City of Newton

Citizen Advisory Group

Defining Choices about Municipal and Educational Service Levels &
Improving the City's Operational Efficiency and Effectiveness &
Developing New or Enhanced Sources of Funding

Benchmarking

October 7, 2008

Draft

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Benchmarking Interns: Jon Herrmann & Justin Masterman

Citizen Advisory Group Benchmarking Contact Person: Ruthanne Fuller (damc3@aol.com)

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I. Introduction

Mayor David Cohen, Board of Aldermen President Lisle Baker, and School Committee Chair Dori Zaleznik appointed the Citizen Advisory Group in May 2008. They asked the committee to help (1) define the choices facing Newton with respect to municipal and educational service levels and their long-term funding requirements and (2) identify, within this context, innovative ways of increasing short- and long-term operational efficiency and effectiveness and developing new or enhanced sources of funding for City services.

As one of its first steps, the Citizen Advisory Group undertook a benchmarking report. Benchmarking compares one community to others. The Citizen Advisory Group wanted to collect this data to help us decide what questions we should ask about Newton.

For the Citizen Advisory Group, benchmarking serves only to raise questions. One set of questions focuses on efficiencies. For example, if Newton is under- or over-spending compared to the benchmark communities, we will need to understand if we are being efficient/inefficient. Even when Newton is spending similar amounts to comparable communities, a red flag might be raised -- perhaps all of the communities are operating inefficiently. As a result, we would urge people to use the tables and charts in a "stand alone" manner with great caution. In many cases, the data need an explanation to be fully understood. Another set of questions raised by the benchmarking concerns community values and related spending priorities. Variances from averages by themselves are neither good nor bad but rather may reflect choices. For example, if Newton spends less/more, perhaps the question will be are we are we giving that area too few resources/investing at a high rate to meet important priorities.

In some cases, the Citizen Advisory Group will try to address the questions raised by the benchmarking in its ongoing work. The following six Citizen Advisory Group committees are doing

interviews, gathering data, and undertaking analysis: Revenue Structure, Municipal Cost Structure, School Cost Structure, Capital Structure, Decision and Control Structure, and Innovation Audit. Their reports will come out in the next three months. But, in many cases, the benchmarking data will raise questions not for the Citizen Advisory Group but for Newton's elected officials, administration and staff, and citizens. While the Citizen Advisory Group can flag the questions, given our limited scope, authority, and manpower, others may very well have to answer them.

This benchmarking exercise also requires skepticism because of the inherent problems of comparability. While our primary sources are Massachusetts databases that try to ensure the data is similar, inevitably there are anomalies. For example, one community might maintain its parks using Department of Public Works employees; another might use employees from a separate Parks and Recreation Department. One community might categorize an expenditure on curriculum development as professional development, while another would use instructional leadership. Although agencies such as the Massachusetts Department of Education require the data submitted by school districts to be audited, nonetheless there are comparability issues. Therefore, the benchmarking data must be used to indicate possible avenues of investigation rather than as definitive indicators of under- or over-spending.

Another reason to use the benchmarking cautiously and judiciously is the inherent problem of finding a community exactly like Newton with which to compare ourselves. With a population of approximately 82,000, a very high proportion of the tax base coming from residential tax payers, and a high median household income level accompanied by pockets of low income residents, Newton simply does not have a "clone," inside or outside of Massachusetts. For example, when we compare Newton to the benchmarking communities that have a similar, deep commitment to

education, our student body often has a larger percentage of students whose first language is not English and who come from families who are low income.

Readers should also understand that this report is currently in “draft” form. We welcome feedback. We are interested in answers to the following questions: Is the data complete and accurate? Are we interpreting it correctly? Do we fully understand the context and nuances embedded in the data? Is it leading us to ask the right questions? A final version will come out in January 2009.

II. Executive Summary

A. Key Questions

City/Town Benchmarking:

1. Allocation Decisions: Whether done in an explicit and transparent fashion or not, Newton has set priorities as reflected by its allocation decisions. Newton has chosen to allocate **more** of its resources to the schools, public works, culture and recreation, and human services compared to other communities. It allocates **the same** to police. It allocates **less** than other communities to fire and "general" government (i.e., the administrative back office like legal, accounting, and planning). It allocates **significantly less** to capital projects -- maintaining, refreshing and replacing its long-term assets like fire engines, buildings, roads, sidewalks and pipelines. It has **significantly less** debt than comparable communities. The benchmarking data raises the question of how explicitly and transparently these allocation decisions have been made and how much the public understands the *de facto* priorities.

2. Compensation Strategy: In general, the minimum and maximum salaries in Newton, regardless of department or pay level, are above average compared to the benchmarking communities. The benchmarking data raises the question of the advantages and disadvantages of this compensation practice in both the short- and long-term.

School Benchmarking:

1. Overall Level of Investment and Investments in Class Size and Teachers: Newton's schools represent a significant portion of the city's overall budget (56%). Compared to demographically similar communities, Newton spends more per capita on its schools and more per pupil. But, compared to those with a similar commitment to education, Newton spends less per capita on education but slightly more per pupil. (Our lower percentage of students in our population leads to this anomaly.) Newton's citizens must look hard at the philosophies and costs underlying the educational system and determine how best to maintain, or even improve, educational excellence within the constraints of the city's resources. The benchmarking shows that cities and towns make quite different decisions on the percentage of their total budget that is allocated to schools and on per capita and per pupil expenditures. Several additional fundamental questions arise from the school benchmarking data. How does class size affect the quality of education in Newton? How does the level of teacher salaries and professional development affect Newton's ability to attract, motivate, and retain excellent teachers and to provide a quality education to students? How does the level of funding impact educational outcomes?

B. Comparison Communities

The Citizen Advisory Group chose four separate benchmarking groups: (1) a group of demographically similar communities in Massachusetts which we call the "Massachusetts Core Benchmarking Communities;" (2) this core group with two additions that help reflect Newton's geographic size and complexity labeled the "Public Safety Benchmarking Communities;" (3) a

group of communities in Massachusetts that have a comparably deep commitment to education called the "Educational Excellence Benchmarking Communities" which are used along with the Core group for the School benchmarking; and (4) a group of demographically similar non-Massachusetts communities that happen to be in Connecticut, which we termed the "Non-Massachusetts Benchmarking Communities" to help inform our Municipal benchmarking analysis.

C. City/Town Benchmarking

Revenues:

1. Development: The revenue benchmarking data suggests that Newton faces fiscal challenges because of its somewhat low revenue per capita and its heavy reliance on residential property taxes. This data raises the questions of whether there are ways to increase revenues within the constraints of Newton as a highly built-out city and to see if Newton is maximizing the taxes from commercial and industrial properties.

2. Taxes: With the average single family tax bill in Newton approximately 5% higher than the average for the core benchmarking communities, the question of matching expectations for what we want from our city services with what we are willing or able to pay in local taxes is raised.

3. State Aid: As a community with both relatively high property values and income levels, state aid per capita to Newton is, not surprisingly, significantly below average compared to the other benchmarking communities in Massachusetts. The data on state aid, when combined with the recent economic woes, may lead to the question of what future levels of state aid are likely.

4. Free Cash: In 2007, Newton was significantly below average in the amount of dollars it gathered from "other" sources, that is, free cash and transfers of surpluses from other funds. The benchmarking data raises the question of whether Newton's policies related to generating free cash should be reviewed.

5. PILOTs: Data gathered on payments in lieu of taxes or PILOTs received by benchmarking communities in Massachusetts reveals that Newton is lower than average but cities and towns that receive significantly higher levels of PILOTs typically have had an unusual circumstance that "forced" a non-profit to increase their payment. The benchmarking data raises the questions of whether it is reasonable to expect increased revenues from PILOTs and whether Newton should pursue them more aggressively.

City/Town Expenditures:

1. Total Expenditures and School Expenditures: Newton's total municipal spending per capita on non-school areas from the General Fund was lower than average for the Massachusetts benchmarking group but higher than the average for the non-Massachusetts group. In part, this is explained by the lower revenues and by the higher school expenditures per capita and the corresponding higher percentage of City resources allocated to the schools. The benchmarking data suggests that further investigation of the lower municipal

spending is in order. Perhaps Newton is being efficient and taking advantage of economies of scale; perhaps Newton is simply under-investing on the municipal side. The benchmarking data also raises the question of the relative allocation of resources to various departments, including the schools.

2. Police: Newton's police department receives a slightly larger percentage of the total municipal budget compared to the average for the Massachusetts benchmarking group and the cost per capita for Newton's police department is very slightly above the average for the core benchmarking communities in Massachusetts. But, communities like Brookline, Quincy and Waltham devote more of their municipal budgets to police and have higher per capita policing costs than Newton. Newton's "crime per capita" is on the low side compared both to the core benchmarking communities and to Brookline, Quincy and Waltham. The benchmarking data leads to the question of whether Newton's low crime rate is a result of a deep commitment to policing or, conversely, that with the low crime rate, the city is overinvesting in policing.

3. Fire: The benchmarking data includes for Newton both the official data for 2007 and the estimated post-arbitration data which is 10% higher. Newton's cost per capita for its fire department is lower than the average, even when looking at the post-arbitration estimate. Newton devotes slightly less of its municipal budget to fire safety compared to other benchmarking communities. The ratio of citizens to fire personnel indicates that Newton has 5% fewer firefighters than the average for core benchmarking group. The benchmarking data raises the question of whether the investment in the fire safety is adequate.

4. Police and Fire Salaries: Minimum and maximum base salaries for police and fire personnel in Newton are almost always either the same or somewhat above the average for the core benchmarking communities, from the top to the bottom of the hierarchy. But, individual communities – such as Brookline – are higher for police. The benchmarking data on police and fire minimum and maximum salaries suggests that further analysis is needed to assess Newton's compensation strategy.

5. Public Works: The benchmarking data show that Newton's public works per capita spending is significantly higher than the average for the Massachusetts benchmarking group. Newton also spends a significantly higher percentage of its municipal budget on public works. The relatively high spending on public works is particularly intriguing in light of the extremely low relative spending on capital projects (See Section D: Capital and Debt) and the high level of relative spending on Parks and Recreation. (Newton's Parks and Recreation Department maintains Newton's public grounds, a function often done by Departments of Public Works.) The benchmarking data raises the question of what is the mix of spending by the Department of Public Works and how this mix and level might be productively altered.

6. General Government: The benchmarking data indicates that Newton appears to be under-spending is in the "back office" or General Government. Newton's cost per capita for General Government is 10% lower compared to the core benchmarking communities. The benchmarking data indicates that further analysis should be done to probe whether Newton is under-spending in this area.

7. Culture and Recreation, and Human Services: The benchmarking data shows that Newton spends significantly more per capita in both Culture & Recreation (18% more) and in Human Services (30% more) than the average for the core benchmarking communities. Newton is also allocating a larger percentage of its municipal budget to Culture and Recreation and Human Services compared to the communities in the core benchmarking group. The benchmarking data suggests more research be done to understand the choices various communities are making about these types of investments in their communities and the efficiency in which they deliver the services.

8. Municipal Salaries: Looking at the minimum and maximum base salaries for a sample of executive and miscellaneous positions in the municipal government reveals that Newton is usually slightly above the average. One notable exception is the Finance Director which is low. The benchmarking data raises the question of the effectiveness in the short- and long-term of Newton's overall salary and compensation strategy and, in particular, the role of a Finance Director and the appropriate pay level for such a position.

9. Health Insurance Contribution: The benchmarking data indicates that some communities are paying a lower percentage of the health insurance contribution, especially for PPOs. The benchmarking raises the question of whether Newton should negotiate with unions to change the contribution percentages.

Capital Assets and Debt

Benchmarking data on capital assets and debt structure reveals the starkest inconsistency between Newton and the benchmarking communities. Compared to all of its Massachusetts as well as non-Massachusetts peers, Newton spends approximately 50% less on its long-term, capital assets (such as buildings, machinery, equipment). Newton also has significantly less debt. Newton has an AAA rating but communities with significantly more total debt service per capita also have AAA ratings. The benchmarking data raises questions about the adequacy of Newton's investments in capital assets and the amount of debt that the city should carry.

D. School Benchmarking

1. School Demographics: Overall, Newton's demographic statistics tend to be in the upper half of the demographically similar communities (i.e., better educated parents, fewer students whose first language is not English, and fewer students from low income families) but in the lower half of the communities with a similar commitment to education. These demographic differences should be kept in mind when looking at the benchmarking data, especially that for communities with a similar commitment to education.

2. Investment in Schools: Newton allocates 55.9% of its total city budget to the school system. This is higher than the average for demographically similar communities (51.1%) but essentially the same as communities with a similar commitment to education (55.5%). Newton also spends more per capita on its schools ($2055) compared to the core benchmarking communities ($1922) but less than the average of communities with a similar commitment to education ($2355). The benchmarking data raises the question of what logic governs the allocation of resources between municipal and school departments.

3. School Expenditures: Newton is second highest in total expenditures per student ($14,525) compared to demographically similar communities ($12,900). Only Brookline is higher. But, Newton is only slightly above the average in total expenditures per student when compared to the communities with a similar commitment to education ($14,223). (When looking at communities with a similar commitment to education, Newton is above average on expenditures per pupil but below average on per capita spending due to Newton's smaller percentage of students in the population.) Compared to communities with a similar commitment to education, Newton expenditures per pupil are **low** in instructional leadership (3.4% less). Newton is **significantly below** the average in expenditures per pupil in administration (14% less) and instructional materials equipment and technology (27% less). Newton still ranks **significantly higher** in two areas: other teaching services (18% more) and professional development (49.5% more). The benchmarking data suggests that more analysis be done to understand better the level of total expenditures per student and nuances related to where these dollars are allocated.

4. Teacher Salaries: Teacher salaries account for 37% of total school expenditures, the same percentage as most of the benchmarking communities. While Newton's average teacher salary is well above the average for demographically similar communities (8.4% higher), it is almost exactly the same as the average for communities with a similar commitment to education. Looking at the minimum and maximum salaries at different educational levels for teachers compared to communities with a similar commitment to education, Newton is above the average in almost all categories. The benchmarking data suggests more analysis be done to assess the compensation policy for Newton's teachers.

5. Special Education: Newton has a somewhat higher percentage of pupils enrolled in special education (18.8%) compared both to the demographically similar communities and communities with a similar commitment to education. The Newton Public Schools allots 21.8% of the total school budget to special education, which is only slightly above the two benchmarking averages. Newton is placing among the lowest percentage of pupils outside the district compared to demographically similar communities and exactly the same as the average for demographically similar communities. The benchmarking data appears to indicate that Newton's out-of-district placements and its flipside, inclusion process, are generally quite similar to the communities with a similar commitment to education but this should be analyzed further. Likewise, the choices around special education and the different ways of implementing it need to be better understood to clarify what lies behind these numbers.

6. School Characteristics: Newton has a low total student-to-teacher ratio. Newton's class sizes appear to be a little bit smaller that average in the elementary and middle schools but a little bit higher in the high schools. Newton is above average for the percentage of students scoring proficient and advanced in 4th grade MCAS testing compared to both benchmarking groups. In 10th grade, Newton's students have essentially the same scores as the average for demographically similar communities but are below average when compared with communities with a similar commitment to education. While the lunch fee in Newton's high schools is higher than that of other communities, Newton still needs to subsidize the food service program by approximately $1 million. The benchmarking data suggests more inquiry

into teacher load, student-teacher ratios, class sizes, outcomes such as MCAS results, and the food service program would be useful in understanding school policies and practices.

III. Choosing Comparison Communities

When searching for a comparable city or town to Newton, in Massachusetts or across the country, it quickly becomes clear that there is no absolutely equivalent community. Demographically, Newton is unusual. Situated in a western suburb close to Boston, Newton is the eleventh largest city or town in Massachusetts[1] with the ninth largest public school system at 11,570 students.[2] The city's 82,819 people live in 32,839 households. While Newton has a large, relatively homogeneous population, nonetheless, our citizens speak 40 different languages at home and 11% of our citizens are non-Caucasian. Newton has a relatively high median household income. Only 2.6% of families and 4.3% of individuals fall below the poverty line, and the unemployment rate is 3.6%.[3] Not surprisingly, Newton's median household income of $86,052 is much higher than the Commonwealth's median household income of $50,502 and the U.S. median of $41,994.[4] The median value of a single family home in Newton was $690,200 in 2006 compared to the Commonwealth's median of $370,400. (The median value increased 37% between 2000 and 2006.) Largely a "bedroom" community, Newton's property tax base is therefore residential – 91.3% in 2007.

The Citizen Advisory Group chose four separate benchmarking groups:

- A group of demographically similar communities in Massachusetts which we call "the Massachusetts Core Benchmarking Communities"

- This Core group with two additions that help reflect Newton's geographic size and complexity labeled "the Public Safety Benchmarking Communities" that are used for the Public Safety benchmarking

[1] 2000 U.S. Census.
[2] Massachusetts Department of Education, 2007.
[3] 2000 U.S. Census.
[4] 2000 U.S. Census.

- A group of communities in Massachusetts that have a comparably deep commitment to education labeled "the Educational Excellence Benchmarking Communities" which are used along with the Core group for the School benchmarking

- A group of demographically similar non-Massachusetts communities from Connecticut which we termed "the Non-Massachusetts Benchmarking Communities" that help inform our Municipal benchmarking analysis.

By comparing ourselves with this range of communities, we hope that the Citizen Advisory Group will be able to gain deeper insight into Newton's budget and programs.

To select the Massachusetts Core Benchmarking Communities, we looked for communities demographically similar to Newton. We began with a preliminary list of communities that had been used in previous benchmarking studies and/or had been recommended by city staff or citizens of Newton. (See Appendix: Table 1A – Candidates for Massachusetts Core Benchmarking Communities). We narrowed down this group using a short list of criteria that captured the essential characteristics of Newton. These criteria included population, population density, median household income, commercial tax assessment as a percentage of the total tax assessment, percentage of individuals below the poverty level, public school students as a percentage of the total population, and use of services from the Massachusetts Water Resources Authority (MWRA).

Selecting our list of candidate communities for the Core Massachusetts Benchmarking Communities required making judgments about where to draw lines – that is, we had to consider within what range certain cities and towns needed to fall in order that we consider them sufficiently "comparable." We used these criteria:

- Newton's estimated population of 82,819 in 2006 (U.S. Census estimate) was much higher than the population of almost all the communities on our preliminary list, but also much lower than a few. We decided to include communities with populations greater than 20,000 people.

