett	71,002	100.4%	0	100.0%	1,860,079	10.8%
Florida	165,585	145.3%	61,031	115.7%	(81,737)	-15.4%
Freetown	81,423	101.9%	(133,818)	97.2%	300,044	6.9%
Gill	8,489	101.5%	0	100.0%	655	0.1%

*Progress Toward the Three Chapter 70 Goals for Fair Local Effort*  
*(See Section 4)*

Municipality	1994 \$ Amount Above/(Below) Fair Amount	1994 %Amount Above/ Below Fair Amount	1997 \$ Amount Above/(Below) Fair Amount	1997 %Amount Above/Below Fair Amount	\$ Difference 1993 – 1997 Required Local Contribution	% Difference 1993 – 1997 Required Local Contribution
Granville	\$ 201,579	124.0%	\$ (35,078)	96.1%	\$ (182,993)	-17.5%
Great Barrington	1,269,872	131.2%	0	100.0%	(973,459)	-18.2%
Greenfield	681,544	110.6%	17,001	100.2%	(22,769)	-0.3%
Halifax	116,076	104.2%	(157,887)	94.9%	26,519	0.9%
Hawley	7,269	104.5%	(35,713)	79.3%	(30,873)	-18.4%
Heath	126,095	138.3%	(31,060)	91.2%	(132,945)	-29.2%
Hinsdale	105,270	112.0%	(589)	99.9%	(8,761)	-0.9%
Holland	278,420	121.4%	81,720	105.9%	(107,319)	-6.8%
Hopedale	779,864	131.8%	(72,813)	97.3%	(555,026)	-17.2%
Huntington	366,893	153.2%	134,864	118.2%	(180,618)	-17.1%
Lanesborough	28,604	101.3%	(140,278)	94.0%	8,375	0.4%
Lee	65,492	102.0%	(76,000)	97.8%	71,594	2.1%
Leverett	128,762	110.8%	(117,078)	91.3%	(98,240)	-7.4%
Leyden	162,890	153.5%	33,017	110.1%	(105,987)	-22.7%
Ludlow	1,032,565	113.2%	67,805	100.8%	(126,270)	-1.4%
Lynn	3,083,149	113.5%	613,745	102.5%	(806,005)	-3.1%
Medway	882,097	112.7%	(17,809)	99.8%	355,070	4.5%
Merrimac	145,297	106.9%	(279,445)	88.7%	(57,417)	-2.5%
Middlefield	765	100.3%	0	100.0%	30,391	12.9%
Milford	132,955	101.1%	(383,737)	97.4%	1,671,032	13.4%
Monroe	4,919	105.7%	0	100.0%	8,335	9.2%
Monson	97,469	103.2%	(238,482)	92.9%	(13,027)	-0.4%
North Brookfield	2,362	100.2%	0	100.0%	76,115	5.4%
Northbridge	0	100.0%	(4,639)	99.9%	308,359	7.8%
Northfield	23,245	101.8%	(77,089)	94.7%	47,784	3.6%
Norton	188,405	102.9%	(1,661)	100.0%	576,678	8.6%
Orange	1,420,833	184.4%	493,525	126.6%	(755,578)	-24.3%
Oxford	598,702	112.4%	124,241	102.4%	(175,283)	-3.2%
Peru	236,340	182.7%	91,045	129.9%	(126,604)	-24.3%

## APPENDIX V

### Progress Toward the Three Chapter 70 Goals for Fair Local Effort (See Section 4)

Municipality	1994 \$ Amount Above/(Below) Fair Amount	1994 %Amount Above/ Below Fair Amount	1997 \$ Amount Above/(Below) Fair Amount	1997 %Amount Above/Below Fair Amount	\$ Difference 1993 - 1997 Required Local Contribution	% Difference 1993 - 1997 Required Local Contribution
Plymouth	\$ 5,488,967	117.8%	\$ 891,266	102.6%	\$ (1,193,633)	-3.3%
Randolph	165,941	101.1%	(14,920)	99.9%	953,656	6.1%
Rochester	934,539	135.1%	217,514	107.4%	(454,429)	-12.6%
Russell	317,554	158.7%	114,889	119.5%	(153,865)	-17.9%
Rutland	731,173	132.1%	32,695	101.3%	(430,867)	-14.3%
Savoy	63,758	125.0%	18,333	106.6%	(24,553)	-7.7%
Shutesbury	437,408	147.5%	22,289	102.2%	(316,513)	-23.3%
Somerset	2,717,581	123.4%	1,117,560	108.5%	(1,143)	0.0%
Somerville	1,918,035	107.7%	270,908	101.0%	(571,265)	-2.1%
South Hadley	340,619	105.0%	0	100.0%	479,523	6.7%
Southbridge	612,355	113.7%	(97,166)	97.9%	(537,757)	-10.6%
Sturbridge	603,433	112.3%	107,210	102.0%	(140,980)	-2.6%
Sunderland	94,621	107.8%	(177,560)	85.9%	(232,121)	-17.7%
Townsend	83,311	102.2%	(281,271)	93.5%	71,497	1.8%
Wales	350,052	155.0%	117,793	116.5%	(154,693)	-15.7%
Ware	79,248	102.6%	(34,711)	99.0%	221,671	7.0%
Wareham	0	100.0%	(224,635)	98.1%	940,002	8.6%
Warwick	116,957	139.4%	31,838	109.4%	(42,641)	-10.3%
Wendell	168,078	157.9%	50,279	116.4%	(101,832)	-22.2%
Westhampton	60,932	107.0%	(120,874)	87.6%	(73,950)	-8.0%
Winchendon	183,729	107.0%	0	100.0%	29,001	1.0%
Worcester	5,348,797	110.7%	111,128	100.2%	(148,827)	-0.3%
<b>Sum</b>	<b>\$ 90,131,677</b>	<b>113.3%</b>	<b>\$ 15,065,612</b>	<b>102.1%</b>	<b>\$ (21,458,234)</b>	<b>-2.8%</b>

#### Group 2. Below Effort at beginning of process. Increase Local Effort (169 Municipalities).

Acushnet	\$ (364,269)	89.8%	\$ (377,458)	90.6%	\$ 440,010	13.8%
Adams	(697,759)	72.2%	(874,962)	67.2%	(22,663)	-1.3%
Alford	(1,037,344)	15.9%	(1,241,854)	6.3%	(111,879)	-57.1%

*Progress Toward the Three Chapter 70 Goals for Fair Local Effort*  
*(See Section 4)*

Municipality	1994 \$ Amount Above/(Below) Fair Amount	1994 %Amount Above/ Below Fair Amount	1997 \$ Amount Above/(Below) Fair Amount	1997 %Amount Above/Below Fair Amount	\$ Difference 1993 – 1997 Required Local Contribution	% Difference 1993 – 1997 Required Local Contribution
Amesbury	\$ (950,499)	87.1%	\$ (545,702)	93.4%	\$ 1,353,142	21.1%
Ashburnham	(224,589)	90.9%	(211,920)	92.3%	275,345	12.2%
Ashby	(147,671)	88.1%	(46,732)	96.6%	227,332	20.8%
Ashfield	(204,365)	78.2%	(343,103)	66.8%	(42,526)	-5.8%
Ashland	(2,715,962)	74.5%	(2,258,871)	81.1%	1,782,700	22.5%
Athol	(2,441,623)	5.4%	(2,766,275)	4.8%	981	0.7%
Attleboro	(1,965,451)	87.4%	(1,766,887)	89.8%	1,995,854	14.7%
Auburn	(414,941)	95.4%	(113,297)	98.9%	1,320,249	15.5%
Ayer	(1,146,903)	72.9%	(662,645)	86.6%	1,211,281	39.3%
Barnstable	(21,121,167)	56.4%	(19,905,144)	61.9%	5,063,820	18.5%
Becket	(842,188)	50.7%	(923,383)	51.1%	99,327	11.5%
Bellingham	(1,553,390)	80.0%	(1,433,329)	84.4%	1,524,745	24.6%
Berkley	(496,714)	76.9%	(596,979)	77.5%	403,264	24.3%
Beverly	(6,853,390)	73.4%	(5,960,624)	79.1%	3,702,497	19.6%
Blackstone	(548,749)	82.0%	(321,888)	90.4%	530,864	21.2%
Blandford	(90,917)	86.6%	(56,739)	92.0%	66,577	11.4%
Bourne	(4,397,091)	66.8%	(4,594,059)	67.2%	556,549	6.3%
Boxford	(6,757,447)	42.1%	(6,384,590)	50.4%	1,579,220	32.1%
Braintree	(5,947,591)	78.6%	(5,829,096)	80.6%	2,253,285	10.3%
Bridgewater	(753,032)	90.3%	0	100.0%	1,970,794	28.1%
Brockton	(6,439,696)	75.4%	(5,928,491)	79.0%	2,550,818	12.9%
Charlton	(1,567,671)	64.9%	(1,660,209)	67.6%	558,907	19.3%
Chelmsford	(3,940,409)	85.0%	(3,423,207)	88.0%	2,912,033	13.1%
Cheshire	(544,158)	58.1%	(436,992)	69.8%	255,440	33.8%
Clinton	(828,615)	82.6%	(671,817)	87.3%	703,744	17.9%
Cummington	(17,446)	96.4%	(10,515)	98.0%	38,693	8.2%
Dartmouth	(5,035,190)	71.3%	(5,231,010)	73.6%	2,051,281	16.4%
Dennis	(13,136,522)	36.5%	(14,009,429)	37.4%	826,804	10.9%
Dighton	(464,445)	83.9%	(618,456)	81.0%	227,145	9.4%

