

**Citizen Advisory Group
City of Newton, Massachusetts**

**Benchmarking
Draft --- August 18, 2008**

Benchmarking Interns: Jon Herrmann & Justin Masterman

I. 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 really no equivalent community. Demographically, Newton is unusual. Situated in a western suburb close to Boston, Newton has a large, relatively homogeneous population. Newton is the 11th largest city or town in Massachusetts¹ with the 9th largest public school system at 11,570 students.² The city's 82,819 people live in 32,839 households. 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 At the same time, our 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 unsurprisingly principally residential – 91.3% in 2007.

¹ 2000 U.S. Census.

² Massachusetts Department of Education, 2007.

³ 2000 U.S. Census.

⁴ 2000 U.S. Census.

The Citizen Advisory Group chose three separate benchmarking groups: a group of demographically similar communities in Massachusetts which we call “the Massachusetts Core Benchmarking Communities,” a group of communities in Massachusetts that have a comparably deep commitment to education labeled “the Educational Excellence Benchmarking Communities,” and a group of demographically similar non-Massachusetts communities across the United States which we termed “the Non-Massachusetts Benchmarking Communities.” 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: Chart 1A). 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 are

Arlington, Belmont, Brookline, Framingham, Lexington, Natick, Needham and

Wellesley. 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 are clones of Newton.

Notably, Newton has the largest population (and corresponding student body) compared

to these benchmark communities. (Unfortunately, the cities and towns closer to us 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.

Table 1: Core Massachusetts Benchmarking Communities

	Population	Population Density (per sq. mile)	Median Household Income (1999 dollars)	Commercial Assessment as % of Total	Percent of Individuals below Poverty level	Total Pupils	Total Pupils as a % of Total Population	MWRA Usage (Water, Sewer, Partial)
Newton	82,819	4,644	\$86,052	9.7%	4.3%	11,715	14.1%	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
Arlington	41,075	8,180	\$64,344	5.6%	4.1%	4,649	11.3%	W/S
Wellesley	26,987	2,614	\$113,686	12.1%	3.8%	4,682	17.4%	PW/S
	2006 Estimates	2000 Census	2000 Census	Mass DOLS, FY '08	2000 Census	Mass DOR, FY '07		

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.** 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.

Table 2: Educational Excellence Benchmarking Communities

	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 (Water, Sewer, Partial)
Newton	82,819	4,644	\$86,052	9.7%	4.3%	11,715	14.1%	W/S
Concord-Carlisle*	21,641	539	\$103,501	7.3%	3.6%	2,687	12.4%	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%	4,569	18.3%	N
Brookline	55,241	8,410	\$66,711	9.2%	9.3%	6,215	11.2%	W/S
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
	2006 Estimates	2000 Census	1999 Dollars 2000 Census	Mass DOLS, FY '08	2000 Census	Mass DOR, FY '07		

* Unbundled

Carlisle	4,852	307	\$129,811	1.5%	2.4%	792	16.3%	N
Concord	16,789	682	\$95,897	9.0%	3.9%	1,895	11.3%	N
Lincoln	7,948	561	\$79,003	3.2%	0.8%	1,231	15.5%	N
Sudbury	17,027	691	\$118,579	6.5%	2.8%	3,339	19.6%	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.

Our final group of benchmarking communities – the Non-Massachusetts Benchmarking Communities – includes several cities and towns across the United States that are similar to Newton demographically. Our search for non-MA 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: Chart 2A). To narrow down this sizable list of about 60 communities, we looked first at the population and median household income of the towns. Communities within 25,000 people of Newton (above or below) and within \$30,000 of Newton's median household income (above or below) were considered candidate non-MA benchmarking communities. This 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 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, are included in our final non-Massachusetts benchmarking list: **West Hartford, CT, Norwalk, CT, and Fairfield, CT.**

Table 3: 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%
	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.

APPENDIX

Chart 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

Chart 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		