- Classified as a suburb of Boston, Newton had a population density of 4,644 people per square mile in 2000 (U.S. Census). We decided that the population density of the communities on our list should not exceed 10,000 people per square mile.

- Newton's median household income in 2000 was $86,052 (in 1999 dollars) according to the U.S Census. We decided to include communities with a median household income between $50,000 and $120,000 – approximately $35,000 above and below Newton's.

- Classified primarily as a residential community, Newton has a commercial tax assessment as a percentage of the total tax assessment in FY08 of 9.7%. We decided to focus on communities whose commercial percentage did not exceed 20%.

- The percentage of individuals below the poverty level in Newton is 4.3%. We decided to exclude communities whose percentage of individuals in poverty exceeded 10%.

- The number of public school students in Newton as a percentage of the total population is 14.3%. We decided to focus on communities whose percentage is approximately between 10% and 20%.

- To ensure that we compare similar budgets, we decided to focus only on communities that buy services from the Massachusetts Water Resources Authority (MWRA). MWRA is a public authority that provides wholesale water and sewer services to 61 communities in eastern and central Massachusetts. Cities or towns can purchase complete or partial water and sewer services from the MWRA. We chose MWRA utilization as one of our criteria because cities/towns that take care of their own water/sewer services (in contrast to those who pay for services from the MWRA, like Newton) have a different and often more costly set of financial commitments which make them unsuitable for comparison with Newton.

The communities in Massachusetts that best fit the criteria set forth above and are included in our Core Massachusetts Benchmarking Communities are **Arlington, Belmont, Brookline, Framingham, Lexington, Natick, Needham and Wellesley.** (See Table 1: Core Massachusetts Benchmarking Communities.) While this group encompasses a broad range of communities, they are a logical and reasonable group with which to compare ourselves. Many are direct "competitors" for residents; however, none of these communities is a clone of Newton. Notably, Newton has the largest population (and corresponding student body) compared to these benchmark communities. (Unfortunately, the cities and towns more similar to Newton in population are quite different in terms of household income.) For that reason, the Citizen Advisory Group will use the benchmarking

information cautiously and judiciously, realizing that choosing these communities was more of an art than a science.

When using benchmarking to help understand public safety (police and fire), the criteria used to choose the Core Massachusetts Benchmarking Communities is useful but not necessarily complete. When speaking with people in Newton's administration and unions, the factors that most influence comparability include size of population, density, poverty levels, square miles and hazards (e.g., commercial buildings, highways, waterways and railways). While some of the Core Massachusetts Benchmarking Communities are useful comparisons using these criteria (especially Brookline, Framingham and Arlington), the addition of **Quincy and Waltham** would help make the public safety benchmarking more comparable. (See Table 2: Public Safety Benchmarking Communities.) Quincy and Waltham both have populations, population density and road miles more similar to Newton than some of the Core Benchmarking communities. Unfortunately, Quincy and Waltham are not good matches in terms of median household income (much lower), poverty rates (much higher), and commercial activity (much higher). Quincy also has much more serious crime issues that Newton. (See Table 11: Crime Statistics.) Nonetheless, Quincy and Waltham, when used with the core benchmarking communities, help provide some perspective when doing public safety benchmarking.

The cities and towns in our second group of benchmarking communities – the Educational Excellence Benchmarking Communities – are not necessarily as demographically similar to Newton in their entirety, but each member of the group has a comparably strong commitment to education: **Brookline, Concord-Carlisle, Lexington, Lincoln-Sudbury, Wayland, Wellesley and Weston.** (See Table 3: Educational Excellence Benchmarking Communities.) In some cases, these communities do not have an integrated K-12 school system (e.g., Concord-Carlisle, Lincoln-

Sudbury). This list was compiled from the recommendations of John D'Auria, a co-chair of the School Cost Structure Subcommittee of the Citizen Advisory Group, and several current and former staff members of the Newton Public Schools School Department and School Committee. This group of cities and towns was created to assist the Citizen Advisory Group in comparing school systems that are motivated by similarly strong commitments to excellence in education.

Data for the Core Massachusetts Benchmarking, the Public Safety Benchmarking and the Educational Excellence Benchmarking communities came from three primary sources: The Massachusetts Department of Revenue - Division of Local Services, the Massachusetts Department of Education and the U.S. Census. In addition, we asked cities and towns directly to provide some information.

Our final group of benchmarking communities – the Non-Massachusetts Benchmarking Communities – includes several municipalities outside the Commonwealth that are similar to Newton demographically. Our search for non-Massachusetts communities started with a master list of several dozen potential cities and towns collected from three main sources: suggestions made by members of the Citizen Advisory Group and staff from the City of Newton, the list of communities Moody's Investor Service recommends as comparable to Newton (AAA communities), and towns on the Educational Research Service School Budget Profile from 2005-06 and 2006-07. (See Appendix: Table 2A – Candidates for the non-Massachusetts Benchmarking Communities by Source.) To narrow down this sizable list of about 60 communities, we looked first at the population and median household income of the towns. We considered communities within 25,000 people of Newton (above or below) and within $30,000 of Newton's median household income (above or below) as candidates for non-Massachusetts benchmarking communities. The group was winnowed further by looking at two more criteria: the number of students in the public school system (between

9,000 and 15,000 public school students), and the town's residential assessed value as a percentage of the town's total assessed value (above 75% of their assessed value coming from residential property). These criteria help ensure that the non-Massachusetts cities and towns have, like Newton, significant education expenditures and are largely residential communities. Three towns, all of which happen to be in Connecticut, were the only ones that met these criteria and were selected for our final non-Massachusetts benchmarking list: **West Hartford, CT; Norwalk, CT; and Fairfield, CT.** (See Table 4: Non-Massachusetts Benchmarking Communities.)

Data for the communities in Connecticut came from their budgets and annual financial reports. While we took care to make sure that the non-Massachusetts data was comparable to the Massachusetts data, different accounting practices, state requirements and regulations, and budgeting conventions require that we view the out-of-state data cautiously.

Table 1: Core Massachusetts Benchmarking Communities

City/Town	Population	Population Density (per sq. mile)	Median Household Income	Commercial Assessment as % of Total*	Percent of Individuals below Poverty Level	Total Pupils	Total Pupils as a % of Total Population	MWRA Usage (**W**ater, **S**ewer, **P**artial)
Newton	**82,819**	**4,644**	**$86,052**	**9.7%**	**4.3%**	**11,715**	**14.1%**	**W/S**
Arlington	41,075	8,180	$64,344	5.6%	4.1%	4,649	11.3%	W/S
Belmont	23,308	5,190	$80,295	5.5%	4.4%	3,811	16.3%	W/S
Brookline	55,241	8,410	$66,711	9.2%	9.3%	6,215	11.2%	W/S
Framingham	64,762	2,664	$54,288	22.6%	8.0%	8,456	13.1%	W/S
Lexington	30,231	1,851	$96,825	12.4%	3.4%	6,313	20.9%	W/S
Natick	31,886	2,133	$69,755	20.8%	2.8%	4,695	14.7%	S
Needham	28,368	2,293	$88,079	12.1%	2.5%	5,064	17.9%	PW/S
Wellesley	26,987	2,614	$113,686	12.1%	3.8%	4,682	17.4%	PW/S
Sources	2006 US Census Estimates	2000 US Census	2000 US Census	MA Dept of Local Services FY08	2000 US Census	MA Dept of Revenue FY07		MWRA

* Commercial includes commercial, industrial and personal property

Table 2: Public Safety Benchmarking Communities

City/Town	Population	Population Density (per sq. mile)	Road Miles	Median Household Income	Commercial Assessment as % of Total*	Percent of Individuals below Poverty Level	Total Pupils	Total Pupils as a % of Total Population	MWRA Usage (**W**ater, **S**ewer, **P**artial)
Newton	**82,819**	**4,644**	**309**	**$86,052**	**9.7%**	**4.3%**	**11,715**	**14.1%**	**W/S**
Arlington	41,075	8,180	121	$64,344	5.6%	4.1%	4,649	11.3%	W/S
Belmont	23,308	5,190	82	$80,295	5.5%	4.4%	3,811	16.3%	W/S
Brookline	55,241	8,410	106	$66,711	9.2%	9.3%	6,215	11.2%	W/S
Framingham	64,762	2,664	242	$54,288	22.6%	8.0%	8,456	13.1%	W/S
Lexington	30,231	1,851	154	$96,825	12.4%	3.4%	6,313	20.9%	W/S
Natick	31,886	2,133	154	$69,755	20.8%	2.8%	4,695	14.7%	S
Needham	28,368	2,293	138	$88,079	12.1%	2.5%	5,064	17.9%	PW/S
Quincy	91,058	5,062	224	$47,121	16.4%	7.3%	8,765	9.6%	W/S
Waltham	59,352	4,663	160	$54,010	30.6%	7.0%	4,836	8.1%	W/S
Wellesley	26,987	2,614	130	$113,686	12.1%	3.8%	4,682	17.4%	PW/S
Sources	2006 US Census Estimates	2000 US Census	MA Dept of Revenue	2000 US Census	MA Dept of Local Services FY08	2000 US Census	MA Dept of Revenue FY07		MWRA

* Commercial includes commercial, industrial and personal property

Table 3: Educational Excellence Benchmarking Communities

City/Town	Population	Population Density (per sq. mile)	Median Household Income	Commercial Assessment as % of Total*	Percent of Individuals below Poverty level	Total Pupils	Total Pupils as a % of Total Population	MWRA Usage (**W**ater, **S**ewer, **P**artial)
Newton	**82,819**	**4,644**	**$86,052**	**9.7%**	**4.3%**	**11,715**	**14.1%**	**W/S**
Brookline	55,241	8,410	$66,711	9.2%	9.3%	6,215	11.2%	W/S
Concord-Carlisle*	21,641	539	$103,501	7.3%	3.6%	3,945	18.2%	N
Lexington	30,231	1,851	$96,825	12.4%	3.4%	6,313	20.9%	W/S
Lincoln-Sudbury*	24,975	643	$105,984	5.4%	2.2%	6,192	24.8%	N
Wayland	12,970	860	$101,036	4.7%	2.5%	2,905	22.4%	N
Wellesley	26,987	2,614	$113,686	12.1%	3.8%	4,682	17.4%	PW/S
Weston	11,646	674	$153,918	3.6%	2.9%	2,401	20.6%	W
Sources	2006 Estimates	2000 Census	1999 Dollars 2000 Census	Mass DOLS, FY 08	2000 Census	Mass DOR, FY'07		

* Commercial includes commercial, industrial and personal property

* Unbundled

Carlisle	4,852	307	$129,811	1.50%	2.40%	792*	16.30%	N
Concord	16,789	682	$95,897	9.00%	3.90%	1895*	11.30%	N
Lincoln	7,948	561	$79,003	3.20%	0.80%	1231*	15.50%	N
Sudbury	17,027	691	$118,579	6.50%	2.80%	3339*	19.60%	N

The data for Concord-Carlisle and Lincoln-Sudbury was compiled differently than the data for other cities and towns. The population for Concord-Carlisle and Lincoln-Sudbury is the combined population of the separate towns. The population density for Concord-Carlisle and Lincoln-Sudbury is the combined total population divided by the combined total land area of the towns. The median household income, the commercial tax breakdown and percent of individuals in poverty for Concord-Carlisle and Lincoln-Sudbury are weighted averages. *The Total Pupils includes the students in grades pk-8 in the individual towns as well as the high school students. (Concord-Carlisle High School has 1258 students and Lincoln-Sudbury has 1,622.)

Table 4: Non-Massachusetts Benchmarking Communities*

City/Town	Pop.	Median Household Income (1999 Dollars)	Pop. Density (per sq. mile)	Percentage of Population below Poverty Level	Number of Students in Public Schools	Residential Assessed Value as a Percentage of Total Assessed Value
Newton, MA	**82,819**	**86,052**	**4644**	**4.30%**	**11,570**	**91.3%**
Fairfield, CT	57,829	83,512	1927	6.90%	9,266	90.2%
Norwalk, CT	84,187	59,839	3704	7.20%	10,475	76.0%
West Hartford, CT	60,700	61,665	2781	4.50%	9,850	80.7%
Sources	2006 Census Est.	2000 Census	2000 Census	2000 Census	Most recent city/town budget	Most recent city/town budget

* Cities and towns that were part of school districts with other communities were excluded.

IV. City/Town Benchmarking

Revenues:

Like all cities and towns, Newton derives its revenue from a variety of sources with property taxes, state aid, local receipts (e.g., motor vehicle excise taxes, building permits and licenses, investment income, water and sewer fees), and "other" sources being the primary categories. (See Table 5: Revenues. Note: This table includes not only the General Fund revenues but all revenues.)

The revenue benchmarking data suggests that Newton faces fiscal challenges because of its somewhat low revenue per capita and its heavy reliance on residential property taxes. More specifically, Newton's total revenue per capita ($3,674) was a little below the average for the core benchmarking group ($3,803 or 3.4% lower) and for the out-of-state benchmarking group ($3,719 or 1.2% lower). Notably, Newton's total revenue per capita falls considerably lower than Lexington, Wellesley and Needham which range from $4,321 to $4,736. Newton is highly dependent on property taxes from the residential sector rather than commercial or industrial sources. Property taxes account for 68% of Newton's total revenue base and 91% of these come from residential tax payers. On average, the other Massachusetts benchmarking communities rely slightly less on residential taxes, deriving 88% of their property taxes from the residential sector. Framingham and Natick, with their richer mix of commercial and industrial properties, only depend on residential tax payers for about 80% of their property taxes. This data raises the questions of whether there are ways to increase revenues within the constraints of Newton as a highly built-out city and to see if Newton is maximizing the taxes from commercial and industrial properties.

The average single family tax bill in Newton is $7,767, approximately 5% higher than the average of $7,361 for the core benchmarking communities. (See Table 6: Average Family Tax Bill.) Interestingly, there is quite a wide range for the average single family tax bill among the benchmarking communities. On the low end are Framingham and Natick at $4,821 and $4,829

respectively. At the other end of the spectrum are Belmont, Lexington and Wellesley at $8,652, $8,788 and $9,405 respectively. The average single tax payer data showing Newton 5% higher may lead to the question of the need for matching expectations for what we want from our city services with what we are willing or able to pay in local taxes.

State aid accounts for 7.2% of Newton's revenues. As a community with both relatively high property values and income levels, state aid per capita to Newton is, not surprisingly, significantly below average compared to the other benchmarking communities in Massachusetts. Newton's state aid revenue is $263 per capita while the average for the benchmarking communities is $324. Lexington, Needham and Wellesley, which also have high median household incomes and few individuals below the poverty line (see Table 1: Core Massachusetts Benchmarking Communities), receive low amounts of state aid, ranging from $240 to $274 per capita. (Note also that local aid accounts for 22% of the Massachusetts state budget and revenue shortfalls at the state level may threaten future local aid payments.) This data on state aid, when combined with the recent economic woes, may lead to the question of what future levels of state aid are likely.

The question of the amount of free cash has been a heated topic in Newton recently.[5] Interestingly, in 2007, Newton was significantly below average in the amount of dollars it gathers from "other" sources, that is, free cash and transfers of surpluses from other funds. Newton had $71 per capita while the average for the group was $160. (By way of reference, if Newton had $11 million in free cash in 2007, its per capita level would have been $133, still considerably lower than the average for the benchmarking group.) Perhaps having the lowest per capita amount of free cash compared to the other benchmarking communities is unsurprising as the Chief Administrative Officer said that Newton has the policy of limiting its reliance on free cash. The benchmarking data raises the question of whether Newton's policies related to generating free cash should be reviewed.

[5] Free cash can be understood as the accumulated differences between the General Fund's revenues and expenditures at the end of the fiscal year after accounting for various accruals and reductions from reserve accounts.

Data gathered on payments in lieu of taxes or PILOTs received by benchmarking communities in Massachusetts reveals that Newton is lower than average. Newton receives $340,000 annually in PILOTs while the average revenue from PILOTs for the core benchmarking group is $506,582. As a cautionary note, however, cities and towns that receive significantly higher levels of PILOTs typically have had an unusual circumstance that "forced" a non-profit to increase their payment. For example, Belmont (which receives $1.2 million) struck a deal with McLean Hospital when it wanted to sell some of its land to a for-profit developer and needed a change in its zoning. The benchmarking data raises the questions of whether it is reasonable to expect increased revenues from PILOTs and if Newton should pursue them more aggressively.

Another interesting piece of data pertains to different strategies towards general overrides. At one end of the spectrum is Wellesley which frequently has overrides on its ballots for relatively "small" amounts. By way of example, since 2000, Wellesley has put ten general override votes before its citizens ranging from $45,000 to $3.5 million. Six of these passed. (Source: Massachusetts Department of Revenue, Division of Local Services, Municipal Data Bank.) In contrast, Newton has gone to the public twice since 2000 for overrides in the amounts in the $11 - $12 million range. While the Citizen Advisory Group is probably not analyzing override strategies, if elected officials decide to ask voters to increase Newton's revenues through overrides, they may want to analyze the appropriateness and effectiveness of different override strategies, including debt exclusions.