## APPENDIX V

### *Progress Toward the Three Chapter 70 Goals for Fair Local Effort (See Section 4)*

Municipality	1994 \$ Amount Above/(Below) Fair Amount	1994 %Amount Above/ Below Fair Amount	1997 \$ Amount Above/(Below) Fair Amount	1997 %Amount Above/Below Fair Amount	\$ Difference 1993 – 1997 Required Local Contribution	% Difference 1993 – 1997 Required Local Contribution
Douglas	\$ (114,883)	95.4%	\$ (292,375)	89.7%	\$ 145,191	6.1%
Dracut	(2,237,070)	81.7%	(2,180,875)	83.9%	1,332,212	13.3%
Dudley	(1,392,435)	58.5%	(1,530,344)	58.9%	226,586	11.5%
Duxbury	(4,246,438)	75.0%	(4,350,623)	76.8%	1,643,942	12.9%
East Brookfield	(364,274)	57.5%	(389,883)	58.2%	51,256	10.4%
East Longmeadow	(856,623)	90.8%	(572,370)	94.5%	1,420,205	16.8%
Easthampton	(903,131)	83.0%	(892,099)	84.3%	391,248	8.9%
Easton	(612,662)	94.8%	(360,762)	97.2%	1,180,492	10.5%
Egremont	(1,072,262)	36.0%	(1,264,384)	28.0%	(112,069)	-18.6%
Essex	(1,525,697)	54.8%	(1,534,592)	59.9%	446,818	24.2%
Fairhaven	(347,281)	95.0%	(134,750)	98.2%	605,635	9.2%
Fall River	(7,694,345)	55.8%	(8,397,807)	56.7%	1,265,814	13.0%
Falmouth	(17,989,458)	52.2%	(18,110,084)	55.0%	2,519,289	12.8%
Fitchburg	(1,576,866)	83.2%	(1,339,931)	87.0%	1,189,714	15.3%
Foxborough	(734,565)	92.6%	(747,122)	92.9%	573,652	6.2%
Franklin	(3,728,135)	75.3%	(4,599,844)	73.0%	1,085,871	9.6%
Gardner	(2,060,393)	63.3%	(2,273,241)	63.7%	426,923	12.0%
Georgetown	(85,615)	97.8%	0	100.0%	602,778	15.9%
Gloucester	(5,512,767)	73.9%	(4,478,743)	80.7%	3,101,424	19.9%
Goshen	(142,547)	75.4%	(178,727)	72.4%	32,392	7.4%
Grafton	(318,283)	95.2%	(348,861)	95.2%	530,014	8.3%
Granby	(246,449)	90.6%	(160,534)	94.6%	424,634	17.9%
Groveland	(1,067,126)	66.3%	(865,171)	75.1%	501,022	23.8%
Hanover	(609,448)	93.7%	(480,970)	95.4%	974,299	10.8%
Hanson	(1,916,594)	56.7%	(1,871,920)	60.8%	396,759	15.8%
Hardwick	(204,499)	78.5%	(201,572)	81.0%	116,941	15.7%
Haverhill	(1,582,185)	92.6%	(465,842)	98.0%	3,306,507	16.7%
Hingham	(13,556,884)	51.2%	(14,077,099)	52.6%	1,390,537	9.8%
Holbrook	(564,993)	88.3%	(402,903)	92.5%	681,295	16.0%

***Progress Toward the Three Chapter 70 Goals for Fair Local Effort***  
***(See Section 4)***

<b>Municipality</b>	<b>1994 \$ Amount Above/(Below) Fair Amount</b>	<b>1994 %Amount Above/ Below Fair Amount</b>	<b>1997 \$ Amount Above/(Below) Fair Amount</b>	<b>1997 %Amount Above/Below Fair Amount</b>	<b>\$ Difference 1993 – 1997 Required Local Contribution</b>	<b>% Difference 1993 – 1997 Required Local Contribution</b>
Holden	\$ (695,739)	92.8%	\$ (688,703)	93.7%	\$ 1,206,655	13.4%
Holliston	(835,953)	91.9%	(819,607)	92.7%	1,033,967	11.0%
Holyoke	(6,042,845)	35.2%	(6,575,633)	34.7%	201,520	6.1%
Hopkinton	(4,075,716)	63.1%	(3,316,885)	75.1%	3,056,071	43.8%
Hubbardston	(367,517)	74.3%	(373,179)	77.3%	211,465	20.0%
Hudson	(669,135)	93.1%	0	100.0%	1,756,060	19.4%
Hull	(655,599)	89.1%	(558,982)	91.3%	543,577	10.2%
Kingston	(1,185,967)	79.0%	(847,874)	86.6%	1,038,995	23.3%
Lakeville	(2,023,935)	65.0%	(2,248,310)	65.0%	426,242	11.4%
Lancaster	(721,683)	74.4%	(58,962)	98.0%	864,086	41.2%
Lawrence	(7,195,666)	33.4%	(7,299,877)	37.4%	757,226	21.0%
Leicester	(616,747)	84.2%	(548,230)	87.0%	380,659	11.6%
Leominster	(5,649,403)	65.8%	(6,146,184)	64.5%	299,702	2.8%
Lowell	(2,286,382)	91.4%	(1,028,945)	96.5%	4,093,869	16.9%
Lunenburg	(1,064,219)	82.3%	(842,492)	87.1%	770,738	15.6%
Malden	(3,913,784)	80.6%	(4,504,811)	79.7%	1,496,713	9.2%
Mansfield	(258,531)	98.0%	(49,568)	99.7%	2,090,948	16.5%
Marlborough	(4,759,173)	80.5%	(4,352,199)	84.2%	3,620,364	18.4%
Marshfield	(5,138,664)	70.9%	(5,197,823)	72.4%	1,097,013	8.7%
Mashpee	(4,971,928)	58.5%	(5,467,426)	58.4%	654,596	9.3%
Medfield	(2,842,402)	75.0%	(2,231,757)	82.5%	1,994,054	23.3%
Mendon	(1,124,130)	62.9%	(1,115,539)	68.1%	479,133	25.2%
Methuen	(2,646,919)	86.0%	(2,312,363)	88.9%	2,195,702	13.5%
Middleborough	(731,226)	90.3%	(311,691)	96.3%	1,390,296	20.4%
Millbury	(325,441)	93.8%	(226,119)	96.0%	517,947	10.5%
Millis	(787,561)	85.4%	(878,467)	85.1%	392,129	8.5%
Millville	(163,961)	82.7%	(244,876)	76.7%	22,176	2.8%
Montague	(447,510)	85.8%	(356,651)	89.5%	341,440	12.6%
Monterey	(1,154,455)	22.4%	(1,428,375)	14.6%	(89,897)	-27.0%

## APPENDIX V

### *Progress Toward the Three Chapter 70 Goals for Fair Local Effort (See Section 4)*

Municipality	1994 \$ Amount Above/(Below) Fair Amount	1994 %Amount Above/ Below Fair Amount	1997 \$ Amount Above/(Below) Fair Amount	1997 %Amount Above/Below Fair Amount	\$ Difference 1993 – 1997 Required Local Contribution	% Difference 1993 – 1997 Required Local Contribution
Montgomery	\$ (94,796)	78.0%	\$ (47,149)	89.6%	\$ 70,466	21.0%
Mount Washington	(348,687)	12.4%	(333,793)	17.1%	19,406	39.2%
Nahant	(2,500,159)	40.3%	(2,410,844)	47.3%	480,569	28.5%
New Bedford	(7,803,695)	57.8%	(8,447,097)	59.4%	1,662,095	15.5%
New Braintree	(98,051)	76.7%	(51,684)	88.8%	87,617	27.1%
New Marlborough	(998,339)	43.1%	(1,217,332)	35.0%	(101,729)	-13.4%
New Salem	(73,343)	85.4%	(123,883)	77.6%	2,456	0.6%
Newbury	(1,493,616)	69.1%	(1,686,957)	68.4%	316,948	9.5%
Norfolk	(1,024,342)	81.6%	(1,300,165)	79.5%	489,352	10.8%
North Adams	(674,560)	74.6%	(693,004)	76.4%	272,932	13.8%
North Andover	(6,687,224)	69.2%	(6,449,140)	73.9%	3,225,091	21.5%
North Attleborough	(4,211,945)	70.9%	(4,165,122)	72.7%	825,118	8.0%
North Reading	(1,608,387)	84.0%	(1,743,532)	84.1%	830,319	9.9%
Northborough	(1,947,572)	82.0%	(1,818,508)	84.9%	1,365,048	15.4%
Oakham	(146,445)	79.6%	(229,086)	70.6%	(21,532)	-3.8%
Palmer	(571,072)	87.7%	(1,636,941)	68.9%	(426,743)	-10.5%
Paxton	(784,770)	72.0%	(672,811)	78.5%	438,705	21.7%
Peabody	(4,358,530)	83.6%	(3,836,222)	86.7%	2,774,488	12.5%
Pembroke	(669,544)	92.3%	(599,952)	93.7%	816,208	10.2%
Pepperell	(1,307,393)	75.4%	(1,431,729)	75.6%	434,960	10.9%
Petersham	(185,789)	76.1%	(275,657)	67.5%	(20,463)	-3.5%
Phillipston	(253,373)	61.3%	(280,950)	60.8%	33,654	8.4%
Pittsfield	(5,351,222)	73.2%	(5,020,004)	77.2%	2,415,434	16.5%
Plainfield	(182,948)	56.4%	(189,927)	56.4%	9,274	3.9%
Plainville	(951,649)	77.5%	(773,683)	83.3%	583,412	17.8%
Plympton	(424,180)	77.3%	(415,572)	79.8%	198,596	13.7%
Princeton	(870,575)	70.8%	(1,118,276)	66.0%	55,674	2.6%
Raynham	(1,341,844)	79.5%	(2,082,431)	72.5%	282,140	5.4%
Reading	(1,011,595)	93.9%	(764,760)	95.7%	1,551,458	9.9%

*Progress Toward the Three Chapter 70 Goals for Fair Local Effort*  
*(See Section 4)*

