

**Department of
Elementary and
Secondary
Education**

School Finance: Chapter 70 Program

FY16 Preliminary Chapter 70 Aid and Net School Spending Requirements

March 4, 2015






Pursuant to section 6 of chapter 70 of the General Laws, the Commissioner of Elementary and Secondary Education is issuing the preliminary estimates of Chapter 70 school aid and net school spending requirements for FY16. These estimates are based on House 1, Governor Baker's proposed state budget for the coming fiscal year. The proposal increases aid from \$4,400,696,187 to \$4,505,983,533, an increase of \$105 million or 2.4 percent.

These are preliminary estimates subject to change as the House and Senate deliberate on the budget. Our purpose in providing these estimates at this time is to assist cities, towns and regional school districts in their budget preparations for FY16. We advise you to construct your local budgets with sufficient flexibility to accommodate the changes that typically occur in the state budget process. The Commissioner will issue the final, official school spending requirements as soon as the Governor and Legislature approve either the FY16 state budget or an earlier local aid resolution.

Here are some of the key points about the proposal:

- The aggregate wealth model used in the formula since FY07 continues to be in effect. For municipalities with required contributions above their targets, the equity component of the formula is reduced by 45% of the gap.
- 78 operating districts receive foundation aid to ensure that they do not fall below their foundation budgets.
- Foundation budgets are raised by an inflation factor of 1.50 percent.
- Enrollment grew by .14 percent; forty percent of districts saw increases of as much as 16 percent.
- Worthington has withdrawn membership from the Gateway Regional School District.

The Department of Elementary and Secondary Education has prepared the following materials to assist local officials in understanding the state aid calculations and local contribution requirements in this year's Chapter 70 program:

-  **Summary chart**, showing foundation enrollment, foundation budget, Chapter 70 aid, and required local contributions for each school district.
-  **Summary chart for regional school districts**, showing foundation enrollment and required local contribution for each member of the district.
-  **Powerpoint presentation**, describing the major components of the formula.
-  **White paper**, describing the major components of the formula in greater detail.
-  **Complete formula spreadsheet**, showing the detailed calculations for each municipality and district

Questions about the Chapter 70 program should be directed to:

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School Finance: Chapter 70 Program

Chapter 70 Aid and Required Contribution Calculations

Chapter 70 is the Commonwealth's program for ensuring adequate and equitable K-12 education funding. It determines an adequate spending level for each school district (the foundation budget). It then uses each community's property values and residents' incomes to determine how much of the foundation budget should be funded from local property taxes. Chapter 70 state aid pays for the remaining amount.

Summary of how the formula works

A **foundation budget** is calculated for each school district, representing the minimum spending level needed to provide an adequate education. The foundation budget is adjusted each year to reflect changes in the district's enrollment; changes in student demographics (grade levels; low income status; English language proficiency); inflation, and geographical differences in wage levels. A description of how foundation budgets are calculated is available at [\[icon \]](#) [\[icon \]](#).

The inflation adjustment for FY16 foundation budgets is set at 1.50 percent, in accordance with the Chapter 70 statute, which stipulates usage of the ratio of the current year's third-quarter inflation index (2014 = 111.214) to the prior year's third-quarter index (2013 = 109.571). Enrollment grew from 940,833 in FY15 to 942,140 in FY16, a .14 percent increase. 60 percent of districts saw enrollment decline by as much as 16 percent. 40 percent of districts saw increases of as much as 17 percent.

The total statewide foundation budget increased from \$9.866 billion in FY15 to \$10.090 billion in FY16, a 2.3 percent rise.

A **target local contribution** establishes an ideal goal for how much each city and town should contribute toward its foundation budget, based on the municipality's wealth. Two measures of municipal wealth are used: aggregate property values and aggregate personal income levels, with each given equal weight. The target is recalculated each year based upon the most recent income and property valuations.

Target calculations assume that local contributions in total should cover 59 percent of the state-wide foundation budget (**target local share**), with state aid covering the remaining 41 percent (**target aid share**). The target local share and target aid share for any individual city or town will vary in proportion to the municipality's wealth. The target calculation also includes a **maximum local share** of 82.5 percent, thus ensuring that all communities will get some minimum amount of state funding.

The **required local contribution** for each municipality is based on the previous year's required contribution, and includes some transition factors so that the shift toward the target levels occurs over a period of several years.

- Municipalities whose local contribution requirements are now higher than their targets will see a reduction in the requirement of 45 percent of the amount above the target.
- Municipalities whose local contribution requirements are now lower than their targets will continue to see their requirements increased by the municipal revenue growth factor. If they are more than 2.5 percent below their target, an increment of either 1 or 2 percent will be added to their growth factor.

In FY16, the **Chapter 70 aid** calculation begins with each district's FY15 Chapter 70 amount. If the sum of that amount and the required local contribution is less than the district's foundation budget, then foundation aid is added to cover the gap.

Target contribution calculations

- Determine the state-wide target local contribution level. Fifty-nine percent of the statewide foundation budget of \$10.090 billion amounts to a total target local contribution of \$5.953 billion. For FY16, the **property percentage** is set at .3808%, which is applied to each municipality's 2014 aggregate equalized property valuation. The **income percentage** is set at 1.4930%, which is applied to each municipality's aggregate total personal income, as reported to the Department of Revenue by local residents for the 2012 calendar year. When these two factors are applied statewide, they yield a total local contribution of \$7.442 billion with half (\$3.721 billion) coming from the property percentage and the other half from the income percentage.
- Apply the property percentage and the income percentage to each individual municipality's aggregate property valuation and income, which determines the municipality's combined effort yield. Some municipalities have so much wealth, or a small enough student population, that their **combined effort yield** is excessive. The **maximum local**

contribution is set at 82.5 percent of foundation budget, which means that the formula would fund a minimum of 17.5 percent of foundation through state aid, even for the wealthiest of communities. In FY16, 143 communities are assigned this maximum contribution. A municipality's target **local contribution** is the lesser of the combined effort yield and the maximum local contribution. The total target local contribution for all municipalities, after taking into account the 82.5 percent cap, equals 59 percent of statewide foundation budgets, or \$5.953 billion.