Table 5: Revenues

						Revenues by Source					
	City/Town	Population	Total Revenue	Total Revenue per Capita	Rank	Property Tax Levy	Property Tax Levy per Capita	Rank	Split between Residential Property Tax Assessed Value & Commercial, Industrial and Personal Property Assessed Value	State Aid	State Aid per Capita
Core Benchmarking Communities	**Newton**	**82,819**	**$304,305,026**	**$3,674**	**5**	$208,504,128	**$2,517**	**4**	**97.3% - 8.7%**	**$21,801,107**	**$263**
	Arlington	41,075	$116,958,838	$2,847	9	$76,778,351	$1,869	9	94.4% - 5.6%	$17,870,028	$435
	Belmont	23,308	$89,858,790	$3,855	4	$57,481,936	$2,466	5	94.5% - 5.5%	$7,695,013	$330
	Brookline	55,241	$201,080,497	$3,640	6	$130,076,534	$2,354	6	90.8% - 9.2%	$18,021,104	$326
	Framingham	64,762	$213,306,233	$3,293	8	$135,707,758	$2,095	7	77.4% - 22.6%	$27,710,048	$427
	Lexington	30,231	$143,176,511	$4,736	1	$101,074,790	$3,343	1	87.6% - 12.4%	$8,304,953	$274
	Natick	31,886	$109,651,561	$3,438	7	$62,839,514	$1,970	8	79.2% - 20.8%	$11,843,080	$371
	Needham	28,368	$125,517,445	$4,424	2	$73,927,704	$2,606	3	87.9% - 12.1%	$21,139,968	$745
	Wellesley	26,987	$116,624,704	$4,321	3	$79,314,896	$2,939	2	87.9% - 12.1%	$6,836,749	$253
	AVERAGE	42,742	$157,831,067	$3,803		$102,856,179	$2,462		88.6% - 12.1%	$15,691,339	$380
Sources		**U.S. Census 2006 Estimate**	**Massachusetts Department of Revenue, Division of Local Services FY07**								
Non-MA Benchmarking Communities	**Newton**	**82,819**	**$304,305,026**	**$3,674**	**2**	**$208,504,128**	**$2,517**	**4**	**97.3% - 8.7%**		
	Fairfield, CT	57,829	$246,253,000	$4,258	1	$192,784,000	$3,333	1	90.2% - 9.8%		
	Norwalk, CT	84,187	$303,804,905	$3,608	3	$215,669,000	$2,561	3	76.0% - 24.0%		
	West Hartford, CT	60,700	$202,458,148	$3,335	4	$173,558,147	$2,859	2	80.7% - 19.3%		
	AVERAGE	**71,384**	$264,205,270	$3,719		$197,628,819	$2,818		86.1% - 15.5%		
Sources		**U.S. Census 2006 Estimate**	**Fairfield, Norwalk, & West Hartford Annual Budgets, FY07**								

Note: These Connecticut communities may account for their revenue differently than the Massachusetts communities. Care was taken to make as comparable a comparison as possible, but accurate PILOT, state aid revenue, local receipt revenue, and other revenue data was not available

Table 5: Revenues (continued)

	City/Town	Population	Revenues by Source: Local Receipts[1]	Local Receipts per Capita	Other[2]	Other per Capita	Revenue from Licenses, Permits & Fees	Revenue from Licenses, Permits & Fees per Capita	PILOTs	Number of Proposed Overrides[3] '00-'07	Number of Successful Overrides '00-'07	Total Levy Increase (millions)
Core Benchmarking Communities	**Newton**	**82,819**	68,040,255	**$821**	**$5,959,536**	**$71**	**$5,371,145**	$64	**$340,010**	**1**	**1**	**$11.5**
	Arlington	41,075	18,989,654	$462	$3,320,805	$80	$1,972,324	$48	$21,000	1	1	$6.0
	Belmont	23,308	16,271,972	$698	$8,409,869	$360	$1,060,085	$45	$1,178,000	2	2	$5.4
	Brookline	55,241	43,855,229	$793	$9,127,630	$165	$3,486,484	$63	$850,000	0	0	$0.0
	Framingham	64,762	44,512,915	$687	$5,375,512	$83	$2,195,388	$33	$507,200	1	1	$7.2
	Lexington	30,231	28,676,248	$948	$5,120,520	$169	$2,195,676	$72	$1,041,184	13	3	$9.5
	Natick	31,886	27,365,749	$858	$7,603,218	$238	$3,050,937	$95	$35,846	2	2	$4.3
	Needham	28,368	25,536,787	$900	$4,912,986	$173	$1,795,813	$63	$250,000	9	5	$4.2
	Wellesley	26,987	25,588,689	$948	$4,884,370	$180	$1,849,839	$68	$336,000	10	6	$13.9
	AVERAGE	42,742	$33,204,166	$791	$6,079,383	$169	$2,553,077	$61	$506,582	4	2.3	$6.9
Sources		**U.S. Census 2006 Estimate**	**Massachusetts Department of Revenue, Division of Local Services FY07**									
Non-MA Benchmarking Communities	**Newton**	**82,819**	**n/a**	**n/a**	**n/a**	**n/a**	**$5,371,145**					
	Fairfield, CT	57,829	n/a	n/a	n/a	n/a	$14,255,000					
	Norwalk, CT	84,187	n/a	n/a	n/a	n/a	$14,138,573					
	West Hartford, CT	60,700	n/a	n/a	n/a	n/a	$4,042,467					
	AVERAGE	**71,384**					$9,451,796					
Sources		**U.S. Census 2006 Estimate**	**Fairfield, Norwalk, & West Hartford Annual Budgets, FY07**									

[1] Includes: Enterprise Funds (user charges), Offset Receipts (money earmarked for a particular purpose: water, sewer, hospital), Community Preservation Fund, and Tax Recapitulation Sheet Page 3 Local Receipts (A document submitted to the DOR in order to set a property tax rate - shows all estimated revenues and actual appropriations that affect the property tax rate)
[2] Includes free cash and transfers of surpluses from other funds
[3] General overrides, not including debt exclusion overrides

Table 6: Average Single Family Tax Bill

	City/Town	Population	Average Single Family Tax Bill
Core Benchmarking Communities	**Newton**	**82,819**	$7,767
	Arlington	41,075	$7,960
	Belmont	23,308	$8,652
	Brookline	55,241	$7,984[1]
	Framingham	64,762	$4,821
	Lexington	30,231	$8,788
	Natick	31,886	$4,829
	Needham	28,368	$6,664
	Wellesley	26,987	$9,405
	AVERAGE	42,742	$7,361
Sources		**U.S. Census 2006 Estimate**	**Massachusetts Department of Revenue, Division of Local Services FY07**

[1] Brookline's figure reflects both taxes and fees due to their unique tax situation and came from the Town of Brookline Override Study Committee Final Report, January 2008

Expenditures (General Fund):

Newton's total municipal spending per capita on non-school areas from the General Fund ($1,533) was 5% lower than average for the Core Massachusetts benchmarking group ($1,615) but 5% higher than the non-Massachusetts benchmarking group ($1,454). (See Table 7: Total Expenditures.) This mirrors Newton's somewhat lower than average revenue (described in the previous section) in which Newton's revenues per capita were 3.4% lower than the core Massachusetts comparison communities. In part, the lower municipal spending per capita is also explained by Newton's higher percentage of City resources allocated to the schools and the corresponding higher school expenditures per capita. (See Table 8: Expenditures on Schools.) This school data will be explored in greater depth in the next section. The benchmarking data suggest that further investigation of the lower municipal spending is in order. Perhaps Newton is being efficient and taking advantage of economies of scale; perhaps Newton is simply under-investing on the municipal side.

The figure for general fund municipal spending includes the major spending categories of police, fire, public works, general government, culture and recreation, and human services. Each of these will be looked at in turn. (Schools are broken out separately and are looked at in the following section.) The general fund municipal spending figure also includes other categories ranging from debt service, benefits (workers' compensation, unemployment, health insurance, other employee benefits), intergovernmental assessments, and miscellaneous other expenditures.

Table 7: Total Expenditures

General Fund Expenditures	City/Town	Population	Total Municipal Spending (Excluding Education)	Total Municipal Spending per Capita	Rank
Core Benchmarking Communities	**Newton**	**82,819**	$126,978,191	**$1,533**	**6**
	Arlington	41,075	$56,763,935	$1,382	9
	Belmont	23,308	$32,960,207	$1,414	8
	Brookline	55,241	$102,198,048	$1,850	2
	Framingham	64,762	$92,416,356	$1,427	7
	Lexington	30,231	$55,382,221	$1,832	3
	Natick	31,886	$49,782,573	$1,561	5
	Needham	28,368	$59,774,851	$2,107	1
	Wellesley	26,987	$45,066,968	$1,670	4
	AVERAGE	42,742	$69,035,928	$1,615	
Sources		**U.S. Census, 2006 Estimate**	**Massachusetts Department of Revenue, Division of Local Services, FY'07**		
Non-MA Benchmarking Communities	**Newton**	**82,819**	**$126,978,191**	**$1,533**	**2**
	Fairfield, CT	57,829	$91,816,000	$1,588	1
	Norwalk, CT	84,187	$112,324,728	$1,334	4
	West Hartford, CT	60,700	$84,147,999	$1,386	3
	AVERAGE	**71,384**	$103,816,730	$1,454	
Sources		**U.S. Census, 2006 Estimate**	**Fairfield, Norwalk, & West Hartford Annual Budgets, FY'07**		

Note: Total Municipal (Excluding Education) Spending includes: General Government, Police, Fire, Other Public Safety, Public Works, Human Services, Culture & Recreation, Debt Service, Fixed Costs (Workers' Compensation, Unemployment, Health Insurance, other Employee Benefits, other insurance and Retirement), Intergovernmental Assessments, Other Expenditures (Court Judgments and other Unclassified Expenditures) and Other Financing Uses.

Expenditures -- Schools:

As a result of Newton's large population compared to the other benchmarking communities, Newton has, in absolute dollars, a large total budget for both the city and the school system. A key question that Newton faces as a community, though, is what percentage of the city's total budget should be devoted to educating its young people. More than half (55.9%) of Newton's total budget is allocated to the school system. This is higher than the average of 51.1% for demographically similar communities but essentially the same as communities with a similar commitment to education (55.5%). Benchmarking reveals that cities and towns make quite different decisions about the percentage of their total budget being allocated to schools (as well as school spending per capita and per pupil expenditure levels.) Three communities allocate a larger proportion of their city/town budgets to the schools: Framingham (56.2%), Lexington (59.9%) and Wayland (65.4%). (See Table 8: Expenditures on Schools.) While Newton also spends more per capita on its schools, investing $2,055, compared to the core benchmarking communities' school expenditures per capita of $1,922 (6.9% more), Newton spends less per capita than all but one of the communities with a similar commitment to education which averages $2,355 (12.7% less). (Brookline is lower with total school expenditures per capita of $1,699. Weston and Concord-Carlisle are considerably higher with school expenditures per capita of $3,394 and $3,187 respectively.) (The data in Table 23 – Expenditures per Pupil mirrors the per capita data.) The benchmarking data raises the question of what logic governs the allocation of resources between municipal and school departments.

Another way of thinking about the question of how much to allocate to the schools is to look at the proportion of the community that are students. Interestingly, there are communities with a higher percentage of pupils spending a smaller percentage of their total budget on

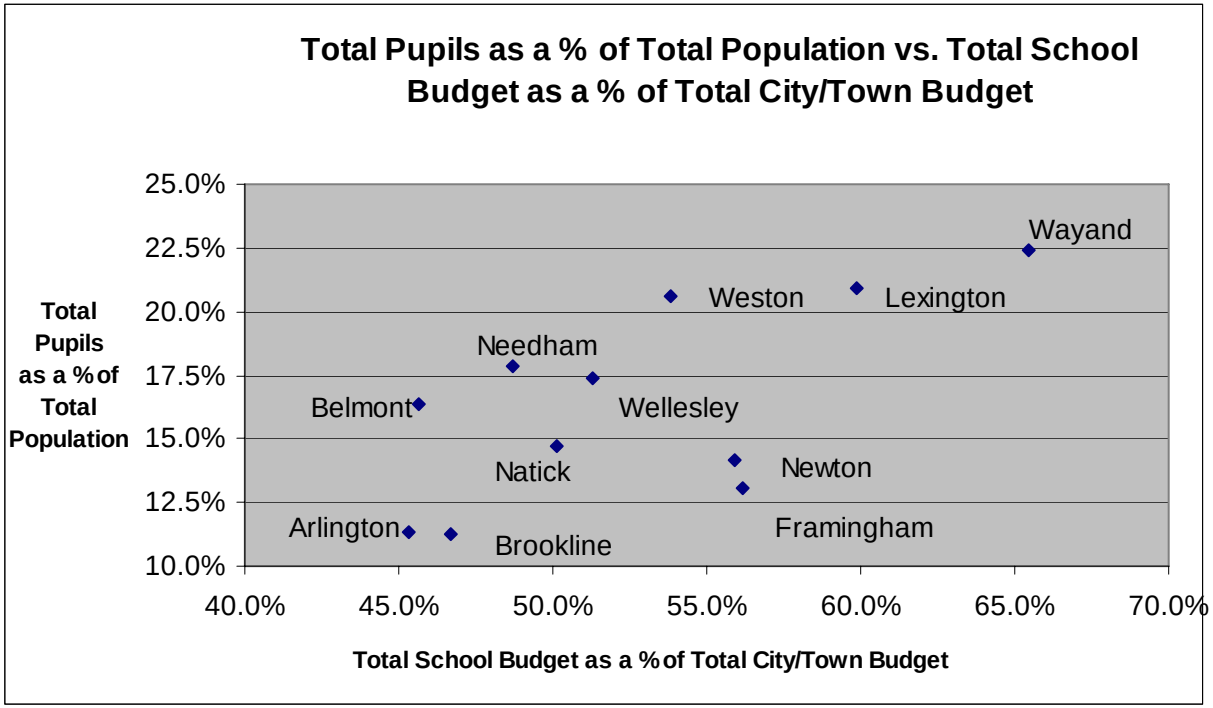
education. For example, with only 14.1% of our total population as students, Newton invests 55.9% of its budget on the schools. In contrast, Wellesley has 17.4% of its population in the school system but only invests 51.3% of its budget on its schools. Wayland, though, with the largest percentage of pupils (22.4%) also devotes the largest percentage of its town budget to the schools (65.4%). One might expect that there would be a clear positive correlation between the percentage of students in a city's or town's population and the percentage of the total budget allocated to education. But, when plotted against each other, for all the cities and towns in both our benchmark groups, the two data sets are scattered and have only a weak positive correlation. (See Graph 1: Percentage of Spending on Schools vs. Percentage of Pupils in the Population.) (The coefficient of determination, R^2, is 0.4311. A score of 1.0 would indicate perfect correlation.) The percentage of its resources that a community invests in education clearly depends not just on what percentage of the families have children in the schools but on a host of factors, including the non-educational priorities of the city or town. (Please note that an extensive school benchmarking analysis follows in a separate section.)

Table 8: Expenditures on Schools

	Communities	Total School Expenditures	Total City/Town Budget	Total School Budget as a % of Total City/Town Budget	Total School Expenditures per Capita	Total Pupils as a % of Total Population	Total Pupils as a % of Total Population Rank
Demographically Similar Communities	**Newton**	**$170,151,871**	**304,305,026**	**55.9%**	**$2,055**	**14.1%**	**6**
	Arlington	$53,027,084	116,958,838	45.3%	$1,291	11.3%	8
	Belmont	$41,016,066	89,858,790	45.6%	$1,760	16.3%	4
	Brookline	$93,827,435	201,080,497	46.7%	$1,699	11.2%	9
	Framingham	$119,807,708	213,306,233	56.2%	$1,850	13.1%	7
	Lexington	$85,697,174	143,176,511	59.9%	$2,835	20.9%	1
	Natick	$54,997,364	109,651,561	50.2%	$1,725	14.7%	5
	Needham	$61,117,736	125,517,445	48.7%	$2,154	17.9%	2
	Wellesley	$59,819,538	116,624,704	51.3%	$2,217	17.4%	3
	AVERAGE	$82,162,442	157,831,067	51.1%	$1,922	15.2%	
Communities with a Similar Commitment to Education	**Newton**	**$170,151,871**	**304,305,026**	**55.9%**	$2,055	**14.1%**	**7**
	Brookline	$93,827,435	201,080,497	46.7%	$1,699	11.2%	8
	Concord-Carlisle	$60,763,727	N/A	N/A	$2,808	18.2%	5
	Lexington	$85,697,174	143,176,511	59.9%	$2,835	20.9%	3
	Lincoln-Sudbury	$79,586,490	N/A	N/A	$3,187	24.8%	1
	Wayland	$38,386,562	58,663,131	65.4%	$2,960	22.4%	2
	Wellesley	$59,819,538	116,624,704	51.3%	$2,217	17.4%	6
	Weston	$39,524,117	73,450,872	53.8%	$3,394	20.6%	4
	AVERAGE	$78,469,614	149,550,124	55.5%	**$2,355**	18.7%	
Sources	**N/A**	**MA DOE FY07**					

Note: Concord-Carlisle and Lincoln-Sudbury data is a weighted average based on the number of students in each pk-8 program and the high school

Graph 1: Percentage of Spending on Schools vs. Percentage of Pupils in the Population



Source: MA DOE FY07; Data includes both sets of Benchmarking Communities

Expenditures - Police:

Newton's police department receives a slightly larger percentage of the total municipal budget (10.9%) compared to the average for the Massachusetts benchmarking group (10.4%) but a smaller percentage compared to Brookline (13.0%), Quincy (15.1%) and Waltham (11.7%) and the average for the non-Massachusetts group (15.3%). (See Table 9: Police – Cost per Capita and Cost as a Percent of Municipal Budget.) The cost per capita for Newton's police department ($166) is essentially the same as the average for the core benchmarking communities in Massachusetts ($164). But, again, Brookline, Quincy and Waltham have higher police costs per capita than Newton at $239, $216, and $205 respectively. For each uniformed policeman (excluding administrative and support staff) in Newton, there are 579 citizens; that is, the ratio of citizens to uniformed police personnel is 579:1. (See Table 10: Police Personnel). This is about a 3% difference from the average (562:1) compared to the core benchmarking group. In other words, there are fewer policemen in Newton. Brookline, Quincy and Waltham have considerably more police with ratios of 395, 453, and 495 respectively. The question is thus raised whether Newton is investing too much, too little or just the right amount in its police department. The benchmarking data is inconclusive.

Linking the investment in policing to crime levels might shed some light on the issue of Newton's spending level on policing. Looking at a variety of crimes ranging from murder to robbery to motor vehicle theft, Newton's "crime per capita" is slightly lower than the average for the core benchmarking community. Brookline, Framingham, Natick and Quincy have much more crime per capita. Brookline chooses to invest more in their police department (with the highest cost per capita) and devotes 13% of its budget to policing. Framingham and Natick, though, have lower police costs per capita ($152 and $154 respectively) and they have different

strategies on the percentage of the municipal budget devoted to the police (14.9% and 9.9% respectively). Quincy has considerably more serious crime (murder, rape, robbery and aggravated assaults) with only 10% more residents than Newton. Perhaps not surprisingly, they devote 15.1% of their municipal budget to policing and have a correspondingly high cost per capita ($216). The crime statistics also lead to the question of whether Newton's low crime rate is a result of a deep commitment to policing. Conversely, one might argue that with the low crime rate, the city could devote fewer resources to this area. These complicated questions deserve more thought.