Municipality	1994 \$ Amount Above/(Below) Fair Amount	1994 %Amount Above/ Below Fair Amount	1997 \$ Amount Above/(Below) Fair Amount	1997 %Amount Above/Below Fair Amount	\$ Difference 1993 – 1997 Required Local Contribution	% Difference 1993 – 1997 Required Local Contribution
Rehoboth	\$ (1,332,394)	75.8%	\$ (1,401,241)	77.7%	\$ 694,829	16.6%
Revere	(1,619,814)	90.9%	(1,192,962)	93.8%	1,833,862	11.4%
Rockland	(104,677)	98.5%	(22,306)	99.7%	971,553	13.7%
Rowley	(743,211)	77.7%	(488,130)	87.1%	688,868	26.5%
Royalston	(384,963)	26.5%	(489,043)	14.5%	(55,955)	-40.3%
Salem	(602,095)	97.1%	(39,556)	99.8%	2,768,212	13.9%
Salisbury	(870,213)	81.5%	(1,137,393)	78.2%	226,022	5.9%
Saugus	(1,282,627)	92.7%	(2,284,601)	88.4%	969,792	5.9%
Sharon	(3,290,530)	77.5%	(2,743,370)	82.7%	1,781,778	15.7%
Sheffield	(500,379)	81.5%	(738,212)	73.6%	(135,787)	-6.2%
Shelburne	(26,298)	96.8%	(64,376)	92.2%	(31,057)	-3.9%
Shirley	(606,471)	71.7%	(415,934)	82.9%	476,055	31.0%
Shrewsbury	(4,149,040)	77.1%	(3,721,123)	81.2%	2,116,329	15.1%
Southampton	(356,841)	86.2%	(639,645)	77.6%	(27,387)	-1.2%
Southwick	(447,904)	86.2%	(342,223)	90.2%	341,949	12.2%
Spencer	(1,414,064)	61.2%	(1,500,637)	63.0%	327,062	14.7%
Springfield	(12,529,805)	62.7%	(12,430,627)	66.0%	3,029,646	14.4%
Sterling	(314,070)	92.3%	0	100.0%	811,258	21.5%
Stoneham	(1,143,154)	91.9%	(1,048,608)	93.1%	1,185,212	9.1%
Stoughton	(1,265,357)	91.6%	(1,497,710)	91.0%	1,463,382	10.6%
Sutton	(1,345,716)	71.9%	(1,244,985)	77.4%	800,937	23.2%
Swansea	(389,187)	95.1%	(198,394)	97.8%	1,082,526	14.3%
Taunton	(1,067,229)	93.3%	(626,718)	96.5%	2,607,342	17.6%
Templeton	(723,570)	62.3%	(687,562)	66.5%	171,712	14.4%
Tewksbury	(4,466,798)	74.4%	(4,951,935)	74.6%	1,600,703	12.3%
Tolland	(1,137,761)	2.0%	(1,097,446)	10.9%	111,078	476.0%
Tyngsborough	(37,312)	99.2%	(577,064)	89.4%	(58,773)	-1.2%
Upton	(2,080,661)	45.3%	(1,975,185)	56.4%	839,468	48.8%
Uxbridge	(187,037)	95.9%	(162,906)	96.8%	632,859	14.5%



## APPENDIX V

### *Progress Toward the Three Chapter 70 Goals for Fair Local Effort (See Section 4)*

Municipality	1994 \$ Amount Above/(Below) Fair Amount	1994 %Amount Above/ Below Fair Amount	1997 \$ Amount Above/(Below) Fair Amount	1997 %Amount Above/Below Fair Amount	\$ Difference 1993 – 1997 Required Local Contribution	% Difference 1993 – 1997 Required Local Contribution
Walpole	\$ (4,966,718)	71.5%	\$ (4,526,535)	76.8%	\$ 2,550,721	20.5%
Warren	(224,001)	83.4%	(404,756)	74.0%	24,900	2.2%
Washington	(60,697)	81.8%	(38,023)	88.8%	28,940	10.6%
Webster	(1,042,693)	83.2%	(1,069,284)	83.8%	348,075	6.7%
West Brookfield	(708,080)	53.1%	(816,840)	46.3%	(96,694)	-12.1%
West Newbury	(1,456,785)	49.9%	(1,687,197)	48.8%	152,799	10.5%
West Springfield	(4,433,291)	71.3%	(4,300,430)	74.6%	1,622,574	14.8%
Westfield	(529,336)	95.9%	(983,973)	92.9%	446,092	3.6%
Westford	(3,232,909)	80.2%	(3,761,270)	80.2%	2,146,151	16.4%
Westminster	(1,546,037)	61.1%	(1,773,137)	58.6%	82,661	3.4%
Westport	(4,060,350)	61.4%	(4,296,243)	62.0%	541,903	8.4%
Weymouth	(7,729,968)	71.8%	(7,735,315)	74.0%	2,319,428	11.8%
Whately	(111,163)	90.0%	(278,134)	77.5%	(41,428)	-4.1%
Whitman	(1,544,522)	68.7%	(1,714,949)	69.1%	443,708	13.1%
Wilbraham	(2,810,082)	72.0%	(2,547,299)	77.1%	1,343,650	18.6%
Wilmington	(250,159)	98.3%	(2,115)	100.0%	2,249,519	15.3%
Windsor	(159,797)	72.9%	(187,824)	71.4%	40,187	9.4%
Winthrop	(533,644)	93.9%	(441,605)	95.1%	323,052	3.9%
Worthington	(214,548)	76.4%	(259,977)	74.0%	43,859	6.3%
Wrentham	(145,868)	96.9%	(48,164)	99.1%	621,216	13.8%
Yarmouth	(9,527,470)	51.8%	(9,395,471)	54.9%	1,160,275	11.3%
<b>Sum</b>	<b><u>\$ (367,946,244)</u></b>	<b>75.6%</b>	<b><u>\$ (361,545,263)</u></b>	<b>78.2%</b>	<b><u>\$ 157,846,476</u></b>	<b>13.8%</b>

***Progress Toward the Three Chapter 70 Goals for Fair Local Effort***  
***(See Section 4)***

Municipality	1994 \$ Amount Above/(Below) Fair Amount	1994 %Amount Above/ Below Fair Amount	1997 \$ Amount Above/(Below) Fair Amount	1997 %Amount Above/Below Fair Amount	\$ Difference 1993 – 1997 Required Local Contribution	% Difference 1993 – 1997 Required Local Contribution
<b><u>Group 3. Below Effort at beginning of process. Maintain Local Effort (104 Municipalities).</u></b>						
Acton	\$ (4,697,715)	77.3%	\$ (4,794,944)	79.4%	\$ 2,396,030	14.9%
Andover	(20,127,507)	54.5%	(22,313,553)	54.7%	2,854,488	11.9%
Arlington	(10,973,605)	67.3%	(11,353,172)	68.3%	1,881,321	8.3%
Avon	(168,326)	95.4%	(64,345)	98.4%	513,055	14.7%
Bedford	(7,472,063)	60.1%	(7,773,318)	62.4%	1,647,985	14.6%
Belmont	(16,092,703)	51.3%	(16,786,587)	52.7%	1,740,834	10.3%
Berlin	(299,226)	82.0%	(350,565)	80.7%	100,829	7.4%
Bolton	(1,366,440)	69.3%	(1,956,700)	60.3%	(109,263)	-3.5%
Boxborough	(1,845,505)	62.0%	(1,988,044)	66.2%	877,070	29.1%
Boylston	(820,125)	75.4%	(906,677)	75.3%	254,421	10.1%
Brewster	(3,978,214)	61.8%	(6,017,814)	46.1%	(1,283,789)	-20.0%
Brookline	(34,151,880)	53.2%	(38,208,002)	51.3%	1,519,052	3.9%
Burlington	(3,792,737)	83.6%	(3,690,118)	85.5%	2,427,420	12.6%
Cambridge	(16,542,408)	81.1%	(16,575,069)	82.0%	4,920,907	7.0%
Canton	(7,077,802)	66.6%	(8,008,576)	65.5%	1,115,594	7.9%
Carlisle	(5,058,192)	47.5%	(5,943,168)	44.3%	149,260	3.3%
Chatham	(13,311,713)	25.4%	(14,447,942)	26.2%	589,634	13.0%
Chilmark	(6,762,560)	9.1%	(7,719,513)	7.6%	(38,438)	-5.7%
Cohasset	(9,214,249)	37.6%	(9,773,828)	38.7%	625,271	11.3%
Concord	(17,368,960)	47.8%	(19,060,896)	46.7%	823,957	5.2%
Danvers	(3,188,907)	84.5%	(3,372,757)	85.2%	2,091,854	12.1%
Dedham	(3,008,489)	83.7%	(3,066,877)	84.4%	1,116,251	7.2%
Deerfield	(640,331)	80.9%	(978,257)	71.9%	(210,613)	-7.7%
Dover	(12,555,253)	30.1%	(13,784,491)	30.8%	724,860	13.4%
Dunstable	(802,116)	62.0%	(1,272,720)	46.1%	(222,871)	-17.0%
Eastham	(4,125,377)	45.3%	(4,682,526)	42.5%	38,527	1.1%
Edgartown	(11,546,268)	22.2%	(12,749,471)	21.7%	249,644	7.6%