- A city or town's target local share presents the target local contribution as a percentage of its municipal foundation budget.

Calculation of the FY16 increments toward the targets

- Increase (or decrease) the city or town's FY15 required local contribution by the **municipal revenue growth factor (mrgf)**. The mrgf has been calculated each year since FY94 by the Massachusetts Department of Revenue and quantifies the most recent annual percentage change in each community's local revenues (such as the annual increase in the Proposition 2½ levy limit) that should be available for schools. The state average mrgf is 4.09 percent. The result of applying the mrgf to the FY15 required contribution is the FY16 **preliminary local contribution**.
- If the preliminary local contribution is **greater than** the target local contribution, then the difference is called **excess local effort**. In FY16, 278 or 80 percent of the 351 cities and towns have a total of \$235 million in excess local effort. For each of these communities the preliminary local contribution is reduced by 45 percent of their excess effort to arrive at the FY16 **required local contribution**.
- If the preliminary local contribution is **less than** the city or town's target local contribution, an additional increment may augment the preliminary contribution. If the community is more than 7.5 percent below its target, the increment is 2 percent of the FY15 local contribution. If it is between 2.5 and 7.5 percent, the increment is 1 percent. If it is less than 2.5 percent, there is no additional increment. In FY16, 73 cities and towns have preliminary contributions that are below target, by \$133 million. Those who fall below by more than 2.5 percent are required to make additional increments totaling \$5.9 million to get closer to their effort goals.
- Most cities and towns belong to at least one regional school district. Some operate a local district and are members of as many as three regionals. A municipality's total contribution is apportioned among the various districts to which it belongs, based on each district's share of the total foundation budget for all of the municipality's students.

Calculation of aid

- The aid calculation begins with each district's FY15 Chapter 70 amount.
- The difference between each district's foundation budget and its required contribution equals **foundation aid**. 78 operating districts receive increases over FY15 through this calculation.
- Each district is guaranteed to receive at least \$20 per pupil in additional Chapter 70 aid. 246 operating districts receive aid through this calculation.

Net School Spending Requirements

Each district must spend the sum of its required district contribution and its Chapter 70 aid. This sum is referred to as the "net school spending requirement."

Massachusetts Department of Elementary and Secondary Education FY16 Chapter 70 Summary

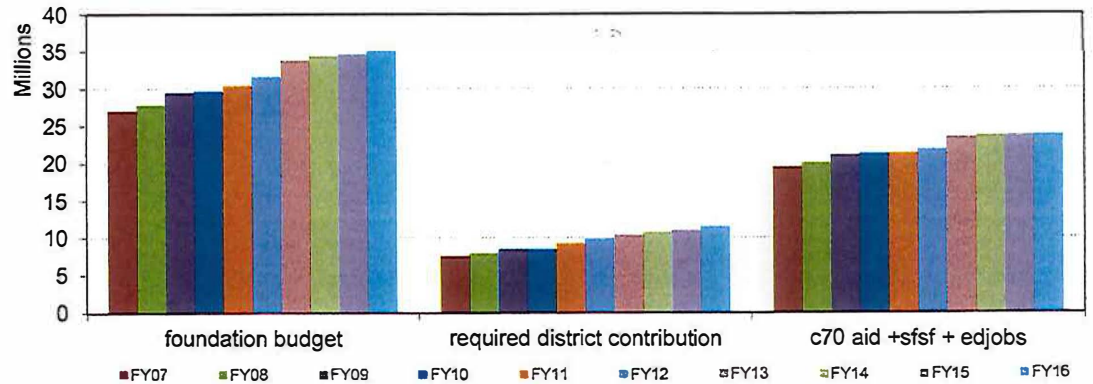
828 Greater Lowell

Aid Calculation FY16

Prior Year Aid	
1 Chapter 70 FY15	23,685,627
Foundation Aid	
2 Foundation budget FY16	34,992,565
3 Required district contribution FY16	11,436,968
4 Foundation aid (2 -3)	23,555,597
5 Increase over FY14 (4 - 1)	0
Minimum Aid	
6 Minimum \$20 per pupil increase	43,900
Non-Operating District Reduction to Foundation	
6 Reduction to foundation	0
FY16 Preliminary Chapter 70 Aid	
7 sum of line 1, 5 minus 6	23,729,527

Comparison to FY15

	FY15	FY16	Change	Pct Chg
Enrollment	2,190	2,195	5	0.23%
Foundation budget	34,545,660	34,992,565	446,905	1.29%
Required district contribution	10,980,189	11,436,968	456,779	4.16%
Chapter 70 aid	23,685,627	23,729,527	43,900	0.19%
Required net school spending (NSS)	34,665,816	35,166,495	500,679	1.44%
Target aid share	65.40%	65.32%		
C70 % of foundation	68.56%	67.81%		
Required NSS % of foundation	100.35%	100.50%		



**Massachusetts Department of Elementary and Secondary Education
FY16 Chapter 70**

Regional District Enrollment and Contributions by Member City or Town

828 Greater Lowell

LEA	Member	Foundation Enrollment			Required Minimum Contribution		
		FY15	FY16	Change	FY15	FY16	Change
	District Total	2,190	2,195	5	10,980,189	11,436,968	456,779
	79 DRACUT	467	453	-14	3,792,487	3,869,112	76,625
	81 DUNSTABLE	15	11	-4	174,980	136,306	-38,674
	160 LOWELL	1,599	1,626	27	5,866,015	6,291,388	425,373
	301 TYNGSBOROUGH	109	105	-4	1,146,707	1,140,162	-6,545

