

City of Newton

# Citizen Advisory Group



## Final Report

April 14, 2009

## **Citizen Advisory Group Members**

Malcolm Salter, Chair

Ruthanne Fuller, Vice Chair

John D'Auria

Kevin C. Dutt

George Foord

David Humphrey

Tony Logalbo

William MacKenzie

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Selina Pandolfi

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Neil Silverston

Laura Thompson





# **Citizen Advisory Group**

## **Final Report**

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City of Newton

CITIZEN ADVISORY GROUP

## A Summing Up



April 14, 2009

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## **MAJOR CONCLUSIONS**

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### 1. SUSTAINABILITY: Like many municipalities, the City of Newton is unsustainably living beyond its means.

- We are simultaneously underfunding some of our needs and aspirations while continuing to make service commitments in both our municipal and school operations beyond our willingness to pay for them.
- On the books, Newton revenues and expenditures are “balanced” at \$286 million, but we are seriously underfunding:
  - Maintenance and repair of public buildings and infrastructure by \$30 M/yr., and
  - Retiree benefits by another \$22M/yr short of responsible funding.
  - In essence, Newton is borrowing over \$50M/yr from future residents just to afford current service levels. At some point this \$50M/yr will need to be paid with interest.
- The magnitude of this underfunding is equal to 17% of the current budget (\$50/\$286).
- Continuing to defer these costs will increase the magnitude of the problem in the future.
- Fully funding these responsibilities would require either a reduction in spending on City services by 17%, a 22% increase in revenues, an increase in funded debt, or some combination of the three.
- To complicate matters, the gap between current revenues and expenses is compounding and growing rapidly.
  - Even ignoring the the underfunding described above, and giving credit for all new potential sources of growth identified by the Citizen Advisory Group, we estimate *sources* of funds (revenues) will grow at a compound annual growth rate of 3.4% through FY 2014 while *uses* (costs) will grow at a 5.3% rate.
  - The cumulative gap between estimated sources and uses of funds under these benign assumptions will grow to \$85M by FY 2014. If annual costs were to include responsible funding of capital infrastructure and a modest catch-up on the funding of retirement benefits, this cumulative deficiency would increase to as much as \$174M in five years.

## MAJOR CONCLUSIONS

- 2. SENSE OF URGENCY:** Despite the warnings of the Citizen Advisory Group over the past 10 months (and the Blue Ribbon Commission on the Municipal Budget dating back to February 2007), there remains a mix of disbelief and lassitude about our conclusions by some Newton residents, elected officials, and City employees (and their representatives).
- In the months leading up to the Mayor’s submission of the FY 2010 budget to the Board of Aldermen, there has been little *public* discussion by stakeholders in the budgeting process (the Mayor, Aldermen, members of School Committee, and residents) of either the true financial condition of the City or the choices and trade-offs facing the City with respect to level of municipal and schools services.
  - Now is the time for Newton residents, their elected representatives, and all candidates for elective office to confront the economic facts. Taken a whole, the six reports of the Citizen Advisory Group demonstrate that it is unavoidable that residents will have to face some combination of (a) increased taxes and user fees and (b) decreased service levels—unless major changes are made in the revenue and cost structure of the City. So, too, may City employees have to absorb some pain. Any other conclusion is wishful thinking.
    - On the revenue side of the equation, potential non-tax-based increases in Newton’s cash inflow are minimal—even with a more aggressive build-out of commercial development— which brings taxes and user fees back to center stage for residents.
    - On the cost side of the equation, since nearly 80% of Newton’s operating costs are related to people, changing the cost structure of the City involves either further reductions in headcount (meaning decreases in the scope, scale, and quality of services), a sharp reduction in the current rate of increase in employee compensation (driven largely by benefit costs), increases in productivity, or some combination of the three.

## MAJOR CONCLUSIONS

- 3. STAKES:** Since the severity of the situation facing our City is not clearly understood and Newton’s economic situation and revenue/spending trade-offs have not been framed realistically, we continue to see a parade of short-term patches and accommodations being relied upon “to balance” the annual budget. This “balance” — uncontested, so far, by residents—disguises the real deterioration in Newton’s service levels and infrastructure.
- Some of this deterioration is already visible to the eye: the physical conditions of our schools, roadways, sidewalks, public parks, and municipal buildings, and increases in class size in our schools.
  - Some of this is less invisible to the eye: the increased work load of school principals unrelated to education, the understaffing of management throughout the City, the extent of underfunding of future retirement benefits, and the declining citizen reviews of municipal services. In many ways, the less visible is more troubling than the visible, because it is more likely to be ignored.
  - It is inevitable that in the absence of major changes in Newton’s revenue and cost structure, the City will lose its ability to provide excellent services and descend into mediocrity. Once Newton’s reputation for excellence and brand strength is lost, it will take decades to recover—if ever.

## MAJOR CONCLUSIONS

**4. SOLUTIONS:** Newton has the capacity to lead the way in high quality, fiscally sound municipal government.

- Part A: Acknowledge Newton's "Four Deficits"
- Part B: Focus on the "Nine Game Changers" and start implementing them as appropriate
- Part C: Communicate how Newton can, should, and will continue to be an outstanding City

# SOLUTIONS

## SOLUTIONS—Part A

### **ACKNOWLEDGE NEWTON'S "FOUR DEFICITS"**

## SOLUTIONS—Part A

### ACKNOWLEDGE NEWTON'S "FOUR DEFICITS"

1. **Operating Budget Deficit\***
2. **Capital Budget Deficit\***
3. **Management Deficit**
4. **Communication Deficit**

\* By State law, no municipality can run a "deficit" in its operating budget. This term is thus used in a non-accounting sense to evoke the notion of a shortfall in the most forceful or compelling terms possible. Also note that the twin Operating and Capital Budget Deficits have been persistent (and largely disguised) due to:

- Capped tax-based revenues and only quasi-capped costs
- Substantial underfunding of capital maintenance and renewal (as much as \$30 million annually)
- Underfunded obligations such as retirement benefits (as much as \$22 million annually)
- Unfunded State mandates in the schools, such as special education.



## SOLUTIONS—Part A

### ACKNOWLEDGE NEWTON’S “FOUR DEFICITS”

#### 1. Operating Budget “Deficit” (see CAG Budget Projections on p. 30)

- As noted above, even if the full potential of possible revenue increases and operating efficiencies identified by the Citizen Advisory Group were to be instantaneously achieved, Newton faces an ever-widening gap between revenues and expenditures.
  - Expressed in terms of dollars rather than percentage points (as in our Major Conclusions above), there is close to a \$3M gap between expenditures and revenues in FY 2010, expanding exponentially to \$5M, \$10M, \$20 million in the out-years—before factoring in any required new investments in capital infrastructure or a modest start on reversing the underfunding of employee retirement benefits (healthcare and pensions).
  - After factoring in only minimal new commitments to infrastructure renewal and the funding of retiree benefits quickly drives the Operating Budget deficit to over \$20 million in FY 2010 and up to over \$50 million in FY 2014 (with an accumulated “deficiency” of \$174M).
  - Note: Prefunding future employee retirement obligations, whether partially or fully, is most always cheaper than “pay-as-you-go” contributions in the annual Operating Budget. Also, as suggested above, in the absence of prefunding, the burden of paying for contractual, financial commitments made today passes to future generations of Newton residents. This passing of the current financial burden is equivalent to a transfer of wealth from younger residents (and new residents) to older residents, for sure a perverse social policy.

## SOLUTIONS—Part A

### ACKNOWLEDGE NEWTON'S "FOUR DEFICITS"

#### 2. Capital Budget Deficit

- Holding Newton North High School aside, Newton's current spending on the maintenance, renewal, and replacement of our municipal buildings, schools, roadways, equipment, parks, and recreational facilities is half of what is required to deliver the quality and scale of public services that the City has historically provided.
  - Currently, Newton is spending \$30 million vs. the \$60 million "required" to fund investment necessary to (1) cover normal depreciation and (2) begin working off an enormous backlog of capital improvement projects.
  - Newton's capital maintenance backlog (\$300 M) is equal to nearly 1/4 of total replacement of replacement value of the City's capital infrastructure(\$1.2 B)—not counting water& sewer, land, parks.

## SOLUTIONS—Part A

### ACKNOWLEDGE NEWTON’S “FOUR DEFICITS”

#### 3. Management Deficit

- What got us here won’t get us to where we want to be.
  - New approaches and tools are needed to guide us through difficult choices and times ahead.
- Newton’s management deficit has been driven by a combination of two factors:
  - Substantial cut-backs in staffing over the past five years in municipal operations and
  - Management processes and structures that are not optimal for “continuous improvement” in operating efficiency and effectiveness. (Note important differences between school and municipal operations).
- Two management processes merit special attention: (1) Performance Management and (2) Capital Planning and Budgeting.

## SOLUTIONS—Part A

### ACKNOWLEDGE NEWTON'S "FOUR DEFICITS"

- Performance Management—Newton's current approach is more informal than what's required. For sure, the Mayor tries to hire good people, give them direction, intervene when problems arise, and support and encourage his management team. But where the current system is most vulnerable is in how the City sets long-and short-term goals for itself, how our leaders measure achievement against these goals, how systems of accountability both motivate and guide the behavior of managers and employees toward the achievement of established goals, and how we create a culture that is forward looking, proactive, focused on objectives, and dedicated to continuous performance improvements. In brief, Newton lacks rigor in strategic and operational planning, the monitoring of performance, individual and group goal setting, performance appraisal and feedback, personal development planning, compensation management, the composition of the City's top management structure, and public participation in Performance Management processes—all of which are required to take Newton to the next level of operating efficiency and effectiveness.
  - Take, for example, the issue of strategic planning. In the absence of an explicit goals for the City, it is very difficult to articulate clear spending and investment priorities. Today, no such explicit goals exist for Newton, although past budgets constitute a record of our "revealed preferences" or "implied goals." These revealed preferences show that Newton citizens pay somewhat high taxes to support schools, public works, culture and recreation, and human services, but that elected officials only begrudgingly invest these tax dollars in capital infrastructure. Can Newton afford these preferences in the future? Do they reflect the "right" spending and investment priorities for the future? Strategic planning helps answer these questions.

## SOLUTIONS—Part A

### ACKNOWLEDGE NEWTON’S “FOUR DEFICITS”

- Capital Planning and Budgeting—Newton’s Management Deficit also lies in its capital planning and budgeting practices:
  - Capital plan is not grounded in long-term vision for City or an explicit set of investment priorities.
  - No up-to-date inventory of municipal assets (which deprives officials of detailed knowledge of the condition and degree of maintenance underfunding for Newton’s capital assets).
  - No capital asset management plan (which has created a reactive vs. preventive capital maintenance regime).
  - Board of Aldermen never gets to systematically examine trade-offs among a full menu of capital projects proposed by the Mayor (a result of a rolling 9 month process and four different capital planning processes—the CIP, Supplemental Capital Budget, Mayor’s Submissions, Capital Stabilization Fund).
  - Poor linkage between the Capital and the Operating Plans (specifically, no “Reserve for Depreciation” in Operating Budget, thus one less forcing mechanism to finance capital maintenance and rank order capital projects).
  - Artificially low “3% of revenues” rule for debt service (vs. 7.4% for 5 AAA communities).
  - “Pay as you go” regime inhibits systematic capital budgeting.

## SOLUTIONS—Part A

### ACKNOWLEDGE NEWTON’S “FOUR DEFICITS”

#### 4. Communication Deficit

- Newton’s communications deficit refers to the failure of municipal and school leaders to be consistently explicit with residents about the on-going choices and trade-offs the City faces, which, in turn, invites gridlock or a propensity to make only small changes from the status quo.
- Gridlock will build unless important choices and trade-offs are systematically identified or flagged by the Mayor, the Board of Aldermen, and the School Committee.
- Either we adopt a new openness to truly informed discourse about municipal and educational priorities, choices, and tradeoffs, or we will see the City’s excellence erode as incremental change—or worse, stagnation—displaces consideration of “game changing” options.

## SOLUTIONS—Part B

### **FOCUS ON THE NINE “GAME CHANGERS”**

## SOLUTIONS—Part B

### FOCUS ON THE “NINE GAME CHANGERS”

#### 1. Reformulating the educational model in Newton.

- The City invests nearly 60% of the City’s Operating Budget, or \$160 million annually, in the Newton Public Schools. Over the past five years, the compound average growth rate of the School budget has been 4.7%. Seventy percent of the School budget, or approximately \$110 million out of the \$160 million, is accounted for by salaries and benefits, with benefits projected to grow at a 9% per annum clip.
- This trend is clearly not sustainable in the current fiscal environment. It is thus important to ask whether excellence in the schools can be better preserved by exploring major changes in the delivery of education rather than by remaining locked into an educational model that has not changed in fundamental ways in nearly a century. (We address compensation costs below.)
- A “value engineering” initiative for the schools (*Innovation in Learning*)—staffed by citizen-experts, elected officials, school administrators, teachers, and parents—is clearly a change option.
- The goal is to achieve the highest level of educational excellence at a lower cost—to find ways of increasing productivity and improving efficiencies so Newton Public Schools can achieve its historical level of quality at lower cost. This could involve expanding capital inputs, such as improving the technology infrastructure (even though capital spending has been a problem for Newton in the past). There may also be other ways of organizing work so that the ratio between quality and cost is improved.
- How many “productivity gains” can be achieved through such a value engineering exercise is unclear, but even marginal reductions in the growth of the large school budget could help balance the Operating Budget over the long run.



## SOLUTIONS—Part B

### FOCUS ON THE “NINE GAME CHANGERS”

#### 2. Re-engineering municipal operations.

- Since FY01, the share of Newton’s Operating Budget represented by municipal government operations has been declining steadily. Its budget dollar increases have also been rising at less than the rate of growth in overall City revenues. Further, fulltime equivalent staffing has dropped from 910.7 in FY01 to 820.8 in FY09—a staffing reduction of 90 people or almost 10% of the relevant work force. Thus, productivity improving efforts have been under way in municipal operations for some time.
- In addition to reducing the costs of employee compensation (discussed below), one of the few pathways to major change in the economics of municipal government operations are productivity increases stemming from re-engineering the current organization—through, for example, outsourcing, consolidations, regionalization, automation, and technology innovation). Here, too, an appropriately staffed “value engineering” initiative (*Municipal Re-Engineering*) is an important change option, since close to 70% of all municipal government expenses are accounted for by salaries and benefits.)
- Evaluating outsourcing opportunities is a particularly effective way to monitor internal versus external market costs and assess technological capabilities (where relevant).
- The goal is to achieve the same scope and level of services at lower cost. Since the current municipal budget numbers are large (\$166M in FY 2009 forecasted to grow to \$144M in FY 2014), so, too, are the potential cost savings from continuous improvements.

## SOLUTIONS—Part B

### FOCUS ON THE “NINE GAME CHANGERS”

#### 3. **Reducing the scope and scale of current services and programs.**

- In the absence of new tax-based revenues, which are extremely unlikely in the near term, Newton faces inevitable choices and trade-offs pertaining to reductions in the scope and scale (and quality) of municipal and school services.
- Prior to any reductions, the Mayor, the Board of Aldermen, and School Committee need to make a serious effort to identify what services Newton residents value the most and then work to build consensus around a more focused, more innovative, and more economically sustainable vision for the City. Only in this way can trade-offs and reductions in service levels be systematically made and politically acceptable. Prioritizing services and deciding where excellence is required and adequate services are tolerable is an important exercise in social choice.

## SOLUTIONS—Part B

### FOCUS ON THE “NINE GAME CHANGERS”

4. **Limiting the average, long-run growth rate of employee salaries and benefits to the average, long-run growth rate of City revenues, while maintaining a level of total compensation sufficient to recruit and retain excellent personnel.**
- Ideally, both goals can be achieved. However, if competitive pay, or an inability to control benefit cost increases through collective bargaining, means that total compensation grows faster than the current and predicted growth in City revenues, then a combination of productivity increases or decreases in scope and quality of service will be required—unless, of course, residents are willing to commit to multiple tax overrides.
  - The *level* and *growth rate* of total compensation constitute essential elements of any compensation policy. With respect to the *level* of total compensation, this Committee recommends that elected officials set an explicit goal expressed in terms of compensating City and School employees so that they fall, as just an example, into the top quintile of that paid to employees in cities of comparable size, in the case of the municipal employees, and cities with a similar commitment to education, in the case of school employees.
  - With respect to the average, long-run *growth rate* of total compensation for City employees, we recommend that this rate should be limited to the historic long-run growth rate of City revenues.
  - One of the effects of the policy of matching employee compensation and revenue growth would be that throughout its duration—or as long as annual inflation continues in the 2% - 3% range—there would be no real income growth for City employees *as a group*, unless tax overrides were to be part of the City’s long-run revenue growth.

## SOLUTIONS—Part B

### FOCUS ON THE “NINE GAME CHANGERS”

#### 5. **Substituting user fees for tax-based revenues in the financing of selected programs.**

- A “big question” facing Newton’s decision makers is whether or not to transfer some of the services currently paid for by taxes into fee-based services, and to increase fees for the use of local services, in order to reduce projected budget gaps.
- In one sense, this “game changer” is as an additional tax on those residents who currently use the newly mandated fee-for-service programs. A more nuanced and economically accurate interpretation of this change is (a) that current tax-based revenues will be used to cover the costs of presently underfunded, broadly used public services and (b) that the user fees will be employed to cover the *selective* use of services outside the boundaries of core community services—with waivers and scholarships available for low-income residents.
- The possible introduction of service fees of course raises important issues regarding what principles should guide the replacement of tax-based funding with introduction of user fees for, the actual costs of relevant services, and the market prices for comparable services.
- After considering each of these issues, the Citizen Advisory Group recommends that Newton adopt this strategy selectively in order to fill its growing budget gap. More specifically, we support converting to a “Pay As You Throw trash collection regime requiring residents to pay cash only for trash services they use (and encouraging increased recycling). We also support increasing user fees to cover more fully the costs of recreational, community educational, and cultural programs with appropriate abatements for low income residents including, but not limited to, Gath Pool and Crystal Lake, summer camps, and playing fields.

## SOLUTIONS—Part B

### FOCUS ON THE “NINE GAME CHANGERS”

#### 6. Taking on more funded debt.

- Until the new high school project, Newton has essentially limited the amount of debt it would borrow to a self-imposed policy that debt service should not be more than 3% of revenues.
- The application of this rule of thumb has historically led to much lower borrowing in Newton than in other similar communities that also maintain debt rated AAA. Prior to the current fiscal year, Newton’s debt per capita was approximately half the level of other benchmark communities with AAA bond rating. This has contributed directly to Newton’s underfunding of capital investment. In the last two fiscal years Newton’s debt has increased by \$42 million from \$68 million to \$110 million, driven largely by school financing. This brings Newton’s current debt service close to 5% of revenues, already a major departure from past practice. But, by increasing its debt service to 6% of revenues or even higher, Newton can raise tens of millions of additional dollars to fund capital investment without necessarily jeopardizing its credit rating. Significantly, debt service as a percent of revenues for comparable communities with AAA credit ratings was 7.4% in 2007, so some unused debt capacity apparently exists even after the commitment to Newton North.
- The goal of increasing Newton’s debt service limits would be to redress the persistent bias against infrastructure spending. Pursuing this goal would, of course, have the effect of spending proportionally more of the Operating Budget on interest and principal repayment and less on other non-capital expenditures until new sources of revenue can be found or developed.

# SOLUTIONS—Part B

## FOCUS ON THE “NINE GAME CHANGERS”

### 7. Increasing municipal revenues through tax overrides or other means of raising monies.

- It is inevitable that tax overrides and debt exclusions will remain important options in Newton’s financial future. Deciding when and under what conditions these options should be considered is mainly a political judgment beyond the scope of this committee’s work. But certain practical decision criteria are in order.
- First, it only makes financial sense to consider a tax override to help fund *current operations* when the City is on a slope of continuous improvement in productivity and efficiency. Without such a economic dynamic at work, an override is just a one period injection followed by an even larger funding gap in the succeeding years. (This logic does not pertain, of course, to a one-time debt exclusion for catch-up on capital infrastructure investments. In this case, a one period injection could permanently change the balance sheet of the City by reducing its capital backlog “accounts payable.”)
- Second, any future consideration of tax overrides or debt exclusions needs to start with an assessment of the (a) actual gains from the new revenue sources, (b) the kind of operating efficiencies identified and recommended in the various reports of the Citizen Advisory Group, and (c) the reduction in expenditures associated with whatever reduced service levels City leaders deem appropriate. The right to employ this “game changer” only makes sense after concluding that all other game changers cannot, by themselves, fix the twin budget deficits referenced above.
- In other words, there are important preconditions to be met before Newton’s leaders can justify an override or debt exclusion and earn sufficient public trust for such a request to be seriously considered and supported by residents.

## SOLUTIONS—Part B

### FOCUS ON THE “NINE GAME CHANGERS”

#### 8. **Introducing a new Performance Management system**

- The Citizen Advisory Group has submitted scores of recommendations supported by hundreds of pages of analysis aimed at enhancing revenues, decreasing costs, increasing productivity, and making necessary investments in capital infrastructure and employee benefits.
- None of this will happen unless Newton’s leadership commits to developing and deploying a new approach to performance management—one that identifies our most important goals, addresses the big choices we face regarding annual expenditures and long-term investments, is more analytically rigorous and outcomes oriented, and supports City managers in moving to the next level of operational excellence.

## SOLUTIONS—Part B

### FOCUS ON THE “NINE GAME CHANGERS”

#### 9. Upgrading communications with Newton residents

- In both municipal and school operations, there has been a reluctance to communicate the cost of the programmatic trade-offs and reductions in service levels that have been made as a result of insufficient funds to maintain the level of services.
- This tendency creates increased skepticism in the judgment and decision making of City leaders. For example, the Citizen Advisory Group perceives that, in the eyes of the public, it is not clear how much the quality of education has been negatively impacted by the economics of the school budget of the past few years. A number of people commented to us that “money is often found” and that leaders continue to proclaim that “Newton continues to deliver excellent education” despite substantial budget cuts in recent years. In light of these cuts in both personnel and program, how can we also argue there has not been a significant and negative impact on the quality of educational services? The impression exists that that regardless of what budget passed, Newton is and will be an excellent school system. While this message encourages well-deserved confidence in the work of the educators and staff who serve the schools, it also leads some to think that the qualitative difference between various budgets are neither substantial nor significant.
- A simplified, more direct, and more recurring communication of (a) the basic economic facts about the City of Newton and (b) the choices it faces in preparing and living with a balanced Operating Budget should be a primary goal of both the Mayor’s Office and School Superintendent’s Office.
- We also believe upgraded communications with residents will invite a higher level of citizen participation in City affairs. Such participation can help officials to be more publicly responsive and accountable, improve the public’s perception of local government performance and the value the public receives from it, and build trust along with a willingness to change in the community.



**SOLUTIONS—Part B**  
**FOCUS ON THE “NINE GAME CHANGERS”**

**None of these strategies or economic “game changers” are mutually exclusive. The political art is in their mixing, according to public preference and political necessity.**

## SOLUTIONS—Part C

**EXPLAIN HOW NEWTON CAN, SHOULD, AND WILL CONTINUE TO BE AN OUTSTANDING CITY**

## SOLUTIONS—Part C

### EXPLAIN HOW NEWTON CAN, SHOULD, AND WILL CONTINUE TO BE AN OUTSTANDING CITY

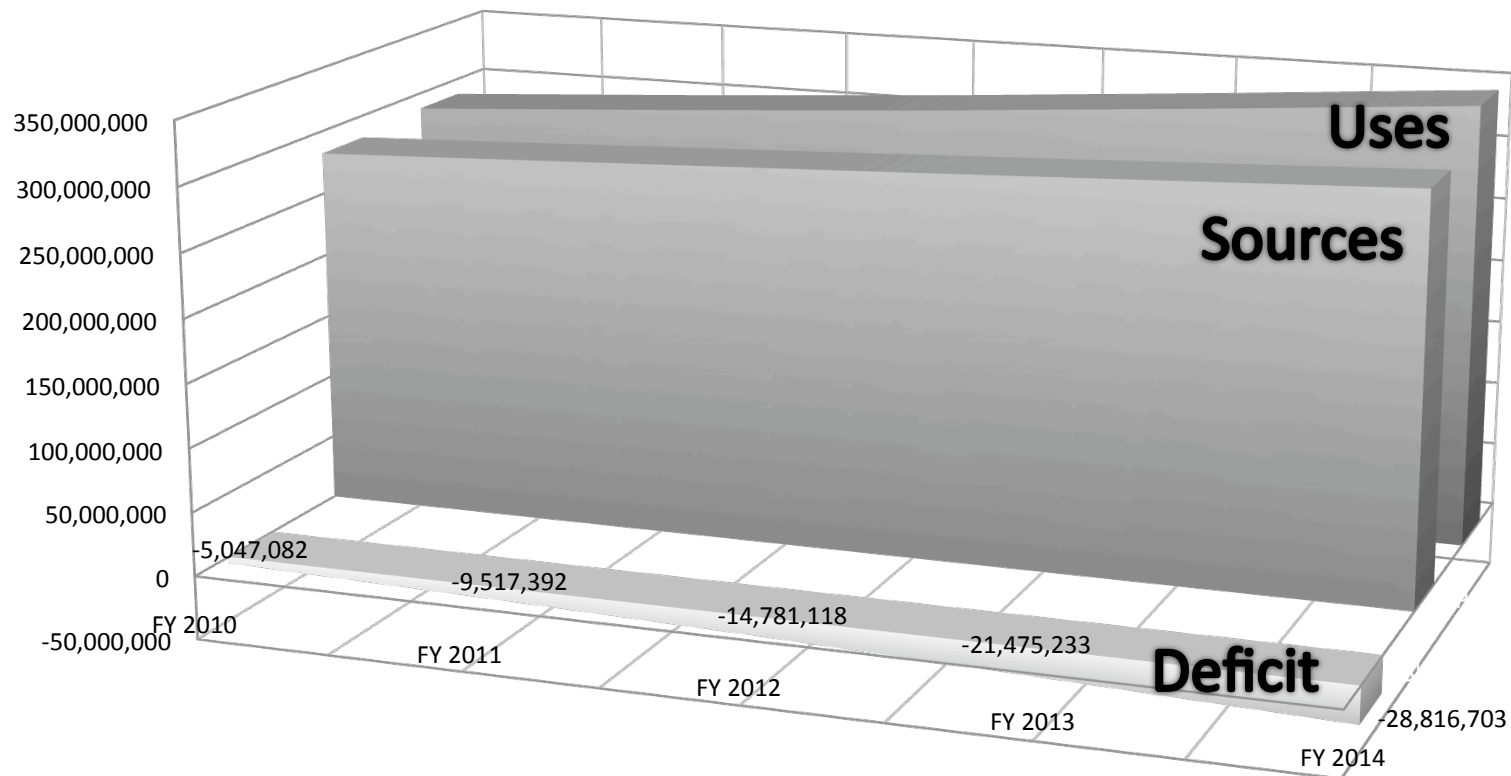
- ❑ **First, we must resist pessimism. Newton not only has the capacity to eradicate its financial and management gaps, but to lead the way in defining progressive, effective municipal government.**
- ❑ **Second, educate citizens about the causes and size of Newton’s “Four Deficits” (starting with Newton’s employee costs, mounting infrastructure problems, and underfunding of health care and post-retirement mandates).**
- ❑ **Third, move quickly to close the Operating Budget Deficit by (1) implementing potential revenue increases and cost savings identified by the CAG and (2) conducting ward-by-ward citizen meetings between the Mayor and residents where spending priorities can be discussed, vetted, and integrated into the Operating Budget.**
- ❑ **Fourth, ask the current City leaders and each mayoral candidate to present their preferred financial scenario for the City—based upon the CAG financial model. This public exercise will reveal their thinking about the difficult choices and trade-offs to be made regarding the scope of programs and services, employee compensation, infrastructure renewal, funding of pensions and healthcare benefits, and revenue enhancement.**
- ❑ **Fifth, require each mayoral candidate to discuss and declare his/her position on the Newton’s Management and Communication deficits and the recommendations of the CAG. Expect action early in the new term.**
- ❑ **Sixth, create two new “value engineering” initiatives staffed by citizen-experts, elected officials, administrators, employees, and, where appropriate, parents:**
  - *Innovation in Learning* (for the schools)
  - *Municipal Re-Engineering* (for municipal operations)
- ❑ **Seventh, empower a subgroup of volunteers from the Citizen Advisory Group to monitor periodically over the next year or two the City’s forward progress in addressing the choices and recommendations laid out by the CAG.**

# CAG Budget Projections

FY 2010 – FY 2014

The Mayor's Budget Office projects a growing deficit between Sources (Revenues) and Uses (Expenditures) over the next five years...

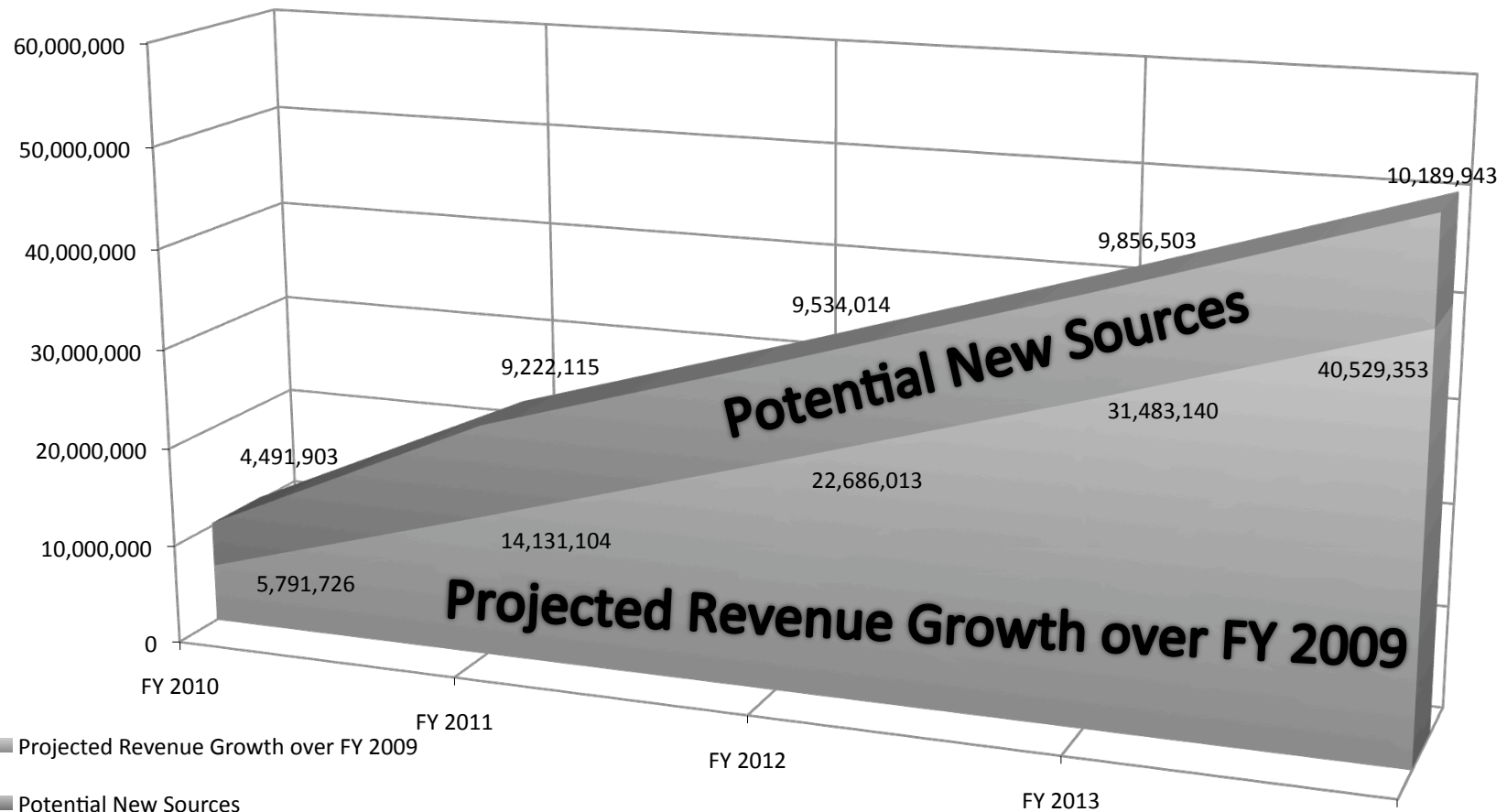
### Mayor's Budget Office Five Year Projection General Fund Operating Budget



Source: Mayor's Budget Office, March 10, 2009 Projection and CAG Analysis

CAG reviewed the Mayor's Budget Office projections and adjusted them to reflect identified potential new Sources...

### Revenue Growth over FY 2009

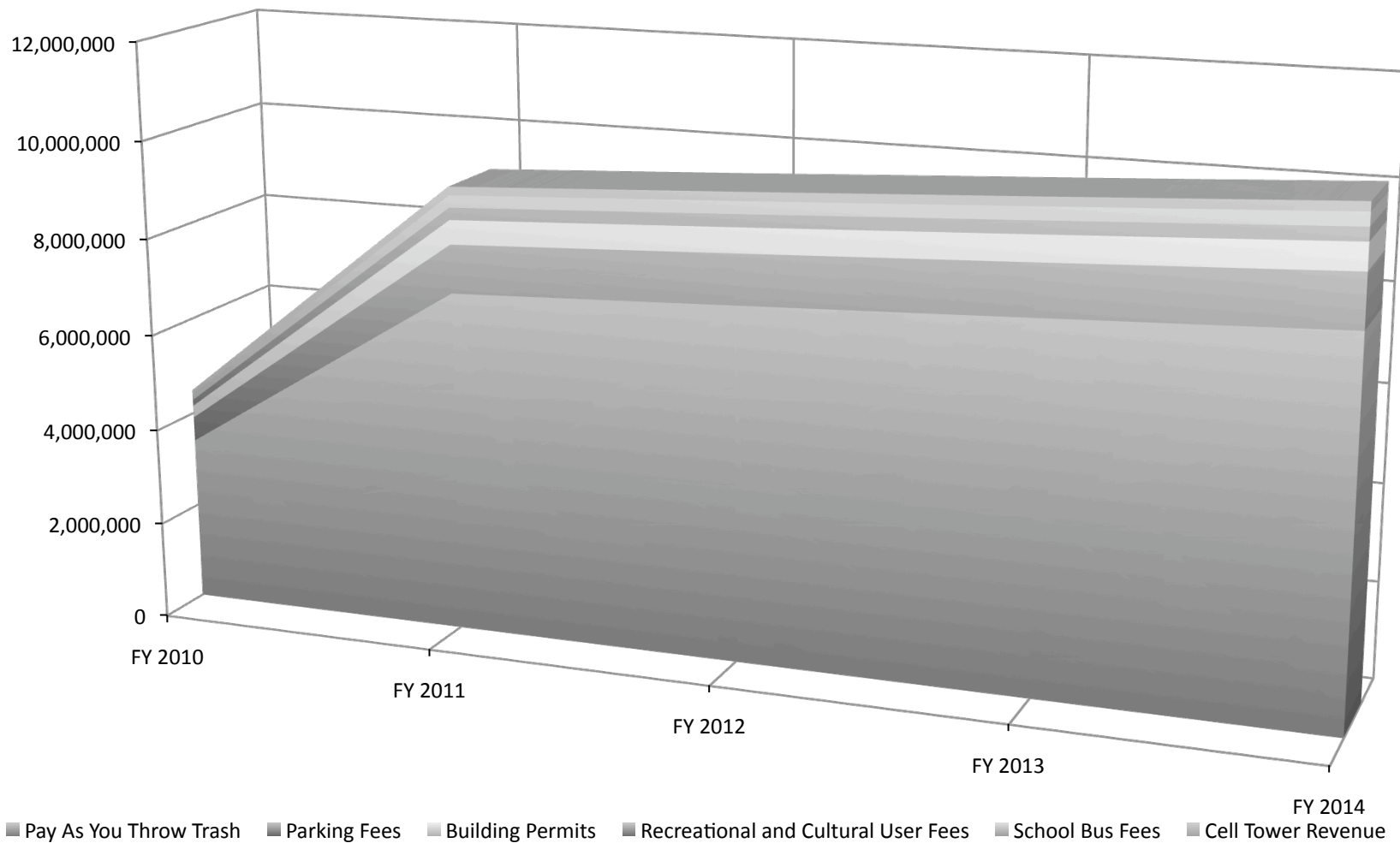


Source: Mayor's Budget Office, March 10, 2009 Projection and CAG Projected Sources

FY 2014

Full implementation of CAG's recommended Potential New Sources would add about \$10 mm annually...

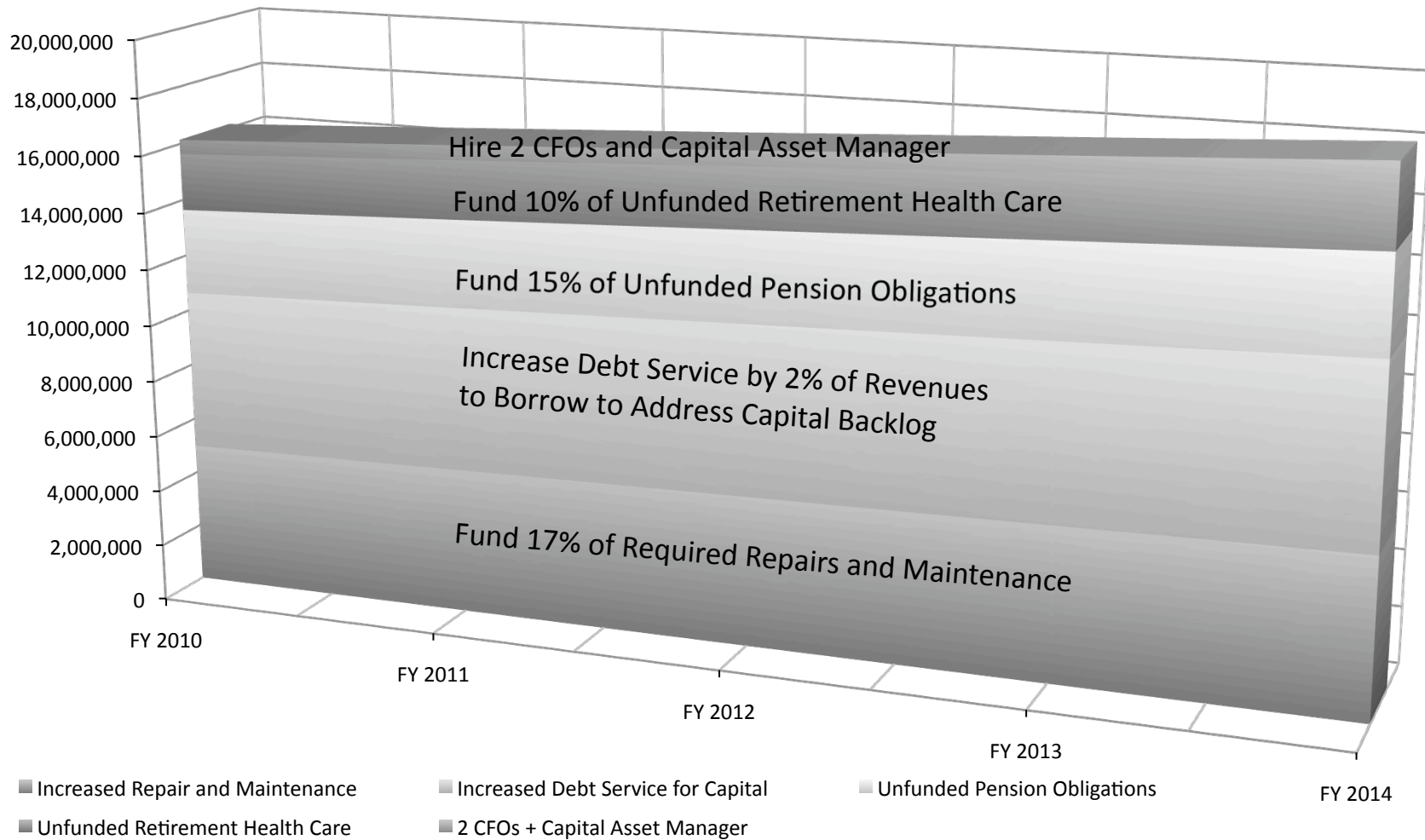
### Potential New Revenue Sources - FY 2010 - FY 2014



Source: CAG Projections

CAG also reviewed projected Uses and layered in its recommended cost savings and “Required Investments”...

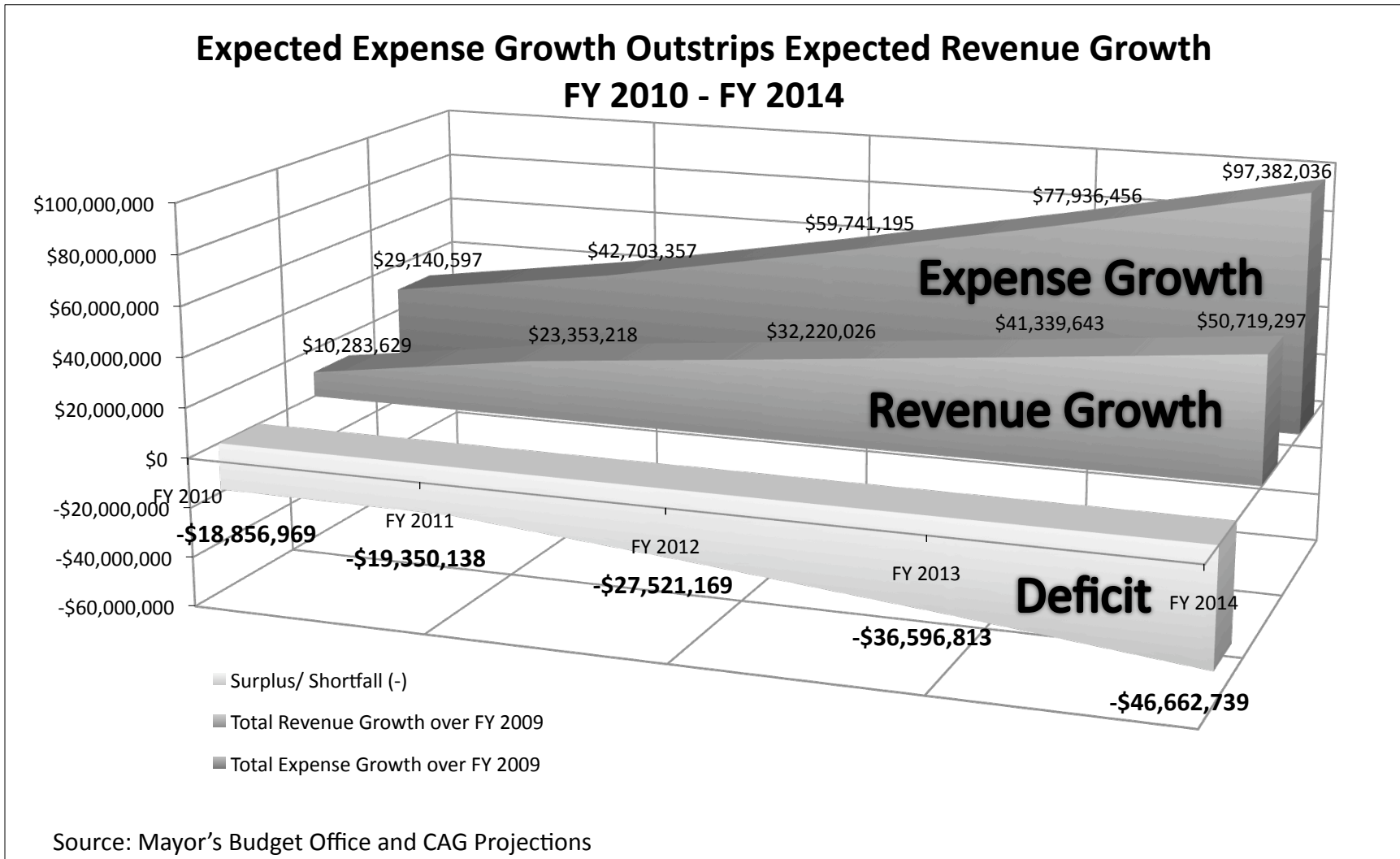
### Impact of Recommended New Uses FY 2010 - FY 2014



Source: CAG Projections

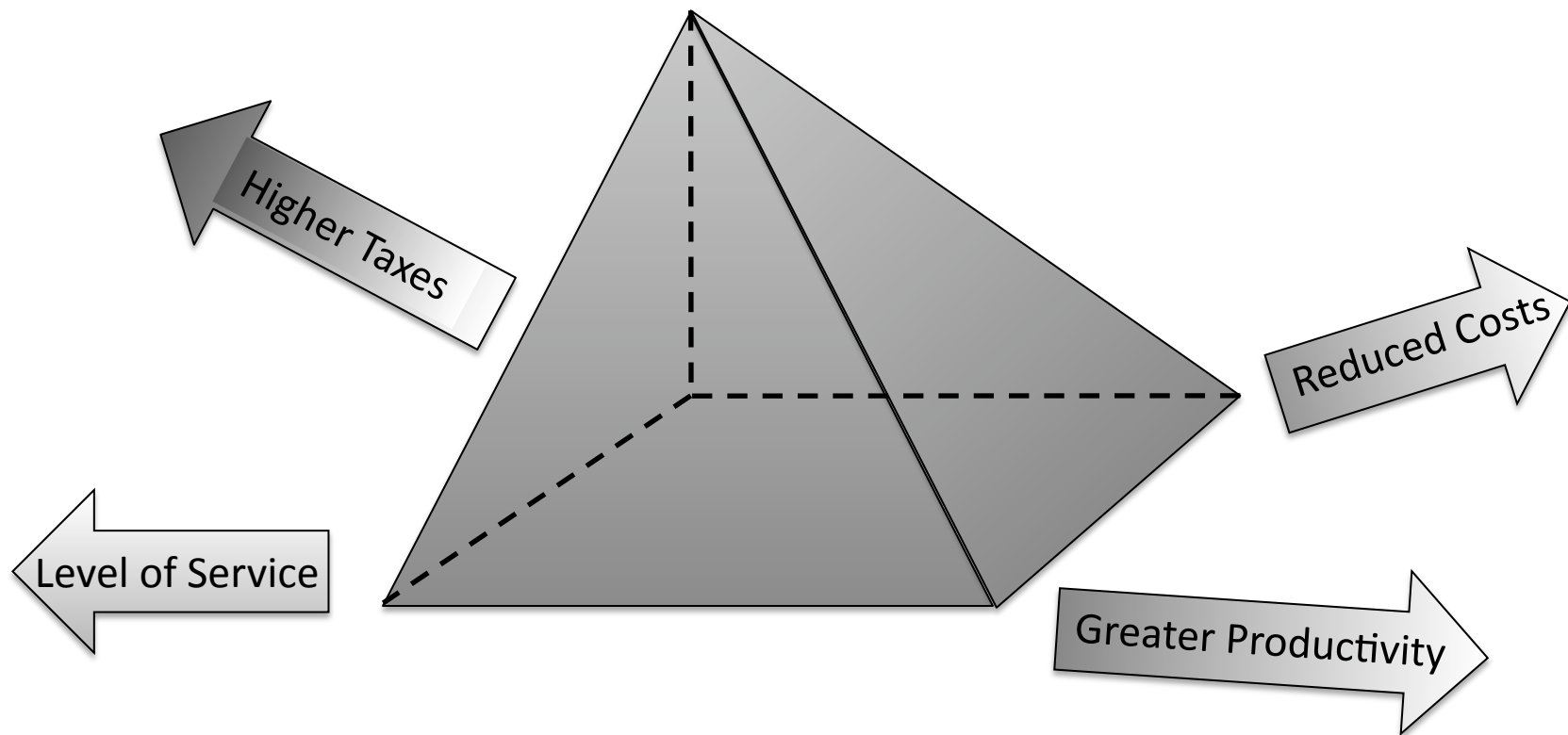


Unfortunately, after adjusting for CAG identified new potential sources, cost savings, and new required uses, the projected shortfall is wider than the City's current projection...



Even if new CAG Potential Sources are promptly realized, embedded growth of Uses plus CAG-recommended Required Uses will outstrip the City's ability to fund these needs without making hard choices among competing priorities...

### The Municipal Tradeoff



**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**

# Benchmarking

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Benchmarking Interns: Jon Herrmann & Justin Masterman

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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 identify, within this context, (2) innovative ways of increasing short- and long-term operational efficiency and effectiveness, and (3) 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 these data to help us decide what questions we should ask about Newton as we identified choices, new or enhanced revenues, and opportunities for efficiencies or increased effectiveness.

For the Citizen Advisory Group, benchmarking serves only to raise questions. One set of questions focuses on efficiencies. For example, if Newton is under-spending compared to the benchmark communities, we will need to understand if we are being efficient or simply under spending. 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 more, perhaps the question will be are we are we 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 five Citizen Advisory Group committees are doing interviews, gathering data, and undertaking analysis: Revenue Structure, Municipal Cost Structure, School Cost Structure, Capital Infrastructure and Planning, and Performance Management and Control. 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 are 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. In theory, the Massachusetts database corrects for this but discrepancies might still occur. One community might categorize an expenditure on curriculum development as professional development, while another would use instructional leadership. Similarly, school building maintenance might fall under the aegis of the city/town maintenance department in one locality but in the School Department for another. 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.



## 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 raise 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 raise 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 suggest that Newton faces fiscal challenges because of its somewhat low revenue per capita and its heavy reliance on residential property taxes. These data raise 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 raise 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 reveal 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 raise 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 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 benchmarking data also raise 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 lead 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 include for Newton both the official data for 2007 and the estimated post-arbitration data which are 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 raise 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 suggest 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 raise 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 indicate that Newton appears to be under-spending 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 indicate 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 show 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 suggest 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 raise 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 indicate 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 reveal 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 raise 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 those 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 raise 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 suggest 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 suggest 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 appear 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 than 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 4<sup>th</sup> grade MCAS testing compared to both benchmarking groups. In 10<sup>th</sup> 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 suggest 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<sup>1</sup> with the ninth largest public school system at 11,570 students.<sup>2</sup> 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%.<sup>3</sup> 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.<sup>4</sup> 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 heavily 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 Police and Fire benchmarking;
- 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; and,
- 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 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,

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<sup>1</sup> 2000 U.S. Census.

<sup>2</sup> Massachusetts Department of Education, 2007.

<sup>3</sup> 2000 U.S. Census.

<sup>4</sup> 2000 U.S. Census.

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). The 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** helps 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 than 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 third 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 is not derived from a numerical analysis but rather on the judgment by people deeply immersed in education. More specifically, 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 and the Newton Public Schools, 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 municipalities. 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 municipalities’ 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 were 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.

After producing the draft Benchmarking report, a number of people mentioned that they would have preferred to look at per household rather than per capita comparisons. We acknowledge the usefulness of per household data but did not have the time to re-do the analyses. We are providing in the Appendix the household data for those who would like to pursue this avenue of investigation.

**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 (Water, Sewer, Partial)
<b>Newton</b>	<b>82,819</b>	<b>4,644</b>	<b>\$86,052</b>	<b>9.7%</b>	<b>4.3%</b>	<b>11,715</b>	<b>14.1%</b>	<b>W/S</b>
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 (Water, Sewer, Partial)
<b>Newton</b>	<b>82,819</b>	<b>4,644</b>	<b>309</b>	<b>\$86,052</b>	<b>9.7%</b>	<b>4.3%</b>	<b>11,715</b>	<b>14.1%</b>	<b>W/S</b>
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
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\* 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 (Water, Sewer, Partial)
<b>Newton</b>	<b>82,819</b>	<b>4,644</b>	<b>\$86,052</b>	<b>9.7%</b>	<b>4.3%</b>	<b>11,715</b>	<b>14.1%</b>	<b>W/S</b>
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 were 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
<b>Newton, MA</b>	<b>82,819</b>	<b>86,052</b>	<b>4644</b>	<b>4.30%</b>	<b>11,570</b>	<b>91.3%</b>
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. Please note that this table includes not only the General Fund revenues but all revenues.)

The revenue benchmarking data suggest 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 is 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. These data raise 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 are threatening future local aid payments.) These 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 is often a heated topic in Newton.<sup>5</sup> 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 raise the question of whether Newton’s policies related to generating free cash should be reviewed.

Data gathered on payments in lieu of taxes or PILOTs received by benchmarking communities in Massachusetts reveal 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 raise the questions of whether it is reasonable to expect increased revenues from PILOTs and if Newton should pursue them more aggressively.

Other interesting data pertain 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 for amounts in the \$11 - \$12 million range. While the Citizen Advisory Group is 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.

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<sup>5</sup> 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.

Table 5: Revenues

	City/Town	Population	Total Revenue	Total Revenue per Capita	Rank	Revenues by Source					
						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
	<b>AVERAGE</b>	<b>42,742</b>	<b>\$157,831,067</b>	<b>\$3,803</b>		<b>\$102,856,179</b>	<b>\$2,462</b>		<b>88.6% - 12.1%</b>	<b>\$15,691,339</b>	<b>\$380</b>
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%		
	<b>AVERAGE</b>	<b>71,384</b>	<b>\$264,205,270</b>	<b>\$3,719</b>		<b>\$197,628,819</b>	<b>\$2,818</b>		<b>86.1% - 15.5%</b>		
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 were not available.