**APPENDIX V****Progress Toward the Three Chapter 70 Goals for Fair Local Effort  
(See Section 4)**

Municipality	1994	1994	1997	1997	\$ Difference	%
	\$ Amount Above/(Below) Fair Amount	%Amount Above/ Below Fair Amount	\$ Amount Above/(Below) Fair Amount	%Amount Above/Below Fair Amount	1993 – 1997 Required Local Contribution	Difference 1993 – 1997 Required Local Contribution
Framingham	\$ (1,858,493)	95.7%	\$ (710,107)	98.5%	\$ 4,670,899	11.2%
Gay Head	(1,167,947)	16.5%	(1,313,132)	12.7%	(38,535)	-16.7%
Gosnold	(1,127,736)	1.4%	(1,172,016)	1.8%	6,251	40.2%
Groton	(2,829,321)	58.9%	(3,444,975)	57.3%	574,030	14.2%
Hadley	(705,774)	79.4%	(1,063,409)	72.6%	103,255	3.8%
Hamilton	(1,674,763)	76.1%	(1,605,096)	78.5%	558,304	10.5%
Hampden	(232,488)	92.4%	(432,741)	87.7%	254,676	9.0%
Hancock	(370,868)	54.9%	(382,323)	54.9%	13,946	3.1%
Harvard	(765,066)	85.4%	(601,336)	89.7%	776,387	17.3%
Harwich	(6,824,048)	51.3%	(7,369,231)	51.0%	495,456	6.9%
Hatfield	(269,186)	86.8%	(218,368)	89.7%	131,133	7.4%
Ipswich	(2,200,816)	77.9%	(1,835,296)	82.6%	942,819	12.1%
Lenox	(358,619)	92.1%	(898,145)	80.2%	(539,526)	-12.9%
Lexington	(22,625,034)	57.0%	(23,972,982)	57.4%	2,208,800	7.4%
Lincoln	(10,271,454)	32.8%	(10,546,562)	33.4%	276,811	5.5%
Littleton	(864,920)	86.7%	(554,179)	92.2%	898,982	15.9%
Longmeadow	(6,391,720)	68.3%	(6,562,793)	70.2%	1,706,193	12.4%
Lynnfield	(5,324,226)	62.2%	(5,516,188)	63.6%	55,245	9.7%
Manchester	(8,794,348)	28.7%	(9,746,820)	28.7%	394,163	11.2%
Marblehead	(19,911,318)	40.0%	(20,757,174)	39.8%	468,578	3.5%
Marion	(4,377,215)	45.4%	(4,811,430)	44.8%	257,377	7.1%
Mattapoisett	(2,986,730)	59.4%	(3,515,293)	56.6%	214,336	4.9%
Maynard	(110,357)	98.2%	(12,348)	99.8%	804,245	13.5%
Medford	(6,439,396)	77.3%	(6,191,151)	79.8%	2,556,449	11.6%
Melrose	(4,348,506)	77.3%	(4,167,403)	79.4%	1,318,198	8.9%
Middleton	(2,140,497)	61.0%	(2,322,667)	61.8%	404,282	12.1%
Milton	(7,864,372)	66.3%	(7,104,856)	71.9%	2,649,319	17.1%
Nantucket	(30,400,977)	18.9%	(33,022,108)	19.5%	907,071	12.8%
Natick	(7,615,222)	73.9%	(7,763,742)	75.6%	2,537,759	11.8%

*Progress Toward the Three Chapter 70 Goals for Fair Local Effort*  
*(See Section 4)*

Municipality	1994 \$ Amount Above/(Below) Fair Amount	1994 %Amount Above/ Below Fair Amount	1997 \$ Amount Above/(Below) Fair Amount	1997 %Amount Above/Below Fair Amount	\$ Difference 1993 – 1997 Required Local Contribution	% Difference 1993 – 1997 Required Local Contribution
Needham	\$ (26,457,835)	44.3%	\$ (27,947,073)	44.5%	\$ 1,394,089	6.6%
New Ashford	(36,224)	76.5%	(34,301)	78.9%	10,525	8.9%
Newburyport	(2,431,830)	80.9%	(1,980,000)	86.1%	1,946,447	18.9%
Newton	(77,072,359)	44.5%	(82,541,289)	45.3%	6,654,965	10.8%
Northampton	(1,005,134)	92.0%	(1,302,898)	90.7%	1,113,815	9.6%
Norwell	(3,406,362)	71.4%	(3,489,820)	73.1%	1,011,693	11.9%
Norwood	(4,238,298)	81.4%	(3,798,088)	84.7%	2,395,942	12.9%
Oak Bluffs	(3,483,156)	44.3%	(4,488,027)	33.8%	(473,217)	-17.1%
Orleans	(10,649,927)	23.8%	(12,170,316)	20.8%	(120,844)	-3.6%
Otis	(1,095,195)	46.3%	(1,109,249)	48.1%	85,993	9.1%
Pelham	(14,704)	98.4%	0	100.0%	85,297	9.3%
Provincetown	(1,860,213)	60.3%	(2,056,778)	60.2%	286,266	10.1%
Quincy	(8,804,343)	81.1%	(8,557,961)	83.3%	4,750,811	12.6%
Richmond	(628,164)	66.6%	(657,376)	68.6%	182,201	14.5%
Rockport	(3,326,905)	58.4%	(3,827,427)	56.4%	279,474	6.0%
Rowe	(905,249)	38.1%	(1,012,960)	34.8%	(15,525)	-2.8%
Sandisfield	(436,026)	53.6%	(417,529)	55.9%	26,109	5.2%
Sandwich	(1,516,101)	90.1%	(1,775,204)	89.5%	1,328,139	9.6%
Scituate	(6,225,956)	65.8%	(6,403,205)	67.3%	1,224,886	10.2%
Seekonk	(1,103,440)	88.7%	(739,954)	93.2%	1,527,542	17.6%
Sherborn	(7,920,505)	36.5%	(8,492,860)	36.5%	329,057	7.2%
Southborough	(4,190,450)	57.5%	(4,258,771)	58.4%	317,214	5.6%
Stockbridge	(2,243,188)	37.8%	(2,718,988)	32.4%	(56,090)	-4.1%
Stow	(1,146,972)	80.1%	(1,473,147)	77.2%	372,971	8.1%
Sudbury	(10,537,712)	61.3%	(11,962,026)	59.8%	1,119,246	6.7%
Swampscott	(6,813,501)	59.6%	(7,385,274)	60.3%	1,164,092	11.6%
Tisbury	(2,839,687)	54.9%	(3,326,239)	50.6%	(48,469)	-1.4%
Topsfield	(2,970,077)	58.1%	(3,086,525)	59.7%	456,104	11.1%
Truro	(4,253,915)	24.8%	(4,594,717)	22.2%	(89,008)	-6.4%

## APPENDIX V

### *Progress Toward the Three Chapter 70 Goals for Fair Local Effort (See Section 4)*

Municipality	1994	1994	1997	1997	\$ Difference	%
	\$ Amount Above/(Below) Fair Amount	% Amount Above/ Below Fair Amount	\$ Amount Above/(Below) Fair Amount	% Amount Above/Below Fair Amount	1993 – 1997 Required Local Contribution	Difference 1993 – 1997 Required Local Contribution
Tyringham	\$ (702,918)	27.6%	\$ (755,478)	30.0%	\$ 56,686	21.2%
Wakefield	(2,249,709)	87.7%	(2,160,004)	89.3%	2,001,836	12.5%
Waltham	(5,904,505)	84.8%	(4,900,262)	88.8%	6,087,105	18.5%
Watertown	(4,898,023)	80.0%	(7,628,896)	70.7%	(1,225,297)	-6.2%
Wayland	(12,129,633)	52.0%	(13,398,121)	50.9%	719,248	5.5%
Wellesley	(39,631,842)	33.5%	(44,589,020)	32.5%	1,435,077	7.2%
Wellfleet	(3,619,077)	35.1%	(4,351,122)	30.1%	(87,985)	-4.5%
Wenham	(1,643,191)	55.0%	(1,784,406)	56.2%	279,114	13.9%
West Boylston	(2,045,294)	62.9%	(2,105,408)	65.3%	495,010	14.3%
West Bridgewater	(1,234,920)	76.1%	(1,227,685)	78.3%	492,979	12.5%
West Stockbridge	(185,180)	87.1%	(374,919)	76.5%	(28,340)	-2.3%
West Tisbury	(3,065,955)	44.4%	(3,888,983)	36.3%	(227,389)	-9.3%
Westborough	(4,752,588)	72.5%	(6,239,865)	68.5%	1,033,028	8.2%
Weston	(37,181,447)	23.6%	(40,232,455)	24.1%	1,274,806	11.1%
Westwood	(7,731,521)	62.5%	(7,778,576)	65.1%	1,621,646	12.6%
Williamsburg	(69,804)	94.8%	(20,604)	98.6%	186,107	14.6%
Williamstown	(401,709)	90.4%	(220,699)	95.2%	578,553	15.4%
Winchester	(19,591,244)	45.0%	(20,720,782)	46.3%	1,866,418	11.7%
Woburn	(7,468,517)	74.1%	(6,715,031)	78.5%	3,220,961	15.1%
Sum	<u>\$ (729,960,593)</u>	59.3%	<u>\$ (785,954,119)</u>	59.7%	<u>\$ 100,239,481</u>	9.4%