Minimum and maximum base salaries for police personnel in Newton are almost always either the same or somewhat above the average for the core benchmarking communities, from the top to the bottom of the hierarchy. (See Table 12: Police Salaries). Brookline, though, is almost always slightly higher while Quincy is sometimes higher but sometimes lower. Waltham is usually lower. The benchmarking data on salaries is thus highly dependent on which individual community or group used for comparison. We would also point out that an important piece of missing information is where the average new employee begins on the salary scale. In addition, the actual salaries may be quite different than the scales might indicate. For example, in FY08, the average salary for the 98 Newton police officers was $47,735, just under the maximum base salary of $48,272. The benchmarking data on police minimum and maximum salaries suggests that further analysis is needed to assess Newton's compensation strategy.

In terms of the ratio of policemen to officers, 74% of Newton's uniformed police employees are police with 26% serving as officers. This is exactly the same as the average for the Massachusetts benchmarking cities and towns (74%) and a bit lower than Brookline, Quincy and Waltham which are 77%, 75% and 77% respectively. (See Table 10: Police Personnel).

Table 9: Police – Cost per Capita and Cost as a Percent of Municipal Budget

	City/Town	Population	Total Cost	Cost per Capita	Rank	Cost as a % of Municipal Budget
Core Benchmarking Communities	**Newton**	**82,819**	**$13,801,951**	**$166**	**3**	**10.9%**
	Arlington	41,075	$5,512,818	$134	9	9.7%
	Belmont	23,308	$3,698,604	$158	4	11.2%
	Brookline	55,241	$13,241,415	$239	1	13.0%
	Framingham	64,762	$9,851,670	$152	6	10.7%
	Lexington	30,231	$4,590,738	$151	7	8.3%
	Natick	31,886	$4,930,066	$154	5	9.9%
	Needham	28,368	$4,190,471	$147	8	7.0%
	Wellesley	26,987	$4,691,948	$173	2	10.4%
	AVERAGE	42,742	$7,167,742	$164		10.4%
Other	Quincy	91,058	$19,685,876	$216		15.1%
	Waltham	59,352	$12,147,522	$205		11.7%
Sources		U.S. Census 2006 Estimate	Massachusetts Department of Revenue, Division of Local Services, FY07			
Non-MA Benchmarking Communities	**Newton**	**82,819**	**$13,801,951**	**$166**	**4**	**10.9%**
	Fairfield, CT	57,829	$12,791,000	$221	2	13.9%
	Norwalk, CT	84,187	$17,215,627	$204	3	15.3%
	West Hartford, CT	60,700	$17,630,796	$290	1	21.0%
	AVERAGE	71,384	$15,359,844	$220		15.3%
Sources		U.S. Census 2006 Estimate	Fairfield, Norwalk, & West Hartford Annual Budgets, FY07; Massachusetts Municipal Personnel Association Compensation/Benefits Survey of Police Personnel, FY07			

Table 10: Police Personnel

	City/Town	Population	Total Number of Uniformed Police Personnel[1]	Number of Citizens per Uniformed Police Employee	Rank	Number of Police Officers	Number of Police Commanders[1]	Number of Police Officers as a % of Uniformed Police Force
Core Benchmarking Communities	**Newton**	**82,819**	**143**	**579**	**5-6**	**106**	**37**	74%
	Arlington	41,075	58	708	2	41	17	71%
	Belmont	23,308	47	496	8	31	16	66%
	Brookline	55,241	140	395	9	108	32	77%
	Framingham	64,762	112	578	7	84	28	75%
	Lexington[2]	30,231	41	737	1	27	14	66%
	Natick	31,886	54	590	4	38	16	70%
	Needham	28,368	49	579	5-6	37	12	76%
	Wellesley	26,987	39	692	3	28	11	72%
	AVERAGE	42,742	76	562		56	20.3	74%
Other	Quincy	91,058	203	453		153	50.0	75%
	Waltham	59,352	150	495		116	34.0	77%
Sources		U.S. Census 2006 Estimate	Massachusetts Municipal Personnel Association Compensation/Benefits Survey of Police Personnel, FY07					

[1] Includes police officers, sergeants, lieutenants, captains, district chiefs, deputy chiefs and police chiefs
[2] Lexington police officer and sergeant salary data from FY05
[3] Police personnel in this section includes non-uniformed police employees such as administrative staff

Table 11: Crime Statistics

	Population	Murder	Rape	Total Robbery	Total Agg. Assaults	Burglary	Larceny	Motor Vehicle Theft	Total	Total per Capita
Newton	**82,819**	**1**	**6**	**15**	**93**	**269**	**786**	**45**	**1215**	**1.5%**
Arlington	41,075	0	4	9	28	157	314	31	543	1.3%
Belmont	23,308	0	5	6	21	69	141	11	253	1.1%
Brookline	55,241	0	7	59	172	219	749	45	1251	2.3%
Framingham	64,762	0	12	49	124	315	1025	219	1744	2.7%
Lexington	30,231	0	3	1	8	50	214	15	291	1.0%
Natick	31,886	0	8	13	48	88	621	36	814	2.6%
Needham	28,368	0	0	2	5	76	192	7	282	1.0%
Wellesley	26,987	0	0	1	19	63	176	4	263	1.0%
Average	42,742		5	17	58	145	469	46	739	1.7%
Quincy	91,058	2	26	92	220	388	909	151	1788	2.0%
Waltham	59,352	0	7	15	56	85	502	78	743	1.3%
Sources	U.S. Census 2006 Estimate	Commonwealth Fusion Center: Crime Reporting Unit; 2005								

Table 12: Police Salaries

	City/Town	Population	Police Officer Min Base Salary	Police Officer Max Base Salary	Sergeant Min Base Salary	Sergeant Max Base Salary	Lieutenant Min Base Salary	Lieutenant Max Base Salary
Core Benchmarking Communities	**Newton**	**82,819**	**$41,338**	**$48,272**	**$58,488**	**$58,488**	**$68,431**	**$68,431**
	Arlington	41,075	$41,450	$45,688	$53,912	$53,912	$63,076	$63,076
	Belmont	23,308	$36,896	$44,890	$51,630	$57,354	$60,400	$67,104
	Brookline	55,241	$41,502	$48,826	$58,591	$58,591	$68,551	$68,551
	Framingham	64,762	$39,704	$46,548	$55,524	$62,517	$63,845	$71,894
	Lexington	30,231	$33,079	$44,908	$55,892	$57,392	$64,432	$65,549
	Natick	31,886	$36,309	$47,990	$42,380	$55,848	$49,764	$64,168
	Needham	28,368	$38,831	$46,816	$49,782	$57,847	$58,202	$73,908
	Wellesley	26,987	$41,067	$48,322	$60,176	$60,176	$69,373	$69,373
	AVERAGE	42,742	$38,908	$46,918	$54,042	$58,014	$62,897	$68,006
Other	**Quincy**	91,058	$39,052	$49,488	$56,913	$60,871	$74,871	$74,871
	Waltham	59,352	$42,918	$45,232	$53,336	$56,803	$62,937	$67,028
Sources		**U.S. Census 2006 Estimate**	**Massachusetts Municipal Personnel Association Compensation/Benefits Survey of Police Personnel, FY07**					

Table 12: Police Salaries (continued)

	City/Town	Population	Captain Min Base Salary	Captain Max Base Salary	District Chief Min Base Salary	District Chief Max Base Salary	Deputy Chief Min Base Salary	Deputy Chief Max Base Salary	Police Chief Min Base Salary	Police Chief Max Base Salary
Core Benchmarking Communities	**Newton**	**82,819**	**$80,064**	**$80,064**	**$63,711**	**$95,567**	**$63,711**	**$95,567**	**$79,656**	**$119,484**
	Arlington	41,075	$73,168	$73,168	-	-	-	-	$78,899	$114,013
	Belmont	23,308	$70,668	$78,512	-	-	-	-	$74,603	$104,444
	Brookline	55,241	$80,205	$80,205	-	-	$97,491	$114,840	$112,661	$132,709
	Framingham	64,762	$73,726	$82,677	-	-	$66,181	$82,279	$113,512	$143,628
	Lexington	30,231	$79,162	$80,369	-	-	-	-	$77,560	$98,138
	Natick	31,886	-	-	-	-	-	-	$77,175	$104,328
	Needham	28,368	-	-	-	-	-	-	$86,822	$108,795
	Wellesley	26,987	-	-	-	-	$91,667	$91,667	$115,787	$115,787
	AVERAGE	42,742	$76,166	$79,166	-	-	$79,763	$96,088	$90,742	$115,703
Other	Quincy	91,058	$92,092	$92,092	-	-	-	-	$101,158	$101,158
	Waltham	59,352	$74,265	$74,265	-	-	$87,633	$87,633	$110,301	$110,301
Sources		**U.S. Census 2006 Estimate**	**Massachusetts Municipal Personnel Association Compensation/Benefits Survey of Police Personnel, FY07**							

Expenditures - Fire

The benchmarking data in this report is from fiscal year 2007, a period when Newton's contract with the firefighters had been under arbitration for a number of years. As a result, the expenditures and salaries are approximately 10% lower than what Newton ultimately owed. (Note that personnel costs account for approximately 95% of the Fire Department's budget.) Therefore, we included two numbers in the tables: the official data for 2007 and the estimated post-arbitration data which is 10% higher according to Newton's Chief Administrative Officer.

Newton's expenditures per capita on fire is lower than the average, even when looking at the post-arbitration estimate ($155), when compared to the average of $165 for the core benchmarking communities in Massachusetts and $172 for the non-Massachusetts benchmarking communities). (See Table 13: Fire - Cost per Capita and Cost as a Percent of Municipal Budget.) Notably, Brookline has an unusually high number for fire cost per capita ($210) because its minimum manning contract with the union requires four firefighters for both Ladders and Engines at all times. (Newton has the same requirement for its three ladder trucks but only for three months in the winter for its six engines.) Framingham, Natick, Needham, Quincy and Waltham also have higher costs per capita and almost all devote more of their municipal budgets to fire as well. Newton also devotes slightly less of its municipal budget to fire (10.1% using the post-arbitration number) compared to both the benchmarking average in Massachusetts of 10.3% and to the non-Massachusetts communities of 11.5%. Interestingly, there is a narrow range in the cost of the fire department as a percentage of the municipal budget. Waltham allocates 12.6% of its budget to fire while Lexington is the lowest at 8.2%.

For each uniformed fire employee (excluding administrative and support staff) in Newton, there are 468 citizens; that is, the ratio of citizens to fire personnel is 468:1. (See Table 14: Fire Personnel). 468:1 represents a 5% difference from the average for the core benchmarking group (444:1). In other words, Newton has fewer firefighters than the core benchmarking group. Brookline, Natick and Waltham have considerably more firefighters per capita with ratios of 345, 375 and 343 respectively. The benchmarking data raises the question of whether Newton's investment in the fire safety is adequate.

Also in Table 14, one can see that 71% of Newton's uniformed fire department employees are firefighters; 29% are officers. This is exactly the same as the average for the Massachusetts cities and towns (71%). Interestingly, there is quite a variation in the percent of firefighters relative to officers, ranging from 65% in Arlington and Wellesley to 78% in Needham.

Base salaries in the Fire Department from top to bottom are always above the average with the exception of the minimum base salary for the Fire Chief. (See Table 15: Fire Salaries.) (But, Newton's fire chief's actual salary is essentially at the highest end of the Fire Chief's maximum base salary so this one anomaly is not particularly meaningful.) Newton's minimum and maximum salaries are also higher compared to individual communities, including Brookline. As with the Police salaries, the benchmarking data suggests that further analysis is needed to assess Newton's compensation strategy.

Table 13: Fire - Cost per Capita and Cost as a Percent of Municipal Budget

	City/Town	Population	Total Cost	Cost per Capita		Cost as a % of Municipal Budget
				Cost per Capita	Rank	
Core Benchmarking Communities	**Newton**	**82,819**	**$11,688,683**	**$141**	**9**	**9.2%**
	Newton Post-Arbitration	**82,819**	**$12,857,551**	**$155**	**5**	**10.1%**
	Arlington	41,075	$5,067,792	$123	10	8.9%
	Belmont	23,308	$3,543,366	$152	6-7	10.8%
	Brookline	55,241	$11,613,068	$210	1	11.4%
	Framingham	64,762	$10,980,090	$169	4	11.9%
	Lexington	30,231	$4,524,996	$149	8	8.2%
	Natick	31,886	$5,994,514	$187	2	12.0%
	Needham	28,368	$5,272,928	$185	3	8.8%
	Wellesley	26,987	$4,113,132	$152	6-7	9.1%
	AVERAGE	42,742	$7,107,493	$165		10.3%
Other	Quincy	91,058	$15,963,436	$175		12.3%
	Waltham	59,352	$13,086,473	$220		12.6%
Sources		U.S. Census 2006 Estimate	Massachusetts Department of Revenue, Division of Local Services, FY07			
Non-MA Benchmarking Communities	**Newton**	**82,819**	**$11,688,683**	**$141**	**5**	**9.2%**
	Newton Post-Arbitration	**82,819**	**$12,857,551**	**$155**	**4**	**10.1%**
	Fairfield, CT	57,829	$10,749,000	$185	2	11.7%
	Norwalk, CT	84,187	$13,554,507	$161	3	12.1%
	West Hartford, CT	60,700	$12,167,438	$200	1	14.5%
	AVERAGE	**73,671**	$12,203,436	$172		11.5%
Sources		U.S. Census 2006 Estimate	Fairfield, Norwalk, & West Hartford Annual Budgets, FY07 Massachusetts Municipal Personnel Association Compensation/Benefits Survey of Fire Personnel, FY07			

[1] Newton estimates that its costs will prove to be 10% higher in 2007 once the impact of the arbitration with the Fire Union is included. The average uses Newton's post-arbitration estimate.

Table 14: Fire Personnel

	City/Town	Population	Total Number of Fire Personnel[1]	Number of Citizens per Individual Fire Person	Rank	Number of Firefighters	Number of Fire Commanders[2]	Number of Firefighters as a % of Uniformed Fire Force
Core Benchmarking Communities	**Newton**	**82,819**	**177**	**468**	**6**	**126**	**51**	**71%**
	Arlington	41,075	71	579	9	46	25	65%
	Belmont	23,308	54	432	3	37	17	69%
	Brookline	55,241	160	345	1	122	38	76%
	Framingham	64,762	146	444	5	107	39	73%
	Lexington	30,231	54	560	8	40	14	74%
	Natick	31,886	85	375	2	57	28	67%
	Needham	28,368	65	436	4	51	14	78%
	Wellesley	26,987	54	500	7	35	19	65%
	AVERAGE	42,742	96	444		69	27	71%
Other	Quincy	91,058	207	440		144	63	70%
	Waltham	59,352	173	343		123	50	71%
Sources		**U.S. Census 2006 Estimate**	**Massachusetts Municipal Personnel Association Compensation/Benefits Survey of Fire Personnel, FY07**					

[1] Total includes all firefighters, lieutenants, captains, district chiefs, deputy chiefs and fire chiefs
[2] Includes lieutenants, captains, district chiefs, deputy chiefs and chiefs.

Table 15: Fire Salaries

	City/Town	Population	Firefighter Min Base Salary	Firefighter Max Base Salary	Lt. Min Base Salary	Lt. Max Base Salary	Captain Min Base Salary	Captain Max Base Salary	Deputy Chief Min Base Salary	Deputy Chief Max Base Salary	Fire Chief Min Base Salary	Fire Chief Max Base Salary
Core Benchmarking Communities	**Newton**	**82,819**	**$43,600**	**$50,437**	**$52,200**	**$59,193**	**$60,020**	**$67,783**	**$69,025**	**$77,675**	**$79,656**	**$119,484**
	Arlington	41,075	$41,539	$45,690	$52,997	$52,997	$60,947	$60,947	$70,088	$70,088	$78,899	$114,013
	Belmont	23,308	$36,531	$43,151	$51,557	$56,302	$64,184	$66,999	n/a	n/a	$74,603	$104,444
	Brookline	55,241	$41,502	$48,826	$58,591	$58,591	$68,551	$68,551	$80,205	$80,205	$112,661	$132,709
	Framingham	64,762	$39,925	$47,882	$49,452	$54,726	$56,868	$62,603	$66,156	$80,246	$113,512	$143,628
	Lexington	30,231	$36,529	$47,223	$49,973	$54,306	$57,219	$62,180	$52,135	$81,908	$77,560	$98,138
	Natick	31,886	$36,220	$47,973	$51,408	$54,689	$58,353	$60,158	$64,968	$69,288	$77,175	$104,328
	Needham	28,368	$39,353	$46,817	$50,436	$55,469	$58,465	$60,293	$62,716	$68,976	$86,822	$108,795
	Wellesley	26,987	$40,480	$47,621	$46,522	$54,765	$54,637	$64,289	$81,615	$81,615	$107,554	$107,554
	AVERAGE	42,742	$39,520	$47,291	$51,460	$55,671	$59,916	$63,756	$68,364	$76,250	$89,827	$114,788
Other	Quincy	91,058	$35,742	$49,488	$60,871	$60,871	$74,874	$74,874	$92,095	$92,095	$110,184	$110,184
	Waltham	59,352	$42,888	$45,201	$53,337	-	$62,938	-	$74,266	-	$94,286	$113,862
Sources		**U.S. Census, 2006 Estimate**	**Massachusetts Municipal Personnel Association Compensation/Benefits Survey of Fire Personnel, FY'07**									

Expenditures - Public Works, General Government, Culture and Recreation, and Human Services:

The benchmarking data show that Newton's public works spending ($202 per capita) is significantly higher than the average for the Massachusetts benchmarking group ($173 per capita – 16.8% more) but slightly lower than the average for the non-Massachusetts benchmarking communities ($207). (See Table 16: Expenditures on Department of Public Works.) Newton also spends a significantly higher percentage of its municipal budget on public works, 13.2%, than the core benchmarking group which is on average 10.7%. Only Belmont (13.3%) and Wellesley (12.9%) are close to Newton. At first glance, compared to its Massachusetts peers, Newton's Department of Public Works appears to be an efficient organization, employing one member of the DPW department for every 555 citizens (a 555:1 ratio) which is significantly above the average (418:1). But, Newton outsources its trash and the employees of this private company are not included in the analysis as DPW employees. Brookline, with a significantly lower ratio of DPW employees to citizens, 310:1 (but a lower cost per capita of $169) has its own DPW employees do the trash pickup. Needham has made a different set of choices as it provides no trash pickup; it has the lowest public works per capita number of $127 and the lowest percentage of the municipal budget allocated to public works, 8.2%.

