



**Report to the Legislature:
Equity Effects of Regional Allocation Methodology on
Regional Vocational Technical Schools**

Chapter 182 of the Acts of 2008 Section 109
December, 2008



This document was prepared by the
Massachusetts Department of Elementary and Secondary Education
Mitchell D. Chester, Ed.D
Commissioner

Board of Elementary and Secondary Education Members

Ms. Maura Banta, Chair, Melrose
Ms. Harneen Chernow, Jamaica Plain
Mr. Gerald Chertavian, Cambridge
Mr. Andrew "AJ" Fajnzylber, Chair, Student Advisory Council, Brookline
Dr. Thomas E. Fortmann, Lexington
Ms. Beverly Holmes, Springfield
Dr. Jeff Howard, Reading
Ms. Ruth Kaplan, Brookline
Dr. Dana Mohler-Faria, Bridgewater
Mr. Paul Reville, Secretary of Education, Worcester
Dr. Sandra L. Stotsky, Brookline
Mitchell D. Chester, Ed.D., Commissioner
and Secretary to the Board

The Massachusetts Department of Elementary and Secondary Education, an affirmative action employer, is committed to ensuring that all of its programs and facilities are accessible to all members of the public.

We do not discriminate on the basis of age, color, disability, national origin, race, religion, sex or sexual orientation. Inquiries regarding the Department's compliance with Title IX and other civil rights laws may be directed to the Human Resources Director, 350 Main St., Malden, MA 02148 781-338-6105.

© 2008 Massachusetts Department of Elementary and Secondary Education
Permission is hereby granted to copy any or all parts of this document for non-commercial educational purposes. Please credit the "Massachusetts Department of Elementary and Secondary Education."

This document printed on recycled paper

Massachusetts Department of Elementary and Secondary Education
350 Main Street, Malden, MA 02148-5023
Phone 781-338-3000 TTY: N.E.T. Relay 800-439-2370
www.doe.mass.edu





Mitchell D. Chester, Ed.D.
Commissioner

Massachusetts Department of Elementary and Secondary Education

350 Main Street, Malden, Massachusetts 02148-5023

Telephone: (781) 338-3000
TTY: N.E.T. Relay 1-800-439-2370

December 30, 2008

Dear Members of the General Court:

Pursuant to Chapter 182 of the Acts of 2008, Section 109, I respectfully submit this *Report to the Legislature: Equity Effects of the Regional School Allocation Methodology on Regional Vocational Technical Schools* in accordance with the following:

“SECTION 109. Notwithstanding any general or special law to the contrary, the department of education shall report on the equity effects of the recently phased-in regional school allocation methodology on regional vocational technical schools; provided further that said report shall be filed with the house and senate committee on ways and means and the joint committee on education by no later than December 31, 2008.”

The Chapter 70 state education aid formula stipulates how much each city and town should pay out of local revenue sources toward the cost of achieving its pupils’ “foundation budget,” which is calculated based on the functional costs associated with each student’s grade level, program, and demographic characteristics. The amount a city or town should pay towards this cost, the “minimum local contribution,” is based upon the city or town’s property valuation and residents’ income, relative to its pupils’ overall foundation budget. Since most Massachusetts communities belong to between two and four school districts, the total contribution must be fairly divided among the local and regional districts to which they belong.

Since the beginning of education reform, the Chapter 70 formula has used three different methods to allocate minimum local contributions to school districts. This report focuses on the current method, which was implemented in FY05. Unlike previous approaches, this one allocates each town’s total contribution requirement directly in proportion to the foundation budgets of their pupils, which has made the formula more equitable.

In school finance, equity is commonly used to apply to a school finance system’s fairness in regards to two separate groups of stakeholders. There is equity for pupils (the quality of education should not hinge on where a pupil lives) and there is equity for taxpayers (the funding for education should be fairly distributed in relation to ability to pay). The focus of this report is taxpayer equity.

Each city and town’s total required contribution must be apportioned between all the pupils it is educating, whether those pupils are attending local schools, academic regional schools, vocational schools, county agricultural schools, collaborative programs, private

special education schools, or any of the other publicly-funded settings in which educational services are delivered. The Chapter 70 statute does not specify the specific methodology by which this “regional allocation” is to be calculated. There have been three separate methods used since FY94, all of which were developed by the Massachusetts Department of Elementary and Secondary Education (ESE).

The current method, used since FY05, was designed to eliminate the underlying inequities in the base contributions. The goal was to tie a town’s total contributions directly to the foundation budget dollars associated with its pupils. For example, if the foundation budget for a town’s pupils at its vocational regional represented three percent of the towns’ overall foundation budget, then three percent of its required contribution should be apportioned to the vocational district.

The new regional allocation methodology has succeeded at its goal—ensuring that a town’s required school contributions are fairly allocated amongst the various school districts to which it may belong. The report details this accomplishment.

If you have questions, please feel free to contact me or Roger Hatch in the Department’s School Finance center at 781 338-6527.

Sincerely,

Mitchell D. Chester, Ed.D.
Commissioner of Elementary and Secondary Education

Table of Contents

Introduction	1
What is equity?	2
The Regional Allocation Methodology	3
Equity Effects	6
Conclusion	13
Appendix 1 – Change in Minimum Contributions, FY04 to FY09	

Introduction

The Department of Elementary and Secondary Education respectfully submits this Report to the Legislature: Equity Effects of the Regional School Allocation Methodology on Regional Vocational Technical Schools pursuant to Chapter 182 of the Acts of 2008, Section 109:

“SECTION 109. Notwithstanding any general or special law to the contrary, the department of education shall report on the equity effects of the recently phased-in regional school allocation methodology on regional vocation technical schools; provided further that said report shall be filed with the house and senate committee on ways and means and the joint committee on education by no later than December 31, 2008.”

The Chapter 70 state education aid formula stipulates how much each city and town should pay out of local revenue sources toward the cost of achieving its pupils’ “foundation budget.” The foundation budget is an estimate of how much spending is needed to provide an adequate education to the students in each of the Commonwealth’s 328 school districts. It is calculated based on the functional costs associated with each student’s grade level, program, and demographic characteristics.¹

The amount a city or town should pay towards this cost is called the “minimum local contribution.” This amount is based upon the city or town’s property valuation and residents’ income, relative to its pupils’ overall foundation budget. Since most Massachusetts communities belong to between two and four school districts, the total contribution must be fairly divided among the local and regional districts to which they belong.

Since the beginning of education reform, the Chapter 70 formula has used three different methods to allocate minimum local contributions to school districts. This report focuses on the current method, which was implemented in FY05. Unlike previous approaches, this one allocates each town’s total contribution requirement directly in proportion to the foundation budgets of their pupils, which has made the formula more equitable.

What Is Equity?

In school finance, equity is commonly used to apply to a school finance system’s fairness in regards to two separate groups of stakeholders. There is equity for pupils (the quality of education should not hinge on where a pupil lives) and there is equity for taxpayers (the funding for education should be fairly distributed in relation to ability to pay). The focus of this report is taxpayer equity.

Regarding taxpayer equity, there are two generally accepted concepts. *Horizontal* equity means that two towns with *similar* needs and ability to pay should make the same effort from local taxes. *Vertical* equity is the corollary. Two towns with *different* needs and abilities to pay should *not* have to make the same effort from local taxes.

¹ For a detailed description of how the foundation budget is determined see http://finance1.doe.mass.edu/chapter70/chapter_cal.pdf

These concepts can be seen in three distinct perspectives as they relate to regional school finance, particularly vocational regional districts:

1. **Once a town's total minimum contribution is calculated there should be equity *within* a town regarding how much it is required to pay for its pupils at various districts.** Wakefield should pay approximately the same per pupil amount for its local district pupils as it does for its pupils at Northeast Metropolitan Vocational (after adjusting for the higher costs of vocational education.) Both horizontal and vertical equity are important here. A town should fairly allocate its local resources to benefit its children equally (horizontal equity). It should also recognize that its vocational pupils' programs are more expensive (they must simultaneously teach both academics and vocational skills), and so a higher amount in per pupil terms should be apportioned to that particular group (vertical equity).
2. **There should be equity *between* towns around the Commonwealth in regards to their total school populations.** The less wealthy city of Lawrence should not be required to pay the same amount for *all* of its pupils, as the wealthier town of Wellesley (vertical equity). In Massachusetts, beginning in FY07, the "aggregate wealth" methodology defined what each community town should pay toward the foundation budgets of all of its pupils. It set in place a phase-in period which brought each town closer to its target amount over a five-year phase-in period.
3. **If (2) is true, then it should be reflected in equity *between member towns of a regional district*.** Lawrence is a member of the Greater Lawrence Vocational Regional District, along with Andover, Methuen and North Andover. The Chapter 70 formula assigns it a target local contribution percentage of 15.65 percent of foundation budget, compared to 46.29 percent for Methuen and the maximum of 82.5 percent for Andover and North Andover. Lawrence should not be required to pay the same amount from local taxes for its vocational pupils as Andover does (also vertical equity).