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## APPENDIX VI

### *Municipal General Fund Expenditures by Function*

#### *Departments Included in Each Function (See Section 6)*

GENERAL GOVERNMENT	POLICE	HEALTH AND WELFARE	INTERGOVERNMENTAL
City/Town Council	<b>FIRE</b>	Health Inspection Services	County Tax
Alderman		Other Health Inspection	County Hospital
Town Meeting	<b>OTHER PUBLIC SAFETY</b>	Health Center	Special Education
Moderator		Nursing Services	Audit of Municipal Accts.
Other Legislative	Ambulance Service	Mental Health Clinic	Exam of Retirement System
Mayor	EMT's	Dental Clinic	Motor Vehicle Excise Tax
Selectmen	Building Inspector	Other Clinical Services	Health Insurance
City/Town Manager	Gas Inspector	Medical Facilities	Elderly Govt. Employees
Other Executive	Plumbing Inspector	Council on Aging	Retired Teachers
Finance Committee	Weights & Measures Inspector	Youth Services	Mosquito Control
Finance Director	Electrical Inspector	Veterans Services	Air Pollution Control
Comptroller	Public Scales	Other Special Programs	Metro Planning Council
Auditor/Accountant	Other Inspectors	Public Assistance	Old Colony Planning Cncl.
Budgeting	Civil Defense	Other Human Services	Parking Surcharges
Purchasing Agent	Dog Officer		MBTA
Assessors	Traffic Control	<b>CULTURE AND RECREATION</b>	Boston Metro District
Revaluation	Forestry	Library	Regional Transit Auth.
Treasurer	Harbor Master	Recreation	Multi-Year Repayment
Collector	Other Public Safety	Parks	Revaluation
Other Finance Officer		Museum	Energy Conservation
Legal Department	<b>EDUCATION</b>	Historical Commission	Small Town Road Assist.
Personnel Board		Celebrations	MWRA
Civil Service	<b>HIGHWAYS</b>	Other Culture and Recreation	Other
Date Processing	Engineer		<b>OTHER EXPENDITURES</b>
Messenger	Highway Administration	<b>DEBT SERVICE</b>	Court Judgments
Tax Title/Foreclosure	Highway Construction/Maint.	Long Term Principal	Other
Other Operation Support	Snow and Ice Control	Long Term Interest	
City/Town Clerk	Street Lighting	Short Term Interest	
Elections	Other Highway	Other Interest	
Registration		<b>FIXED COSTS</b>	
License Commission	<b>OTHER PUBLIC WORKS</b>	Retirement (Contributory)	
Other License & Registration	Waste Collection/Disposal	Retirement (Non-Contributory)	
Conservation Commission	Street Cleaning	Worker's Compensation	
Planning Board	Other Waste Collection/Disp.	Unemployment	
Zoning Appeals Board	Sewer Collection/Disposal	Health Insurance	
Other Land Use	Pumping Station	Life Insurance	
Urban Redevelopment	Other Sewerage	Medicare	
Economic Development	Water Distribution	Other Employee Benefits	
Rent Control	Electric Distribution	Liability Insurance	
Other Development	Gas Distribution		
Worker's Compensation	Parking Garage		
Public Buildings	Airport		
Buildings Insurance	Other Transportation		
Town Reports	Cemetery		
Other General Govt.			

SOURCE: Massachusetts Department of Revenue





*Change in Municipal General Fund Expenditures for Direct and Indirect Non-School Purposes  
1993 Versus 1995 (See Section 6)*

Municipality	Direct Non-School Expenditure Change 1993 Versus 1995		Indirect Non-School Expenditure Change 1993 Versus 1995		Total Non-School Expenditure Change 1993 Versus 1995	
	Whole \$	%	Whole \$	%	Whole \$	%
Abington	\$ 217,505	5.25%	\$ (480,138)	-10.33%	\$ (262,633)	-2.99%
Acton	34,273	0.61%	(28,998)	-0.57%	5,275	0.05%
Acushnet	200,524	13.68%	99,067	6.88%	299,591	10.31%
Adams	97,155	3.45%	284,927	18.13%	382,082	8.71%
Agawam	1,213,457	11.96%	(564,868)	-8.11%	648,589	3.79%
Alford	(10,517)	-6.90%	(47,324)	-27.46%	(57,841)	-17.81%
Amesbury	97,105	2.23%	1,311,304	27.57%	1,408,409	15.45%
Amherst	345,223	4.83%	439,745	8.02%	784,968	6.22%
Andover	(857,288)	-4.82%	2,766,563	21.13%	1,909,275	6.18%
Arlington	249,853	1.61%	(574,891)	-3.00%	(325,038)	-0.94%
Ashburnham	11,928	1.02%	131,340	15.41%	143,268	7.08%
Ashby	89,756	18.82%	82,985	36.88%	172,741	24.61%
Ashfield	(55,632)	-13.02%	(273,922)	-46.78%	(329,554)	-32.54%
Ashland	(394,264)	-10.25%	(925,942)	-17.57%	(1,320,206)	-14.48%
Athol	(407,984)	-11.70%	18,815	0.84%	(389,169)	-6.80%
Attleboro	1,761,501	14.59%	(1,310,369)	-11.38%	451,132	1.91%
Auburn	74,720	1.69%	728,657	20.06%	803,377	9.99%
Avon	(50,426)	-1.91%	(60,942)	-3.49%	(111,368)	-2.54%
Ayer	539,842	20.56%	(133,483)	-4.17%	406,359	6.98%
Barnstable	163,815	1.40%	447,092	2.74%	610,907	2.18%
Barre	61,546	4.89%	(124,986)	-9.94%	(63,440)	-2.52%
Becket	64,615	12.18%	(5,494)	-1.27%	59,121	6.15%
Bedford	(260,984)	-3.35%	645,491	8.23%	384,507	2.46%
Belchertown	339,498	20.76%	(494,306)	-16.03%	(154,808)	-3.28%
Bellingham	279,565	6.88%	1,250,144	25.92%	1,529,709	17.22%
Belmont	(629,704)	-4.03%	(936,588)	-10.99%	(1,566,292)	-6.49%
Berkley	47,004	6.00%	131,736	9.42%	178,740	8.19%
Berlin	136,936	24.01%	170,435	56.44%	307,371	35.24%
Bernardston	(598)	-0.16%	(10,197)	-4.33%	(10,795)	-1.75%

*Change in Municipal General Fund Expenditures for Direct and Indirect Non-School Purposes  
1993 Versus 1995 (See Section 6)*

Municipality	Direct Non-School Expenditure Change 1993 Versus 1995		Indirect Non-School Expenditure Change 1993 Versus 1995		Total Non-School Expenditure Change 1993 Versus 1995	
	Whole \$	%	Whole \$	%	Whole \$	%
Beverly	\$ 2,015,383	11.98%	\$ 2,115,756	18.70%	\$ 4,131,139	14.68%
Billerica	1,383,360	9.38%	3,398,934	32.80%	4,782,294	19.04%
Blackstone	85,621	5.28%	145,677	15.02%	231,298	8.93%
Blandford	(148,020)	-35.67%	(6,003)	-3.28%	(154,023)	-25.76%
Bolton	262,320	31.09%	(122,801)	-17.08%	139,519	8.93%
Boston	59,719,512	11.64%	(5,060,981)	-1.27%	54,658,531	5.99%
Bourne	811,866	18.41%	249,418	3.61%	1,061,284	9.37%
Boxborough	68,277	5.53%	72,075	4.67%	140,352	5.05%
Boxford	377,152	21.57%	(12,434)	-0.53%	364,718	8.91%
Boylston	(189,828)	-19.47%	(59,895)	-7.64%	(249,723)	-14.20%
Braintree	1,365,040	10.67%	(36,189)	-0.36%	1,328,851	5.83%
Brewster	256,615	8.34%	(47,597)	-0.76%	209,018	2.24%
Bridgewater	419,665	8.35%	(297,900)	-7.87%	121,765	1.38%
Brimfield	(15,172)	-3.28%	509,605	99.82%	494,433	50.81%
Brockton	2,968,442	11.12%	(3,088,108)	-7.26%	(119,666)	-0.17%
Brookfield	(23,374)	-5.46%	310,344	79.34%	286,970	35.02%
Brookline	4,875,507	16.57%	3,015,762	8.68%	7,891,269	12.30%
Buckland	51,057	12.99%	6,754	2.04%	57,811	7.98%
Burlington	295,505	2.08%	324,047	2.62%	619,552	2.33%
Cambridge	2,611,909	4.76%	(6,733,956)	-7.55%	(4,122,047)	-2.86%
Canton	718,008	10.46%	933,521	14.04%	1,651,529	12.22%
Carlisle	(97,890)	-4.99%	(77,392)	-3.19%	(175,282)	-3.99%
Carver	210,892	10.42%	1,186,805	50.29%	1,397,697	31.88%
Charlemont	12,922	4.01%	(218,727)	-54.54%	(205,805)	-28.46%
Charlton	(169,190)	-10.20%	(19,145)	-1.64%	(188,335)	-6.66%
Chatham	665,127	14.68%	484,584	9.95%	1,149,711	12.23%
Chelmsford	566,371	5.37%	(867,032)	-7.08%	(300,661)	-1.32%
Chelsea	1,383,381	12.89%	14,125,129	132.40%	15,508,510	72.48%
Cheshire	9,906	1.59%	14,633	3.94%	24,539	2.47%
Chester	66,003	23.64%	(40,888)	-17.53%	25,115	4.90%

## APPENDIX VII

### *Change in Municipal General Fund Expenditures for Direct and Indirect Non-School Purposes 1993 Versus 1995 (See Section 6)*