Massachusetts Department of Elementary and Secondary Education

Office of School Finance

FY16 Chapter 70 Foundation Budget

828 GREATER LOWELL

	Base Foundation Components										--- Incremental Costs Above The Base ---				TOTAL*	
	(1) Pre-School	(2) Kindergarten		(3) Full-Day	(4) Elementary	(5) Jr High/ Middle	(6) High School	(7) ELL PK	(8) ELL K Half	(9) ELL KF - 12	(10) Voca- tional	(11) Special Ed In District	(12) Special Ed Out of Dist	(13) Low Income		
		Half-Day												Elem	Other	
Foundation Enrollment	0	0	0	0	0	0	49	0	0	0	2,146	104	0	0	1,284	2,195
1 Administration	0	0	0	0	0	0	17,875	0	0	0	782,861	261,851	0	0	0	1,062,587
2 Instructional Leadership	0	0	0	0	0	0	32,285	0	0	0	1,413,935	0	0	0	0	1,446,220
3 Classroom and Specialist Teachers	0	0	0	0	0	0	191,575	0	0	0	14,263,410	864,043	0	0	2,636,617	17,955,646
4 Other Teaching Services	0	0	0	0	0	0	22,754	0	0	0	996,517	806,746	0	0	0	1,826,016
5 Professional Development	0	0	0	0	0	0	6,158	0	0	0	445,874	41,681	0	0	76,809	570,522
6 Instructional Equipment & Tech	0	0	0	0	0	0	34,282	0	0	0	2,627,455	36,381	0	0	0	2,698,119
7 Guidance and Psychological	0	0	0	0	0	0	17,975	0	0	0	787,217	0	0	0	0	805,192
8 Pupil Services	0	0	0	0	0	0	24,212	0	0	0	1,060,382	0	0	0	0	1,084,593
9 Operations and Maintenance	0	0	0	0	0	0	43,212	0	0	0	3,541,866	292,501	0	0	539,010	4,416,589
10 Employee Benefits/Fixed Charges	0	0	0	0	0	0	33,849	0	0	0	2,407,597	331,368	0	0	354,268	3,127,082
11 Special Ed Tuition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 Total	0	0	0	0	0	0	424,175	0	0	0	28,327,114	2,634,572	0	0	3,606,705	34,992,566
13 Wage Adjustment Factor	100.0%											Foundation Budget Per Pupil				15,942

Total foundation enrollment does not include columns 11 through 14, because those columns represent increments above the base. The pupils are already counted in columns 1 to 10.

Total foundation enrollment assigns pupils in pre-kindergarten and half-time kindergarten an enrollment count of .5.

Special education in-district headcount is an assumed percentage, representing 3.75 percent of K to 12 non-vocational enrollment and 4.75 percent of vocational enrollment.

Special education out-of-district headcount is also an assumed percentage, representing 1 percent of non-vocational K-12 enrollment.

Low income headcounts are the number of pupils in columns 1 through 10 who are eligible for free or reduced lunch.

Each component of the foundation budget represents the enrollment on line 1 multiplied by the appropriate state-wide foundation allotment.

The wage adjustment factor is applied to underlying rates in all functions except instructional equipment, benefits and special education tuition.

The foundation budget shown on this page may differ from the final number used in the formula, due to rounding error.

Massachusetts Department of Elementary and Secondary Education
Chapter 70 Trends

828 GREATER LOWELL

	Foundation Enrollment	Pct Chg	Foundation Budget	Pct Chg	Required Local Contribution	Chapter 70 Aid	Pct Chg	Required Net School Spending (NSS)	Pct Chg	Actual Net School Spending	Pct Chg	Dollars Over/Under Requirement	Percent Over/Under
FY06	2,063	3.3	24,208,574	7.8	6,905,055	17,303,519	9.2	24,208,574	7.8	24,667,561	7.8	458,987	1.9
FY07	2,090	1.3	27,036,778	11.7	7,606,125	19,430,653	12.3	27,036,778	11.7	26,454,413	7.2	-582,365	-2.2
FY08	2,064	-1.2	27,800,682	2.8	8,491,402	19,937,045	2.6	28,428,447	5.1	28,377,446	7.3	-51,001	-0.2
FY09	2,077	0.6	29,465,237	6.0	8,561,998	18,820,473	-5.6	27,382,471	-3.7	27,518,542	-3.0	136,071	0.5
FY10	2,026	-2.5	29,630,458	0.6	8,466,385	20,611,676	9.5	29,078,061	6.2	29,634,792	7.7	556,731	1.9
FY11	2,105	3.9	30,423,898	2.7	9,232,155	20,785,128	0.8	30,017,283	3.2	30,241,825	2.0	224,542	0.7
FY12	2,152	2.2	31,597,336	3.9	9,860,549	21,736,787	4.6	31,597,336	5.3	31,620,112	4.6	22,776	0.1
FY13	2,203	2.4	33,772,319	6.9	10,353,219	23,419,100	7.7	33,772,319	6.9	33,794,249	6.9	21,930	0.1
FY14	2,196	-0.3	34,324,570	1.6	10,693,693	23,630,877	0.9	34,324,570	1.6	34,374,126	1.7	49,556	0.1
FY15	2,190	-0.3	34,545,660	0.6	10,980,189	23,685,627	0.2	34,665,816	1.0	34,928,965 *	1.6	263,149	0.8

Dollars Per Foundation Enrollment

Percentage of Foundation

Chapter 70
Percent of
Actual NSS

	Foundation Budget	Ch 70 Aid	Actual NSS	Ch 70	Required NSS	Actual NSS	Chapter 70 Percent of Actual NSS
FY06	11,735	8,388	11,957	71.5	100.0	101.9	70.1
FY07	12,936	9,297	12,658	71.9	100.0	97.8	73.4
FY08	13,469	9,659	13,749	71.7	102.3	102.1	70.3
FY09	14,186	9,061	13,249	63.9	92.9	93.4	68.4
FY10	14,625	10,174	14,627	69.6	98.1	100.0	69.6
FY11	14,453	9,874	14,367	68.3	98.7	99.4	68.7
FY12	14,683	10,101	14,693	68.8	100.0	100.1	68.7
FY13	15,330	10,631	15,340	69.3	100.0	100.1	69.3
FY14	15,630	10,761	15,653	68.8	100.0	100.1	68.7
FY15	15,774	10,815	15,949	68.6	100.3	101.1	67.8

* Budgeted

To see earlier years back to FY93, unhide rows 10 to 22 and 36 to 48.

Foundation enrollment is reported in October of the prior fiscal year (e.g. FY15 enrollment = Oct 1, 2013 headcount).

Foundation budget is the state's estimate of the minimum amount needed in each district to provide an adequate educational program.

Required Net School Spending is the annual minimum that must be spent on schools, including carryovers from prior years.