Two recent changes to the formula are intended to address these three issues. Beginning in FY05, the formula instituted a phase-in that over four years (culminating in FY08 and continuing into FY09) would directly tie a town's contributions to the costs of its pupils at the districts it belongs to. This is the specific mechanism known as the "regional allocation." It addressed *within-town* equity and has succeeded at resolving the disparities that existed.

Beginning in FY07, the Chapter 70 formula instituted very aggressive measures to address *between-town* equity. The aggregate wealth methodology stipulated that a town's total required contribution is now directly tied to its property values, its residents' income and the costs of its students.

These two formulaic mechanisms have separate goals, but should both result in reduced inequities at vocational regional districts. This report will focus on the regional allocation methodology, and then look at the extent to which those inequities at

vocational regional districts have changed over time. While it addresses the impact of the aggregate wealth method to a lesser extent, it is important to keep in mind that the regional allocation shifted far less money than the aggregate wealth method. Both are important though, when we look at the results for vocational regional districts.

The Regional Allocation: Methodology

Each city and town's total required contribution must be apportioned between all the pupils it is educating, whether those pupils are attending local schools, academic regional schools, vocational schools, county agricultural schools, collaborative programs, private special education schools, or any of the other publicly-funded settings in which educational services are delivered. The Chapter 70 statute does not specify the specific methodology by which this "regional allocation" is to be calculated. There have been three separate methods used since FY94, all of which were developed by the Massachusetts Department of Elementary and Secondary Education (ESE).

Methods Used Between FY94 and FY04

The first method was used between FY94 and FY02. It was initially a valid way of doing the calculation, but it was not sensitive enough to enrollment change. In vocational regional school districts this was a problem because in percentage terms, individual towns' enrollments fluctuate much more from year to year than at academic regionals. After several years of enrollment change, the formula reached a point where there were pronounced disparities in what the Chapter 70 formula required cities and towns to pay for their vocational pupils.

By the late 1990's, after the first method had been in place for several years, the allocation formula resulted in a minimum contribution of zero for a number of towns even though they did have students enrolled at their vocational districts. This nonsensical result—not to mention less obvious inequities—made it clear that a change in methodology was needed.

In FY03, a second method was adopted which did improve the sensitivity to enrollment change. The base contribution remained the same as the previous year, but increases in required contribution were proportional to foundation budgets at each of the districts to which a town belonged. Over time this method would have resulted in a much fairer allocation, but it did nothing to correct the underlying inequities in the base contributions. It was only used in the FY03 and FY04 Chapter 70 calculations.

The Current Method, Used Since FY05

The current or third method was designed to eliminate the underlying inequities in the base contributions. The goal was to tie a town's total contributions directly to the foundation budget dollars associated with its pupils. For example, if the foundation budget for a town's pupils at its vocational regional represented three percent of the towns' overall foundation budget, then three percent of its required contribution should be apportioned to the vocational district.

Implementing this new plan all at once would have been disruptive to some local budgets, so it was scheduled for a four-year phase in. In FY05, 25 percent of the disparity

between the existing contribution percentage and a community's foundation percentage was eliminated. In FY06, 50 percent of the remaining disparity was reduced, and in FY07, 75 percent. Beginning in FY08, the disparity was completely reduced and again in FY09 required contributions were directly proportional to foundation budgets.

A big advantage of this methodology is its transparency. Previous methods were much more difficult for state officials to explain and for local officials to understand. The logic of the old calculations was complicated, and this frequently led to distrust of the results.

Table 1 shows how the new method works in FY09, using Arlington as an example. Arlington is a K-12 local district and also belongs to the Minuteman Regional Vocational Technical district². The first four rows are shown for comparison purposes, so that the reasons for changes from one year to the next can be seen.

² The same presentation is available for any city or town by downloading the "complete formula spreadsheet" on ESE's website, at http://finance1.doe.mass.edu/chapter70/chapter_09.xls

Table 1: Apportionment of Local Contribution Across School Districts

<u>Prior Year (FY08) Allocation Percentage (for comparison purposes)</u>	ARLINGTON	MINUTEMAN	COMBINED TOTAL ALL DISTRICTS
1 FY08 foundation enrollment	4,429	169	4,598
2 FY08 foundation budget	\$35,888,203	\$2,346,824	\$38,235,027
3 Each district's share of municipality's combined FY08 foundation	93.86%	6.14%	100.00%
4 FY08 required contribution	\$30,613,441	\$2,001,893	\$32,615,334
 <u>Apportionment of FY09 contribution among community's districts</u>			
5 FY09 total unapportioned required contribution			33,681,285
6 FY09 foundation enrollment	4,469	151	4,620
7 FY09 foundation budget	\$38,070,505	\$2,200,059	\$40,270,564
8 Each district's share of municipality's total FY09 foundation (row 7)	94.54%	5.46%	100.00%
9 FY09 required contribution apportioned using row (row 8 x row 5)	\$31,841,211	\$1,840,074	\$33,681,285

Row 5 is the FY09 total required contribution. This amount is determined by a separate calculation on the “municipal contribution” sheet within the formula spreadsheet. It is directly determined by a community’s property valuation, residents’ income, and foundation budget for all of its pupils.

Row 6 shows the October 1, 2007 headcount of pupils being financed by the two districts to which Arlington belongs. The foundation budget for each district’s Arlington pupils is shown in row 7. Arlington’s local district pupils account for 94.54 percent of the town’s total foundation budget (row 8). The town’s total required contribution in row five is allocated directly in proportion to the percentages in row 8.