**Table 5: Revenues (continued)**

	City/Town	Population	Revenues by Source							Number of Proposed Overrides <sup>3</sup> '00-'07	Number of Successful Overrides '00-'07	Total Levy Increase (millions)
			Local Receipts <sup>1</sup>	Local Receipts per Capita	Other <sup>2</sup>	Other per Capita	Revenue from Licenses, Permits & Fees	Revenue from Licenses, Permits & Fees per Capita	PILOTs			
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
	<b>AVERAGE</b>	<b>42,742</b>	<b>\$33,204,166</b>	<b>\$791</b>	<b>\$6,079,383</b>	<b>\$169</b>	<b>\$2,553,077</b>	<b>\$61</b>	<b>\$506,582</b>	<b>4</b>	<b>2.3</b>	<b>\$6.9</b>
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					
	<b>AVERAGE</b>	<b>71,384</b>					<b>\$9,451,796</b>					
Sources		U.S. Census 2006 Estimate	Fairfield, Norwalk, & West Hartford Annual Budgets, FY07									

<sup>1</sup>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)

<sup>2</sup>Includes free cash and transfers of surpluses from other funds

<sup>3</sup>General overrides, not including debt exclusion overrides

**Table 6: Average Single Family Tax Bill**

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

<sup>1</sup> 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.) The 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
	<b>AVERAGE</b>	<b>42,742</b>	<b>\$69,035,928</b>	<b>\$1,615</b>	
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
	<b>AVERAGE</b>	<b>71,384</b>	<b>\$103,816,730</b>	<b>\$1,454</b>	
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 on Expenditures per Pupil in Table 23 mirror the per capita data.) The benchmarking data raise the question of what logic governs the allocation of resources between municipal and school departments.

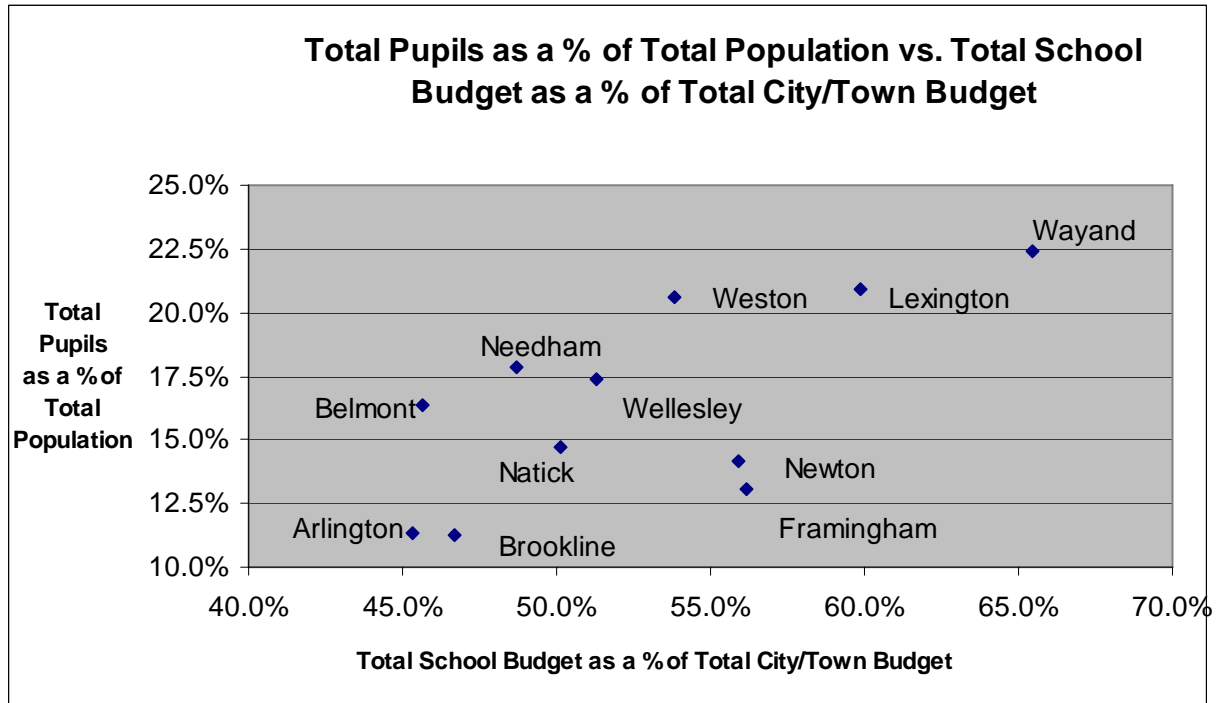
Another way of thinking about the question of how much of the total Newton budget to allocate to the schools is to look at the proportion of the community that are students. Interestingly, there are communities with a higher percentage of pupils spending a smaller percentage of their total budget on 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
<b>Demographically Similar Communities</b>	<b>Newton</b>	<b>\$170,151,871</b>	<b>304,305,026</b>	<b>55.9%</b>	<b>\$2,055</b>	<b>14.1%</b>	<b>6</b>
	<b>Arlington</b>	\$53,027,084	116,958,838	45.3%	\$1,291	11.3%	8
	<b>Belmont</b>	\$41,016,066	89,858,790	45.6%	\$1,760	16.3%	4
	<b>Brookline</b>	\$93,827,435	201,080,497	46.7%	\$1,699	11.2%	9
	<b>Framingham</b>	\$119,807,708	213,306,233	56.2%	\$1,850	13.1%	7
	<b>Lexington</b>	\$85,697,174	143,176,511	59.9%	\$2,835	20.9%	1
	<b>Natick</b>	\$54,997,364	109,651,561	50.2%	\$1,725	14.7%	5
	<b>Needham</b>	\$61,117,736	125,517,445	48.7%	\$2,154	17.9%	2
	<b>Wellesley</b>	\$59,819,538	116,624,704	51.3%	\$2,217	17.4%	3
	<b>AVERAGE</b>	<b>\$82,162,442</b>	<b>157,831,067</b>	<b>51.1%</b>	<b>\$1,922</b>	<b>15.2%</b>	
<b>Communities with a Similar Commitment to Education</b>	<b>Newton</b>	<b>\$170,151,871</b>	<b>304,305,026</b>	<b>55.9%</b>	<b>\$2,055</b>	<b>14.1%</b>	<b>7</b>
	<b>Brookline</b>	\$93,827,435	201,080,497	46.7%	\$1,699	11.2%	8
	<b>Concord-Carlisle</b>	\$60,763,727	N/A	N/A	\$2,808	18.2%	5
	<b>Lexington</b>	\$85,697,174	143,176,511	59.9%	\$2,835	20.9%	3
	<b>Lincoln-Sudbury</b>	\$79,586,490	N/A	N/A	\$3,187	24.8%	1
	<b>Wayland</b>	\$38,386,562	58,663,131	65.4%	\$2,960	22.4%	2
	<b>Wellesley</b>	\$59,819,538	116,624,704	51.3%	\$2,217	17.4%	6
	<b>Weston</b>	\$39,524,117	73,450,872	53.8%	\$3,394	20.6%	4
	<b>AVERAGE</b>	<b>\$78,469,614</b>	<b>149,550,124</b>	<b>55.5%</b>	<b>\$2,355</b>	<b>18.7%</b>	
<b>Sources</b>	<b>N/A</b>	<b>MA DOE FY07</b>					

Note: Concord-Carlisle and Lincoln-Sudbury data are 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 include 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 are 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 are 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 suggest 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
<b>Core Benchmarking Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>\$13,801,951</b>	<b>\$166</b>	<b>3</b>	<b>10.9%</b>
	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%
	<b>AVERAGE</b>	<b>42,742</b>	<b>\$7,167,742</b>	<b>\$164</b>		<b>10.4%</b>
<b>Other</b>	Quincy	91,058	\$19,685,876	\$216		15.1%
	Waltham	59,352	\$12,147,522	\$205		11.7%
<b>Sources</b>		U.S. Census 2006 Estimate	Massachusetts Department of Revenue, Division of Local Services, FY07			
<b>Non-MA Benchmarking Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>\$13,801,951</b>	<b>\$166</b>	<b>4</b>	<b>10.9%</b>
	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%
	<b>AVERAGE</b>	<b>71,384</b>	<b>\$15,359,844</b>	<b>\$220</b>		<b>15.3%</b>
<b>Sources</b>		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 <sup>1</sup>	Number of Citizens per Uniformed Police Employee	Rank	Number of Police Officers	Number of Police Commanders <sup>1</sup>	Number of Police Officers as a % of Uniformed Police Force
<b>Core Benchmarking Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>143</b>	<b>579</b>	<b>5-6</b>	<b>106</b>	<b>37</b>	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 <sup>2</sup>	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%
	<b>AVERAGE</b>	<b>42,742</b>	<b>76</b>	<b>562</b>		<b>56</b>	<b>20.3</b>	<b>74%</b>
<b>Other</b>	Quincy	91,058	203	453		153	50.0	75%
	Waltham	59,352	150	495		116	34.0	77%
<b>Sources</b>		U.S. Census 2006 Estimate	Massachusetts Municipal Personnel Association Compensation/Benefits Survey of Police Personnel, FY07					

<sup>1</sup> Includes police officers, sergeants, lieutenants, captains, district chiefs, deputy chiefs and police chiefs

<sup>2</sup> Lexington police officer and sergeant salary data from FY05

<sup>3</sup> 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
<b>Newton</b>	<b>82,819</b>	<b>1</b>	<b>6</b>	<b>15</b>	<b>93</b>	<b>269</b>	<b>786</b>	<b>45</b>	<b>1215</b>	<b>1.5%</b>
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%
<b>Average</b>	<b>42,742</b>		<b>5</b>	<b>17</b>	<b>58</b>	<b>145</b>	<b>469</b>	<b>46</b>	<b>739</b>	<b>1.7%</b>
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
	<b>AVERAGE</b>	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
<b>Core Benchmarking Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>\$80,064</b>	<b>\$80,064</b>	<b>\$63,711</b>	<b>\$95,567</b>	<b>\$63,711</b>	<b>\$95,567</b>	<b>\$79,656</b>	<b>\$119,484</b>
	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
	<b>AVERAGE</b>	<b>42,742</b>	<b>\$76,166</b>	<b>\$79,166</b>	<b>-</b>	<b>-</b>	<b>\$79,763</b>	<b>\$96,088</b>	<b>\$90,742</b>	<b>\$115,703</b>
<b>Other</b>	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
<b>Sources</b>		<b>U.S. Census 2006 Estimate</b>	<b>Massachusetts Municipal Personnel Association Compensation/Benefits Survey of Police Personnel, FY07</b>							

## Expenditures - Fire

The benchmarking data in this report are 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 are 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 raise 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 suggest 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	
<b>Core Benchmarking Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>\$11,688,683</b>	<b>\$141</b>	<b>9</b>	<b>9.2%</b>
	<b>Newton Post-Arbitration</b>	<b>82,819</b>	<b>\$12,857,551</b>	<b>\$155</b>	<b>5</b>	<b>10.1%</b>
	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%
	<b>AVERAGE</b>	<b>42,742</b>	<b>\$7,107,493</b>	<b>\$165</b>		<b>10.3%</b>
<b>Other</b>	Quincy	91,058	\$15,963,436	\$175		12.3%
	Waltham	59,352	\$13,086,473	\$220		12.6%
<b>Sources</b>		U.S. Census 2006 Estimate	Massachusetts Department of Revenue, Division of Local Services, FY07			
<b>Non-MA Benchmarking Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>\$11,688,683</b>	<b>\$141</b>	<b>5</b>	<b>9.2%</b>
	<b>Newton Post-Arbitration</b>	<b>82,819</b>	<b>\$12,857,551</b>	<b>\$155</b>	<b>4</b>	<b>10.1%</b>
	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%
		<b>AVERAGE</b>	<b>73,671</b>	<b>\$12,203,436</b>	<b>\$172</b>	
<b>Sources</b>		U.S. Census 2006 Estimate	Fairfield, Norwalk, & West Hartford Annual Budgets, FY07 Massachusetts Municipal Personnel Association Compensation/Benefits Survey of Fire Personnel, FY07			

<sup>1</sup> 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 <sup>1</sup>	Number of Citizens per Individual Fire Person	Rank	Number of Firefighters	Number of Fire Commanders <sup>2</sup>	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%
	<b>AVERAGE</b>	<b>42,742</b>	<b>96</b>	<b>444</b>		<b>69</b>	<b>27</b>	<b>71%</b>
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					

<sup>1</sup> Total includes all firefighters, lieutenants, captains, district chiefs, deputy chiefs and fire chiefs

<sup>2</sup> 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
<b>Core Benchmarking Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>\$43,600</b>	<b>\$50,437</b>	<b>\$52,200</b>	<b>\$59,193</b>	<b>\$60,020</b>	<b>\$67,783</b>	<b>\$69,025</b>	<b>\$77,675</b>	<b>\$79,656</b>	<b>\$119,484</b>
	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
	<b>AVERAGE</b>	<b>42,742</b>	<b>\$39,520</b>	<b>\$47,291</b>	<b>\$51,460</b>	<b>\$55,671</b>	<b>\$59,916</b>	<b>\$63,756</b>	<b>\$68,364</b>	<b>\$76,250</b>	<b>\$89,827</b>	<b>\$114,788</b>
<b>Other</b>	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
<b>Sources</b>		<b>U.S. Census, 2006 Estimate</b>	<b>Massachusetts Municipal Personnel Association Compensation/Benefits Survey of Fire Personnel, FY'07</b>									

## **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 raise 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 in the “back office” or General Government as well as maintenance. 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 indicate that further analysis should be done to probe whether Newton is under-spending in this area.

The benchmarking data also show 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).<sup>6</sup> (See Table 17: Expenditures on General Government, Culture and Recreation, and Human Services.) In parallel, Newton is allocating a larger percentage of its

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<sup>6</sup> Human Services includes Environmental Health Services (e.g., regulation of retail food establishments, pools, tanning and massage facilities, camps, funeral homes, pest control, etc.), Clinical Health Services (including twenty-one schools nurses) and public health providers, Emergency Preparedness, and human and volunteer services. Of note, the Newton Department of Health and Human Services allocates just over \$2 million or 66% of its municipal funds for school health

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 raise 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 are 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 appears that the other Massachusetts benchmarking communities classify school nurses as School Department employees.) The benchmarking data suggest 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 union 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. The benchmarking data raise the question of the effectiveness in the short- and long-term of Newton's overall salary and compensation strategy. 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. Moreover, the Benchmarking report has noted that overall administrative costs are low in comparison to the benchmarking communities in both the City and the School functions.

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 raise the question of whether Newton should negotiate with the unions to change the contribution percentages.

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services. It appears that the other Massachusetts benchmark communities classify school health services as school district expenses.

**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
<b>Core Benchmarking Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>\$16,805,226</b>	<b>\$202</b>	<b>3</b>	<b>13.2%</b>	<b>149</b>	<b>556</b>	<b>3</b>
	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
	<b>AVERAGE</b>	<b>42,742</b>	<b>\$7,412,361</b>	<b>\$173</b>		<b>10.7%</b>	<b>107</b>	<b>400</b>	
<b>Sources</b>		<b>U.S. Census 2006 Estimate</b>	<b>MA Dept. of Revenue, Division of Local Services, FY07; Town Budgets/Annual Financial Reports, FY07</b>						
<b>Non-MA Benchmarking Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>\$16,805,226</b>	<b>\$202</b>	<b>2</b>	<b>13.2%</b>	<b>149</b>	<b>556</b>	<b>4</b>
	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 <sup>1</sup>	60,700	\$12,196,978	\$200	3	14.5%	56	1,084	1
	<b>AVERAGE</b>	<b>71,384</b>	<b>\$14,646,846</b>	<b>\$207</b>		<b>14.2%</b>	<b>106</b>	<b>730</b>	
<b>Sources</b>		<b>U.S. Census 2006 Estimate</b>	<b>Town Budgets/Annual Financial Reports, FY07</b>						

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.

<sup>1</sup> West Hartford DPW Data are 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 <sup>1</sup>	General Govt per Capita	GG Cost as a % of Municipal budget	Culture & Rec. <sup>2</sup>	Culture & Rec. per Capita	C&R as a % of Mun. Budget	Human Services <sup>3</sup>	Human Services per Capita	HS as a % of Mun. Budget
<b>Core Benchmarking Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>\$10,201,560</b>	<b>\$123</b>	<b>8.0%</b>	<b>\$8,756,667</b>	<b>\$105</b>	<b>6.9%</b>	<b>\$2,836,433</b>	<b>\$34</b>	<b>2.2%</b>
	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%
	<b>AVERAGE</b>	<b>42,742</b>	<b>\$5,676,236</b>	<b>\$136</b>	<b>8.2%</b>	<b>\$3,807,619</b>	<b>\$89</b>	<b>5.5%</b>	<b>\$1,151,926</b>	<b>\$26</b>	<b>1.7%</b>
<b>Sources</b>		U.S. Census 2006 Estimate	Massachusetts Department of Revenue, Division of Local Services, FY07								

<sup>1</sup>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.

<sup>2</sup>Culture and Recreation: Library, Recreation, Parks, Newton History Museum, Celebrations and other.

<sup>3</sup>Human Services: Health Services, Clinical Services, Special Programs, and Veteran's Services.

Table 18: Salaries of Executive and Miscellaneous Positions

Executive and Misc. Employee Wage/Salary Data	City/Town	Population	Minimum and Maximum Annual Base Pay for Executive and Miscellaneous Positions							
			Laborer Min	Laborer Max	Clerk 1 (Jr. Clerk) Min	Clerk 1 (Jr. Clerk) Max	Building Commissioner Min	Building Commissioner Max	Health Director Min	Health Director Max
Core Benchmarking Communities	Newton	82,819	\$33,105	\$38,594	\$27,825	\$41,737	\$67,215	\$101,498	72257	108385
	Arlington	41,075	\$13.54/hr	\$16.41/hr	n/a	n/a	\$44,354	\$57,392	52127	67449
	Belmont	23,308	\$33,616	\$39,139	\$23,975	\$28,771	\$64,147	\$89,805	64147	89805
	Brookline	55,241	n/a	\$37,885	\$34,378	\$36,313	\$97,491	\$114,840	90270	106333
	Framingham	64,762	\$34,882	\$39,478	n/a	n/a	\$83,397	\$101,930	83395	101930
	Lexington	30,231	\$32,754	\$37,837	\$25,720	\$40,408	\$61,006	\$95,845	52135	81908
	Natick	31,886	\$26,470	\$37,117	n/a	n/a	\$57,353	\$77,534	66530	89856
	Needham	28,368	\$28,234	\$32,515	\$26,154	\$33,130	\$62,895	\$78,812	67107	84090
	Wellesley	26,987	\$25,584	\$33,134	n/a	n/a	\$50,240	\$75,360	57440	86160
	<b>AVERAGE</b>	42,742	\$30,664	\$36,962	\$27,610	\$36,072	\$65,344	\$88,113	\$67,268	\$90,657
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
	<b>AVERAGE</b>	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
<b>Core Benchmarking Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>80%</b>	<b>80%</b>
	<b>Arlington</b>	41,075	85%	75%
	<b>Belmont</b>	23,308	90%	80%
	<b>Brookline</b>	55,241	75%	75%
	<b>Framingham</b>	64,762	90%	75%
	<b>Lexington</b>	30,231	85%-87%	80%
	<b>Natick</b>	31,886	85%-89%	50%
	<b>Needham</b>	28,368	69%	50%
	<b>Wellesley</b>	26,987	80%	50%
	<b>AVERAGE</b>	<b>42,742</b>	<b>82.4%</b>	<b>68.3%</b>
	<b>Sources</b>		U.S. Census 2006 Estimate	Massachusetts Municipal Personnel Association Benchmark Salary Survey FY07



## Capital and Debt

Data on Newton's capital structure reveal 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 benchmarking average is essentially double, \$1,626, and the non-Massachusetts benchmarking 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 raise 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
<b>Core Benchmarking Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>\$155</b>	<b>\$68,289,973</b>	<b>\$824</b>	<b>9</b>
	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
	<b>AVERAGE</b>	<b>42,742</b>	<b>\$304</b>	<b>\$63,008,846</b>	<b>\$1,626</b>	
<b>Sources</b>		<b>U.S. Census 2006 Estimate</b>	<b>Massachusetts Department of Revenue, Division of Local Services FY07</b>			
<b>Non-MA Benchmarking Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>n/a</b>	<b>\$68,289,973</b>	<b>\$824</b>	<b>4</b>
	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
	<b>AVERAGE</b>	<b>71,384</b>		<b>\$166,301,493</b>	<b>\$2,430</b>	
<b>Sources</b>		<b>U.S. Census 2006 Estimate</b>	<b>Fairfield, Norwalk, &amp; West Hartford Annual Budgets, FY07</b>			

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

Capital Spreadsheet Continued...	City/Town	Population	Total Debt Service	Total Debt Service per Capita <sup>1</sup>	Rank	General Fund Debt Service	General Fund Debt Service per Capita	Rank	Total Debt Service as a % of General Fund Operating Budget <sup>2</sup>	Rank	Bond Ratings
<b>Core Benchmarking Communities</b>	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
	<b>AVERAGE</b>		42,742	\$10,366,642	\$267.78		\$8,306,640	\$215		7.38%	
<b>Sources</b>		U.S. Census 2006 Estimate	Massachusetts Department of Revenue, Division of Local Services FY07								
<b>Non-MA Benchmarking Communities</b>	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						
	<b>AVERAGE</b>		71,384	\$17,427,183	\$253						
<b>Sources</b>		U.S. Census 2006 Estimate	Fairfield, Norwalk, & West Hartford Annual Budgets, FY07								

<sup>1</sup> Debt service includes both principal and interest payments

<sup>2</sup> 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, when looking at percentages, 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 include METCO (Metropolitan Council for Educational Opportunity) children. In the Newton Public Schools, approximately 415 or 3.7% of the students 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 include 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
<b>Demographically Similar Communities</b>	<b>Newton</b>	<b>82,819</b>	<b>11,715</b>	<b>14.1%</b>	<b>68.0%</b>	<b>18.7%</b>	<b>6.9%</b>	<b>18.8%</b>
	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%
<b>AVERAGE</b>	<b>42,742</b>	<b>6,178</b>	<b>15.2%</b>	<b>62.8%</b>	<b>15.2%</b>	<b>8.9%</b>	<b>16.3%</b>	
<b>Communities with a Similar Commitment to Education</b>	<b>Newton</b>	<b>82,819</b>	<b>11,715</b>	<b>14.1%</b>	<b>68.0%</b>	<b>18.7%</b>	<b>6.9%</b>	<b>18.8%</b>
	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%
	<b>AVERAGE</b>	<b>33,314</b>	<b>5,546</b>	<b>18.7%</b>	<b>71.8%</b>	<b>11.3%</b>	<b>4.9%</b>	<b>16.8%</b>
<b>Sources</b>		2006 Estimates	MA DOE FY07		Census 2000	MA DOE 07-08		MA DOE FY08

Note: Concord-Carlisle and Lincoln-Sudbury data are 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 on Expenditures per Pupil in Table 23 mirror the per capita data.) The benchmarking data raise 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 of the total Newton budget 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.)

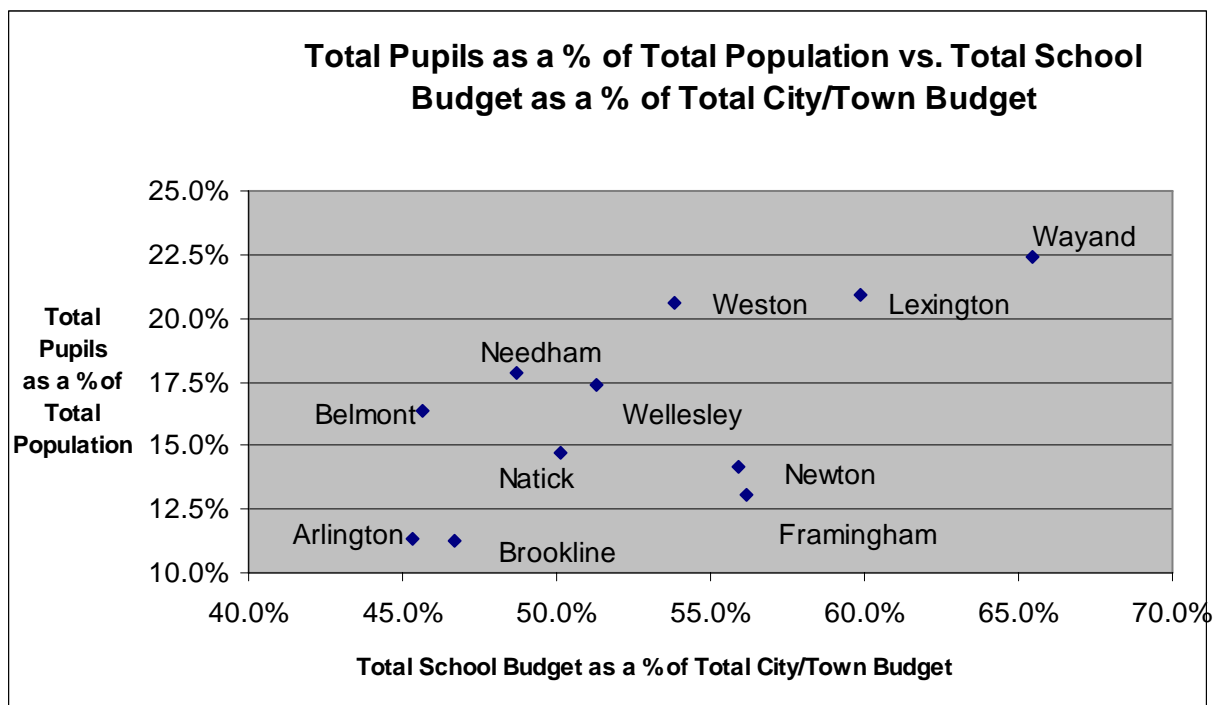
**Table 22: Expenditures on Schools**

	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
<b>Demographically Similar Communities</b>	<b>Newton</b>	<b>\$170,151,871</b>	<b>304,305,026</b>	<b>55.9%</b>	<b>\$2,055</b>	<b>14.1%</b>	<b>6</b>
	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
	<b>AVERAGE</b>	<b>\$82,162,442</b>	<b>157,831,067</b>	<b>51.1%</b>	<b>\$1,922</b>	<b>15.2%</b>	
<b>Communities with a Similar Commitment to Education</b>	<b>Newton</b>	<b>\$170,151,871</b>	<b>304,305,026</b>	<b>55.9%</b>	<b>\$2,055</b>	<b>14.1%</b>	<b>7</b>
	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
	<b>AVERAGE</b>	<b>\$78,469,614</b>	<b>149,550,124</b>	<b>55.5%</b>	<b>\$2,355</b>	<b>18.7%</b>	
<b>Sources</b>	<b>N/A</b>	<b>MA DOE FY07</b>					

Note: Concord-Carlisle and Lincoln-Sudbury data are 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 include 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;<sup>7</sup> instructional leadership;<sup>8</sup> 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);<sup>9</sup> professional development (71% more);<sup>10</sup> 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 show 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, these 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 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.)

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.)<sup>11</sup> 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

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<sup>7</sup> 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.

<sup>8</sup> Instructional leadership refers to department heads, principals and assistant principals, and supervisory curriculum directors.

<sup>9</sup> Other teaching services include such people as non-supervisory instructional coordinators, team leaders, curriculum facilitators, medical and therapeutic services, aides and librarians.

<sup>10</sup> 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).

<sup>11</sup> 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.

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 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 suggest 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
<b>Demographically Similar Communities</b>	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
	<b>AVERAGE</b>	<b>\$451</b>	<b>\$937</b>	<b>\$4,854</b>	<b>\$1,053</b>	<b>\$170</b>	<b>\$297</b>	<b>\$394</b>
<b>Communities with a Similar Commitment to Education</b>	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
	<b>AVERAGE</b>	<b>\$527</b>	<b>\$971</b>	<b>\$5,332</b>	<b>\$1,318</b>	<b>\$194</b>	<b>\$430</b>	<b>\$440</b>
<b>Sources</b>	<b>MA DOE FY07</b>							

Note: Concord-Carlisle and Lincoln-Sudbury are 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
	<b>AVERAGE</b>	<b>\$856</b>	<b>\$1,117</b>	<b>\$2,036</b>	<b>\$50,495</b>		<b>\$12,900</b>		<b>\$82,162,442</b>
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
	<b>AVERAGE</b>	<b>\$1,066</b>	<b>\$1,254</b>	<b>\$2,001</b>	<b>\$56,483</b>		<b>\$14,223</b>		<b>\$78,469,614</b>
Sources		MA DOE FY07							

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

Table 23: Expenditures per Pupil (continued)

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

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

Note: Concord-Carlisle and Lincoln-Sudbury data are 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
	<b>AVERAGE</b>	<b>\$30,305,392</b>	<b>482.2</b>	<b>\$61,881</b>		<b>\$38,030</b>	<b>\$61,812</b>	<b>12.6</b>	<b>\$40,931</b>	<b>\$68,765</b>	<b>13</b>
Communities with a Similar Commitment to Education <sup>1</sup>	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
	<b>AVERAGE</b>	<b>\$30,557,863</b>	<b>459.9</b>	<b>\$66,780</b>		<b>\$38,724</b>	<b>\$64,839</b>	<b>12.3</b>	<b>\$41,587</b>	<b>\$72,477</b>	<b>12.8</b>
Sources		MA DOE FY07			Town of Brookline Override Study Committee Final Report 2008 (FY06)						

<sup>1</sup>Data for Concord-Carlisle and Lincoln-Sudbury were not readily available.



**Table 25: Teacher Salaries (continued)**

TEACHER SALARIES (Continued)	Communities	Master's (Continued)						Doctorate		
		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
	<b>AVERAGE</b>	<b>\$43,800</b>	<b>\$73,600</b>	<b>13.1</b>	<b>\$45,191</b>	<b>\$77,121</b>	<b>13.4</b>	<b>\$46,883</b>	<b>\$78,108</b>	<b>13.2</b>
Communities with a Similar Commitment to Education <sup>1</sup>	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
	<b>AVERAGE</b>	<b>\$44,297</b>	<b>\$78,038</b>	<b>12.8</b>	<b>\$45,469</b>	<b>\$78,727</b>	<b>13.0</b>	<b>\$47,463</b>	<b>\$83,950</b>	<b>13.2</b>
Sources	Town of Brookline Override Study Committee Final Report 2008 (FY06)									

<sup>1</sup>Data for Concord-Carlisle and Lincoln-Sudbury were 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.)<sup>12</sup> 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 lead 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 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 appear 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.

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<sup>12</sup> 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.

**Table 26: Special Education**

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	In-District Instruction		Out-of-District Tuition
							Teaching	Other Instructional	MA Public Schools and Collaboratives
<b>Demographically Similar Communities</b>	<b>Newton</b>	<b>11,566.9</b>	<b>148.4</b>	<b>1.3%</b>	<b>1</b>	<b>11,715</b>	<b>\$21,367,453</b>	<b>\$3,831,949</b>	<b>\$617,324</b>
	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
	<b>AVERAGE</b>	<b>6,032.9</b>	<b>144.7</b>	<b>2.3%</b>		<b>6,178</b>	<b>\$8,679,951</b>	<b>\$1,517,923</b>	<b>\$1,087,178</b>
<b>Communities with a Similar Commitment to Education</b>	<b>Newton</b>	<b>11,566.9</b>	<b>148.4</b>	<b>1.3%</b>	<b>3-4</b>	<b>11,715</b>	<b>\$21,367,453</b>	<b>\$3,831,949</b>	<b>\$617,324</b>
	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
	<b>AVERAGE</b>	<b>5,626.8</b>	<b>78.4</b>	<b>1.3%</b>		<b>5,546</b>	<b>\$8,603,806</b>	<b>\$1,382,066</b>	<b>\$773,660</b>
<b>Sources</b>		<b>MA DOE FY07</b>							

\*These data come from Schedule 11 of the FY07 DOE End of Year Report, Pupil Membership Summary. This data includes 20.2 charter school students, 23.4 regular education FTEs for out-of-district students, and 4.1 Technical Vocational students in the Tuitioned Out FTE of 148.4. Thus, the Tuitioned Out of District includes both Special Education and Regular Education tuitioned out plus charter school students.

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
	<b>AVERAGE</b>	<b>\$4,133,333</b>	<b>\$15,418,385</b>	<b>\$71,019,807</b>	<b>21.3%</b>	<b>16.3%</b>	<b>5.0</b>
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
	<b>AVERAGE</b>	<b>\$3,632,466</b>	<b>\$14,391,997</b>	<b>\$67,383,207</b>	<b>20.5%</b>	<b>16.7%</b>	<b>3.8</b>
Sources	MA DOE FY07						

\* Total School Operating Budget is derived by adding FY07 Circuit Breaker funds to FY07 Net School Spending for each district.

## School Characteristics

The benchmarking data highlight 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 are 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.<sup>13</sup> (This, however, can be a difficult statistic to compare across communities because there are 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 three 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 suggest that more information on teacher load 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 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. Moreover, taking a snapshot of one class does not tell a meaningful story nor does it align with the way the Newton Public Schools use MCAS as an assessment tool.<sup>14</sup> 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 4<sup>th</sup> grade MCAS testing for both benchmarking groups. Only Belmont and Lexington consistently score better than Newton at the 4<sup>th</sup> grade level. (See Table 30: MCAS Results.) Yet, in 10<sup>th</sup> 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

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<sup>13</sup> Core subjects include English, Math, Social Sciences, Foreign Languages and Science

<sup>14</sup> Newton Public Schools do not use the MCAS as a way of competing with other school districts. Rather, they follow cohorts of students longitudinally to see how a particular group of students progress over the years into the proficient or advanced categories. They focus on what percentage of students, in a given cohort, move from warning/needs improvement to proficient/advanced over time. They consciously and actively use the data to improve teaching and learning.

education (92% and 90%). 10<sup>th</sup> graders in six of seven other communities with a similar commitment to education (Concord-Carlisle, Lexington, Lincoln-Sudbury, Wayland, Wellesley and Weston) score better on both the English Language Arts and the Math sections of the MCAS. These data on MCAS results 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 more than \$1 million. (There are a host of factors that impact the cost of providing meals. For example, Newton serves lunch to students in twenty-one buildings. In contrast, Brookline has only ten and Framingham thirteen. 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 suggest the food service program should be looked at more closely.

**Table 27: Length of School Day**

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

Table 28: Teacher Load

TEACHER LOAD	Communities	Length of Teacher Year	High School				Overall Student/Teacher Ratio	Student/Teacher Ratio Rank
			Periods per Week for Other Teachers	Periods per Week for English Teachers	Maximum Students for Other Teachers	Maximum Students for English Teachers		
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
	<b>AVERAGE</b>	<b>183</b>	<b>20</b>	<b>19</b>	<b>122</b>	<b>113</b>	<b>13.6</b>	
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
	<b>AVERAGE</b>	<b>184</b>	<b>19</b>	<b>18</b>	<b>122</b>	<b>113</b>	<b>13.0</b>	
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 are 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
	<b>AVERAGE</b>	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
	<b>AVERAGE</b>	20.4	21.6	20.7
Sources		MA DOE 2007-2008		

Table 30: MCAS Results

MCAS	Communities	Percent of Students with MCAS Scores of Proficient and Advanced (2007)							
		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
	<b>AVERAGE</b>	<b>76.1</b>	<b>67.1</b>	<b>71.6</b>		<b>88.2</b>	<b>87.3</b>	<b>87.8</b>	
Communities with a Similar Commitment to Education	Newton	<b>78.0</b>	<b>73.0</b>	<b>75.5</b>	<b>3</b>	<b>88.0</b>	<b>88.0</b>	<b>88.0</b>	<b>7</b>
	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
	<b>AVERAGE</b>	<b>78.7</b>	<b>68.7</b>	<b>73.7</b>		<b>92.1</b>	<b>89.9</b>	<b>91.0</b>	
Sources		MA DOE 2007							

**Table 31: High School Lunch Fees**

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

## 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**

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

### **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., musical 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



Table 4A: Population and Household Data for Comparison Communities

	Population	Households
<b>Core Massachusetts Benchmarking Communities</b>		
Newton	82,819	31873
Arlington	41,075	18192
Belmont	23,308	9552
Brookline	55,241	25591
Framingham	64,762	25076
Lexington	30,231	10936
Natick	31,886	13109
Needham	28,368	10424
Wellesley	26,987	9430
<b>Public Safety Benchmarking Communities</b>		
Newton	82,819	31873
Arlington	41,075	18192
Belmont	23,308	9552
Brookline	55,241	25591
Framingham	64,762	25076
Lexington	30,231	10936
Natick	31,886	13109
Needham	28,368	10424
Quincy	91,058	37903
Waltham	59,352	22778
Wellesley	26,987	9430
<b>Educational Excellence Benchmarking Communities</b>		
Newton	82,819	31873
Brookline	55,241	25591
Concord-Carlisle	21,641	7566
Lexington	30,231	10936
Lincoln-Sudbury	24,975	8294
Wayland	12,970	4625
Wellesley	26,987	9430
Weston	11,646	3718
Unbundled		
Carlisle	4852	1618
Concord	16789	5948
Lincoln	7948	2790
Sudbury	17027	5504
<b>Non-Massachusetts Benchmarking Communities</b>		
Newton, MA	82,819	31873
West Hartford, CT	60,700	24325
Norwalk, CT	84,187	31844
Edison, NJ	99,523	19658

Sources: Population – 2006 US Census Estimates; Households – 2005-2007 American Community Survey 3 Year Estimates, US Census Bureau when available or 2000 US Census



City of Newton

# Citizen Advisory Group

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

## Report on Municipal Revenue

# Report on Municipal Revenue

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## I. Summary

Newton's opportunities to increase revenues are modest. Exploiting these opportunities by themselves will not close the widening gap between the City's expenditures and revenues. Neither will their successful exploitation fill the gap between the kind of city Newton's residents say they would like and that which residents are willing or able to afford. Nevertheless, given voters' current antipathy toward higher property taxes and probable reductions in aid from the Commonwealth, converting *potential* municipal revenue gains into *actual* gains is an important step towards ensuring Newton's fiscal health.

The Citizen Advisory Group looked expansively for incremental revenue gains. We found potential realizable revenue increases amounting to 1% to 4% of the annual General Fund budget (\$2 to \$10 million). These are maximum figures and assume swift implementation of our specific recommendations, which relate primarily to moving some services from the tax base to user fees, along with price increases for fees and services.

It is noteworthy that the financial effects of an immediate and full implementation of our recommendations would be short-term in nature—meaning that they could only fill our budget gap for one or two years. This gap can be further forestalled, to some extent, by parallel efforts devoted to achieving incremental operating efficiencies. In two other reports, the Citizen Advisory Group recommend a broad portfolio of possible operating efficiencies that could reduce the costs of Newton's municipal and educational operations. However, even if the full potential of these recommended operating efficiencies and the revenue enhancements presented in this report is achieved, it appears that the rate of growth of difficult to control expenditures (e.g., health care, pension benefits, energy, and special education) will continue to outstrip the rate of revenue growth which has been quasi-limited by Proposition 2 ½. It will still not be able to fully fund the scope and quality of public services that Newton has historically provided.

This conclusion is consistent with the *Report of the Blue Ribbon Commission on the Municipal Budget* (February 1, 2007), which concluded that Newton faced a significant structural deficit. The Mayor's office updated the Commission's budget forecast in the spring of 2008. That revised forecast shows revenues in the operating budget increasing at a rate of 2.9 percent per year from 2009 through 2014, with expenditures growing at a significantly higher 5.9 percent annual rate in order to fund the current range and level of public service. This 3 percent mismatch in growth rates means that Newton will be short an estimated \$7.3 million in 2010, \$25 million the next year and, by 2013, \$45 million.

Since, by law, Massachusetts municipalities must have a balanced budget, the "big choices" currently facing Newton's residents and their elected leaders are more profound than simply increasing revenues or reducing costs. Rather, we must consider reductions in the historic scope and scale of municipal and educational services and/or ways to moderate the growth in compensation. If voters' recent rejection of the property tax override ballot question suggests limited support for increasing revenues through tax increases, then Newton's residents and their elected leaders must make these difficult choices.

## II. Methodology

From June through November 2008, Citizen Advisory Group Revenue Committee members sought to understand, evaluate, and articulate the revenue choices facing Newton by:

- Analyzing historic revenue streams, current revenue budgets, and forecasts
- Studying public information to benchmark Newton's revenue sources with local and national peers and identifying best practices<sup>1</sup>
- Reviewing prior and pending revenue proposals made by citizens and elected officials
- Soliciting new ideas from the public through interactive small meetings with concerned citizens, web blogs, and "town-hall" style forums
- Interviewing knowledgeable public officials and private citizens, including the Mayor, key City and school administrators, Aldermen and School Committee members.

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<sup>1</sup> See CAG's Benchmarking Report for more information.

### III. Articulation of Choices

Identifying potential new revenue choices starts with understanding the current sources of Newton's revenues. In fiscal year 2007, Newton's General Fund revenue totaled \$260 million.<sup>2</sup> Sources of revenue are reflected in Exhibit I.

Newton is overwhelmingly dependent on the property tax. Fully 80% of revenues in the General Fund come from locally assessed property taxes. Since 1980, following passage of Proposition 2 1/2, these revenues are limited to 2.5% annual increases plus any new growth from property development unless citizens vote to increase taxes.<sup>3</sup> In a mature suburban city like Newton, new growth has averaged about 1% per year since 1980. **Hence, 80% of Newton's revenues, regardless of expense growth, can be expected to continue to grow at about 3.5% per year, and assuming no other revenue growth, total revenues will grow 2.8% annually.**

Non-property-tax municipal revenue accounts for only 20% of Newton's annual budget. Unfortunately, of this 20%, two-thirds is state aid and state-mandated motor vehicle excise and hotel taxes -- 13.4% of Newton's annual budget -- over which there is no local control. In the past, state aid has proved difficult to predict as it ebbed and flowed with the Commonwealth's fiscal health. In the short-term, Newton expects decreases in state aid, reflecting current economic strains. In addition, while new local taxing authority (on meals, hotels, or telecommunications) for municipalities to compensate for this lost aid has been discussed in the Legislature, no action has been taken.

**Less than 7% of Newton's revenues come from controllable local fees.** The issuance of building permits accounts for the largest portion of these fees -- about 27% of the total (\$4.6 million—less than 2% of the General Fund). Parking violation fines are the second largest, about 10% (\$1.4 million -- less than 1% of the General Fund). All other local fees account for less than 3.5% of the General Fund.

Given this breakdown in revenues, it is easy to see why policymakers seeking to fill budget gaps have turned to Proposition 2 1/2 overrides: property taxes are overwhelmingly Newton's largest revenue source. All other revenue sources are just a fifth as large and less than 7% are controllable. **Without Proposition 2 1/2 overrides, if state funding remains constant, only those 7% of revenues controlled locally can be managed to fill the gap.** While a doubling of locally controlled non-property revenues would cover one year's budget gap, the next year's expense growth will create the same gap once again.

Going forward, then, the first "big question" currently facing Newton's decision makers is whether or not to transfer some of the services paid for by taxes currently into fee-based services and to increase fees for local services to plug projected budget gaps. If the answer to this question is "yes," then there are choices regarding which municipal services should carry a user fee and which services should not. There are also choices related to enhancing the flows from property-tax-based sources.

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<sup>2</sup> All dollar and percentages quoted are based on FY 2007 Actual as presented in the Mayor's Recommended FY 2009 Operating Budget. The General Fund excludes dedicated enterprise funds, chiefly the Water and Sewer Fund, through which the City reimburses the cost of participation in the regional Massachusetts Water Resources Authority (MWRA).

<sup>3</sup> See Appendix IV, p.46 for a discussion of the property tax.

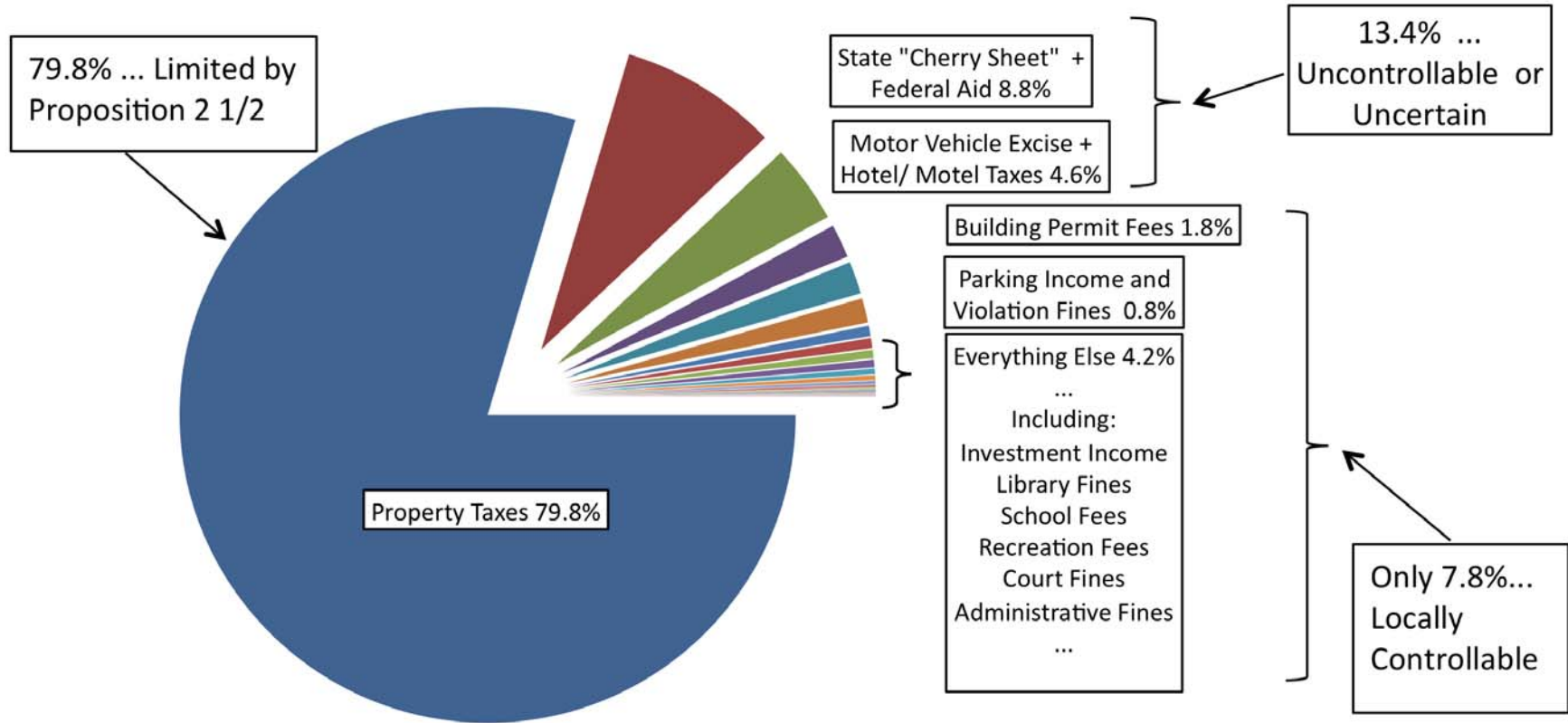
The Citizen Advisory Group addresses these choices by examining operating strategies for enhancing revenue streams from both sources, as well as streams from other, less established revenue sources. It is the opinion of the Citizen Advisory Group that Newton has no choice but to adopt these strategies in order to fill its growing budget gap.

Before proceeding to the committee's recommendations, a special word is in order regarding the use of tax overrides and debt exclusions as means of reducing the City's budget gap and structural deficit.

Given the possible, but still relatively small, increases to Newton's non-property tax related revenue sources, it is inevitable that tax overrides and debt exclusions will remain important options in Newton's financial future. Deciding when and under what conditions these options should be considered is a political judgment beyond the scope of this committee's work. As a practical matter, however, this committee expects that any future consideration of tax overrides or debt exclusions would be in conjunction with an assessment of the actual gains from the new revenue sources identified in this report and the kind of operating efficiencies identified and recommended in forthcoming reports from the Citizen Advisory Group.



### Exhibit I - Sources of Newton Revenue



Source: FY 2007 Actual -- \$260,242,369 Total Revenue, Mayor's Recommended FY 2009 Operating Budget, City of Newton

## Exhibit II – Citizen Advisory Group Recommended Revenue Enhancement Strategies

<u>Item</u>	<u>Recommendation</u>	<u>Revenue Impact (millions)</u>	<u>Implementation</u>
1	Convert to a “Pay As You Throw” (PAYT) trash collection regime requiring residents to pay only for trash services they use and encouraging increased recycling.	\$1.0 - \$6.8	Short- to Medium-Term
2	Increase parking revenue through meter increases, new meters, and longer hours for paid parking as well as implementation of collection automation and other technology.	\$0.5 - \$1.0	Short-Term
3	Increase building permit fees and continue enhanced enforcement and auditing to ensure construction costs are accurately reported.	\$0.35 - \$0.5	Short- to Medium-Term
4	Increase user fees to cover more fully the costs of recreational, community educational, and cultural programs with appropriate abatements for low income residents including, but not limited to, Gath Pool and Crystal Lake, summer camps, and playing fields. Consolidate these programs in one department to decrease costs, improve effectiveness and increase revenues.	\$0.1 - \$0.5	Short- to Medium-Term
5	Increase cell tower rental income by leasing municipal properties.	\$0.1-0.175	Short- to Medium-Term
6	Increase individual, corporate, and foundation giving to the Newton Public Schools and to the City of Newton by working more closely with these constituencies and increase grants to the City by retaining a grant writer.	\$0.1 - 0.5	Short- to Medium-Term
7	Sell or lease underutilized municipal properties, especially when redevelopment of such properties can enhance the vitality of the City’s villages.	To Be Determined	Longer-Term
8	Negotiate aggressively PILOTs (payments in lieu of taxes) or SILOTs (services in lieu of taxes) with local institutions like colleges and hospitals.	Indeterminate	Longer -Term
9	Streamline zoning approval processes to encourage appropriate development that could enlarge the City’s commercial and residential tax base.	To Be Determined	Longer-Term
<b>TOTAL</b>		\$2 - \$10 million 1% to 4% of General Fund	

## IV. Recommendations

There are no magic bullets and no free lunches to increase Newton's revenues. Each identified revenue enhancement will be incremental and virtually all will require some group to pay more - either compulsorily, through increased fees, or voluntarily, through greater generosity. These choices will force Newton's citizens to re-examine what municipal services they pay for, what they are willing to pay, and what they can afford. In general, the Citizen Advisory Group believes that fee levels should be transparent and should reflect the full cost of services unless the community as whole benefits from the service or, if appropriate, reflect private market pricing. Subsidies should be readily available for low-income residents. Such transparency will help Newton's citizen make better decisions about what they expect and can afford from local government.

**Recommendation #1: Implement a “Pay As You Throw” (PAYT) trash collection regime requiring residents to pay only for trash services they use and encouraging increased recycling.**

*Municipal revenue enhancement and cost savings -- \$1.0 to \$6.8 million annually*

The Citizens Advisory Group urges the Mayor and Board of Aldermen to adopt a complete Pay As You Throw (“PAYT”) program to make the Garden City truly become a green city. With appropriate protections for low-income residents, Pay As You Throw promises an equitable and efficacious way to increase municipal revenues by 2% while attaining valuable environmental goals. While this is the largest potential revenue strategy identified by the Citizen Advisory Group, no proposal is likely to be more controversial. Nevertheless, Pay As You Throw is potentially able to simultaneously increase municipal revenues while meeting the socially desirable goals of reducing solid waste and increasing recycling.

Currently, Newton spends \$6.8 million annually (about \$250 per household) to collect and dispose of residential trash although there is no legal obligation for Commonwealth municipalities to either collect or dispose of municipal waste. In fact, local policies vary widely though **59% of Massachusetts’s Massachusetts municipalities have implemented Pay As You Throw programs.** For example, locally, Wellesley has no trash collection, requiring residents to contract for collection privately or bring their own trash to Wellesley’s “dump.” Needham has no public trash collection and charges residents \$1.50 for each 30 gallon bag they bring to Needham’s Recycling and Transfer Station. In addition, Natick, one of the Citizen Advisory Group’s Core Benchmarking Communities, has had PAYT in place since 2003.

According to the Massachusetts Department of Environmental Protection (MA DEP), Pay As You Throw (PAYT), also known as unit-based or variable-rate pricing, is a system in which residents pay for each *unit of waste discarded* rather than paying a fixed tax per residential household.<sup>4</sup> Recycling is encouraged and is entirely free.

It is equivalent to putting a price tag on each container of trash that is placed at the curb for disposal. As residents pay directly for waste disposal services, they have a financial incentive to reduce their waste through recycling, composting, and source reduction. As with other utilities such as water and sewer, oil and gas, or electricity, residents can reduce their bills and not subsidize their neighbors. In addition, residents can clearly see the cost savings associated with innovations like automated trash collection which should foster greater support.<sup>5</sup>

MA DEP points out that Pay As You Throw not only provides residents an opportunity to save money on their trash bills but also promotes:

- **Fairness.** Residents pay only for the amount of trash they generate. Households generating less trash pay less than households that generate more.
- **Increased Recycling, Composting and Waste Reduction.** As residents come to understand that trash disposal costs more than recycling, they may be more likely to

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<sup>4</sup> See Appendix III for a discussion of User Fee vs. Taxes.