Municipality	Direct Non-School Expenditure Change 1993 Versus 1995		Indirect Non-School Expenditure Change 1993 Versus 1995		Total Non-School Expenditure Change 1993 Versus 1995	
	Whole \$	%	Whole \$	%	Whole \$	%
Chesterfield	\$ (1,865)	-0.76%	\$ 6,380	3.01%	\$ 4,515	0.99%
Chicopee	1,127,353	6.38%	1,802,581	11.98%	2,929,934	8.95%
Chilmark	79,006	11.31%	178,652	23.41%	257,658	17.63%
Clarksburg	58,479	32.20%	31,033	10.16%	89,512	18.38%
Clinton	635,521	20.72%	372,685	9.81%	1,008,206	14.68%
Cohasset	123,006	3.25%	219,086	7.24%	342,092	5.02%
Colrain	49,257	22.16%	(194,870)	-42.34%	(145,613)	-21.33%
Concord	(4,804)	-0.08%	488,029	7.21%	483,225	3.76%
Conway	42,587	11.38%	(256,110)	-25.62%	(213,523)	-15.54%
Cummington	(6,823)	-3.05%	36,940	22.04%	30,117	7.70%
Dalton	(135,665)	-6.39%	(88,265)	-8.13%	(223,930)	-6.98%
Danvers	1,587,825	13.57%	(2,940,181)	-17.33%	(1,352,356)	-4.72%
Dartmouth	715,024	12.55%	(823,603)	-13.83%	(108,579)	-0.93%
Dedham	382,552	2.99%	548,027	6.61%	930,579	4.41%
Deerfield	99,322	10.94%	(117,616)	-7.18%	(18,294)	-0.72%
Dennis	325,669	4.76%	(196,634)	-3.31%	129,035	1.01%
Dighton	19,599	1.38%	(22,308)	-2.55%	(2,709)	-0.12%
Douglas	(90,535)	-8.17%	82,235	3.85%	(8,300)	-0.26%
Dover	(170,955)	-6.81%	(82,444)	-3.61%	(253,399)	-5.29%
Dracut	949,902	16.40%	(11,688)	-0.29%	938,214	9.61%
Dudley	(190,152)	-11.33%	(204,418)	-15.51%	(394,570)	-13.17%
Dunstable	6,769	1.51%	65,042	15.86%	71,811	8.36%
Duxbury	720,854	14.21%	(687,163)	-10.18%	33,691	0.28%
East Bridgewater	(114,777)	-3.31%	(272,729)	-7.06%	(387,506)	-5.29%
East Brookfield	(156,112)	-22.95%	6,756	2.96%	(149,356)	-16.44%
East Longmeadow	116,687	3.26%	(1,325,748)	-25.61%	(1,209,061)	-13.81%
Eastham	64,188	2.45%	382,337	11.69%	446,525	7.58%
Easthampton	297,073	9.44%	327,402	7.15%	624,475	8.08%
Easton	583,791	12.44%	815,368	15.24%	1,399,159	13.93%

*Change in Municipal General Fund Expenditures for Direct and Indirect Non-School Purposes  
1993 Versus 1995 (See Section 6)*

Municipality	Direct Non-School Expenditure Change 1993 Versus 1995		Indirect Non-School Expenditure Change 1993 Versus 1995		Total Non-School Expenditure Change 1993 Versus 1995	
	Whole \$	%	Whole \$	%	Whole \$	%
Edgartown	\$ 1,221,064	44.86%	\$ (191,356)	-4.80%	\$ 1,029,708	15.35%
Egremont	(46,612)	-7.79%	(13,694)	-3.07%	(60,306)	-5.78%
Erving	(61,089)	-13.29%	(32,662)	-6.86%	(93,751)	-10.02%
Essex	(13,343)	-1.18%	30,972	4.01%	17,629	0.93%
Everett	1,372,253	9.00%	(276,874)	-1.11%	1,095,379	2.72%
Fairhaven	588,753	14.77%	188,402	6.96%	777,155	11.61%
Fall River	1,365,104	4.68%	193,697	0.64%	1,558,801	2.62%
Falmouth	1,769,305	13.85%	(101,954)	-0.86%	1,667,351	6.77%
Fitchburg	1,974,653	12.90%	1,087,935	8.67%	3,062,588	10.99%
Florida	209,698	81.71%	(17,274)	-8.55%	192,424	41.95%
Foxborough	352,189	8.48%	311,168	6.83%	663,357	7.62%
Framingham	(1,696,080)	-6.95%	(4,047,470)	-13.56%	(5,743,550)	-10.58%
Franklin	720,890	12.08%	679,838	16.82%	1,400,728	14.00%
Freetown	165,154	10.53%	(68,419)	-4.54%	96,735	3.15%
Gardner	469,973	8.55%	690,661	11.40%	1,160,634	10.04%
Gay Head	51,428	15.48%	37,087	9.30%	88,515	12.11%
Georgetown	82,550	7.06%	231,673	13.22%	314,223	10.75%
Gill	(16,793)	-5.00%	(10,809)	-4.53%	(27,602)	-4.81%
Gloucester	1,265,906	15.19%	(2,031,779)	-16.51%	(765,873)	-3.71%
Goshen	(6,073)	-2.11%	(14,489)	-6.70%	(20,562)	-4.08%
Gosnold	101,151	104.75%	80,619	56.71%	181,770	76.14%
Grafton	(174,636)	-6.73%	1,028,162	41.82%	853,526	16.89%
Granby	25,889	2.91%	(1,282,908)	-50.95%	(1,257,019)	-36.90%
Granville	54,018	17.99%	85,313	12.09%	139,331	13.85%
Great Barrington	361,783	22.74%	(20,457)	-1.40%	341,326	11.17%
Greenfield	(561,200)	-8.62%	872,895	12.07%	311,695	2.27%
Groton	275,018	14.62%	(164,723)	-6.00%	110,295	2.38%
Groveland	85,406	8.22%	(131,110)	-9.18%	(45,704)	-1.85%
Hadley	(58,298)	-6.35%	21,567	1.78%	(36,731)	-1.72%
Halifax	220,318	16.07%	693,473	53.42%	913,791	34.23%

## APPENDIX VII

### *Change in Municipal General Fund Expenditures for Direct and Indirect Non-School Purposes 1993 Versus 1995 (See Section 6)*

Municipality	Direct Non-School Expenditure Change 1993 Versus 1995		Indirect Non-School Expenditure Change 1993 Versus 1995		Total Non-School Expenditure Change 1993 Versus 1995	
	Whole \$	%	Whole \$	%	Whole \$	%
Hamilton	\$ 87,018	3.57%	\$ 89,005	6.79%	\$ 176,023	4.69%
Hampden	101,021	10.46%	(275,526)	-24.65%	(174,505)	-8.38%
Hancock	(4,449)	-3.48%	3,903	5.18%	(546)	-0.27%
Hanover	687,007	17.88%	459,607	13.80%	1,146,614	15.98%
Hanson	482,305	18.13%	(93,311)	-3.21%	388,994	6.99%
Hardwick	(39,904)	-6.28%	(15,932)	-3.82%	(55,836)	-5.31%
Harvard	159,394	11.71%	33,871	1.05%	193,265	4.21%
Harwich	717,976	10.61%	636,007	8.88%	1,353,983	9.72%
Hatfield	24,352	4.78%	2,042	0.20%	26,394	1.74%
Haverhill	869,497	6.44%	1,417,340	6.97%	2,286,837	6.76%
Hawley	(11,061)	-8.02%	(7,700)	-10.59%	(18,761)	-8.91%
Heath	20,850	7.95%	29,945	15.38%	50,795	11.12%
Hingham	278,235	3.47%	339,489	5.61%	617,724	4.39%
Hinsdale	12,737	3.31%	(19,750)	-7.77%	(7,013)	-1.10%
Holbrook	119,522	3.90%	148,071	2.95%	267,593	3.31%
Holden	(17,394)	-0.56%	68,122	2.55%	50,728	0.88%
Holland	87,913	31.28%	(22,114)	-4.96%	65,799	9.05%
Holliston	239,822	6.19%	(344,080)	-19.04%	(104,258)	-1.83%
Holyoke	1,322,387	8.74%	1,815,869	12.91%	3,138,256	10.75%
Hopedale	55,507	4.50%	194,412	19.06%	249,919	11.09%
Hopkinton	(193,306)	-5.66%	(559)	-0.02%	(193,865)	-2.78%
Hubbardston	118,973	20.74%	104,581	21.69%	223,554	21.18%
Hudson	105,031	1.66%	56,303	0.98%	161,334	1.34%
Hull	88,492	2.25%	210,627	4.10%	299,119	3.30%
Huntington	1,954	0.59%	9,630	3.96%	11,584	2.02%
Ipswich	139,477	2.65%	171,665	7.35%	311,142	4.10%
Kingston	515,938	14.59%	1,108,161	49.47%	1,624,099	28.12%
Lakeville	138,529	10.67%	162,635	8.15%	301,164	9.14%
Lancaster	56,180	5.52%	(334,545)	-27.89%	(278,365)	-12.56%

***Change in Municipal General Fund Expenditures for Direct and Indirect Non-School Purposes  
1993 Versus 1995 (See Section 6)***

Municipality	Direct Non-School Expenditure Change 1993 Versus 1995		Indirect Non-School Expenditure Change 1993 Versus 1995		Total Non-School Expenditure Change 1993 Versus 1995	
	Whole \$	%	Whole \$	%	Whole \$	%
Lanesborough	\$ 80,212	14.64%	\$ 100,649	15.08%	\$ 180,861	14.88%
Lawrence	(509,936)	-2.56%	1,032,472	4.09%	522,536	1.16%
Lee	(468,530)	-23.73%	(327,408)	-15.72%	(795,938)	-19.62%
Leicester	132,008	8.81%	1,053,800	51.21%	1,185,808	33.34%
Lenox	113,332	9.86%	438,093	24.09%	551,425	18.58%
Leominster	964,059	8.96%	1,072,585	15.59%	2,036,644	11.55%
Leverett	82,074	26.42%	54,697	26.79%	136,771	26.57%
Lexington	378,939	2.92%	1,001,466	10.66%	1,380,405	6.17%
Leyden	(114,118)	-38.27%	(44,395)	-23.50%	(158,513)	-32.54%
Lincoln	355,795	11.06%	(24,235)	-0.64%	331,560	4.74%
Littleton	187,768	8.51%	186,219	5.84%	373,987	6.93%
Longmeadow	128,716	2.62%	260,750	6.81%	389,466	4.45%
Lowell	4,376,675	13.33%	1,511,286	3.55%	5,887,961	7.81%
Ludlow	877,977	17.24%	(978,345)	-17.59%	(100,368)	-0.94%
Lunenburg	(203,896)	-10.46%	(259,660)	-11.04%	(463,556)	-10.77%
Lynn	2,650,247	7.77%	1,854,325	5.34%	4,504,572	6.55%
Lynnfield	118,591	3.21%	69,327	1.86%	187,918	2.53%
Malden	1,616,927	8.57%	1,174,479	4.03%	2,791,406	5.81%
Manchester	102,491	4.15%	(105,960)	-4.12%	(3,469)	-0.07%
Mansfield	647,548	12.97%	(170,780)	-2.09%	476,768	3.63%
Marblehead	252,424	3.58%	(111,717)	-1.44%	140,707	0.95%
Marion	240,265	13.20%	181,253	8.30%	421,518	10.53%
Marlborough	397,868	2.81%	213,159	2.42%	611,027	2.66%
Marshfield	486,233	8.82%	(339,527)	-4.92%	146,706	1.18%
Mashpee	724,286	16.67%	157,217	2.43%	881,503	8.14%
Mattapoisett	296,022	18.61%	(35,255)	-1.86%	260,767	7.49%
Maynard	163,858	3.43%	(14,655)	-0.38%	149,203	1.72%
Medfield	279,446	8.86%	703,504	22.21%	982,950	15.55%
Medford	(162,641)	-0.78%	1,650,825	8.34%	1,488,184	3.66%
Medway	192,917	7.29%	161,126	5.95%	354,043	6.61%