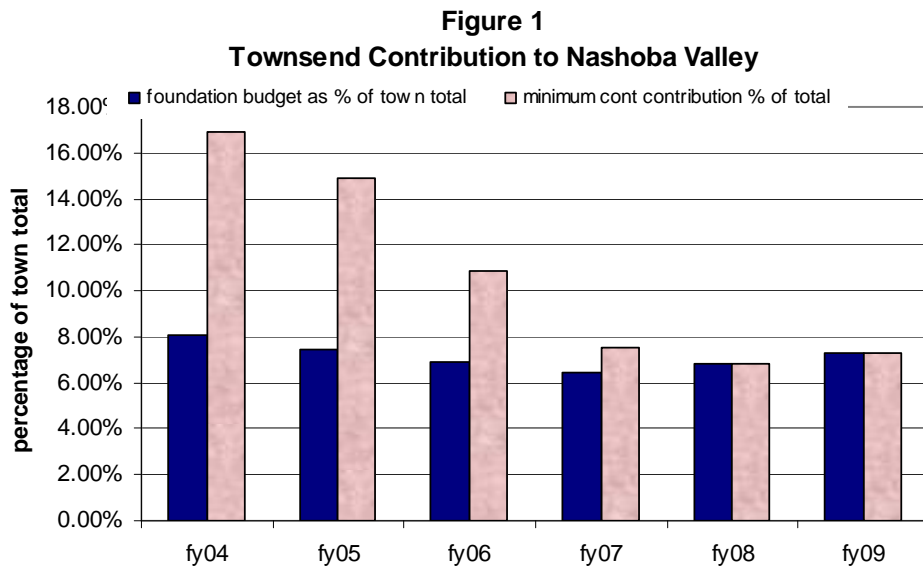
Equity Effects

The Regional Allocation

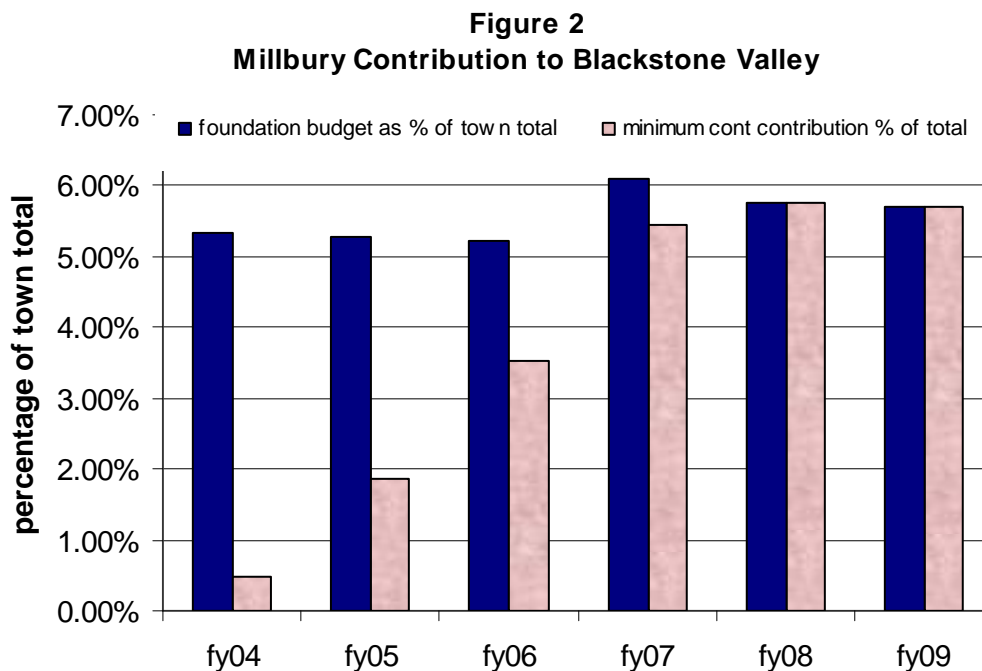
The regional allocation phase-in is now complete. It was fully accomplished in FY08 and continues into FY09. Each city and town’s contributions are tied directly to the costs of its pupils at the various districts to which it belongs. If a town’s pupils at its vocational regional district represent five percent of the combined costs of its vocational and local district pupils, then five percent of its required contribution is allocated to its vocational district.

Townsend is an example of a community that in FY04 was required to make an exorbitantly high contribution to Nashoba Valley, its regional vocational district. This was not the fault of Nashoba Valley in any way. The required contribution was imposed by the Commonwealth’s Chapter 70 calculations.

In FY04, there were 99 Townsend pupils enrolled at Nashoba Valley. Their foundation budget was \$1,080,487. The foundation budget for its 1,832 pupils at North Middlesex, the K-12 academic regional district to which it belongs, was \$12,246,431. The vocational pupils accounted for 8.11 percent of the combined \$13,326,918 in foundation budget for all of the town’s pupils. Yet out of Townsend’s total required contribution of \$5,754,644 that year, the Chapter 70 calculations required that \$975,540 or 16.95% had to be paid to Nashoba Valley. Figure 1 shows that the regional allocation method corrected this inequity. By FY08 the vocational pupils represented 6.82 percent of the town’s total foundation budget, and exactly 6.82 percent of the town’s required contribution was allotted to them. In FY09, five more pupils chose Nashoba Valley than in the previous year, while the number of Townsend students stayed the same. They now represented 7.26 percent of the town’s total foundation budget, and 7.26 percent of its FY09 total required contribution was assigned to Nashoba Valley.



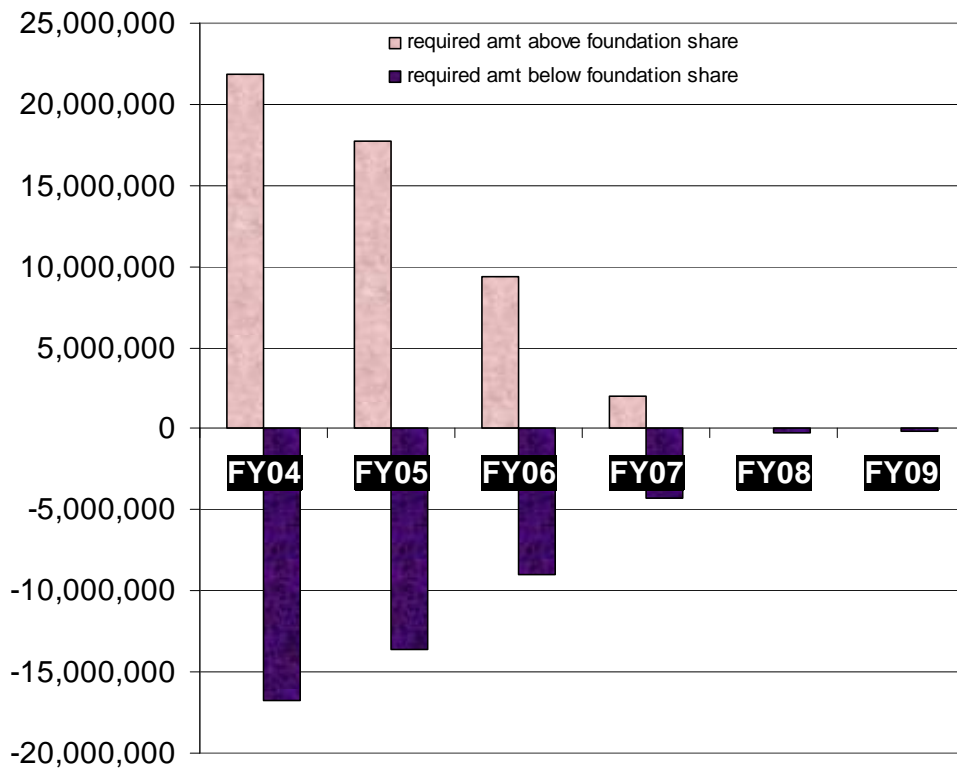
Millbury is an example of the opposite type of correction: a town that was being required by the Commonwealth—through no fault of its own—to underfund its vocational pupils at Blackstone Valley, the vocational regional district of which it is a member.



Millbury’s enrollment and foundation share at Blackstone Valley stayed about the same over the six year period. The regional allocation drove Millbury’s contribution to Blackstone from \$35,937 in FY04 (for 74 pupils, which is \$486 per pupil) to the much higher level of \$582,054 for the 74 pupils the town sent there in FY08, which is \$7,866 per pupil and much more in line with its fellow members’ required contributions.

It is not difficult to quantify the total dollar impact of the new regional allocation methodology. If Townsend's FY04 contribution to Nashoba Valley had been directly in line with its foundation budget there, it would have had a required contribution of \$466,561 instead of \$1,080,487, which was \$508,979 more than what would have been equitable. Statewide the total of the required contributions that *exceeded* foundation budget percentages in FY04 was \$21,808,595 for 102 towns. On the other hand, there were 127 towns like Millbury that were not being required to pay an equitable share. If we add up the amounts that their required amounts were *lower* than their foundation percentages, it totals to \$16,736,279 for 127 towns. Figure 3 shows that these disparities were systematically reduced to near-zero in FY08 and again in FY09³

Figure 3
Required Contributions at Regional Vocational Districts FY04 to FY09
Amounts Above and Below Foundation Share, Mass. Totals



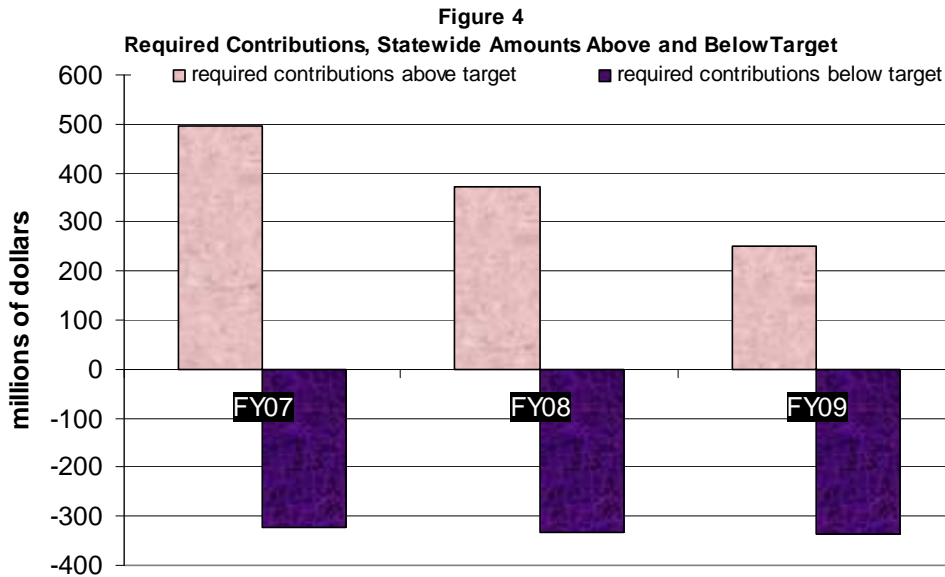
Between-town disparities

Between-town disparities were dramatically reduced by the aggregate wealth method that was first used in FY07 (Figure 4). In that first year, required contributions in excess of target levels totaled \$496 million statewide for 232 communities (Without the excess

³ The assessments for Essex Agricultural Technical High School students are treated on a per-pupil basis by statute. There is an adjustment for this in line 10 of the regional allocation spreadsheet for those communities in northeastern Massachusetts that are affected. This calculation is the reason why the disparities are not reduced all the way to zero.

effort reduction component of the formula, it would have been \$621 million). That amount fell to \$371 million in FY08 and to \$250 million in FY09.