<sup>5</sup> Newton’s Department of Public Works has recommended fully automated trash collection as it would produce cost savings of \$1 million annually or a 15% reduction in cost. Automated trash collection is widely used with established methods and technologies. Nevertheless, the Board of Aldermen, reflecting concerns of constituents, only permitted DPW to begin a limited six-month trial involving just one-sixth of the City in November 2008.

recycle and compost more and throw away less. Implementation of a Pay As You Throw program, in conjunction with Newton's existing curbside recycling program, can *increase* a community's recycling rate between 20 and 27 percent. (Recycling provides revenue to Newton.) In addition, Pay As You Throw has been shown to *decrease* a community's residential trash generation rate.

- **Improved Environmental Quality.** By diverting waste from disposal, Pay As You Throw programs extend the life of landfills, decrease air pollution from trash incinerators, and reduce the need for new disposal facilities. As communities turn to reuse, recycling, and composting, natural resources, such as land, air, and water, are protected and preserved.

As of 2006, 59% of Commonwealth cities and towns (139 in total) have already implemented Pay As You Throw. In these municipalities, as residents' awareness of their trash has been raised, Pay As You Throw has dramatically:

- (1) Increased the recycling rate (by 20% to 27%);
- (2) Reduced the amount of trash thrown away (by 10% to 30%);
- (3) Reduced the overall cost (municipal and residents') of trash disposal.

Newton currently spends \$6.8 million annually to dispose of not only household trash, but virtually anything placed on the curb, including bulky and expensive to dispose of "white goods" (refrigerators, stoves, washers/dryers, etc.) at no charge. Newton's recycling rate is slightly below the Commonwealth average but only 87<sup>th</sup> out of 259 municipalities. Given Newton's "Garden City" moniker and stated citizen interest in environmental issues, there seems to be a gap between residents' words and actions.

The City can implement a range of options for Pay As You Throw and realize substantial revenue enhancement and cost savings. Three options ranging from greatest resident burden to least are as follows:

- *Complete Pay As You Throw Program:* Newton would no longer provide any trash services for free. Residents would pay for disposal and all administrative costs incurred by Newton. Newton would raise a projected **\$6.8 million annually** and would insulate the City's budget from major cost changes at the renewal of each trash contract cycle. Under this scenario, residents would pay a flat fee of \$70 per year and buy trash bags at City Hall or local merchants that reflect Newton's full per bag cost of collection and disposal – about \$2 per large bag or about \$1 per small bag. All recycling would be free. Subsidy programs for low-income residents would be available. A household that discards 2 bags a week would pay no more than they currently do – about \$250 per year. (The cost would come in the form of a fee rather than through the property tax (which is tax deductible).) Households that increase recycling and decrease trash would pay less.
- *One-Barrel (35-Gallon) Free Pay As You Throw Program:* Under this program, all residents would be allowed one 35-gallon container of trash for free, as well as unlimited recycling. Anything beyond 35 gallons would incur a fee that could be managed in a variety of methods already proven in other communities. All white goods would also be subject to a fee. City revenues would increase by an estimated **\$1.5 to \$2 million annually**.

- *Two-Barrel (64-Gallon) Free Pay As You Throw Program:* Under this program, all residents would be allowed one 64-gallon container of trash for free, as well as unlimited recycling. Similar in structure to the previous option, anything beyond 64-gallons would incur a fee that could be managed in a variety of methods already proven in other communities. All white goods would also be subject to a fee. City revenues would increase by an estimated **\$1.0 million annually**. This program is being piloted currently by Newton’s DPW in five neighborhoods.

Critics of Pay As You Throw raise the issues of the non-tax deductibility of user fees and possibility of illegal dumping. Neither concern seems insurmountable. Given the small amount of the Pay As You Throw fee, the lost tax deduction would amount to just \$25 to \$75 per household. Likewise, MA DEP reports little evidence of increased dumping with adoption of Pay As You Throw but recommends increased enforcement and education during the adoption period.<sup>6</sup>

Pay As You Throw is strongly endorsed and encouraged by both the MA DEP and the Federal Environmental Protection Agency. Many cities and towns in the Commonwealth have chosen to implement a Pay As You Throw program when faced with difficult financial decisions and have seen reduced costs, reduced waste and increased recycling rates. To encourage adoption, the MA DEP provides financial support to municipalities for training, which could bring in \$200,000 to \$400,000 in grants.

The Citizen Advisory Group urges full adoption of Pay As You Throw resulting in increased revenues of \$6.8 million while increasing recycling and reducing solid waste.

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<sup>6</sup> According to PAY AS YOU THROW (PAYT) IN THE US: 2006 UPDATE AND ANALYSES FINAL REPORT, EPA Office of Solid Waste and Skumatz Economic Research Associates, Inc. (pp.16-17), the two most frequent concerns about PAYT are (1) illegal dumping and (2) impacts on large families and the poor:

Illegal dumping: Research shows illegal dumping is a bigger fear than reality, and is a problem in about 20% of communities – a problem that lasts about 3 months or less. Further, analysis of the composition of illegally dumped material finds only about 15% is household in origin and that the largest household component is bulky items or appliances (or “white goods”). Enforcement of illegal dumping ordinances usually keeps the problem at bay. PAYT programs should make sure to introduce methods for getting rid of occasional bulky materials through stickers, payments, appointments, or other methods.

Concerns about large families or the poor: Large families pay more for groceries, water, and other services they use more than other households, and PAYT basically extends this to trash service. Note that large families have opportunities to reduce trash through recycling – opportunities that are not as readily provided in the use of food! Consider the converse of the argument – is it fair for small families on fixed incomes (retirees) to subsidize large disposers (whether or not they are large families)? On the low income issue, in some cases, communities provide “lifeline” discount rates for essential services like energy and telephone, etc., and these types of discounts can be extended to garbage fees through discounts or allocations of some free bags / tags. Special arrangements for poor or infirm are made in less than 10% of the communities with PAYT, but are included in communities with policies for other services.

**Recommendation #2: Increase parking revenue through meter increases, new meters, and longer hours for paid parking as well as collection automation and other technology, or privatization as well as revisited enforcement policies**

*Municipal revenue enhancement -- \$500,000 to \$1,000,000 annually*

About \$1.2 million is earned annually from parking meters. Under Massachusetts law, this money is used for street maintenance and lighting. In addition, about \$1.4 million is paid in parking violation fines. The City Traffic Engineer has identified potential revenue enhancements from parking changes of \$500,000 to \$1,000,000 annually. These proposals should be embraced by the Mayor and Board of Aldermen and implemented immediately. In addition, enforcement policies should be reviewed to make sure adequate resources are being dedicated to this effort.

Parking meter revenue could be augmented by \$500,000 to \$1,000,000 per year by:

- (1) Increasing meter rates by \$0.25 per hour (a \$.25 per hour increase to \$.50 per hour two years ago generated an extra \$250,000),
- (2) Increasing the number of meters (300 to 400 potential new locations exist) — a 17% to 23% increase,
- (3) Lengthening the hours of operation (from 8 am to 6 am currently to 8 am to 8 pm) and
- (4) Adjusting employee and commuter parking policies.

In addition, so-called “pay on foot” automation could further increase revenues and reduce costs associated with meter collection, maintenance, enforcement, and counting.

It appears that rate increases would be justified. When benchmarked with other communities like Boston, Cambridge (\$1 per hour) and Brookline (\$0.75 per hour), Newton’s parking rates are low. The Mayor and Board of Aldermen have not pursued raising rates or increasing the number of meters very often, apparently for fear of angering residents. Increased parking meter rates might also be accompanied by free parking for hybrid or alternative fuel vehicles, which is the norm in most California cities, to encourage conservation.

Parking automation should become a high priority as it will likely decrease costs. A “pay on foot” automation pilot program was approved for Newton Centre’s 59-space Cypress Street lot but has not been implemented yet. At a cost of about \$20,000 per lot, all eleven off-street lots could be automated for less than \$250,000. This automation is widely used and a well-established private sector norm. Revenue increases come from increased turnover, reduced labor and maintenance costs and better collection, enforcement and control. In addition, parking rates can be changed quickly and remotely to match demand and modify behavior to accommodate more parkers and maximize income. Meters can be programmed to reset when parkers leave to increase revenue. Assuming a 20% increase in revenue and only modest labor and maintenance savings, a one to two year payback can be expected on the cost of new automation.

The City’s Traffic Engineer has identified 300 to 400 new meter locations (a 17% to 23% increase to 1764 existing meters), including 80 in Waban. These additional meter locations have been opposed by some members of the public, especially by Waban residents. Given that additional meters can be installed at a cost of \$400 per meter and meters average \$600 in annual revenue, the payback is less than one year. Four hundred new meters might add \$250,000 in annual meter revenue plus \$150,000 to \$200,000 in enforcement revenue. Fairness suggests that Waban parkers should be treated no differently than other village parkers and meters should be installed. Likewise, meter policies and hours of operation should be uniform throughout the

City, which would mean eliminating free Saturdays in the Austin Street (Newtonville) and Melrose Avenue (Auburndale) lots.

Currently, enforcement is the responsibility of ten parking control officers who issued about 70,000 tickets in 2007. Generally, parking control officers write tickets that generate two to three times their salaries. Newton charges the state imposed maximum of \$25 for parking tickets as well as late fines. Increasing fees above state imposed maximums would require home-rule legislation (as Brookline did). The Citizen Advisory Group recommends that Newton pursue home-rule legislation to increase the fees.

In addition, Newton police officers wrote about 9000 \$5 tickets in 2007 for overnight parking during the winter months (November 15 to April 15) when it is prohibited. Municipal officials believe that the cost of enforcement (ticketing, processing, and collection) actually exceeds the cost of the \$5 ticket. The overnight parking ban exists to facilitate snow plowing. However, in older neighborhoods with multi-family homes, inadequate off street parking forces residents to park on the street. Newton can either cease enforcement or raise the cost of overnight parking tickets to cover the actual costs. Alternatively, the ban could be amended to be in effect only when snow is present and penalties increased to insure compliance. We recommend increasing overnight parking fines to \$25 to increase revenue and fully recover costs, facilitate snowplowing, and discourage parking scofflaws as adequate off-street parking is required under Newton's zoning code.

Parking revenue increases are possible but become political and philosophical when they force decision makers to confront tradeoffs when making policy. Who should pay for parking? Where? How much? Equitable parking rate policies can and should discriminate between different users: shoppers, for which pricing should encourage rapid turnover to help Newton retail merchants; employees, for whom employers need affordable long-term parking; commuters, for whom environmental and energy policy may want to encourage the use of public transportation; and, finally, residents who it seems should be favored (with lower prices or restrictions) over non-residents when parking is scarce (e.g., at commuter locations). Accommodating these varied users while maximizing revenue is the art of municipal parking revenue management.



**Recommendation #3: Raise building permit fees and continue enhanced enforcement and auditing to ensure construction costs are accurately reported**

*Municipal revenue enhancement -- \$350,000-\$500,000 annually*

The Citizen Advisory Group urges the Mayor and Board of Alderman to increase building permit fees to \$20 per \$1000 from the current \$18.60 per \$1000 rate. This 7.5% increase will raise \$350,000 to \$400,000 annually and is in line with neighboring Brookline fees. In addition, consistent with the CAG's general philosophy on fees and recommendations contained in Newton's Comprehensive Plan, building permit fees should be waived or reduced on appropriate affordable housing projects.

In addition, estimated construction costs on building permit applications should continue to be scrutinized carefully to ensure accurate collection of building permit fees. Some suggest that contractors are tempted to under-report the full cost of construction so as to save money on building permit fees. Inspectional Services should develop appropriate guidelines and be given appropriate resources and personnel to ensure strict compliance with all applicable laws on building permit fees, including obtaining contract documents and affidavits to verify costs as well as auditing large projects.

If building costs are hypothetically underestimated or under-reported by just 10% annually, the City is losing \$500,000 annually in building permit fees.

**Recommendation #4:** Increase user fees to cover more fully the costs of recreational, community educational, and cultural programs with appropriate abatements for low income residents including, but not limited to, Gath Pool and Crystal Lake, summer camps, and playing fields. Consolidate these programs in one department to decrease costs, improve effectiveness and increase revenues.

*Municipal revenue enhancement -- \$100,000 - \$500,000 annually*

Newton should more thoughtfully determine how much of the full cost of recreation, community education, and cultural programs should be covered by user fees and also increase the amount of funds available for scholarships to ensure access for low income residents.

Newton has a decentralized approach to providing community educational, recreational and cultural programs with the support of City funds. Many different departments create and promote programs with no central vision for Newton's overarching goals. Nor is there consistency in the amount of financial support for these programs from Newton versus degree of costs covered by user fees. There is no central clearinghouse where residents can find programs of interest. The lack of centralization results in the duplication of programs. While there are advantages to the current system (e.g., an entrepreneurial spirit results in a wide variety of programs), it also results in:

- Inconsistent policies towards user fees vs. tax supported programs within and across departments
- Administrative inefficiencies
- Program inefficiencies
- Marketing inefficiencies
- Insufficient funding for scholarships
- Insufficient use of private-public partnerships and support from individuals, corporations and foundations
- Unhealthy competition for teachers and space

The Citizen Advisory Group recommends Newton:

1. Develop a thoughtful policy about degree of tax subsidization vs. user fees for each of the community educational, recreational and cultural programs.
2. Consider creating a Culture, Recreation and Community Education Department unifying Recreation from the Parks and Recreation Department, Community Education from the Schools Department, the Newton History Museum and other cultural, recreational and community education programs from other departments to decrease costs, improve effectiveness and increase revenues.
3. Significantly increase scholarships for low-income residents to maintain universal access.

*Appendix I discusses Newton's recreational, community educational, and cultural programs in more depth.*

**Recommendation #5: Augment cell tower rental income by leasing municipal properties.**

*Municipal revenue enhancement -- \$100,000 to \$175,000 annually*

Currently, Newton earns about \$170,000 annually by renting space atop City Hall to cell phone providers for antennas but could add about \$100,000 to \$175,000 annually by leasing two or three other City-owned sites.

One new site -- an existing water tank on Ober Road on the south side of the City -- has been identified and should get DPW and Aldermanic approval. There is strong demand from carriers as cell reception is poor in that area and four or five carriers could be expected to respond to a City RFP to lease space atop the tower with annual rents of \$25,000 to \$30,000 per carrier plus 2% to 3% annual escalations. Although in a residential neighborhood, according to the Planning Department, the antennas can be mounted atop the existing water tank and screened so they will not be obviously visible. This would require Aldermanic approval.

Similarly, other City-owned properties could be leased for cell phone antennas. The City should maximize the use of its properties for commercial telecommunications uses as advances in cell antenna design allow them to be integrated architecturally and fairly unobtrusively and provide better phone service for residents and needed additional revenue for the City.

Recommendation #6: Enhance individual, corporate, and foundation giving to the Newton Public Schools and to the City of Newton by working more closely with these constituencies and increase grants to the City by retaining a grant writer.

*School revenue enhancement -- \$100,000 - \$500,000;*

*Municipal revenue enhancement \$50,000 - \$500,000 or more*

Support to the City from Individuals and Businesses via Foundations and Nonprofits: In addition to revenue from taxes, fees, and inter-governmental transfers, the Citizen Advisory Group considered the potential of additional revenues to the City from foundation, nonprofit and public-private partnership organizations for “public” or “community” purposes. Currently, Newton has a number of quasi-public institutions that are defined as nonprofits with the mission of raising funds for purposes of this type. One example is the Newton Pride Committee, a nonprofit volunteer organization created in 1988 that which provides support for Newton cultural and arts programs and organizes family-oriented activities (including the Fourth of July festivities and the Halloween Window Painting Contest). The Newton Pride Committee works with individual and business donors to augment programs in the Mayor's Office of Cultural Affairs, the Newton Cultural Council and the Newton Parks and Recreation Department. Examples of other important nonprofits include the Newton Community Service Center (which works with the City to enhance and deliver a variety of social services to residents), the Newton Historical Society, and the Friends of Newton Free Library. These nonprofits, and numerous others, generate revenues for various public and quasi-public purposes and programs.

The Citizen Advisory group has come to two conclusions concerning revenues from these types of quasi-public nonprofits. First, little effort has been made to take a full inventory of the number, role, and impact of these nonprofit organizations. Second, there has been little effort to assess whether existing nonprofits have heretofore untapped potential, whether there are significant areas or functions where additional potential might exist, or whether there might be value in developing a higher level of fundraising coordination among these organizations to, for example, ensure that existing organizations are not competing, rather than cooperating, with each other in their fundraising activities. Third, there has been little effort to encourage new nonprofits that could help the City. Superficially, at least, it would appear that Newton's nonprofit sector is somewhat under-developed, especially with respect to partnering with the private and commercial sectors in the city, to achieving a high level of coordination, and for raising significant donations for public purposes.

There have been discussions from time to time about the potential for the development of a broad-based Newton Community Foundation. Such a foundation might serve as a central, community-wide, multi-purpose, mediating institution to raise funds, operate programs, support nonprofits and distribute small grants. (This might be similar to the Brookline Community Foundation. With a six person staff, the Brookline Community Foundation strengthens and sustains local nonprofits, organizations, and initiatives through grant-making and administrative and organizational support.) When considered in the past, the difficulties of creating and maintaining such a foundation were thought to be prohibitive, and they may still be. Yet, Newton would seem to have an abundance of residents and friends who have both the capacity and desire to make voluntary contributions to the community. The central question is whether Newton's nonprofit sector currently provides sufficient opportunities to potential individual and business contributors. The Citizen Advisory Group recommends that a significant effort be made to assess

the potential for an expanded nonprofit sector to generate revenues and support programs in a way or at a level not possible .currently. This effort should be sensitive to the accomplishments of existing nonprofit organizations and strive to strengthen them. If promising, City leaders should help incubate a Newton Community Foundation.

Support to the City from Federal and State Governments via Grants: The municipal side of the City of Newton may not be taking full advantage of federal and state grants. While Newton does receive a variety of grants from governmental entities, currently, other than in the School Department, the city does not employ or retain a dedicated grant writer. (Some departments do grant writing. For example, both Parks and Recreation and the Newton Police Department have a couple of people with a lot of experience writing grants and have this as one of their responsibilities.) At one time, the Planning Department did have such a dedicated grant writer. After a few years, it became clear that new grant writing opportunities for cities like Newton were limited. Most grant programs provide funding for specific, targeted programs in which the grant funding is designated as supplemental (i.e., for a new program, not an existing, ongoing effort). (For example, Newton received significant grant funds for the new laptop initiative for police officers.) But, Newton primarily needs funds for ongoing, core services, infrequently pursues new initiatives, and rarely has matching funds available. For example, members of the Citizen Advisory Group heard of an instance where the City could receive perhaps as much as \$500,000 in new state grant revenue, but would have to match that revenue with \$500,000 of its own new spending. Lacking the matching funds, Newton decided not to pursue the grant. Opportunities in the conservation and recreation areas were attractive but required matching funds that Newton could not allocate. Following a staff departure, the grant writer position in the Planning Department was left unfilled and then eliminated.

The City of Newton has continued to apply for grants when opportunities presented themselves and City administrators believe that a competitive application could be filed. In particular, grants in the public safety and energy arenas continue to be pursued by people within the relevant departments with grant writing experience. Nevertheless, the potential for increasing grant revenue exists, especially for those programs where Newton has ongoing activity that would require little or no new local expenditures by the grant. The City should consider placing a professional grant writer on retainer (perhaps with a commission based on successful grants) who can help identify grant opportunities and assist in writing grants when those opportunities do make sense.

Support to the Newton Public Schools from the Federal and State Governments via Grants: Grants, primarily from the Federal and State governments, to Newton Public Schools have grown dramatically from \$6.5 million in FY2002 to \$10.6 million in FY2009. (Individual, corporate and foundation grants account for the smallest amount of the total grant revenue (approximately 4%) or \$385,000 in FY2009.) The Citizen Advisory Group has concluded that the current level of staffing is “maxed out” writing and administering the current Federal and State grants. If Newton Public Schools determines that there are additional federal or state grants that would help the quality of Newton’s schools, the City will likely need to invest in more staff dedicated to grant writing, administration, and compliance.

Support to the Newton Public Schools from Individuals, Corporations and Nonprofits via Grants and Foundations: A relatively small amount of support for Newton Public Schools comes from individuals, foundations or corporations. Since schools are not classified as nonprofit

organizations, contributions directly to the schools from individuals may not be tax deductible. Rather, individuals give to another entity (even the City), which in turn supports the Newton Public Schools. For example, the Newton Schools Foundation (NSF) is an independent, nonprofit 501c3 organization that provides approximately \$190,000 in grants, scholarships and training to Newton teachers. While it operates in close cooperation with the Superintendent, the Newton Schools Foundation proudly maintains its independence. In addition to donations to the Newton Schools Foundation, parents and others donate approximately \$900,000 annually to the schools through Parent Teacher Organizations (PTOs).

Citizen Advisory Group discussions with those involved with the Newton Schools Foundation suggest that the Foundation is going through a period of transition, reviewing its mission and working through some financial issues. For the near term, it does not seem likely that the Newton Schools Foundation will be in the position to raise significantly more revenue for the schools than it has in the past. It is certainly possible that the School Committee and/or the School Department would like to see a nonprofit emerge that has greater capacity to raise funds for the schools, and perhaps a mission of being more responsive to the expressed needs of the School Department or School Committee. One possible model to examine is Brookline 21<sup>st</sup> Century Fund. If either a re-missioned Newton Schools Foundation or an additional nonprofit emerged, the Newton School Department may wish to hire a professional development (fundraising) officer to expedite individual giving.

*Appendix II discusses individual, corporate and foundation giving, private-public partnerships, and grants in more depth.*

**Recommendation #7: Sell or lease underutilized municipal properties, especially when redevelopment of such properties can enhance the vitality of the City's villages.**

*Municipal revenue enhancement: one-time \$6,000,000 to \$25,000,000 payment or equivalent lease streams*

Well-located but non-essential or underdeveloped city-owned properties should be sold or (preferably) leased through competitive RFP (Request For Proposal) processes when such sites can raise revenue or long-term lease income, increase property taxes, and support desirable planning goals like enhancing the vitality of the City's villages while increasing so-called "smart" growth near transit as well as broadening affordable and senior housing choices. Unfortunately, in the short-term, given the current global financial crisis, sales of underutilized municipal properties may be infeasible as development is difficult to finance.

Two examples that have been recently proposed include having developers bid to:

- 1) Replace Newtonville's unsightly Austin Street parking lot with new underground parking, attractive shops, and housing in scale with surrounding commercial and residential buildings, and;
- 2) Build a new fire station and fire department headquarters in Newton Center at Centre and Willow Streets in exchange for rezoning the site to allow for a mixed-use retail and housing development with additional public parking.

Both of these are promising developments that would improve their surrounding neighborhoods and further the City's planning objectives while providing immediate payments or (preferably) long-term lease revenues.

The City's Planning Department should identify a list of possible development sites and work with the Mayor and Board of Alderman to prioritize their redevelopment.

**Recommendation #8:** Negotiate aggressively PILOTs (payments in lieu of taxes) or SILOTs (services in lieu of taxes) with local institutions like colleges and hospitals.  
*Municipal revenue enhancement -- indeterminate but chief benefit is closer relationship and potential partnership with local institutions*

Prominent local non-profit institutions like Boston College and Newton-Wellesley Hospital have long been coveted targets for payments in lieu of taxes. While their non-profit status exempts them from paying real estate taxes, proponents of PILOTs suggest that they should voluntarily contribute to their host community proportionate with their visibility, perceived economic stature, and use of municipal services. To date, however, only Boston College has agreed to a PILOT arrangement, voluntarily donating \$100,000 annually since the mid 1980s as well as allowing municipal employees to take classes free of charge.

Elected officials and city staff need to make a better case for prominent non-profits to pay for municipal services received in order to have a more meaningful discussion with their non-profit counterparts. Police services, fire protection, and street maintenance, among other municipal services, are utilized by non-profits. A dialogue about the cost of these services and contributing toward their provision could be mutually beneficial to Newton and non-profit institutions. A reasoned and studied quantitative approach could produce a positive outcome with the City recognizing non-profits' unique value to the community and the non-profits acknowledging the cost of municipal services. Any agreement would necessarily recognize that the fiscal health of the city and its prominent non-profit institutions are inexorably linked.

In addition, requests for payments for specific services provided may be most productive. For example, almost \$400,000 is spent annually to bus 143 K-6 students who attend seven private schools within Newton. These private schools, which directly benefit from the bus transportation provided to Newton students, could be asked to contribute to the cost of bus services.

### Background

Payments in Lieu of Taxes are generally voluntary or negotiated payments made by tax-exempt organizations to local governments. Pursuant to Massachusetts law, tax-exempt organizations do not pay local taxes on the property they own.

Newton's tax-exempt entities own properties with an assessed value exceeding \$1 billion. After excluding properties owned by governmental entities (city, state, federal), religious institutions, and the Newton Housing Authority, the assessed value of the remaining properties exceeds \$700 million. The Blue Ribbon Commission estimated that if these properties were taxed at the appropriate residential or commercial rate, these schools and charitable entities would pay over \$9 million in taxes.

Data gathered on payments in lieu of taxes 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 question of whether it is reasonable to expect increased revenues from PILOTs.

#### Developing a PILOT Program

The Dover Amendment (Massachusetts General Law Chapter 40A, Section 3, 2nd paragraph) exempts religious and educational organizations from local zoning laws. However, Boston and Cambridge are exempt from the Dover Amendment and, therefore, have more leverage than Newton and other municipalities in negotiating PILOTs with non-profits. Nevertheless, many communities outside of Boston and Cambridge have successfully negotiated PILOTs with their non-profits and the Citizen Advisory Group recommends that Newton develop a plan for a more robust PILOT program.

PILOT proponents argue that it is not fair for residents to pay higher property taxes while relatively wealthy organizations pay no taxes whatsoever, especially when those organizations receive costly services. Tax-exempt entities generally resist calls to begin or increase their PILOTs. They often respond by pointing to the benefits they bring to the local community – jobs, people who frequent local businesses, miscellaneous taxes and fees they pay, and other community services they provide. It is important to note that as non-profits purchase additional property that then becomes tax-exempt, an erosion of the City’s tax base occurs.

In developing a PILOT program, the City should consider which entities it wishes to target. Generally, PILOT programs focus exclusively on the large, private tax-exempt organizations such as hospitals and universities. Churches, social service agencies, social clubs, etc. are often excluded from PILOT programs.

In developing their PILOTs, some communities have estimated the portion of their budgets that is expended on public services – fire, police, and public works – and apply that percentage to the assessed value of the tax-exempt property. This approach attempts to capture and charge the tax-exempts for the value of the services the City provides from which they benefit.

In addition to a revenue based PILOT program, the City may consider educational and economic development partnerships with its tax-exempt organizations. These are also known as services in lieu of taxes or SILOTs. It may be possible to partner, for example, with Boston College’s School of Education to provide additional assistance to Newton Public Schools (perhaps in the form of additional student teachers or curriculum support), or with Newton-Wellesley Hospital to provide some health benefits to municipal workers. (Newton-Wellesley Hospital and Boston College already provide some SILOTs.)

Clearly, negotiating a significant PILOT program will be challenging. Yet, the current fiscal condition of Newton and the on-going constraints of Proposition 2 ½ warrant that these institutions make a significantly greater financial contribution to Newton. These institutions directly benefit from the quality of service provided by Newton’s police, fire and public works departments and indirectly benefit through all the services that contribute to the quality of life in the City.

**Recommendation #9:** Streamline zoning approval processes to encourage appropriate development that could enlarge the City's commercial and residential tax base.

New development is not the magic bullet that some proponents assert; it will not allow the City to grow itself out of its budget issues. Nor, given the global financial crisis, is it likely to occur in the short-term. It can, however, have a positive revenue effect while chiefly and importantly ensuring the economic vitality, diversity, attractiveness, and value of Newton's ailing villages and re-developing underutilized properties and locations.

The city's permitting function is badly broken. Streamlined permitting processes to encourage transit-oriented growth to ensure the viability of the City's village centers and redevelop selected low-density nodes near or on transit (like Route 9's Chestnut Hill Square, Needham Street, and Riverside) are critically important to maintain the City's vitality, attractiveness, and diversity while at the same time slowly growing the City's commercial and residential tax base. Municipal leadership is needed to encourage and manage responsible new growth in this predominantly residential community as well as to keep and make Newton the city its residents say they want it to be.

Currently, new growth in property taxes -- from renovation or new development -- equals about 1% of the total property tax or \$2,000,000 a year. Even if a consensus emerged to encourage new growth, given the City's mature suburban nature, only limited development -- even if promoted --- is physically possible. To generate \$1,000,000 in new annual commercial property tax revenue, about 125,000 square feet of new development must be built each year -- a typical five- or six-story suburban office building or neighborhood shopping center with a grocery store. Similarly, to generate \$1,000,000 in new annual residential property, some combination of 250 apartments or condominiums or 75 average-sized single-family homes must be built each year (residential uses are taxed at half the commercial rate). **Hence, to achieve additional 1% annual growth in property taxes, one new office building and one new apartment complex must be added each year in Newton.** Most would agree, with Newton's few undeveloped locations, this growth is probably unsustainable.

Still, Newton's current system of zoning approvals is universally seen as a major impediment to new growth. A Special Permit issued by the Board of Aldermen is required for virtually any structure larger than a single- or two-family dwelling. This significantly slows development and casts Newton as anti-growth in the commercial development community who has mostly bypassed Newton and looked for opportunities elsewhere. Whether this anti-growth bias is desirable or accurately reflects the consensus sentiment of the community is widely debated. However, all agree the current process is cumbersome and time consuming.

If there is agreement that selected new growth is appropriate in the City's villages to encourage so-called "smart" development or in redeveloping locations like Route 9, Needham Street, Wells Avenue or the areas adjacent to MBTA stations, then pro-actively creating ordinances and processes to get the kind of development the City wants and putting them in place will encourage such development. The Mayor and the Board of Aldermen need to work together to change and streamline Newton's zoning process and regulations to encourage appropriate mixed, residential and commercial uses.

Indeed, the Newton Comprehensive Plan in November 2007 noted, "Ultimately, potential development opportunities along the commercial corridors, if well-conceived and shaped, can increase the tax base and provide job and housing opportunities without detracting from the residential communities which they surround." (p. 6-4)

The chart below suggests that development (perhaps possible over the next 7 to 10 years, but not sooner) of three widely discussed development sites – New England Development’s Chestnut Hill Square, Northland’s Needham Street site and Normandy’s Riverside Station – might eventually add \$9.65 million in annual property tax revenue. However, given the global financial crisis, the feasibility and timing of these projects remain uncertain. Moreover, their collective impact is modest – about 3% of Newton’s annual budget—or enough to fill the expected gap between revenue and expense growth in just one year. An equal amount of new growth each year would be necessary to continue to fill the revenue / expense gap. So while these developments might be compelling and even attractive to many Newton residents, their property tax impact alone is surely not great enough to be the sole criterion for their support.

In conclusion, while a more streamlined zoning and permitting process would make Newton a fairer and more transparent place for developers and investors, and could help achieve compact growth near transit and revitalize or augment Newton’s villages with new retail, offices, and diverse housing for seniors and lower-income residents, it will not allow Newton to outgrow its budget issues but only possibly partially plug the gap.

## Property Tax from Three Potential New Developments

<b>Project</b>	<b>Program</b>	<b>Value / SF</b>	<b>Est. Value</b>	<b>Est. Property Tax</b>
<i>Chestnut Hill Square (2009 proposal)</i>				
	225,000 sf retail	400	90,000,000	1,800,000
	90,000 sf medical office	450	40,500,000	810,000
	75 housing units	400	30,000,000	600,000
			<i>160,500,000</i>	<i>3,210,000</i>
<i>Northland Needham Street (preliminary not proposed)</i>				
	150,000 sf retail	350	52,500,000	1,050,000
	100 housing units	350	35,000,000	700,000
			<i>87,500,000</i>	<i>1,750,000</i>
<i>Riverside Station (2009 proposal)</i>				
	420,000 sf office	350	147,000,000	2,940,000
	190 housing units	350	66,500,000	1,330,000
	60,000 sf retail	350	21,000,000	420,000
			<i>234,500,000</i>	<i>4,690,000</i>
<b>Total Potential Property Tax from Three New Developments At Completion</b>				<b>9,650,000</b>

*Note:* Assumes commercial assessment rate of \$20 per \$1000

## V. Other Revenue Strategies

1. Mass Pike Air Rights Development. Some have suggested additional development over the Mass Pike right of way could allow for commercial and residential increases in the property tax base. While healing the scar created by the 1960s construction of the Mass Pike through Newton might be an admirable planning goal, it appears economically infeasible in the short-term and politically challenged in the longer-term. Recent failures to construct high rise structures over the Mass Pike in Boston (e.g., Wynn's aborted Columbus Center, Millennium's abandoned Mass Ave proposal, Meredith Management's stalled Fenway proposal and Drew's reconsidered Waterside Place at the Core Block) suggests low- and mid-rise projects appropriate to Newton would have an even more difficult time amortizing the cost of an expensive deck over the Mass Pike across a smaller project. Indeed, even if economically feasible, large scale development would be likely challenged, slowed or stopped by concerned neighbors. In addition, the Mass Pike, not the City of Newton, would control the sale of development rights, giving Newton less control over the shape and scale of development. We judge this proposal infeasible currently.

2. Municipal Reselling of Electricity. Some have suggested that the City of Newton take advantage of a longstanding but ambiguous Massachusetts law that allows municipal reselling of electricity to save residents money and earn the profit currently flowing to NStar. Our review of the few operating municipal utilities did not reveal significant savings to consumers and given the unresolved legal standing we judge this proposal as currently infeasible. It should be reviewed in the future if the law is clarified and savings appear realizable and realistic.

3. Voluntary City Sales Tax. Some have suggested the city encourage Newton merchants to collect a voluntary 1% sales tax and remit it to the City to provide additional revenue. We admire the creativity of the suggestion but have doubts about implementation and participation.

# VI. Appendices

# Appendix I

## Recreation, Community Educational and Cultural Programs

### I. Executive Summary

**RECOMMENDATION:** Increase user fees to cover more fully the costs of recreational, community educational, and cultural programs with appropriate abatements for low income residents including, but not limited to, Gath Pool and Crystal Lake, summer camps, and playing fields. Consolidate these programs in one department to decrease costs, improve effectiveness and increase revenues.

*Municipal revenue enhancement -- \$100,000 - \$500,000 annually*

The City should more thoughtfully determine how much of the full cost of recreation, community education and cultural programs should be covered by user fees and also increase the amount of funds available for scholarships to ensure access for low income residents.

Newton has a decentralized approach to providing community educational, recreational and cultural programs with the support of City funds. Many different departments create and promote programs with no central vision for Newton's overarching goals. Nor is there consistency in the amount of financial support for these programs from Newton versus degree of costs covered by user fees. There is no central clearinghouse where residents can find programs of interest. The lack of centralization results in the duplication of programs. While there are advantages to the current system (e.g., an entrepreneurial spirit results in a wide variety of programs), it also results in:

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- Program inefficiencies
- Marketing inefficiencies
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- Insufficient use of private-public partnerships and support from individuals, corporations and foundations
- Unhealthy competition for teachers and space

The Citizen Advisory Group recommends Newton:

1. Develop a thoughtful policy about degree of tax subsidization vs. user fees for each of the community educational, recreational and cultural programs.
2. Consider creating a Culture, Recreation and Community Education Department unifying Recreation from the Parks and Recreation Department, Community Education from the Schools Department, the Newton History Museum and other cultural, recreational and community education programs from other departments to decrease costs, improve effectiveness and increase revenues.
3. Significantly increase scholarships for low-income residents to maintain universal access.

## II. Current Status

### A. Recreation

Newton's Parks and Recreation Department has four components: Administration, Recreational Programs, Maintenance and Forestry. This report focuses only on the Recreational Program component.

Using the statement in the *Recommended Budget FY 2009*, the Recreational Program "provides a number of opportunities for tots through seniors, from camps, sports clinics, after school programs, classes, swim facilities, programming at Newton South High School and Newton North High School, senior trips and activities and one of the largest special needs programs in the state."

Years ago, all recreational programs were funded by the City's general fund. With the passing of Proposition 2 ½ in the early 1980s and the subsequent fiscal pressures, Parks and Recreation realized that in order to expand recreational programs ("new and expanded programs") – as opposed to the "existing ones" – the new programs would have to be self-sustaining financially. As a result, there are two separate funding mechanisms for recreational programs.

Newton's General Fund, which comes from taxpayer dollars, funds the "existing programs." "Existing programs" include outdoor swimming (Gath Pool and Crystal Lake), indoor recreation (e.g., basketball, volleyball, floor hockey; weekend and after school programs), Special Needs and senior recreation, cultural arts administration (e.g., Director of Cultural Affairs) as well as leisure, educational and social activities at approximately seven community centers, two of which have their funding broken out separately (Lower Falls and Emerson). In addition, the general fund covers the cost of maintaining recreation buildings (including utilities), supplies and equipment, and lighting for playfields and courts. While fees are sometimes charged for these "existing" programs, they are not intended to cover the full costs. The Parks and Recreation Commissioner has noted that if all recreational programs were in revolving funds (i.e., self-sustaining rather than subsidized by tax dollars) and the full costs were to be covered then fees would have to be raised. One of the goals of the Recreation program has been to keep fees as low as possible to keep programs affordable and thus available for as many people as possible. The Parks and Recreation Department strongly believes that these programs are offered for the general good of the community and foster community spirit. The Department is committed to meeting the recreational needs of Newton's citizenry and believes it is appropriate to subsidize the programs with tax dollars. They believe raising fees would result in decreased participation.

To look more in-depth at one recreational area, outdoor swimming, Gath Pool and Crystal Lake are accessible to Newton residents by modest fees. These fees are set by the citizen-run Parks and Recreation Commission with an eye toward affordability rather than toward cost recovery. (Non-residents are charged a higher fee.) While fee comparisons have been done with other communities, the philosophy has prevailed that these are public facilities that should be available to taxpayers/residents at affordable rates and thus with little extra charge. It appears that membership fees (currently 3500 members who pay \$45 per adult per season or \$20 per child per season) cover about 65% of the \$205,000 seasonal salaries of direct personnel (e.g., lifeguards) in FY2008.

There are important private-public partnerships to help maintain playing fields. Little leagues and softball leagues help maintain baseball fields by adopting a field and helping maintain it. This saves the Parks and Recreation Department approximately \$50,000 a year in field maintenance costs. Girls soccer and youth soccer also provide Parks and Recreation with approximately \$50,000 of either direct or indirect funding to help maintain the soccer fields. These private-public partnerships have significantly improved the quality of the fields. However, a proposal to issue field permits costing \$1 per hour per field was met with broad opposition a couple of years ago.

The FY2007 general fund expenditures for each of these areas were:

FY2007 General Fund Recreation Expenditures

Recreation Administration <sup>7</sup>	\$235,314
Recreation Activities	52,912
Outdoor Swimming	156,153
Indoor Recreation	107,896
Special Needs Recreation	128,680
Community Centers	78,467
Senior Recreational Services	7,091
Cultural Affairs	93,654
Recreation Building Maintenance	<u>330,595</u>
	\$1,190,762

Revolving funds were set up for the “new and expanded” recreation programs in the early 1980s. (A revolving fund is a fund or account whose income finances that activities continuing operations. Thus, the activity is self-sustaining.) The fees paid for “new and expanded programs” into the revolving funds are intended to cover only the direct costs of the recreational services (e.g., direct salaries, equipment and supplies). All the administrative costs (for example, the salary of the Director of Cultural Affairs) are still covered by the general fund. Similarly, while Parks and Recreation personnel oversee the recreational programs, their salaries and benefits are not allocated to the self funding “new” recreational programs. In addition, the revolving funds for “new” programs do not cover the benefits for the direct employees. Nor do the revolving funds pay for the depreciation of equipment or buildings or maintenance and on-going costs of the fields or recreational buildings. Where the revenues cannot cover completely the direct costs of the Arts in the Park program (e.g., concerts, performances, garden tours, Harvest Fair), Newton Pride often provides additional funding. For the other programs, they have to be self-sustaining in the way described above.

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<sup>7</sup> This is a pro-rated amount. The total Parks & Recreation Administration cost was \$887,978. Recreation is approximately 26.5% of the total Parks and Recreation Department budget.



## FY2007 Recreation Revolving Funds Expenditures

Senior Citizen Programs	\$42,113
Arts in the Park	201,310
Camps	327,982
Recreational Activities and Classes	<u>540,661</u>
	\$1,112,066

Scholarships are available. Each summer program raises its own scholarship monies. These donations come from individuals and corporations. Parks and Recreation also receives some funding from the federal government through Community Development Block Grants. At the beginning of last summer, Parks and Recreation had \$25,000 available for scholarships. However, while 64 young people received scholarships last summer to camps, the Recreation Department finds it usually has insufficient funds to cannot meet the full requests for scholarships. As a result, Parks and Recreation often provides only partial scholarships.

Seventeen summer camps (with two new ones in 2008) are the largest and most visible recreation program serving over 1000 children per week during June, July, and August. These programs have continued to grow entrepreneurially and organically with new camps created and vetted annually in response to perceived demand. Those camps that are able to achieve breakeven within a year or two are kept and grown while the money losers are folded. Parks and Recreation are proud of their ability to provide safe, fun and affordable programs while continuing to grow and innovate and become inclusive to accommodate underserved children with special needs.

While the Parks and Recreation Commissioner reports to the Mayor, there is also a Parks and Recreation Commission which is comprised of eight voting members, one representative from each ward. These members are appointed by the Mayor with the approval of the Board of Aldermen.

### B. Community Education

Newton Community Education (NCEd) describes itself as “a self-sustaining arm of the Newton Public Schools, open to all students, regardless of residence. We provide educational, social, cultural, and vocational programs to adults and children alike, endeavoring to provide high-quality classes at a reasonable cost.”

As an independent arm of the Newton Public Schools, Newton Community Education is funded through a revolving account. The only school subsidy is free space (no rent) for their administrative offices and for classrooms, free phone service, and free utilities. Parks and Recreation also does not charge them for field use. As mentioned, Newton Community Education does not pay rent to NPS for the use of school buildings, fulfilling an important part of its mission of providing access to the broader community to school facilities. Starting two years ago, the revenues that Newton Community Education brings in has to cover not only salaries but also benefits. Newton Community Education also has to pay custodian fees which totaled \$55,000 last year.

Newton Community Education has its own oversight Commission. It consists of two members each chosen by the School Committee, the Mayor, the Newton PTO Council, and the Board of Aldermen, plus ex officio members from Parks and Recreation and the After School Association. The Director of Newton Community Education reports within Newton Public Schools to the Executive Director of Instructional Programs who in turn reports to the Deputy Superintendent.

Scholarships are available but since Newton Community Education has limited funds, the scholarships only cover two-thirds of the fee of a program. The attendee must pay one-third of the fee.

NCEd offers about 350 courses per semester in its catalog. The range and number of classes has fluctuated somewhat same in the last 10 years. There does seem to be a general trend to more classes for children and fewer adult classes. In addition, there has been a higher cancellation rate for adult classes that do not get enough sign ups; this may be due to greater competition, less discretionary income, or a fixed or diminishing audience for the greater number of classes offered. Newton Community Education has also taken over the Drivers Education program from the schools and runs GED, plumbing, and other certification programs.

NCEd employs 8 administrators (some work part-time), In addition, they hire instructors. They also use “vendors,” organizations like “Play Soccer” that have contracts with the City (hired by the Purchasing Department but actively overseen by NCEd) with NCEd receiving a small management fee.

### C. Other Recreation and Educational Programs

In addition to the Recreation Department and Community Education, there are a number of other organizations that offer similar services in Newton:

- Garden City Sports (run by Tom Giusti, athletic director at NNHS) (baseball, wrestling, soccer, etc.)
- Newton Public Schools: summer educational programs, performing arts, SPACE camp (an arts and culture program)
- Newton History Museum: education, game days, lectures, tours, exhibits, book clubs
- Library: discussion and singing groups, concerts, lectures, ESL and computer classes, art exhibits
- Newton Conservation Commission: (Environmental Science Program)
- Newton Senior Center: classes, lectures, cultural programs, recreational programs
- Newton Pride Committee: a public-private partnership that sponsors citywide events (e.g., Newton Garden Tour, Heartbreak Hill International Youth Race)
- After School Programs: Offered at individual public schools

### III. Issues

Newton has a decentralized approach to providing educational, recreational and cultural programs with the support of City funds. Many different departments create and promote these programs with no central vision for Newton's overarching goals for community educational, recreational and cultural programs. Nor is there consistency in the amount of financial support for these programs from the City versus degree of costs covered by fees. There is no central clearing house where residents can find programs of interest nor is the duplication of programs sorted out.

On the one hand, this decentralized approach has resulted in a rich array of programs. In addition to all the for-profits and non-profits in the greater Newton area, residents can find a wide variety of programs offered by city employees. In addition, many of the programs are offered at a low cost (especially compared to those offered by for-profit organizations).

On the other hand, there are significant drawbacks from Newton's current approach.

- **Inconsistent Policies towards User Fees vs. Tax Supported Programs within and across Departments:** Within the Recreation Department, there are inconsistent policies of degree of tax subsidization of programs. Those started before 1982 receive a heavy subsidy while subsequent ones receive a moderate subsidy. Programs offered by Community Education receive almost no subsidy but instead are financed by user fees.
- **Administrative Inefficiencies:** There is duplication of administrative overhead (both managerial and support services).
- **Program Inefficiencies:** Recreation and Community Education might offer essentially the same program at the same time. When each program only enrolls 40% of the necessary students, both get cancelled. If Newton had offered just one program, it would have been 80% full.
- **Marketing Inefficiencies:** It is difficult for residents to find out what programs are available when and by whom.
- **Insufficient Funding for Scholarships:** None of the departments individually have been able to raise sufficient funds for scholarships when collectively they might be able to.
- **Insufficient Use of Private-Public Partnerships and Support for Foundations:** Because the efforts are splintered, Newton has only limited private-public partnerships for these programs. Quasi-public foundations grow organically, sometimes with limited support from administrators and staff.
- **Unhealthy Competition for Teachers and Space:** While this decentralized approach creates healthy competition between departments, it also encourages unhealthy "hoarding" of scarce resources like exceptional teachers and space in parks, playfields and schools.

## IV. Recommendations

### 1. Develop a thoughtful policy about degree of tax subsidization vs. user fees for each of the community educational, recreational and cultural programs.

The decision about using user fees versus taxes to pay for an activity are typically analyzed from four perspectives: cost, beneficiary, usage, and rationing. A full discussion of this can be found in Appendix III: User Fees vs. Taxes. These perspectives will help Newton determine the level of the user fee and tax subsidization (ranging from full cost reimbursement to partial cost reimbursement to no cost reimbursement). It should be noted that generally, it is more efficient and equitable to subsidize directly and explicitly low-income households than to fix an artificially low charge for all. Scholarships can be funded by tax dollars, by private-public partnerships, by higher user fees or some combination of the three. Ultimately, Newton has to decide how important its wide variety of community educational, recreational and cultural programs are for building community, helping such groups as senior citizens or citizens with special needs, and encouraging learning and exercise. A final consideration is the very real drawback of shifting from property tax funding of services to user charges is the lack of federal deductibility. User charges are not deductible, while local property taxes are deductible.

Increasing user fees to cover the full or partial cost of more of Newton's recreational programs (e.g., outdoor swimming fees could be raised and still appear affordable (perhaps, \$90 per adult and \$40 per child) might increase revenues by \$100,000 - \$500,000. Higher fees for non-residents can almost certainly be justified as they are at Crystal Lake.

Likewise, a playing field revolving fund might allow more transparency and foster a willingness to pay for field maintenance by playing field users.

### 2. Consider creating a "Culture, Recreation and Community Education" Department:

This department would cross the usual divide between municipal and school services by combining:

- Recreational activities
- Educational activities (including Community Education)
- Cultural activities
- Newton History Museum

This would help Newton provide a broad array of services in a coordinated manner while reducing costs and improving marketing and communication. Cost savings might be in the range of \$50,000 - \$250,000 (one to four positions and fewer programs with higher attendance).

Creating a new department is not without difficulties. Newton Community Education and Parks and Recreation each have separate commissions. They have distinct cultures and management practices.

If a new department is not created, at a minimum the various departments should work more closely together and consolidate some functions and coordinate course offerings. One organization might take the lead on all "education" or "course like offerings" while another the

recreational or cultural offerings. Together, the departments could invest in an online registration and catalog. They could work together on marketing activities.

3. Significantly Increase Scholarships:

Increase the funding for scholarship for low-income Newton residents by \$50,000 - \$100,000. Scholarships can be funded by tax dollars, by donations and private-public partnerships, by higher user fees or some combination of the three.

## Appendix II

### Individual, Corporate, and Foundation Giving

#### I. Executive Summary

Recommendation 6: Increase individual, corporate, and foundation giving to the Newton Public Schools and to the City of Newton by working more closely with these constituencies and increase grants to the City by retaining a grant writer.

*School revenue enhancement -- \$100,000 - \$500,000;*

*Municipal revenue enhancement \$50,000 - \$500,000 or more*

Support to the City from Individuals and Businesses via Foundations and Nonprofits: In addition to revenue from taxes, fees, and inter-governmental transfers, the Citizen Advisory Group Revenue Committee considered the potential of additional revenues from foundation, nonprofit and public-private partnership organizations for “public” or “community” purposes to the City. Currently, Newton has a number of quasi-public institutions that are defined as nonprofits with the mission of raising funds for purposes of this type. One example is the Newton Pride Committee, a nonprofit volunteer organization created in 1988 that which provides support for Newton cultural and arts programs and organizes family-oriented activities (including the Fourth of July festivities and the Halloween Window Painting Contest). The Newton Pride Committee works with individual and business donors to augment programs in the Mayor's Office of Cultural Affairs, the Newton Cultural Council and the Newton Parks and Recreation Department. Examples of other important nonprofits include the Newton Community Service Center (which works with the City to enhance and deliver a variety of social services to residents), the Newton Historical Society, and the Friends of Newton Free Library. These nonprofits, and numerous others, generate revenues for various public and quasi-public purposes and programs.

The Citizen Advisory group has come to two conclusions concerning revenues from these types of quasi-public nonprofits. First, little effort has been made to take a full inventory of the number, role, and impact of these nonprofit organizations. Second, there has been little effort to assess whether existing nonprofits have heretofore untapped potential, whether there are significant areas or functions where additional potential might exist, or whether there might be value in developing a higher level of fundraising coordination among these organizations to, for example, ensure that existing organizations are not competing, rather than cooperating, with each other in their fundraising activities. Third, there has been little effort to encourage new nonprofits that could help the City. Superficially, at least, it would appear that Newton's nonprofit sector is somewhat under-developed, especially with respect to partnering with the private and commercial sectors in the city, to achieving a high level of coordination, and for raising significant donations for public purposes.

There have been discussions from time to time about the potential for the development of a broad-based Newton Community Foundation. Such a foundation might serve as a central, community-wide, multi-purpose, mediating institution to raise funds, operate programs, support nonprofits and distribute small grants. (This might be similar to the Brookline Community Foundation. With a six person staff, the Brookline Community Foundation strengthens and sustains local nonprofits, organizations, and initiatives through grant-making and administrative

and organizational support.) When considered in the past, the difficulties of creating and maintaining such a foundation were thought to be prohibitive, and they may still be. Yet, Newton would seem to have an abundance of residents and friends who have both the capacity and desire to make voluntary contributions to the community. The central question is whether the Newton's nonprofit sector currently provides sufficient opportunities to potential individual and business contributors. The Citizen Advisory Group Revenue Committee recommends that a significant effort be made to assess the potential for an expanded nonprofit sector to generate revenues and support programs in a way or at a level not possible through current revenue sources. This effort should be sensitive to the accomplishments of existing nonprofit organizations and strive to strengthen those accomplishments. If promising, City leaders should help incubate a Newton Community Foundation.

Support to the City from Federal and State Governments via Grants: The municipal side of the City of Newton may not be taking full advantage of federal and state grants. While Newton does receive a variety of grants from governmental entities, currently, other than in the School Department, the city does not employ or retain a dedicated grant writer. (Some departments do grant writing. For example, both Parks and Recreation and the Newton Police Department have a couple of people with a lot of experience writing grants and have this as one of their responsibilities.) At one time, the Planning Department did have such a dedicated grant writer. After a few years, it became clear that new grant writing opportunities for cities like Newton were limited. Most grant programs provide funding for specific, targeted programs in which the grant funding is designated as supplemental (i.e., for a new program, not an existing, ongoing effort). (For example, Newton received significant grant funds for the new laptop initiative for police officers.) But, Newton primarily needs funds for ongoing, core services, infrequently pursues new initiatives, and rarely has matching funds available. For example, members of the Citizen Advisory Group Revenue Committee heard of an instance where the City could receive perhaps as much as \$500,000 in new state grant revenue, but would have to match that revenue with \$500,000 of its own new spending. Lacking the matching funds, Newton decided not to pursue the grant. Opportunities in the conservation and recreation areas were attractive but required matching funds that Newton could not allocate. Following a staff departure, the grant writer position in the Planning Department was left unfilled and then eliminated.