The benchmarking data does not necessarily reflect all the costs of public works. For example, some municipalities include building and/or park maintenance in their Public Works Department while others do not. (Newton has a Parks and Recreation Department that maintains the city's public grounds and a Public Buildings Department that maintains buildings.) The benchmarking data raises the question of what is the mix of spending by the Department of Public Works and how this mix and level might be productively altered.

The benchmarking analysis indicates that Newton appears to be under-spending is in the "back office" or General Government. This category includes Legislative, Executive, Accountant/Auditor, Collector, Treasurer, Law Department Town/City Counsel, Public Building/Properties Maintenance, Assessors, Operation Support, License and Registration, Land Uses, Conservation Commission and others. (See Table 17: General Government, Culture and Recreation, & Human Services.) Newton's cost per capita for General Government is $123, 10% lower compared to the core benchmarking communities' average of $136. Interestingly, the General Government cost per capita has a wide range among the core benchmarking communities, stretching from $108 (Arlington) to $161 (Natick). General Government accounts for 8.0% of Newton's municipal expenditures, a bit lower than the average of 8.2% for the core Massachusetts benchmarking group. The benchmarking data on General Government expenditures indicates that further analysis should be done to probe whether Newton is under-spending in this area.

The benchmarking data also shows that Newton spends significantly more money ($105 per capita) than the core average ($89 per capita) in Culture & Recreation (18% more) and significantly more ($34 per capita) than the core benchmarking average ($26 per capita) in Human Services (30% more). (See Table 17: Expenditures on General Government, Culture and Recreation, and Human Services.) In parallel, Newton is allocating a larger percentage of its resources to Culture and Recreation and Human Services, 6.9% and 2.2% respectively, compared to the averages for the communities in the core benchmarking group, 5.5% for Culture and Recreation and 1.7% for Human Services. The benchmarking data raises the question of the reasons various communities are making about these types of investments in their communities and the efficiency in which they deliver the services. Newton, for example, invests heavily in its

library system, spending approximately $5 million in 2007. Newton is also unusual in supporting a local museum (which cost approximately $280,000 in 2007). Also, Culture & Recreation includes park maintenance workers, a function done by Departments of Public Works in other communities. (Note: Newton's Public Works expenditures per capita and percent of the municipal budget is also high compared to the benchmarking communities.) The city's Health Services Department includes the 21 nurses that work in each of the schools, an expense of approximately $1.4 million. (It is unclear if other communities classify school nurses as Health Department or School Department employees.) The benchmarking data suggests that more research be done to understand what lies behind the apparently high expenditures and the choices being made in Culture and Recreation and Health Services.

Looking at the minimum and maximum base salaries for a sample of executive and miscellaneous positions in the municipal government reveals that Newton is usually slightly above the average. From laborers and clerks to Directors of departments, Newton sets its minimum and maximum salaries a bit higher than the average. (See Table 18: Salaries of Executive and Miscellaneous Positions.) Perhaps because Newton is a larger community and wants the flexibility of hiring more experienced people, it has higher maximums for almost all positions. One notable exception is the Finance Director in which both Newton's minimum and maximum are below the average and are the very lowest of all the core benchmarking communities. (Note: Newton disperses its financial leadership between the Chief Budget Officer, the Treasurer and the Comptroller.) The benchmarking data raises the question of the effectiveness in the short- and long-term of Newton's overall salary and compensation strategy and, in particular, the role of a Finance Director and the appropriate pay level for such a position. It is also worth noting that when it comes to executive/management salaries, minimum and

maximum base salaries are less relevant than with union positions. One needs to look at typical progression over a period of time. What is the usual starting step? Are steps always automatic? How often in the past have steps been given, frozen, effected by merit, etc.? Management pay scales can be very deceptive.

Benefits are a substantial part of Newton's expenditures (approximately 15% of the General Fund) and health insurance is one of the significant components. The City of Newton pays 80% of the health insurance contribution for both HMOs and PPOs. (See Table 19: City/Town Contribution Percentages to Health Insurance.) The average for the core benchmarking communities is a contribution of 82.4% for HMOs and 68.3% for PPOs. Some communities make a smaller contribution than Newton's. Brookline, for example, contributes 75% for both types of plans. Needham appears to be the lowest at 69% and 50% for the HMO and PPO respectively. The benchmarking data on municipal contribution levels on health insurance raises the question of whether Newton should negotiate with the unions to change the contribution percentages.

Table 16: Expenditures on Department of Public Works

	City/Town	Population	Total Cost	Cost per Capita	Rank	Cost as a % of municipal budget	Total Number of DPW Employees	Number of Citizens per DPW Employee	Rank
Core Benchmarking Communities	**Newton**	**82,819**	**$16,805,226**	**$202**	**3**	**13.2%**	**149**	**556**	**3**
	Arlington	41,075	$5,966,447	$145	8	**10.5%**	121	**339**	6
	Belmont	23,308	$4,394,815	$188	4	**13.3%**	34	**686**	1
	Brookline	55,241	$9,345,157	$169	5	**9.1%**	178	**310**	8
	Framingham	64,762	$9,507,857	$146	7	**10.3%**	114	**568**	2
	Lexington	30,231	$6,320,487	$209	2	**11.4%**	81	**373**	4
	Natick	31,886	$4,938,959	$154	6	**9.9%**	89	**358**	5
	Needham	28,368	$3,629,437	$127	9	**6.1%**	86	**330**	7
	Wellesley	26,987	$5,802,864	$215	1	**12.9%**	109	**248**	9
	AVERAGE	42,742	$7,412,361	$173		**10.7%**	107	**400**	
Sources		**U.S. Census 2006 Estimate**	**MA Dept. of Revenue, Division of Local Services, FY07; Town Budgets/Annual Financial Reports, FY07**						
Non-MA Benchmarking Communities	**Newton**	**82,819**	**$16,805,226**	**$202**	**2**	**13.2%**	**149**	**556**	**4**
	Fairfield, CT	57,829	$13,855,000	$239	1	15.1%	98	**590**	3
	Norwalk, CT	84,187	$15,730,178	$186	4	14.0%	122	**690**	2
	West Hartford, CT[1]	60,700	$12,196,978	$200	3	14.5%	56	**1,084**	1
	AVERAGE	**71,384**	$14,646,846	$207		14.2%	106	730	
Sources		**U.S. Census 2006 Estimate**	**Town Budgets/Annual Financial Reports, FY07**						

Note: Attempts were made to ensure suitable comparisons between the towns. In general, Public Works included: Highways/ Streets Snow & Ice, Highway/Streets other, Waste Collection & Disposal, Sewerage Collection & Disposal, Water Distribution, Parking Garage, Street Lighting and other.

[1] West Hartford DPW Data is approximate - West Hartford uses an unclear and complicated department breakdown system that makes it difficult to compare with other CT and MA towns

Table 17: Expenditures on General Government, Culture and Recreation, and Human Services

	City/Town	Population	General Govt[1]	General Govt per Capita	GG Cost as a % of Municipal budget	Culture & Rec.[2]	Culture & Rec. per Capita	C&R as a % of Mun. Budget	Human Services[3]	Human Services per Capita	HS as a % of Mun. Budget
Core Benchmarking Communities	**Newton**	**82,819**	**$10,201,560**	**$123**	**8.0%**	**$8,756,667**	**$105**	**6.9%**	**$2,836,433**	**$34**	**2.2%**
	Arlington	41,075	$4,474,152	$108	**7.9%**	$2,849,107	$69	**5.0%**	$734,029	$17	**1.3%**
	Belmont	23,308	$3,454,856	$148	**10.5%**	$2,509,852	$107	**7.6%**	$685,985	$29	**2.1%**
	Brookline	55,241	$8,735,154	$158	**8.5%**	$5,557,341	$100	**5.4%**	$1,800,595	$32	**1.8%**
	Framingham	64,762	$7,059,984	$109	**7.6%**	$4,330,496	$66	**4.7%**	$1,038,554	$16	**1.1%**
	Lexington	30,231	$4,379,886	$144	**7.9%**	$2,686,728	$88	**4.9%**	$753,950	$24	**1.4%**
	Natick	31,886	$5,136,858	$161	**10.3%**	$2,283,954	$71	**4.6%**	$938,469	$29	**1.9%**
	Needham	28,368	$4,102,126	$144	**6.9%**	$1,676,962	$59	**2.8%**	$823,556	$29	**1.4%**
	Wellesley	26,987	$3,541,547	$131	**7.9%**	$3,617,464	$134	**8.0%**	$755,759	$28	**1.7%**
	AVERAGE	42,742	$5,676,236	$136	**8.2%**	$3,807,619	$89	**5.5%**	$1,151,926	$26	**1.7%**
Sources		U.S. Census 2006 Estimate	Massachusetts Department of Revenue, Division of Local Services, FY07								

[1]General Government: Legislative, Executive, Accountant/Auditor, Collector, Treasurer, Law Department Town/City Counsel, Public Building/Properties Maintenance, Assessors, Operation Support, License and Registration, Land Uses, Conservation Commission and other.

[2]Culture and Recreation: Library, Recreation, Parks, Historical Commission, Celebrations and other.

[3]Human Services: Health Services, Clinical Services, Special Programs, and Veteran's Services.

Table 18: Salaries of Executive and Miscellaneous Positions

			Minimum and Maximum Annual Base Pay for Executive and Miscellaneous Positions					
Executive and Misc. Employee Wage/Salary Data	**City/Town**	**Population**	**Laborer Min**	**Laborer Max**	**Clerk 1 (Jr. Clerk) Min**	**Clerk 1 (Jr. Clerk) Max**	**Finance Director Min**	**Finance Director Max**
Core Benchmarking Communities	**Newton**	**82,819**	**$33,105**	**$38,594**	**$27,825**	**$41,737**	**$67,215**	**$101,498**
	Arlington	41,075	$13.54/hr	$16.41/hr	n/a	n/a	n/a	n/a
	Belmont	23,308	$33,616	$39,139	$23,975	$28,771	n/a	n/a
	Brookline	55,241	n/a	$37,885	$34,378	$36,313	$105,291	$124,027
	Framingham	64,762	$34,882	$39,478	n/a	n/a	$89,188	$108,150
	Lexington	30,231	$32,754	$37,837	$25,720	$40,408	$117,875	$117,875
	Natick	31,886	$26,470	$37,117	n/a	n/a	$77,175	$104,328
	Needham	28,368	$28,234	$32,515	$26,154	$33,130	$86,822	$108,795
	Wellesley	26,987	$25,584	$33,134	n/a	n/a	$80,560	$120,840
	AVERAGE	42,742	$30,664	$36,962	$27,610	$36,072	$89,161	$110,120
Sources		**U.S. Census 2006 Estimate**	**Massachusetts Municipal Personnel Association Benchmark Salary Survey, FY07**					

Table 18: Salaries of Executive and Miscellaneous Positions (continued)

			Minimum and Maximum Annual Base Pay for Executive and Miscellaneous Positions					
Executive and Misc. Employee Wage/Salary Spreadsheet Continued…	**City/Town**	**Population**	**Library Director Min**	**Library Director Max**	**Assessor Min**	**Assessor Max**	**DPW Director Min**	**DPW Director Max**
Core Benchmarking Communities	**Newton**	**82,819**	**$67,215**	**$101,498**	**$67,215**	**$101,498**	**$79,656**	**$119,484**
	Arlington	41,075	$71,727	$103,648	$64,735	$94,545	$78,899	$114,013
	Belmont	23,308	$64,147	$89,805	$64,147	$89,865	$74,603	$104,444
	Brookline	55,241	$90,270	$106,333	$83,583	$98,547	$112,661	$132,709
	Framingham	64,762	$80,968	$101,930	$72,683	$86,861	$113,512	$143,628
	Lexington	30,231	$72,673	$91,955	$49,713	$78,103	$77,560	$98,138
	Natick	31,886	$66,530	$89,856	$49,443	$66,839	$77,175	$104,328
	Needham	28,368	$67,107	$84,090	$62,895	$78,812	$86,822	$108,795
	Wellesley	26,987	$61,520	$92,280	$57,440	$86,160	$80,560	$120,840
	AVERAGE	42,742	$71,351	$95,711	$63,539	$86,803	$86,828	$116,264
Sources		**U.S. Census 2006 Estimate**	**Massachusetts Municipal Personnel Association Benchmark Salary Survey, FY07**					

Table 19: City/Town Contribution Percentages to Health Insurance

	City/Town	Population	% City/Town Contribution	
			HMO	PPO
Core Benchmarking Communities	**Newton**	**82,819**	**80%**	**80%**
	Arlington	41,075	85%	75%
	Belmont	23,308	90%	80%
	Brookline	55,241	75%	75%
	Framingham	64,762	90%	75%
	Lexington	30,231	85%-87%	80%
	Natick	31,886	85%-89%	50%
	Needham	28,368	69%	50%
	Wellesley	26,987	80%	50%
	AVERAGE	42,742	82.4%	68.3%
Sources		**U.S. Census 2006 Estimate**	**Massachusetts Municipal Personnel Association Benchmark Salary Survey FY07**	

Capital and Debt

Data on Newton's capital structure reveals the starkest inconsistency with the benchmarking communities, across the entire range of data collected for this benchmarking report. (See Table 20: Expenditures on Capital Assets and Debt.) Compared to all of its Massachusetts as well as non-Massachusetts peers, Newton spends only $155 per capita on long-term, capital assets (e.g., buildings, machines, and equipment), approximately 50% less than the core benchmarking community group average of $304. In parallel, Newton has significantly less debt per capita, allocating the lowest percent of its general fund operating budget to debt compared to the nine benchmarking communities. Newton has $824 per capita in outstanding debt while the Massachusetts average is essentially double, $1,626, and the non-Massachusetts average is essentially triple, $2,430. Newton's total debt service is $159 per capita, while the Massachusetts benchmarking average is $268 and the non-Massachusetts benchmarking average is $252. Newton allocates 4.47% of its general fund operating budget to debt service, compared to the Massachusetts benchmarking average of 7.38%. (Newton has a policy of allocating only 3% of its General Fund operating budget to debt service. The actual percentage was "high" in 2007 due to a one year anomaly related to an unusual payment from a fire many years ago. So, the contrast with the benchmarking communities should be even greater.) The benchmarking data raises questions about the adequacy of Newton's investments in capital assets and the amount of debt that the city should carry.

This underinvestment in capital assets and low debt levels are two reasons Newton has an AAA rating from Moody's Bond Ratings service. But, communities with significantly more total debt service per capita also have AAA ratings. For example, Belmont ($202), Brookline

($258), Lexington ($326), Needham ($341), and Wellesley ($341) have the same AAA rating at much higher total debt service per capita levels. (Newton's total debt service per capita is $159.)

Table 20: Expenditures on Capital Assets and Debt

	City/Town	Population	Expenditures per Capita on Capital Projects	Outstanding Debt	Outstanding Debt per Capita	Rank
Core Benchmarking Communities	**Newton**	**82,819**	**$155**	**$68,289,973**	**$824**	**9**
	Arlington	41,075	$102	$51,527,988	$1,254	7
	Belmont	23,308	$250	$36,018,056	$1,545	6
	Brookline	55,241	$163	$104,508,761	$1,891	3
	Framingham	64,762	$216	$71,183,808	$1,099	8
	Lexington	30,231	$439	$55,984,978	$1,851	4
	Natick	31,886	$176	$68,179,485	$2,138	2
	Needham	28,368	$759	$50,190,631	$1,769	5
	Wellesley	26,987	$481	$61,195,935	$2,267	1
	AVERAGE	42,742	$304	$63,008,846	$1,626	
Sources		**U.S. Census 2006 Estimate**	**Massachusetts Department of Revenue, Division of Local Services FY07**			
Non-MA Benchmarking Communities	**Newton**	**82,819**	**n/a**	**$68,289,973**	**$824**	**4**
	Fairfield, CT	57,829	n/a	$187,246,000	$3,237	1
	Norwalk, CT	84,187	n/a	$236,743,000	$2,812	3
	West Hartford, CT	60,700	n/a	$172,927,000	$2,848	2
	AVERAGE	**71,384**		$166,301,493	$2,430	
Sources		**U.S. Census 2006 Estimate**	**Fairfield, Norwalk, & West Hartford Annual Budgets, FY07**			

Table 20: Expenditures on Capital Assets and Debt (continued)

Capital Spreadsheet Continued…	City/Town	Population	Total Debt Service	Total Debt Service per Capita[1]	Rank	General Fund Debt Service	General Fund Debt Service per Capita	Rank	Total Debt Service as a % of General Fund Operating Budget[2]	Rank	Bond Ratings
Core Benchmarking Communities	**Newton**	**82,819**	**$13,238,255**	**$159.00**	**9**	**$9,660,389**	**$116**	**9**	**4.47%**	**9**	**AAA**
	Arlington	41,075	$8,256,310	$201.00	7	$7,550,826	$183	7	7.89%	5	Aa2
	Belmont	23,308	$4,729,406	$202.00	6	$4,418,856	$189	6	6.51%	7	AAA
	Brookline	55,241	$14,268,142	$258.00	5	$13,348,303	$241	4	8.00%	4	AAA
	Framingham	64,762	$10,551,622	$162.00	8	$8,054,951	$124	8	5.23%	8	A1
	Lexington	30,231	$9,868,314	$326.00	3	$9,183,414	$303	2	9.05%	2	AAA
	Natick	31,886	$14,027,863	$439.00	1	$6,867,254	$215	5	7.81%	6	Aa2
	Needham	28,368	$9,147,417	$322.00	4	$7,165,726	$252	3	8.17%	3	AAA
	Wellesley	26,987	$9,212,451	$341.00	2	$8,510,042	$315	1	9.27%	1	AAA
	AVERAGE	42,742	$10,366,642	$267.78		$8,306,640	$215		7.38%		
Sources		**U.S. Census 2006 Estimate**	**Massachusetts Department of Revenue, Division of Local Services FY07**								

Non-MA Benchmarking Communities	**Newton**	**82,819**	**$13,238,255**	**$159**	**4**
	Fairfield, CT	57,829	$20,140,000	$348	1
	Norwalk, CT	84,187	$20,728,000	$246	3
	West Hartford, CT	60,700	$15,602,478	$257	2
	AVERAGE	**71,384**	$17,427,183	$253	
Sources		**U.S. Census 2006 Estimate**	**Fairfield, Norwalk, & West Hartford Annual Budgets, FY07**		

[1] Debt service includes both principal and interest payments

[2] Operating budget here *includes* education expenditures

IV. School Benchmarking

Demographics

People who live in Newton generally are quite similar demographically to those in both benchmarking groups but there are some interesting differences. Although Newton has the largest population and the largest student body of the selected communities, 14.1% of Newton's population is pupils, slightly below both the average of 15.2% for demographically similar communities and below the average of 18.7% for communities with a similar commitment to education. (See Table 21: Schools: Demographics Overview.) Like the comparison communities, Newton residents 25 years of age and older are well-educated, with 68.0% of the population having a bachelor's degree or higher. The percentage of students in Newton whose first language is not English, 18.7%, is higher but relatively close to the average for the list of demographically similar communities (15.2%), but, when compared to communities with a similar commitment to education (11.3%), it is much higher. Communities like Newton, Brookline, Framingham and Lexington have high percentages of students whose first language is not English. Yet, the percentage of pupils in Newton who are "low-income" (6.9%) is a bit lower compared to the average for demographically similar communities (8.9%) and a bit higher for communities with a similar commitment to education (4.9%). But, the averages are a bit misleading when looking at income because of the wide range. For example, 28.8% of the students are from low-income families in Framingham but only 1.9% are in Weston. The communities with a similar commitment to education have only 1% to 5% of their students in the low income category with the exceptions of Newton (6.9%) and Brookline (10.0%). Overall, Newton's demographic statistics tend to be in the upper half of the demographically similar

communities (i.e., better educated parents, fewer students whose first language is not English, and fewer students from low income families) but in the lower half of the communities with a similar commitment to education. These demographic differences should be kept in mind when looking at the benchmarking data, especially that for communities with a similar commitment to education.