For those being required to make *less* effort than the formula indicates they should be making, there has been a slight *deterioration* in equity. In FY07, there were 119 cities and towns whose required effort was below their target by \$322 million. In FY09 there were 127 cities and towns who fell short by \$328 million. This occurred in spite of a provision, implemented in FY08 and continued in FY09 that required an additional increase of one percent for those who were more than five percent below their target, and an increase of two percent for those who were more than ten percent below. This provision imposed increases of \$20 and \$21 million in those two years respectively.



The Chapter 70 formula as it currently stands is very good at correcting effort that is above the target amount. Because of the limits of Proposition 2 1/2, the formula is not designed to make the same level of progress toward bringing below-effort communities up to their targets. This is a more difficult problem which hopefully will be addressed over time.

Equity Between Members of Regional Districts

Equity for regional district members is directly related to within and between town equity. The regional allocation methodology successfully resolved a \$21 million problem. Members now can see that their town’s total contribution is fairly allocated among all of its pupils. There remains, however, a \$250 million problem that requires 224 municipalities to pay more than they should, and allows 127 cities and towns to pay \$328 million less than they should.

The disparities in how much regional district members must pay are due to two main factors. First, the concept of vertical equity dictates that **there should be disparities because no two towns have exactly the same ability to pay**. Secondly, the between-

town disparities have not been fully resolved in spite of the great progress that has been made toward reducing required contributions that are too high.

While it is statistically impossible to distinguish the impact of the regional allocation methodology from the other equity components of the formula, it is reasonable to assume that the changes to the regional allocation formula over the past several years have resulted in positive improvement. Appendix 1 compares vocational regional districts' member contributions, in dollar and per pupil terms, for FY04 and FY09.

Complaints about inequities in vocational district contributions often focus on the disparities between the highest and lowest dollar amounts. Figure 5 shows the range between lowest and highest per pupil contribution in FY04. For example, Berlin's contribution to Assabet Valley was \$2,462 per pupil, the leftmost end of the bar. Westborough's contribution was \$13,100, the rightmost end.

Clearly there were some significant disparities that year. Harvard paid \$30,518 for one pupil at Montachusset and West Newbury \$41,515 for one pupil at Whittier. At the other extreme Whittier was required to charge Georgetown only \$507 for five pupils.

Figure 5
Required Contribution Per Pupil, Lo-Hi Range FY04

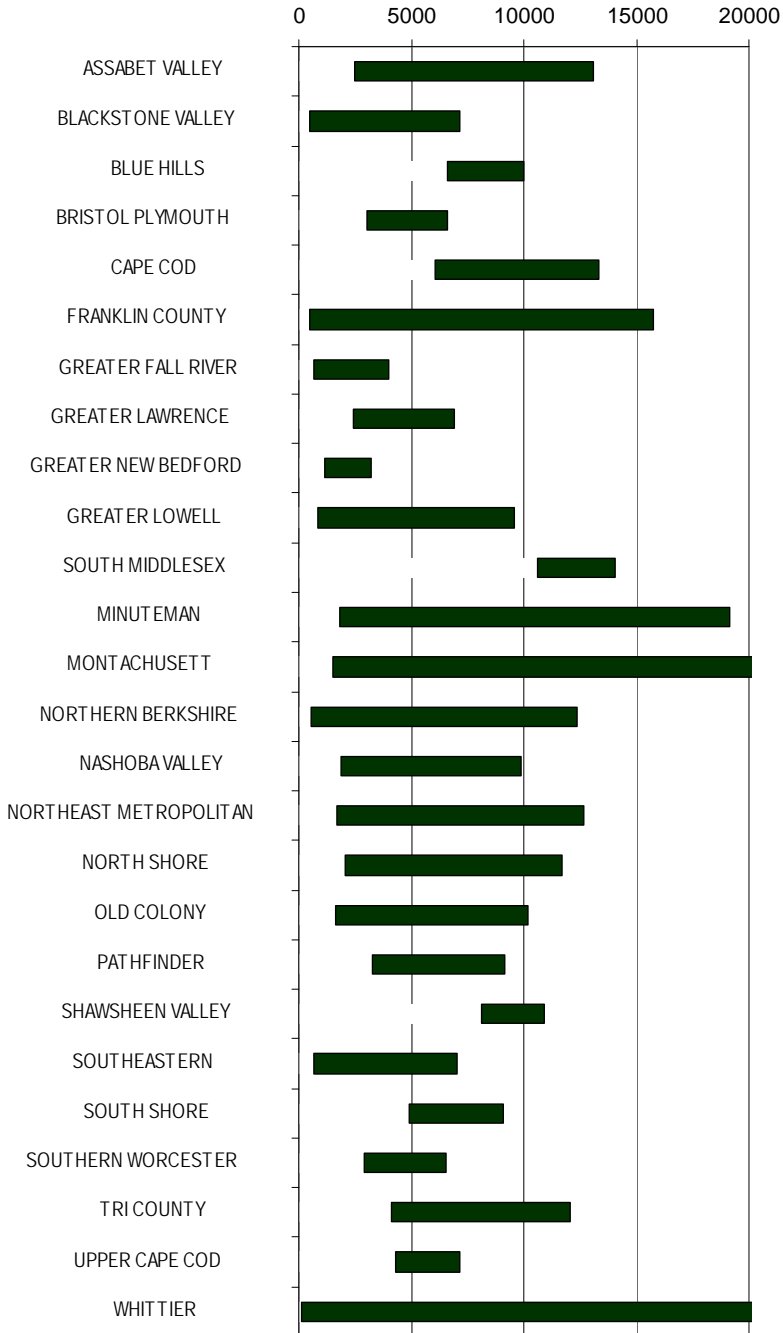
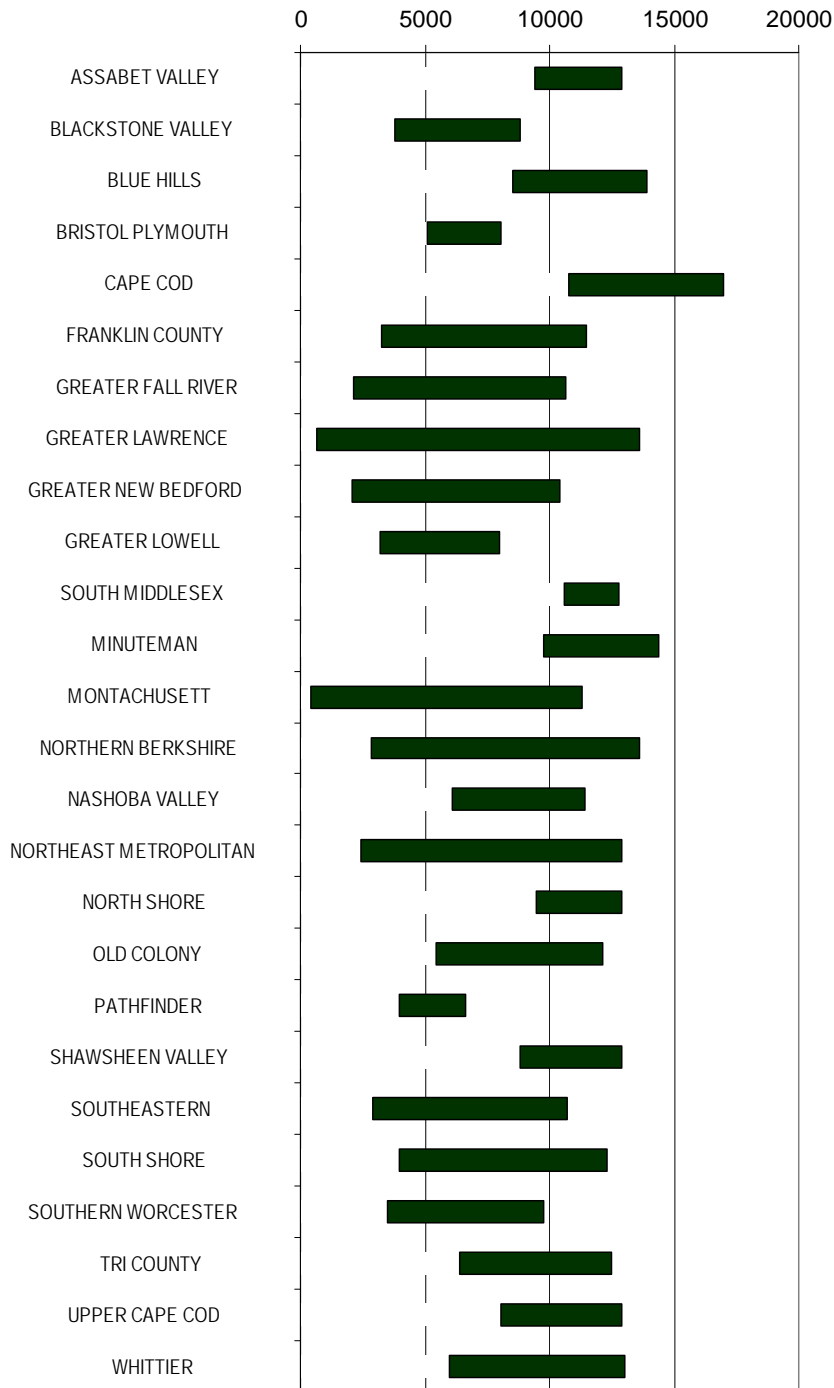