Net School Spending includes municipal indirect spending for schools but excludes capital expenditures, transportation, grants and revolving funds.

Federal SFSF grants in FY09, FY10, FY11, and FY12 and federal Education Jobs grants in FY11, FY12 and FY13 are not included in these calculations. Net school spending is limited to Chapter 70 aid and appropriated local contributions. However, the SFSF and Education Jobs calculations were directly based upon the Chapter 70 formula and helped districts spend at foundation budget levels.

In FY09, this district received an SFSF grant of	\$2,211,849	In FY12 the combined SFSF/Ed Jobs amount was	4,715
In FY10, this district's SFSF grant entitlement was	\$552,397	In FY13 the Education Jobs amount was	0
In FY11, the combined SFSF and Educ Jobs entitlement was	\$431,570		

Massachusetts Department of Elementary and Secondary Education
Chapter 70 Trends

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	Foundation Enrollment		Foundation Budget		Required Local Contribution	Chapter 70 Aid	Required Net School Spending (NSS)		Actual Net School Spending	Dollars Over/Under Requirement	Percent Over/Under		
	Pct Chg	Pct Chg	Pct Chg	Pct Chg		Pct Chg	Pct Chg	Pct Chg	Pct Chg				
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Dollars Per Foundation Enrollment

Percentage of Foundation

Chapter 70

	Dollars Per Foundation Enrollment			Percentage of Foundation			Chapter 70 Percent of Actual NSS
	Foundation Budget	Ch 70 Aid	Actual NSS	Ch 70	Required NSS	Actual NSS	
FY06	11,735	8,388	11,957	71.5	100.0	101.9	70.1
FY07	12,936	9,297	12,658	71.9	100.0	97.8	73.4
FY08	13,469	9,659	13,749	71.7	102.3	102.1	70.3
FY09	14,186	9,061	13,249	63.9	92.9	93.4	68.4
FY10	14,625	10,174	14,627	69.6	98.1	100.0	69.6
FY11	14,453	9,874	14,367	68.3	98.7	99.4	68.7
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FY13	15,330	10,631	15,340	69.3	100.0	100.1	69.3
FY14	15,630	10,761	15,653	68.8	100.0	100.1	68.7
FY15	15,774	10,815	15,949	68.6	100.3	101.1	67.8

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In FY09, this district received an SFSF grant of	\$2,211,849	In FY12 the combined SFSF/Ed Jobs amount was	4,715
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Member Communities

Massachusetts Department of Elementary and Secondary Education

Office of School Finance

FY16 Chapter 70 Foundation Budget

79 DRACUT

	----- Base Foundation Components -----										--- Incremental Costs Above The Base ---				TOTAL*
	(1) Pre-School	(2) Kindergarten Half-Day	(3) Kindergarten Full-Day	(4) Elementary	(5) Jr High/ Middle	(6) High School	(7) ELL PK	(8) ELL K Half	(9) ELL KF - 12	(10) Vocational	(11) Special Ed In District	(12) Special Ed Out of Dist	(13) Low Income Elem	(14) Other	
Foundation Enrollment	41	1	279	1,551	1,025	936	0	0	50	10	144	38	806	297	3,873
1 Administration	7,479	182	101,779	565,805	373,920	341,453	0	0	18,240	3,648	362,563	95,676	0	0	1,870,746
2 Instructional Leadership	13,507	329	183,825	1,021,907	675,342	616,702	0	0	32,944	6,589	0	0	0	0	2,551,145
3 Classroom and Specialist Teachers	61,934	1,511	842,904	4,685,757	2,725,065	3,659,470	0	0	227,498	66,465	1,196,368	0	2,190,772	609,872	16,267,615
4 Other Teaching Services	15,884	387	216,186	1,201,808	571,725	434,641	0	0	30,979	4,644	1,117,032	1,461	0	0	3,594,747
5 Professional Development	2,449	60	33,352	185,438	132,850	117,627	0	0	8,092	2,078	57,712	0	48,215	17,767	605,639
6 Instructional Equipment & Tech	8,964	219	121,998	678,206	448,202	654,863	0	0	21,864	12,244	50,374	0	0	0	1,996,933
7 Guidance and Psychological	4,506	110	61,335	340,972	299,946	343,353	0	0	14,632	3,668	0	0	0	0	1,068,521
8 Pupil Services	1,793	44	24,401	203,476	219,637	462,496	0	0	6,560	4,941	0	0	0	0	923,347
9 Operations and Maintenance	17,198	419	234,064	1,301,196	932,258	825,430	0	0	56,787	16,505	405,001	0	338,351	124,678	4,251,887
10 Employee Benefits/Fixed Charges	15,503	378	210,974	1,172,913	736,996	646,579	0	0	47,565	11,219	458,817	0	222,383	81,945	3,605,272
11 Special Ed Tuition	0	0	0	0	0	0	0	0	0	0	0	908,398	0	0	908,398
12 Total	149,217	3,639	2,030,819	11,357,477	7,115,940	8,102,615	0	0	465,158	132,000	3,647,868	1,005,536	2,799,722	834,261	37,644,250
13 Wage Adjustment Factor	100.0%														

Foundation Budget Per Pupil 9,720

- Total foundation enrollment does not include columns 11 through 14, because those columns represent increments above the base. The pupils are already counted in columns 1 to 10.
- Total foundation enrollment assigns pupils in pre-kindergarten and half-time kindergarten an enrollment count of .5.
- Special education in-district headcount is an assumed percentage, representing 3.75 percent of K to 12 non-vocational enrollment and 4.75 percent of vocational enrollment.
- Special education out-of-district headcount is also an assumed percentage, representing 1 percent of non-vocational K-12 enrollment.
- Low income headcounts are the number of pupils in columns 1 through 10 who are eligible for free or reduced lunch.
- Each component of the foundation budget represents the enrollment on line 1 multiplied by the appropriate state-wide foundation allotment.
- The wage adjustment factor is applied to underlying rates in all functions except instructional equipment, benefits and special education tuition.
- The foundation budget shown on this page may differ from the final number used in the formula, due to rounding error.