Special education enrollment as a percent of total enrollment falls in a narrow band in all the benchmarking communities. Newton's percentage of pupils who are enrolled in special education (18.8%) is higher when compared to demographically similar communities (16.3%), to communities with a similar commitment to education (16.8%) and to the statewide percentage (16.9%), by two or three percentage points. Of the benchmarking communities, only Framingham has a higher percentage (20.7%) of special education students.

The demographic data on students in Newton's schools includes METCO (Metropolitan Council for Educational Opportunity) children. 3.7% of the students in Newton Public Schools (approximately 415) live in Boston and attend schools in Newton through the METCO program. These children are all African American, Latino, Asian or Native American. The Department of Education data includes these children in its demographic profile of the schools they attend. Without exception, every community in both benchmarking groups also participates in the METCO program.

Table 21: Schools: Demographics Overview

	Communities	Population	Total Pupils	Total Pupils as a % of Total Population	% of Population 25 Years and Over who have a Bachelors Degree or Higher	% of Students Whose First Language is Not English	% of Students who are Low Income (% of Students on Free and Reduced Lunch)	Special Education Enrollment as a % of Total Enrollment
Demographically Similar Communities	**Newton**	**82,819**	**11,715**	**14.1%**	**68.0%**	**18.7%**	**6.9%**	**18.8%**
	Arlington	41,075	4,649	11.3%	52.8%	10.8%	9.7%	16.1%
	Belmont	23,308	3,811	16.3%	63.1%	11.1%	5.9%	13.1%
	Brookline	55,241	6,215	11.2%	76.9%	28.1%	10.0%	18.3%
	Framingham	64,762	8,456	13.1%	42.3%	34.1%	28.8%	20.7%
	Lexington	30,231	6,313	20.9%	69.1%	18.8%	4.7%	16.4%
	Natick	31,886	4,695	14.7%	52.5%	4.9%	7.4%	14.9%
	Needham	28,368	5,064	17.9%	64.9%	5.8%	3.0%	12.4%
	Wellesley	26,987	4,682	17.4%	75.9%	4.8%	3.9%	15.9%
	AVERAGE	42,742	6,178	15.2%	62.8%	15.2%	8.9%	16.3%
Communities with a Similar Commitment to Education	**Newton**	**82,819**	**11,715**	**14.1%**	**68.0%**	**18.7%**	**6.9%**	**18.8%**
	Brookline	55,241	6,215	11.2%	76.9%	28.1%	10.0%	18.3%
	Concord-Carlisle	21,641	3,945	18.2%	70.0%	4.6%	2.5%	16.8%
	Lexington	30,231	6,313	20.9%	69.1%	18.8%	4.7%	16.4%
	Lincoln-Sudbury	24,975	6,192	24.8%	71.0%	3.4%	3.9%	14.9%
	Wayland	12,970	2,905	22.4%	68.3%	5.2%	5.1%	18.3%
	Wellesley	26,987	4,682	17.4%	75.9%	4.8%	3.9%	15.9%
	Weston	11,646	2,401	20.6%	75.1%	6.4%	1.9%	14.9%
	AVERAGE	33,314	5,546	18.7%	71.8%	11.3%	4.9%	16.8%
Sources		2006 Estimates	MA DOE FY07		Census 2000	MA DOE 07-08		MA DOE FY08

Note: Concord-Carlisle and Lincoln-Sudbury data is a weighted average based on the number of students in each pk-8 program and the high school

Investment in Schools

As previously noted in the City/Town Benchmarking section, as a result of Newton's large population compared to the other benchmarking communities, Newton has, in absolute dollars, a large total budget for both the city and the school system. A key question that Newton faces as a community, though, is what percentage of the city's total budget should be devoted to educating its young people. More than half (55.9%) of Newton's total budget is allocated to the school system. This is higher than the average of 51.1% for demographically similar communities but essentially the same as communities with a similar commitment to education (55.5%). Benchmarking reveals that cities and towns make quite different decisions on the percentage of their total budget being allocated to schools (as well as per capita and per pupil expenditure levels.) Three communities allocate a larger proportion of their city/town budgets to the schools: Framingham (56.2%), Lexington (59.9%) and Wayland (65.4%). (See Table 22: Expenditures on Schools. Note: this is the same as Table 8.) While Newton also spends more per capita on its schools, investing $2055, compared to the core benchmarking communities' school expenditures per capita of $1922 (6.9% more), Newton spends less per capita than all but one of the communities with a similar commitment to education which averages $2355 (12.7% less). (Brookline is lower with total school expenditures per capita of $1699. Weston and Concord-Carlisle are considerably higher with school expenditures per capita of $3394 and $3187 respectively.) (The data in Table 23 – Expenditures per Pupil mirrors the per capita data.) The benchmarking data raises the question of what logic governs the allocation of resources between municipal and school departments.

Another way of thinking about the question of how much to allocate to the schools is to look at the proportion of the community that are students. Interestingly, there are communities with a higher percentage of pupils spending a smaller percentage of their total budget on education. For example, with only 14.1% of our total population as students, Newton invests 55.9% of its budget on the schools. In contrast, Wellesley has 17.4% of its population in the school system but only invests 51.3% of its budget on its schools. Wayland, though, with the largest percentage of pupils (22.4%) also devotes the largest percentage of its town budget to the schools (65.4%). One might expect that there would be a clear positive correlation between the percentage of students in a city's or town's population and the percentage of the total budget allocated to education. But, when plotted against each other, for all the cities and towns in both our benchmark groups, the two data sets are scattered and have only a weak positive correlation. (See Graph 2: Percentage of Spending on Schools vs. Percentage of Pupils in the Population. Note: this is the same as Graph 1.) (The coefficient of determination, R^2, is 0.4311. A score of 1.0 would indicate perfect correlation.) The percentage of its resources that a community invests in education clearly depends not just on what percentage of the families have children in the schools but on a host of factors, including the non-educational priorities of the city or town. (Please note that an extensive school benchmarking analysis follows in a separate section.)

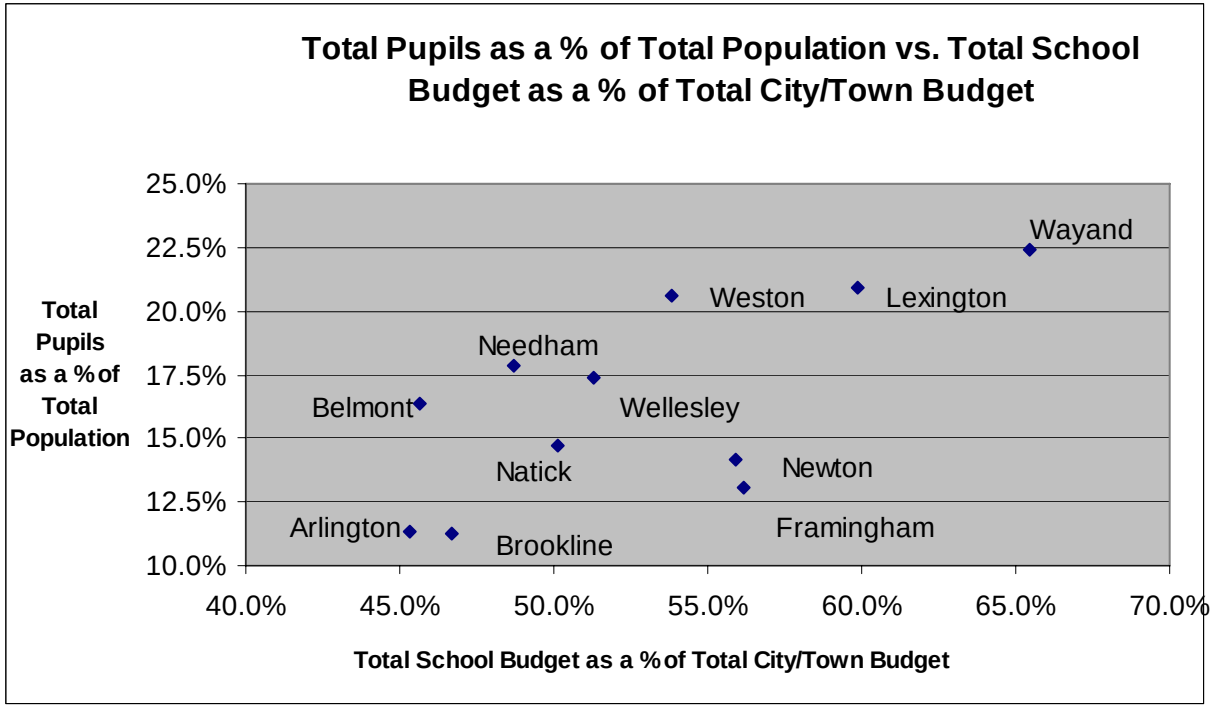
Table 22: Expenditures on Schools

	Communities	Total School Expenditures	Total City/Town Budget	Total School Budget as a % of Total City/Town Budget	Total School Expenditures per Capita	Total Pupils as a % of Total Population	Total Pupils as a % of Total Population Rank
Demographically Similar Communities	**Newton**	**$170,151,871**	**304,305,026**	**55.9%**	**$2,055**	**14.1%**	**6**
	Arlington	$53,027,084	116,958,838	45.3%	$1,291	11.3%	8
	Belmont	$41,016,066	89,858,790	45.6%	$1,760	16.3%	4
	Brookline	$93,827,435	201,080,497	46.7%	$1,699	11.2%	9
	Framingham	$119,807,708	213,306,233	56.2%	$1,850	13.1%	7
	Lexington	$85,697,174	143,176,511	59.9%	$2,835	20.9%	1
	Natick	$54,997,364	109,651,561	50.2%	$1,725	14.7%	5
	Needham	$61,117,736	125,517,445	48.7%	$2,154	17.9%	2
	Wellesley	$59,819,538	116,624,704	51.3%	$2,217	17.4%	3
	AVERAGE	$82,162,442	157,831,067	51.1%	$1,922	15.2%	
Communities with a Similar Commitment to Education	**Newton**	**$170,151,871**	**304,305,026**	**55.9%**	$2,055	**14.1%**	**7**
	Brookline	$93,827,435	201,080,497	46.7%	$1,699	11.2%	8
	Concord-Carlisle	$60,763,727	N/A	N/A	$2,808	18.2%	5
	Lexington	$85,697,174	143,176,511	59.9%	$2,835	20.9%	3
	Lincoln-Sudbury	$79,586,490	N/A	N/A	$3,187	24.8%	1
	Wayland	$38,386,562	58,663,131	65.4%	$2,960	22.4%	2
	Wellesley	$59,819,538	116,624,704	51.3%	$2,217	17.4%	6
	Weston	$39,524,117	73,450,872	53.8%	$3,394	20.6%	4
	AVERAGE	$78,469,614	149,550,124	55.5%	**$2,355**	18.7%	
Sources	**N/A**	**MA DOE FY07**					

Note: Concord-Carlisle and Lincoln-Sudbury data is a weighted average based on the number of students in each pk-8 program and the high school

Note: This is the same at Table 8.

Graph 2: Percentage of Spending on Schools vs. Percentage of Pupils in the Population



Source: MA DOE FY07; Data includes both sets of Benchmarking Communities

Note: This is the same as Graph 1.

School Expenditures

Compared to demographically similar communities, Newton is second highest in total expenditures per student at $14,524. (See Table 23: Expenditures per Pupil.) This is 12.6% more compared to the average of $12,900. Only Brookline is higher, spending $15,098 per student. Newton spends more per student in seven of the eleven categories tracked. Compared to the average for demographically similar communities, Newton invests less per pupil for administration;[6] instructional leadership;[7] instructional materials, equipment and technology; and insurance and retirement. Newton spends a good deal more money than the average demographically similar community on classroom and specialist teachers (11% more); other teaching services (48% more);[8] professional development (71% more);[9] guidance counseling and testing (32% more); and pupil services (35% more).

Special Education is looked at in greater depth later in this report. To begin, the data on out-of-district expenditures per pupil shows that Newton spends 19% more than the average for demographically similar community and 6% more than the average for communities with a similar commitment to education. But, this data will require more analysis. Newton's practice of teaching a greater percentage of its special education students itself might mean that the more unusual, and, therefore, more costly placements, are educated outside the district, driving up the

[6] Complete definitions of these terms are in Appendix III: Glossary of Terms for Financial Reporting, Massachusetts Department of Education. Administration includes the School Committee, Superintendent and Assistant Superintendents, District-Wide Administration, finance and administrative services and district wide information management and technology.
[7] Instructional leadership refers to department heads, principals and assistant principals, and supervisory curriculum directors.
[8] Other teaching services include such people as non-supervisory instructional coordinators, team leaders, curriculum facilitators, medical and therapeutic services, aides and librarians.
[9] Professional development includes the Director of Professional Development, teacher professional development days and their substitutes, professional development stipends, providers and expenses, and instructional supervisors, teachers and other professional staff who spend one-half or more of their time providing teacher training and implementation (i.e., curriculum coordinators).

average cost. (In fact, Table 26: Special Education shows that Newton places only 1.3% of its special education students outside of the district compared to the average of 2.3% for demographically similar communities.) The Special Education expenditures will be looked at in greater depth in a later section of this benchmarking report.

When Newton is compared to the communities with a similar commitment to education, Newton is no longer near the top of the list for school expenditures. Instead, in total expenditures per pupil, Newton falls to fourth ($14,524) out of the eight communities, slightly above the average ($14,223) of communities with a similar commitment to education. (See Table 23: Expenditures per Pupil.)[10] The range of expenditures per student is quite wide. Weston, Concord-Carlisle and Brookline are significantly higher than the average at $16,463, $15,297, and $15,098 respectively. But, Wellesley, Lincoln-Sudbury and Wayland are significantly lower than Newton's $14,524 at $12,776, $12,842 and $13,214. So, some communities known for excellent school systems spend significantly less than Newton per student. Notably, Newton spends per pupil essentially the same as the average for communities with a similar commitment to education for classroom and specialist teachers. Newton is below in instructional leadership (3.4% less). Newton is significantly below the average in expenditures per pupil in administration (14% less) and instructional materials equipment and technology (27% less). Newton still ranks significantly higher in two areas compared to communities with a similar commitment to education: other teaching services (18% more) and professional development (49.5% more).

There is some concern that different school systems might account for expenditures in different categories. In particular, Newton's curriculum coordinators are in the Professional

[10] When looking at communities with a similar commitment to education, Newton is above average on expenditures per pupil but below average on per capita spending due to Newton's smaller percentage of students in the population.

Development category (in line with the guidelines from the Massachusetts Department of Education (DOE) – See Appendix III) but there is some concern that other communities might classify their curriculum coordinators differently. While the DOE requires that schools hire auditing firms to verify the accuracy of the data and the DOE reviews the categorization of expenses, nonetheless there may be variations across school systems in accounting practices. To try to correct for this possibility, we combined the categories of Instructional Leadership, Other Teaching Services and Professional Development at the end of Table 23. Even when combined, Newton still has significantly higher expenditures per pupil ($2783) than demographically similar communities ($2160, a 27.9% difference) and communities with a similar commitment to education ($2483, a 12.1% difference).

The benchmarking data suggests that more analysis be done to understand better the level of total expenditures per student and the nuances of where these dollars are allocated.