Figure 6 shows the range of required contributions at the same districts in FY09. The upper-end disparities have disappeared. That improvement *can* be attributed to the regional allocation methodology. A visual comparison of Figures 5 and 6 would seem to indicate that the ranges between high and low contributions per pupil were smaller in

FY09. Statistically, out of the 26 vocational regional districts, 17 had lower ranges. The median range was \$6,989 in FY04 and \$6,169 in FY09. Disparities were markedly reduced.

Figure 6
Required Contribution Per Pupil, Lo-Hi Range FY09



Conclusion

We have gone through a period of adjustment from a regional allocation methodology, that was in some cases nonsensical, to one which is rational and can be clearly explained. From this point on, annual changes in contributions to regional districts should be more moderate and understandable to local officials.

The new regional allocation methodology has succeeded at its goal—ensuring that a town’s required school contributions are fairly allocated amongst the various school districts to which it may belong.

When viewed in per-pupil terms, significant disparities remain among vocational district members’ required contributions, though they are not as extreme as they were in FY04. Some of these are due to the fact that the planned five-year phase-in of the aggregate wealth methodology is not yet complete. Even if it were, it would not have corrected all cases where communities’ contributions are below their targets. The remaining disparities are legitimately due to the fact that members of vocational districts all have different abilities to pay no matter how slight, and that the Chapter 70 formula should recognize these differences.

Appendix 1												
Change in Minimum Contributions, FY04 to FY09, Vocational Regional Districts												
		FY04	FY04	FY04		FY09	FY09	FY09				
		Net Minimum	enroll-	contribution		Net Minimum	enroll-	contribution	change in	change		
School District	Member City/Town	Contribution	ment	per pupil		Contribution	ment	per pupil	contribution	per pupil	lea	lea
ASSABET VALLEY	BERLIN	46,769	19	2,462		373,305	29	12,873	326,536	10,411	801	28
ASSABET VALLEY	HUDSON	1,505,605	166	9,070		1,292,387	137	9,433	-213,218	364	801	141
ASSABET VALLEY	MARLBOROUGH	3,652,183	363	10,061		3,435,949	320	10,737	-216,234	676	801	170
ASSABET VALLEY	MAYNARD	446,496	71	6,289		782,270	74	10,571	335,774	4,283	801	174
ASSABET VALLEY	NORTHBOROUGH	517,893	59	8,778		590,690	53	11,145	72,797	2,367	801	213
ASSABET VALLEY	SOUTHBOROUGH	157,476	18	8,749		183,444	16	11,465	25,968	2,717	801	276
ASSABET VALLEY	WESTBOROUGH	615,722	47	13,100		665,808	53	12,562	50,086	-538	801	321
BLACKSTONE VALLEY	BELLINGHAM	40,547	43	943		609,736	72	8,469	569,189	7,526	805	25
BLACKSTONE VALLEY	BLACKSTONE	530,938	74	7,175		477,710	79	6,047	-53,228	-1,128	805	32
BLACKSTONE VALLEY	DOUGLAS	325,861	74	4,404		349,351	66	5,293	23,490	890	805	77
BLACKSTONE VALLEY	GRAFTON	349,346	75	4,658		747,002	85	8,788	397,656	4,130	805	110
BLACKSTONE VALLEY	HOPEDALE	89,201	26	3,431		97,455	22	4,430	8,254	999	805	138
BLACKSTONE VALLEY	MENDON	124,409	25	4,976		200,884	34	5,908	76,475	932	805	179
BLACKSTONE VALLEY	MILFORD	545,538	95	5,743		1,302,827	154	8,460	757,289	2,717	805	185
BLACKSTONE VALLEY	MILLBURY	35,937	74	486		596,188	73	8,167	560,251	7,681	805	186
BLACKSTONE VALLEY	MILLVILLE	153,576	45	3,413		175,508	46	3,815	21,932	403	805	188
BLACKSTONE VALLEY	NORTHBRIDGE	541,823	114	4,753		562,616	111	5,069	20,793	316	805	214
BLACKSTONE VALLEY	SUTTON	374,384	60	6,240		638,833	77	8,297	264,449	2,057	805	290
BLACKSTONE VALLEY	UPTON	66,205	20	3,310		189,977	32	5,937	123,772	2,627	805	303
BLACKSTONE VALLEY	UXBRIDGE	627,956	124	5,064		1,358,037	195	6,964	730,081	1,900	805	304
BLUE HILLS	AVON	485,151	51	9,513		624,305	46	13,572	139,154	4,059	806	18