**Massachusetts Department of Elementary and Secondary Education
FY16 Chapter 70**

Apportionment of Local Contribution Across School Districts

79 DRACUT	DRACUT	GREATER LOWELL	ESSEX COUNTY	COMBINED TOTAL ALL DISTRICTS
<u>Prior Year Data (for comparison purposes)</u>				
1 FY15 foundation enrollment	3,957	467		4,424
2 FY15 foundation budget	37,334,954	7,366,586		44,701,540
3 Each district's share of municipality's combined FY15 foundation	83.52%	16.48%		100.00%
4 FY15 required contribution	19,220,889	3,792,487		23,013,376
<u>Apportionment of FY16 contribution among community's districts</u>				
5 FY16 total unapportioned required contribution ("municipal contribution" sheet row 19 or 24)				24,037,471
6 FY16 foundation enrollment	3,873	453		4,326
7 FY16 foundation budget	37,644,250	7,221,700		44,865,950
8 Each district's share of municipality's total FY16 foundation	83.90%	16.10%		100.00%
9 FY16 Required Contribution	20,168,359	3,869,112		24,037,471
10 Change FY15 to FY16 (9 - 4)	947,470	76,625		1,024,095

**Massachusetts Department of Elementary and Secondary Education
FY16 Determination of City and Town Total Required Contribution**

79 DRACUT

Effort Goal

1) 2014 equalized valuation	2,920,269,000
2) Property percentage	0.3808%
3) Local effort from property wealth	11,119,860
4) 2012 income	896,546,000
5) Income percentage	1.4930%
6) Local effort from income	13,385,465
7) Combined effort yield (row 3+ row 6)	24,505,326
8) Foundation budget FY16	44,865,950
9) Maximum local contribution (82.5% * row 8)	37,014,409
10) Target local contribution (lesser of row 7 or row 9)	24,505,326
11) Target local share (row 10 as % of row 8)	54.62%
12) Target aid share (100% minus row 11)	45.38%

FY16 Increments Toward Goal

13) Required local contribution FY15	23,013,376
14) Municipal revenue growth factor (DOR)	4.45%
15) FY16 preliminary contribution (13 x 14)	24,037,471
16) Preliminary contribution pct of foundation (15/8)	53.58%
<i>If preliminary contribution is above the target share:</i>	
17) Excess local effort (15 - 10)	
18) 45% reduction toward target (17 x 45%)	
19) FY16 required local contribution (15 - 18), capped at 90% of foundation	
20) Contribution as percentage of foundation (19 / 8)	
<i>If preliminary contribution is below the target share:</i>	
21) Shortfall from target local share (11 - 16)	1.04%
22) Added increment toward target (13 x 1% or 2%)*	0
<i>*1% if shortfall is between 2.5% and 7.5%; 2% if shortfall > 7.5%</i>	
23) Shortfall from target after adding increment (10 - 15 - 22)	467,855
24) FY16 required local contribution (15 + 22)	24,037,471
25) Contribution as percentage of foundation (24 / 8)	53.58%

Massachusetts Department of Elementary and Secondary Education

Office of School Finance

FY16 Chapter 70 Foundation Budget

81 DUNSTABLE

	Base Foundation Components										Incremental Costs Above The Base				TOTAL*
	(1) Pre-School	(2) Kindergarten Half-Day	(3) Kindergarten Full-Day	(4) Elementary	(5) Jr High/ Middle	(6) High School	(7) ELL PK	(8) ELL K Half	(9) ELL KF - 12	(10) Vocational	(11) Special Ed In District	(12) Special Ed Out of Dist	(13) Low Income Elem	(14) Low Income Other	
Foundation Enrollment	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
1 Administration	0	0	0	0	0	0	0	0	0	365	0	0	0	0	365
2 Instructional Leadership	0	0	0	0	0	0	0	0	0	659	0	0	0	0	659
3 Classroom and Specialist Teachers	0	0	0	0	0	0	0	0	0	6,647	0	0	0	0	6,647
4 Other Teaching Services	0	0	0	0	0	0	0	0	0	464	0	0	0	0	464
5 Professional Development	0	0	0	0	0	0	0	0	0	208	0	0	0	0	208
6 Instructional Equipment & Tech	0	0	0	0	0	0	0	0	0	1,224	0	0	0	0	1,224
7 Guidance and Psychological	0	0	0	0	0	0	0	0	0	367	0	0	0	0	367
8 Pupil Services	0	0	0	0	0	0	0	0	0	494	0	0	0	0	494
9 Operations and Maintenance	0	0	0	0	0	0	0	0	0	1,650	0	0	0	0	1,650
10 Employee Benefits/Fixed Charges	0	0	0	0	0	0	0	0	0	1,122	0	0	0	0	1,122
11 Special Ed Tuition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 Total	0	0	0	0	0	0	0	0	0	13,200	0	0	0	0	13,200
13 Wage Adjustment Factor	100.0%										Foundation Budget Per Pupil				13,200

Total foundation enrollment does not include columns 11 through 14, because those columns represent increments above the base. The pupils are already counted in columns 1 to 10.

Total foundation enrollment assigns pupils in pre-kindergarten and half-time kindergarten an enrollment count of .5.

Special education in-district headcount is an assumed percentage, representing 3.75 percent of K to 12 non-vocational enrollment and 4.75 percent of vocational enrollment.

Special education out-of-district headcount is also an assumed percentage, representing 1 percent of non-vocational K-12 enrollment.

Low income headcounts are the number of pupils in columns 1 through 10 who are eligible for free or reduced lunch.

Each component of the foundation budget represents the enrollment on line 1 multiplied by the appropriate state-wide foundation allotment.

The wage adjustment factor is applied to underlying rates in all functions except instructional equipment, benefits and special education tuition.

The foundation budget shown on this page may differ from the final number used in the formula, due to rounding error.