**APPENDIX VII*****Change in Municipal General Fund Expenditures for Direct and Indirect Non-School Purposes  
1993 Versus 1995 (See Section 6)***

<b>Municipality</b>	<b>Direct Non-School Expenditure Change 1993 Versus 1995</b>		<b>Indirect Non-School Expenditure Change 1993 Versus 1995</b>		<b>Total Non-School Expenditure Change 1993 Versus 1995</b>	
	<b>Whole \$</b>	<b>%</b>	<b>Whole \$</b>	<b>%</b>	<b>Whole \$</b>	<b>%</b>
Melrose	\$ 641,533	7.45%	\$ 1,001,041	11.62%	\$ 1,642,574	9.53%
Mendon	104,307	10.67%	90,782	20.24%	195,089	13.68%
Merrimac	228,831	18.62%	758,339	61.73%	987,170	40.17%
Methuen	293,650	2.33%	421,346	3.75%	714,996	3.00%
Middleborough	195,437	4.02%	(334,928)	-5.34%	(139,491)	-1.25%
Middlefield	9,131	6.37%	(28,789)	-23.77%	(19,658)	-7.43%
Middleton	26,419	1.28%	448,278	39.30%	474,697	14.80%
Milford	241,430	2.97%	607,405	9.43%	848,835	5.82%
Millbury	2,440	0.08%	(137,957)	-3.91%	(135,517)	-2.08%
Millis	(154,704)	-8.54%	126,908	3.87%	(27,796)	-0.55%
Millville	(51,090)	-8.88%	(118,543)	-25.24%	(169,633)	-16.23%
Milton	643,161	6.25%	988,893	7.88%	1,632,054	7.15%
Monroe	4,681	4.77%	1,193	1.75%	5,874	3.53%
Monson	124,575	7.03%	149,173	4.88%	273,748	5.67%
Montague	(170,202)	-6.78%	25,053	1.30%	(145,149)	-3.27%
Monterey	181,127	41.86%	(40,154)	-13.16%	140,973	19.11%
Montgomery	38,606	23.17%	15,728	13.04%	54,334	18.92%
Mount Washington	(8,324)	-8.36%	17,238	20.29%	8,914	4.83%
Nahant	(286,219)	-15.06%	169,840	8.24%	(116,379)	-2.94%
Nantucket	657,795	8.82%	166,330	1.32%	824,125	4.11%
Natick	1,395,014	11.51%	1,021,967	6.75%	2,416,981	8.87%
Needham	1,221,459	9.53%	1,881,009	11.16%	3,102,468	10.46%
New Ashford	(10,995)	-20.09%	(3,930)	-11.33%	(14,925)	-16.69%
New Bedford	4,274,881	11.84%	1,964,888	7.01%	6,239,769	9.73%
New Braintree	(293)	-0.21%	(31,397)	-18.48%	(31,690)	-10.27%
New Marlborough	43,758	11.43%	(17,523)	-5.54%	26,235	3.75%
New Salem	17,144	10.53%	4,609	1.79%	21,753	5.18%
Newbury	601,473	33.20%	1,467,311	117.06%	2,068,784	67.50%
Newburyport	221,119	3.62%	500,880	10.10%	721,999	6.52%

*Change in Municipal General Fund Expenditures for Direct and Indirect Non-School Purposes  
1993 Versus 1995 (See Section 6)*

Municipality	Direct Non-School Expenditure Change 1993 Versus 1995		Indirect Non-School Expenditure Change 1993 Versus 1995		Total Non-School Expenditure Change 1993 Versus 1995	
	Whole \$	%	Whole \$	%	Whole \$	%
Newton	\$ (90,381)	-0.22%	\$ 1,329,003	5.17%	\$ 1,238,622	1.86%
Norfolk	211,851	8.15%	1,417,269	75.07%	1,629,120	36.31%
North Adams	488,472	9.45%	1,348,629	26.62%	1,837,101	17.95%
North Andover	893,636	10.86%	93,943	1.13%	987,579	5.97%
North Attleborough	(204,850)	-3.09%	425,838	5.51%	220,988	1.54%
North Brookfield	(161,876)	-17.80%	113,778	10.86%	(48,098)	-2.46%
North Reading	516,209	11.22%	175,099	3.60%	691,308	7.31%
Northampton	434,853	4.82%	812,980	7.57%	1,247,833	6.31%
Northborough	327,677	8.37%	(51,105)	-1.49%	276,572	3.76%
Northbridge	124,179	4.72%	(1,377,261)	-32.54%	(1,253,082)	-18.27%
Northfield	115,479	16.52%	24,597	3.15%	140,076	9.46%
Norton	502,166	17.82%	(155,393)	-3.46%	346,773	4.75%
Norwell	78,224	2.21%	74,254	2.52%	152,478	2.35%
Norwood	1,181,425	2.84%	2,653,994	35.09%	3,835,419	7.81%
Oak Bluffs	151,925	7.22%	1,247,699	63.61%	1,399,624	34.43%
Oakham	(27,980)	-10.13%	(23,096)	-14.16%	(51,076)	-11.63%
Orange	204,863	10.80%	(608,125)	-25.39%	(403,262)	-9.39%
Orleans	57,422	1.29%	141,694	3.03%	199,116	2.18%
Otis	(44,624)	-7.60%	(96,248)	-22.07%	(140,872)	-13.76%
Oxford	406,367	18.75%	123,717	4.50%	530,084	10.78%
Palmer	376,298	13.51%	(393,678)	-6.21%	(17,380)	-0.19%
Paxton	373,007	12.88%	(124,612)	-15.00%	248,395	6.67%
Peabody	4,003,281	18.31%	624,745	5.46%	4,628,026	13.90%
Pelham	13,069	4.48%	6,607	2.97%	19,676	3.83%
Pembroke	(485,045)	-10.12%	(468)	-0.01%	(485,513)	-5.95%
Pepperell	107,225	5.01%	59,865	5.20%	167,090	5.08%
Peru	(32,665)	-19.60%	(31,273)	-25.62%	(63,938)	-22.15%
Petersham	(49,485)	-17.08%	30,441	15.32%	(19,044)	-3.90%
Phillipston	19,298	7.41%	(42,750)	-15.64%	(23,452)	-4.39%
Pittsfield	2,284,197	12.58%	(582,814)	-2.94%	1,701,383	4.48%



## APPENDIX VII

### *Change in Municipal General Fund Expenditures for Direct and Indirect Non-School Purposes 1993 Versus 1995 (See Section 6)*

Municipality	Direct Non-School Expenditure Change 1993 Versus 1995		Indirect Non-School Expenditure Change 1993 Versus 1995		Total Non-School Expenditure Change 1993 Versus 1995	
	Whole \$	%	Whole \$	%	Whole \$	%
Plainfield	\$ 7,816	3.84%	\$ (2,812)	-1.31%	\$ 5,004	1.20%
Plainville	(102,482)	-4.60%	5,101	0.25%	(97,381)	-2.28%
Plymouth	1,045,072	5.97%	4,189,810	59.92%	5,234,882	21.38%
Plympton	246,168	33.98%	(87,070)	-18.87%	159,098	13.42%
Princeton	(164,464)	-17.43%	(19,532)	-1.50%	(183,996)	-8.19%
Provincetown	185,129	3.79%	214,124	4.90%	399,253	4.31%
Quincy	2,218,039	5.92%	1,244,228	2.24%	3,462,267	3.72%
Randolph	236,863	2.78%	(294,938)	-2.80%	(58,075)	-0.30%
Raynham	588,111	22.07%	(420,123)	-18.33%	167,988	3.39%
Reading	455,589	5.87%	908,423	11.61%	1,364,012	8.75%
Rehoboth	(167,428)	-7.22%	159,421	12.70%	(8,007)	-0.22%
Revere	2,015,515	15.52%	1,746,715	6.77%	3,762,230	9.70%
Richmond	(13,339)	-3.50%	118,080	34.35%	104,741	14.45%
Rochester	217,152	36.53%	(103,951)	-7.17%	113,201	5.54%
Rockland	311,286	7.83%	394,230	8.04%	705,516	7.95%
Rockport	(2,735)	-0.08%	564,219	11.73%	561,484	6.69%
Rowe	(58,499)	-12.47%	(1,080)	-0.30%	(59,579)	-7.18%
Rowley	(29,764)	-2.68%	(359,804)	-19.97%	(389,568)	-13.37%
Royalston	(23,527)	-5.28%	7,943	5.81%	(15,584)	-2.68%
Russell	(3,567)	-1.36%	50,865	20.96%	47,298	9.38%
Rutland	25,505	2.90%	(57,858)	-9.49%	(32,353)	-2.17%
Salem	514,969	3.40%	40,859	0.21%	555,828	1.63%
Salisbury	105,542	4.85%	(242,156)	-16.10%	(136,614)	-3.71%
Sandisfield	11,347	3.67%	(43,202)	-17.85%	(31,855)	-5.78%
Sandwich	818,819	17.52%	56,284	0.67%	875,103	6.68%
Saugus	174,628	2.01%	843,182	9.02%	1,017,810	5.64%
Savoy	(26,563)	-16.43%	11,107	9.16%	(15,456)	-5.46%
Scituate	(127,681)	-1.70%	(57,401)	-1.26%	(185,082)	-1.53%
Seekonk	450,658	12.24%	357,274	13.19%	807,932	12.64%