BLUE HILLS	BRAINTREE	1,091,205	129	8,459	1,422,965	127	11,204	331,760	2,745	806	40
BLUE HILLS	CANTON	468,626	58	8,080	975,446	78	12,506	506,820	4,426	806	50
BLUE HILLS	DEDHAM	509,730	58	8,788	625,366	45	13,897	115,636	5,109	806	73
BLUE HILLS	HOLBROOK	783,450	117	6,696	1,182,113	139	8,504	398,663	1,808	806	133
BLUE HILLS	MILTON	382,088	56	6,823	508,269	42	12,102	126,181	5,279	806	189
BLUE HILLS	NORWOOD	508,925	75	6,786	702,278	55	12,769	193,353	5,983	806	220
BLUE HILLS	RANDOLPH	2,555,095	255	10,020	2,788,133	307	9,082	233,038	-938	806	244
BLUE HILLS	WESTWOOD	72,918	11	6,629	138,134	11	12,558	65,216	5,929	806	335
BRISTOL PLYMOUTH	BERKLEY	462,342	87	5,314	564,928	103	5,485	102,586	170	810	27
BRISTOL PLYMOUTH	BRIDGEWATER	367,901	76	4,841	669,909	95	7,052	302,008	2,211	810	42
BRISTOL PLYMOUTH	MIDDLEBOROUGH	660,238	100	6,602	866,548	137	6,325	206,310	-277	810	182
BRISTOL PLYMOUTH	RAYNHAM	219,879	73	3,012	850,871	106	8,027	630,992	5,015	810	245
BRISTOL PLYMOUTH	TAUNTON	1,614,289	535	3,017	3,768,034	739	5,099	2,153,745	2,081	810	293
CAPE COD	BARNSTABLE	1,255,662	155	8,101	2,796,641	221	12,654	1,540,979	4,553	815	20
CAPE COD	BREWSTER	565,120	59	9,578	683,012	55	12,418	117,892	2,840	815	41
CAPE COD	CHATHAM	147,951	17	8,703	196,909	13	15,147	48,958	6,444	815	55
CAPE COD	DENNIS	863,674	104	8,305	1,238,252	98	12,635	374,578	4,331	815	75
CAPE COD	EASTHAM	177,252	25	7,090	272,470	19	14,341	95,218	7,250	815	85
CAPE COD	HARWICH	671,398	87	7,717	843,993	68	12,412	172,595	4,694	815	126
CAPE COD	MASHPEE	363,223	42	8,648	496,423	45	11,032	133,200	2,383	815	172
CAPE COD	ORLEANS	206,292	16	12,893	221,838	15	14,789	15,546	1,896	815	224
CAPE COD	PROVINCETOWN	32,485	3	10,828	153,030	9	17,003	120,545	6,175	815	242
CAPE COD	TRURO	133,282	10	13,328	94,697	6	15,783	-38,585	2,455	815	300
CAPE COD	WELLFLEET	135,240	14	9,660	120,262	8	15,033	-14,978	5,373	815	318
CAPE COD	YARMOUTH	863,363	143	6,038	1,871,168	174	10,754	1,007,805	4,716	815	351
FRANKLIN COUNTY	BERNARDSTON	144,952	23	6,302	181,410	26	6,977	36,458	675	818	29
FRANKLIN COUNTY	BUCKLAND	99,108	14	7,079	132,045	17	7,767	32,937	688	818	47
FRANKLIN COUNTY	COLRAIN	152,686	17	8,982	160,769	25	6,431	8,083	-2,551	818	66
FRANKLIN COUNTY	CONWAY	157,335	10	15,734	94,040	11	8,549	-63,295	-7,184	818	68

FRANKLIN COUNTY	DEERFIELD	132,562	20	6,628	139,642	15	9,309	7,080	2,681	818	74
FRANKLIN COUNTY	ERVING	18,996	12	1,583	80,494	7	11,499	61,498	9,916	818	91
FRANKLIN COUNTY	GILL	32,692	9	3,632	67,977	10	6,798	35,285	3,165	818	106
FRANKLIN COUNTY	GREENFIELD	866,213	125	6,930	948,387	138	6,872	82,174	-57	818	114
FRANKLIN COUNTY	HEATH	54,253	11	4,932	43,238	6	7,206	-11,015	2,274	818	130
FRANKLIN COUNTY	LEYDEN	78,437	11	7,131	47,403	5	9,481	-31,034	2,350	818	156
FRANKLIN COUNTY	MONTAGUE	437,051	79	5,532	466,996	69	6,768	29,945	1,236	818	192
FRANKLIN COUNTY	NEW SALEM	46,977	9	5,220	46,024	7	6,575	-953	1,355	818	206
FRANKLIN COUNTY	NORTHFIELD	177,978	17	10,469	221,183	29	7,627	43,205	-2,842	818	216
FRANKLIN COUNTY	ORANGE	286,349	81	3,535	229,094	70	3,273	-57,255	-262	818	223
FRANKLIN COUNTY	SHELBURNE	106,634	13	8,203	110,232	12	9,186	3,598	983	818	268
FRANKLIN COUNTY	SUNDERLAND	34,711	5	6,942	89,996	13	6,923	55,285	-19	818	289
FRANKLIN COUNTY	WARWICK	49,515	8	6,189	49,067	8	6,133	-448	-56	818	312
FRANKLIN COUNTY	WENDELL	5,049	10	505	57,631	8	7,204	52,582	6,699	818	319
FRANKLIN COUNTY	WHATELY	26,716	10	2,672	81,172	8	10,147	54,456	7,475	818	337
GREATER FALL RIVER	FALL RIVER	611,795	933	656	2,313,072	1,100	2,103	1,701,277	1,447	821	95
GREATER FALL RIVER	SOMERSET	182,901	61	2,998	1,076,818	101	10,662	893,917	7,663	821	273
GREATER FALL RIVER	SWANSEA	359,726	90	3,997	1,272,886	123	10,349	913,160	6,352	821	292
GREATER FALL RIVER	WESTPORT	303,221	85	3,567	966,739	93	10,395	663,518	6,828	821	331
GREATER LAWRENCE	ANDOVER	82,790	12	6,899	340,131	25	13,605	257,341	6,706	823	9
GREATER LAWRENCE	LAWRENCE	4,049,298	1,435	2,822	762,951	1,196	638	-3,286,347	-2,184	823	149
GREATER LAWRENCE	METHUEN	544,572	227	2,399	1,396,514	205	6,812	851,942	4,413	823	181
GREATER LAWRENCE	NORTH ANDOVER	74,424	19	3,917	264,447	20	13,222	190,023	9,305	823	211
GREATER NEW BEDFORD	DARTMOUTH	444,815	158	2,815	1,955,665	188	10,402	1,510,850	7,587	825	72
GREATER NEW BEDFORD	FAIRHAVEN	593,696	184	3,227	1,972,334	254	7,765	1,378,638	4,538	825	94
GREATER NEW BEDFORD	NEW BEDFORD	1,686,062	1,486	1,135	3,244,649	1,580	2,054	1,558,587	919	825	201
GREATER LOWELL	DRACUT	1,669,997	307	5,440	2,335,586	325	7,186	665,589	1,747	828	79
GREATER LOWELL	DUNSTABLE	95,806	10	9,581	135,386	17	7,964	39,580	-1,617	828	81

GREATER LOWELL	LOWELL	4,598,796	1,590	2,892	5,249,231	1,634	3,213	650,435	320	828	160
GREATER LOWELL	TYNGSBOROUGH	55,146	64	862	790,794	101	7,830	735,648	6,968	828	301
SOUTH MIDDLESEX	ASHLAND	814,439	58	14,042	543,555	47	11,565	-270,884	-2,477	829	14
SOUTH MIDDLESEX	FRAMINGHAM	6,123,768	528	11,598	5,845,486	504	11,598	-278,282	0	829	100
SOUTH MIDDLESEX	HOLLISTON	492,367	38	12,957	275,951	26	10,614	-216,416	-2,344	829	136
SOUTH MIDDLESEX	HOPKINTON	292,669	25	11,707	282,369	24	11,765	-10,300	59	829	139
SOUTH MIDDLESEX	NATICK	923,362	87	10,613	768,140	60	12,802	-155,222	2,189	829	198
MINUTEMAN	ACTON	501,272	41	12,226	350,935	33	10,634	-150,337	-1,592	830	2
MINUTEMAN	ARLINGTON	965,245	140	6,895	1,840,074	151	12,186	874,829	5,291	830	10
MINUTEMAN	BELMONT	391,059	27	14,484	397,190	32	12,412	6,131	-2,071	830	26
MINUTEMAN	BOLTON	172,947	15	11,530	130,466	11	11,861	-42,481	331	830	34
MINUTEMAN	BOXBOROUGH	20,086	11	1,826	142,241	13	10,942	122,155	9,116	830	37
MINUTEMAN	CARLISLE	53,765	7	7,681	94,552	7	13,507	40,787	5,827	830	51
MINUTEMAN	CONCORD	229,706	12	19,142	301,471	21	14,356	71,765	-4,786	830	67
MINUTEMAN	DOVER	30,174	2	15,087	13,947	1	13,947	-16,227	-1,140	830	78
MINUTEMAN	LANCASTER	454,637	34	13,372	292,764	30	9,759	-161,873	-3,613	830	147
MINUTEMAN	LEXINGTON	517,628	43	12,038	882,483	67	13,171	364,855	1,134	830	155
MINUTEMAN	LINCOLN	70,970	7	10,139	54,387	4	13,597	-16,583	3,458	830	157
MINUTEMAN	NEEDHAM	159,545	22	7,252	224,077	18	12,449	64,532	5,197	830	199
MINUTEMAN	STOW	467,925	51	9,175	521,176	41	12,712	53,251	3,537	830	286
MINUTEMAN	SUDBURY	109,159	20	5,458	131,807	11	11,982	22,648	6,525	830	288
MINUTEMAN	WAYLAND	83,072	9	9,230	244,686	18	13,594	161,614	4,363	830	315
MINUTEMAN	WESTON	9,242	2	4,621	42,647	3	14,216	33,405	9,595	830	330
MONTACHUSETT	ASHBURNHAM	354,212	52	6,812	334,583	48	6,970	-19,629	159	832	11
MONTACHUSETT	ASHBY	353,802	45	7,862	266,113	42	6,336	-87,689	-1,526	832	12
MONTACHUSETT	ATHOL	195,738	102	1,919	51,158	117	437	-144,580	-1,482	832	15
MONTACHUSETT	BARRE	74,385	16	4,649	128,244	32	4,008	53,859	-641	832	21
MONTACHUSETT	FITCHBURG	1,417,199	348	4,072	1,452,990	408	3,561	35,791	-511	832	97
MONTACHUSETT	GARDNER	257,529	135	1,908	517,287	146	3,543	259,758	1,635	832	103