**Massachusetts Department of Elementary and Secondary Education
FY16 Chapter 70**

Apportionment of Local Contribution Across School Districts

81 DUNSTABLE

	DUNSTABLE	GROTON DUNSTABLE	GREATER LOWELL	COMBINED TOTAL ALL DISTRICTS
<u>Prior Year Data (for comparison purposes)</u>				
1 FY15 foundation enrollment		602	15	617
2 FY15 foundation budget		5,528,946	236,614	5,765,560
3 Each district's share of municipality's combined FY15 foundation		95.90%	4.10%	100.00%
4 FY15 required contribution		4,088,752	174,980	4,263,732
<u>Apportionment of FY16 contribution among community's districts</u>				
5 FY16 total unapportioned required contribution ("municipal contribution" sheet row 19 or 24)				4,323,762
6 FY16 foundation enrollment	1	574	11	586
7 FY16 foundation budget	13,200	5,374,058	175,361	5,562,619
8 Each district's share of municipality's total FY16 foundation	0.24%	96.61%	3.15%	100.00%
9 FY16 Required Contribution	10,260	4,177,196	136,306	4,323,762
10 Change FY15 to FY16 (9 - 4)	10,260	88,444	-38,674	60,030

**Massachusetts Department of Elementary and Secondary Education
FY16 Determination of City and Town Total Required Contribution**

81 DUNSTABLE

Effort Goal

1) 2014 equalized valuation	467,427,400
2) Property percentage	0.3808%
3) Local effort from property wealth	1,779,880
4) 2012 income	163,678,000
5) Income percentage	1.4930%
6) Local effort from income	2,443,719
7) Combined effort yield (row 3+ row 6)	4,223,598
8) Foundation budget FY16	5,562,619
9) Maximum local contribution (82.5% * row 8)	4,589,161
10) Target local contribution (lesser of row 7 or row 9)	4,223,598
11) Target local share (row 10 as % of row 8)	75.93%
12) Target aid share (100% minus row 11)	24.07%

FY16 Increments Toward Goal

13) Required local contribution FY15	4,263,732
14) Municipal revenue growth factor (DOR)	3.33%
15) FY16 preliminary contribution (13 x 14)	4,405,714
16) Preliminary contribution pct of foundation (15/8)	79.20%

If preliminary contribution is above the target share:

17) Excess local effort (15 - 10)	182,116
18) 45% reduction toward target (17 x 45%)	81,952
19) FY16 required local contribution (15 - 18), capped at 90% of foundation	4,323,762
20) Contribution as percentage of foundation (19 / 8)	77.73

If preliminary contribution is below the target share:

21) Shortfall from target local share (11 - 16)	
22) Added increment toward target (13 x 1% or 2%)*	
*1% if shortfall is between 2.5% and 7.5%; 2% if shortfall > 7.5%	
23) Shortfall from target after adding increment (10 - 15 - 22)	
24) FY16 required local contribution (15 + 22)	
25) Contribution as percentage of foundation (24 / 8)	

Massachusetts Department of Elementary and Secondary Education FY16 Chapter 70 Summary

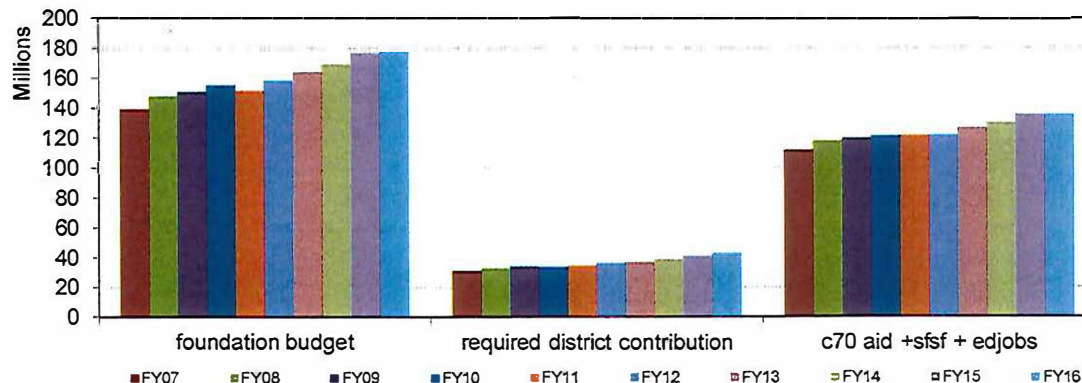
160 Lowell

Aid Calculation FY16

Prior Year Aid	
1 Chapter 70 FY15	135,128,765
Foundation Aid	
2 Foundation budget FY16	177,537,954
3 Required district contribution FY16	43,089,941
4 Foundation aid (2 -3)	134,448,013
5 Increase over FY14 (4 - 1)	0
Minimum Aid	
6 Minimum \$20 per pupil increase	306,000
Non-Operating District Reduction to Foundation	
6 Reduction to foundation	0
FY16 Preliminary Chapter 70 Aid	
7 sum of line 1, 5 minus 6	135,434,765

Comparison to FY15

	FY15	FY16	Change	Pct Chg
Enrollment	15,093	15,300	207	1.37%
Foundation budget	176,078,572	177,537,954	1,459,382	0.83%
Required district contribution	40,949,807	43,089,941	2,140,134	5.23%
Chapter 70 aid	135,128,765	135,434,765	306,000	0.23%
Required net school spending (NSS)	176,078,572	178,524,706	2,446,134	1.39%
Target aid share	73.57%	73.22%		
C70 % of foundation	76.74%	76.28%		
Required NSS % of foundation	100.00%	100.56%		