*Change in Municipal General Fund Expenditures for Direct and Indirect Non-School Purposes  
1993 Versus 1995 (See Section 6)*

Municipality	Direct Non-School Expenditure Change 1993 Versus 1995		Indirect Non-School Expenditure Change 1993 Versus 1995		Total Non-School Expenditure Change 1993 Versus 1995	
	Whole \$	%	Whole \$	%	Whole \$	%
Sharon	\$ 1,523,978	33.47%	\$ 1,183,176	18.57%	\$ 2,707,154	24.78%
Sheffield	(8,343)	-1.22%	18,731	3.42%	10,388	0.84%
Shelburne	10,120	2.05%	(24,627)	-7.35%	(14,507)	-1.75%
Sherborn	136,210	7.15%	193,034	10.23%	329,244	8.68%
Shirley	49,701	3.95%	377,531	41.18%	427,232	19.63%
Shrewsbury	680,452	9.10%	329,284	5.09%	1,009,736	7.24%
Shutesbury	45,439	14.25%	77,986	16.30%	123,425	15.48%
Somerset	(43,318)	-0.82%	(92,552)	-2.54%	(135,870)	-1.52%
Somerville	3,975,653	16.92%	2,376,111	5.40%	6,351,764	9.41%
South Hadley	12,046	0.37%	436,918	11.09%	448,964	6.27%
Southampton	65,298	7.67%	462	0.05%	65,760	3.62%
Southborough	118,182	5.04%	153,132	7.16%	271,314	6.05%
Southbridge	181,572	4.94%	(71,488)	-1.54%	110,084	1.32%
Southwick	150,938	9.13%	125,781	7.61%	276,719	8.37%
Spencer	(649,316)	-24.23%	(145,316)	-7.79%	(794,632)	-17.49%
Springfield	6,075,877	7.91%	8,000,608	13.28%	14,076,485	10.27%
Sterling	321,559	5.58%	(302,092)	-21.86%	19,467	0.27%
Stockbridge	(253,599)	-18.43%	83,777	13.74%	(169,822)	-8.55%
Stoneham	90,755	1.08%	(2,045,509)	-23.27%	(1,954,754)	-11.38%
Stoughton	979,461	13.20%	444,653	6.33%	1,424,114	9.86%
Stow	31,915	2.04%	(326,846)	-21.83%	(294,931)	-9.63%
Sturbridge	(306,023)	-14.28%	(70,781)	-3.49%	(376,804)	-9.03%
Sudbury	596,501	10.97%	122,779	2.24%	719,280	6.58%
Sunderland	10,252	1.51%	(33,944)	-2.81%	(23,692)	-1.25%
Sutton	(59,923)	-4.40%	(252,541)	-8.03%	(312,464)	-6.93%
Swampscott	85,083	1.17%	1,236,414	20.56%	1,321,497	9.94%
Swansea	343,845	10.47%	(219,200)	-7.54%	124,645	2.01%
Taunton	2,467,320	14.63%	676,657	4.01%	3,143,977	9.32%
Templeton	(79,548)	-6.60%	53,911	4.56%	(25,637)	-1.07%
Tewksbury	225,958	1.96%	(581,277)	-5.92%	(355,319)	-1.67%

## APPENDIX VII

### *Change in Municipal General Fund Expenditures for Direct and Indirect Non-School Purposes 1993 Versus 1995 (See Section 6)*

Municipality	Direct Non-School Expenditure Change 1993 Versus 1995		Indirect Non-School Expenditure Change 1993 Versus 1995		Total Non-School Expenditure Change 1993 Versus 1995	
	Whole \$	%	Whole \$	%	Whole \$	%
Tisbury	\$ 327,446	15.30%	\$ 88,809	2.77%	\$ 416,255	7.79%
Tolland	(237,908)	-55.11%	17,752	10.79%	(220,156)	-36.93%
Topsfield	224,280	12.28%	1,812	0.12%	226,092	6.83%
Townsend	400,892	29.52%	5,919	0.53%	406,811	16.40%
Truro	250,112	15.55%	229,776	15.02%	479,888	15.29%
Tyngsborough	208,037	8.82%	30,487	0.82%	238,524	3.91%
Tyringham	10,232	6.49%	(5,084)	-3.38%	5,148	1.67%
Upton	(2,001)	-0.11%	184,020	27.14%	182,019	7.31%
Uxbridge	287,911	10.64%	(170,928)	-4.93%	116,983	1.89%
Wakefield	(772,392)	-9.05%	1,281,789	13.46%	509,397	2.82%
Wales	63,971	42.28%	4,667	1.98%	68,638	17.74%
Walpole	269,494	4.39%	(1,297,517)	-21.18%	(1,028,023)	-8.38%
Waltham	2,437,391	10.78%	2,349,054	16.24%	4,786,445	12.91%
Ware	(37,149)	-1.48%	251,244	11.97%	214,095	4.65%
Wareham	(119,504)	-2.44%	94,766	1.21%	(24,738)	-0.19%
Warren	3,486	0.34%	146,036	28.11%	149,522	9.67%
Warwick	5,236	2.57%	(34,849)	-19.60%	(29,613)	-7.76%
Washington	16,674	10.67%	(10,771)	-8.61%	5,903	2.10%
Watertown	(855,168)	-5.70%	1,112,401	5.84%	257,233	0.76%
Wayland	629,143	12.05%	601,100	8.97%	1,230,243	10.32%
Webster	285,602	10.42%	13,338	0.31%	298,940	4.23%
Wellesley	714,381	5.94%	2,147,012	21.18%	2,861,393	12.91%
Wellfleet	48,934	2.29%	66,964	2.70%	115,898	2.51%
Wendell	52,325	24.09%	(12,242)	-3.57%	40,083	7.15%
Wenham	33,694	1.86%	112,297	12.12%	145,991	5.34%
West Boylston	(13,951)	-0.73%	216,304	19.49%	202,353	6.68%
West Bridgewater	268,887	12.58%	115,561	6.10%	384,448	9.53%
West Brookfield	(43,317)	-5.98%	(13,566)	-2.84%	(56,883)	-4.73%
West Newbury	181,883	17.30%	(139,238)	-10.81%	42,645	1.82%

*Change in Municipal General Fund Expenditures for Direct and Indirect Non-School Purposes  
1993 Versus 1995 (See Section 6)*

Municipality	Direct Non-School Expenditure Change 1993 Versus 1995		Indirect Non-School Expenditure Change 1993 Versus 1995		Total Non-School Expenditure Change 1993 Versus 1995	
	Whole \$	%	Whole \$	%	Whole \$	%
West Springfield	\$ 538,570	4.30%	\$ (82,324)	-0.86%	\$ 456,246	2.06%
West Tisbury	93,331	11.75%	(372,117)	-28.62%	(278,786)	-13.31%
Westborough	(935,379)	-14.54%	1,037,827	15.96%	102,448	0.79%
Westfield	867,673	9.83%	1,373,158	9.03%	2,240,831	9.32%
Westford	153,505	2.77%	434,430	8.44%	587,935	5.50%
Westhampton	24,745	10.22%	26,302	4.45%	51,047	6.13%
Westminster	188,219	13.30%	137,559	10.67%	325,778	12.05%
Weston	96,296	1.24%	828,881	13.00%	925,177	6.55%
Westport	19,374	0.56%	(303,672)	-9.05%	(284,298)	-4.18%
Westwood	(181,414)	-2.80%	720,231	15.15%	538,817	4.79%
Weymouth	1,242,054	8.22%	(4,816,895)	-27.64%	(3,574,841)	-10.99%
Whately	(88,540)	-22.34%	(175,145)	-16.34%	(263,685)	-17.96%
Whitman	624,502	19.24%	181,701	8.46%	806,203	14.95%
Wilbraham	110,540	3.48%	(424,415)	-15.25%	(313,875)	-5.27%
Williamsburg	(11,656)	-2.58%	(557,319)	-50.13%	(568,975)	-36.38%
Williamstown	(32,667)	-1.75%	(136,994)	-9.02%	(169,661)	-5.02%
Wilmington	153,575	2.00%	(694,478)	-5.86%	(540,903)	-2.77%
Winchendon	401,411	24.82%	1,809,360	114.72%	2,210,771	69.20%
Winchester	1,152,391	12.82%	958,320	7.83%	2,110,711	9.95%
Windsor	(201,078)	-49.50%	19,581	17.40%	(181,497)	-34.99%
Winthrop	(25,980)	-0.48%	436,511	8.65%	410,531	3.92%
Woburn	973,017	7.48%	797,626	4.10%	1,770,643	5.45%
Worcester	5,601,410	9.85%	(14,973,227)	-23.38%	(9,371,817)	-7.75%
Worthington	(9,030)	-3.61%	(46,768)	-19.86%	(55,798)	-11.49%
Wrentham	120,987	4.28%	44,527	2.44%	165,514	3.56%
Yarmouth	181,606	1.94%	837,407	10.07%	1,019,013	5.77%
<b>Statewide Total</b>	<b><u>\$ 185,320,154</u></b>	<b>7.53%</b>	<b><u>\$ 58,845,181</u></b>	<b>2.43%</b>	<b><u>\$ 244,165,335</u></b>	<b>5.00%</b>