MONTACHUSETT	HARVARD	30,518	1	30,518	56,390	5	11,278	25,872	-19,240	832	125
MONTACHUSETT	HOLDEN	282,742	38	7,441	383,409	42	9,129	100,667	1,688	832	134
MONTACHUSETT	HUBBARDSTON	171,119	35	4,889	203,301	53	3,836	32,182	-1,053	832	140
MONTACHUSETT	LUNENBURG	271,256	44	6,165	498,770	55	9,069	227,514	2,904	832	162
MONTACHUSETT	PETERSHAM	35,793	10	3,579	27,213	4	6,803	-8,580	3,224	832	234
MONTACHUSETT	PHILLIPSTON	37,485	16	2,343	91,405	17	5,377	53,920	3,034	832	235
MONTACHUSETT	PRINCETON	241,600	23	10,504	189,248	17	11,132	-52,352	628	832	241
MONTACHUSETT	ROYALSTON	28,869	19	1,519	32,960	25	1,318	4,091	-201	832	255
MONTACHUSETT	STERLING	238,850	52	4,593	522,732	55	9,504	283,882	4,911	832	282
MONTACHUSETT	TEMPLETON	84,685	50	1,694	205,834	67	3,072	121,149	1,378	832	294
MONTACHUSETT	WESTMINSTER	244,724	56	4,370	375,183	60	6,253	130,459	1,883	832	328
MONTACHUSETT	WINCHENDON	249,495	92	2,712	573,072	141	4,064	323,577	1,352	832	343
NORTHERN BERKSHIRE	ADAMS	235,600	113	2,085	444,850	136	3,271	209,250	1,186	851	4
NORTHERN BERKSHIRE	CLARKSBURG	80,538	31	2,598	132,389	38	3,484	51,851	886	851	63
NORTHERN BERKSHIRE	FLORIDA	92,985	27	3,444	165,695	28	5,918	72,710	2,474	851	98
NORTHERN BERKSHIRE	MONROE	24,778	2	12,389	16,717	2	8,359	-8,061	-4,031	851	190
NORTHERN BERKSHIRE	NORTH ADAMS	1,075,345	219	4,910	559,486	197	2,840	-515,859	-2,070	851	209
NORTHERN BERKSHIRE	SAVOY	100,197	11	9,109	78,044	14	5,575	-22,153	-3,534	851	263
NORTHERN BERKSHIRE	WILLIAMSTOWN	7,776	15	518	231,128	17	13,596	223,352	13,077	851	341
NASHOBA VALLEY	CHELMSFORD	775,107	93	8,334	1,334,714	117	11,408	559,607	3,073	852	56
NASHOBA VALLEY	GROTON	436,490	46	9,489	338,456	43	7,871	-98,034	-1,618	852	115
NASHOBA VALLEY	LITTLETON	37,555	20	1,878	461,854	42	10,997	424,299	9,119	852	158
NASHOBA VALLEY	PEPPERELL	700,063	116	6,035	653,697	107	6,109	-46,366	74	852	232
NASHOBA VALLEY	SHIRLEY	126,308	42	3,007	337,220	54	6,245	210,912	3,237	852	270
NASHOBA VALLEY	TOWNSEND	975,540	99	9,854	508,369	78	6,518	-467,171	-3,336	852	299
NASHOBA VALLEY	WESTFORD	346,763	47	7,378	495,813	55	9,015	149,050	1,637	852	326
NORTHEAST METROPOLITAN	CHELSEA	1,318,103	269	4,900	500,735	205	2,443	-817,368	-2,457	853	57
NORTHEAST METROPOLITAN	MALDEN	996,957	163	6,116	1,217,003	218	5,583	220,046	-534	853	165

NORTHEAST METROPOLITAN	MELROSE	66,958	40	1,674	741,668	68	10,907	674,710	9,233	853	178
NORTHEAST METROPOLITAN	NORTH READING	137,930	29	4,756	359,510	34	10,574	221,580	5,818	853	217
NORTHEAST METROPOLITAN	READING	143,894	23	6,256	353,897	33	10,724	210,003	4,468	853	246
NORTHEAST METROPOLITAN	REVERE	1,866,941	273	6,839	1,552,868	242	6,417	-314,073	-422	853	248
NORTHEAST METROPOLITAN	SAUGUS	1,027,521	148	6,943	1,861,097	145	12,835	833,576	5,892	853	262
NORTHEAST METROPOLITAN	STONEHAM	314,391	28	11,228	580,300	46	12,615	265,909	1,387	853	284
NORTHEAST METROPOLITAN	WAKEFIELD	292,204	34	8,594	892,935	72	12,402	600,731	3,808	853	305
NORTHEAST METROPOLITAN	WINCHESTER	65,039	9	7,227	73,032	6	12,172	7,993	4,945	853	344
NORTHEAST METROPOLITAN	WINTHROP	163,061	40	4,077	510,837	51	10,016	347,776	5,940	853	346
NORTHEAST METROPOLITAN	WOBURN	1,203,079	95	12,664	1,109,870	86	12,905	-93,209	241	853	347
NORTH SHORE	BEVERLY	878,752	104	8,450	1,218,832	101	12,068	340,080	3,618	854	30
NORTH SHORE	BOXFORD	45,111	5	9,022	100,009	9	11,112	54,898	2,090	854	38
NORTH SHORE	DANVERS	573,907	66	8,696	902,354	71	12,709	328,447	4,014	854	71
NORTH SHORE	ESSEX	39,062	5	7,812	97,715	8	12,214	58,653	4,402	854	92
NORTH SHORE	GLOUCESTER	283,001	53	5,340	665,051	56	11,876	382,050	6,536	854	107
NORTH SHORE	HAMILTON	35,007	9	3,890	104,053	9	11,561	69,046	7,672	854	119
NORTH SHORE	LYNNFIELD	93,628	8	11,704	76,194	7	10,885	-17,434	-819	854	164
NORTH SHORE	MANCHESTER	38,557	5	7,711	25,781	2	12,891	-12,776	5,179	854	166
NORTH SHORE	MARBLEHEAD	34,939	10	3,494	113,372	10	11,337	78,433	7,843	854	168
NORTH SHORE	MIDDLETON	60,728	14	4,338	201,141	19	10,586	140,413	6,249	854	184
NORTH SHORE	NAHANT	42,997	6	7,166	62,882	5	12,576	19,885	5,410	854	196
NORTH SHORE	ROCKPORT	225,652	21	10,745	112,952	9	12,550	-112,700	1,805	854	252
NORTH SHORE	SALEM	586,050	97	6,042	1,110,851	117	9,494	524,801	3,453	854	258
NORTH SHORE	SWAMPSCOTT	20,372	10	2,037	207,271	17	12,192	186,899	10,155	854	291
NORTH SHORE	TOPSFIELD	36,771	5	7,354	21,688	2	10,844	-15,083	3,490	854	298