Massachusetts Department of Elementary and Secondary Education

Office of School Finance

FY16 Chapter 70 Foundation Budget

160 LOWELL

	----- Base Foundation Components -----										--- Incremental Costs Above The Base ---				TOTAL*
	(1) Pro-School	(2) --- Kindergarten --- Half-Day	(3) Full-Day	(4) Elementary	(5) Jr High/ Middle	(6) High School	(7) ELL PK	(8) ELL K Half	(9) ELL KF - 12	(10) Voca- tional	(11) Special Ed In District	(12) Special Ed Out of Dist	(13) --- Low Income --- Elem	(14) Other	
Foundation Enrollment	642	1	1,036	4,302	2,520	2,724	0	0	4,145	251	564	147	7,543	3,142	15,300
1 Administration	117,107	182	377,933	1,569,370	919,296	993,715	0	0	1,512,096	91,565	1,420,039	370,117	0	0	7,371,420
2 Instructional Leadership	211,500	329	682,589	2,834,459	1,660,352	1,794,762	0	0	2,731,016	165,376	0	0	0	0	10,080,385
3 Classroom and Specialist Teachers	969,792	1,511	3,129,922	12,996,858	6,699,672	10,649,996	0	0	18,859,543	1,668,274	4,685,774	0	20,502,477	6,451,908	86,615,727
4 Other Teaching Services	248,724	387	802,755	3,333,448	1,405,606	1,264,917	0	0	2,568,159	116,554	4,375,044	5,654	0	0	14,121,247
5 Professional Development	38,353	60	123,843	514,347	326,617	342,325	0	0	670,785	52,150	226,040	0	451,222	187,954	2,933,698
6 Instructional Equipment & Tech	140,367	219	453,012	1,881,136	1,101,920	1,905,819	0	0	1,812,484	307,312	197,298	0	0	0	7,799,567
7 Guidance and Psychological	70,556	110	227,754	945,752	737,428	999,245	0	0	1,212,951	92,074	0	0	0	0	4,285,870
8 Pupil Services	28,068	44	90,609	564,379	539,986	1,345,983	0	0	543,783	124,024	0	0	0	0	3,236,875
9 Operations and Maintenance	269,300	419	869,142	3,609,120	2,291,990	2,402,214	0	0	4,707,601	414,263	1,586,256	0	3,166,476	1,318,980	20,635,761
10 Employee Benefits/Fixed Charges	242,747	378	783,402	3,253,301	1,811,930	1,881,712	0	0	3,943,139	281,597	1,797,034	0	2,081,189	866,909	16,943,339
11 Special Ed Tuition	0	0	0	0	0	0	0	0	0	0	0	3,514,066	0	0	3,514,066
12 Total	2,336,514	3,639	7,540,961	31,502,169	17,494,798	23,580,687	0	0	38,561,557	3,313,190	14,287,485	3,889,836	26,201,365	8,825,752	177,537,954
13 Wage Adjustment Factor	100.0%														

Foundation Budget Per Pupil 11,604

- Total foundation enrollment does not include columns 11 through 14, because those columns represent increments above the base. The pupils are already counted in columns 1 to 10.
- Total foundation enrollment assigns pupils in pre-kindergarten and half-time kindergarten an enrollment count of .5.
- Special education in-district headcount is an assumed percentage, representing 3.75 percent of K to 12 non-vocational enrollment and 4.75 percent of vocational enrollment.
- Special education out-of-district headcount is also an assumed percentage, representing 1 percent of non-vocational K-12 enrollment.
- Low income headcounts are the number of pupils in columns 1 through 10 who are eligible for free or reduced lunch.
- Each component of the foundation budget represents the enrollment on line 1 multiplied by the appropriate state-wide foundation allotment.
- The wage adjustment factor is applied to underlying rates in all functions except instructional equipment, benefits and special education tuition.
- The foundation budget shown on this page may differ from the final number used in the formula, due to rounding error.

**Massachusetts Department of Elementary and Secondary Education
FY16 Determination of City and Town Total Required Contribution**

160 LOWELL

Effort Goal

1) 2014 equalized valuation	6,552,635,400
2) Property percentage	0.3808%
3) Local effort from property wealth	24,951,259
4) 2012 income	1,977,818,000
5) Income percentage	1.4930%
6) Local effort from income	29,528,897
7) Combined effort yield (row 3+ row 6)	54,480,157
8) Foundation budget FY16	203,459,554
9) Maximum local contribution (82.5% * row 8)	167,854,132
10) Target local contribution (lesser of row 7 or row 9)	54,480,157
11) Target local share (row 10 as % of row 8)	26.78%
12) Target aid share (100% minus row 11)	73.22%

FY16 Increments Toward Goal

13) Required local contribution FY15	46,815,822
14) Municipal revenue growth factor (DOR)	4.48%
15) FY16 preliminary contribution (13 x 14)	48,913,171
16) Preliminary contribution pct of foundation (15/8)	24.04%
<i>If preliminary contribution is above the target share:</i>	
17) Excess local effort (15 - 10)	
18) 45% reduction toward target (17 x 45%)	
19) FY16 required local contribution (15 - 18), capped at 90% of foundation	
20) Contribution as percentage of foundation (19 / 8)	
<i>If preliminary contribution is below the target share:</i>	
21) Shortfall from target local share (11 - 16)	2.74%
22) Added increment toward target (13 x 1% or 2%)*	468,158
<i>*1% if shortfall is between 2.5% and 7.5%; 2% if shortfall > 7.5%</i>	
23) Shortfall from target after adding increment (10 - 15 - 22)	5,098,828
24) FY16 required local contribution (15 + 22)	49,381,329
25) Contribution as percentage of foundation (24 / 8)	24.27%

**Massachusetts Department of Elementary and Secondary Education
FY16 Chapter 70**

Apportionment of Local Contribution Across School Districts

160 LOWELL

LOWELL GREATER LOWELL ESSEX COUNTY

COMBINED TOTAL ALL
DISTRICTS

Prior Year Data (for comparison purposes)

1 FY15 foundation enrollment	15,093	1,599	16,692
2 FY15 foundation budget	176,078,572	25,223,064	201,301,636
3 Each district's share of municipality's combined FY15 foundation	87.47%	12.53%	100.00%
4 FY15 required contribution	40,949,807	5,866,015	46,815,822

Apportionment of FY16 contribution among community's districts

5 FY16 total unapportioned required contribution ("municipal contribution" sheet row 19 or 24)			49,381,329
6 FY16 foundation enrollment	15,300	1,626	16,926
7 FY16 foundation budget	177,537,954	25,921,600	203,459,554
8 Each district's share of municipality's total FY16 foundation	87.26%	12.74%	100.00%
9 FY16 Required Contribution	43,089,941	6,291,388	49,381,329
10 Change FY15 to FY16 (9 - 4)	2,140,134	425,373	2,565,507