The City of Newton has continued to apply for grants when opportunities presented themselves and City administrators believe that a competitive application could be filed. In particular, grants in the public safety and energy arenas continue to be pursued by people within the relevant departments with grant writing experience. Nevertheless, the potential for increasing grant revenue exists, especially for those programs where Newton has ongoing activity that would require little or no new local expenditures by the grant. The City should consider placing a professional grant writer on retainer (perhaps with a commission based on successful grants) who can help identify grant opportunities and assist in writing grants when those opportunities do make sense.

Support to the Newton Public Schools from the Federal and State Governments via Grants: Grants, primarily from the Federal and State governments, to Newton Public Schools have grown dramatically from \$6.5 million in FY2002 to \$10.6 million in FY2009. (Individual, corporate and foundation grants account for the smallest amount of the total grant revenue (approximately 4%) or \$385,000 in FY2009.) The Citizen Advisory Group has concluded that the current level of staffing is "maxed out" writing and administering the current Federal and

State grants. If Newton Public Schools determines that there are additional federal or state grants that would help the quality of Newton's schools, the City will likely need to invest in more staff dedicated to grant writing, administration, and compliance.

Support to the Newton Public Schools from Individuals, Corporations and Nonprofits via Grants and Foundations: A relatively small amount of support for Newton Public Schools comes from individuals, foundations or corporations. Since schools are not classified as nonprofit organizations, contributions directly to the schools from individuals may not be tax deductible. Rather, individuals give to another entity (even the City), which in turn supports the Newton Public Schools. For example, the Newton Schools Foundation (NSF) is an independent, nonprofit 501c3 organization that provides approximately \$190,000 in grants, scholarships and training to Newton teachers. While it operates in close cooperation with the Superintendent, the Newton Schools Foundation proudly maintains its independence. In addition to donations to the Newton Schools Foundation, parents and others donate approximately \$900,000 annually to the schools through Parent Teacher Organizations (PTOs).

Citizen Advisory Group discussions with those involved with the Newton Schools Foundation suggest that the Foundation is going through a period of transition, reviewing its mission and working through some financial issues. For the near term, it does not seem likely that the Newton Schools Foundation will be in the position to raise significantly more revenue for the schools than it has in the past. It is certainly possible that the School Committee and/or the School Department would like to see a nonprofit emerge that has greater capacity to raise funds for the schools, and perhaps a mission of being more responsive to the expressed needs of the School Department or School Committee. One possible model to examine is Brookline 21<sup>st</sup> Century Fund. If either a re-missioned Newton Schools Foundation or an additional nonprofit emerged, the Newton School Department may wish to hire a professional development (fundraising) officer to expedite individual giving.

## **II. Current Status**

### **A. School Grant Writing**

Newton Public Schools (NPS) have two people devoted to grant writing and grant management/compliance. (Salaries, benefits,<sup>8</sup> and office supplies and expenses are approximately \$175,000.) Grants have grown dramatically from \$6.5 million in FY2002 to \$10.6 million in FY2009, representing a compound annual growth rate of over 7%. They have great success; only one grant that NPS applied for in the last five years has been rejected.

Grants come from three sources: the Federal government, both direct and indirect via Massachusetts, the Commonwealth of Massachusetts, and private individuals or foundations. Federal direct grants accounted for 23% of the FY2009 total, Federal indirect grants 41%, Massachusetts grants 32%, and private grants 4%.

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<sup>8</sup> Benefits are estimated at 20% of salaries.



## Newton Public Schools Grant Revenue FY02 - FY09

	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09E
Federal								
Direct	\$123,770	\$0	\$124,995	\$504,877	\$734,448	\$1,335,347	\$886,172	\$2,484,134
Indirect	\$2,852,328	\$3,016,456	\$3,755,503	\$3,838,812	\$3,971,701	\$3,896,518	\$3,970,252	\$4,340,701
State	\$3,167,781	\$2,898,195	\$2,742,009	\$2,883,198	\$3,167,101	\$3,399,327	\$3,601,649	\$3,411,882
Private	\$413,175	\$340,204	\$330,092	\$392,482	\$772,045	\$528,782	\$425,518	\$384,996
Total	\$6,557,054	\$6,254,855	\$6,952,599	\$7,619,369	\$8,645,295	\$9,159,974	\$8,883,591	\$10,621,713

Source: Newton Public Schools, July 30, 2008

**Federal Direct Grants:** Federal direct grants currently total \$2.5 million. Federal direct grants (and most State grants) are additional income, intended to “supplement” and not “supplant” school services. Therefore, these funds cannot be used to pay for ongoing teachers’ salaries or other expenditures that are essential part of the school operations. NPS must apply directly to the Federal Department that issues the grant (e.g., Department of Education, Department of Justice, etc.). These grants are more competitive than the indirect ones since they are awarded to schools from the entire country and thus have more applicants for them. To apply for these requires a lot of time and effort. Federal grant funds are expected to triple in 2009 with the awarding to NPS of a \$1.5 million grant directed at early intervention (Safe Schools/Healthy Students). There are currently three other Federal direct grants: \$394,000 for “Teaching American History,” \$380,000 for “Elementary Counseling,” and \$216,000 for “Physical Education Program.”

**Federal Indirect Grants:** Federal indirect grants, also known as entitlement and allocation grants, are passed through the State. They are used for ongoing, ordinary operations. As entitlement and allocation grants, if NPS qualifies based on the specific criteria, then NPS gets the money based on the number of students or teachers that meet the criteria. The Federal indirect grants include Title I: Helping Disadvantaged Children, Title IIA: Highly Qualified Teachers; Title IID: Technology in Education; Title III: English Language Learners; Title IV: Safe and Drug Free Schools; and Title V: Promoting Equity/Innovation Technology.

In 2008, the indirect federal grants brought in almost \$4 million, with \$4.3 million expected for 2009. There are four major grants. The biggest grant is \$2.7 million for SPED IDEA (Special Education – Individuals with Disabilities Education Improvement Act). These funds help to ensure equity, accountability and excellence in education for children with disabilities. The other three large indirect Federal grants are Title I: Helping Disadvantaged Children (\$930,000 in FY09), Title IIA: Highly Qualified Teachers (\$272,000), and Title III: English Language Learners (\$138,000). (NOTE: The amount of the grants is affected by the criteria. When the criteria change, there can be a large impact. Changes in poverty rate calculations, for example, led to an increase in the Title I grant awarded to Newton from about \$510,000 in FY2008 to over \$930,000 in FY2009.)

**State Grants:** State grants come primarily from the Mass Department of Education. In both FY2008 and FY2009, they totaled approximately \$3.6 million. With the exception of the largest state grant for METCO (\$2.4 million), these are not entitlement or allocation grants. The funds

are intended to “supplement” and not “supplant” school services. The other two large state grants are Community Partnerships for Children (\$369,000 in FY09) and Quality Full-Day Kindergarten (\$334,000).

METCO (Metropolitan Council for Educational Opportunity) helps children in Boston who are African American, Latino, Asian and Native American attend schools in suburbs. Approximately 415 METCO students are part of the Newton Public Schools.

The amount of the METCO grant is a function of the number of children enrolled. The Citizen Advisory Group will issue a detailed white paper in December 2008 on METCO as part of its School Cost Structure report.

Private Grants: Private grants account for the smallest amount of the total grant revenue (approximately 4%). Private grants totaled \$425,000 in FY08 and \$385,000 is expected for FY09. One grant from the Freeman Foundation for the Jingshan Exchange is for \$300,000 or 78% of the total of private grants.

Private grants can come from individuals, foundations and corporations. Donations from individuals can be particularly useful because they often have fewer restrictions and can be directed to the area of greatest need. Since schools are not classified as nonprofit organizations, contributions directly to the schools from individuals may not be tax deductible. Rather, individuals give to another entity (even the City), which in turn supports the Newton Public Schools. Individuals could also give to Newton Public Schools through an organization like the Newton Schools Foundation.

#### B. Giving through Parent Teacher Organizations (PTOs)

Parents (as well as some non-parents) donate approximately \$900,000 annually to Newton Public Schools by giving to the specific school their child/children attend via PTOs. Each of the twenty-one Newton Public Schools has their own PTO, which raises funds. The PTOs work closely with the principals to determine the specific needs of their school (e.g., libraries, field trips, teacher funds for classroom supplies). The PTO Council has an equity policy that places a ceiling on the spending by elementary PTOs on many items (e.g., Creative Arts and Sciences, teacher and principal discretionary funds). But, only three or four of the fifteen elementary school PTOs come close to that ceiling. Also, a number of items are exempt from the ceiling (e.g., technology and playgrounds) so there is always a place to direct the donations.

#### C. Giving through the Newton Schools Foundation

The Newton Schools Foundation is an independent, non-profit 501c3 with a full-time director and a part-time assistant. Its mission is “to enhance and broaden community support for public education and to provide private funding for innovative and challenging programs in the Newton Public Schools.”

Approximately twenty-five years old, the Newton Schools Foundation awards grants directly to Newton Public School teachers. It also funds several scholarships and student leadership training. Teachers and other school personnel are asked to submit “innovative and creative” ideas that require extra funding. The Newton Schools Foundation had applications from 44 teachers

last year. Twenty-seven grants were awarded, totaling \$164,000. The combination of scholarships, student leadership training and grants totaled approximately \$188,500 in FY2008 and are projected to be in the range of \$190,000 to \$200,000 in FY2009.

Since 1985, the Newton Schools Foundations has awarded more than \$2.2 million in grants. The Newton Schools Foundation has an endowment of approximately \$1.3 million dollars, but the purpose the funds are restricted to certain types of initiatives. Usually, the interest from the endowment contributes \$65,000 - \$90,000 to support the grants.

Until recently, the Newton Schools Foundation granted money and then raised the funds. As more money was granted than raised and as that amount increased yearly, the organization found itself significantly in the “red” a few years ago. The Newton Schools Foundation is now operating in the black and is half way to reversing the financial model to raise the funds before awarding the grants. During this period of adjustment, the Newton Schools Foundation has raised approximately \$400,000 to \$500,000 annually.

The Newton Schools Foundation receives donations from approximately 3% of Newton’s families. The Foundation is working to expand significantly the donor base, targeting alumni, major donors and corporations.

While in close contact with the Superintendent, the Newton Schools Foundation is proudly independent from the Newton Public Schools.

The Newton Schools Foundation is reviewing its mission. For example, while they see the value of raising an endowment for technology (an idea about which the Superintendent is excited), they are not convinced that this is the right model. Instead of focusing on such a specific area, they believe an endowment might need to cover a wide spectrum of educational goals. The Newton Schools Foundation is also monitoring closely the efforts of the Strategic Planning Committee to see where funds will be needed in the future.

#### D. Brookline: Potential Fundraising Role Models

Other communities are raising large amounts of money for public schools from individuals through nonprofits. One example is Brookline and the nonprofit, the 21<sup>st</sup> Century Fund. While independent, the Fund works closely with both the Headmaster of Brookline High School and the Brookline School Committee. With a two and a half person staff, the 21<sup>st</sup> Century Fund has raised almost \$3 million since 1998. Last year alone, the 21<sup>st</sup> Century Fund raised \$775,000. They view themselves as a venture capital fund for the high school, supporting teachers as they explore new and innovative programs. Their web-site states:

*The 21st Century Fund is a non-profit organization founded in 1998 by a group of parents, alumni and Brookline residents to serve as a sustainable source of funding for new approaches to major challenges in public high school education. In short, the 21st Century Fund provides “venture capital for public education.”*

*Tax dollars finance the major operational and capital needs at Brookline High School, but they cannot be the sole source of funding. Private donations play a critical role in the success of public education by making it possible to try new ideas, new approaches for facing challenges,*

*and for seizing opportunities.*

*The 21st Century Fund directs its support to programs from one or more of the following categories:*

- *Fostering academic achievement for all students*
- *Supporting a world-class faculty*
- *Educating students to be leaders and citizens in a changing world.*
- *Integrating technology into the curriculum.*

*The 21st Century Fund receives tax-deductible contributions from the families of students, from BHS alumni, and from the broader Brookline community. The signature event to raise funds is the annual Gala held each fall.*

Many of the grants are used to pay for teachers' salaries of the "replacement" staff while those with the grants can pursue their new ideas. In essence, the Fund provides a way for Brookline teachers to make changes within the Brookline High School system. They are paid to do research and implement innovative programs.

The 21st Century Fund has a 24 person Board of Directors, 12 Ex-Officio Members of the Board, 3 Emeritus Members of the Board and a 32 person Board of Overseers. They are just on the verge of embarking on a capital campaign to build an endowment.

In addition to the 21<sup>st</sup> Century Fund, Brookline also has a Brookline Education Foundation. It has committed more than \$285,000 to grants in activities for FY2009. Started in 1981, this nonprofit is "dedicated to preserving Brookline's commitment to excellence in public education. The Foundation raises private funds to support innovative teaching, administrative leadership, professional development, and community participation in the schools. It ... has raised over \$3 million for the Brookline Public Schools. Supporters and donors include parents, citizens, and businesses." The Brookline Education Foundation has a 35 person Board of Directors, a 26 member Board of Overseers and two staff members (an Executive Director and an Assistant Director).

The Brookline Community Fund also supports the public schools. For example, last year, the Brookline Community Fund awarded a \$50,000 challenge grant to Steps to Success, a program that works make college a goal and reality for children grades 4-12 living in Brookline Public Housing.

#### E. Support to the City from Federal and State Governments via Grants

The municipal side of the City of Newton may not be taking full advantage of federal and state grants. While Newton does receive a variety of grants from governmental entities, currently, other than in the School Department, the city does not employ or retain a dedicated grant writer. (Some departments do grant writing. For example, both Parks and Recreation and the Newton Police Department have a couple of people with a lot of experience writing grants and have this as one of their responsibilities.) At one time, the Planning Department did have such a dedicated grant writer. After a few years, it became clear that new grant writing opportunities for cities like Newton were limited. Most grant programs provide funding for specific, targeted programs in

which the grant funding is designated as supplemental (i.e., for a new program, not an existing, ongoing effort). (For example, Newton received significant grant funds for the new laptop initiative for police officers.) But, Newton primarily needs funds for ongoing, core services, infrequently pursues new initiatives, and rarely has matching funds available. For example, members of the Citizen Advisory Group Revenue Committee heard of an instance where the City could receive perhaps as much as \$500,000 in new state grant revenue, but would have to match that revenue with \$500,000 of its own new spending. Lacking the matching funds, Newton decided not to pursue the grant. Opportunities in the conservation and recreation areas were attractive but required matching funds that Newton could not allocate. Following a staff departure, the grant writer position in the Planning Department was left unfilled and then eliminated.

The City of Newton has continued to apply for grants when opportunities presented themselves and City administrators believe that a competitive application could be filed. In particular, grants in the public safety and energy arenas continue to be pursued by people within the relevant departments with grant writing experience. Nevertheless, the potential for increasing grant revenue exists, especially for those programs where Newton has ongoing activity that would require little or no new local expenditures by the grant. The City should consider placing a professional grant writer on retainer (perhaps with a commission based on successful grants) who can help identify grant opportunities and assist in writing grants when those opportunities do make sense.

#### F. Support to the City from Individuals and Businesses via Foundations and Nonprofits

In addition to revenue from taxes, fees, and inter-governmental transfers, the Citizen Advisory Group Revenue Committee considered the potential of additional revenues from foundation, nonprofit and public-private partnership organizations for “public” or “community” purposes to the City. Currently, Newton has a number of quasi-public institutions that are defined as nonprofits with the mission of raising funds for purposes of this type. One example is the Newton Pride Committee, a nonprofit volunteer organization created in 1988 that which provides support for Newton cultural and arts programs and organizes family-oriented activities (including the Fourth of July festivities and the Halloween Window Painting Contest). The Newton Pride Committee works with individual and business donors to augment programs in the Mayor's Office of Cultural Affairs, the Newton Cultural Council and the Newton Parks and Recreation Department. Examples of other important nonprofits include the Newton Community Service Center (which works with the City to enhance and deliver a variety of social services to residents), the Newton Historical Society, and the Friends of Newton Free Library. These nonprofits, and numerous others, generate revenues for various public and quasi-public purposes and programs.

The Citizen Advisory group has come to two conclusions concerning revenues from these types of quasi-public nonprofits. First, little effort has been made to take a full inventory of the number, role, and impact of these nonprofit organizations. Second, there has been little effort to assess whether existing nonprofits have heretofore untapped potential, whether there are significant areas or functions where additional potential might exist, or whether there might be value in developing a higher level of fundraising coordination among these organizations to, for example, ensure that existing organizations are not competing, rather than cooperating, with each other in their fundraising activities. Third, there has been little effort to encourage new nonprofits

that could help the City. Superficially, at least, it would appear that Newton's nonprofit sector is somewhat under-developed, especially with respect to partnering with the private and commercial sectors in the city, to achieving a high level of coordination, and for raising significant donations for public purposes.

There have been discussions from time to time about the potential for the development of a broad-based Newton Community Foundation. Such a foundation might serve as a central, community-wide, multi-purpose, mediating institution to raise funds, operate programs, support nonprofits and distribute small grants. (This might be similar to the Brookline Community Foundation. With a six person staff, the Brookline Community Foundation strengthens and sustains local nonprofits, organizations, and initiatives through grant-making and administrative and organizational support.) When considered in the past, the difficulties of creating and maintaining such a foundation were thought to be prohibitive, and they may still be. Yet, Newton would seem to have an abundance of residents and friends who have both the capacity and desire to make voluntary contributions to the community. The central question is whether the Newton's nonprofit sector currently provides sufficient opportunities to potential individual and business contributors. The Citizen Advisory Group Revenue Committee recommends that a significant effort be made to assess the potential for an expanded nonprofit sector to generate revenues and support programs in a way or at a level not possible through current revenue sources. This effort should be sensitive to the accomplishments of existing nonprofit organizations and strive to strengthen those accomplishments. If promising, City leaders should help incubate a Newton Community Foundation.

## **II. Issues**

### School Grant Writing:

The Citizen Advisory Group has concluded that the current level of staffing is "maxed out" writing and administering the current grants. In particular, the administration of additional awards would be undoable given the manpower.

### Schools and Individual Fundraising:

There is an opportunity to raise more money (perhaps \$100,000 - \$500,000) from individuals for the Newton Public Schools. Brookline serves as a role model. Through two school foundations, Brookline raises the same or more money than Newton despite having 33% fewer residents and 46% fewer students.

But, finding an appropriate way to raise the money is difficult. The Newton Schools Foundation has a long history in the community and is proudly independent. As the Newton Schools Foundation is in a period of transition (working through some financial issues and reviewing its mission), it is not likely to be of immediate help to the Newton Public Schools in terms of raising significantly more money. It may or may not choose to raise more funds that are more in line with the current, expressed needs of NPS (e.g., a technology endowment).

### **III. Recommendations**

School Grant Writing: If Newton Public Schools thinks there are additional federal, state or foundation grants that would help the quality of Newton's schools, they are likely to need to invest in more staff in the grant writing and compliance area.

Individual Giving to the Schools: The School Committee and the administration of the Newton Public Schools (NPS) need to decide if they would like to help found a foundation that works more closely with NPS and/or give the Newton Schools Foundation the opportunity to consider doing so. The Newton Schools Foundation serves an important role by providing grants to teachers. It may not consider it part of their mission or culture to align itself more closely and directly with the Newton Public Schools. If either a new foundation was founded or if the Newton Schools Foundation chose to reorient itself, then NPS may want to hire a development officer within its Grants Department to focus on individual giving. For example, this person could pursue alumni fundraising, major gifts, special events, and gifts and bequests, and private-public partnerships.

Municipal Grant Writing: The City should consider placing a professional grant writer on retainer (perhaps with a commission based on successful grants) who can help identify grant opportunities and assist in writing grants when those opportunities do make sense.

Individual and Foundation Giving to the City: The Citizen Advisory Group Revenue Committee recommends that a significant effort be made to assess the potential for an expanded nonprofit sector to generate revenues and support programs in a way or at a level not possible through current revenue sources. This effort should be sensitive to the accomplishments of existing nonprofit organizations and strive to strengthen those accomplishments. If promising, City leaders should help incubate a Newton Community Foundation.

## Appendix III

### User Fees vs. Taxes

The decision about using user fees versus taxes to pay for an activity is typically analyzed from four perspectives: cost, beneficiary, usage, and rationing:

Cost: What is the full cost of providing these government services, including direct effort, indirect supporting activities, and organizational overhead?

Beneficiary: Who benefits from these services? In other words, to what degree does the community as a whole benefit, and to what degree does it benefit the individual using the service? Is this a core service essential to Newton as a whole or does it benefit a limited number of users?

Usage: Can a core service can be linked directly to individual users and charged by volume? For example, communities like Newton charge homeowners for sewage and water services based on volume of use. In recent years, some cities and towns have also begun charging for solid waste collection (i.e., trash) based on volume.

Rationing: Is it a service for which a price signal affects a desired outcome? Services that are free, even if they are core (such as water, sewer and trash) may still justify a fee if there is sufficient variability in use among the citizens and cost can be related closely to the “volume” of use. Thus those who generate more trash create more cost and there is far more sense in apportioning the cost over the specific use than apportioning the cost based on the assessed value of the home. Charging in this case has the corollary benefit of reducing volume of use, as those charged will act in their self-interest to reduce their costs.

The answers to these questions will result in user fees that are not only cost-based but policy-based too. Once the full costs are known, then citizens and elected officials need to enter into a dialog about the public and private benefits of different government services and the appropriate funding sources for those mixed benefits (e.g., fees from the private citizen or general tax revenues from the community at large.) This leads to the fundamental question:

Does the general public benefit in part for a service provided and thus, should general resources, such as taxes, pay for part of the full cost of service, or does the private citizen solely benefit from the service provided, and thus, should bear more, if not all, of the costs incurred?

The answer to the question above helps determine the level of the user fee and tax subsidization. There are a number of options:

Full cost reimbursement: To determine the full cost, Newton should include the direct and indirect costs associated with providing the service. In calculating direct costs, Newton should include costs for staff salaries and benefits, supplies and materials, capital facilities and equipment, depreciation in equipment value, and any other costs attributable to the production and delivery of a service. Equipment and facility costs may include cash purchases, debt service costs, or maintenance costs. Indirect costs may include a portion of management and



administrative costs for personnel to administer or provide services. Newton can decide which programs should have fees set to recover the full cost.

Partial cost reimbursement: Newton can decide that some activities and services, such as bus transportation for public school students should be, in part, supported by Newton's tax dollars, but that users of these activities or services should also pay a charge. Newton can then set the fee at a level lower than the full cost.

No cost reimbursement: Newton can also decide that some activities and services should be provided with no user fees.

Waivers or Scholarships: Generally, it is more efficient and equitable to subsidize directly and explicitly low-income households than to fix an artificially low charge for all. Scholarships can be funded by tax dollars, by private-public partnerships, by higher user fees or some combination of the three.

Competing with the Private Sector: User fees may be particularly appropriate when a local government like Newton provides services that also are provided by the private sector, particularly if they are not core government services. Using general fund taxes to subsidize such services poses two problems. First, the benefit principle is violated if taxpayers citywide fund a service they do not receive. Second, subsidies allow the government provider to undercut the prices of private sector providers, leading to unfair competition. But, user fees may not be appropriate to finance core government services, particularly social services and education programs where services and benefits are provided based upon social objectives.

Fee increases: Because the costs of providing a service may vary from year to year, user fee levels should be reviewed annually and, if needed, revised to reflect changes in costs.

Tax Implications: A final consideration is the very real drawback of shifting from property tax funding of services to user charges is the lack of federal deductibility. User charges are not deductible, while local property taxes are deductible.

## Appendix IV

### Property Assessment and Taxation

The Citizen Advisory Group closely examined Newton's Property Assessment and Taxation functions as almost 80% of the City's revenues are derived from the property tax. While we are unable to identify new revenue sources from property tax, given the centrality of property tax to Newton's revenues, it is important to have a thorough understanding.

We do offer the following recommendations:

#### Tax Rates

The Citizen Advisory Group recommends that the Board of Aldermen continue the practice of shifting the tax burden to commercial and industrial properties to their legal limit. This approach also shifts the tax burden away from individual taxpayers who may be least able to afford additional taxes in a bear market.

#### Litigation and Expert Witness Support

The Assessor noted that the City has generally provided Assessment Administration with reasonable funding to support its litigation and expert witness costs in defending the City's assessments. The Citizen Advisory Group recommends this funding be continued.

#### Staffing Considerations

Because of cuts in Assessment Administration staff over the past few years, the number of inspections has declined. The result is a delay in inspections of new and improved properties, as well as a drop off in general inspections that might reveal improvements that were made without formal notification to the City. The Citizen Advisory Group recommends that Newton analyze whether restoring those positions could result in a net increase in revenue to the City.

#### Assessment and Budget Process

The overall tax burden is set in Newton when the Mayor and Board of Aldermen ("BOA") agree upon the budget. Each year, the Board of Aldermen has the option (but is not required) to increase the tax levy on existing properties by 2.5%. In addition to the 2.5% increase on existing properties, the Board of Aldermen may increase the tax levy each year by the amount of taxes due on any "new growth" (new construction or improvements to existing properties). The 2.5% increase on existing property plus the tax on new growth represent the citywide increase in taxes that can be collected. In FY08, this amount was approximately 3.5% over FY07.

The tax on new growth plus the tax on existing properties (increased by 2.5%) make up the "levy limit." In recent years, Newton has "levied to the limit" in each of its budgets. Newton may not increase taxes beyond the levy limit without an operating or debt exclusion override.

The Assessor determines the amount of new growth in Newton each year and sets the assessed values of all taxable properties in the City. The assessed values determine the proportion of the tax levy that each property owner will pay. Thus, the assessed values are not used to raise or lower taxes, but rather to ensure owners of similar classes of property are sharing the tax burden equitably. The Board of Aldermen determines (within certain limits) how much of the burden

will be borne by commercial, industrial and personal (“CIP”) vs. residential properties. At an annual Classification Hearing, the Board of Aldermen votes on two tax rates – one for commercial and industrial properties and one for residential properties. Over time, the Board of Aldermen has chosen to assess CIP properties at 175% of the residential rate, consistent with the maximum allowed under Massachusetts law.

Despite the differential in tax rate, commercial and industrial properties account for only 10% of Newton’s tax base, down from 20% over the past two decades. The shift of tax burden away from commercial and industrial properties to residential properties has been due to:

- Greater appreciation in residential compared to commercial properties over the past 20 years—at least until the housing bubble burst recently.
- Most of the recent large new construction in Newton has been residential in nature. The Avalon apartments on Needham Street and Route 9 and the Arbor Point apartments at Woodland Station, for example, both fall into the residential real estate category. In addition, some of the recent residential complexes have been built on the site of former commercial and industrial sites. Thus, the City has witnessed an increase in residential land use, and a decrease in commercial and industrial use.

### Valuation

The Massachusetts General Laws require that assessed values represent “full and fair cash value.” (It was noted, however, that because of the mechanics described above, rising and falling assessed values do not result in a correlative rise or decrease in a property’s tax burden.) For residential properties, the Assessor determines values based on actual sales of comparable homes in the area. For commercial properties, the Assessor uses both comparable sales and income methodologies. Tenants and landlords are required to produce income and expense information each year in order for the City to calculate the assessment under the income methodology.

The Assessor noted that Newton is fairly aggressive in its valuations, and that commercial property taxpayers often challenge the City’s assessments before the Appellate Tax Board (ATB). It was noted that the City’s assessment methodologies are audited and approved by the Department of Revenue (DOR), and that the City is also bound to consider ATB rulings and precedent in applying the methodology. It was also noted that landlords and tenants fight property assessments fairly rigorously and that the City does not always prevail in court.

### Overlay Account

Mass General Law Chapter 59, Section 23 requires that Newton establish an Overlay Account. The Overlay Account is a reserve to cover abatements and exemptions for real estate and personal property taxes. The Assessors have exclusive control over determining the amount of money that should be reserved in the overlay account. In FY 2008, Newton appropriated 1% of projected property taxes to the overlay account to reserve for anticipated abatement and exemptions. For FY 2009, the Mayor’s budget called for a 1.4% appropriation. The Board of Aldermen has called for the Mayor to reduce the appropriation to 1% for FY 2009.

Of the ten Massachusetts cities and towns with tax levies in excess of \$100 million, Newton has the lowest overlay as a percentage of the tax levy (less than 1%). Newton's overlay reserve is also the lowest measured against the top 15 CIP communities in Massachusetts. If the Overlay Account is underfunded, the deficit must be raised from the next year's tax levy (budget). If the deficit is not raised, the City's tax rates will not be certified by the Massachusetts Department of Revenue, a prerequisite to the City collecting property taxes. Assessment Administration cautions against under-funding the Overlay Account in a bear market as this is typically a time when businesses start to fail and residents lose their jobs and, as a result, abatement filings may go up.

### Other Potential Revenue

Telecommunications Poles and Wires: The Assessor expects Newton to see additional revenue of approximately \$700,000 annually from the taxation of telecommunications poles and wires over public ways (per the recent ATB ruling in Newton's favor). Verizon has appealed the decision to the Massachusetts Supreme Judicial Court. Newton is required to hold all taxes collected pursuant to the ATB's ruling in the Overlay Account pending determination of the appeal by the SJC and a ruling on valuation of the property.

Wireless Equipment: Newton was successful at both the ATB and SJC level in asserting its right to tax wireless equipment located in Newton. Taxes are currently being collected and reserved in the Overlay Account. A trial is scheduled for March 2009 to determine the value of the equipment. Once that is decided (and the appeals process is complete), the Assessor can release the prior years' overlay monies that were reserved for this appeal. Newton can expect approximately \$150,000 annually in taxes from this type of property

**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

**School Cost Structure**

# School Cost Structure

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## **I. Executive Summary**

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 identify, within this context, (2) innovative ways of increasing short- and long-term operational efficiency and effectiveness, and (3) identify new or enhanced sources of funding for City services.

The School Cost Structure Committee of the Citizen Advisory Group was pleased to find the School Committee and the Newton Public Schools' administrators working proactively in developing a long-term strategic plan and re-thinking Newton's educational model, while showing a deep interest in technology and online learning as possible vehicles to improve the educational model.

However, in the course of our work, we became deeply concerned that, in the absence of new revenues, the Newton Public Schools would be unable to maintain its current level of services and programs or to continuously improve, one of the essential elements of excellence in the field of education.

Related to this major concern, we found:

- Evidence of a long-standing gap between the funding of the Newton Public Schools and what it costs to run the system under the current educational model. In other words, we found an educational model (including programs, services, compensation, utilities, etc.) that requires a 5.9% increase annually in the budget to sustain itself; ergo, the necessity to make cuts whenever the school budget increases less than 5.9%. Since 2003 (shortly after an override vote), the Newton Public Schools budget has grown at a compound annual rate of 4.3% per year (FY03 – FY09). If the Newton Public Schools continues to receive budget increases of 4.3%, this creates a funding gap of \$2.5 million next year, growing to almost \$20 million by FY15, with a cumulative deficit in the next six years of more than \$60 million.
- Key costs increasing at a faster rate than the overall budget:
  - Benefits
  - Special Education
  - Utilities

number of factors that are contributing to the erosion in quality as financial resources have become more constrained:

- Diminished administrative and leadership support
- Reduced capacity to supervise of teachers
- Shrinking professional development opportunities
- Insufficient technology
- Inadequate building maintenance
- Increases in class size

Near-term opportunities to save money, perhaps as much as \$1 to \$2 million, in two areas:

- Transportation — by increasing user fees and reducing service
- Food Services □□ through outsourcing both management and labor
- A need to examine more rigorously and regularly educational areas, programs and approaches for both educational effectiveness and financial sustainability. In particular,
  - For Special Education, we see the need for developing internal standards and for the use of outside consultants to do this examination comprehensively and effectively.
  - For METCO, we see the need to periodically assess and communicate how this program supports our core values and how effectively it is achieving our educational goals.
- The need to bolster long-term planning, budgeting, and scenario planning under the direction of a Chief Financial Officer.
- The urgent need to increase the quality of and to consider new vehicles for communication about the financial condition of the Newton Public Schools and the programmatic choices it faces, as a means of regaining trust and fostering the necessary dialogue about the future of the school system.
- As part of the above and in response to the difficult economic circumstances of the City of Newton and the nation, it is necessary for the Newton Public Schools to distinguish between the *essential* and the *desirable* qualities of an excellent school system. In particular, in the absence of new revenues, Newton Public Schools will very likely need to reevaluate some of its past practices and choices that significantly affect the economics and performance of the school system, including:
  - Class size
  - Teaching loads
  - Compensation
  - Teacher development

We recognize that there would be fewer difficult choices if revenues allowed the Newton Public Schools' budget to increase annually by 5.9%. In a Citizen Advisory Group report on Revenues, we make a recommendation to increase donations to the Newton Public Schools through grants, individual giving and foundations. While helpful, these increased revenues are likely to be modest and may take a few years to be realized. More broadly, the Revenues analysis found that Proposition 2 ½ puts a ceiling on automatic increases in revenues and there are only limited other opportunities to increase the City's overall revenues from its recent levels of 3.5% to 4.0%. In fact, given the Commonwealth's financial crisis, Governor Patrick has indicated that local aid (approximately 7% of Newton's budget) will decrease.

In addition to sustaining excellence in education, Newton faces many challenges. A forthcoming Citizen Advisory Group report on Newton's Capital Resources will highlight the substantial underfunding of capital assets and call for significant increased investments in this area. In addition, the recently released report on the Municipal Cost Structure pointed out that post-retirement health care obligations, underfunded by as much as \$22 million annually, will put pressure on the City budget. In light of these factors, the Newton Public Schools may not receive in the future the percent increases in its budget that it has received in the past unless (or, possibly, even if) voters approve an

increase in taxes through overrides. Thus, it is critical for both the City and the Newton Public Schools to lay out our priorities and expenditures through a process that enables the community to make choices, both short-term and long-term, in a thoughtful, deliberative way.

The Citizen Advisory Group is very aware that these will be difficult choices for the School Committee and the administration of the Newton Public Schools. The choices are limited, in part, because there are only a few parts of the budget where changes make a material difference. Furthermore, many line items can only be partially controlled by the Newton Public Schools. Of those that can be affected, essentially none of the choices are appealing because of their immediate impact on the quality of education. We also note that the School Committee has an almost infinite variety of ways to control costs. Any of the line items that we discuss below could be included and each to a greater or lesser degree. As a result, the School Committee will need a comprehensive, long-term vision for the Newton Public Schools and clarity about what it considers *essential* versus *desirable* as it makes its choices.

We gave considerable thought to the characteristics of the different line items that the Newton Public Schools are likely to consider during a period of fiscal constraint. To begin, one set of choices involves teacher and staff compensation, the largest component of the budget. There are two ways to moderate the growth in compensation: employ fewer people or have lower rates of growth in salaries and/or benefits. Neither route is attractive but nonetheless, in the short-term, both must be considered.

People are the lifeblood of a school system. Teachers provide students the attention and guidance they need to develop into “lifelong learners, thinkers and productive contributors to our global society.”<sup>1</sup> Similarly, supervisors □ principals, assistant principals, housemasters, department heads, and coordinators □ provide teachers with attention and guidance to help them develop into great teachers. Employing fewer teachers inevitably leads to the issue of class size and teacher load. Of course, smaller class sizes are better than larger ones. Nonetheless, we recognize the tradeoffs that the School Committee and the administration must consider in balancing class size with other critical elements of providing excellence in education.<sup>2</sup> Similarly, smaller teacher loads are better than bigger ones. Nonetheless, many excellent school systems have their high school teachers teach more sections than those in Newton. Reducing the number of supervisors is particularly unappealing but an option nonetheless. Teacher development is critical and we found a lot of evidence that erosion to supervision and professional development has already occurred. Moreover, if class sizes and teacher loads increase (and the rate of growth in salaries and benefits moderate), it becomes even more critical to invest in supervision and development. (In fact, we recommend later in this report that Newton Public Schools increase the budgets for professional development (and also technology), making cuts in other areas potentially even deeper.)

Growth in compensation, which includes both salaries and benefits, will be another set of options to consider. Of course, paying higher salaries would be better than lower ones. We hire in a competitive marketplace and we want to attract and retain the best teachers and staff. If anything, teachers are underpaid relative to other professions. Nonetheless, if salaries grow faster than the City’s revenues

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<sup>1</sup> The Mission of the Newton Public Schools.

<sup>2</sup> We note that the Budget Guidelines issued by the School Committee in November 2008 mentioned this possibility. It said, “... we clearly affirm that efforts to hold harmless or modestly increase teacher support and technology and to allow some movement forward on strategic planning initiatives might require cuts in other areas. We recognize that these priorities might result in some increases in class sizes and decreases in breadth of program.”

or as rising costs sometimes cannot be sufficiently controlled in other areas to bring them in line, then, limiting salary increases might be a necessity.

Providing benefits is absolutely necessary to attract and retain people. But, health costs have been rising faster than the City's revenues. Inarguably, we need to control the rate of increases in benefit costs. There are a number of ways to do this. What appears to be an "easy" way is by changing health insurance plans (i.e., joining the Commonwealth's Group Insurance Commission) but even that is fraught with uncertainty. Other ways are less appealing but may need to be considered. Newton might need to change both the proportion of contributions made by the City versus the employee and the level of benefits for future employees. Newton simply may not be able to bear the same level of benefits in the future that it has committed to in the past. Nonetheless, we recognize that health care costs are difficult to control and their rates of growth are likely to increase at a faster rate than the City's revenues, thereby putting pressure to decrease costs in other parts of the School's budget.

We also recommend considering ways to control the rates of increase in the costs of special education but acknowledge the challenges inherent in doing this, particularly in the near-term. While mandated, Newton Public Schools still has choices around how to provide its special education services. But, the number of special education students is rising nationally and the severity of their diagnoses is increasing as well. Moreover, as class sizes increase, the ability of teachers to make individual accommodations can become more restricted.

Similarly, energy conservation and efficiency measures should be implemented aggressively to moderate the increases in utility expenses. The City and the School Department have already taken some actions. (We note, for example, that ten school buildings have been switched from oil to gas to save energy.) Nonetheless, we recognize that even as we improve energy efficiency, utility costs are likely to increase at a faster rate than the City's revenues and the overall Newton Public Schools' budget, thereby requiring decreases in funding in other critical parts of the budget.

We would also add that the current budget and decision making processes do not lend themselves necessarily to tackling cost reduction issues comprehensively. The individual elements each need to be considered one by one, but, more importantly, they must be considered as a group. There are important relationships between individual cost items. More importantly, the individual items – number of employees, teacher compensation, class size, teacher load, teacher development, investments in technology, etc. – need to be linked to a comprehensive, strategic, and long-term plan for the Newton Public Schools. As we recommend in this report, scenario planning is one powerful tool for doing this.

The Citizen Advisory Group built one scenario as a model. It serves partially as a way to understand the challenges the Newton Public Schools face and the effects of various choices. More importantly, the model shows the power and usefulness of scenario planning. In this example, if the Newton Public Schools continued using its current educational model, which requires budget increases of 5.9% annually, but only received increases of 4.3%, the cumulative deficit in the next six years would be over \$60 million. To address this, we decreased the rate of growth in salaries (admittedly, not a very appealing option), reduced the growth in benefits, joined the GIC, and implemented cost efficiencies in food services and transportation. In addition, we invested \$1 million in the Schools' technology plan. Under this scenario, the Schools' budget is positive or breakeven until FY13, at which point the budget generates a cumulative deficit of \$10 million through FY15. We plugged this with a \$3.4 million override (approximately \$114 per household) in FY13. This model is not an

endorsement of these particular choices but rather shows the power of long-term planning. (Scenario planning is explored in more depth in the Long-Term Planning and Budgeting Framework section of this report.) We recommend that the School Committee and the administration model the financial implications of different sets of choices that reflect what they view as essential to the quality of education in Newton.

The bottom line is that the Newton Public Schools face difficult choices right now. Almost every choice will be painful because so many of the potential levers affect the quality of education. Making these choices will put a premium on the leadership and vision of the School Committee and Newton Public School administrators. The Citizen Advisory Group sees the absolute need for these leaders to re-engage in a discussion about the future of the Newton Public Schools and discuss the following questions:

- What are the choices we need to make?
- How can we most effectively and efficiently meet the needs of all our students, including those students requiring special education?
- How do we maintain the high quality of our teachers?
- How can we control expenses, including benefits and utilities?
- Most importantly, what are our priorities? What as a community are we willing to pay for? What are we willing to sacrifice?
- What is *essential*? What is *desirable*?

The Citizen Advisory Group calls upon the Newton Public Schools administration and the School Committee to lead the community in this discussion. We look to their experience and expertise to help frame our long-term choices and priorities, present an overarching vision, and clarify our values.

## **II. Objectives and Methodology of the Citizen Advisory Group**

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 identify, within this context, (2) innovative ways of increasing short- and long-term operational efficiency and effectiveness, and (3) identify new or enhanced sources of funding for City services.

The following report is in response to these charges and was crafted from six months of interviews with school administrators, School Committee members, parents, citizens, and input from several open forums. The Citizen Advisory Group also analyzed reports by the Newton Public Schools and other sources of data, including information from a Citizen Advisory Group benchmarking report.

Given our limited resources and time period, the Citizen Advisory Group had to select a few, critical areas of the Newton Public Schools to study in depth. The choices could have included high school athletics, the arts, the choice of student-centered middle schools versus subject-centered Junior Highs, or Career and Technical Education. We ultimately chose:

- Administrative Practices
- Budgeting and Compensation
- Special Education
- METCO (Metropolitan Council for Educational Opportunity)
- Transportation
- Food Services

We chose these areas for a number of reasons. They sometimes represented key cost drivers (compensation and Special Education). Others involved areas that often had been sited as areas of concern related to costs (transportation and food services). Finally, METCO was chosen as an area many people wanted to understand better, with particular questions about how it is financed.

### **III. Snapshot of the Newton Public Schools**

In 2007 - 2008, the Newton Public Schools served 11,556 students in twenty-one schools, including fifteen elementary schools (grades K-5), four middle schools (grades 6-8), and two high schools (grades 9-12). According to the Massachusetts Department of Elementary and Secondary Education:

- 14.1% of Newton’s total population are school age.
- 18.7% of the students in Newton have a first language that is not English.
- 6.9% of pupils in Newton come from low-income families.
- 18.8% of Newton’s pupils are enrolled in special education.
- 70.7% of the students are White, 13.6% are Asian, 6.5% are Hispanic/Latino, 4.8% are African American, and 4.4% are other

In the late 1960s, Newton had over 18,000 students in the public school system. Enrollment declined dramatically until the late 1980s and has been relatively flat for the last ten years. Recently, the Newton Public Schools have begun to experience an increase in elementary school students but these increases are not expected to continue. Projections show growth in the middle schools, declines in the elementary schools, and increases in the high schools beginning in 2012-13. Overall, enrollment will have increased in FY06 through FY08, be essentially flat in FY09 through FY11, and then increase again by 60 to 90 students in each of the fiscal years 2012 – 2014.

**Table 1: Newton Public Schools Enrollment**

	FY99 Actual	FY00 Actual	FY01 Actual	FY02 Actual	FY03 Actual	FY04 Actual	FY05 Actual	FY06 Actual	FY07 Actual	FY08 Actual	FY09 Actual
Elementary	5,293	5,212	5,097	5,002	4,970	4,938	4,975	5,133	5,318	5,408	5,498
Middle School	2,614	2,640	2,672	2,688	2,688	2,673	2,620	2,534	2,474	2,453	2,480
High School	3,259	3,396	3,477	3,560	3,618	3,656	3,673	3,748	3,709	3,695	3,592
Total Enrollment	11,166	11,248	11,246	11,250	11,276	11,267	11,268	11,415	11,501	11,556	11,570
Change from Previous Year		82	-2	4	26	-9	1	147	86	55	14

Source: Newton Public Schools



**Table 2: Enrollment Projections for the Newton Public Schools**

Level	Actual 2008-09	Projections*				
		2009-10	2010-11	2011-12	2012-13	2013-14
Elementary	5,498	5,488	5,470	5,405	5,309	5,215
Middle	2,480	2,568	2,640	2,778	2,830	2,916
High	3,592	3,507	3,470	3,460	3,562	3,660
Total	11,570	11,563	11,580	11,643	11,701	11,791
Change from Previous Year	14	-7	17	63	58	90
% Change from Previous Year			0.1%	0.5%	0.5%	0.8%

\* Projections using 5 Year Ratios; Includes a separate forecast for kindergarten based on three years' Trends

Source: Newton Public Schools (as of November 2008)

The School Committee and the administration at the Newton Public Schools give a lot of thought to class sizes. They have explicit guidelines and make purposeful choices.

From 2000-01 to 2007-2008, elementary classes ranged from a high average of 21.1 students in 2006-07 to a low average of 19.8 students in 2003-04. As a result of the Newton Public Schools reductions in instructional staff for the current fiscal year (2008-09), the current elementary school class sizes average 21.9 students, which is 1.8 more than last year and the highest average class size in the last nine years.

Average middle school class sizes have ranged from a low of 20.0 students in 2000-01 to a high of 21.8 students in 2006-07. In the middle school, it currently stands at 21.2, an increase of 0.5 from last year. The high schools' lowest class size average was 19.6 students in 2000-01 as compared to 21.4 students currently and a high of 21.8 in 2005-06.

**Table 3: Average Class Sizes for Elementary Classes (K-5) and Secondary School Classes in English, World Language, Science, History and Social Sciences and Math  
2000-01 through 2008-09**

Grade Level	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Elementary	20.3	20.3	20.1	19.8	20.3	20.6	21.1	20.1	21.9
Middle	20.0	22.1	21.0	21.4	21.5	21.1	21.8	20.7	21.2
High	19.6	21.1	20.4	21.3	21.7	21.8	21.2	21.2	21.4

Source: Newton Public Schools

In addition to average class size, the percent of classes that are small (i.e., fewer than 20 students) and large (i.e., 25 or more students) is also useful for assessing the status of the Newton Public Schools.

The data from 2000-01 to 2008-09 for percentage of classes that are small show a major change at the elementary school level this year. The best year at the elementary school level was in 2003-04 when 43.8% of the classes had fewer than 20 students. Last year, it was at 42.4%. But, in the current academic year, the percentage fell to 16.0%. At the middle school level, the best year was in 2000-01 when 35.8% of the classes had fewer than 20 students. The worst year was in 2001-02 with 18.7% and this year it stands at 25.2%. At the high school level, the best year for small class sizes was also in 2000-01 when 45.4% had fewer than 20 students. The worst year was in 2005-6 with 26.7% and it now stands at 29.5%.

The data from 2000-01 to 2008-09 for the percent of classes that are large (with 25 or more students) show a large increase at the elementary, middle and high school levels this year. At the elementary level, the best year was in 2002-03 when only 1.6% of the classes had more than 25 years. Last year, only 5.5% of the elementary classes were large. But, in the current academic year, it increased to 18.8%, the highest level in the last nine years. At the middle school level, prior to this year, classes with 25 or more students fluctuated quite a bit from a high of 23.0% in 2001-02 to a low of 7.5% last year. This year it stands at 14.1%. At the high school level, the best year was in 2000-01 with 13.1% of the classes having more than 25 students. The worst year was in 2004-05 with 29.7% being large. Classes with more than 25 students increased from 21.0% to 27.9% from 2007-08 to 2008-09.

From the Citizen Advisory Group vantage point, the elementary school data on class size are the most troubling. The School Committee in Newton has a target goal for Kindergarten and Grade 1 of 20 students or below; the goal for Grades 2-5 is fewer than 25 students. The target goal is 90 students per middle school team and no more than 15% of high school classes having more than 25 students.<sup>3</sup> In the eyes of many educators, it is most critical to keep Kindergarten and grade 1 (and arguably grade 2) below 20 students given the needs of students that age and the importance of learning to read and developing a sense of numeracy in those years. The Distribution of Elementary Class Sizes data for Newton that is available at the Newton Public Schools website currently show that nearly 80% of the Kindergarten and Grade 1 classes have more than 20 students in 2008-09, a statistic that is worrisome. Last year, only 45% of these classes had more than 20 students. To repeat, this doubling in class size at the young ages raises concerns.

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<sup>3</sup> Newton Public Schools Fiscal 2009, Superintendent's Proposed Budget. January 14, 2008.

**Table 4: Percent of Classes with Fewer than 20 Students and  
with 25 or More Students  
(2000-01 to 2008-09)**

	Fewer than 20 Students								
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Elementary	38.4%	36.6%	42.7%	43.8%	36.5%	38.3%	23.5%	42.4%	16.0%
Middle	35.8%	18.7%	25.7%	21.6%	20.7%	24.9%	19.1%	29.2%	25.2%
High	45.4%	34.2%	39.4%	29.3%	29.2%	26.7%	31.3%	29.4%	29.5%
	25 Students or More								
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Elementary	3.6%	2.0%	1.6%	4.4%	3.7%	9.6%	8.0%	5.5%	18.8%
Middle	10.3%	23.0%	14.8%	14.0%	15.4%	10.1%	17.5%	7.5%	14.1%
High	13.1%	19.6%	13.9%	19.8%	29.7%	29.0%	22.9%	21.0%	27.9%

Note: For 2000-01 and 2001-02, the data are for percent of classes with 24 or more students rather than 25 or more students

Source: Newton Public Schools

The Mayor of Newton, with some input from the Board of Aldermen and the School Committee, decides what portion and dollar amount of the total City of Newton budget will be allocated to the schools. Using the traditional accounting statements, currently the Newton Public Schools receive a little more than half (55.9%) of Newton's total budget. 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%). (See the Citizen Advisory Group Benchmarking Report for more details.) Another accounting method allocates expenses like retirement pensions and benefits and debt and interest to the Schools or to the municipal departments. Using this method, in FY09, the Newton Public Schools accounts for 61.0% of the City's expenses, an increase from 57.9% in FY2001. (See the Appendix.)

**Table 5: City of Newton General Fund Budget (FY09)**

	<u>Expenditures</u>	<u>% of Total</u>
Newton Public Schools	\$158,484,693	55.4%
Municipal Departments	\$84,440,253	29.5%
Retirement Pensions and Benefits	\$20,961,920	7.3%
Debt and Interest	\$10,011,346	3.5%
State Assessments	\$5,603,855	2.0%
All Other	<u>\$6,498,791</u>	<u>2.3%</u>
<b>TOTAL</b>	<b>\$286,000,858</b>	<b>100.0%</b>

Source: City of Newton Comptrollers Office, January 2009.

The budget for the Newton Public Schools can also be viewed in light of the rate of growth for both the total revenues of the City of Newton and for individual departments and expense categories. Table 6 shows a fifteen year trend analysis of revenues and expenditures for the City of Newton. Expenditures by the Newton Public Schools have grown at a consistently higher rate than both Newton's revenues and expenditures by municipal departments (e.g., public safety and public works). In other words, Newton has been allocating increasing amounts of funding to the schools. We would note that school costs in almost every city and town in Massachusetts are exceeding the rate of growth in both revenues and the rate of growth on the municipal side, often due to increases in special education, benefits, and utilities. While municipal departments face the same issue with benefits and utilities, they do not have the costs associated with special education.

**Table 6: 15 Year Trend Analysis  
Compound Annual Growth Rate in Revenues and Expenditures of the City of Newton**

	Fiscal Year 2008 Actual	Compound Annual Growth Rates		
		5 years	10 years	15 years
		2003-2008	1998-2008	1993-2008
<b>REVENUES:</b>				
Property Taxes	\$215,239,592	3.7%	4.6%	4.3%
Intergovernmental Revenue	\$29,633,992	6.6%	8.0%	9.5%
Other (1)	\$27,306,861	3.3%	2.4%	4.3%
<b>Total Revenue</b>	<b>\$272,180,445</b>	<b>3.9%</b>	<b>4.6%</b>	<b>4.7%</b>
<b>EXPENDITURES:</b>				
<b>Public Education</b>	<b>\$152,728,991</b>	<b>4.7%</b>	<b>6.5%</b>	<b>5.9%</b>
General Government	\$12,869,213	2.7%	3.7%	4.0%
Public Safety	\$31,150,150	1.3%	3.1%	3.2%
Public Works	\$19,871,674	1.8%	2.4%	1.9%
Health & Human Services	\$3,486,798	4.4%	5.8%	6.0%
Culture & Recreation	\$10,430,886	3.5%	4.5%	4.1%
<b>Total Municipal Departments</b>	<b>\$77,808,721</b>	<b>2.1%</b>	<b>3.3%</b>	<b>3.2%</b>
Debt & Interest	\$7,426,543	2.5%	3.0%	4.9%
Pensions & Retiree Benefits	\$19,666,614	6.9%	7.9%	4.2%
Other (2)	\$7,299,588	-0.1%	-2.1%	0.8%
<b>Total Expenditures</b>	<b>\$264,930,457</b>	<b>3.8%</b>	<b>5.1%</b>	<b>4.7%</b>

Source: Data from City of Newton Comptroller's Office. Analysis by Citizen Advisory Group.