NORTH SHORE	WENHAM	34,308	5	6,862	10,320	1	10,320	-23,988	3,458	854	320
OLD COLONY	ACUSHNET	912,074	170	5,365	1,443,225	222	6,501	531,151	1,136	855	3
OLD COLONY	CARVER	165,406	102	1,622	524,890	96	5,468	359,484	3,846	855	52
OLD COLONY	LAKEVILLE	689,072	103	6,690	605,576	79	7,666	-83,496	975	855	146
OLD COLONY	MATTAPOISETT	244,596	24	10,192	363,791	30	12,126	119,195	1,935	855	173
OLD COLONY	ROCHESTER	245,378	60	4,090	609,126	72	8,460	363,748	4,370	855	250
PATHFINDER	BELCHERTOWN	751,999	96	7,833	526,079	90	5,845	-225,920	-1,988	860	24
PATHFINDER	GRANBY	385,102	42	9,169	218,979	33	6,636	-166,123	-2,533	860	111
PATHFINDER	HARDWICK	78,874	24	3,286	85,070	21	4,051	6,196	765	860	124
PATHFINDER	MONSON	521,183	96	5,429	470,956	85	5,541	-50,227	112	860	191
PATHFINDER	NEW BRAintree	41,678	8	5,210	43,652	7	6,236	1,974	1,026	860	202
PATHFINDER	PALMER	595,682	123	4,843	867,599	180	4,820	271,917	-23	860	227
PATHFINDER	WARE	562,813	106	5,310	660,893	120	5,507	98,080	198	860	309
PATHFINDER	WARREN				205,912	52	3,960	205,912	3,960	860	311
SHAWSHEEN VALLEY	BEDFORD	161,989	20	8,099	296,199	23	12,878	134,210	4,779	871	23
SHAWSHEEN VALLEY	BILLERICA	4,866,242	525	9,269	4,915,862	545	9,020	49,620	-249	871	31
SHAWSHEEN VALLEY	BURLINGTON	947,001	87	10,885	1,078,046	86	12,535	131,045	1,650	871	48
SHAWSHEEN VALLEY	TEWKSBURY	2,808,834	311	9,032	3,271,319	371	8,818	462,485	-214	871	295
SHAWSHEEN VALLEY	WILMINGTON	2,428,086	246	9,870	2,286,673	239	9,568	-141,413	-303	871	342
SOUTHEASTERN	BROCKTON	2,572,528	782	3,290	2,397,619	822	2,917	-174,909	-373	872	44
SOUTHEASTERN	EAST BRIDGEWATER	257,308	63	4,084	497,695	76	6,549	240,387	2,464	872	83
SOUTHEASTERN	EASTON	333,849	66	5,058	699,807	73	9,586	365,958	4,528	872	88
SOUTHEASTERN	FOXBOROUGH	76,014	46	1,652	273,685	29	9,437	197,671	7,785	872	99
SOUTHEASTERN	MANSFIELD	181,852	44	4,133	343,001	42	8,167	161,149	4,034	872	167
SOUTHEASTERN	NORTON	373,984	80	4,675	904,729	128	7,068	530,745	2,393	872	218
SOUTHEASTERN	SHARON	10,282	16	643	117,381	11	10,671	107,099	10,028	872	266
SOUTHEASTERN	STOUGHTON	603,498	125	4,828	1,073,007	120	8,942	469,509	4,114	872	285
SOUTHEASTERN	WEST BRIDGEWATER	282,259	40	7,056	299,297	28	10,689	17,038	3,633	872	323

SOUTH SHORE	ABINGTON	561,413	92	6,102	1,011,878	118	8,575	450,465	2,473	873	1		
SOUTH SHORE	COHASSET	48,676	7	6,954	110,636	9	12,293	61,960	5,339	873	65		
SOUTH SHORE	HANOVER	334,542	41	8,160	589,126	59	9,985	254,584	1,826	873	122		
SOUTH SHORE	HANSON	285,175	52	5,484	314,297	79	3,978	29,122	-1,506	873	123		
SOUTH SHORE	NORWELL	87,938	18	4,885	104,778	9	11,642	16,840	6,757	873	219		
SOUTH SHORE	ROCKLAND	675,622	96	7,038	1,084,643	150	7,231	409,021	193	873	251		
SOUTH SHORE	SCITUATE	286,062	42	6,811	526,067	48	10,960	240,005	4,149	873	264		
SOUTH SHORE	WHITMAN	973,591	107	9,099	526,305	112	4,699	-447,286	-4,400	873	338		
SOUTHERN WORCESTER	AUBURN	388,015	80	4,850	915,636	94	9,741	527,621	4,891	876	17		
SOUTHERN WORCESTER	CHARLTON	855,830	131	6,533	626,885	121	5,181	-228,945	-1,352	876	54		
SOUTHERN WORCESTER	DUDLEY	259,041	71	3,648	338,489	97	3,490	79,448	-159	876	80		
SOUTHERN WORCESTER	NORTH BROOKFIELD				203,529	41	4,964	203,529	4,964	876	215		
SOUTHERN WORCESTER	OXFORD	450,982	105	4,295	961,105	148	6,494	510,123	2,199	876	226		
SOUTHERN WORCESTER	PAXTON				145,673	15	9,712	145,673	9,712	876	228		
SOUTHERN WORCESTER	RUTLAND	104,056	36	2,890	266,403	53	5,026	162,347	2,136	876	257		
SOUTHERN WORCESTER	SOUTHBRIDGE	1,026,969	261	3,935	1,137,067	303	3,753	110,098	-182	876	277		
SOUTHERN WORCESTER	SPENCER				397,873	110	3,617	397,873	3,617	876	280		
SOUTHERN WORCESTER	WEBSTER	777,094	135	5,756	781,037	113	6,912	3,943	1,156	876	316		
TRI COUNTY	FRANKLIN	1,287,001	169	7,615	1,257,132	192	6,548	-29,869	-1,068	878	101		
TRI COUNTY	MEDFIELD	32,862	8	4,108	146,651	14	10,475	113,789	6,367	878	175		
TRI COUNTY	MEDWAY	191,211	44	4,346	507,079	62	8,179	315,868	3,833	878	177		
TRI COUNTY	MILLIS	225,597	37	6,097	499,167	53	9,418	273,570	3,321	878	187		
TRI COUNTY	NORFOLK	137,483	30	4,583	360,892	41	8,802	223,409	4,219	878	208		
TRI COUNTY	NORTH ATTLEBOROUGH	1,072,072	212	5,057	1,603,025	251	6,387	530,953	1,330	878	212		
TRI COUNTY	PLAINVILLE	713,469	83	8,596	620,780	76	8,168	-92,689	-428	878	238		
TRI COUNTY	SEEKONK	695,706	77	9,035	708,449	63	11,245	12,743	2,210	878	265		
TRI COUNTY	SHERBORN	84,477	7	12,068	24,949	2	12,475	-59,528	406	878	269		
TRI COUNTY	WALPOLE	424,829	56	7,586	635,055	59	10,764	210,226	3,177	878	307		
TRI COUNTY	WRENTHAM	436,641	76	5,745	652,112	80	8,151	215,471	2,406	878	350		

UPPER CAPE COD	BOURNE	428,948	99	4,333	1,319,077	126	10,469	890,129	6,136	879	36
UPPER CAPE COD	FALMOUTH	1,160,477	162	7,163	2,407,305	187	12,873	1,246,828	5,710	879	96
UPPER CAPE COD	MARION	90,991	13	6,999	297,016	24	12,376	206,025	5,376	879	169
UPPER CAPE COD	SANDWICH	670,956	97	6,917	1,523,934	139	10,964	852,978	4,046	879	261
UPPER CAPE COD	WAREHAM	1,465,579	257	5,703	1,562,090	194	8,052	96,511	2,349	879	310
WHITTIER	AMESBURY	584,026	81	7,210	563,489	62	9,089	-20,537	1,878	885	7
WHITTIER	GEORGETOWN	507	5	101	142,421	16	8,901	141,914	8,800	885	105
WHITTIER	GROVELAND	234,632	33	7,110	256,714	34	7,550	22,082	440	885	116
WHITTIER	HAVERHILL	5,590,669	828	6,752	4,614,524	649	7,110	-976,145	358	885	128
WHITTIER	IPSWICH	148,298	21	7,062	395,737	33	11,992	247,439	4,930	885	144
WHITTIER	MERRIMAC	317,837	51	6,232	196,772	33	5,963	-121,065	-269	885	180
WHITTIER	NEWBURY	6,983	9	776	87,325	8	10,916	80,342	10,140	885	203
WHITTIER	NEWBURYPORT	98,913	20	4,946	286,691	22	13,031	187,778	8,086	885	204
WHITTIER	ROWLEY	34,517	5	6,903	147,090	15	9,806	112,573	2,903	885	254
WHITTIER	SALISBURY	84,892	41	2,071	296,477	31	9,564	211,585	7,493	885	259
WHITTIER	WEST NEWBURY	41,515	1	41,515	42,311	5	8,462	796	-33,053	885	329