Massachusetts Department of Elementary and Secondary Education

Office of School Finance

FY16 Chapter 70 Foundation Budget

301 TYNGSBOROUGH

	Base Foundation Components										Incremental Costs Above The Base				TOTAL*
	(1) Pre-School	(2) Kindergarten Half-Day		(3) Full-Day	(4) Elementary	(5) Jr High/ Middle	(6) High School	(7) ELL PK	(8) ELL K Half	(9) ELL KF - 12	(10) Vocational	(11) Special Ed In District	(12) Special Ed Out of Dist	(13) Low Income Elom	
Foundation Enrollment	31	90	13	649	458	566	0	0	3	0	65	17	180	69	1,750
1 Administration	5,655	16,417	4,742	236,755	167,078	206,477	0	0	1,094	0	163,657	42,803	0	0	844,678
2 Instructional Leadership	10,213	29,650	8,565	427,607	301,762	372,920	0	0	1,977	0	0	0	0	0	1,152,694
3 Classroom and Specialist Teachers	46,828	135,952	39,275	1,960,707	1,217,639	2,212,885	0	0	13,650	0	540,027	0	489,254	141,687	6,797,904
4 Other Teaching Services	12,010	34,868	10,073	502,884	255,463	262,828	0	0	1,859	0	504,216	654	0	0	1,584,855
5 Professional Development	1,852	5,377	1,554	77,594	59,361	71,129	0	0	485	0	26,051	0	10,768	4,128	258,299
6 Instructional Equipment & Tech	6,778	19,678	5,685	283,788	200,270	395,996	0	0	1,312	0	22,738	0	0	0	936,244
7 Guidance and Psychological	3,407	9,891	2,858	142,676	134,025	207,626	0	0	878	0	0	0	0	0	501,360
8 Pupil Services	1,355	3,935	1,137	85,142	98,140	279,672	0	0	394	0	0	0	0	0	469,775
9 Operations and Maintenance	13,004	37,752	10,906	544,472	416,560	499,138	0	0	3,407	0	182,813	0	75,562	28,966	1,812,581
10 Employee Benefits/Fixed Charges	11,721	34,030	9,830	490,793	329,311	390,987	0	0	2,854	0	207,105	0	49,664	19,038	1,545,334
11 Special Ed Tuition	0	0	0	0	0	0	0	0	0	0	0	406,389	0	0	406,389
12 Total	112,822	327,549	94,626	4,752,419	3,179,610	4,899,658	0	0	27,909	0	1,646,607	449,845	625,248	193,818	16,310,113
13 Wage Adjustment Factor	100.0%														

Foundation Budget Per Pupil 9,320

- Total foundation enrollment does not include columns 11 through 14, because those columns represent increments above the base. The pupils are already counted in columns 1 to 10.
- Total foundation enrollment assigns pupils in pre-kindergarten and half-time kindergarten an enrollment count of .5.
- Special education in-district headcount is an assumed percentage, representing 3.75 percent of K to 12 non-vocational enrollment and 4.75 percent of vocational enrollment.
- Special education out-of-district headcount is also an assumed percentage, representing 1 percent of non-vocational K-12 enrollment.
- Low income headcounts are the number of pupils in columns 1 through 10 who are eligible for free or reduced lunch.
- Each component of the foundation budget represents the enrollment on line 1 multiplied by the appropriate state-wide foundation allotment.
- The wage adjustment factor is applied to underlying rates in all functions except instructional equipment, benefits and special education tuition.
- The foundation budget shown on this page may differ from the final number used in the formula, due to rounding error.

**Massachusetts Department of Elementary and Secondary Education
FY16 Determination of City and Town Total Required Contribution**

301 TYNGSBOROUGH

<u>Effort Goal</u>		<u>FY16 Increments Toward Goal</u>	
1) 2014 equalized valuation	1,414,054,300	13) Required local contribution FY15	12,100,740
2) Property percentage	0.3808%	14) Municipal revenue growth factor (DOR)	3.05%
3) Local effort from property wealth	5,384,465	15) FY16 preliminary contribution (13 x 14)	12,469,813
4) 2012 income	441,797,000	16) Preliminary contribution pct of foundation (15/8)	69.34%
5) Income percentage	1.4930%	<i>If preliminary contribution is above the target share:</i>	
6) Local effort from income	6,596,046	17) Excess local effort (15 - 10)	489,302
7) Combined effort yield (row 3+ row 6)	11,980,511	18) 45% reduction toward target (17 x 45%)	220,186
8) Foundation budget FY16	17,984,017	19) FY16 required local contribution (15 - 18), capped at 90% of foundation	12,249,627
9) Maximum local contribution (82.5% * row 8)	14,836,814	20) Contribution as percentage of foundation (19 / 8)	68.11
10) Target local contribution (lesser of row 7 or row 9)	11,980,511	<i>If preliminary contribution is below the target share:</i>	
11) Target local share (row 10 as % of row 8)	66.62%	21) Shortfall from target local share (11 - 16)	
12) Target aid share (100% minus row 11)	33.38%	22) Added increment toward target (13 x 1% or 2%)*	
		<i>*1% if shortfall is between 2.5% and 7.5%; 2% if shortfall > 7.5%</i>	
		23) Shortfall from target after adding increment (10 - 15 - 22)	
		24) FY16 required local contribution (15 + 22)	
		25) Contribution as percentage of foundation (24 / 8)	

**Massachusetts Department of Elementary and Secondary Education
FY16 Chapter 70**

Apportionment of Local Contribution Across School Districts

301 TYNGSBOROUGH

TYNGSBOROUGH

GREATER LOWELL

COMBINED TOTAL ALL
DISTRICTS

Prior Year Data (for comparison purposes)

1 FY15 foundation enrollment	1,802	109	1,911
2 FY15 foundation budget	16,424,709	1,719,396	18,144,105
3 Each district's share of municipality's combined FY15 foundation	90.52%	9.48%	100.00%
4 FY15 required contribution	10,954,033	1,146,707	12,100,740

Apportionment of FY16 contribution among community's districts

5 FY16 total unapportioned required contribution ("municipal contribution" sheet row 19 or 24)			12,249,627
6 FY16 foundation enrollment	1,750	105	1,855
7 FY16 foundation budget	16,310,113	1,673,904	17,984,017
8 Each district's share of municipality's total FY16 foundation	90.69%	9.31%	100.00%
9 FY16 Required Contribution	11,109,465	1,140,162	12,249,627
10 Change FY15 to FY16 (9 - 4)	155,432	-6,545	148,887