The overall financial picture of the City is sobering. The Citizen Advisory Group report on Municipal Revenue concluded that Newton’s opportunities to increase revenues are modest. In fact, Newton can expect cuts in local aid from the Commonwealth. The Citizen Advisory Group on Municipal Cost Structure did not discover any elixirs that will immediately and significantly reduce the cost of Newton’s municipal services and even calls for funding of new initiatives like retiree health care. A forthcoming Citizen Advisory Group report on Newton’s Capital Resources will highlight the substantial underfunding of capital assets and call for significant increased investments in this area. In light of these factors, the Citizen Advisory Group thinks the Newton Public Schools may not receive in the future the percent increases in its budget that it has had in the past unless voters approve overrides.

The Newton Public Schools’ budget has increased every year since FY82. The school system received particularly large increases of 10.2% in FY03 (after an override vote) and of 7.7% in FY08. (It is worth noting that these are nominal budget increases and have not been adjusted for inflation.)

**Table 7: Newton Public Schools Budget (FY1990 – FY2009)**

Fiscal Year	Total Budget	% Increase
FY90	\$56,590,590	7.4%
FY91	\$60,600,642	7.1%
FY92	\$62,100,590	2.5%
FY93	\$62,900,590	1.3%
FY94	\$66,958,019	6.5%
FY95	\$69,938,590	4.5%
FY96	\$74,668,690	6.8%
FY97	\$80,894,411	8.3%
FY98	\$88,567,403	9.5%
FY99	\$95,500,709	7.8%
FY00	\$101,561,577	6.3%
FY01	\$107,996,320	6.3%
FY02	\$113,175,197	4.8%
FY03	\$124,675,197	10.2%
FY04	\$127,298,456	2.1%
FY05	\$132,198,007	3.8%
FY06	\$137,685,240	4.2%
FY07	\$143,949,686	4.5%
FY08	\$155,077,580	7.7%
FY09	\$160,085,168	3.2%

Source: Newton Public Schools

The Newton Public Schools will spend \$160 million this school year, a 3.2% increase over the FY08 budget. While the Newton Public Schools’ budget has increased every year since FY82, it has not increased as fast as some critical budget components (e.g., health insurance, special education costs, and utilities). (See Table 8: NPS Budget Detail FY04-FY08.)

- Salaries accounted for \$108 million or over 67% of the General Fund school budget in FY08. According to the Newton Public Schools, the current three-year contract with the Newton Teachers Association resulted in annual salary increases of 1.5%, 3.1%, and 3.0% for FY07, FY08 and FY09 respectively. In addition to these salary increases, step and level increases<sup>4</sup> (net of savings due to turnover of staff) averaged 1.5% per year for FY07 through FY09. As a result, salaries, in total, increased by 3.0%, 4.6%, and 4.5% for FY07 through FY09.<sup>5</sup> In the last three years, therefore, salaries grew at a greater rate than the overall school budget only in FY09. Salaries also grew at a lower or the same rate as the City of Newton's revenues in both FY07 and FY08.<sup>6</sup>
- Benefits, a \$22 million line item in FY08, had a compound annual growth rate of 9.4% from FY04 – FY08.
- Special Education, a \$39.9 million line item in FY08, had a compound annual growth rate of 9.16% from 1998 – 2008 while the total school budget grew at 5.82% during this period. (The section of this report on Special Education provides further information.)
- Utilities, a \$6 million line item in FY08, had a compound annual growth rate of 13.2% from FY04 – FY08.

In summary, the compound annual growth rate from FY99 to FY08 in enrollment was 0.4% while full time equivalents increased 1.3% and the total budget grew at 5.0%.

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<sup>4</sup> Teachers receive an increase in pay based on years of experience (known as steps) and education levels (also known as lanes).

<sup>5</sup> Note: For comparison purposes, the total budget of the Newton Public Schools increased by 4.5%, 7.7% and 3.2% for FY07 through FY09. The compound annual growth rate for the total budget from FY04 to FY08 was 5.0%.

<sup>6</sup> General fund revenues for the City of Newton grew 5.1% in FY07 and 4.6% in FY08 compared to the previous year.

**Table 8: Newton Public Schools Budget Detail FY04 - FY08**

	FY04	FY05	FY06	FY07	FY08	Percent of Total FY08 Budget	Compound Annual Growth Rate FY04 to FY08
Enrollment	11,276	11,267	11,268	11,415	11,501		0.5%
% Change from Previous Year		-0.1%	0.0%	1.3%	0.8%		
Personnel: Full Time Equivalents	1,706	1,714	1,680	1,694	1,796		1.3%
% Change from Previous Year		1.5%	-2.0%	0.8%	6.0%		
Salaries	\$91,138,495	\$94,232,412	\$96,229,875	\$99,615,536	\$107,762,306	69.5%	4.3%
Benefits	\$15,519,963	\$16,916,538	\$17,979,851	\$19,690,644	\$22,203,861	14.3%	9.4%
Subtotal Compensation	\$106,658,458	\$111,148,950	\$114,209,726	\$119,306,180	\$129,966,167	83.8%	5.1%
Non Personnel Expenses							
Utilities	\$3,777,109	\$4,203,937	\$5,505,416	\$5,891,654	\$6,212,784	4.0%	13.2%
Special Ed Out of District Tuitions	\$5,928,085	\$4,905,505	\$5,362,752	\$4,485,189	\$5,706,988	3.7%	-0.9%
Special Ed Transportation	\$1,650,181	\$1,896,474	\$1,988,331	\$2,117,222	\$2,453,594	1.6%	10.4%
Maintenance	\$1,398,583	\$1,527,096	\$2,149,317	\$2,516,995	\$1,914,100	1.2%	8.2%
Contract Services	\$1,210,419	\$1,458,769	\$1,223,132	\$1,625,015	\$1,693,213	1.1%	8.8%
Regular Transportation	\$1,477,858	\$1,552,631	\$1,634,003	\$1,654,774	\$1,629,150	1.1%	2.5%
Per Pupil Allocation	\$1,309,367	\$1,241,430	\$1,147,132	\$1,091,026	\$1,211,631	0.8%	-1.9%
Other (1)	<u>\$4,346,902</u>	<u>\$4,260,833</u>	<u>\$4,614,428</u>	<u>\$5,261,115</u>	<u>\$4,289,953</u>	<u>2.8%</u>	<u>-0.3%</u>
Subtotal Non Personnel Expenses	\$21,098,504	\$21,046,675	\$23,624,511	\$24,642,990	\$25,111,413	16.2%	4.4%
Grand Total	\$127,756,962	\$132,195,625	\$137,834,237	\$143,949,171	\$155,077,580	100.0%	5.0%
% Change from Previous Year		3.5%	4.3%	4.4%	7.7%		

(1) Other: Equipment Repair, Textbooks and Instructional Materials, Custodial & Cleaning Supplies, In-State and Out of State Travel, Admin Office Supplies & Expenses, Equipment, Athletics, School lunch subsidy, Capital Expenditures.

Source: Newton Public Schools

As a result of important components of the school expenses growing faster than the overall budget, the Newton Public Schools have had to make difficult choices in FY04 – FY07 and again in FY09 to produce a balanced budget. These decisions are reflected in part in the data on the staffing history. With salaries and benefits comprising such a large part of the total budget, Newton Public Schools inevitably has to control the number of employees if revenues do not grow at the same pace as the expenses related to the historical level of programs and services. The number of full time equivalents in the last ten years shows an uneven, up and down pattern. As mentioned previously, the compound annual growth rate from FY99 to FY08 in enrollment was 0.4% while full time equivalents increased 1.3%. (See Table 9: Newton Public Schools: General Fund Staffing History - FY99 to FY08.) Interestingly, for those categories with a large number of personnel, only aides that help special education students grew at a high rate. (This is discussed in depth later in this report.)



**Table 9: Newton Public Schools: General Fund Staffing History (FY99 to FY08)**

CATEGORY	RESPONSIBILITY CENTER	POSITION DESCRIPTION	FY99 Actual	FY00 Actual	FY01 Actual	FY02 Actual	FY03 Actual	FY04 Actual	FY05 Actual	FY06 Actual	FY07 Actual	FY08 Actual	
<b>ADMINISTRATION</b>			21	23	23	24	28	31	31	30	29	38	
AIDES	Special Education Aides		195	228	249	276	299	275	275	261	271	234	
	Other Aides (1)		101	113	113	100	92	101	109	103	108	192	
<b>AIDES Total</b>			297	340	362	375	391	376	384	363	378	426	
<b>CLERICAL</b>			93	91	91	90	92	84	85	81	80	79	
<b>CENTRAL STAFF</b>			7	7	8	8	8	7	7	7	7	7	
<b>OPERATIONS (Custodial and Maintenance)</b>			92	92	94	94	97	90	93	89	86	89	
INSTRUCTION	Elementary Education	Elementary and Reserve Teachers	231	245	248	242	241	245	238	240	245	261	
	Secondary Education	Middle School Teachers	190	194	194	184	190	186	185	177	169	175	
		High School Teachers	215	238	243	236	248	246	243	242	247	248	
		Other Teachers (2)				4	2	2	2	1	1	4	
		English Language Learners	English Language Learners Teachers	17	17	17	18	19	19	19	20	21	22
	Career & Technical Education	Career & Tech Ed Teachers	9	9	8	8	10	10	10	10	10	10	
	Information Technology	Instructional Technology Specialists	11	11	11	11	11	11	11	11	11	11	12
		Librarians	26	26	25	26	26	24	24	20	22	23	
	Curriculum & Instruction	Elementary Art Teachers	14	15	15	14	14	14	14	14	14	12	14
		Elementary Literacy Specialists	9	9	7	8	15	15	15	15	15	16	15
		Elementary Music Teachers	15	15	15	14	15	15	15	16	15	15	17
		Elementary PE Teachers	15	16	16	16	16	16	16	15	15	15	17
		Other (3)	10	16	17	12	11	10	10	5	5	9	
		Total	63	70	70	63	70	70	69	65	63	71	
	Pupil Services	Classroom Teachers	42	43	43	50	49	48	52	55	53	58	
		Inclusion Facilitators	9	14	23	23	24	25	26	27	26	25	
		Learning Center Teachers	54	54	60	57	63	62	62	61	61	57	
		Pre-K Teachers	7	8	6	7	7	8	9	10	10	10	
		Speech & Language					15	17	18	19	21	19	
		Other (4)	2	2	0	4	5	4	5	5	7	8	
<b>INSTRUCTION Total</b>			891	948	966	990	983	979	976	969	969	1,008	
<b>PUPIL SERVICES (Guidance Counselors, Psychologists, Social Workers, Other)</b>			63	67	72	69	71	70	70	74	77	80	
SUPERVISORY	Elementary Education	Principals	15	15	15	15	15	15	15	15	15	15	
	Secondary Education (5)		47	47	48	48	48	48	48	47	48	47	
	Curriculum & Instruction	Coordinators	9	9	9	9	9	8	8	8	8	9	
	Other Supervisory (6)		12	12	12	13	15	13	13	13	12	12	
<b>SUPERVISORY Total</b>			68	68	68	70	72	69	69	68	68	68	
<b>Grand Total</b>			1,531	1,636	1,685	1,682	1,742	1,706	1,714	1,681	1,694	1,796	
<b>Percent Difference Previous Year</b>				6.9%	3.0%	-0.2%	3.6%	-2.1%	0.5%	-2.0%	0.8%	6.0%	

**Table 8: Newton Public Schools Budget Detail FY04 - FY08**

	FY04	FY05	FY06	FY07	FY08	Percent of Total FY08 Budget	Compound Annual Growth Rate FY04 to FY08
Enrollment	11,276	11,267	11,268	11,415	11,501		0.5%
% Change from Previous Year		-0.1%	0.0%	1.3%	0.8%		
Personnel: Full Time Equivalents	1,706	1,714	1,680	1,694	1,796		1.3%
% Change from Previous Year		1.5%	-2.0%	0.8%	6.0%		
Salaries	\$91,138,495	\$94,232,412	\$96,229,875	\$99,615,536	\$107,762,306	69.5%	4.3%
Benefits	<u>\$15,519,963</u>	<u>\$16,916,538</u>	<u>\$17,979,851</u>	<u>\$19,690,644</u>	<u>\$22,203,861</u>	<u>14.3%</u>	<u>9.4%</u>
Subtotal Compensation	\$106,658,458	\$111,148,950	\$114,209,726	\$119,306,180	\$129,966,167	83.8%	5.1%
Non Personnel Expenses							
Utilities	\$3,777,109	\$4,203,937	\$5,505,416	\$5,891,654	\$6,212,784	4.0%	13.2%
Special Ed Out of District Tuitions	\$5,928,085	\$4,905,505	\$5,362,752	\$4,485,189	\$5,706,988	3.7%	-0.9%
Special Ed Transportation	\$1,650,181	\$1,896,474	\$1,988,331	\$2,117,222	\$2,453,594	1.6%	10.4%
Maintenance	\$1,398,583	\$1,527,096	\$2,149,317	\$2,516,995	\$1,914,100	1.2%	8.2%
Contract Services	\$1,210,419	\$1,458,769	\$1,223,132	\$1,625,015	\$1,693,213	1.1%	8.8%
Regular Transportation	\$1,477,858	\$1,552,631	\$1,634,003	\$1,654,774	\$1,629,150	1.1%	2.5%
Per Pupil Allocation	\$1,309,367	\$1,241,430	\$1,147,132	\$1,091,026	\$1,211,631	0.8%	-1.9%
Other (1)	<u>\$4,346,902</u>	<u>\$4,260,833</u>	<u>\$4,614,428</u>	<u>\$5,261,115</u>	<u>\$4,289,953</u>	<u>2.8%</u>	<u>-0.3%</u>
Subtotal Non Personnel Expenses	\$21,098,504	\$21,046,675	\$23,624,511	\$24,642,990	\$25,111,413	16.2%	4.4%
Grand Total	\$127,756,962	\$132,195,625	\$137,834,237	\$143,949,171	\$155,077,580	100.0%	5.0%
% Change from Previous Year		3.5%	4.3%	4.4%	7.7%		

(1) Other: Equipment Repair, Textbooks and Instructional Materials, Custodial & Cleaning Supplies, In-State and Out of State Travel, Admin Office Supplies & Expenses, Equipment, Athletics, School lunch subsidy, Capital Expenditures.

Source: Newton Public Schools

**Table 9: Newton Public Schools: General Fund Staffing History (FY99 to FY08)**

CATEGORY	RESPONSIBILITY CENTER	POSITION DESCRIPTION	FY99 Actual	FY00 Actual	FY01 Actual	FY02 Actual	FY03 Actual	FY04 Actual	FY05 Actual	FY06 Actual	FY07 Actual	FY08 Actual	
<b>ADMINISTRATION</b>			21	23	23	24	28	31	31	30	29	38	
AIDES	Special Education Aides		195	228	249	276	299	275	275	261	271	234	
	Other Aides (1)		101	113	113	100	92	101	109	103	108	192	
<b>AIDES Total</b>			297	340	362	375	391	376	384	363	378	426	
<b>CLERICAL</b>			93	91	91	90	92	84	85	81	80	79	
<b>CENTRAL STAFF</b>			7	7	8	8	8	7	7	7	7	7	
<b>OPERATIONS (Custodial and Maintenance)</b>			92	92	94	94	97	90	93	89	86	89	
INSTRUCTION	Elementary Education	Elementary and Reserve Teachers	231	245	248	242	241	245	238	240	245	261	
	Secondary Education	Middle School Teachers	190	194	194	184	190	186	185	177	169	175	
		High School Teachers	215	238	243	236	248	246	243	242	247	248	
		Other Teachers (2)				4	2	2	2	1	1	4	
		English Language Learners	English Language Learners Teachers	17	17	17	18	19	19	19	20	21	22
	Career & Technical Education	Career & Tech Ed Teachers	9	9	8	8	10	10	10	10	10	10	
	Information Technology	Instructional Technology Specialists	11	11	11	11	11	11	11	11	11	12	
		Librarians	26	26	25	26	26	24	24	20	22	23	
	Curriculum & Instruction	Elementary Art Teachers	14	15	15	14	14	14	14	14	14	12	14
		Elementary Literacy Specialists	9	9	7	8	15	15	15	15	15	16	15
		Elementary Music Teachers	15	15	15	14	15	15	15	16	15	15	17
		Elementary PE Teachers	15	16	16	16	16	16	15	15	15	15	17
		Other (3)	10	16	17	12	11	10	10	5	5	9	
		Total	63	70	70	63	70	70	69	65	63	71	
	Pupil Services	Classroom Teachers	42	43	43	50	49	48	52	55	53	58	
		Inclusion Facilitators	9	14	23	23	24	25	26	27	26	25	
		Learning Center Teachers	54	54	60	57	63	62	62	61	61	57	
		Pre-K Teachers	7	8	6	7	7	8	9	10	10	10	
		Speech & Language					15	17	18	19	21	19	
		Other (4)	2	2	0	4	5	4	5	5	7	8	
<b>INSTRUCTION Total</b>			891	948	966	990	983	979	976	969	969	1,008	
<b>PUPIL SERVICES (Guidance Counselors, Psychologists, Social Workers, Other)</b>			63	67	72	69	71	70	70	74	77	80	
SUPERVISORY	Elementary Education	Principals	15	15	15	15	15	15	15	15	15	15	
	Secondary Education (5)		47	47	48	48	48	48	48	47	48	47	
	Curriculum & Instruction	Coordinators	9	9	9	9	9	8	8	8	8	9	
	Other Supervisory (6)		12	12	12	13	15	13	13	13	12	12	
<b>SUPERVISORY Total</b>			68	68	68	70	72	69	69	68	68	68	
<b>Grand Total</b>			1,531	1,636	1,685	1,682	1,742	1,706	1,714	1,681	1,694	1,796	
<b>Percent Difference Previous Year</b>				6.9%	3.0%	-0.2%	3.6%	-2.1%	0.5%	-2.0%	0.8%	6.0%	

- (1) Other Aides: Information Technology, Fine Arts, Science, World Language, Early Literacy, Specialists, Pre-K
  - (2) Other Teachers: Enrichment Coordinators, Springboard, MCAS, Reserve
  - (3) Other Curriculum and Instruction: (China Institute, Community Service, Data & Assessment Specialist, Elementary Academic Initiatives Facilitator, Elementary Curriculum Specialists, Health Specialist, Middle School Literacy Specialists, PTA Creative Arts, Research Assistant (MCAS) Theater Technical Assistants, Elementary School Coaches
  - (4) Other Pupil Services (Adaptive Physical Education, One-on-One Program, Vision Specialists)
  - (5) Secondary Education Supervisory: Assistant Principals, Department Heads, Housemasters, Principals
  - (6) English Language Learners, Career & Technical Ed, Information Technology, Curriculum and Instruction Administration & Early Childhood & MCAS & Mentor; Pupil Services Administration & Elementary Coordinator & Guidance Dept & Middle School Assistant Principals & Pre-K Coordinator & SPED Dept. Heads & Speech Coordinator
- NOTE: The figures in this table are calculated using the Newton Public Schools General Fund only and do not include staff paid on Federal, State or Private Grants or Revolving Funds.  
Source: Newton Public Schools

#### EXPLANATIONS FROM NPS:

Administration: **The change from 29 to 38 FTE's in the "Administration" Category from FY07 to FY08 is due to the following factors:**

- 1.) Pupil Services: The reorganization of the Pupil Services Administration for one year due to the retirement of the Assistant Superintendent for Pupil Services led to the addition of 2.4 interim positions for FY08. Positions were redefined for that year and there was no less than 1.0 FTE increase.
- 2.) Middle School Technology Salaries of 2.3 FTE's were re-categorized during NTA negotiations from Unit C aide positions to Unit E administrative positions, so no new FTE's.
- 3.) Information Technology Administration was increased by 2.0 FTE's due to increased IT needs.
- 4.) Purchasing and Transportation: The former position of 1.0 Purchasing and Transportation Coordinator was split into two new full time positions adding 1.0 FTE, but both positions at lower salary level.
- 5.) The High School Planning Liaison position was increased by 0.2 FTE due to increased needs during the Newton North construction period.
- 6.) A 1.0 secretarial position in the Office of the Deputy Superintendent was reclassified from a NESA secretarial position to a non-aligned Administrative Secretarial position, so no new FTE.

**Total Increase = 8.9 FTE from FY07 to FY08**

**The change from 21 to 30 FTE's in the "Administration" Category from FY99 to FY06 is due to the following factors:**

- 1.) Administrative Reorganization: A reorganization of the Ed Center administrative staff went into effect for the FY04 fiscal year. This led to the creation of some new positions and the elimination of others, in the categories of Administration, Clerical, Central Staff and Supervisory. The following changes were made in the Administration Category: 2 new positions in Human Resources, 1 new position in Curriculum & Instruction (later reduced to 0.55), 2 new positions in Pupil Services, -1.0 position in Business, Finance & Planning, -0.5 position in Secondary Ed and -1.0 position in Information Technology. The net effect is an addition of 2.0 positions in Administration. FYI-There were also reductions in clerical staff as part of the reorganization to more than offset the increases.
- 2.) Open District: 1.0 Open District (Technology Support Position) was added at the high school level in FY03.
- 3.) Production Center: 1.0 Production Manager was added at the Ed Center in FY01, cost offset by printing costs paid by school and department budgets.
- 4.) Information Technology: Information Technology Administration was increased by 4.0 FTE's from FY99 to FY06 due to increased IT needs.
- 5.) Business, Finance & Planning: The Planning Specialist position was created in FY00 as a 1.0 position. This position had formerly been in the previous Planning & Operations Department as Office Manager and may not have been classified as Administration.

Total Increase = 9.0 FTE from FY99 to FY06

Aides: The increase in aides' positions during FY08 is primarily due to an increase in Pupil Services aides of 40.0 FTEs. These staffing increases have been addressed by the Pupil Services Department.

Elementary and Reserve Teachers: The overall increase in Elementary and Reserve Teachers from FY04 through FY08 has been in line with the increases in elementary enrollments during the period.

Speech and Language: Speech and Language Teachers have increased by 6.4 FTE's from FY03 to FY08. This staffing increase has been addressed by the Pupil Services Department.

Administrative Reorganization in FY'04:

The reorganization saved approximately \$750,000 at the same time increasing the number of professional positions and decreasing secretarial positions. This savings has basically been realized on an ongoing basis since the number of positions did not increase after that until 2008-09 when NPS added the Assistant Superintendent for Elementary Education. That addition was for a zero net increase due to several retirements among the administrative staff.

- (1) Other Aides: Information Technology, Fine Arts, Science, World Language, Early Literacy, Specialists, Pre-K
  - (2) Other Teachers: Enrichment Coordinators, Springboard, MCAS, Reserve
  - (3) Other Curriculum and Instruction: (China Institute, Community Service, Data & Assessment Specialist, Elementary Academic Initiatives Facilitator, Elementary Curriculum Specialists, Health Specialist, Middle School Literacy Specialists, PTA Creative Arts, Research Assistant (MCAS) Theater Technical Assistants, Elementary School Coaches
  - (4) Other Pupil Services (Adaptive Physical Education, One-on-One Program, Vision Specialists)
  - (5) Secondary Education Supervisory: Assistant Principals, Department Heads, Housemasters, Principals
  - (6) English Language Learners, Career & Technical Ed, Information Technology, Curriculum and Instruction Administration & Early Childhood & MCAS & Mentor; Pupil Services Administration & Elementary Coordinator & Guidance Dept & Middle School Assistant Principals & Pre-K Coordinator & SPED Dept. Heads & Speech Coordinator
- NOTE: The figures in this table are calculated using the Newton Public Schools General Fund only and do not include staff paid on Federal, State or Private Grants or Revolving Funds.  
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#### EXPLANATIONS FROM NPS:

Administration: **The change from 29 to 38 FTE's in the "Administration" Category from FY07 to FY08 is due to the following factors:**

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- 3.) Information Technology Administration was increased by 2.0 FTE's due to increased IT needs.
- 4.) Purchasing and Transportation: The former position of 1.0 Purchasing and Transportation Coordinator was split into two new full time positions adding 1.0 FTE, but both positions at lower salary level.
- 5.) The High School Planning Liaison position was increased by 0.2 FTE due to increased needs during the Newton North construction period.
- 6.) A 1.0 secretarial position in the Office of the Deputy Superintendent was reclassified from a NESAs secretarial position to a non-aligned Administrative Secretarial position, so no new FTE.

**Total Increase = 8.9 FTE from FY07 to FY08**

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- 2.) Open District: 1.0 Open District (Technology Support Position) was added at the high school level in FY03.
- 3.) Production Center: 1.0 Production Manager was added at the Ed Center in FY01, cost offset by printing costs paid by school and department budgets.
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- 5.) Business, Finance & Planning: The Planning Specialist position was created in FY00 as a 1.0 position. This position had formerly been in the previous Planning & Operations Department as Office Manager and may not have been classified as Administration.

Total Increase = 9.0 FTE from FY99 to FY06

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Elementary and Reserve Teachers: The overall increase in Elementary and Reserve Teachers from FY04 through FY08 has been in line with the increases in elementary enrollments during the period.

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Administrative Reorganization in FY'04:

The reorganization saved approximately \$750,000 at the same time increasing the number of professional positions and decreasing secretarial positions. This savings has basically been realized on an ongoing basis since the number of positions did not increase after that until 2008-09 when NPS added the Assistant Superintendent for Elementary Education. That addition was for a zero net increase due to several retirements among the administrative staff.

**Table 10: Staffing - Compound Annual Growth Rates**

			FY08	FY99- FY08	FY04- FY08
ENROLLMENT			11,570	0.4	0.7
CATEGORY	RESPONSIBILITY CENTER	POSITION DESCRIPTION			
ADMINISTRATION			38	6.8%	5.2%
AIDES		Special Education Aides	234	2.0%	-4.0%
		Other Aides (1)	192	7.4%	17.4%
AIDES Total			426	4.1%	3.2%
CLERICAL			79	-1.8%	-1.5%
CENTRAL STAFF			7	0.0%	0.0%
OPERATIONS (Custodial and Maintenance)			89	-0.4%	-0.3%
INSTRUCTION	Elementary Education	Elementary and Reserve Teachers	261	1.4%	1.6%
	Secondary Education	Middle School Teachers	175	-0.9%	-1.5%
		High School Teachers	248	1.6%	0.2%
		Other Teachers (2)	4	n.a.	18.9%
		English Language Learners	English Language Learners Teachers	22	2.9%
	Career & Technical Education	Career & Tech Ed Teachers	10	1.2%	0.0%
	Information Technology	Instructional Technology Specialists	12	1.0%	2.2%
		Librarians	23	-1.4%	-1.1%
	Curriculum & Instruction	Elementary Art Teachers	14	0.0%	0.0%
		Elementary Literacy Specialists	15	5.8%	0.0%
		Elementary Music Teachers	17	1.4%	3.2%
		Elementary PE Teachers	17	1.4%	1.5%
		Other (3)	9	-1.2%	-2.6%
		Total	71	1.3%	0.4%
	Pupil Services	Classroom Teachers	58	3.7%	4.8%
		Inclusion Facilitators	25	12.0%	0.0%
		Learning Center Teachers	57	0.6%	-2.1%
		Pre-K Teachers	10	4.0%	5.7%
		Speech & Language	19	n.a.	2.8%
		Other (4)	8	16.7%	18.9%
INSTRUCTION Total			1,008	1.4%	0.7%
PUPIL SERVICES (Guidance Counselors, Psychologists, Social Workers, Other)			80	2.7%	3.4%
SUPERVISORY	Elementary Education	Principals	15	0.0%	0.0%
	Secondary Education (5)		47	0.0%	-0.5%
	Curriculum & Instruction	Coordinators	9	0.0%	3.0%
	Other Supervisory (6)		12	0.0%	-2.0%
SUPERVISORY Total			68	0.0%	-0.4%
Grand Total			1,796	1.8%	1.3%

Source: Newton Public Schools. Staffing from the General Fund.

#### **IV. Goals and Choices of the Newton Public Schools**

The Citizen Advisory Group has discerned a number of key choices made by the School Committee of the Newton Public Schools and the Superintendent and administration that demonstrate a number of their fundamental principles and goals:

- Provide an excellent education to all students, not just in the core academics but in all aspects of education (e.g., robust athletics, arts and vocational programs)
- Maintain small class sizes and small teaching loads at all levels
- Attract and retain skilled and dedicated teachers and administrators using excellent compensation as one tool (e.g., goal of top 5 in Massachusetts for teacher pay and benefits)
- Give priority to people (especially classroom teachers and compensation) over buildings, maintenance, technology, and equipment when tradeoffs are required
- Implement mandates fully, incorporating the spirit of the laws, in pursuing an excellent education for all students, including those students with special education plans
- Enact policies that address the wide range of economic needs of families in Newton (e.g., keep fees low, make transportation accessible and at a low cost)
- Foster respect for individuals of differing races, religions, ethnicities, economic classes, learning styles and abilities

According to an analysis by the Citizen Advisory Group, the funding required to support these goals and the quality and quantity of services within the Newton Public Schools using the current educational model requires an annual growth rate in expenditures of 5.9%. This often exceeds the increase in revenues provided by the City. Consequently, even though the school budget has increased on a year-to-year basis, the size of the increase has not always allowed for “maintenance of effort.”

Having a gap between needed increases to sustain historical levels of service and revenues is not unique to Newton. In fact, we have seen parallel versions of these issues emerge in many, many cities and towns throughout the state. Last year, CommonWealth Magazine featured an article entitled, “Municipal Meltdown” in its Fall 2007 issue that describes just these problems.<sup>7</sup>

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<sup>7</sup> “For more and more Massachusetts cities and towns, the financial equation isn’t adding up. The costs of local government are simply rising at a rate far faster than the revenues used to pay for services. Though homeowners have been howling over steadily rising bills, overall property tax collections are held in check by Proposition 21/2, the state’s landmark tax cap measure. State aid to cities and towns, which has become an increasingly important source of funding for local governments because of the property tax cap, has risen only modestly in recent years—after deep cuts during the state budget crisis several years ago. Add soaring health care and pension costs, and you have a recipe for municipal disaster.” Municipal Meltdown by Gabrielle Gurley, CommonWealth, Fall 2007.

## **V. Implications of the Structural Funding Gap**

Due to the contractual agreements with Newton Public Schools' employees and the growth rate in some key expense items, the underlying expenses of the school system have been growing at a faster rate than the budget increases. (For example, the Budget and Compensation Analysis later in this report shows that benefits increased 9.3% on average for the past six years and the Special Education Analysis projects special education costs to increase at 8.7% in the future.) This funding gap has meant that the Newton Public Schools have had to make difficult decisions to reduce services, (i.e., cut expenses) in selected areas. These cuts have resulted in an erosion of services and programs. The Citizen Advisory Group does not believe that the full impact on the students, teachers and staff of these losses, even while previously stated by the School Department, have been delineated clearly enough.

In order to close the gap between ongoing costs growing faster than revenues, **the Newton Public Schools has had to make decisions that have produced a *gradual and cumulative erosion in most instances in arenas that can be best described as educational infrastructure***, i.e., educational investments that are hard to spot by parents and citizens because they are long-term investments rather than items that address more immediate needs. Some of these areas are administrative and leadership support, staff supervision, professional development, and technology applications. These cuts or postponed investments (or sometimes maintenance of current levels of staffing), in combination with a student population increase of close to 300 students in the last four years, have negatively impacted the ability of administrators and teachers to do their jobs effectively.

- **Administrative and Leadership Support**: Reductions over the past five years totaling \$7.6 million dollars, in combination with a student population increase of close to 300 students, have negatively impacted the ability of administrators and teachers to do their jobs effectively. There is less administrative and leadership support. From an administrative perspective, there has been a loss of a director of curriculum and instruction, a speech coordinator, a high school assistant principal, and a middle school assistant to the principal. In the spring of 2006, the Gibson Consulting Group completed a study on the management structure in the Newton Public Schools. They concluded that the administrative structure was stretched too thin and did not provide adequate programmatic or individual support to teachers and staff. The Deputy Superintendent, for example, has 22 significant leaders reporting to her currently. One of the elementary principals has 52 direct reports. Out of the fifty-two, twenty are classroom teachers, and the others are aides, teaching assistants, a custodian, and lunchroom assistants. We also believe that inclusion facilitators' case loads are extremely heavy, another area where important aspects of administration are more taxed and stressed.
- **Staff Supervision**: In a series of interviews with principals, they described having less time now than they did in the past to provide guidance for new teachers, attend and contribute to team meetings, and help teachers untangle knotty



instructional problems. One reason for this is that they are spending more of their time servicing students and families in ways that used to be taken care of by different service providers within the system – staff who have been reduced or eliminated due to budget shortfalls. Most recently, for example, the loss of 6.8 social workers in the elementary schools has directly impacted elementary principals. In the past, when students and families needed support, counseling, and advice, social workers could provide some of this assistance. The principals in our interviews spoke of the emotional issues families are facing which in turn can spill into the classroom. Principals view these emotional and social issues as increasing in both frequency and complexity and expressed concern that they could not handle this effectively as well as all their other essential instructional and curricular responsibilities. This is a particularly stressful scenario for elementary principals because they have fewer support personnel to help with leadership, supervision, and accountability responsibilities. (There are no assistant principals within the elementary administrative structure.)

Stretched administrative staffing has been compounded by the fact that *negotiated changes over time* in the contract have made it financially difficult to have “part time” or fractional parts of administrators (e.g., a 0.2 administrator). The negotiated settlement requires that if a staff member served as a 0.2 administrator and 0.8 teacher, they would be paid as a full time administrator. This has made it more challenging to invest in administrative support in an economical manner. Additionally, the economic downturn in Massachusetts and the nation are expected to further reduce services for the neediest families, leaving more of the burden to fall on the schools for emotional, social, and psychological support.

- Professional Development: Over a ten year period, funding for direct teacher professional development opportunities have diminished, including the opportunity for teachers to attend summer workshops, to create curriculum, to participate in programs like Teachers as Scholars, and to take courses and receive compensation for those costs. For example, in FY03, \$577,294 was invested in professional development. This decreased to \$342,245 in FY05, \$182,956 in FY07, and is expected to be \$245,300 in FY09.

The Citizen Advisory Group Benchmarking Report noted that Newton spends 49.5% more on professional development than communities with a similar commitment to education. It appears that while Newton has cut those aspects of professional development that provide growth opportunities for teachers, it continues to invest more heavily than other communities in another area that the Massachusetts Department of Elementary and Secondary Education also classifies as professional development: 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. (The budget for curriculum coordinators is not included in the figures above.)

In summary, Newton's teachers, while receiving significant support from other Newton Public Schools' staff that focus on curriculum coordination and curriculum development, have less opportunity for the more traditional professional development activities than they have had in the past. Additionally, it is important to note, that many of the instructional supervisors noted above have a far greater number of supervisees than they had in the past. What is clear to the Citizen Advisory Group is that Newton's ability to provide professional development, when compared to previous years, has diminished. We would add that some consider that the capacity to provide quality professional development is what distinguishes great school systems from good ones. Professional development may very well fall in the category of essential qualities of excellent schools.

- Technology: Insufficient and deferred funding has drastically slowed the implementation of the Newton Public Schools' long-range instructional technology plan. The Instructional Technology Plan envisioned the use of technology to deepen learning and to enhance student productivity, communication and research and to help faculty collect and analyze data on students while enhancing communication. Funds for training teachers, servers, hardware, software, peripherals, supplies, maintenance, and replacement were also included in the plan. The technology plan has been funded on a limited basis, at approximately 10% - 15% of the defined need, due to budget constraints.

The diminished capacity of administrators to provide ongoing supervision and the reduction in professional development opportunities have challenged the Newton Public Schools' ability to nurture, develop and sustain teacher quality. Newton's reputation and its track record as a high quality education system have rested on the foundation of hiring and developing skilled and dedicated teachers. It is not sufficient to hire the best and the brightest. The system must also support the ongoing growth and development of teachers.

The gap in funding referenced above, combined with a consistent set of decisions that have favored meeting the needs of more immediate and more visible items like maintaining reasonable class size, has left fewer opportunities for teachers to expand their repertoires and gain needed knowledge to keep current. These kinds of decisions impact the system's ability to support the growth and development of new and veteran teachers.

To expand on this idea, class size is often the visible face of school quality for parents. In 2007-08, over 40% of elementary classes had fewer than twenty students. Even in the high schools (which have larger class sizes), only 21% of the classes had more than twenty-five students. These data can lead people to think that the Newton Public Schools are doing just fine. But, other aspects of the system were declining even as class sizes remained reasonable. Reasonable class sizes in essence camouflaged erosion in other areas.

Another area that has been impacted by this gradual and cumulative erosion is building maintenance as investments have been continually postponed. By all accounts, necessary

building maintenance has been inadequately funded. (The forthcoming Citizen Advisory Group on Capital will explore this issue.) While the link between building maintenance and teaching and learning might not be obvious, when we interviewed principals, they described spending significantly more time than they once did on such problems as leaks and non-functioning toilets (as two examples). Each minute devoted to this kind of challenge is time taken away from what could be spent observing and analyzing teaching or interacting with students.

## **VI. Communication to the Public**

In addition to the financial gap placing stress on the system, **there has been a reluctance to communicate about the cost of the programmatic trade-offs that have been made as a result of insufficient funds to maintain the level of services.** This reluctance is rooted in a desire to maintain morale during a period when people are asked to do more with less. Furthermore, there is a concern on the part of some administrators that focusing on these losses would appear to some as “whining” and that would incur criticism and a further erosion of public support. **This reluctance to communicate the “not so good news,” however, has led to a secondary set of issues that are challenging the system.** These are:

- Impact of Funding below “Maintenance of Effort” Levels: The Citizen Advisory Group perceives that, in the eyes of the public, it is not clear how much the quality of education has been negatively impacted by the economics of the past few years. In our interviews, a number of people have commented that “money is often found” and that leaders continue to proclaim that, “Newton continues to be an excellent system” despite the cuts. If cuts have been made and erosion has been sustained, has there not been a significant and negative impact on the quality of service? Last spring, the Override Budget and the Allocation Budget in some ways defined a difference in quality. But, we believe that there is a sense in the community that **regardless of what budget passed, Newton is and will be an excellent school system.** This kind of confidence works as a double-edged sword. It encourages well-deserved confidence in the work of the educators and staff who serve the schools but it also leads some to think that the qualitative difference between various budgets is neither substantial nor significant. This is a dilemma for Newton.
- Trust: The Citizen Advisory Group perceives an increased skepticism in, and in some cases a lack of trust for, the judgment and decision-making processes of School Committee members and school leaders. Contributing factors to this development are:
  - Sometimes what is claimed will happen after a failed override or a lean budget year does not occur or occurs in a less serious way.
  - Comments from administrators that are aimed at keeping morale high during a stressful time are interpreted as exemplifying a reluctance to be honest.
  - The Newton North decision-making process and the communication vehicles used to inform the public about the new Newton North Building and how to finance it were flawed. This significant financial and communication issue has tainted people’s confidence in leadership across the city.
  - Information about the school budget and parent – school communication has felt incomplete by some citizens. Part of this is inevitable because it is impossible to always provide data in the form requested and immediate

answers to questions. While responding in a timely fashion to data inquiries is a goal of the Newton Public Schools, administrators have limited time to communicate with the public and, as more time is spent responding to information queries, there is less time available to do the job of running the schools. While we recognize this inevitable tension, we think that rather than more forums and additional reports, the format and the way the communication is framed may need to change. Our recent national election has shown the power of almost instantaneous communication with constituencies. As examples, the Citizen Advisory Group believes that building and updating regularly a database of answers to frequently asked questions (from such sources as parent emails) and more robust and up-to-date information on the website would help the Newton Public Schools to provide timely updates and online opportunities to both circulate important information and expand the boundaries of current levels of communication. We also point out that the Gibson Consulting Group study on the Newton Public Schools Management Structure in the Fall 2005/ Spring 2006 noted:

*Parents and other stakeholders frequently take their issues directly to the central office, which takes administrators away from their leadership roles to address issues that could be better resolved at the campus level. The district needs a central office position to support the current “transaction” volume. Over time, the district needs to analyze why the volume of inquiries is so high relative to the size of the school system and take specific actions to alleviate these demands without adversely affecting parent and stakeholder relations.*

The School Committee chose not to create this position. If the Newton Public Schools continue to not want to invest in such a position, they need to do the analysis to understand and alleviate the volume of inquiries.

- Distinguishing Essential and Desirable Qualities of Excellent Schools: Additionally, much of what goes into a quality school is not obvious to the general public. More education is needed as to what makes a quality school system as well as the essential (and desirable) factors that contribute to this quality. **We believe that it is critical for the Newton Public Schools to make clear the distinction between what are desirable educational qualities and what are essential ones for maintaining a high quality school system.**

## **VII. Reputational Effects**

The Citizen Advisory Group is aware of the “reputational effects” of past and continuing erosion budgets. With respect to Newton Public Schools, **the question is how far can expenses and investments related to educational programs, services, and oversight be cut before Newton schools lose their reputation for excellence?** As the community discusses “priorities” and “choices” in the coming weeks and months, this question will become increasingly salient.

Once a reputation for excellence is lost, it is very difficult to regain. This happens in all walks of life: for hospitals, law firms, investment management firms, universities, and, of course, just about every other service and product whose brand conveys assurance to clients and buyers. Because the costs of a lost reputation are so high, the incentives to maintain a good reputation are normally quite strong.

Most organizations in competitive milieus (think of Newton as only one of several attractive suburbs of Boston) rely heavily on reputations because it encourages people to choose one offering over another. For sure, advertising has a role to play in building reputation, but the best way to pay for and maintain a reputation is not to broadcast a message of excellence or reliability but rather to demonstrate it very clearly to knowledgeable, interested “customers.” Arguably, Newton continues to have the reputation for one of the very best public school systems in Massachusetts. But, if Newton schools are systematically underfunded by some standard, its inability to demonstrate excellence or even adequacy to extremely attentive and knowledgeable parents will become transparent to all.

Equally important is that fact that “reputation” can be very important in motivating employees. This dynamic can lead to either a virtuous or a vicious circle. In Newton’s case, a loss of reputation and internal pride could beget further declines in morale, thereby perpetuating or accelerating eroding performance.

Finally, and most important, is the matter of trust. From the very beginning of the Citizen Advisory Group work, we have heard about an eroding trust in leaders in Newton’s city government and the schools. We noted this on the previous page. In the absence of trust, the costs of maintaining cooperative relationships can become very high. (One of such costs is the introduction or expansion of enforceable contracts designed to ensure certain levels of performance; this “contracting model” can be expensive and inflexible.) If Newton’s reputation for excellence continues to erode with its eroding budgets then this trust link will be broken, and a major reconstruction effort will be required to restore its reputation.

It is an old and probably correct presumption that home prices correlate highly with the reputation of a community’s school system. For many of us, the calculus surrounding the decision to “buy into Newton” is more complex. Without trust in our elected and appointed leaders to deliver services reflecting the values of our community, Newton will decline in its ability to attract and retain residents who share the city’s traditional values. If this were to occur, then Newton would become just another bedroom community with few special features except geography.

## **VIII. Long-Term Planning and Budgeting Framework**

The Newton Public Schools invests considerable time and expertise in their budgeting and forecasting capabilities. They produce numerous, detailed analyses of a wide range of programs within the school system. Nonetheless, there are a number of ways to improve the process to help the School Committee and the administration as it distinguishes and makes choices about what is desirable and what is essential for maintaining a quality school system.

We recognize that the City of Newton's practice of making budget allocations only for one year at a time inhibits the ability of the Newton Public Schools to plan for the long term. As a result, the Newton Public Schools make year to year budget decisions which often have the effect of turning short-term choices based on a specific year's budget constraints into long-term decisions. The Citizen Advisory Group believes that it is critical for the Newton Public Schools to produce long-term strategic and financial plans by *program area* that make clear program priorities and their associated costs. In this way, the administrators of Newton Public Schools, the School Committee, and the City will be able to make *long-term* choices on what is "essential" and what is "desirable." By changing the budgeting system, Newton Public Schools can plan more effectively, improve their operations more thoughtfully, and achieve their education objectives more definitively. An improved long-term budgeting process will allow both the School Committee and the administration to make better financial and program decisions, improve operations, and enhance relations with citizens and other stakeholders.

### **Key Principles**

- The Newton Public Schools should lay out the budget forecast over a six year (i.e., the length of two union contracts) time horizon – this will help the Newton Public Schools to evaluate more comprehensively the long-term impacts of the decisions that they make. While the Newton Public Schools produce extensive long-term forecasts, detailed budgeting focuses primarily on the following fiscal year. Given the short-term focus, it is difficult to give sufficient perspective to long-term needs. (The lack of funding for the Instructional Technology Plan serves as an example of this.)
- The Newton Public Schools administration should produce a six year plan that organizes costs by program area – similar to the existing responsibility areas (e.g., elementary education, special education, arts and music, technology, etc.) that will align with the choices that the Newton Public Schools need to make.
- The Newton Public Schools should include a revenue plan (jointly developed with the City) that details funding scenarios, options, and contingencies. Scenarios and options should include such areas as City allocations, State grants, direct fundraising, debt financing, and overrides (including debt exclusions).
- All key stakeholders – the School Committee, administration, teachers, parents, and citizens – should be included in this process.

## Approach

- Develop the budget for the next six years using a programmatic framework (e.g., elementary education, middle school education, high school education, special education, fine arts, athletics, METCO, English Language Learning, professional development, etc.) which will enable the School Department to communicate programmatic priorities more effectively. A narrative that explains goals and objectives for each program should be included. (Existing forecasts group expenses either under type of costs (e.g. salaries) or by “responsibility center.” Neither method allows citizens to look at programs in detail.
- As best as possible, include metrics that indicate service level for the category. These would include performance measures such as: class size, number of hours of music/art instruction, breadth of program options, adult/student ratio, supervisory hours, educational outcomes, etc. These metrics are critical for showing what the Newton Public Schools gets for its investment or, loses with cuts.
- Under each programmatic area, include separate line items for salaries, benefits, and any costs that comprise greater than 5% of the total category. That way, it is possible to understand the major cost drivers for each program.
- Since this is likely to be in a spreadsheet form, the model will allow administrators to adjust growth rates for teacher salaries and benefits and other key cost components through the six years. This will enable the Newton Public Schools to explore in more detail the tradeoffs between salary growth at a certain level vs. cutting/expanding existing or new programs.
- Keep capital and technology investments as separate categories so they can be monitored easily.
- Create three scenarios:
  - A<sub>1</sub> Stable Budget & Incremental Change in Newton’s Educational Model: Assume 4% annual growth in the school’s budget and \$1.75 million in capital spending – present incremental changes in the current model over 6 years.
  - A<sub>2</sub> Stable Budget & New Model for Newton Public Schools: Assume 4% annual growth in the school’s budget and \$1.75 capital spending – consider a new model for delivering education to Newton’s students
  - B Growing Budget: Assume 6% annual growth and capital investment based on defined program needs
- Be sensitive to reversible vs. irreversible decisions. In the context of setting priorities and making choices due to the structural gap between revenues and expenses, the School Committee will want to make a distinction between (a) resource allocation or budgeting decisions that can be easily reversed if new sources of income can be developed or found, and (b) decision’s whose effects can only be reversed at great cost or not at all.



Here are some generalized examples:

- *Reversible* decisions or choices might include deferred maintenance in a non-inflationary environment or a temporary cut back in “non-core” academic offerings if it actually leads to reductions in school staff.

- *Irreversible* decisions might include losing both the *capacity* and the *brand name* for academic excellence of the Newton Public Schools system and systematically underfunding capital renewal and technology. For example, if Newton Public Schools continues to defer introduction of its technology strategy, how long will it take for Newton to sink into a position where the costs of catching up will be prohibitive — thereby permanently compromising the school system’s reputation for instructional excellence? Or, how much further will deferred maintenance in the schools lead to a backlog (now running in the hundreds of millions of dollars) that will be very difficult to work off as the maintenance and construction costs inevitably increase along with the interest payable on bonded projects?

### Scenario Planning

The Citizen Advisory Group built a variation of scenario A<sub>1</sub> - Stable Budget & Incremental Change in Newton’s Educational Model as a way to understand the challenges the Newton Public Schools face and the effects of various choices. If the Newton Public Schools continued using its current educational model which requires budget increases of 5.9% annually but only received increases of 4.3%, the cumulative deficit in the next six years would be over \$60 million. In the scenario, we decreased the rate of growth in salaries and benefits and implemented cost efficiencies in food services and transportation. We also invested \$1 million in technology. This still left a deficit of \$10 million which we hypothetically plugged with a \$3.4 million override in FY13. This model is not an endorsement of these particular choices but rather shows the power of scenario planning.

**Table 11: Newton Public Schools Six Year Scenario Planning**

<i>All figures in (\$000's)</i>	<u>FY2010</u>	<u>FY2011</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>
BASE CASE:						-
NPS Budget requirement at 5.9% growth	\$169,530	\$179,532	\$190,125	\$201,342	\$213,221	\$225,801
NPS Budget allocation at 4.3% growth	166,969	174,148	181,637	189,447	197,593	206,090
						-
<i>Surplus/(deficit)</i>	<i>(2,561)</i>	<i>(5,384)</i>	<i>(8,488)</i>	<i>(11,895)</i>	<i>(15,628)</i>	<i>(19,711)</i>
<i>Cumulative surplus/(deficit)</i>	<i>(\$2,561)</i>	<i>(\$7,945)</i>	<i>(\$16,433)</i>	<i>(\$28,328)</i>	<i>(\$43,956)</i>	<i>(\$63,668)</i>
	-	-	-	-	-	-

**Table 11: Newton Public Schools Six Year Scenario Planning (continued)**

<i>All figures in (\$000's)</i>		<u>FY2010</u>	<u>FY2011</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>
SCENARIO A-1							-
Reduce NPS Budget requirement to 5.1% growth*		\$168,249	\$176,830	\$185,848	\$195,327	\$205,288	\$215,758
NPS Budget allocation at 4.3% growth		166,969	174,148	181,637	189,447	197,593	206,090
<i>Surplus/(deficit)</i>		<i>(1,281)</i>	<i>(2,682)</i>	<i>(4,212)</i>	<i>(5,880)</i>	<i>(7,695)</i>	<i>(9,668)</i>
<i>Cumulative surplus/(deficit)</i>		<i>(1,281)</i>	<i>(3,962)</i>	<i>(8,174)</i>	<i>(14,054)</i>	<i>(21,749)</i>	<i>(31,417)</i>
Additional efficiencies/(investments)							
Outsourcing school lunch		1,188	1,247	1,310	1,375	1,444	1,516
Transportation savings		800	832	865	900	936	973
Benefits savings from GIC		-	500	537	577	619	665
Insurance trust fund distribution		-	2,925	2,925	-	-	-
Investment in technology		-	(500)	(500)	-	-	-
Subtotal efficiencies/(investments)		1,988	5,004	5,137	2,852	2,999	3,155
<i>Revised surplus/(deficit)</i>		<i>707</i>	<i>2,323</i>	<i>925</i>	<i>(3,028)</i>	<i>(4,696)</i>	<i>(6,513)</i>
<i>Revised cumulative surplus/(deficit)</i>		<i>707</i>	<i>3,030</i>	<i>3,955</i>	<i>928</i>	<i>(3,768)</i>	<i>(10,281)</i>
Operational override (FY2013)					3,427	3,427	3,427
Net cumulative surplus/(deficit)		\$707	\$3,030	\$3,955	\$4,355	\$3,086	-

\* Reduce NPS Budget requirement to 5.1% growth by (1) reducing COLA for teachers/aides to 2%/year, (2) reducing aide Step growth to 4%/year, and (3) reducing benefits growth to 7.4%/year

## **IX. Overarching Recommendations**

In summary, the cycle of trying to maintain Newton’s reputation for excellence *without* clearly defining and communicating the choices that school leaders have already made and the resultant losses has complicated the financial challenges that confront the Newton Public Schools.

It is from this understanding that the Citizen Advisory Group recommends:

1. Implement Cost Saving, Program Assessment and Budgeting Recommendations: Follow up on the recommendations for efficiencies, improvements, and planning, some of which are further delineated later in this report.
  - Compensation:
    - The School Committee and Administration should develop and articulate a philosophy for staff and teachers’ compensation – does the Newton Public Schools want to continue to be among the top levels for teacher pay, and, if so, how do these investments impact the funding available for other parts of the educational program?
    - In particular, the School Committee and Administration should review the compensation structure of Newton’s special education aides as the number of aides are increasing and their salaries are growing at 8.4% annually.
    - The Newton Public Schools should survey teachers on a regular basis to assess “what matters most” to teachers; this will help the Newton Public Schools focus its limited funds in ways that will continue to attract and retain the highest quality teachers possible.
    - The City and the Newton Public Schools should actively consider joining the state’s health insurance program, the Group Insurance Commission (GIC). An in-depth analysis should be done immediately. Certainly the decision to join the GIC will be easier if legislation is passed that would allow municipalities to join without union approval but the analysis should be done regardless of whether such legislation is passed. In addition, the level of the City’s contribution to health care premiums should be reviewed and the benefits accorded to future employees. Newton Public Schools may not be able to bear the same level of benefits in the future that it has committed to in the past.