Table 23: Expenditures per Pupil

EXPENDITURES	Communities	Administration	Instructional Leadership	Classroom and Specialist Teachers	Other Teaching Services	Professional Development	Instructional Materials, Equipment and Technology	Guidance Counseling and Testing
Demographically Similar Communities	**Newton**	**$453**	**$938**	**$5,412**	**$1,555**	**$290**	**$314**	**$519**
	Arlington	$348	$694	$4,110	$789	$216	$122	$339
	Belmont	$325	$850	$3,940	$573	$142	$378	$280
	Brookline	$766	$1,084	$5,981	$1,501	$319	$332	$425
	Framingham	$488	$861	$5,333	$1,055	$65	$262	$379
	Lexington	$311	$966	$5,175	$1,094	$70	$269	$403
	Natick	$654	$1,034	$4,179	$693	$50	$244	$383
	Needham	$476	$888	$4,578	$901	$123	$447	$357
	Wellesley	$237	$1,114	$4,980	$1,314	$255	$300	$458
	AVERAGE	$451	$937	$4,854	$1,053	$170	$297	$394
Communities with a Similar Commitment to Education	**Newton**	**$453**	**$938**	**$5,412**	**$1,555**	**$290**	**$314**	**$519**
	Brookline	$766	$1,084	$5,981	$1,501	$319	$332	$425
	Concord-Carlisle	$698	$896	$5,516	$1,567	$194	$811	$470
	Lexington	$311	$966	$5,175	$1,094	$70	$269	$403
	Lincoln-Sudbury	$468	$872	$4,709	$1,185	$179	$400	$397
	Wayland	$741	$820	$5,395	$861	$80	$356	$429
	Wellesley	$237	$1,114	$4,980	$1,314	$255	$300	$458
	Weston	$545	$1,081	$5,484	$1,462	$161	$662	$421
	AVERAGE	$527	$971	$5,332	$1,318	$194	$430	$440
Sources		**MA DOE FY07**						

Note: Concord-Carlisle and Lincoln-Sudbury data is a weighted average based on the number of students in each pk-8 program and the high school

Table 23: Expenditures per Pupil (continued)

EXPENDITURES (Continued)	Communities	Pupil Services	Operations and Maintenance	Insurance, Retirement and Other	Expenditures per Pupil Outside the District	Expenditures per Pupil Outside the District Rank	Total Expenditures per Pupil	Total Expenditures per Pupil Rank	Total Expenditures
Demographically Similar Communities	**Newton**	**$1,154**	**$1,236**	**$2,072**	**$59,904**	**3**	**$14,524**	**2**	**$170,151,871**
	Arlington	$660	$1,068	$2,246	$41,134	7	$11,406	8	$53,027,084
	Belmont	$636	$944	$1,815	$49,120	6	$10,764	9	$41,016,066
	Brookline	$706	$1,431	$1,942	$59,740	4	$15,098	1	$93,827,435
	Framingham	$1,122	$1,039	$2,661	$31,183	8	$14,169	3	$119,807,708
	Lexington	$867	$1,191	$2,377	$60,205	2	$13,574	4	$85,697,174
	Natick	$958	$924	$2,189	$21,806	9	$11,715	7	$54,997,364
	Needham	$827	$1,205	$1,646	$57,439	5	$12,070	6	$61,117,736
	Wellesley	$772	$1,013	$1,374	$73,923	1	$12,776	5	$59,819,538
	AVERAGE	$856	$1,117	$2,036	$50,495		$12,900		$82,162,442
Communities with a Similar Commitment to Education	**Newton**	**$1,154**	**$1,236**	**$2,072**	**$59,904**	**4**	**$14,524**	**4**	**$170,151,871**
	Brookline	$706	$1,431	$1,942	$59,740	5	$15,098	3	$93,827,435
	Concord-Carlisle	$1,186	$1,245	$1,421	$60,853	2	$15,297	2	$60,763,727
	Lexington	$867	$1,191	$2,377	$60,205	3	$13,574	5	$85,697,174
	Lincoln-Sudbury	$982	$1,091	$1,898	$51,357	6	$12,842	7	$79,586,490
	Wayland	$1,290	$1,281	$1,606	$44,002	7	$13,214	6	$38,386,562
	Wellesley	$772	$1,013	$1,374	$73,923	1	$12,776	8	$59,819,538
	Weston	$1,573	$1,542	$3,318	$41,881	8	$16,463	1	$39,524,117
	AVERAGE	$1,066	$1,254	$2,001	$56,483		$14,223		$78,469,614
Sources		**MA DOE FY07**							

Note: Concord-Carlisle and Lincoln-Sudbury data is a weighted average based on the number of students in each pk-8 program and the high school

Table 23: Expenditures per Pupil (continued)

		Expenditures per Pupil in the District			
	Communities	**Instructional Leadership (a)**	**Other Teaching Services (b)**	**Professional Development (c)**	**Total of (a) (b) (c)**
Demographically Similar Communities	**Newton**	**$938**	**$1,555**	**$290**	**$2,783**
	Arlington	$694	$789	$216	$1,699
	Belmont	$850	$573	$142	$1,565
	Brookline	$1,084	$1,501	$319	$2,904
	Framingham	$861	$1,055	$65	$1,982
	Lexington	$966	$1,094	$70	$2,130
	Natick	$1,034	$693	$50	$1,777
	Needham	$888	$901	$123	$1,912
	Wellesley	$1,114	$1,314	$255	$2,683
	AVERAGE	$937	$1,053	$170	$2,160
Communities with a Similar Commitment to Education	**Newton**	**$938**	**$1,555**	**$290**	**$2,783**
	Brookline	$1,084	$1,501	$319	$2,904
	Concord-Carlisle	$896	$1,567	$194	$2,657
	Lexington	$966	$1,094	$70	$2,130
	Lincoln-Sudbury	$872	$1,185	$179	$2,236
	Wayland	$820	$861	$80	$1,762
	Wellesley	$1,114	$1,314	$255	$2,683
	Weston	$1,081	$1,462	$161	$2,704
	AVERAGE	$971	$1,318	$194	$2,483
Sources		**MA DOE FY07**			

Note: Concord-Carlisle and Lincoln-Sudbury data is a weighted average based on the number of students in each pk-8 program and the high school

Teacher Salaries

For essentially all schools, personnel costs – salaries and benefits – are by far the largest single line item in its budget. In Newton, over $62 million is spent on teacher salaries, accounting for 37% of total school expenditures, the same percentage as most of the benchmarking communities, regardless of type. (See Table 24: Salaries as a Percent of Total School Expenses.) While Newton's average teacher salary of $67,080 is well above the average for demographically similar communities (8.4% higher), it is almost exactly the same as the average for communities with a similar commitment to education ($66,780). (See Table 25: Teacher Salaries.) However, looking at the minimum and maximum salaries at different educational levels for teachers compared to communities with a similar commitment to education, Newton is higher in nine out of ten categories, ranging from 0.4% to 5.4% higher. In conclusion, while Newton's average salaries are above the average for demographically similar communities, they are generally similar to communities with a similar commitment to education but Newton has higher minimum and maximum salaries for all teachers, regardless of educational background. The benchmarking data suggests more analysis be done to assess the compensation strategy for Newton's teachers.

Table 24: Salaries as a Percent of Total School Expenses

	Communities	Total Teacher Salaries	Total Expenditures	Total Teacher Salaries as a % of Total Expenditures
Demographically Similar Communities	**Newton**	**$62,820,787**	**$170,151,871**	37%
	Arlington	$18,741,839	$53,027,084	35%
	Belmont	$14,844,988	$41,016,066	36%
	Brookline	$36,718,881	$93,827,435	39%
	Framingham	$42,823,607	$119,807,708	36%
	Lexington	$32,087,114	$85,697,174	37%
	Natick	$18,862,405	$54,997,364	34%
	Needham	$22,889,937	$61,117,736	37%
	Wellesley	$22,958,973	$59,819,538	38%
	AVERAGE	$30,305,392	$82,162,442	37%
Communities with a Similar Commitment to Education	**Newton**	**$62,820,787**	**$170,151,871**	**37%**
	Brookline	$36,718,881	$93,827,435	39%
	Concord-Carlisle	$21,553,161	$60,763,727	35%
	Lexington	$32,087,114	$85,697,174	37%
	Lincoln-Sudbury	$28,940,131	$79,586,490	36%
	Wayland	$15,493,817	$38,386,562	40%
	Wellesley	$22,958,973	$59,819,538	38%
	Weston	$13,267,606	$39,524,117	34%
	AVERAGE	$29,230,059	$78,469,614	37%
Sources		**MA DOE FY07**	**MA DOE FY07**	

Note: Concord-Carlisle and Lincoln-Sudbury data is a weighted average based on the number of students in each pk-8 program and the high school

Table 25: Teacher Salaries

TEACHER SALARIES	Communities	Total Teacher Salaries	Total Teachers	Average Teacher Salaries	Average Teacher Salaries Rank	Bachelor's			Master's		
						Min.	Max.	Steps	Min.	Max.	Steps
Demographically Similar Communities	**Newton**	**$62,820,787**	**936.5**	**$67,080**	**3**	**$39,711**	**$66,997**	**13**	**$43,260**	**$73,790**	**13**
	Arlington	$18,741,839	349.3	$53,655	9	$34,748	$58,243	12	$37,388	$63,014	12
	Belmont	$14,844,988	254.0	$58,445	7	$37,192	$64,724	14	$39,941	$71,697	14
	Brookline	$36,718,881	544.8	$67,399	2	$38,707	$64,076	13	$41,271	$69,570	14
	Framingham	$42,823,607	694.5	$61,666	6	$38,169	$60,424	11	$40,974	$65,710	11
	Lexington	$32,087,114	519.5	$61,763	5	$38,174	$62,444	12	$40,558	$69,991	12
	Natick	$18,862,405	350.5	$53,816	8	$38,571	$57,534	14	$42,428	$63,289	14
	Needham	$22,889,937	361.5	$63,324	4	$37,631	$55,141	10	$40,451	$68,265	13
	Wellesley	$22,958,973	329.0	$69,784	1	$39,364	$66,722	14	$42,108	$73,559	14
	AVERAGE	$30,305,392	482.2	$61,881		$38,030	$61,812	12.6	$40,931	$68,765	13
Communities with a Similar Commitment to Education[1]	**Newton**	**$62,820,787**	**936.5**	**$67,080**	**5**	**$39,711**	**$66,997**	**13**	**$43,260**	**$73,790**	**13**
	Brookline	$36,718,881	544.8	$67,399	4	$38,707	$64,076	13	$41,271	$69,570	14
	Lexington	$32,087,114	519.5	$61,763	8	$38,174	$62,444	12	$40,558	$69,991	12
	Wayland	$15,493,817	242.0	$64,037	7	$38,843	$65,273	10	$41,187	$74,348	12
	Wellesley	$22,958,973	329.0	$69,784	3	$39,364	$66,722	14	$42,108	$73,559	14
	Weston	$13,267,606	187.9	$70,617	1	$37,544	$63,521	12	$41,137	$73,602	12
	AVERAGE	$30,557,863	459.9	$66,780		$38,724	$64,839	12.3	$41,587	$72,477	12.8
Sources		**MA DOE FY07**				**Town of Brookline Override Study Committee Final Report 2008 (FY06)**					

[1]Data for Concord-Carlisle and Lincoln-Sudbury was not readily available.

Table 25: Teacher Salaries (continued)

		Master's (Continued)						Doctorate		
TEACHER SALARIES (Continued)	**Communities**	**Min. (+1)**	**Max. (+1)**	**Steps (+1)**	**Min. (+45)**	**Max. (+45)**	**Steps (+45)**	**Min.**	**Max.**	**Steps**
Demographically Similar Communities	**Newton**	**$46,546**	**$78,345**	**12**	**$47,927**	**$79,725**	**13**	**$49,577**	**$83,161**	**13**
	Arlington	$38,700	$64,205	12	N/A	N/A	N/A	$40,901	$67,062	12
	Belmont	$42,189	$75,016	14	$43,444	$76,972	14	$44,693	$78,933	14
	Brookline	$43,923	$75,257	15	$45,242	$76,576	15	$46,501	$81,261	16
	Framingham	N/A	N/A	N/A	N/A	N/A	N/A	$47,987	$73,092	11
	Lexington	$42,973	$75,113	12	$44,192	$78,366	12	$45,441	$81,619	12
	Natick	$46,671	$69,617	14	N/A	N/A	N/A	$51,338	$76,579	14
	Needham	$43,576	$72,006	12	$45,150	$73,966	13	$46,481	$76,482	13
	Wellesley	$45,823	$79,238	14	N/A	N/A	N/A	$49,032	$84,783	14
	AVERAGE	$43,800	$73,600	13.1	$45,191	$77,121	13.4	$46,883	$78,108	13.2
Communities with a Similar Commitment to Education[1]	**Newton**	**$46,546**	**$78,345**	**12**	**$47,927**	**$79,725**	**13**	**$49,577**	**$83,161**	**13**
	Brookline	$43,923	$75,257	15	$45,242	$76,576	15	$46,501	$81,261	16
	Lexington	$42,973	$75,113	12	$44,192	$78,366	12	$45,441	$81,619	12
	Wayland	$43,056	$81,796	12	N/A	N/A	N/A	$48,658	$90,866	12
	Wellesley	$45,823	$79,238	14	N/A	N/A	N/A	$49,032	$84,783	14
	Weston	$43,459	$78,476	12	$44,515	$80,241	12	$45,566	$82,012	12
	AVERAGE	$44,297	$78,038	12.8	$45,469	$78,727	13.0	$47,463	$83,950	13.2
Sources	**Town of Brookline Override Study Committee Final Report 2008 (FY06)**									

[1]Data for Concord-Carlisle and Lincoln-Sudbury was not readily available.

Special Education

Newton has a higher percentage of pupils enrolled in special education, 18.8 percent of the total student body, compared both to the demographically similar communities (16.3%) and communities with a similar commitment to education (16.7%). The Newton Public Schools allots 21.8% of the total school budget to special education, which is only slightly above the two benchmarking averages of 21.3% and 20.5%. (See Table 26: Special Education.)[11] With the exceptions of Wayland and Weston, every community spends a higher percentage of its budget on special education than the percentage of special education students in its schools. The spread in Newton between these two percentages, 3.0, is smaller than the average for the demographically similar communities (5.0) and for the communities with a similar commitment to education (3.8). Interestingly, the spread between the percent of the total student body enrolled in special education and the percent of the total school budget allocated to special education has quite a wide range among the benchmarking communities. Wellesley is at 9.4 while Wayland is at – 2.9. The benchmarking data leads to the question of the choices around special education and the different ways of delivering these services.

Each community provides services for some special education students within its own school system, known as "in district." Newton's philosophy has been to educate as many special education students "in district" as possible believing inclusion helps all students. (Out of district services also generally cost more per pupil than the services that are being provided in district.) In fact, Newton is placing among the lowest percentage of pupils outside the district, 1.3%, compared to demographically similar communities which have an average of 2.3% out of district special education students. (Brookline, Needham, Wellesley and Lexington are also very low at

[11] It is worth noting that the Department of Education numbers do not necessarily capture the full cost of Special Education for not only Newton but all cities and towns.

1.3%, 1.4%, 1.5% and 1.8% respectively.) The average for demographically similar communities is exactly the same as Newton's, 1.3%. However, the effect of small numbers may be at work here. Weston, for example, only has 2380 students in its system. Only 19 children are placed out of district (0.8%). But, it may just be random that Weston has fewer children needing this type of full support. Yet, parents in a wealthy community like Weston may choose to send their children to schools that they pay for directly. The benchmarking data appears to indicate that Newton's out-of-district placements are generally quite similar to the communities with a similar commitment to education but this should be analyzed further.

Table 26: Special Education

							In-District Instruction		Out-of-District Tuition
SPECIAL EDUCATION	**Communities**	**FTE Pupils at the District**	**FTE Pupils Tuitioned Outside of District**	**FTE Pupils Tuitioned Outside of District as a % of Total Pupils**	**FTE Pupils Tuitioned Outside of District as a % of Total Pupils Rank**	**Total Pupils**	**Teaching**	**Other Instructional**	**MA Public Schools and Collaboratives**
Demographically Similar Communities	**Newton**	**11,566.9**	**148.4**	**1.3%**	**1**	**11,715**	**$21,367,453**	**$3,831,949**	**$617,324**
	Arlington	4,524.9	124.0	2.7%	7	4,649	$4,092,649	$869,765	$1,718,548
	Belmont	3,725.1	85.5	2.2%	6	3,811	$2,840,885	$626,969	$1,658,713
	Brookline	6,130.7	83.8	1.3%	1	6,215	$10,323,566	$1,777,074	$816,180
	Framingham	8,029.9	425.6	5.0%	9	8,456	$12,065,649	$2,497,946	$1,687,870
	Lexington	6,200.2	113.0	1.8%	5	6,313	$10,897,251	$982,213	$1,113,119
	Natick	4,513.4	181.4	3.9%	8	4,695	$3,827,148	$490,034	$925,067
	Needham	4,995.3	68.4	1.4%	3	5,064	$5,814,037	$1,016,984	$521,816
	Wellesley	4,610.0	72.3	1.5%	4	4,682	$6,890,917	$1,568,371	$725,969
	AVERAGE	6,032.9	144.7	2.3%		6,178	$8,679,951	$1,517,923	$1,087,178
Communities with a Similar Commitment to Education	**Newton**	**11,566.9**	**148.4**	**1.3%**	**3-4**	**11,715**	**$21,367,453**	**$3,831,949**	**$617,324**
	Brookline	6,130.7	83.8	1.3%	3-4	6,215	$10,323,566	$1,777,074	$816,180
	Concord-Carlisle	n/a	n/a	n/a	n/a	3,945	$6,141,968	$914,551	$1,487,051
	Lexington	6,200.2	113.0	1.8%	6	6,313	$10,897,251	$982,213	$1,113,119
	Lincoln-Sudbury	n/a	n/a	n/a	n/a	6,192	$6,673,069	$1,108,733	$860,889
	Wayland	2,872.0	33.1	1.1%	2	2,905	$3,500,348	$382,845	$398,033
	Wellesley	4,610.0	72.3	1.5%	5	4,682	$6,890,917	$1,568,371	$725,969
	Weston	2,380.8	20.0	0.8%	1	2,401	$3,035,875	$490,788	$170,713
	AVERAGE	5,626.8	78.4	1.3%		5,546	$8,603,806	$1,382,066	$773,660
Sources		**MA DOE FY07**							

Table 26: Special Education (continued)

		Out-of-District Tuition (Continued)					
SPECIAL EDUCATION (Continued)	**Communities**	**MA Private and Out-of-State Schools**	**Combined Special Education Expenditures**	**Total School Operating Budget**	**Special Education as a % of the Total School Budget (A)**	**Special Education Enrollment as a % of Total Enrollment (B)**	**Difference between (A) and (B)**
Demographically Similar Communities	**Newton**	**$6,604,398**	**$32,421,124**	**$148,911,532**	**21.8%**	**18.8%**	**3.0**
	Arlington	$2,532,680	$9,213,642	$45,933,507	20.1%	16.1%	4.0
	Belmont	$2,124,798	$7,251,365	$35,020,219	20.7%	13.1%	7.6
	Brookline	$4,159,428	$17,076,248	$78,093,557	21.9%	18.3%	3.6
	Framingham	$7,868,255	$24,119,720	$99,383,254	24.3%	20.7%	3.6
	Lexington	$5,015,831	$18,008,414	$77,921,076	23.1%	16.4%	6.7
	Natick	$2,168,627	$7,410,876	$48,988,822	15.1%	14.9%	0.2
	Needham	$2,742,049	$10,094,886	$52,914,410	19.1%	12.4%	6.7
	Wellesley	$3,983,929	$13,169,186	$52,011,889	25.3%	15.9%	9.4
	AVERAGE	$4,133,333	$15,418,385	$71,019,807	21.3%	16.3%	5.0
Communities with a Similar Commitment to Education	**Newton**	**$6,604,398**	**$32,421,124**	**$148,911,532**	**21.8%**	**18.8%**	**3.0**
	Brookline	$4,159,428	$17,076,248	$78,093,557	21.9%	18.3%	3.6
	Concord-Carlisle	$4,400,748	$12,944,318	$53,525,378	24.2%	16.4%	6.8
	Lexington	$5,015,831	$18,008,414	$77,921,076	23.1%	16.4%	7.5
	Lincoln-Sudbury	$3,494,501	$12,137,192	$61,916,093	19.6%	14.7%	4.6
	Wayland	$748,077	$5,029,303	$33,185,854	15.2%	18.3%	-2.9
	Wellesley	$3,983,929	$13,169,186	$52,011,889	25.3%	15.9%	9.4
	Weston	$652,817	$4,350,193	$33,500,275	13.0%	14.9%	-1.9
	AVERAGE	$3,632,466	$14,391,997	$67,383,207	20.5%	16.7%	3.8
Sources	**MA DOE FY07**						

School Characteristics

The benchmarking data highlights some interesting choices about teacher-student ratios, class size, teacher load and even lunch fees. The length of the school day does not hold any surprises. Newton is very similar to all the benchmarking communities at the elementary, middle and high school levels. (See Table 27: Length of School Day.) (Note: All the benchmarking communities have essentially the same number of school days.)