- Special Education:
  - The School Committee should have an outside evaluation done to determine how well and how efficiently the special education program is delivered; this type of evaluation is needed on a periodic basis, perhaps every ten years.
  - The Newton Public Schools should establish its own set of metrics to measure the effectiveness of its special education programs. In establishing those benchmarks, the Citizens Advisory Group suggests Newton Public Schools involve special education parents, educators, and administrators.
  - The Newton Public Schools should systematically capture and report costs and revenues in a more “reader friendly,” accessible manner.
  - The Newton Public Schools should partner with the Special Education PAC to continually evaluate and improve upon programs and practices, including substantive issues of quality and the delivery of services.
  - The Newton Public Schools should continue to work with the Special Education PAC to improve communication, transparency and public understanding of Newton’s special education programs.
  
- METCO:
  - The School Committee and the Newton Public Schools should periodically assess and communicate how this program supports our core values and how effectively it is achieving our educational goals. In particular, the assessment should review the impact (e.g., educational, social, financial, curricular, class size, teacher load, etc.) of the METCO program, its level of participation, and the quality of this longstanding program.
  
- Transportation:
  - Reduce costs by providing transportation or free transportation to fewer students and increase fees (Range of savings: \$30,000 to \$800,000)
  
- Food Services:
  - Outsource Food Services, both management and labor (Range of savings: \$300,000 to \$1.2 million)

2. Create a Chief Financial Officer (CFO) position and Implement a Long-Term Scenario Planning and Budgeting Process: While the school administration does an excellent job of accounting, control, and forecasting, the Citizen Advisory Group believes that creating an *additional* Chief Financial Officer position would enable the school system to focus more attention on analysis and in developing and implementing a long-term financial strategy. As the ninth largest school system in Massachusetts and with responsibility for managing a \$160 million

enterprise, comprising 55% of Newton’s total expenditures, this is a good investment.<sup>8</sup> The Chief Financial Officer position can potentially be filled either by elevating existing staff or hiring someone from outside the system. As discussed earlier, the School Department (like most city departments) appears locked into a short-term budgeting process that inhibits its ability to make long-term decisions on funding critical priorities. The current strategic planning process is essential to creating a long-term vision for the school system, but without integrating this plan into a long-term financial framework, the Newton Public Schools will remain mired in short-term priorities. Additionally, a more robust financial infrastructure will help to rebuild confidence and trust in the school system.

3. Define Essential Qualities of the Newton Public Schools: While efficiencies will make a marked difference, ultimately they will not close the gap between the amount of revenue needed to sustain the current breadth and quality of Newton Public School programs and services and the rising costs of areas such as utilities, legal mandates for special education, and health care benefits. Given this reality, the Citizen Advisory Group believes that it is critical for the Newton Public Schools to *make choices* by distinguishing between what is *desirable* and what is *essential* for maintaining a quality school system. While many communities would like the distinction of being the best or a leader among many, we think we should keep our eye on the target of **consistently delivering a high quality program in the essential areas**. In order to accomplish that goal, we need to tackle the difficult subject and come to reasonable agreement among stakeholders about what factors contribute to the high quality that Newton citizens want and are willing to support financially.

While there is near consensus about certain parameters, such as the central importance of skilled and dedicated educators, there is less unanimity and inconsistent research findings that support with reasonable certainty, other factors, such as class size. Continued and expanded “education” of the public is desperately needed, especially on the complexity of programs, mandates, funding, and most importantly, the factors that maintain and produce an excellent school system. In particular, the School Committee and the Superintendent need to be clear about what are the markers of high quality that Newton wants to use to judge its progress. In the absence of specific and community-developed benchmarks, many are going to rely almost solely on standardized test scores and class size. We believe this is too limiting a standard. Much more dialogue and communication are needed to help inform citizens about the importance of breadth and depth of curricular offerings, Special Education mandates and processes, METCO, teacher development and compensation, as well as the critical need for consistent supervision (and the time needed for administrators to complete this work), professional development, and programs that support early intervention in order to prevent problems later in the school life of students (e.g., literacy intervention and pre-school).

As part of this community education outreach, we think that there needs to be a more thorough explanation of fixed *costs* with an emphasis on how costs, even ones that appear fixed, are a function of past choices and priorities. Teacher load, while contractual in nature at this current time, can change through negotiation. Salaries and the associated steps and lanes are also negotiable. Factors like small class size are not contractual and thus any substantive shifts in

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<sup>8</sup> Only Boston, Springfield, Worcester, Brockton, Lowell, Lynn, New Bedford, and Lawrence have more students. Department of Elementary and Secondary Education, 2007-08 data.

class size guidelines could impact the number of teachers and thus the amount of costs that are *fixed* in the short term.

As part of that process, we think the following areas should be reviewed in depth with completely open minds. These are potential levers to use to reduce costs in the face of financial constraints. The School Committee and the Superintendent should answer questions *like* the following:

1. Class Size: What are the upper limits of class size that still support quality teaching learning and does it vary across elementary, middle, and high schools? Can class size be increased with minimal effect on education? If so, by how much? We have seen some significant shifts in class size from last year to this year. When can the Newton Public Schools provide to the public, data, in addition to teacher and administrative observations, that show educational trends related to these increases (e.g., achievement, special education referrals)? For example, last year approximately 56% of Newton's first grade and Kindergarten classes met the target guideline of fewer than 20 students. This year, due to the failed override, approximately 20% of those classes met the target guideline. This is a significant shift in enrollment parameters. Can the Newton Public Schools document both the qualitative and quantitative differences that flow from this change? The evidence on detrimental effects of larger class size, especially of small increases in class size starting from Newton's current levels, is very mixed at best, and any such deleterious effects can probably be more than offset by making sure that one hires and supports top quality teachers.
2. Teaching Loads: As teacher loads increase, educators will have less time per student for feedback and instructional interaction. What teaching loads at Newton's high schools are desirable or essential? We know that communities that have a similar dedication to excellence have, in some cases, similar load configurations. Others, though, have a higher load than academic teachers at Newton's high schools. Would the savings accrued by having higher loads produce gains in other areas of instruction (e.g., elementary schools) without sacrificing essential levels of quality?
3. Teacher Compensation and Development: While hiring skilled and talented teachers is central to high quality education, what is done to support the ongoing development of those teachers may be even more critical.<sup>9</sup> What kinds of professional development, administrative supports, and educational collaboration are essential to the growth and development of skilled teachers? Can Newton's strategy for salaries and benefits be modified without endangering our talent pool? While everyone can agree that skilled and dedicated teachers are critical, the

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<sup>9</sup> Malcolm Gladwell in Most Likely to Succeed: How do we hire when we can't tell who's right for the job? (New Yorker, December 15, 2008) quotes Eric Hanushek, an economist at Stanford, who estimates that the students of a very bad teacher will learn, on average, half a year's worth of material in one school year. The students in the class of a very good teacher will learn a year and a half's worth of material. According to Hanushek, teacher effects dwarf school effects: your child is actually better off in a "bad" school with an excellent teacher than in an excellent school with a bad teacher. Hanushek posits that teacher effects are also much stronger than class-size effects. A school system would have to cut the average class almost in half to get the same effect from switching from an average teacher to a teacher in the eighty-fifth percentile. Furthermore, a good teacher often costs the same as an average one, whereas halving class size would require that build twice as many classrooms and hire twice as many teachers. But, identifying top quality teachers is not easy nor is training them to become one. Moreover, not all educators agree with Hanushek's conclusion.

specific role of salaries and benefits, class size, student load, student mix, professional development, and working conditions are less understood. Can salary increases be scaled back with minimal impact on hiring and retention? Would increased supervision and collaboration significantly improve teacher satisfaction, retention, and skills?

4. Neighborhood Schools: While optimal class sizes and neighborhood schools are desirable in Newton, are both essential to the quality of educational programming? If not, which should have the higher priority? As the Newton Public Schools plans its renovations for elementary and/or middle schools, should it consider having fewer, larger schools? What are the costs and benefits – educationally and financially – of maintaining the current number or reducing the number of school buildings? Can larger schools still nurture smaller learning communities, another goal of the Newton Public Schools?
  
6. Re-Thinking Education: We applaud the efforts of the School Committee’s Strategic Planning team initiative. Thinking about how to provide a quality education, both in a period of fiscal constraint and in an era of technological innovation, is critical. This strategic planning process is addressing such important questions as, “What does a child graduating in 2020 need from the Newton Public Schools? What are the key strengths of our school system so that we can let those competencies be a driving force in future decision-making? What could it mean for the Newton Public Schools to be a “permeable” campus?” Recommendations that the Newton Public Schools expand and explore online learning options for pre K – 12 students and use other online resources for students and teachers could have profound implications for the nature and cost of education in the future.

None of the recommendations for increased efficiencies elsewhere in this report will close the gap between the greater rate of growth in expenses compared to revenues in the Newton school system. However, we believe that providing the public with the information, education, and distinctions listed above will result in improved confidence in the leadership and direction of the schools as it makes difficult decisions about the *desirable* and the *essential*. This confidence in turn will improve the likelihood that if elected officials decide to put an override on a ballot, voters might support additional funding for the schools. Educating the public will also provide citizens with a more complete and accurate understanding of the budgetary choices that have to be made in order to protect and acquire the essential and core qualities of the schools that they embrace.

In some ways, our recommendations, especially the ones centered on communication, might cause frustration because it is easy to conclude that the kind of communication we recommend is precisely what has been and is occurring. In our investigation, we did not meet a single citizen who wanted anything but a strong Newton Public School system. However, we did hear sufficient doubt and/or confusion around whether or not the money currently funding the schools was carefully and wisely spent. We also did not sense a deep and broad understanding of how the current educational needs that have not been funded sufficiently in the eyes of the administration were critical and essential to sustaining the quality that they espoused for the schools.

Our report is aimed at shaping a mission that we believe must be undertaken by school leaders in coordination with the School Committee. This boils down to providing a blue print that clearly outlines what is essential to maintaining a high quality educational system.



## **X. Summary of Additional Recommendations**

### **A. Budget and Compensation**

Since fiscal year 2003 (FY03) when Newton citizens voted for a general override, the Newton Public Schools budget has grown at a compound annual growth rate of 4.3%. However, that 4.3% is below the approximately 5.9% annual increase that the Citizen Advisory Group estimates is needed to maintain existing levels of programs and services (assuming existing contracts and arrangements with Newton Public Schools' employees remain largely the same and similar growth in special education as experienced in past three to five years). The Citizen Advisory Group analyzed key components of the Newton Public Schools budget including salaries, benefits, special education, utilities, and maintenance. As salaries and benefits comprise 83% of the Newton Public Schools budget, it was imperative that the Citizen Advisory Group look particularly closely at the Newton Public Schools compensation.

Teachers and aides comprise 78% of the Newton Public Schools' salary expense, thus the Citizen Advisory Group focused our compensation analysis on those two segments of the workforce: Newton Teachers Association Bargaining Unit A (Teachers) and Unit C (Aides).

As part of the analysis, we developed a model that projected the growth of the Newton Public Schools, based both on School administration estimates and our own analysis. The model revealed that the two major factors that are driving school budget growth beyond 4.3% are:

- Benefits (growing at 9.3% over the past six years); and,
- Special education mandated costs projected to grow at 8.7% per year. As discussed in the report on Special Education, a number of factors continue to drive these costs -- chief among them are the overall growth of the special education population and the increasing complexity of student needs (including a dramatic increase in students with autism, health, communication and neurological diagnoses). Further, while the Citizen Advisory Group recommends a much closer look at the Special Education programs, in the near term, we see few opportunities for significant savings.

Of note, while health insurance benefits are a key component of overall growth in the budget, teacher salaries are *not* the "budget buster" that leads to 5.9% growth. The Citizen Advisory Group estimates that teacher salaries (Unit A) are growing at approximately 4% per year (including the 3% Cost of Living Adjustment (COLA) for FY09) when we account for step and lane increases and turnover savings (discussed in more detail below).

Under the current business model, without a budget increase each year of 5.9%, the Citizen Advisory Group believes that the Newton Public Schools will not be able to maintain its current level of programs and services. In other places in this report, the Citizen Advisory Group notes that the Newton Public Schools has already suffered from the erosion in its budget. We also suggest some areas for savings (e.g., Food Services and Transportation). But, the Citizen Advisory Group concludes that if the budget continues to grow at less than 5.9% per year, the quality of the Newton schools will continue to erode.

As part of this report, we recommend that Newton:

## Develop and Articulate a Philosophy of Teacher Compensation

We believe that it is critical for the City and the Newton Public Schools to articulate a clear viewpoint on teacher compensation. What is the appropriate level of teacher salaries, both compared to other communities as well as compared to other professions (a challenge faced by all school systems)? Does Newton want salary levels to remain consistent with other communities the Citizen Advisory Group Benchmarking report cited as having a “similar commitment to educational excellence,” with compensation levels among the highest in the state? If we choose not to, what are the implications for Newton’s ability to continue to attract top quality teachers? And, as important, how do we continue to craft the type of job and work environment that will attract and retain teachers?

## Review Compensation Structure of Special Education Aides

We believe that it is timely and prudent to review the compensation structure of Newton’s special education aides. As illustrated more fully in the Special Education portion of this report, the number of aides entering the system to support Newton’s increasingly complex special education population is far exceeding the number of aides exiting the system each year. In addition, aides’ salaries are growing at 8.4% annually. The increase in the number of aides combined with the growth in salaries has overall special education aide salaries growing at 10.8%. We recommend that the Newton Public Schools identify what skills are currently required of its special education aides and benchmark their compensation package to similarly skilled aides in surrounding communities. We also recommend that the Newton Public Schools model the long-term impact of the current step structure in aides’ salaries, and give consideration to whether a more fiscally sustainable model can be developed.

## Conduct Regular Teacher Surveys

We believe that in order to develop a clear vision of teachers’ compensation and work environment, it is essential that we ask the teachers “what matters to them” in a clear, confidential format. In Appendix F, we have included a sample teacher survey that we designed. We recommend that the school department conduct an extensive survey on teachers’ views of the current state of the school system that addresses what is important to teachers in their jobs and what factors teachers believe contribute to providing an excellent education. We think surveying the teachers is essential to developing a work environment that will be attractive to talented educators.

## Consider Joining the Commonwealth’s Group Insurance Commission

Health insurance benefits are an area where the City may have an opportunity to realize savings. While teachers’ salary growth is in line with Massachusetts’ average personal income growth, private employers have been able to pass on a share of the growing costs of health insurance to employees; employer contributions to health care premiums in Massachusetts have, on average, dropped to 75%, below the 80% currently paid by the Newton Public Schools. The Commonwealth’s health insurance program has sometimes had lower levels of growth in its insurance costs than Newton has realized. Thus, the Citizen Advisory Group recommends that the Newton Public Schools and the City consider joining the Commonwealth’s Group Insurance Commission (GIC). The Citizen Advisory Group report on Municipal Cost Structure provides more detail on this recommendation.

## **B. Special Education**

Special education is a very complex and specialized area. No member of the Citizen Advisory Group is expert in special education, therefore the Citizen Advisory Group did not attempt to evaluate how well Newton is delivering special education services. Instead, the Citizen Advisory Group undertook to identify (1) the financial trends in special education and how special education costs are impacting the total Newton Public Schools budget, and (2) to what degree the community thinks our special education dollars are well spent. The Citizen Advisory Group analyzed the Newton Public Schools' special education enrollment and cost data, and documented the viewpoints and concerns it heard about Newton's special education programming during the course of its work. Finally, the Citizen Advisory Group developed recommendations to address the issues identified and concerns raised.

Newton is mandated under state and federal law to provide special education services to eligible students from age three (3) to twenty-two (22). Currently, Newton has approximately 2,300 students who are eligible for special education. In FY '08 they represented approximately 19.5% of the total student population, and over 25% of the total school budget is devoted specifically to their needs.

Special education enrollment has been growing faster than total enrollment, and the special education portion of the budget has grown correspondingly. A significant contributor to the growth in the special education budget is the number and salary structure of the special education aides who support Newton's students with special needs. The growth in the number of aides is due to the fact that more students with severe needs who require the assistance of an aide are entering the system than exiting. Thus, in recent years there has been a net increase in the number of aides in the system. In addition, under the current contract with the Newton Teachers' Association, aides' salaries are growing at approximately 8.6%, with little or no "turnover savings" resulting from retirement of aides at higher steps.<sup>10</sup> Aides are also entitled to benefits and benefits have been another significant driver of Newton Public Schools' overall expenses. Other contributors to special education cost growth are transportation costs, out-of-district tuition, and contracted services.

Because special education services are legally mandated, it is not entirely within the control of Newton Public Schools to decide how much of its budget to spend on special education services in any given year. For example, if a student is identified with special education needs during the school year, Newton Public Schools must address those needs and would have to pay for the cost of services for this student even though the funding had not been set aside in the budget process. Costs for special education services, depending on severity of need, can range from \$2,000 to \$250,000 per student. In a time of relatively static or limited budget growth, mandated special education costs may continue to take up a larger portion of the Newton Public Schools budget, with the result that other parts of the school budget must be reduced.

The special education laws are grounded on student and parental rights and on the principle that separate is not equal. School districts are obligated to provide a "free and appropriate" education in the "least restrictive environment" based on the student's individual needs. Thus, it is not simply a matter of a school system deciding to "hold the line" on its special education services. Legally, Newton Public Schools must provide appropriate services to its students with special needs. However, the means by which those services are delivered are not mandated (although they are regulated). As such, in analyzing special education programming, the issues are ones of efficacy and

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<sup>10</sup> The salary structure of aides and its impact on the budget is discussed more fully in Appendix A.

efficiency (just as in general education): how do we most effectively and efficiently meet the individualized needs of our students with special learning needs?

During the course of its work, the Citizen Advisory Group heard repeatedly that Newton provides a very good, if not excellent, education to its students with special needs, just as it does for its general education students. Nevertheless, the Citizen Advisory Group identified the following issues as worthy of further examination:

1. The efficacy and fiscal sustainability of the Neighborhood Inclusion model;
2. The lack of agreed-upon metrics to measure outcomes of programs and services;
3. The absence of a consistent and easily understandable summary of special education costs and revenues (presented in a way that allows easy analysis of growth trends, etc.);
4. A lack of transparency about the special education programs and services provided within Newton Public Schools;
5. A lack of public understanding about special education generally – what it is, the diversity of the special needs population and profiles, the legal mandates under which services are provided, and the individualized nature of each student’s educational plan.

In view of this, the Citizen Advisory Group recommends that the Newton Public Schools:

1. Conduct an outside evaluation to determine how well and how efficiently special education services are delivered (this analysis would address whether Newton Public Schools can deliver as good or better services with the same or fewer dollars);<sup>11</sup> this type of evaluation is needed on a periodic basis, perhaps every ten years;
2. Establish its own set of metrics to measure the effectiveness of its special education programs. The Citizen Advisory Group suggests Newton Public Schools work with the Special Education PAC to establish these metrics and that it involve special education parents, educators, and administrators;
3. Capture and report systematically special education costs and revenues in a more “reader friendly” manner;
4. Partner with the Special Education PAC to continually evaluate and improve upon programs and practices; these efforts should not be focused on compliance issues, but rather on substantive issues of quality and the delivery of services;
5. Improve communication, transparency and public understanding of Newton’s special education programs by continuing to work with the Special Education PAC.

## **C. METCO**

The Citizen Advisory Group was given three mandates: to develop new or enhanced sources of funding, to improve the City’s operational efficiency and effectiveness, and to define choices about municipal and educational service levels. The analysis of METCO falls squarely into the category of defining choices about educational service levels and also raises issues relating to efficiency and effectiveness. We undertook this review of METCO while recognizing the long-held commitment of Newton Public Schools to diversity and to the METCO program as well as the increasing financial

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<sup>11</sup> The Citizen Advisory Group understands that the School Committee has recently committed to such a study. The Citizen Advisory Group believes that defining the scope of the study and the expected deliverables will be paramount in ensuring an instructive report with actionable recommendations is produced.

pressure on the School Department's operating budget. Any number of programs could have been reviewed in depth (e.g., high school athletics, the arts, the choice of student centered middle schools versus subject centered Junior Highs, or Career and Technical Education); METCO was chosen as an area many people wanted to understand better, with particular questions about how it is funded.

The benefits conferred by METCO on Newton's school system seem clear to the Citizen Advisory Group. METCO provides both Newton and Boston students an important education in diversity. Without exception, the Citizen Advisory Group found the teachers and the administration in the Newton Public Schools completely committed to the METCO program. The METCO program serves as an important and long standing marker of what Newton stands for as a city. As such, this program represents value choices as well as resource commitments made by the Newton community over many years.

What is harder to measure, however, are the claims that METCO places on school resources. Like many of the choices made by the Newton Public Schools, METCO comes with a price tag. While there are a number of different ways to analyze financially the METCO program, the analysis the Citizen Advisory Group finds most compelling shows it is essentially break even. Participating in METCO involves not only possible financial outlays but also increases in class size (a hot button issue in Newton, like most communities) and teacher load.

METCO is a voluntary program in two senses. African American, Latino, Asian and Native American children from Boston or Springfield voluntarily attend suburban schools and 32 suburban school districts voluntarily welcome the Boston students into their school systems. With 415 students (plus or minus 5%), Newton has the largest METCO enrollment in Massachusetts in absolute numbers. As a percentage of METCO students relative to total school population, Newton stands sixth among the ten communities that enroll the largest number of METCO students. METCO students account for 3.5% of Newton's total enrollment.

Newton's goals for the METCO program include:

- Providing the opportunity for participating students from Boston to learn together in an integrated public school setting with students from racially isolated suburban schools.
- Increasing the diversity and reducing the racial isolation in Newton so that the students from different backgrounds can learn from each other in meaningful ways.
- Providing closer understanding and cooperation between urban and suburban parents and other citizens in the Boston metropolitan area.

Newton has had a long term policy of admitting METCO students only in Kindergarten, 1<sup>st</sup> or 2<sup>nd</sup> grades. Working with the elementary school principals, the Director of METCO assigns METCO students to specific schools based on existing and projected class size, siblings that already attend that school, low number of METCO students at that particular elementary school (thus that school is a candidate for more METCO children), and the strong preference for not isolating one METCO child in a grade at a school by himself/herself.

As Newton's METCO materials note, "The Newton METCO Program is comprised of a diverse group of students from broad ethnic, cultural, economic, and religious backgrounds with a range of educational strengths and needs." Seventy-nine percent of the METCO students are African-

American, 14% Latino and 7% Asian. With the METCO students, the diversity of the Newton school system changes somewhat. Notably, METCO doubles the number (and percentage) of African American students in the Newton Public Schools. Using the rate of participation of METCO students in the national free or reduced lunch program (which is by no means a perfect indicator), socioeconomically, the majority of METCO students are not from low income families. While METCO does not include severely disabled special education students that need placement outside of Newton, METCO includes students with a range of educational strengths and needs and does include non-severely disabled children with special education needs. Newton's METCO program has a higher percentage of students with special education needs relative to the resident Newton student population (37% in 2007 for METCO compared to 17% for Newton as a whole, including the METCO students).

Massachusetts provides a grant to suburban school districts that participate in METCO. The direct METCO costs for staff and expenses are considerably lower than the state grant. Therefore, METCO in effect provides revenues to the Newton Public Schools General Fund. For sake of clarity, we call these revenues the "METCO Credit to Instruction." For both FY2008 and FY2009, the METCO Credit to Instruction came to approximately \$939,000 or \$2,318 per METCO student.

A financial analysis of METCO addresses only one of the considerations pertaining to its sustainability, perhaps the least important one. Yet this analysis has the virtue of reopening a discussion of community values and priorities as we work our way through increasingly difficult economic times. The most compelling financial analysis in the eyes of the Citizen Advisory Group looks at incremental costs. This analysis shows a financial cost to Newton of \$990,934 compared to the METCO Credit to Instruction of \$939,000. **In essence, the incremental cost analysis shows a small cost to Newton of approximately \$50,000 in total for participating in METCO.** When compared to the schools' estimated 2009 budget of \$160 million, participating in METCO could be viewed as a "no cost" or relatively "minimal cost" vehicle for achieving broad social and educational goals that are fully embraced by the community. In other words, Newton Public Schools provides and participates in a wide range of programs to meet its mission of educating, preparing, and inspiring students to achieve their full potential as lifelong learners, thinkers, and productive contributors. As one way to achieve these goals, Newton Public Schools voluntarily participates in METCO. The school system has a financial incentive to do so in the form of a grant from Massachusetts. The financial analysis shows the METCO program essentially breaks even.

It is important to note that such a credit is not guaranteed from one year to the next. As an example, for FY2009, Governor Deval Patrick has reduced over 10% of the State allocation to METCO, which for Newton has resulted in a cut of about \$130,000. While it is not clear yet if the same reduction will be applied for FY2010, the Newton Public Schools have anticipated a further reduction of \$100,000. As METCO administrative costs will not decrease, these cuts result in a net decrease of the per student contribution that the program provides to the Newton Public Schools.

Just like other non-mandated programs, Newton Public Schools should periodically review in depth METCO: its purpose and measurable benefits and costs. Therefore, the Citizen Advisory Group recommends that the School Committee and Newton Public Schools analyze and discuss openly the following types of questions:

- How can Newton best achieve its educational goals for diversity and what is METCO's role in this?
- How can Newton Public Schools measure – qualitatively and quantitatively – the learning impact of having a more diverse school community by virtue of participating in METCO?
- Is METCO achieving its full potential? Are there ways to increase its effectiveness?
- If, based on a set of assumptions, METCO costs the Newton Public Schools more than what is received in METCO grant funding, are the social and educational benefits sufficient to retain the program at its current level, a lower level, or at all?
- Will even more resources from Newton be required in the future to maintain the current scale of METCO's operations and Newton's position as a leader in multi-cultural education?
- If the state reduced or eliminated funding for METCO, would Newton Public Schools keep the program?
- Can Newton, perhaps in concert with other cities and towns, press the state to provide more funding to METCO?
- Should the scale of the METCO program be reduced and will this ensure or undermine Newton's continued leadership in multi-cultural education?
- If class sizes continue to rise in the future, how should this be factored into the analysis of METCO?
- Should some portion of the commitment to METCO be reallocated to other pressing needs within the school system?

While these are difficult questions both to discuss and to answer thoughtfully, the Citizen Advisory Group recommends that Newton Public Schools periodically (perhaps every five years) examine in depth the impact of METCO (e.g., educational, social, financial, class size, teacher load), its level of participation, and the quality and effectiveness of this longstanding program. This has not been done historically in an open and periodic manner. The Citizen Advisory Group also recommends that Newton Public Schools annually or biennially publish in depth data about METCO, perhaps similar to what is found in this report. Just as the School Committee thinks deeply about a wide range of choices (e.g., class size, professional development, curriculum) so too should METCO be discussed openly and regularly to see if the investments provide the kind of return we hope in actualizing Newton's commitment to diversity.

## D. Transportation

Only 15% of Newton's regular education public school students use the bus system. Of these, 65% pay a fee to do so. Yet, transportation of regular education students within the Newton school district to both public and private schools currently costs \$1.64 million per year. The cost is in part due to two factors out of Newton's control – the mandate by Massachusetts to transport K-6 students (both public and in-town private school students) for free who live more than 2 miles from their school and high bus costs. But, a significant portion of the \$1.64 million is a result of three choices that have been made by the School Committee – bussing additional students for free, offering bus service to all students for a fee, and setting bus fees at a level substantially below full cost.

The School Committee has voluntarily chosen to offer to bus for free approximately 1270 K-5 elementary school students. Significant savings are possible if Newton only provided free transportation based on the State mandate – K-6 students who live more than 2 miles from school. Newton classifies parts of Newton as safety areas and voluntarily provides free transportation to ensure young students in these areas get to and from school safely. Approximately 970 of the 1270 K-5 students live in areas classified as safety areas. If the Newton Police provided more crossing guards, the number of students living in safety areas would decrease; as a result, costs would decrease since fewer buses would be needed or income from bus fees would increase.

In addition, Newton chooses to offer transportation for a fee of \$220 (a level substantially below full cost) to all 7 – 12 students and K-5 students who live within 1 mile of the school and 6<sup>th</sup> grade students who live within 2 miles of school.

Newton has also followed state regulations that mandate free transportation for in-town private school students. However, it appears that the mandate may no longer be enforceable. Newton's lawyers are pursuing this question.

Communities have very different policies about who is eligible to ride for free, who is eligible to pay, and the level of fees. Compared to some communities, Newton's fees (\$220 per student with a \$440 family cap) are considerably lower (e.g., Lexington (\$550 per student with a \$1600 family cap) and Needham (\$370 per student with a \$750 family cap)). Brookline provides no bus service at all (even for a fee) for K – 8 students living within 1.5 miles of their schools and no service to 9 – 12 students (except those in South Brookline where there is no public transportation available). Wellesley follows the state mandate and only provides bus service to K – 6 students living farther than 2 miles from the school. In contrast, some communities – mostly those with far fewer students and smaller geographic areas to serve – provide bus service for free to all their students (e.g., Weston and Wayland).

There are two possible strategies for reducing the transportation cost of \$1.64 million. These alternatives can be used in combination:

- (1) Reducing the costs by reducing the number of buses by either/or
  - (a) Providing bus service to only those students mandated by law and/or
  - (b) Hiring more crossing guards to reduce the number of elementary school students who need bus service for safety reasons



- (2) Increasing fee revenues by either/or
  - (a) Increasing the fee level and/or
  - (b) Having more students pay the fee (K-5 students who live between 1 – 2 miles from school, presumably in non-safety areas)
  - (c) Asking private schools to contribute to the cost of transportation

If Newton followed state mandates and only provided bus service to K-6 students that live more than 2 miles from school, this would result in FY09 in a 52% reduction in the cost of transportation, or approximately \$859,980 in savings. Transportation costs would decrease from \$1.64 million to \$784,080. If Newton were able to eliminate transportation to in-town private school students, there would be a savings of \$191,360. If Newton charged fees to the elementary school students who live between 1 and 2 miles from the school in non-safety areas who currently use the bus system regularly,<sup>12</sup> fee revenues might increase by \$30,000 - \$50,000. If fee levels were increased (to either \$300 or \$400) using the current policy, additional revenues of \$80,000 to \$170,000 are likely. If both more users were charged and fees were increased, additional revenues would be \$155,000 to \$270,000. In addition, Newton should ask private schools to contribute to the cost of transportation, a form of payments in lieu of taxes (PILOTs).

All of the above mentioned issues must though be looked at in the context of the “community” side of delivering education. Newton’s “neighborhood school” system results in students in twenty-one different buildings. Yet, because of the neighborhood schools, most elementary school students live within two miles of their school. Newton is also a physically large community (18 square miles), with little transportation from the MBTA available. There are few alternatives to walking or biking to school for the younger students other than riding school buses or being driven by adults (carpools or parents). Many schools are located in dense urban settings so that if buses were eliminated and automobile counts increased, traffic might become worse and safety issues might increase for pedestrians and cyclists. Newton can expect that if bus service is decreased or fees increased, parents will be upset. When Newton recently instituted fees for K-6 students living between 1 to 2 miles from school, ridership went down and parents reacted negatively to the new policy. As the amount of money brought in by the fees was not significant in the eyes of policy makers, the School Committee changed the following year to the “no fee between 1 - 2 miles for K-5” policy.

The Citizen Advisory Group recommends that the Newton Public Schools explore all the options. Spending \$1.64 million to bus 15% of Newton’s public school students does not seem like a good use of funds in light of all the other educational priorities facing the Newton Public Schools. But, this is a choice based on values and priorities. It involves financial, safety, convenience and environmental issues. Shifting more of the burden for transportation and its costs to parents in light of other priorities for the school system seems appropriate to the Citizen Advisory Group.

## **E. Food Services**

Food Services in the Newton Public Schools are a \$4.2 million dollar operation. While enrollment has grown slightly by 2.5% since FY2003, lunch sales have declined by 12.7%. Only 38% of students buy lunch at school. (The Director of Food Service for Newton suggested that the number of students

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<sup>12</sup> 299 elementary school students who live 1-2 miles from school in non-safety are allowed to ride for free under the current policy.

district-wide eating meals should be at 50% - 55%.) Even as sales have declined, total expenses have grown by 6.2%. After income and reimbursements, providing 688,695 meals (of which 636,635 were lunch) to students resulted in a loss of \$1.2 million in 2008 (i.e., the Newton Public Schools had to provide a subsidy). This loss did not come as a surprise and had been projected in the Newton Public Schools' operating budget.

The Commonwealth of Massachusetts requires all public schools to offer lunch to its students. In addition, Newton participates in the federal National School Lunch Program which provides cash subsidies and low cost food commodities to schools. As part of this program, Newton provides low income students with low-cost or free lunches. While overall sales are down, the number of free and reduced lunches has increased by 34% and 14% respectively since FY2003.

The facilities at the fifteen elementary schools have a substantial impact on the quality and costs associated with food service. The fifteen elementary schools do not have full kitchens (only re-heating ones) and only six elementary schools have designated eating areas (i.e., cafeterias). Teachers, by contract, are not responsible for students during the lunch period in elementary schools. Therefore, Newton hires lunch attendants to monitor the children at a cost of \$408,613 in FY2008. Nonetheless, the 15 elementary schools have among the smallest losses on average compared to the middle and high schools and among the lowest cost per meal. But, because there are so many elementary schools, the cumulative effect of the deficit in elementary school food services (\$496,162) is considerable. Certainly, though, food services in the elementary schools are not the sole driver of the food services deficit.

The Newton Public School lunch prices are higher than comparable schools and higher than the meals students choose to buy at many of the for-profit eateries that high school students frequent.

Food accounts for over 30% of the Food Services budget and food costs increased by 11.7% last year. Labor and benefits account for another 62% of the budget.

Food Services at the Newton Public Schools seem to be under the shadow of a "perfect storm," leading to a lot of red ink:

- The Food Service Department is losing \$1.2 million on expenses of \$4.2 million.
- Losses have been rising on a rather consistent basis.
- Prices are the highest of any benchmark schools.
- Sales of paid lunches have been falling consistently.
- Sales of free and reduced price lunches (which receive only a partial subsidy) have been increasing.
- The percentage of students buying lunch is low, particularly in the middle school, according to people experienced in this area.
- Serving only nutritious food as required by the National School Lunch Program and by Newton's Wellness policy may result in menus that are less appealing to students, leading to decreased sales.
- Based on anecdotal evidence, students (who may have high expectations about food) complain about the low quality, unappealing taste and unsatisfactory menu choices.
- Food costs are rising.
- Labor costs are rising.

- The nature of the elementary school facilities make changes in food choices more difficult and require unusual and thus higher labor costs.
- The economic turmoil has reduced disposable income.

While other school districts are facing the same cost pressures, nonetheless it is unusual for a school system to be consistently in the red in its food service program. We know, for example, that Lexington and Wellesley (and recently Brookline) break even.

The objective for the Food Service Department should be to provide nutritious meals at a break-even financial level by increasing revenue through greater participation and lowering costs.

The Citizen Advisory Group applauds the efforts of the Newton Public Schools for the incremental changes they have already implemented and are considering right now. But, the Citizen Advisory Group believes that a more significant change is needed. We recommend that the Newton Public Schools put out to bid the management and delivery of the food services program. Both private businesses as well as the Food Service Department should be allowed to “bid” for the contract. (To be more specific, rather than bidding, the Newton Public Schools would compare an in-house management proposal to bids which would be issued according to state procurement laws.)

We are convinced that competition will lead to more appealing food choices, higher sales, and lower costs. The Town of Lexington has successfully done just this.

If the Newton Public Schools are unwilling to introduce competition and get bids, they must find a way to decrease labor hours and increase labor flexibility. Brookline can serve as a role model.

## **XI. Appendices**

### **A. Budget and Compensation Report**

#### **I. Executive Summary**

Since FY03 when Newton citizens voted for a general override, the Newton Public Schools (NPS) budget has grown at a compound annual growth rate of 4.3%. However, that 4.3% is below the approximately 6% annual increase that the Citizen Advisory Group estimates is needed to maintain existing levels of programs and services (assuming existing contracts and arrangements with Newton Public Schools employees remain largely the same and similar growth in special education as experienced in past 3-5 years). The Citizen Advisory Group analyzed key components of the Newton Public Schools budget including salaries, benefits, special education, utilities, and maintenance. As salaries and benefits comprise 83% of the Newton Public Schools budget, it was imperative that the Citizen Advisory Group look particularly closely at Newton Public Schools compensation.

Teachers and aides comprise 78% of Newton Public Schools' salary expense, thus the Citizen Advisory Group focused our compensation analysis on those two segments of the workforce: Newton Teachers Association Bargaining Unit A (Teachers) and Unit C (Aides).

As part of the analysis, we developed a model that projected the growth of the Newton Public Schools, based both on School administration estimates and our own analysis. The model revealed that the two major factors that are driving school budget growth beyond 4.3% are:

1. Benefits (growing at 9.3% over the past six years); and,
2. Special education mandated costs projected to grow at 8.7% per year. As discussed in the report on Special Education, a number of factors continue to drive these costs -- chief among them are the overall growth of the special education population and the increasing complexity of student needs (including a dramatic increase in students with autism, health, communication and neurological diagnoses). Further, while the Citizen Advisory Group recommends a much closer look at the Special Education programs, in the near term, we see few opportunities for significant savings.

Of note, while health insurance benefits are a key component of overall growth in the budget, teacher salaries are *not* the "budget buster" that leads to 6% growth. The Citizen Advisory Group estimates that teacher salaries (Unit A) are growing at approximately 4% per year (including the 3% Cost of Living Adjustment (COLA) for FY09) when we account for step and lane increases and turnover savings (discussed in more detail below).

Under the current business model, without a budget increase each year of 5.9%, the Citizen Advisory Group believes that the Newton Public Schools will not be able to maintain its current level of programs and services. In other places in this report, the Citizen Advisory Group notes that the Newton Public Schools has already suffered from the erosion in its budget. We also suggest some areas for savings (e.g., Food Services and Transportation). But, the Citizen Advisory Group concludes that if the budget continues to grow at less than 5.9% per year, the quality of the Newton schools will continue to erode.

As part of this report, we recommend that Newton:

### Develop and Articulate a Philosophy of Teacher Compensation

We believe that it is critical for the City and the Newton Public Schools to articulate a clear viewpoint on teacher compensation. What is the appropriate level of teacher salaries, both compared to other communities as well as compared to other professions (a challenge faced by all school systems)? Does Newton want salary levels to remain consistent with other communities the Citizen Advisory Group Benchmarking Study cited as having a “similar commitment to educational excellence,” with compensation levels among the highest in the state? If we choose not to, what are the implications for Newton’s ability to continue to attract top quality teachers? And, as important, how do we continue to craft the type of job and work environment that will attract teachers?

### Review Compensation Structure of Special Education Aides

We believe that it is timely and prudent to review the compensation structure of Newton’s special education aides. As illustrated more fully in the Special Education portion of this report, the number of aides entering the system to support Newton’s increasingly complex special education population is far exceeding the number of aides exiting the system each year. In addition, aides’ salaries are growing at 8.4% annually. The increase in the number of aides combined with the growth in salaries has overall special education aide salaries growing at 10.8%. We recommend that the Newton Public Schools identify what skills are currently required of its special education aides and benchmark their compensation package to similarly skilled aides in surrounding communities. We also recommend that the Newton Public Schools model the long-term impact of the current step structure in aides’ salaries, and give consideration to whether a more fiscally sustainable model can be developed.

### Conduct Regular Teacher Surveys

We believe that in order to develop a clear vision of teachers’ compensation and work environment, it is essential that we ask the teachers “what matters to them” in a clear, confidential format. In Appendix F, we have included a sample teacher survey that we designed. We recommend that the school department conduct an extensive survey on teachers’ views of the current state of the school system that addresses what is important to teachers in their jobs and what factors teachers believe contribute to providing an excellent education. We think surveying the teachers is essential to developing a work environment that will be attractive to talented educators.

### Consider Joining the Commonwealth’s Group Insurance Commission

Health insurance benefits are an area where the City may have an opportunity to realize savings. While teachers’ salary growth is in line with Massachusetts’ average personal income growth, private employers have been able to pass on a share of the growing costs of health insurance to employees; employer contributions to health care premiums in Massachusetts have, on average, dropped to 75%, below the 80% currently paid by the Newton Public Schools. The Commonwealth’s health insurance program has sometimes had lower levels of growth in its insurance costs than Newton has realized. Thus, the Citizen Advisory Group recommends that the Newton Public Schools and the City consider joining the Commonwealth’s Group Insurance Commission (GIC). Recent analysis by the City suggests that annual savings could range from \$1 to \$6 million. The Citizen Advisory Group report on Municipal Cost Structure provides more detail on this recommendation.

## II. Current Status

Salaries and benefits account for more than \$135<sup>13</sup> million, or approximately 85% of the Fiscal Year 2009 \$160 million Newton Public Schools budget (General Fund). While the total school budget has grown at a compound annual rate of 4.3% over the past six years since the 2003 override (FY 03 – FY 09), that growth has not enabled the system to keep pace with its program and staffing requirements. In order to better understand the role of compensation and benefits in the overall budget, the Citizen Advisory Group has analyzed the individual components of the Newton Public Schools compensation structure. Specifically, we looked at:

Growth in programs that in turn require increases in staffing levels;

The rate of salary growth for teachers and aides; and,

Benefits and healthcare costs

### *Composition of the Newton Public Schools Staff*

In FY 2009, the Newton Public Schools employs approximately 1,700 people, over 1,400 of which are instructional staff (classroom teachers, specialists, librarians, etc.) and aides. The remainder of the staff is comprised of administration and supervisory personnel (superintendents, principals, department heads, directors of technology and technical education), administrative support personnel (budget and accounting, payroll, human resources, procurement), pupil services personnel (psychologists, guidance counselors, social workers), and clerical and custodial personnel. (The history of staffing for FY99-FY08 is in Table 9.)

For compensation and contract purposes, the Newton Public Schools staff is comprised of 8 units. Units A-E are part of the Newton Teachers' Association and are comprised of teachers, aides, specialists and certain administrators. The administrative assistants and custodians negotiate separate contracts with their own unions. Central staff administrators and principals do not participate in collective bargaining.

### **What drives growth in salary compensation?**

To analyze the salary cost structure for the Newton Public Schools we looked at two of the bargaining units, which together comprise 78% of salaries. Unit A – which includes teachers, specialists, school psychologists and social workers – is \$74.3 million for FY09<sup>14</sup>, or 66% of total salaries for the system. Unit C – which includes Aides (both Regular Instruction and Special Education) – is \$13.7 million, or 12% of total salaries.

There are three essential components to growth in salaries for the Newton Public Schools teachers and staff:

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<sup>13</sup> Not including \$2,396,828 in salary offsets due to SPED circuit breakers, METCO, and other.

<sup>14</sup> Not including approximately \$320,000 in Longevity payments for Unit A. Longevity payments reward teachers, secretaries, principals, and administrators for length of service. For teachers, these are paid out during the 14<sup>th</sup> year of service. Total Longevity costs for the Newton Public Schools in FY2009 are \$684,157. For NTA Unit A (Teachers), Longevity payments are paid out in FY2009 as follows: Between 14-19 years of service – \$750; between 20-24 years of service – \$1,000; Between 25-29 years of service – \$1,500; 30 or more years of service – \$2,600.

- Annual salary increases (or Cost of Living Adjustments – COLAs): These are negotiated in each contract cycle. For FY 2009, the COLA was 3.0% for all teachers and aides.<sup>15</sup>
- Step and Lane increases: During the first 13 years of tenure (for teachers) and the first 8-10 years (for aides), individuals receive an *additional* salary increase over and above the COLA to recognize the additional experience they have gained. For teachers, this is approximately 4% per year while they are “stepping,” and for aides, this increase is approximately 8% per year while they are “stepping.” The philosophy behind the step system for teacher compensation is the assertion that teachers’ starting salaries are lower than those of other professions that require similar educational backgrounds and responsibilities. In those other professions, employees often make a significant salary jump after 2-5 years of experience through promotions and advancement. Proponents of steps argue that the steps ensure teachers progress toward that increased compensation earned by other professionals. Step proponents also point out that it takes teachers 10-14 years (depending on the number of steps<sup>16</sup>) to reach a compensation level that many other professionals reach in half that time. *As of June 2008, 41% of Newton Teachers have “stepped out” (reached step 13).*

“Lane” increases are based on teachers’ attainment of additional educational credentials, for example earning a “Master’s degree.” While these are substantial for individuals earning additional degrees, at an aggregate level, they do not greatly impact the growth in compensation for the Newton Public Schools.

With few exceptions across the state and country, this is the salary structure that school systems use. Nevertheless, it creates an unusual collective bargaining dynamic. The school department and teachers union typically negotiate a single COLA for all teachers – both those who *only receive the COLA and those who start with a 4% increase due to steps. Thus, for FY 2009, those teachers still “stepping” will earn an increase of approximately 7%, while those who have reached step 13 will earn an increase of 3%.*

- Turnover savings: Each year, as teachers retire or leave the system, they are replaced by new teachers, usually at a lower step, receiving lower pay. For the five years up through FY08, the average salary difference of a teacher leaving the system and a new one entering was approximately \$10,000. The resulting turnover savings for Unit A (teachers) is approximately \$1.2 million per year, not including any additional savings due to headcount reductions.

To better understand how each of these elements contributes to the overall growth of the school budget, the Citizen Advisory Group analyzed the total rate of salary growth for Units A and C. We estimated the annual rate of growth in salaries by adding the COLA increase to the increase due to steps and lanes, and then subtracting savings due to turnover. *Note that our calculations for teacher and aide salary growth include those who are still stepping and those who are not.* As shown in the analysis below, the model shows that with COLAs, steps and lanes, and turnover savings,<sup>17</sup> overall teachers’ annual salary is growing at rate of 4.0% per year, while overall aides’ annual salary is growing at a rate of 8.4% per year. This difference between teachers’ and aides’ salary growth is due to two primary factors: 1) Newton Public Schools realizes negligible turnover savings from aides, and 2) aides’ annual step increases are substantially higher than those for teachers.

<sup>15</sup> In FY07 and FY08, the COLA increases were 1.5% and 3.1% respectively.

<sup>16</sup> The number of steps is not uniform across all districts; each school district negotiates its own number of steps and step increases in salary.

<sup>17</sup> This analysis is based on static headcount

**Table 1: Rate of Salary Growth, Units A and C (FY2009)**

	Unit A (Teachers)	Unit C (Aides)
FY09 Salaries (millions)	\$74.3	\$13.7
Overall salary growth due to STEPS and Lanes	2.6%	5.4%
COLA increase (FY09)	3.0%	3.0%
Net increase before turnover savings	5.6%	8.4%
Turnover savings	1.6%	-
Net annual salary growth (projected)	4.0%	8.4%

(Further below is an analysis of the impact of salary growth on the school budget as a whole.)

**How do the Newton Public Schools’ salaries and wage growth compare to other communities, and to Massachusetts as a whole?**

Based on the Draft Citizen Advisory Group Benchmarking report from October, 2008, the Newton Public Schools teacher salaries are high compared to demographically similar communities, but in line with communities with a “similar commitment to education.”<sup>18</sup>

Compared to demographically similar communities, Newton’s average teacher salary of \$67,080 (MA DOE FY07) is 8.4% above the average of \$61,881. For Master’s level teachers, Newton’s highest step level, Newton’s teacher salary was 7.3% above the average.

Among the six communities with a similar commitment to education, Newton’s average salary ranked fifth, although 0.4% above the average. For Master’s level teachers, Newton’s highest step level, Newton was 1.8% above the average of that group, second to Wayland. In regards to salary growth *within* the step levels, Newton’s compounded annual Step growth (for Master’s level teachers) is 4.6% per year, compared to an average of 4.8% per year for communities with a similar commitment to education.

For Massachusetts, the average growth in personal wage income was 4.5% per year, based on income levels from 1997 – 2007.<sup>19</sup>

**Benefits**

Benefits include health insurance (84% of total benefits cost), dental, life, and disability insurance, as well as unemployment, workers compensation and travel reimbursement. Health insurance has grown at a rate of 9.3% per year over the past six years (FY03 – FY09).

This growth rate appears to be higher than the experience of Massachusetts as a whole. According to Families USA, family health insurance premiums in Massachusetts grew at an annual rate of 8.6%

<sup>18</sup> Based on the October 7, 2008 CAG Draft Benchmarking Report “Communities with a Similar Commitment to Education” include: Newton, Brookline, Lexington, Wayland, Wellesley, and Weston

<sup>19</sup> Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce, <http://www.bea.gov/regional/spi/SA04fn.cfm>



per year from 2000 – 2007.<sup>20</sup> For the comparable period (FY01 – FY08), average family premiums for the Newton Public Schools grew at a rate of 10% per year. Perhaps as significant, in the private sector, employers have been able to pass some of the burden of fast growing health insurance costs back on employees. Employer contributions for family plans in Massachusetts declined during that same period: from an average of 79% in 2000 to 75% in 2007.<sup>21</sup> During that same period, employer contributions in the City of Newton have remained at 80%.

As rapidly growing healthcare costs plague all municipalities, some are starting to explore the option of joining the Massachusetts Group Insurance Commission (GIC). While the Municipal Cost Committee of the Citizen Advisory Group will be exploring this in greater depth, it is appropriate to briefly discuss it here as benefits are such a significant component of the Newton Public Schools' costs. The Group Insurance Commission is the Commonwealth's insurance purchasing pool that covers over 290,000 state and municipal (some) employees. Some cities and towns have begun to join the GIC (most recently Weston) to take advantage of lower premium rates in the GIC pool. While there are some significant collective bargaining issues involved in joining the GIC, the City's analysis suggests that city wide savings could be between \$1 and \$6 million per year. In addition, as the City currently self insures, joining the GIC might enable the City to liquidate the existing health insurance trust fund of approximately \$9 million.

Joining the GIC also comes with some costs. Newton would be giving up some efficiencies and flexibility it currently has (e.g., Canadian drug purchases, the ability to offer benefits on an exception basis, etc.). Further, it is prudent to compare the City's recent cost experience with the GIC's premium growth to ensure that the savings are, in fact, significant. The analysis of the long-term savings of joining the GIC is a complex one that must weigh many variables.

### **III. Issues**

#### **What are the major drivers to the growth of the Newton Public Schools' budget?**

Based on the Citizen Advisory Group analysis of compensation growth combined with the Newton Public Schools five year forecast (through FY13), the Newton Public Schools will require increases of approximately 5.9% per year in order to maintain the current level of service and programs (assuming existing contracts and arrangements with Newton Public Schools employees remain largely the same and similar growth in special education as experienced in the past 3-5 years). Since Newton's override vote in 2002 that impacted the FY03 budget, the Newton Public Schools budget has grown at a rate of 4.3% per year (FY03 – FY09). Thus, if maintenance of existing program levels requires 5.9% growth each year but it only receives an increase in its budget of 4.3%, then the school system will face a deficit of approximately \$2.5 million next year. *Accumulating and compounding this deficit results in a funding gap of almost \$20 million by FY 2015.*

The Citizen Advisory Group analysis of the Newton Public Schools' budget and forecast show two key components that drive the growth in the budget above 4.3%:

- Benefits (growing at 9.3% over the past six years); and,

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<sup>20</sup> Families USA, "Premiums versus Paychecks, A Growing Burden for Massachusetts's Workers", October 2008

<sup>21</sup> *ibid*

- Special Education mandated costs projected to grow at 8.7% per year. As discussed in the Special Education report, a number of factors continue to drive these costs. Chief among them are:
- Special education enrollment growing a higher rate than total enrollment in the Newton Public Schools (3.5% per year from FY98 - FY08 compared to 0.5% for total Newton Public Schools enrollment); and,
- A rise in the complexity and needs of students requiring special education services, in particular, the rise in students on the autism spectrum and students with communication, health and neurological diagnoses. From 2003-2008, the number of students with special needs increased 8.07%, but the number of students presenting with autism, communication, health, and neurological needs grew by 75%. In 2003, these students comprised 21% of the special education population, compared to 35% in 2008. These students require a wide range of significant services including occupational therapy, physical therapy, Applied Behavior Analysis support, and speech and language services. Students with these diagnoses also most typically require aide support, and the Newton Public Schools has witnessed a corresponding increase in the number of aides in the system. For example, it is projected that two students requiring aide support will age out of the system (graduate) in June 2009, while 30 students requiring aide support will enter the system in September 2009.

The other two components of projected growth in the Newton Public Schools budget that exceed 4.3% are charter maintenance (i.e., ongoing maintenance of capital plant) and utilities.

Table 2 lays out the major cost components of the Newton Public Schools and their projected rates of growth.

**Table 2: Growth Drivers in Newton Public Schools Budget (FY09)**

	Base Year (FY 2009)	% growth	% of budget	Contribution to growth above 4.3%	
				\$	%
Instructional salary less offsets (not including SPED)[1]	\$62,707,400	4.30%	39%	7,354	0%
Other salary (principals, custodians, admin, etc.)[2]	24,622,423	3.80%	15%	-123,287	-5%
Benefits (total, including SPED)[3]	23,190,989	8.90%	14%	1,061,414	42%
SPED (less benefits)[4]	33,596,828	8.40%	21%	1,384,487	55%
Utilities[5]	6,384,408	6.00%	4%	108,535	4%
Charter maintenance[6]	1,914,100	15.00%	1%	204,809	8%
All other[7]	<u>7,669,020</u>	<u>2.50%</u>	<u>5%</u>	<u>-137,691</u>	<u>-5%</u>
TOTAL	160,085,168	5.90%	100%	2,505,621	100%

[1] Includes growth in teachers' and aides' salaries based on analysis done under the section "what drives growth in salary compensation"

[2] Based on FY '08-FY '09 growth

[3] Uses historical growth over the past 5 years (8.4%). Figure incorporates growth in FTEs

[4] Based on current NPS projections with the exception that circuit breaker reimbursements are projected to grow at the same rate of tuition increases. Given recent information from the state, it is possible that circuit breaker reimbursement may be reduced.

[5] Based on NPS estimates

[6] Based on NPS estimates of need for appropriate funding to address backlog and future needs

[7] Based on NPS estimates

Note: with total benefits pulled out of SPED

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While this report highlights a number of issues, the Citizen Advisory Group budget analysis shows that it is not teachers' salary compensation that is driving up costs beyond the Newton Public Schools' post override growth rates in its overall budget. Rather, benefits and mandated special education costs are driving overall Newton Public Schools costs up at 6% per year. While the Citizen Advisory Group does believe there exists potential savings in benefit costs (discussed above), in the near term, as the special education report shows, Newton Public Schools will be limited in its ability to substantially reduce special education costs.

#### **IV. Recommendations**

##### **1) Develop and Articulate a Philosophy of Teacher Compensation**

While teachers' salary compensation is not driving the Newton Public Schools' budget growth beyond 4.3%, personnel costs do comprise the biggest part of the budget. Thus, the Citizen Advisory Group believes that it is critical for the City and the Newton Public Schools to articulate a clear viewpoint on teacher compensation. What is the appropriate level of teacher salaries, both compared to other communities as well as compared to other professions (a challenge faced by all school systems)? Does Newton want salary levels to remain consistent with other communities the Citizen Advisory Group Benchmark study cited as having a "similar commitment to education," with compensation levels among the highest in the state? If the Newton Public Schools chooses not to, what are the implications for the ability to continue to attract top quality teachers? What percent increases in salaries are viable in light of the City's financial situation? (It is also important to note that the percent increases in Newton's teacher contract have often been used by Newton's municipal unions as a standard in their negotiations in the following three years.) And, as important, how does the Newton Public Schools continue to craft the type of job and work environment that will attract teachers?

##### **2) Review Compensation Structure of Special Education Aides**

We believe that it is timely and prudent to review the compensation structure of Newton's special education aides. As illustrated more fully in the Special Education portion of this report, the number of aides entering the system to support Newton's increasingly complex special education population is far exceeding the number of aides exiting the system each year. In addition, aides' salaries are growing at 8.4% annually. The increase in the number of aides combined with the growth in salaries has overall special education aide salaries growing at 10.8%. We recommend that the Newton Public Schools identify what skills are currently required of its special education aides and benchmark their compensation package to similarly skilled aides in surrounding communities. We also recommend that the Newton Public Schools model the long-term impact of the current step structure in aides' salaries, and give consideration to whether a more fiscally sustainable model can be developed.

##### **3) Conduct Regular Teacher Surveys**

The Citizen Advisory Group believes that in order to develop a clear vision on teachers' compensation and work environment, it is essential that the Newton Public Schools ask the teachers "what matters the them" in a clear, confidential format. There may be no more important information than this in helping develop a teacher compensation policy. In Appendix F, we have included a

sample teacher survey that the Citizen Advisory Group designed. The Citizen Advisory Group recommends that the school department conduct an extensive survey on teachers' views of the current state of the school system that addresses what is important to teachers in their jobs and what factors do teachers believe contribute to providing an excellent education. The Citizen Advisory Group recommends that such a survey be conducted regularly, possibly every three years. In the private sector, CEOs regularly survey their employees in order to get a sense of what things really matter to them in order to attract and retain top talent. The Citizen Advisory Group heard many comments from Newton Public Schools' administrators, School Committee members and the public during our work supporting the high value that Newton places on having excellent teachers in its school system. The Citizen Advisory Group thinks surveying the teachers is essential to developing a work environment that will be attractive to talented educators.

#### 4) Consider Joining the Group Insurance Commission

Health insurance benefits are an area where the Citizen Advisory Group believes the City has an opportunity to realize savings. As noted above, while teachers' salary growth is in line with Massachusetts' average personal income growth, employer contributions to health care premiums in Massachusetts have dropped below the 80% currently paid by Newton Public Schools.

In order to join the GIC, Newton would have to make a decision by October, 2009, to join for 2010. As noted above, there are currently some not insignificant collective bargaining issues involved in joining the pool. By law, 70% of the City's union membership would need to vote to join the GIC. Thus, joining the GIC is not a decision that the City can make unilaterally, but one that must be arrived at with the support of the City's unions. House Speaker Salvatore DiMasi said in early December 2008 that he will propose legislation in January 2009 that would allow municipalities to join the state's health insurance program without union approval.<sup>22</sup> Nevertheless, the Citizen Advisory Group recommends that Newton begin immediately to explore the GIC and that it develop a position on potential savings by the end of the current fiscal year.

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<sup>22</sup> Boston Globe, December 9, 2008.

## **VI. Conclusion**

Unless the Newton Public Schools identifies ways of increasing its revenues, the system will need to reduce costs through some combination of:

- Reducing teacher salaries and/or benefits, possibly below that of other communities with a similar commitment to education
- Further reducing staffing levels and increasing class size
- Increasing teacher load (i.e., have teachers in the high school teach five classes rather than four)
- Re-configuring the neighborhood school model, the middle school model, and/or reducing the number of buildings to achieve greater economies of scale
- Further decreasing supervision and teacher development
- Further cutting programs
- Re-inventing the educational model by using technology to reduce staffing
- Achieving efficiencies in utilities, transportation and food services

Thus, without new revenues or changes in our service delivery model, we believe the quality of the Newton schools will continue to erode, putting our reputation as an excellent school system at substantial risk.

## **B. Special Education Report**

### **I. Executive Summary**

Special education is a very complex and specialized area. No member of the Citizen Advisory Group is expert in special education, therefore the Citizen Advisory Group did not attempt to evaluate how well Newton is delivering special education services. Instead, the Citizen Advisory Group undertook to identify (1) the financial trends in special education and how special education costs are impacting the total Newton Public Schools budget, and (2) to what degree the community thinks our special education dollars are well spent. The Citizen Advisory Group analyzed the Newton Public Schools' special education enrollment and cost data, and documented the viewpoints and concerns it heard about Newton's special education programming during the course of its work. Finally, the Citizen Advisory Group developed recommendations to address the issues identified and concerns raised.

Newton is mandated under state and federal law to provide special education services to eligible students from age three (3) to twenty-two (22). Currently, Newton has approximately 2,300 students who are eligible for special education. In FY '08 they represented approximately 19.5% of the total student population, and over 25% of the total school budget is devoted specifically to their needs.

Special education enrollment has been growing faster than total enrollment, and the special education portion of the budget has grown correspondingly. A significant contributor to the growth in the special education budget is the number and salary structure of the special education aides who support Newton's students with special needs. The growth in the number of aides is due to fact that more students with severe needs who require the assistance of an aide are entering the system than exiting. Thus, in recent years there has been a net increase in the number of aides in the system. In addition, under the current contract with the Newton Teachers' Association, aides' salaries are growing at approximately 8.6%, with little or no "turnover savings" resulting from retirement of aides at higher steps.<sup>23</sup> Aides are also entitled to benefits and benefits have been another significant driver of Newton Public Schools' overall expenses. Other contributors to special education cost growth are transportation costs, out-of-district tuition, and contracted services.

Because special education services are legally mandated, it is not entirely within the control of Newton Public Schools to decide how much of its budget to spend on special education services in any given year. For example, if a student is identified with special education needs during the school year, Newton Public Schools must address those needs and would have to pay for the cost of services for this student even though the funding had not been set aside in the budget process. Costs for special education services, depending on severity of need, can range from \$2,000 to \$250,000 per student. In a time of relatively static or limited budget growth, mandated special education costs may continue to take up a larger portion of the Newton Public Schools budget, with the result that other parts of the school budget must be reduced.

The special education laws are grounded on student and parental rights and on the principle that separate is not equal. School districts are obligated to provide a "free and appropriate" education in the "least restrictive environment" based on the student's individual needs. Thus, it is not simply a matter of a school system deciding to "hold the line" on its special education services. Legally, Newton Public Schools must provide appropriate services to its students with special needs.

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<sup>23</sup> The salary structure of aides and its impact on the budget is discussed more fully in Appendix A.

However, the means by which those services are delivered are not mandated (although they are regulated). As such, in analyzing special education programming, the issues are ones of efficacy and efficiency (just as in general education): how do we most effectively and efficiently meet the individualized needs of our students with special learning needs?

During the course of its work, the Citizen Advisory Group heard repeatedly that Newton provides a very good, if not excellent, education to its students with special needs, just as it does for its general education students. Nevertheless, the Citizen Advisory Group identified the following issues as worthy of further examination:

1. The efficacy and fiscal sustainability of the Neighborhood Inclusion model;
2. The lack of agreed-upon metrics to measure outcomes of programs and services;
3. The absence of a consistent and easily understandable summary of special education costs and revenues (presented in a way that allows easy analysis of growth trends, etc.);
4. A lack of transparency about the special education programs and services provided within Newton Public Schools;
5. A lack of public understanding about special education generally – what it is, the diversity of the special needs population and profiles, the legal mandates under which services are provided, and the individualized nature of each student’s educational plan.

In view of this, the Citizen Advisory Group recommends that the Newton Public Schools:

1. Conduct an outside evaluation to determine how well and how efficiently special education services are delivered (this analysis would address whether Newton Public Schools can deliver as good or better services with the same or fewer dollars);<sup>24</sup> this type of evaluation is needed on a periodic basis, perhaps every ten years;
2. Establish its own set of metrics to measure the effectiveness of its special education programs. The Citizen Advisory Group suggests Newton Public Schools work with the Special Education PAC to establish these metrics and that it involve special education parents, educators, and administrators;
3. Capture and report systematically special education costs and revenues in a more “reader friendly” manner;
4. Partner with the Special Education PAC to continually evaluate and improve upon programs and practices; these efforts should not be focused on compliance issues, but rather on substantive issues of quality and the delivery of services;
5. Improve communication, transparency and public understanding of Newton’s special education programs by continuing to work with the Special Education PAC.

## **II. Current Status**

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<sup>24</sup> The Citizen Advisory Group understands that the School Committee has recently committed to such a study. The Citizen Advisory Group believes that defining the scope of the study and the expected deliverables will be paramount in ensuring an instructive report with actionable recommendations is produced.



## A. Legal Framework

Newton is mandated under the Individuals with Disabilities Education Act (IDEA), the Americans with Disabilities Act (ADA), and state law to provide special education services to eligible students from age 3 to 22.<sup>25</sup> Eligibility is determined through a formal evaluation that the school district must provide free of charge. To be eligible for special education, (a) the student must have a disability, (b) the disability must prevent the student from progressing effectively in general education, and (c) the student must require specially designed instruction or related services in order to access the general curriculum.

In general, the laws mandating special education services are based on parental and student rights and are grounded in six basic principles. Three of them are foundational principles: parent and student participation, appropriate evaluation, and procedural safeguards. The other three principles drive the implementation of special education services and are worthy of elaboration.

- Free and Appropriate Public Education (FAPE)
  - Services must be sufficient to enable the child to progress in education and to achieve the goals of the individualized education program
  - School districts must provide preschool, elementary and secondary education through age twenty-two (22), including access to extra-curricular and non-academic school activities
  - The curriculum should be the standard general education curriculum, and must be modified based on the individual student's needs
- Individualized Education Program (IEP)
  - An individualized education program (IEP) and services must be developed for each child and must identify specific, measurable goals which can be reached in a year's time
- Least Restrictive Environment
  - To the maximum extent appropriate, students with disabilities have the right to be educated in the classroom they would have attended if they did not have disabilities
  - A student may not be removed from the general education classroom solely because of needed curriculum modification; such removal should occur only if the nature or severity of the disability is such that education in the general education classes with the use of supplementary aides and services can not be satisfactorily achieved.

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<sup>25</sup> Students may also receive accommodation and related services under the Americans with Disabilities Act (ADA) and Section 504 of the federal Rehabilitation Act, respectively. Technically, students who only have 504 plans are not entitled to special education services; their accommodations and related services may be provided by general education or special education staff as part of a general education initiative. Therefore, these students and the costs associated with their accommodations and related services are not accounted for in the special education budget.

Special education is provided through an Individualized Education Program (IEP). Each student's special education services must be developed by a "team" that includes the student's teachers, parents, specialists, school psychologist, principal and special education administrators (the IEP team). The laws give rights to parents and students, and procedural safeguards are mandated to ensure those rights are not violated.

The Least Restrictive Environment (LRE) requirement of the special education laws mandates that students with disabilities be educated with their non-disabled peers to the maximum extent appropriate based on the student's needs. The IEP team must choose the least restrictive environment in which to educate the student based on the services the student is receiving. Generally, this means that the student should attend the school he or she would attend if he or she were non-disabled, unless the IEP team determines that the nature of the student's disability would not allow that student to make satisfactory educational progress in that environment. To that end, the IEP team must consider whether supplementary aides and services would make it possible for the student to be educated in the general education setting. The determination must be made based on the student's *individual* needs. The model of educating students with special needs alongside their non-disabled peers is referred to as "inclusion."

It is important to note that federal and state laws require that the curriculum be delivered to students with special needs by a teacher certified in both the subject area and in special education. Often, those will be different people. For instance, at the middle school or high school level, a special education teacher will need to work with a certified math teacher to modify the curriculum for the students, unless that math teacher is also certified in special education or the special education teacher is certified in math. Further, students may only be placed in a classroom together if they are forty-eight months or less apart in age.

#### B. Newton's Special Education Programming

To be responsive to the individual needs of students, and to comply with state and federal laws, Newton's special education programming takes many forms and occurs in many locations. Special education services are delivered in the elementary, middle, and high schools, as well as through the Newton Early Childhood Preschool Program (NECP) which provides services to eligible 3-5 year olds. Students whose needs cannot be met by the Newton Public Schools are placed in out-of-district schools as appropriate.

As required, the Newton Public Schools follow an inclusive model for educating students with disabilities. The majority of Newton's students with special needs are educated in their neighborhood schools and in general education classrooms. Depending on the individual's needs, the student may receive in-class support from a specialist, or may leave the classroom for a short period to attend a support class or session (sometimes referred to as "pull-out" services). Some students require a 1:1 aide plus specialist support.

There are situations when a student's needs are best met in a setting other than the general education classroom, but still within the Newton Public Schools. In those instances, students are "clustered" with other students from across the City with similar needs and are educated together in one location. The Newton Public Schools endeavor to provide inclusion opportunities for these classrooms where appropriate. For instance, a substantially separate elementary school classroom may join a general education classroom for art, music, PE and lunch.

A brief description of Newton's special education programs follows.

#### *Pre-School*

Programs for 3 and 4 year olds with special needs are provided at the Education Center and at Lincoln-Eliot Elementary School. The Pre-School enrolls children with special education needs who receive services for free (as mandated by the law), and also serves children who do not have special needs on a private-pay basis. There are approximately 200 students enrolled in the Pre-School, approximately 145 of which are receiving special education services.

#### *Learning Centers*

School-based Learning Centers help children who spend the majority or all of their time in their general education classrooms, but require some additional or modified instruction in various areas. Special education teachers provide services either in the classrooms or through "pull-out" time during the week. All twenty-one (21) schools in Newton have a Learning Center and special education teachers.

#### *Neighborhood Inclusion Program*

The Neighborhood Inclusion Program provides support to children with moderate to severe disabilities who are fully included in their neighborhood schools. There are minimal pull-out services, as all special education services are delivered in the regular context of the classroom, usually with the assistance of an aide. The program depends heavily on appropriate curriculum modification based on individual student needs. All twenty-one (21) schools in Newton have a Neighborhood Inclusion Program.

#### *Integrated Classrooms*

Integrated classrooms are ones in which students with a defined learning disability are grouped with their non-disabled peers and the class is staffed with a full-time general education teacher and a full-time special education teacher (as well as other specialists on a part-time basis as appropriate). At least 51% of the students in integrated classrooms are non-disabled, and 49% or fewer are students with disabilities. These are City-wide programs, so the classrooms include children from other than the neighborhood school that houses the program.

#### *Substantially Separate Classrooms*

These are classrooms for children who spend most of their week in a classroom taught by a special educator. A substantially separate classroom may be appropriate for students who need intensive or very specialized assistance or instruction.

#### *Out-of-District Placement*

Students whose needs cannot be met within the Newton Public Schools system are educated by schools outside of the district. There are both day school and residential placements. In FY08, there were 124 children enrolled in out-of-district schools and programs (representing 1.07% of total Newton Public Schools enrollment, and 5.51% of special education enrollment).

#### *Home or Hospital*

When students are unable to attend school for ten (10) consecutive days, the Newton Public Schools must provide a tutor to give them private instruction. This population of students fluctuates, but represents a relatively small number of Newton's students.

### C. Philosophy and Choices

While the requirement to provide special education services is established by law, the exact means of delivering the services is not. However, Newton has proudly embraced its obligations under state and federal special education mandates and has programming designed to meet the letter and the intent of the special education laws. As discussed above, to the extent feasible, Newton strives to educate its students with special needs in-district, integrating them as much as possible within the general education classrooms in keeping with the Least Restrictive Environment requirement. The Newton Public Schools Guide to Special Education Programs provides this explanation of the Newton Public Schools' inclusion philosophy:

*Inclusion is a belief that everyone belongs and everyone benefits. The educational model challenges schools to meet the needs of all students by educating learners with disabilities alongside their non-disabled peers. Inclusion is based on a belief that all children can learn together in the same schools and classrooms with appropriate supports. Genuine friendships develop when each child is appreciated for his or her unique gifts....*

*The mission of the schools is to maximize the potential and independence of each student. An inclusive education helps prepare students with disabilities for an integrated adult life and builds understanding and acceptance within the broader community....*

*This educational model presents the schools with an opportunity to eliminate the barriers between children with disabilities and their non-disabled peers.*

Students with special needs represent a broad spectrum of disabilities. Many students require support in only certain areas and only a couple times a week. Some students only require services or modifications during part of their education (e.g. during elementary school); others will require support throughout their time in school. Many students with disabilities are gifted learners and go on to achieve great academic success. It is widely accepted that early intervention can often prevent more severe complications later in a student's academic career, and identification and support for children in pre-school and elementary school were cited as essential and cost-effective.

The Newton Public Schools considers that inclusive special education programming benefits all students. The belief is that being exposed to and working alongside students who learn differently and face a variety of different challenges better prepares all of our students for the broader community they will meet upon graduating from high school. It also fosters respect for and understanding of human differences. Finally, several teachers and administrators commented that Newton's extensive inclusion programming was part of what attracted them to and keeps them working in Newton.

Not all school systems have as extensive a range of special education programming as Newton. In January of 2008, the Pupil Services department in the Newton Public Schools inquired into how some of our neighboring communities were delivering special education services. The models varied from relying more on substantially separate classrooms to hiring special education teachers to act as one-on-one aides. Factors that may affect a community's special education programming include the size of the community, the needs of its students, its commitment to compliance with special education laws, educational philosophy and educational leadership. There does not appear to be a "most

common” approach to special education across communities in Massachusetts. Because Newton is a relatively large district and because of its commitment to educating students in-district, Newton has chosen to develop a broad spectrum of delivery models – from Neighborhood Inclusion to Integrated Classrooms to substantially separate classrooms. Many smaller systems might not be able to support the breadth of programming that Newton has, or may choose to send more children out of district or to do more clustering.

#### D. Costs and Demographics

##### 1. The Data

The Newton Public Schools maintain excellent detailed records and analysis of its special education expenses. An example is the monthly report presented to the School Committee that tracks current year aides, tuitions, contracted services and measures these against the current year budget. In addition, the Newton Public Schools budget book contains a three-year analysis of costs. The district also performs various trending analyses as requested by the administration and School Committee from time to time.

Nevertheless, analyzing Newton Public Schools’ special education costs comes with some unique challenges. Some of the challenges stem from the fact that data are captured and reported in different places for different purposes, and often with different costs included or excluded. For instance, in the Newton Public Schools budget, all of the guidance counselors’, social workers’ and school psychologists’ time is allocated to the special education cost center, even though these professionals serve both special needs and general education students.<sup>26</sup> However, no ‘overhead’ allocation of general education system costs is captured in the special education cost center. Thus, arguably, the current reporting of special education costs may overstate some expenses while understating others. Another source of some confusion can be the reporting of state and federal grants and reimbursements (sometimes referred to as “revenues”) that Newton Public Schools receives to offset some of its special education costs. Generally, the budget presents special education costs net of these revenues, but some other reports may present numbers gross of revenues. Further complicating the analysis are reports generated by the Massachusetts Department of Education (DOE), which contain different cost allocations based on the DOE’s own methodology.

None of this reporting is “wrong” or misrepresents costs, but it makes detailed analysis of the Newton Public Schools’ special education costs a bit tricky. It is necessary to spend time with the Newton Public Schools finance staff in order to understand whether the data are “apples to apples.” For purposes of this report, the Citizen Advisory Group used the Newton Public Schools budget numbers (except when noted otherwise) and referenced whether the numbers are gross or net of reimbursements.

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<sup>26</sup> However, in the 10 Year Trends in the NPS budget, guidance counselors are not captured in the special education cost center.

## 2. Enrollment and Cost Trends

Special education enrollment and costs are growing at a faster rate than general education enrollment and costs. In 1998, approximately 15% of Newton’s students received special education services. In 2008, that number rose to approximately 20%, representing a 41% increase. The CAGR (Compound Annual Growth Rate) for total enrollment from 1998 to 2008 was 0.55%, while the CAGRs for special education and general education enrollments for the same period were approximately 3.01% and 0.04% respectively.

**Table 1: Total Special Education Enrollment (1998-2008)**

	SPED enroll.- In District	SPED enroll.- Out of District	Total SPED enroll.	Total SPED enroll. change from previous year	Total district enroll.	% of SPED enroll. relative to total enroll.
FY 98	1,535	137	1,672		10,944	15.28%
FY 99	1,630	146	1,776	104	11,166	15.91%
FY 00	1,644	126	1,770	-6	11,248	15.74%
FY 01	1,576	153	1,729	-41	11,246	15.37%
FY 02	1,702	143	1,845	116	11,250	16.40%
FY 03	1,803	124	1,927	82	11,276	17.09%
FY 04	1,975	134	2,109	182	11,267	18.72%
FY 05	2,094	126	2,220	111	11,268	19.70%
FY 06	2,185	122	2,307	87	11,415	20.21%
FY 07	2,112	119	2,231	-76	11,501	19.40%
FY 08	2,126	124	2,250	19	11,556	19.47%

CAGR 98-08: 3.01%

Total SPED enrollment increase 98-07: 34.57%

Source: Newton Public Schools

In addition, as the special education population has grown faster than overall enrollment, the special education portion of the Newton Public Schools budget has also grown at a faster rate than the overall budget. In 1998, 18.9% of the Newton Public Schools budget went to meet the needs of students with special needs. By 2008, 26.9% of the budget was allocated to special education costs, representing an increase of over 150% since 1998. The CAGR for total school costs from 1998 to 2008 was 5.99%, while the CAGRs for special education and general education costs for the same period were approximately 9.84% and 4.88% respectively.

(Note: when looking at the cost of special education, we have taken into account gross costs, not including grants and other reimbursements that the Newton Public Schools have been able to access. See the explanation below on Circuit Breaker reimbursements for Out-of-District tuitions.)

**Table 2: Total Special Education Cost (1998-2008)**

	SPED Cost - In District	SPED Cost – Out-of-District	Total SPED Cost	Total SPED Cost - Change from Previous Year	Total School Cost	% of SPED Cost relative to Total Cost
FY 98	\$12,858,457	\$3,752,209	\$16,610,666		\$88,117,283	18.85%
FY 99	\$14,773,650	\$3,802,632	\$18,576,282	\$1,965,616	\$96,946,993	19.16%
FY 00	\$16,630,521	\$3,948,730	\$20,579,251	\$2,002,969	\$101,561,577	20.26%
FY 01	\$19,034,635	\$4,632,504	\$23,667,139	\$3,087,888	\$108,595,958	21.79%
FY 02	\$20,308,232	\$4,992,268	\$25,300,500	\$1,633,361	\$113,323,738	22.33%
FY 03	\$22,575,155	\$4,958,122	\$27,533,277	\$2,232,777	\$124,289,844	22.15%
FY 04	\$23,052,596	\$6,512,233	\$29,564,829	\$2,031,552	\$128,465,671	23.01%
FY 05	\$24,721,072	\$7,139,603	\$31,860,675	\$2,295,846	\$134,532,211	23.68%
FY 06	\$26,252,160	\$7,309,794	\$33,561,954	\$1,701,279	\$140,016,301	23.97%
FY 07	\$31,169,377	\$6,570,364	\$37,739,741	\$4,177,787	\$146,195,893	25.81%
FY 08	\$34,323,134	\$8,131,340	\$42,454,474	\$4,714,733	\$157,642,982	26.93%

Total SPED costs do not include credits/debits deriving from grants and reimbursements

Growth 1998-2008 155.59%

CAGR 98-08 9.84%

Source: Newton Public Schools

### 3. Benchmarking

Because every school district designs its own special education programs and staffing structure, it is important to be cautious when comparing district programs. In order to fully “benchmark” Newton’s special education costs to another community, it is essential to understand the diversity of the population, the means by which special education is delivered in the other community, and how they have structured and titled their special education personnel. Nevertheless, it is possible to look at overall cost trends across districts by referring to data collected by the Department of Education each year.<sup>27</sup>

While it only looked at 2007, the Citizen Advisory Group’s benchmarking study (which drew on DOE data) indicated that the percentage of students receiving special education services and special

<sup>27</sup> Note that while the DOE requires consistent reporting, there is no way to know how accurate other districts are in reporting their costs. Nevertheless, it is the best data available for benchmarking across communities in the Commonwealth.

education spending in Newton is about average for communities with a similar commitment to educational excellence. Newton has a higher percentage of pupils enrolled in special education (18.8% of the total student body) compared to 16.7% for communities with a similar commitment to education. However, the Newton Public Schools allocate only slightly more of the total school budget to special education (21.8% in Newton versus an average of 20.5%).

**Table 3: Benchmarking:  
Newton vs. Communities with Similar  
Commitment to Education**

	Special Education enrollment as a % of Total School Enrollment	Special Education Budget as % of Total School Budget
<b>Newton</b>	<b>18.8</b>	<b>21.8</b>
Brookline	18.3	21.9
Concord-Carlisle	15.6	23.2
Lexington	16.4	23.1
Lincoln-Sudbury	14.7	19.3
Wayland	18.3	15.2
Wellesley	15.9	25.3
Weston	14.9	13.0

MA DOE FY07

Source: Citizen Advisory Group Benchmarking study

#### 4. Changes in Demographics and Staffing Needs

Over the past five years, the number and needs of Newton’s students with special needs have changed in a significant way. Newton has witnessed a rise in the number of students on the autism spectrum, as well as the number of students with communication, health, and neurological issues. These students require a wide range of significant services including occupational therapy, physical therapy, Applied Behavior Analysis support, and speech and language services. Students with these diagnoses also most typically require aide support.

According to Newton Public Schools, *“not only is the population of students within particular disability categories growing, but many children within these categories have demonstrated a greater*



*degree of need. It is no surprise that students with greater levels of need require more individualized and specialized support... ”<sup>28</sup>*

The table below shows information from 2003 to 2008 for the total number of students with a disability and each category.

**Table 4: Newton Special Education Disabilities (2003-2008)**

<b>Primary Disability</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>Increase 03-08</b>
<b>Autism</b>	<b>94</b>	<b>113</b>	<b>119</b>	<b>139</b>	<b>161</b>	<b>185</b>	<b>96.81%</b>
<b>Communication</b>	<b>169</b>	<b>201</b>	<b>230</b>	<b>275</b>	<b>254</b>	<b>262</b>	<b>55.03%</b>
Dev. Delay	216	234	231	236	227	222	2.78%
Emotional	178	176	191	174	170	161	-9.55%
<b>Health</b>	<b>134</b>	<b>158</b>	<b>179</b>	<b>211</b>	<b>220</b>	<b>236</b>	<b>76.12%</b>
Intellectual	51	54	52	52	50	45	-11.76%
Multiple Disabilities	32	31	30	30	32	32	0.00%
<b>Neurological</b>	<b>58</b>	<b>59</b>	<b>67</b>	<b>71</b>	<b>88</b>	<b>113</b>	<b>94.83%</b>
Physical	12	13	20	20	16	13	8.33%
Sensory/Deaf Blind	2	1	1	3	2	2	0.00%
Sensory/Hearing	16	18	18	18	16	15	-6.25%
Sensory/Vision	5	5	8	9	7	6	20.00%
Specific Learning	1151	1158	1121	1078	1006	995	-13.55%
None Specified						2	
<b>Grand Total</b>	<b>2118</b>	<b>2221</b>	<b>2267</b>	<b>2316</b>	<b>2249</b>	<b>2289</b>	<b>8.07%</b>

Source: Newton Public Schools 1/09

Note: The total number of students on this table does not tie to the total SPED enrollment table for the following reasons: students may have been classified with more than one disability and thus be listed more than one time in the count; not all students may be listed on the Primary Disability chart; and the numbers on the Primary Disability chart are not as of October 1st of any given year and thus are a snapshot from a different point in time.

The table illustrates growth from 2003 to 2008 in several categories that are indicative of more severe disabilities: Autism (91 students), Communication (93 students), Health (102 students) and Neurological (55 students). Students with Autism present with a three-fold set of needs in communication, social/behavioral interaction, and learning. An aide (either shared or individualized) is often employed to provide support to these students. Students with Health and Neurological disabilities often require the support of many staff members including assistants, nursing supports, occupational and physical therapy supports, psychological and behavioral specialists, etc.

According to the Newton Public Schools, more students who require the support of an aide are entering the school system than leaving each year. In FY08 and FY09 special education had aide headcounts increase by 14% and 9% respectively. The following table shows projected transition data on students who are expected to enter and exit the school district who's IEPs require aides.

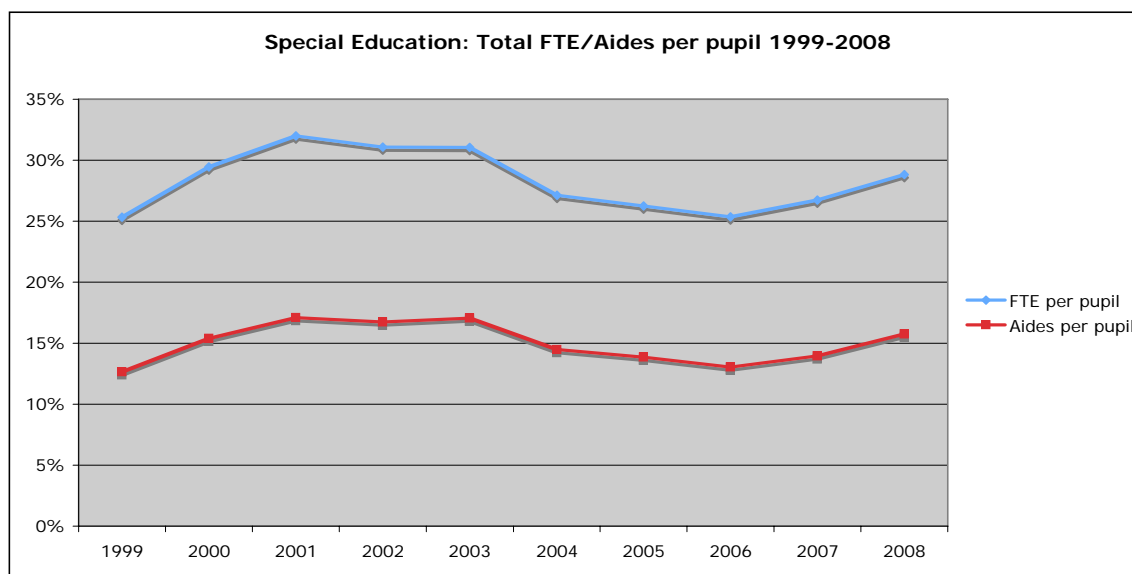
<sup>28</sup> Special Education information provided to the School Committee in January, 2008

**Table 5: Transition Data (2009)**

Incoming to Elementary Schools September 2009	Exiting High School June 2009
30 students: 6 require BT, 7 require 1:1 and 17 require shared aide support	2 students: 1 Aged Out with a 1:1 aide and one student sharing aide support

The ratios of FTE/Pupil (full time equivalent positions allocated to special needs pupils) and special education Aides/Pupil have increased in recent years. In 2001, the ratios of FTE/pupil and Aides/pupil had increased approximately 4-6% from 1999 levels, and the Newton Public Schools made an effort to reduce the number of aides in the system. By 2006, the numbers were closer to 1999 levels. However, given the needs of the students who have entered the system over the past five years, those ratios have risen again (although not to the levels they had reached in 2001).

**Chart 1: Total FTEs and Aides per Pupil (1999 – 2008)**



Source: Newton Public Schools. This table does not include students in out-of-district placements, but does include pre-school pupils. The assumption here is that students in out-of-district placements are not the primary driver in the growth in the Newton Public Schools special education employees. FTEs and Aides represent FTEs and Aides whose services are allocated specifically to students with special needs.

Not only is the number of aides in the system growing, the type of aide required has shifted over the past five years. Approximately three years ago, in response to the increasing complexity and needs of its special education population, the Newton Public Schools created a second category of aides, known as Aide Specialists. These are aides with an advanced skill set or training, and they are paid on a higher salary scale. The Aide Specialist category was created because the Newton Public Schools were struggling to attract aides with the skills needed to service the more complex needs of the current special education population. As discussed more fully in the Budget and Compensation Analysis section of this report, the growth in aide salaries is one of the main cost drivers in the

special education budget, growing at approximately 8.6% year over year.

#### 5. Out-of-District Placement Costs

When Newton cannot address the needs of its students with special needs within the district itself, those students are placed in out-of-district schools and programs. Out-of-district (OOD) placements are quite costly, ranging from \$27,000 to \$250,000 per student annually. From 1998 to 2008, OOD costs grew at a CAGR of approximately 8%, and at a CAGR of about 10% from 2003-2008.

**Table 6: Total Out-of-District Costs (1998 - 2008)**

1998	\$3,752,209
1999	\$3,802,632
2000	\$3,948,730
2001	\$4,632,504
2002	\$4,992,268
2003	\$4,958,122
2004	\$6,512,233
2005	\$7,139,603
2006	\$7,309,794
2007	\$6,570,364
2008	\$8,131,340

CAGR 1998-2008: 8.04%  
CAGR 2003-2008: 10.40%  
Source: Newton Public  
Schools

Starting in 2004, Massachusetts began reimbursing local school districts up to 75% of the OOD tuition costs that exceed approximately \$35,000. This reimbursement mechanism is referred to as the “Circuit Breaker” program. The numbers in this table are shown gross of any Circuit Breaker reimbursements. It is anticipated that Circuit Breaker reimbursements will decrease as a result of the current fiscal crisis. For FY09, the Newton Public Schools are budgeting Circuit Breaker reimbursement of approximately 60% instead of 75%.

The table below illustrates the history Newton's of Circuit Breaker reimbursements from their inception in 2004 through 2008.

**Table 7: Out-of-District Tuition and Circuit Breaker Reimbursements (FY04 – FY09)**

	<b>FY04</b>	<b>FY05</b>	<b>FY06</b>	<b>FY07</b>	<b>FY08*</b>	<b>FY 09</b>
Out of District Tuition	\$5,803,524	\$4,803,017	\$5,127,730	\$4,324,157	\$5,565,938	\$6,497,578
Plus Circuit Breaker	\$708,709	\$2,336,586	\$2,182,064	\$2,246,207	\$2,565,402	\$2,839,600
Total Out-of-District Tuition	\$6,512,233	\$7,139,603	\$7,309,794	\$6,570,364	\$8,131,340	\$9,337,178

\* FY08 Out-of-District Tuition is budget, not actual.

Source: Newton Public Schools

In FY08, there were 124 students (or about 5.5% of the special education population) in out-of-district placement. The majority of these students are in middle and high school, with only 9 at the elementary school level. The percentage of students in OOD placements relative to total school enrollment has remained relatively constant over the past decade. However, as a percentage of the special education population, OOD students have decreased.

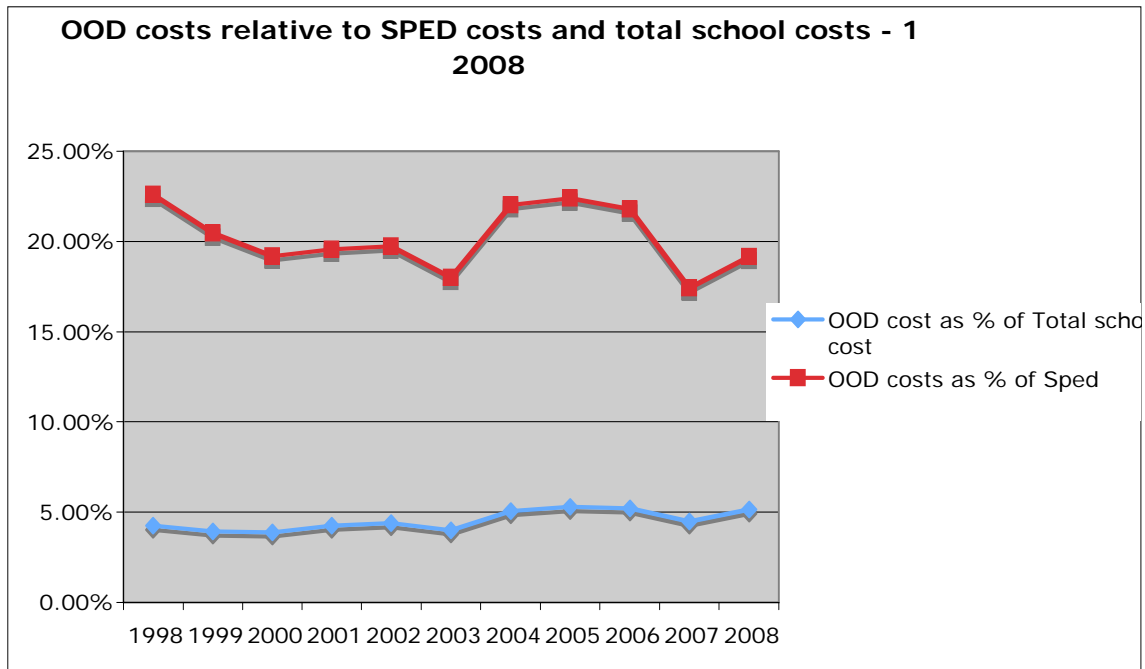
**Table 8: Out-of-District Population (FY98 – FY08)**

	# OOD students	Total SPED	OOD as % SPED	Total NPS	OOD as % Total NPS
FY 98	137	1672	8.19%	10944	1.25%
FY 99	146	1776	8.22%	11166	1.31%
FY 00	126	1770	7.12%	11248	1.12%
FY 01	153	1729	8.85%	11246	1.36%
FY 02	143	1845	7.75%	11250	1.27%
FY 03	124	1927	6.43%	11276	1.10%
FY 04	134	2109	6.35%	11267	1.19%
FY 05	126	2220	5.68%	11268	1.12%
FY 06	122	2307	5.29%	11415	1.07%
FY 07	119	2231	5.33%	11501	1.03%
FY 08	124	2250	5.51%	11556	1.07%

Source: Newton Public Schools

As a result of the Newton Public Schools' commitment to educate as many students with special needs as possible within district, the Newton Public Schools have maintained its relative OOD costs (not accounting for the Circuit Breaker reimbursements) at between 4% and 5% of the total school budget even though tuitions were rising during that same period. Also, as a percentage of the special education budget, OOD costs have dropped from 23% to 19% in the same time period.

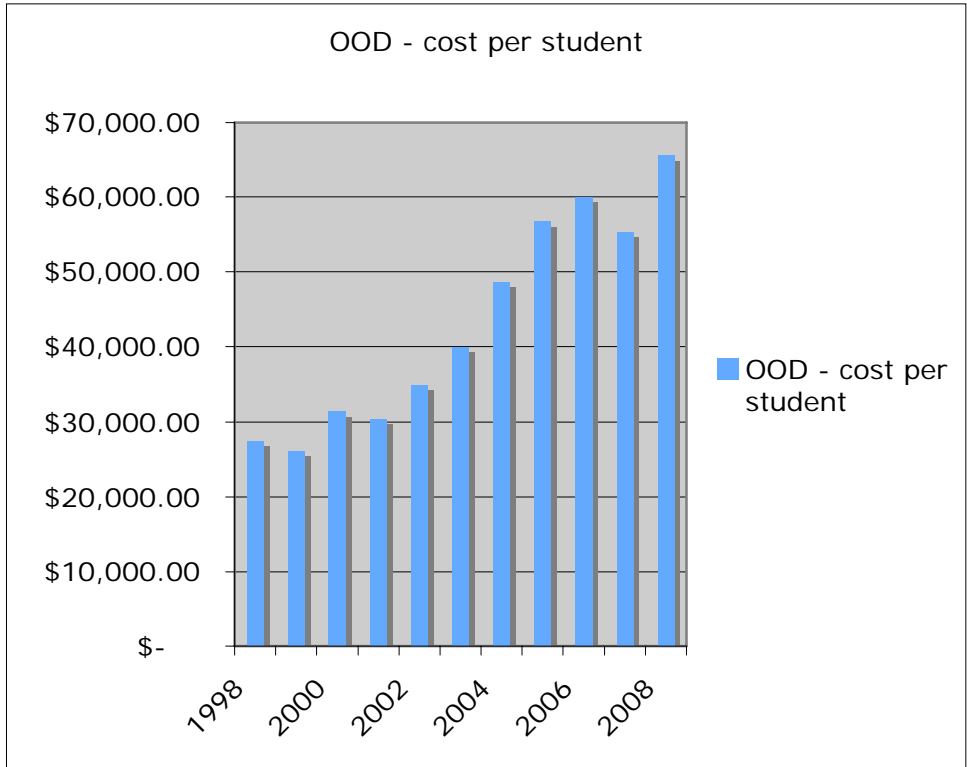
**Chart 2: Out-of-District Costs relative to SPED Costs and Total School Costs (1998 – 2008)**



Source: NPS data collected from 2008 and 2009 budget, as well as a recent NPS update to those numbers.

The costs of out-of-district placements have increased steadily during the past ten years from an average per pupil cost of a little over \$27,000 in 1998 to over \$65,000 in 2008. However, from 1998-2008, actual OOD costs (net of Circuit Breaker reimbursements) increased just 40%, while total school costs increased 76%. Thus, it appears that the Newton Public Schools’ efforts to educate more students in-district have helped contain the OOD costs in the budget. (It is important to bear in mind, however, that one OOD placement alone might cost up to \$250,000 per year, thus average numbers can be skewed upwards or downwards as a result of only a few significantly expensive placements.)

**Chart 3: Out-of-District Cost per Student (1998 – 2008)**



As illustrated by the table below, Newton’s out-of-district tuitions are somewhat lower as a percentage of total school costs when compared with OOD costs of five neighboring communities. Newton’s OOD costs are 5% of the total school budget, while Weston has the lowest OOD costs at 2.5% and Watertown has the highest at 11%.

**Table 9: Out of District Costs - Benchmarked (FY04 - FY07)**

	FY04		FY05		FY06		FY07	
	Total OOD Tuition	% of Total NPS cost	Total OOD Tuition	% of Total NPS cost	Total OOD Tuition	% of Total NPS cost	Total OOD Tuition	% of Total NPS cost
<b>Newton</b>	<b>\$5,137,633</b>	<b>4%</b>	<b>\$6,825,517</b>	<b>5%</b>	<b>\$6,370,129</b>	<b>5%</b>	<b>\$7,211,553</b>	<b>5%</b>
Brookline	\$3,968,968	7%	\$4,085,349	7%	\$4,710,110	8%	\$4,528,614	7%
Waltham	\$3,013,960	6%	\$4,025,537	8%	\$3,751,168	7%	\$3,825,487	7%
Belmont	\$2,367,237	8%	\$1,785,687	6%	\$2,069,653	6%	\$2,124,798	6%
Watertown	\$1,770,258	7%	\$2,357,216	9%	\$3,115,656	11%	\$3,169,443	11%
Weston	\$688,841	3%	\$615,126	3%	\$586,070	2%	\$633,852	2%

Source: Newton Public Schools, October 2008

Note: These figures are reported gross of Circuit Breaker funds.

## 6. Transportation

The Newton Public Schools are required to transport its out-of-district students to their schools, as well as provide in-district transportation for students who cannot walk or use the standard bus service, or who are clustered in a school outside of their neighborhood school.

From 2004 to 2008, special education transportation costs increased by approximately 48%, with a CAGR of over 10%. Total transportation for the district has experienced a CAGR of less than 3% for the same period.

**Table 10: Special Education Transportation Costs (2004 – 2008)**

	SPED Transportation Costs	Change from Previous Year
FY 04	\$1,650,181	
FY 05	\$1,896,474	\$246,293
FY 06	\$1,988,331	\$91,857
FY 07	\$2,117,222	\$128,891
FY 08	\$2,453,594	\$336,372

Source: Newton Public Schools

While these expenses represent a relatively small portion of the total special education budget (approximately 5-6%), this is another element that is contributing to special education costs rising faster than the overall school budget.

## 7. Contracted Services

Another area of special education costs that is growing faster than the overall school budget is Contracted Services. There are situations and students that sometimes require specialized expertise not possessed in the Newton Public Schools or more effectively delivered by outside service providers. When this arises, the Newton Public Schools engage outside professionals to provide the necessary services. Examples of these services are mandated independent outside evaluations, bilingual evaluations, training and consultation services for specific needs, nursing care for medically fragile students, and psychiatric evaluations.

From 2004-2008, contracted services expenses increased approximately 40%, with a CAGR of 8.75% for the same period. During this time, contracted services have consistently comprised approximately 1% of the total school budget, and between 4-5% of the special education budget.

## 8. Grants and Medicaid Reimbursements

Newton receives state and federal grants and a Medicaid reimbursement for certain special education



costs. The significant grants are the federal IDEA grant, and the state Circuit Breaker grant. The Medicaid reimbursement is a relatively small amount of money. An overview of the grants and reimbursements is contained in Appendix A.

### **III. Issues**

#### ***Overall Pressure on Budget***

Municipalities across Massachusetts, and indeed across the country, are struggling with the growing costs of compliance with the extensive federal and state special education mandates. Newton's special education budget faces many of the same pressures as surrounding school districts, with increases in the numbers and complexity of disabilities of students with special needs, the FTEs required to support them, and out-of-district tuition and transportation costs exceeding the 3-3.5% increase the City experiences in revenue growth annually.

#### **Because special education services are specifically mandated, it is not entirely within the control of Newton Public Schools to decide how much money to spend on special education services.**

Since the school system's ability to limit special education services is significantly constrained by the legal foundation of special education services and given the current growth Newton (along with other communities) is experiencing in its special education population, it is reasonable to assume that in a time of relatively static or limited budget growth, special education costs will continue to grow at a faster rate than the overall school budget, requiring reductions in resources in other parts of the system.

#### ***Observations on Special Education in Newton***

During the course of its work, the Citizen Advisory Group heard differing views on Newton's special education services. Some of the observations went to the substance of the programming, and some went to the costs and management of the programming. The views were expressed by parents, special education providers, elected officials, school administrators, and interested citizens. Many opposing opinions were presented. Because the Citizen Advisory Group's fact gathering process was somewhat anecdotal in nature,<sup>29</sup> it is important to recognize that there are likely other opinions that are not represented here. However, several themes emerged, and we summarize below the most significant ones.

#### **Financial and Management Issues**

##### **1. "The Neighborhood Inclusion Model is not Fiscally Sustainable"**

When the Neighborhood Inclusion model was designed, it not only allowed students with special needs to attend their local schools with their peers, it also was relatively cost-effective. Aides are paid much less than special education teachers, and having one inclusion facilitator work with the

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<sup>29</sup> The Citizen Advisory Group conducted interviews with special education personnel from the Newton Public Schools, the Special Education PAC leadership, and some School Committee members. In addition, the Citizen Advisory Group spoke with people who contacted us directly, and with some people we knew or who were referred to us. The "methodology" for selecting the people we spoke with was not scientific, yet we did reach out to a broad spectrum of interested parties.

aides to deliver the curriculum was more cost effective than having a full special education teacher for each grade (or 2 grades) per school. In addition, transportation costs are less when students attend their neighborhood schools.

As discussed above, the Newton Public Schools are experiencing growth in the number of aides it must employ under the Neighborhood Inclusion model, as more children requiring aides are entering the system than exiting. The growth in the number of aides, combined with the current salary scale that grows at 8.6%, indicates that the Neighborhood Inclusion model, as currently constructed, is not fiscally sustainable if the Newton Public Schools' budget is growing at 4.3%.<sup>30</sup> (See Appendix A for a more detailed analysis of compensation costs and their impact on the overall budget.)

In January 2008, the Newton Public Schools modeled the cost of creating substantially separate classrooms in each elementary school to determine if clustering children within their schools would reduce costs (by reducing the number of aides). The modeling showed that in 13 of the 14 elementary schools, clustering students into a substantially separate classroom would have been approximately \$582,000 more expensive. The analysis did not model the costs of clustering the students across the City or by villages as this "would not only pose a further regression for any inclusive practice, but would add transportation costs." (As noted above, special education transportation costs grew at a CAGR of 10% from 2004-2008.) Note, too, that space constraints may make the creation of substantially separate classrooms infeasible.

Substantially separate classrooms may also not be desirable or appropriate from an academic standpoint. Because each child's needs are unique and can vary widely (even within a "common" or "like" disability), there may not be an appropriate grouping at a certain grade level to support substantially separate classrooms that would meet the students' academic needs. The Newton Public Schools are working on modeling and documenting the viability of more integrated classrooms. The Citizen Advisory Group applauds this effort and encourages the Newton Public Schools to make its analysis available to the public.

## 2. "Newton Provides Too Many Special Education Services"

Newton is generally viewed as being a leader in providing excellent special education services. Some in our community believe we are spending too much money on special education or providing services to too many students. The proponents of these positions sometimes assert that the Newton Public Schools give parents of students with special needs whatever they want. It was asserted that some parents push for any and all services that the district provides, even when their children are not entirely in need of such services.

As noted above, in order to be eligible for special education services, students must undergo a formal evaluation and meet certain criteria. Therefore, the eligibility of a student for services is determined under legal principles after specific evaluations and observations have been conducted. Further, the Newton Public Schools assert that, when appropriate, the district uses mediation to resolve disputes over the eligibility for or appropriateness of services that are being sought.

In further contrast to the view that the Newton Public Schools give special education parents everything they ask for, the Citizen Advisory Group, through its due diligence, heard many stories of

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<sup>30</sup> 4.3% is the rate of growth the Newton Public Schools budget experienced from 2004-2008.

families who feel frustrated that their children's needs are not being met. Some of these parents think there is a significant gap between Newton's reputation and the reality of its special education services. There are families in Newton who find the process of obtaining special education services to be a struggle, even when they believe the child is clearly entitled to the services. Some parents feel the district throws up road blocks, tries to do the minimum, and will not offer anything the parents do not specifically ask for. In addition, several people pointed out that there exists a population of parents who are not well equipped to advocate for their children at all, either because of language, financial, or time barriers.

Based on our discussions and interviews, the Citizen Advisory Group could not detect a clear and consistent pattern with regards to this issue. What is clear is that the perception that the Newton Public Schools provides too many special education services is not universally shared and many stakeholders (including parents of the direct recipients of the services) have varied perspectives.

Another observation by some parents was that it can be very difficult to find out what programs and services are available, what processes are in place for working with the Newton Public Schools, and to whom they should go for assistance. Parents noted a lack of easily accessible information regarding specialized programs and the personnel structure (who plays what role and to whom should they address their questions).

Some who think Newton is spending too much money on special education suggested that the Newton Public Schools should bring its special education services down to the "mandated" level. The Citizen Advisory Group is not clear how one would determine what the mandated level is. As described earlier in this report, the special education laws require that school districts provide students with special needs the same educational opportunities as it provides to students without special needs. Further, the laws require individualized plans based on each child's individualized needs.

In response to the suggestion of reducing special education services to the mandated level, one parent replied: "Even if we could determine what mandated levels were, would we lower our services? Would we ever suggest that we not deliver an excellent education to students in general education? If not, why would we suggest so for our children with special needs?" The Citizen Advisory Group believes that this is not just a question of financial concerns and legal requirements, but also a values question for the community.

### 3. "We Do not Measure Results"

One theme the Citizen Advisory Group heard repeatedly was that the Newton Public Schools do not have agreed-upon metrics to measure the effectiveness of its special education programs. As such, it is hard to judge if the programming is producing the best possible results and if the money is being well spent. Measuring results of a special education program poses particular difficulties, as each student's challenges are unique. However, each student's IEP contains criteria to measure the student's progress over a twelve month period. An assessment of how frequently those criteria are met may be a useful tool for measuring the effectiveness of the services. In addition, the Citizen Advisory Group believes it is possible to develop other *qualitative* criteria to help judge the progress and development of programs and services. Some possible ways to measure outcomes might be (1) parent satisfaction, (2) the number of students who move off of IEPs or who need fewer services with

time, (3) whether the student has become a better problem solver, (4) whether the student has become a better self-advocate, and (5) the use of “best practices” in the delivery of special education services.