Newton has a low total student-to-teacher ratio at 12.4. (See Table 28: Teacher Load.) Among both demographically similar communities and communities with a similar commitment to education, only Lexington, Framingham and Concord-Carlisle match this student-teacher ratio (at 12.5, 12.4 and 12.4 respectively) with the average at 13.6 for the demographically similar benchmarking group and 13.0 for the communities with a similar commitment to education. While the data is limited, Newton's High School teacher load appears to be lower than that of other communities. Newton's core High School teachers teach 16 periods per week, whereas in most other communities the teachers are assigned 20 or more periods.[12] (This, however, can be a difficult statistic to compare across communities because there of other factors, such as period length and whether the High School is on a five day schedule.) By contract, Newton High School English teachers are not allowed to have more than 245 students for every 3 year period or, in essence, 82 students per year. This number is much lower than that of other communities which have on average a maximum of 125 students per English teacher. The benchmarking data suggests that more information on teacher load should be gathered.

While we have limited data on class size, Newton's class sizes appear to be a little bit smaller than average in the elementary and middle schools but a little bit higher in the High

[12] Core subjects include English, math, Social Sciences, Foreign Languages and Science

Schools. (See Table 29: Class Size.) For example, the average class size for Newton in core High School subjects is 21.1 while the averages for the two benchmarking sets are 20.2 and 20.7. More information should be gathered to understand the student-teacher ratios and class sizes better, particularly in light of the changes made this school year.

Measuring educational outcomes is difficult at best and the Massachusetts Comprehensive Assessment System (MCAS) is only one (perhaps flawed) instrument for doing so. Everything from the mix of student demographics to the effectiveness of individual teachers to class size and curriculum can have an impact. Nonetheless, in terms of outcomes, Newton is experiencing mixed results based on the MCAS results in 2007. Newton is above average for the percentage of students scoring proficient and advanced in 4th grade (MCAS) testing for both benchmarking groups. Only Belmont and Lexington consistently score better than Newton at the 4th grade level. (See Table 30: MCAS Results.) Yet, in 10th grade, the percent of Newton's students with MCAS scores of proficient and advanced for both English (88%) and Math (88%) are essentially the same as the average for demographically similar communities (88% and 87%) and below average when compared with communities with a similar commitment to education (92% and 90%). 10th graders in six of seven other communities with a similar commitment to education (Lexington, Lincoln-Sudbury, Wayland, Wellesley and Weston) score better on both the English Language Arts and the Math sections of the MCAS. This data on MCAS results will add to complexity of understanding Newton's schools.

Interestingly, the lunch fee in Newton's high schools, at $3.50, is higher than that of other communities. (See Table 31: High School Lunch Fees.) Yet, even with that high fee, Newton still needs to subsidize the food service program by $1 million. (There are a host of factors that impact the cost of providing meals. For example, Newton serves lunch to students in 21

buildings. In contrast, Brookline has only 10 and Framingham 13. Most of Newton's elementary schools do not have cafeterias so additional staff have to be hired as "lunch aides." Newton also accounts for both the salaries and benefits of its food service workers in the food service budget. It is unclear whether all communities include the benefits in their food service accounts.) The benchmarking data suggests the food service program should be looked at more closely.

Table 27: Length of School Day

LENGTH OF SCHOOL DAY	Communities	Length of Elementary School Day	Length of Middle School Day	Length of High School Day
Demographically Similar Communities	**Newton**	**354**	**381**	**398**
	Arlington	360	386	386
	Belmont	360	380	410
	Brookline	360	360	390
	Framingham	N/A	N/A	390
	Lexington	369	405	400
	Natick	360	375	407
	Needham	360	375	395
	Wellesley	358	361	384
	AVERAGE	360	378	396
Communities with a Similar Commitment to Education	**Newton**	**354**	**381**	**398**
	Brookline	360	360	390
	Concord-Carlisle	N/A	N/A	390
	Lexington	369	405	400
	Lincoln-Sudbury	N/A	N/A	409
	Wayland	361	370	391
	Wellesley	358	361	384
	Weston	365	399	391
	AVERAGE	361	379	394
Sources		**Town of Brookline Override Study Committee Final Report 2008; Data FY06**		

Table 28: Teacher Load

			High School					
TEACHER LOAD	**Communities**	**Length of Teacher Year**	**Periods per Week for Other Teachers**	**Periods per Week for English Teachers**	**Maximum Students for Other Teachers**	**Maximum Students for English Teachers**	**Overall Student/ Teacher Ratio**	**Student/ Teacher Ratio Rank**
Demographically Similar Communities	**Newton**	**183**	**16**	**16**	N/A	**82***	**12.4**	**1**
	Arlington	183	N/A	N/A	N/A	N/A	13.6	5
	Belmont	183	N/A	N/A	N/A	N/A	15.7	9
	Brookline	183	20	20	115	115	12.9	4
	Framingham	N/A	N/A		N/A		12.5	3
	Lexington	184	20	16	125	100	12.4	1
	Natick	182	N/A	N/A	N/A	N/A	14.3	7
	Needham	182	25	25	N/A	N/A	14.5	8
	Wellesley	184	20	20	125	125	13.9	6
	AVERAGE	183	20	19	122	113	13.6	
Communities with a Similar Commitment to Education	**Newton**	**183**	**16**	**16**	N/A	**82***	**12.4**	**1**
	Brookline	183	20	20	115	115	12.9	4
	Concord-Carlisle	185	N/A	N/A	N/A	N/A	12.4	1
	Lexington	184	20	16	125	100	12.4	1
	Lincoln-Sudbury	184	N/A	N/A	N/A	N/A	13.3	6
	Wayland	183	N/A	N/A	N/A	N/A	13.4	7
	Wellesley	184	20	20	125	125	13.9	8
	Weston	184	N/A	N/A	N/A	N/A	12.9	4
	AVERAGE	184	19	18	122	113	13.0	
Sources		**Brookline Override Study Committee 2008**	**Information provided by School districts or available on School websites**				**MA DOE 2007-2008**	

* By contract, Newton high school English teachers are not allowed to have more than 245 students over a 3 year period or 82 students.
The number given is a per year average.
Concord-Carlisle and Lincoln-Sudbury data for teacher load is based on a weighted average of the number of students in pk-8 and the high school

Table 29: Class Size

CLASS SIZE	Communities	Average Class Size FY08		
		Elementary School	Middle School (core subjects)	High School (core subjects)
Demographically Similar Communities	**Newton**	**20.1**	**20.7**	**21.1**
	Arlington	19.7	21.5	18.9
	Brookline	19.4	N/A	19.8
	Lexington	N/A	N/A	20.8
	AVERAGE	19.7	21.1	20.2
Communities with a Similar Commitment to Education	**Newton**	**20.1**	**20.7**	**21.1**
	Lexington	N/A	N/A	20.8
	Wayland	20.6	N/A	N/A
	Weston	20.4	22.4	20.2
	AVERAGE	20.4	21.6	20.7
Sources		**MA DOE 2007-2008**		

Table 30: MCAS Results

		Percent of Students with MCAS Scores of Proficient and Advanced (2007)							
MCAS	**Communities**	**4th Grade English Language Arts**	**4th Grade Math**	**Average 4th Grade Scores**	**Average 4th Grade Scores Rank**	**10th Grade English Language Arts**	**10th Grade Math**	**Average 10th Grade Scores**	**Average 10th Grade Scores Rank**
Demographically Similar Communities	**Newton**	**78**	**73**	**75.5**	**4**	**88**	**88**	**88**	**5**
	Arlington	78	76	77	3	85	80	82.5	8
	Belmont	82	74	78	2	89	93	91	4
	Brookline	75	62	68.5	8	88	85	86.5	6
	Framingham	52	43	47.5	9	74	83	78.5	9
	Lexington	81	76	78.5	1	92	91	91.5	3
	Natick	79	70	74.5	6	88	83	85.5	7
	Needham	77	63	70	7	95	91	93	2
	Wellesley	83	67	75	5	95	92	93.5	1
	AVERAGE	76.1	67.1	71.6		88.2	87.3	87.8	
Communities with a Similar Commitment to Education	**Newton**	**78.0**	**73.0**	**75.5**	**3**	**88.0**	**88.0**	**88.0**	**7**
	Brookline	75.0	62.0	68.5	5	88.0	85.0	86.5	8
	Concord-Carlisle	N/A	N/A	N/A	N/A	95.0	89.0	92.0	3
	Lexington	81.0	76.0	78.5	2	92.0	91.0	91.5	5
	Lincoln-Sudbury	N/A	N/A	N/A	N/A	92.0	90.0	91.0	6
	Wayland	70.0	61.0	65.5	6	92.0	95.0	93.5	1
	Wellesley	83.0	67.0	75.0	4	95.0	92.0	93.5	1
	Weston	85.0	73.0	79.0	1	95.0	89.0	92.0	3
	AVERAGE	78.7	68.7	73.7		92.1	89.9	91.0	
Sources		**MA DOE 2007**							

Table 31: High School Lunch Fees

LUNCH FEES	Communities	Lunch Fees for High School
Demographically Similar Communities	**Newton**	**$3.50**
	Brookline	$3.25
	Lexington	$3.25
	Needham	$3.00
	Wellesley	$2.50
	AVERAGE	$3.10
Communities with a Similar Commitment to Education	**Newton**	**$3.50**
	Concord-Carlisle	$2.50
	Lexington	$3.25
	Wayland	$2.75
	Wellesley	$2.50
	Weston	$3.00
	AVERAGE	$2.92
Sources	**Ed Dept. of Cities and Towns**	

V. Appendix

Table 1A: Candidates for Massachusetts Core Benchmarking Communities

Arlington	Natick
Belmont	Needham
Boston	Newton
Brookline	Quincy
Cambridge	Waltham
Dedham	Watertown
Framingham	Wellesley
Hingham	Weston
Lexington	Westwood
Medford	Weymouth
Milton	Winchester

Table 2A: Candidates for the Non-Massachusetts Benchmarking Communities by Source

Recommendations from Staff and Citizens	Moody's Investor Service Recommendations	Educational Research Service School Budget Profile 2006-2007	Educational Research Service School Budget Profile 2005-2006
West Hartford, CT	Alexandria, VA	New Canaan, CT	Napa Valley, CA
Shaker Heights, OH	Raleigh, NC	W. Palm Beach, FL	Plainfield, CT
New Rochelle, NY	Boca Raton, FL	Conyers, GA	Wilmington, DE
White Plains, NY	Bellevue, WA	Naperville, IL	W. Palm Beach, FL
Saco, ME	Plano, TX	Osceola, IN	Atlanta, GA
Westminster, CO	Madison, WI	Annapolis, MD	Wheaton, IL
Rockford, IL	Omaha, NE	Traverse City, MI	Indianapolis, IN
Bethesda, MD	Greensboro, NC	St. Paul, MN	Dearborn, MI
Chevy Chase, MD	Naples, FL	Charlotte, NC	Traverse, MI
Fairfax, VA	Santa Monica, CA	Edison, NJ	Brick, NJ
Trier, IL	Norwalk City, CT	Union City, NJ	Longwood, NY
Scarsdale, NY	Winston-Salem, NC	Dix Hills, NY	Amherst, NY
	Naperville, IL	Hilliard City, OH	Edmond, OK
	Salt Lake City, UT	Downingtown, PA	Harrisburg, PA
	Overland Park, KS	W. Chester, PA	Lansdale, PA
	Fairfield Town, CT	Arlington, VA	Grand Prairie, TX
	Beverly Hills, CA	Lynwood, WA	Appleton, WI
	Durham, NC	Janesville, WI	
	Palo Alto, CA		

Appendix 3A: Glossary of Terms for Financial Reporting, Massachusetts Department of Education

The Massachusetts Department of Education requires that schools report all expenditures including grants and revolving accounts. The schools must show how much is spent in specific functional areas and districts are required to hire auditing firms to verify the accuracy of the data. In addition, the Massachusetts Department of Education conducts a careful review of the data.

Expenditures are broken into eleven functions (with 63 sub-functions that provide further detail). The ones that are of most interest are:

1. Administration: Activities which have as their purpose the general direction, execution, and control of the affairs of the school district that are system wide and not confined to one school, subject, or narrow phase of school activity. This includes the activities of the School Committee, the Superintendent (and office) and Assistant Superintendents (Instruction/Academic Programs: Assistant Superintendent for Community Relations), District-Wide Administration (Assistant to Superintendent, Grants Manager, Director of Planning), finance and administrative services (e.g., Finance and Business; Human Resources, Benefits, Personnel; Legal Services for School Committee and Legal Settlements); District wide Information Management and Technology.

2. Instructional Leadership: Instructional activities involving the teaching of students, supervising of staff, developing and utilizing curriculum materials and related services. This includes district wide academic leadership for Regular Day, Special Education, Ch 74 Occupational Day, English Language Learners, Academic Support, Adult Education, and other managers responsible for delivery of student instructional programs at the district level; Curriculum Directors (Supervisory); Department Heads; School building leadership (Building Level – Curriculum leaders, department heads, school principals and assistants, headmasters and deans); School Leadership – Building – Principal's Office; School Curriculum Leaders/Department Heads – Building Level; and Building Technology: (Expenditures that support a ***school's*** daily operation- non instructional).

3. Classroom and Specialist Teachers: Classroom Teachers; Specialist Teachers - Certified teachers who provide individualized instruction to students (in-class or pull out, one to one or small groups) to supplement the services delivered by the student's classroom teachers. Include reading recovery, Title 1 reading specialist, special education, academic support and language acquisitions services;

4. Other Teaching Services: Instructional Coordinators and Team Leaders (Non-Supervisory) – Includes curriculum facilitators, instructional team leaders and department chairs that are non-supervisory; Medical/Therapeutic Services (Costs for Occupational Therapy, Physical Therapy, Speech, Vision and other therapeutic services that are provided by licensed practitioners);

Substitutes; Non-Clerical Paraprofessionals/Instructional Assistants hired to assist teachers/specialists in the preparation of instructional materials or classroom instruction. (Includes American Sign Language Specialists); Librarians and Media Center Directors

5. Professional Development: Professional Development Leadership Development (Director of Professional Development); Teacher/Instructional Staff-Professional Days; Substitutes for Teachers/Instructional Staff at Professional Development Activities; Professional Development Stipends, Providers and Expenses; Instructional supervisors, teachers and other professional staff who spend one-half or more of their time providing teacher training and implementation. (Includes full time or prorated share of salaries of professional staff training teachers, teachers being trained to implement new curriculum or instructional practices, teachers targeted for training and support to remedy performance weaknesses, master teachers, mentor teachers, curriculum coaches and other who provide in-district professional development)

6. Instructional Materials, Equipment and Technology: Textbooks and Related/Other Software/Media/Materials; Instructional Equipment; General Supplies; Other Instructional Services; Instructional Technology: (Expenditures to support ***direct instructional*** activities); Classroom (Laboratory) and Other Instructional Technology; Instructional Software

7. Guidance, Counseling and Testing Services: Guidance (guidance counselors, school adjustment counselors, and social workers); Testing and Assessment; Psychological Services

8. Pupil Services: Attendance and Parent Liaison Services; Health Services; Student Transportation Services (To and from school); Food Services; Athletic Services; Other Student Activities (e.g., **m**usical directors, drama coaches, and other extra-curricular personnel); School Security

9. Operations and Maintenance: Housekeeping activities relating to the physical plant and maintenance activities for grounds, buildings and equipment including Custodial Services (e.g., custodians, janitors, engineers, truck drivers and other maintenance personnel); Heating of Buildings; Utility Services; Maintenance of Grounds; Maintenance of Buildings; Building Security System – Installation and Maintenance; Maintenance of Equipment; Extraordinary Maintenance; Networking & Telecommunications (Expenditures to support the school district's infrastructure); and Technology Maintenance

10. Insurance, Retirement and Other: Retirement and insurance programs, rental of land and buildings, debt service for current loans, and other recurring items, which are not generally provided for under another function including Employee Retirement (e.g., Contributions to employee retirement systems; Social Security contributions; Contributions to pension plans; Medicaid contributions); Insurance Programs (Employee unemployment, health, and life insurance premiums or payments, and workers' compensation for active employees); Insurance for Retired School Employees (Health insurance premiums for retired school employees); Other Non Employee Insurance; Rental-Lease of Equipment; Rental-Lease of Buildings; Debt Service (Interest) on Current Loans; Other Charges: (Costs of municipal and other public safety inspections, Bank Charges, Contracts for Medicaid billing); Crossing Guards

Notes:

Supervisory refers to individuals responsible for a program/activity and for directing and evaluating personnel in that program/activity.

Non Supervisory refers to individuals responsible for a program/activity and for coordinating personnel working in that program/activity.

Source: Massachusetts Department of Education; Chart of Accounts – Criteria for Financial Reporting; Expenditures per Pupil by Function