#### 4. “We do not Measure our Costs”

Some comments were made that the Newton Public Schools does not track or measure the costs of special education programs. The Newton Public Schools does capture and provide detailed reporting on its special education costs, but, as noted above, the data are not captured in a consistent way that is understandable to the public or that makes analyzing trends easy. The result is that many incorrect conclusions are drawn about how the Newton Public Schools manage and spend its special education dollars and the true drivers of special education costs.

### Qualitative Issues

#### 1. Case Loads of Inclusion Facilitators

Newton’s Neighborhood Inclusion model relies on having an aide available to a student to help the student gain access to the curriculum and programming provided by the school. The model is highly dependent on the expertise of Inclusion Facilitators, teachers who have been trained in special education. Inclusion Facilitators hire and train aides, modify the curriculum for each child, work with the aides and the general education teacher to deliver the curriculum to the student, coordinate with parents and specialists, ensure the IEP is being implemented and that all paperwork is in compliance with regulations, etc. When the neighborhood inclusion model was established, it was designed for Inclusion Facilitators who had caseloads of four (4) to six (6) students; today, the Inclusion Facilitators are managing caseloads of twelve (12) to eighteen (18).

Concern was expressed by both the Newton Public Schools personnel and parents that the Inclusion Facilitators can not possibly be effective for all of their students when case loads are this heavy. The result is that some children are left adrift in an environment that is more demanding than they can handle. One parent said it this way: While a trained special education teacher can help a learning-disabled kid learn, someone without that training is more likely to help a kid get the correct answer in order to “keep pace.” Concern was also expressed that the Inclusion Facilitators are “burning out” and turning over relatively quickly which can be very disruptive for the students, the aides, the teachers, and the family.

The Citizen Advisory Group understands that Newton Public Schools is undertaking an analysis of Inclusion Facilitators’ case loads. The Citizen Advisory Group supports this effort and encourages the Newton Public Schools to make the results of the analysis readily available to the public.

#### 2. How well is Neighborhood Inclusion Serving our Students with Special Needs?

Newton’s current population of students with special needs has a different profile of disabilities and needs than did the special education population when the neighborhood inclusion model was created. Some have questioned whether this model is serving some of the population well. Specifically, some parents and educators have questioned whether some (not all) of the students on the autism spectrum would be better served in a setting with more specialized instruction by more highly trained staff. Some expressed disappointment with the skills, training and supervision of the aides assigned to support their children (this comment was not confined to parents of autistic children).

A few parents raised the concern that Neighborhood Inclusion is not appropriate for many students, but that these students sometimes have to fail repeatedly in the general education classroom setting before another option is considered. Sometimes, children are placed in classrooms where they do not/cannot receive adequate support, and only after the student endures tremendous stress and multiple failures is another setting is considered. In the interim, the disability may be compounded by academic failure and social isolation, and sometimes anxiety and depression.

Another observation was that Neighborhood Inclusion results in having specialists and aides scattered across the City, making it harder for them to collaborate and share strategies, resources, etc.<sup>31</sup> It was also noted that parents with children who were not well served in the Neighborhood Inclusion model struggled with being able to move beyond the school-based team to consider alternative service models. Several said they found it difficult to gain access to expertise that lay outside the local school.

Many parents, however, are very satisfied with the Neighborhood Inclusion model and believe it is serving their children well. Several of these parents noted that it is of paramount importance to bear in mind that students with special needs represent a full spectrum of needs. Some children will thrive in and contribute meaningfully to a general education classroom, while others may be less well served in that setting. Therefore, there is not a “one size fits all” solution to the provision of special education services and the Citizen Advisory Group cautions against simply concluding that Neighborhood Inclusion as an entire program is flawed.

The Newton Parent Advisory Council for Special Education (PAC) conducted a Parent Survey in collaboration with the Newton Public Schools Student Services Department to better understand the experiences and perceptions of parents whose children received special education services from the Newton Public Schools during the 2007-2008 school year. The survey questions were selected by the PAC to correspond largely with areas reviewed by the Coordinated Program Review (CPR) of the Massachusetts Department of Elementary and Secondary Education, and to measure overall satisfaction with special education programs as well as with specific services and communication. Open response questions were included so that parents had the opportunity to share concerns not addressed in the survey questions. The Citizen Advisory Group applauds this collaborative survey by the Special Education PAC and the Newton Public Schools and encourages both parties to make the results of the survey public when the data have been analyzed and compiled.

### 3. Physical Plant Considerations

Another consideration that must not be overlooked in thinking about the delivery of special education services is the limited space we have in many schools. Currently, some special education services are delivered to children in hallways, alcoves, under the stairs and sometimes even in closets. Not only is this a less than ideal educational setting, the laws require that students with special needs be educated

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<sup>31</sup> Some identified a collateral cost of the school-based programming in the lack of centralized purchasing and cataloging of materials. Apparently, the district has purchased multiple licenses of the same software but has not always obtained volume discounts as the orders were all placed independently of each other. Another example is that instructional materials are not catalogued centrally, so often the staff does not know what materials are available at other schools. A purchasing manager was hired by NPS in January, 2008, so it is possible these issues are being rectified.

in settings that are equivalent to those of the general education students. The DOE cited Newton on this issue in its most recent audit. It was also noted by some parents that having the Preschool program split between two buildings negatively impacts the service delivery in the program.

#### 4. “Inclusion Provides Collateral Benefits to the Classroom”

It was noted several times that in addition to the social benefits and awareness that general education students gain by being educated alongside their disabled peers, the general education students benefit in other ways too. The inclusion model often results in having another adult in the classroom for a large portion of each day. There are many classrooms across Newton that benefit from having an aide in the room who can attend not just to his or her “assigned” special needs student, but also can provide general support to the entire class. Providing a second pair of eyes and hands in a room will often result in more feedback and support to all students in the room, not just to the students with special needs. At the elementary school level in particular, this was cited by many as a benefit to the entire class. In addition, all students benefit from having the general education teachers trained in differentiated instruction and teaching techniques.

### **IV. Recommendations<sup>32</sup>**

1. Outside Evaluation: The Citizen Advisory Group recommends that Newton Public Schools engage an outside specialist to evaluate the Newton Public Schools’ current special education programming. The Citizen Advisory Group recommends that the evaluation focus on the following questions:

- How well is the Newton Public Schools’ approach to special education serving the needs of its students with special needs? How does the Newton Public Schools determine the level of quality of its programming and how does the Newton Public Schools set its goals for the level of quality it wants to achieve? How do the aides contribute to or detract from the quality of services delivered?
- Is Newton’s current service delivery model cost effective? Are there ways to streamline or improve upon the current model with the same or fewer dollars? Are there ways to restructure aides’ compensation to bring the growth more in line with realistic budget growth?
- What are the costs and benefits of creating more substantially separate or integrated classrooms? Would separate or integrated settings with fewer but more highly trained staff provide better services with the same or fewer dollars?
- What opportunities are there for improvement and innovation? Could technology play a role in improving results for children and reducing costs?

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<sup>32</sup> In addition to the major recommendations in the body of the report, the Citizen Advisory Group recommends that Newton Public Schools consider:

- Cataloguing all materials and software currently held in the system and making the catalogue available to all special education personnel.
- Centralizing purchasing of materials and software programs to avoid duplication and obtain volume discounts where available. It is possible the purchasing manager who was hired in January 2008 has already addressed some of the purchasing issues.
- Consider adopting an “opt-out” policy for Medicaid reimbursement claims (see Appendix A to this report for detail on Medicaid reimbursements).

It is further recommended that Newton Public Schools consider conducting this type of evaluation every 5-10 years.

## 2. Establish Own Metrics

Newton Public Schools should establish its own set of metrics to measure the effectiveness of its special education programs. In establishing those benchmarks, the Citizen Advisory Group suggests the Newton Public Schools work with the Special Education PAC and involve special education parents, educators, and administrators.

## 3. Create Framework for Capturing and Reporting Costs

The Newton Public Schools should develop a consistent way of capturing and reporting annual costs and revenues and report that data in a reader-friendly format. Such a system would enable the year to year trends to be readily analyzed. The Citizen Advisory Group believes developing such a methodology would assist in advancing public understanding and appreciation of the special education services the Newton Public Schools provides.

## 4. Partner with Special Education PAC to Evaluate Programs and Practices

The Citizen Advisory Group recommends that the Newton Public Schools partner with the Special Education PAC to continually evaluate and improve upon programs and practices. These efforts should not be focused on compliance issues, but rather on substantive issues of quality, the delivery of services and areas for innovation and improvement, and collaboration across the district. (The recent survey that the Special Education PAC and Newton Public Schools conducted together is an example of such collaboration.) The Citizen Advisory Group recommends that the Special Education PAC participate in designing and reviewing the outside evaluation described in Recommendation 1.

## 5. Improve Transparency, Communication and Public Understanding of Special Education System and Programs

Given the complexity of special education laws and services, and the confusion evident among some special education parents and some of the public about Newton's programming, the Citizen Advisory Group recommends that the Newton Public Schools continue to partner with the Special Education PAC to improve communication, transparency and public understanding of Newton's special education programs. Specifically, Newton Public Schools should:

- Work to improve the public understanding of special education including the legal basis for services and the breadth of services that must be provided;
- Develop more comprehensive explanations of the Newton Public Schools special education programs, processes and personnel so that parents can more readily understand and navigate through the system;
- Provide more detail in the Handbook to Special Education on which programs serve which disabilities and what services are available
- Continue to update the organizational chart of special education personnel (down to the school level), with a brief description of the responsibilities of each position

- Provide a chart explaining to whom questions should be addressed
- Provide a summary of the process of evaluating and reviewing the need for special education services



## **Appendix A – Special Education Grants and Reimbursements**

Newton receives state and federal grants and a Medicaid reimbursement for certain special education costs. While grant amounts are earmarked for special education and are reflected in the Newton Public Schools budget, smaller reimbursements under Medicaid are received by the City's general fund and need to be re-appropriated to Newton Public Schools by the City.

### *IDEA Grant*

IEPs are partially funded by federal and state contributions. The main contribution comes from the special education IDEA (Special Education – Individuals with Disabilities Education Improvement Act) grant, which in 2008 amounted to \$2.7 million. The grant, closely aligned with the No Child Left Behind act, is designed to ensure accountability and excellence in education for children with disabilities. The special education IDEA grant is a federal grant which is passed to the district through the State and is based on the number of children that meet the criteria of the grant.

### *METCO Grant*

Until 2003, when it was discontinued, Newton Public Schools also received a specific supplement to the METCO grant to support students with special needs that participate in METCO. (In 2003 the supplement amounted to \$108,363).

### *Circuit Breaker Grant*

The Circuit Breaker line within State grants refers to a reimbursement that Newton Public Schools receives from the State for children who are placed out of district. Once Newton Public Schools has incurred costs equal to four times the state foundation formula (approximately \$30,000) for a student's special education services, the State reimburses 75% of the remaining costs (72% right away and the remaining 3% at the end of the year if the state has enough funds – which has always been the case so far). Prior to 2004, the State paid only 35% of the costs of out of district placements.

**Appendix Table 1: Circuit Breaker History (FY04 - FY08)**

	<b>FY04</b>	<b>FY05</b>	<b>FY06</b>	<b>FY07</b>	<b>FY08</b>
<b>Circuit Breaker Funds Received</b>					
Current Year Circuit Breaker*	\$1,480,772	\$2,828,431	\$2,715,290	\$2,811,308	\$2,906,161
Additional 3%	\$0	\$124,774	\$113,141	\$117,140	\$121,092
<b>Total Circuit Breaker Received</b>	<b>\$1,480,772</b>	<b>\$2,953,205</b>	<b>\$2,828,431</b>	<b>\$2,928,448</b>	<b>\$3,027,253</b>
Carry Forward from Prior Year	\$0	\$0	\$124,774	\$293,000	\$317,241
<b>Total Circuit Breaker Funds Available</b>	<b>\$1,480,772</b>	<b>\$2,953,205</b>	<b>\$2,953,205</b>	<b>\$3,221,448</b>	<b>\$3,344,494</b>
<b>Use of Circuit Breaker Funds</b>					
Special Education Out-of-District Tuition	\$823,875	\$2,350,290	\$2,182,064	\$2,246,207	\$2,565,402
Special Education Aides Salaries	\$656,897	\$478,141	\$478,141	\$568,000	\$568,000
Special Education Contracted Services		\$0	\$0	\$90,000	\$90,000
<b>Total Circuit Breaker Uses</b>	<b>\$1,480,772</b>	<b>\$2,828,431</b>	<b>\$2,660,205</b>	<b>\$2,904,207</b>	<b>\$3,223,402</b>
<b>Carry Forward to Next Year</b>	<b>\$0</b>	<b>\$124,774</b>	<b>\$293,000</b>	<b>\$317,241</b>	<b>\$121,092</b>

\*Circuit Breaker was funded at 35% of eligible costs in FY04 and at 72% in FY05 through FY08, with an additional 3% for a total of 75% funding

Source: NPS November 2008

*Other Grants*

Smaller grants are also available for more specific purposes. Below is a chart of all grants received for FYs 2006-2008 directed at special education.

SPED Grants 06-08				FY06		FY07		FY08	
Type of Grant	Grant Name	SPED	% SPED	SPED Amount	Percent	SPED Amount	Percent	SPED Amount	Percent
DIRECT FEDERAL	2008 COUNSELING GRANT	SPED	19%					71,941	19%
DIRECT FEDERAL	2006 INTERFACE GRANT	SPED	19%	37,657	19%	18,829	19%		
DIRECT FEDERAL	2007 PEP GRANT	SPED	10%			44,783	10%	36,059	10%
DIRECT FEDERAL	SMALLER LEARNING COMM TEACHING	SPED	19%	39,609	19%	45,525	19%		
DIRECT FEDERAL	AMERICAN HISTORY	SPED	19%	62,279	19%	69,377	19%		
	<b>total direct federal</b>			<b>139,545</b>	<b>19%</b>	<b>178,514</b>	<b>16%</b>	<b>108,000</b>	<b>15%</b>
FEDERAL	MENTAL HEALTH	SPED	100%	18,000	100%				
FEDERAL	PERKINS OCC ED	SPED	19%	13,986	19%	14,201	19%	16,274	19%
FEDERAL	NON TRADITIONAL BY GENDER SECONDARY	SPED	19%	1,899	19%				
FEDERAL	READING	SPED	19%	11,381	19%	8,550	19%	6,080	19%
FEDERAL	SPED AUTISTIC	SPED	100%	75,000	100%				
FEDERAL	'08 SPED CORRCV ACTION	SPED	100%					8,500	100%
FEDERAL	SPED EARLY CHILDHOOD	SPED	100%	74,210	100%	74,738	100%	74,344	100%
FEDERAL	SPED ELECT PORTFL	SPED	100%	1,500	100%				
FEDERAL	SPED IDEA	SPED	100%	2,671,727	100%	2,697,304	100%	2,730,593	100%
FEDERAL	SPED INDUCTION	SPED	100%	20,000	100%	120,633	100%	69,589	100%
FEDERAL	SPED PROGRAM	SPED	100%			6,000	100%	6,000	100%

	REVIEW								
FEDERAL	TITLE IIA	SPED	19%	50,347	19%	49,598	19%	50,846	19%
FEDERAL	TITLE IV	SPED	19%	7,933	19%	8,236	19%	7,155	19%
<b>total federal</b>				<b>2,945,983</b>	<b>89%</b>	<b>2,979,260</b>	<b>90%</b>	<b>2,969,381</b>	<b>90%</b>
	'08 ACADEMIC								
STATE	SUPPT GRANT	SPED	19%					3,713	19%
STATE	CIRCUIT BREAKER	SPED	100%	2,660,205	100%	2,904,207	100%	3,223,401	100%
	INCL CONC ENRL								
STATE	PTSP	SPED	100%			129,138	100%	180,000	100%
	KINDERGARTEN								
STATE	GRANT	SPED	19%	75,311	19%	72,823	19%	74,091	19%
STATE	MASS REHAB	SPED	100%	86,000	100%	99,000	100%	100,190	100%
<b>total state</b>				<b>2,821,516</b>	<b>90%</b>	<b>3,205,168</b>	<b>91%</b>	<b>3,581,395</b>	<b>92%</b>
PRIVATE	CCBD GIFTS	SPED	100%					500	100%
PRIVATE	CSCF-UNSPECIFIED	SPED	50%					2,500	50%
<b>total private</b>								<b>3,000</b>	<b>55%</b>

Source NPS November 2008

Note: as some of the grants are directed to the entire school population, % special education refers to the amount of the grant that goes specifically to special education.

### *Medicaid Reimbursements*

As part of a Federal program, some of the services provided in the IEP designed for children whose families are eligible for Medicaid can be reimbursable by Medicaid.

Filing for these reimbursements happens quarterly, but reimbursements are not necessarily received immediately, therefore there are often large swings across quarters. The amounts received are approximately \$250K per year. The funds are reimbursed directly to the City, and Newton Public Schools must ask the City to re-appropriate the money to the Newton Public Schools budget.<sup>33</sup>

Obtaining the Medicaid reimbursements is dependent on two things: ensuring paperwork is completed and filed (including documentation of employees' time attributable to the design and implementation of the IEPs), and parental permission to file the claims. The office for Pupil Services (special education) administers the process (although Budget and Finance collaborate), while a unit at UMass Medical School prepares the claims under a contract with the school district. The paperwork is not an insignificant undertaking.

Currently, Newton has an "opt-in" policy with regard to parental permission to participate in the reimbursements; claims can be filed only if parents give signed permission. Studies that have looked at this issue indicate that communities where parents are asked to opt-out of the process (as opposed to opt-in like in Newton) are able to make greater use of this opportunity.

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<sup>33</sup> This is similar to what happens with E-rate reimbursements, which return federal money to the schools and libraries for technology use. E-reimbursements are also small, about \$50K per year of which about \$2K goes to pay a consultant who applies for the reimbursement. Like Medicaid reimbursements, these funds go back to the City, therefore NPS and the libraries have to ask the City to re-appropriate the funds.

## **C. METCO Report**

### **I. Executive Summary**

The Citizen Advisory Group was given three mandates: to develop new or enhanced sources of funding, to improve the City's operational efficiency and effectiveness, and to define choices about municipal and educational service levels. The analysis of METCO falls squarely into the category of defining choices about educational service levels and also raises issues relating to efficiency and effectiveness. We undertook this review of METCO while recognizing the long-held commitment of Newton Public Schools to diversity and to the METCO program as well as the increasing financial pressure on the School Department's operating budget. Any number of programs could have been reviewed in depth (e.g., high school athletics, the arts, the choice of student centered middle schools versus subject centered Junior Highs, or Career and Technical Education); METCO was chosen as an area many people wanted to understand better, with particular questions about how it is funded.

The benefits conferred by METCO on Newton's school system seem clear to the Citizen Advisory Group. METCO provides both Newton and Boston students an important education in diversity. Without exception, the Citizen Advisory Group found the teachers and the administration in the Newton Public Schools completely committed to the METCO program. The METCO program serves as an important and long standing marker of what Newton stands for as a city. As such, this program represents value choices as well as resource commitments made by the Newton community over many years.

What is harder to measure, however, are the claims that METCO places on school resources. Like many of the choices made by the Newton Public Schools, METCO comes with a price tag. While there are a number of different ways to analyze financially the METCO program, the analysis the Citizen Advisory Group finds most compelling shows it is essentially break even. Participating in METCO involves not only possible financial outlays but also increases in class size (a hot button issue in Newton, like most communities) and teacher load.

METCO is a voluntary program in two senses. African American, Latino, Asian and Native American children from Boston or Springfield voluntarily attend suburban schools and 32 suburban school districts voluntarily welcome the Boston students into their school systems. With 415 students (plus or minus 5%), Newton has the largest METCO enrollment in Massachusetts in absolute numbers. As a percentage of METCO students relative to total school population, Newton stands sixth among the ten communities that enroll the largest number of METCO students. METCO students account for 3.5% of Newton's total enrollment.

Newton's goals for the METCO program include:

- Providing the opportunity for participating students from Boston to learn together in an integrated public school setting with students from racially isolated suburban schools.
- Increasing the diversity and reducing the racial isolation in Newton so that the students from different backgrounds can learn from each other in meaningful ways.
- Providing closer understanding and cooperation between urban and suburban parents and other citizens in the Boston metropolitan area.

Newton has had a long term policy of admitting METCO students only in Kindergarten, 1<sup>st</sup> or 2<sup>nd</sup> grades. Working with the elementary school principals, the Director of METCO assigns METCO students to specific schools based on existing and projected class size, siblings that already attend that school, low number of METCO students at that particular elementary school (thus that school is a candidate for more METCO children), and the strong preference for not isolating one METCO child in a grade at a school by himself/herself.

As Newton's METCO materials note, "The Newton METCO Program is comprised of a diverse group of students from broad ethnic, cultural, economic, and religious backgrounds with a range of educational strengths and needs." Seventy-nine percent of the METCO students are African-American, 14% Latino and 7% Asian. With the METCO students, the diversity of the Newton school system changes somewhat. Notably, METCO doubles the number (and percentage) of African American students in the Newton Public Schools. Using the rate of participation of METCO students in the national free or reduced lunch program (which is by no means a perfect indicator), socioeconomically, the majority of METCO students are not from low income families. While METCO does not include severely disabled special education students that need placement outside of Newton, METCO includes students with a range of educational strengths and needs and does include non-severely disabled children with special education needs. Newton's METCO program has a higher percentage of students with special education needs relative to the resident Newton student population (37% in 2007 for METCO compared to 17% for Newton as a whole, including the METCO students).

Massachusetts provides a grant to suburban school districts that participate in METCO. The direct METCO costs for staff and expenses are considerably lower than the state grant. Therefore, METCO in effect provides revenues to the Newton Public Schools General Fund. For sake of clarity, we call these revenues the "METCO Credit to Instruction." For both FY2008 and FY2009, the METCO Credit to Instruction came to approximately \$939,000 or \$2,318 per METCO student.

A financial analysis of METCO addresses only one of the considerations pertaining to its sustainability, perhaps the least important one. Yet this analysis has the virtue of reopening a discussion of community values and priorities as we work our way through increasingly difficult economic times. The most compelling financial analysis in the eyes

of the Citizen Advisory Group looks at incremental costs. This analysis shows a financial cost to Newton of \$990,934 compared to the METCO Credit to Instruction of \$939,000. **In essence, the incremental cost analysis shows a *small cost* to Newton of approximately \$50,000 in total for participating in METCO.** When compared to the schools' estimated 2009 budget of \$160 million, participating in METCO could be viewed as a "no cost" or relatively "minimal cost" vehicle for achieving broad social and educational goals that are fully embraced by the community. In other words, Newton Public Schools provides and participates in a wide range of programs to meet its mission of educating, preparing, and inspiring students to achieve their full potential as lifelong learners, thinkers, and productive contributors. As one way to achieve these goals, Newton Public Schools voluntarily participates in METCO. The school system has a financial incentive to do so in the form of a grant from Massachusetts. The financial analysis shows the METCO program essentially breaks even.

It is important to note that such a credit is not guaranteed from one year to the next. As an example, for FY2009, Governor Deval Patrick has reduced over 10% of the State allocation to METCO, which for Newton has resulted in a cut of about \$130,000. While it is not clear yet if the same reduction will be applied for FY2010, the Newton Public Schools have anticipated a further reduction of \$100,000. As METCO administrative costs will not decrease, these cuts result in a net decrease of the per student contribution that the programs provides to the Newton Public Schools.

Just like other non-mandated programs, Newton Public Schools should periodically review in depth METCO: its purpose and measurable benefits and costs. Therefore, the Citizen Advisory Group recommends that the School Committee and Newton Public Schools analyze and discuss openly the following types of questions:

- How can Newton best achieve its educational goals for diversity and what is METCO's role in this?
- How can Newton Public Schools measure – qualitatively and quantitatively – the learning impact of having a more diverse school community by virtue of participating in METCO?
- Is METCO achieving its full potential? Are there ways to increase its effectiveness?
- If, based on a set of assumptions, METCO costs the Newton Public Schools more than what is received in METCO grant funding, are the social and educational benefits sufficient to retain the program at its current level, a lower level, or at all?
- Will even more resources from Newton be required in the future to maintain the current scale of METCO's operations and Newton's position as a leader in multi-cultural education?



- If the state reduced or eliminated funding for METCO, would Newton Public Schools keep the program?
- Can Newton, perhaps in concert with other cities and towns, press the state to provide more funding to METCO?
- Should the scale of the METCO program be reduced and will this ensure or undermine Newton’s continued leadership in multi-cultural education?
- If class sizes continue to rise in the future, how should this be factored into the analysis of METCO?
- Should some portion of the commitment to METCO be reallocated to other pressing needs within the school system?

While these are difficult questions both to discuss and to answer thoughtfully, the Citizen Advisory Group recommends that Newton Public Schools periodically (perhaps every five years) examine in depth the impact of METCO (e.g., educational, social, financial, class size, teacher load), its level of participation, and the quality and effectiveness of this longstanding program. This has not been done historically in an open and periodic manner. The Citizen Advisory Group also recommends that Newton Public Schools annually or biennially publish in depth data about METCO, perhaps similar to what is found in this report. Just as the School Committee thinks deeply about a wide range of choices (e.g., class size, professional development, curriculum) so too should METCO be discussed openly and regularly to see if the investments provide the kind of return we hope in actualizing Newton’s commitment to diversity.

## II. Overview

METCO (Metropolitan Council for Educational Opportunity) grew out of the desire of parents in Boston in the early 1960s to send their children to suburban schools (a form of voluntary busing). Newton was one of seven school systems that participated in METCO the year it began, 1966.<sup>34</sup> METCO is a voluntary program and operates only in Massachusetts. Currently, there are about 3,300 students participating in 32 school districts in metropolitan Boston and in four school districts outside Springfield. Because of lack of funding from the Commonwealth, no new communities have been permitted to join the METCO program since 1975.

When started in 1966, only African American students could participate. METCO now includes African American, Latino, Asian and Native American children from Boston or Springfield. The placement process begins with parents registering their child at METCO. The waitlist often extends to five years. (The program's waiting list currently

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<sup>34</sup> Arlington, Braintree, Brookline, Lexington, Lincoln and Wellesley were the other six founding communities. In its first year, Newton began with 50 African American students in grades three through six attending seven different schools.

exceeds 15,500 and continues to grow. There are many students for every grade level awaiting placement, with approximately 600 placed annually.) When seats become available, METCO refers students on a first-come, first-served basis, based on the date the child registered with METCO. When parents register a child with METCO, they do not get to choose which suburban school they want the child to attend. The school districts also do not get to choose which students are assigned to them. Rather, the school district tells METCO the number of students they would like by grade and METCO assigns them the students. (Siblings do get priority.) Newton can only reject students based on severe disabilities that require out-of-district placement. (Newton's Director of METCO has only had one child assigned to Newton in eleven years who fell in that category and, therefore, was not admitted).

Once accepted into the Newton Public Schools, new METCO students and their parents go through an extensive process. Students are assessed academically; parents are interviewed; and both students and parents attend mandatory workshops and orientations. On joining the Newton METCO program, the METCO student has the same rights, privileges and services of a Newton resident student, provided they meet the expectations of the Newton Public Schools. For example, METCO families are expected to attend two parent-teacher conferences, back-to-school events, and four of six Newton METCO Parents' Council meetings.

Newton's goals for the METCO program focus on increasing diversity and reducing racial isolation. More specifically, they include:

- Providing the opportunity for participating students from Boston to learn together in an integrated public school setting with students from racially isolated suburban schools.
- Increasing the diversity and reducing the racial isolation in Newton so that the students from different backgrounds can learn from each other in meaningful ways.
- Providing closer understanding and cooperation between urban and suburban parents and other citizens in the Boston metropolitan area.

Without exception, the Citizen Advisory Group found the teachers and the administration in the Newton Public Schools completely committed to the METCO program. They talked passionately about the positive impact METCO has on both Newton and Boston students. While there are many ways the Newton Public Schools reflects its commitment to diversity and respect for human differences, a June 2007 Coordinated Program Review of Newton Public Schools by the Massachusetts Department of Education noted:

Staff at all levels exhibit a strong commitment to diversity. The district's "Respect for Human Differences" mantra was heard and seen repeatedly by the team in interviews and in documentation of policies and practices.

### III. METCO Students

With 415 students from Boston (plus or minus 5%), Newton has the largest METCO enrollment in Massachusetts in absolute terms. Newton has had this enrollment of approximately 415 students for at least the last decade. More specifically, in FY2008, Newton had 405 METCO students and this year, FY2009, there are 423. In FY2008, Brookline had the second largest METCO program with 292 students and Lexington had the third largest with 260 students.

But, when looking at the METCO enrollment as a percent of total enrollment, Newton falls in the top ten list from first place to sixth as METCO students account for 3.46% of Newton's total student enrollment. (Weston has the highest percentage at 6.83%.)

**Table 1: METCO Enrollment  
Ten Largest Enrollments by City/Town (10/07)**

City/Town	METCO Enrollment*	Total Enrollment**	METCO Enrollment as a % of Total Enrollment	Ranking of METCO Enrollment as a % of Total Enrollment
<b>Newton</b>	<b>405</b>	<b>11,700</b>	<b>3.46%</b>	<b>6</b>
Brookline	292	6,168	4.73%	3
Lexington	260	6,253	4.16%	5
Weston	165	2,416	6.83%	1
Wellesley	156	4,765	3.27%	7
Belmont	120	3,759	3.19%	9
Needham	145	5,013	2.89%	10
Wayland	129	2,820	4.57%	4
Melrose	116	3,579	3.24%	8
Concord	103	1,831	5.63%	2

Source: \*FY2009 METCO Grant Program: Grant Allotment Summary

\*\* Massachusetts Department of Elementary and Secondary Education, 2007-2008

**Table 2: METCO Enrollment in  
Newton Public Schools (2004-2009)**

FY2003-04	418
FY2004-05	415
FY2005-06	419
FY2006-07	416
FY2007-08	405
FY2008-09	423

Source: Newton Public Schools

As Newton’s METCO materials note, “The Newton METCO Program is comprised of a diverse group of students from broad ethnic, cultural, economic, and religious backgrounds with a range of educational strengths and needs.”<sup>35</sup> The pattern of racial/ethnic diversity of Newton’s METCO students has stayed relatively stable over the years. In 2008, it consisted of:

**Table 3: Racial Diversity of  
Newton METCO Students (2008)**

African-American	79%	(328 students)
Asian	7%	(29 students)
Latino	14%	(58 students)

Source: Newton Public Schools

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<sup>35</sup> Overview of the Newton METCO Program, 8/27/07.

The population of Newton as a city is 2% African American, 7.7% Asian, 2.5% Hispanic, and 88% white. Therefore, with the METCO students, the diversity of the Newton school system changes somewhat. Notably, METCO doubles the number (and percentage) of African American students in the Newton Public Schools. Nonetheless, African American students are still a small percentage of the total student body. With the METCO program, African American students increase from 2.1% of Newton’s student body to 4.8%.

**Table 4: Enrollment by Race/Ethnicity (2007- 08)  
Newton Public Schools**

RACE	% OF TOTAL STUDENTS*	# OF TOTAL STUDENTS*	# OF METCO STUDENTS	TOTAL # WITHOUT METCO STUDENTS	TOTAL % WITHOUT METCO STUDENTS
African American	4.8%	561	328	233	2.1%
Asian	13.6%	1591	29	1562	13.8%
Hispanic/Latino	6.5%	760	58	702	6.2%
Native American	0.1%	11	0	11	0.1%
Other	4.3%	503	0	503	4.4%
White	70.7%	8306	0	8306	73.4%

Source: Massachusetts Department of Revenue

According to the Director of METCO, the students from Boston require courage, tenacity, time and energy, a willingness to deal with the logistics, and the ability to span two very different racial worlds and sometimes socioeconomic worlds. Very occasionally a METCO student is counseled to leave the Newton Public Schools. It usually occurs in the middle or high school when a child is simply not thriving. With close supervision from the METCO staff, Newton can help a student along the way so it happens infrequently. By adding a second counselor at the high school level recently, Newton’s METCO program has been able to give the METCO students additional support. (There is now one counselor per high school each with a caseload of 60 METCO students.)

Each of the 32 school districts that participate in METCO decides for itself how many METCO students it wants and in what grades. Newton has had a long term policy of admitting METCO students only in Kindergarten, 1<sup>st</sup> or 2<sup>nd</sup> grades. (Occasionally, Newton admits a 3<sup>rd</sup> grader.) Newton believes the child and his/her family integrate more successfully, socially and educationally, by starting at an early age. Newton’s goal is to have always 415 METCO students in the school system. Therefore, Newton “replaces” the number that graduate each year with younger children. Since Newton occasionally

has slippage just before the school year begins or in the first few weeks of school, these students have to be “replaced” the following year as well. (For example, in 2007-08, Newton expected to have 415 METCO students but ended up with only 405 METCO students. So, Newton needed to add 10 students plus the graduates to reach its goal of 415 this year.) The number of METCO students by grade in the Newton Public Schools in 2008-2009 ranges from 24 to 50 with the average being 33.

The Director of METCO works with the fifteen principals of the elementary schools to see how many seats are available in Kindergarten, First or Second grades based on projected class sizes and the current number of METCO students already in that grade. In particular, principals look for classrooms that will have fewer than 25 students in the following year. The Director then assigns METCO students to specific schools based on existing and projected class size, siblings that already attend that school, low number of METCO students at that particular elementary school (thus that school is a candidate for more METCO children), and the strong preference for not isolating one METCO child in a grade at a school by himself/herself. (These students are called “isolates.”) (NOTE: There are 13 isolates in the elementary schools at the moment out of 211 METCO elementary school students.)<sup>36</sup> Because of enduring space constraints at some schools, METCO students are not evenly spread across the elementary schools. (For example, in FY09, Countryside has the fewest METCO students, 2, while Memorial-Spaulding has the most, 24; fourteen of the fifteen elementary schools have more than ten METCO students; the four middle schools each have from 20 to 29; the two high schools have 60 and 62).

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<sup>36</sup> Newton does not appear to track non-white Newton residents to minimize Newton “isolates” but only tracks METCO “isolates.”

**Table 5: METCO Enrollment 2008-09 by School and Grade**

School	Grade						Spec. Ed.*	Total
	K	1	2	3	4	5		
Angier	0	5	3	3	0	2	0	13
Bowen	0	3	3	1	3	1	0	11
Burr	0	2	2	3	5	3	0	15
Cabot	2	4	0	2	1	4	0	13
Countryside	0	0	0	0	0	2	0	2
Franklin	2	2	2	1	6	2	2	17
Horace Mann	3	4	0	3	0	0	0	10
Lincoln-Eliot	3	8	4	0	5	3	0	23
Mason-Rice	0	3	0	1	4	2	0	10
Memorial-Spaulding	4	5	4	4	4	3	0	24
Peirce	0	5	2	2	1	4	0	14
Underwood	5	2	1	3	2	2	0	15
Ward	3	0	2	1	4	1	0	11
Williams	0	2	4	2	2	1	0	11
Zervas	2	5	3	3	1	4	0	18
<b>Total Elementary</b>	<b>24</b>	<b>50</b>	<b>30</b>	<b>29</b>	<b>38</b>	<b>34</b>	<b>2</b>	<b>207</b>
				<b>6</b>	<b>7</b>	<b>8</b>	<b>Spec. Ed.*</b>	<b>Total</b>
Bigelow				5	8	8	0	21
Brown				9	11	9	0	29
Day				9	10	5	0	24
Oak Hill				5	9	6	0	20
<b>Total Middle</b>				<b>28</b>	<b>38</b>	<b>28</b>	<b>0</b>	<b>94</b>
				<b>9</b>	<b>10</b>	<b>11</b>	<b>Spec. Ed.*</b>	<b>Total</b>
North High				17	13	17	3	62
South High				14	13	20	0	60
<b>Total High</b>				<b>31</b>	<b>26</b>	<b>30</b>	<b>3</b>	<b>122</b>
<b>Grand Total</b>								<b>423</b>

\*Students who receive special education services outside the regular classroom for a significant amount of time.

When class sizes increase in Newton as they did this year, there tends to be more discussion about METCO and the number of METCO students. This year, budget constraints led to an increase in the number of elementary school classrooms with 25 or more students from 15 to 47 of the 250 classrooms, representing 18.8% of the classrooms. (Last year, only 5.5% of the classrooms had 25 or more students.) However, at least in their first year in the Newton school system, METCO students are placed only in classrooms where there is availability. Availability is defined as an elementary class size lower than 25. The percent of classes with 25 students or more in the middle and high schools also increased in FY2009 and now stand at 14.1% and 27.9% respectively.

**Table 6: Percent of Classes with 25 or More Students and  
with Fewer than 20 Students  
2004-05 through 2008-09**

	25 Students or More					Fewer Than 20 Students				
	2004-05	2005-06	2006-07	2007-08	2008-09	2004-05	2005-06	2006-07	2007-08	2008-09
Elementary	3.7%	9.6%	8.0%	5.5%	18.8%	36.5%	38.3%	23.5%	42.4%	16.0%
Middle	15.4%	10.1%	17.5%	7.5%	14.1%	20.7%	24.9%	19.1%	29.2%	25.2%
High	29.7%	29.0%	22.9%	21.0%	27.9%	29.2%	26.7%	31.3%	29.4%	29.5%

Source: Newton Public Schools; Annual Class Size Report, January 2009.

Using subsidized or free lunches as a proxy for income, the majority of METCO students are not from low-income families. In 2006-2007, the most recent year for which these data are readily available, 145 of the METCO students (out of the 416) or 35% qualified free or reduced meals. However, the number might be low in that some METCO students, especially in the middle and high schools, might have been eligible for free or reduced meals but might not have taken the forms home for parents to fill out and/or felt stigmatized by participating in the program and therefore avoided participating in it. (Also, using participation in free and reduced meals as a proxy for “low-income” families may be misleading. According to the United States Department of Agriculture, a family of four with an income of \$39,500 is not eligible for free or subsidized meals; neither is a single mother with two children with an income of \$33,000. Moreover, eligibility requirements are set nationally and do not take into account regional differences in the cost of living.)

While METCO does not include severely-disabled students with special education needs that require placement outside of Newton, METCO does include Boston students with a range of educational strengths and needs and does include non-severely disabled children with special education needs. Newton’s METCO program has a higher percentage of students with special education needs relative to the resident Newton student population. Thirty-seven percent of the METCO students were students with special education needs



in 2007 compared to 17% for Newton students as a whole (including the METCO students).

**Table 7: Number and Percent of METCO and  
Total Newton Public School Students in Special Education  
(FY04 - FY08)**

<b>NUMBER AND PERCENT OF METCO STUDENTS IN SPED</b>									
As of October 1	Special Education Placement Level*						Total # of METCO in SPED	Total METCO Enrollment	% of METCO in SPED
	Full Inclusion		Partial Inclusion		Substantially Separate Classroom				
	#	%	#	%	#	%			
2003	102	24.4%	24	5.7%	5	1.2%	131	418	31.4%
2004	103	24.8%	31	7.5%	8	1.9%	142	415	34.3%
2005	115	27.4%	31	7.4%	9	2.1%	155	419	37.1%
2006	113	27.2%	31	7.5%	4	1.0%	148	416	35.7%
2007	119	29.4%	23	5.7%	7	1.7%	149	405	36.9%
<b>NUMBER AND PERCENT OF TOTAL NEWTON K-12 POPULATION IN SPED</b>									
As of October 1	Special Education Placement Level*						Total # of Students in SPED**	Total K-12 Enrollment	% of Students in SPED
	Full Inclusion		Partial Inclusion		Substantially Separate Classroom				
	#	%	#	%	#	%			
2003	1,484	13.2%	260	2.3%	114	1.0%	1,858	11,267	16.5%
2004	1,579	14.0%	265	2.4%	122	1.1%	1,966	11,268	17.4%
2005	1,625	14.2%	252	2.2%	138	1.2%	2,015	11,415	17.7%
2006	1,601	13.9%	300	2.6%	110	1.0%	2,011	11,501	17.5%
2007	1,565	13.5%	309	2.7%	135	1.2%	2,009	11,556	17.4%

\*Special Education Placement Level Descriptions:

Full Inclusion (10) - special education services outside the general education classroom less than 21% of the time.

Partial Inclusion (20) - special education services outside the general education classroom 21% to 60% of the time.

Substantially Separate Classroom (40) - special education services outside the general education classroom more than 60% of the time.

\*\*Does not include tuitioned-out and pre K students.

Source: Newton Public Schools; Business, Finance and Planning 9/5/08

The results of Newton METCO students on Grade 4 and Grade 10 MCAS English Language Arts and Math tests compared to those of Newton and Boston students as a whole are shown in Table 8. In Grade 4, the percent of Newton METCO students scoring proficient or advanced is fourteen percentage points higher than their counterparts in the Boston public schools and thirty-two or thirty-three percentage points lower than Newton students as a whole in both English and Math. In Grade 10, Newton METCO students score eight percentage points higher on English and seven percentage points lower than students in Boston public schools in Math and thirty-three to thirty-eight percentage points lower than Newton students as a whole in both English and Math. A pattern of

METCO students scoring higher than their counterparts in Boston but lower than their suburban peers appears to exist in other communities with METCO students.

**Table 8: MCAS Results (2007)**

<b>MCAS Results (2007)</b>			
<b>Percent of Students Scoring Proficient or Advanced</b>			
	<u>Newton METCO Students</u>	<u>Boston Students</u>	<u>Newton Students</u>
Grade 4			
English	45%	31%	78%
Math	41%	27%	73%
Grade 10			
English	58%	50%	88%
Math	48%	55%	88%

Source: Newton Public Schools and Massachusetts Department of Elementary and Secondary Education (ESE)

Except for students whose families move out of Boston, most of Newton’s METCO students stay in the program and graduate. The most recent year for which graduation rates are available for comparison purposes is 2006-07. Of the 33 students who started in Newton’s METCO program in elementary school as part of the Class of 2007, four moved out of Boston and one withdrew prior to high school and transferred to the Boston Public Schools. Of the 28 who started high school in Newton’s 9<sup>th</sup> grade, all graduated. (This latter data are used to calculate graduation rates.) In summary, Newton’s METCO students had a 100% graduation rate in 2007, higher than Newton students as a whole and substantially higher than students in Boston.

**Table 9: Graduation Rates (2006-07)**<sup>37</sup>

	Graduation Rate
Newton	
Total Students	93.7%
METCO Students*	100.0%
Boston	57.9%
Statewide	80.9%

Source: Massachusetts Department of Elementary and Secondary Education and Newton Public Schools

#### **IV. Staffing**

The Newton METCO program in 2007- 08 had 14 staff members. This consisted of the Director, an Office Secretary, and a half-time office aide and a half-time volunteer coordinator; four guidance counselors (two in each high school, two for the four middle schools); and seven bus monitors for the buses transporting elementary school students. The half-time volunteer coordinator, while on the METCO staff, helps coordinate volunteer activities for all of the Newton Public Schools; this position can be thought of as one of the benefits of the METCO funding Newton receives.

**Table 10: Newton METCO Staffing (FY04 - FY08)**

	FY04	FY05	FY06	FY07	FY08
METCO Director	1.00	1.00	1.00	1.00	1.00
Guidance Counselors	2.00	3.00	3.00	4.00	4.00
Bus Monitors	5.00	5.00	5.00	7.10	7.00
Office Assistant/Secretary	1.00	1.00	1.00	1.00	1.00
Office Aide	0.47	0.47	0.47	0.47	0.47
Volunteer Coordinator	0.00	0.00	0.50	0.50	0.50
Total Full Time Equivalents	9.47	10.47	10.97	14.07	13.97

Source: Newton Public Schools; 11/7/08

<sup>37</sup> The four-year graduation rate is calculated by the Massachusetts Department of Elementary and Secondary Education as: # of students in cohort (denominator) who graduate in 4 years or less / [# of 1st time entering 9th graders in 2003-04] - transfers out/deaths + transfers in.

In the past, METCO had dedicated METCO social workers in the elementary schools but they were eliminated perhaps ten years ago. For the last ten years, the Director of the METCO program depended on the elementary school social workers and psychologists to assist METCO students and identify emerging issues. However, the elementary school social worker positions were eliminated this year.

## **V. Funding**

METCO is funded by Massachusetts through the Massachusetts Department of Elementary and Secondary Education's Racial Imbalance Law. Funding is intended:<sup>38</sup>

- To pay the full cost of student transportation (both buses and bus monitors)
- To pay the full cost of METCO staff who are in participating school districts to enhance both academic achievement and cross-cultural understanding
- To make a financial contribution toward the cost of teachers and other educational costs in the participating school districts

At the state level, METCO received essentially level funding from 1992 to 2000. In 2001, the program received a funding increase of 24%. In the subsequent three years, METCO was either level-funded or experienced cuts. From 2005 to 2007, METCO received increases ranging from 11% to 15%. In 2008, METCO had a 5% increase in funding with a total allocation of \$20.6 million. In 2009, METCO was supposed to receive an additional \$1 million in funding. But, according to the Boston Globe on March 8, 2009, Governor Patrick recently announced a 10% funding decrease (or \$2.3 million) and canceled the \$1 million increase. He has also recommended another cut of more than \$850,000 for next year.

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<sup>38</sup> According to the METCO grant application, funds may be used for local district costs incurred as a result of the presence of METCO students, METCO transportation costs, and for supplemental services that will contribute in a measurable way to enhanced educational opportunity and academic achievement, as well as diversity enrichment. In the area of enhanced educational opportunity and academic achievement, services may include regular day and after-school tutoring and mentoring programs, staff professional development geared towards understanding and addressing the achievement gap between minority and non-minority students, and other programs and services such as providing ways for parents to support their children's learning. In the area of diversity enrichment, services may include training, in-school and after-school activities, incentives programs, etc. that contribute to increased cross-cultural and racial understanding. Source: Massachusetts Department of Elementary and Secondary Education.

**Table 11: METCO Funding History in  
Massachusetts (1992 – 2008)**

Year	Total Allocation	Percent Change from Previous Year
1992	\$12,031,328	
1993	\$12,031,328	0%
1994	\$12,031,328	0%
1995	\$12,031,328	0%
1996	\$12,031,328	0%
1997	\$12,031,328	0%
1998	\$12,031,328	0%
1999	\$12,371,328	3%
2000	\$12,371,328	0%
2001	\$15,319,156	24%
2002	\$15,319,156	0%
2003	\$15,128,126	-1%
2004	\$13,615,313	-10%
2005	\$15,615,313	15%
2006	\$17,615,313	13%
2007	\$19,615,313	11%
2008	\$20,615,313	5%

Source: Massachusetts Department of Elementary and  
Secondary Education

All participating school districts receive the same dollar amount per METCO student for instructional and support services which is called a “per pupil allotment.” In the last four years, the per pupil allotment has increased from \$3400 to \$4000. (Up until FY2003, the state provided additional funds for METCO students who were in special education programs but this payment was eliminated. The FY03 METCO SPED supplement of \$108,363 to Newton was the last one.)

**Table 12: METCO per Pupil Allotment from Massachusetts (FY06 – FY09)**

FY06	\$3,400
FY07	\$3,700
FY08	\$3,800
FY09	\$4,000

Source: Massachusetts Department of Elementary  
and Secondary Education

In addition to the per pupil allotment for instructional and support services, school districts also receive funding for transportation. The amount is based on the number of buses needed. Newton has run eleven buses for the METCO students for at least the last ten years. The transportation allotment has covered in full the actual cost of the buses. (While part of the same grant, the funds for transportation are not intended to cover the cost of the bus monitors; those personnel expenses are covered by the per pupil allotment for instructional and support services.)

**Table 13: Newton METCO Transportation Expenses and State Transportation Allocation (FY04 – FY09)**

Fiscal Year	Budget/ Actual	Newton METCO Transportation Expenses	State Transportation Allocation
FY04	Actual	\$614,664	\$711,900
FY05	Actual	\$668,112	\$687,525
FY06	Actual	\$699,550	\$764,918
FY07	Actual	\$714,393	\$757,759
FY08	Actual	\$719,280	\$761,463
FY09	Budget	\$762,430	\$761,463

Source: Newton Public Schools; METCO Grant Program;  
Includes the base and supplemental transportation allocations

In line with the state budget increases to METCO, METCO allotments to Newton have grown over time and totaled \$2.4 million in FY2008. (After the initial report by the Citizen Advisory Group, we learned that the allotment for FY2009 was initially estimated at \$2,252,192 with 423 students.)

**Table 14: METCO Allotments to Newton (FY04 - FY09)**

	Total State METCO Allotment to Newton	Percent Change	# of Newton METCO Students	Total State METCO Allotment to Newton/ # of METCO Students
FY04	\$1,707,351		418	\$4,085
FY05	\$1,968,754	15.3%	415	\$4,744
FY06	\$2,179,724	10.7%	419	\$5,202
FY07	\$2,308,059	5.9%	416	\$5,548
FY08	\$2,421,463	4.9%	405	\$5,979

Source: Newton Public Schools, 11/8/08  
Includes the per pupil allotment for instructional and support services and the transportation allotment.

Once Newton’s Director of METCO receives from Massachusetts the grant amount for instructional and support services and transportation, the Director determines Newton’s METCO budget. The direct costs for METCO staff and expenses are considerably lower than the total amount of the state grant. Therefore, METCO in effect provides revenues to the Newton Public Schools General Fund. Those have been labeled both the “METCO Offset – Instruction” and “Teacher Credit” historically. For sake of clarity, we call these revenues the “METCO Credit to Instruction” hereafter. For FY2008, the METCO Credit to Instruction came to approximately \$939,000 or \$2,318 per METCO student. For FY09, the METCO Credit to Instruction is projected to remain at \$939,000. For FY2010, it is forecasted to drop by \$100,000 to \$839,000.

**Table 15: METCO Expenses (FY04 - FY08)**

	FY04	FY05	FY06	FY07	FY08	Percent Change FY04 - FY08
Total State Allocation*	\$1,707,351	\$1,968,754	\$2,179,724	\$2,308,059	\$2,421,463	41.8%
Expenses						
Staff Costs	\$316,277	\$380,660	\$401,311	\$510,332	\$525,716	
Aide and Tutor Expense**	\$0	\$0	\$0	\$25,616	\$72,348	
Benefits*** +	\$3,497	\$41,347	\$30,820	\$39,903	\$104,014	
All other expenses	<u>\$108,877</u>	<u>\$127,752</u>	<u>\$98,233</u>	<u>\$56,976</u>	<u>\$60,866</u>	
	\$428,651	\$549,759	\$530,364	\$632,827	\$762,944	78.0%
Transportation	\$615,974	\$667,911	\$702,065	\$743,632	\$719,280	16.8%
Total Expenses	\$1,044,625	\$1,217,670	\$1,232,429	\$1,376,459	\$1,482,224	41.9%
METCO Credit to Instruction ++	\$662,726	\$751,084	\$947,295	\$931,600	\$939,239	41.7%
Total	\$1,707,351	\$1,968,754	\$2,179,724	\$2,308,059	\$2,421,463	
Staffing: # of Full Time Equivalents	9.47	10.47	10.97	14.07	13.97	47.5%
# of Newton METCO Students	418	415	419	416	405	-3.1%

Notes:

\*The total budget is the same as the state allocation. The total budget (also known as the total expense) is the final actual cost for the fiscal year and may differ slightly from the original budget. Grant amendments are required for budget changes of more than 10%.

\*\* Aide and tutor costs are charged by hourly timesheets and are not included in FTE counts.

\*\*\*Prior to FY05 most employee benefits for grant staff were paid by the district budget. In FY05, the practice and the accounting system allowed for direct charging of benefits to the fund or grant from the which the employee is Paid, although not always full cost.

+In FY08 the METCO grant covered an additional benefits cost due to a remaining balance in transportation line item.

++ The teacher credit to the Newton Public Schools is adjusted at year end to include remaining balances in METCO accounts.

Source: Newton Public Schools, 11/8/08

Since FY04, the state allocation to Newton's METCO program, Newton's METCO expenses and the METCO Credit to Instruction have grown at the same rate. That reflects a conscious policy on the part of the Newton Public Schools to keep the growth of METCO expenses and the METCO Credit to Instruction equal.

## **VI. Class Size Analysis**

At the request of the Citizen Advisory Group, the Newton Public Schools did a careful analysis of the impact on class size of having no Boston students from the METCO program in the Newton Public Schools. Using the current headcount of 423 students in FY09, Newton Public Schools looked at the specific placements of the METCO students at each of the twenty-one schools and in each grade and classroom. The analysis found:

### Elementary Schools:

- With 207 fewer students, there would be 248 classrooms versus 250 currently
- Average class size would be reduced by -0.7 to 21.3 students versus 22.0 currently
- Burr Grade 4 would have class sizes of 27 and 26 students, numbers that are higher than most Grade 4 classes. Lincoln-Eliot Grade 1 would have two classes both with class sizes of 23 students compared with three classes of 20, 18 and 16 students

### Middle Schools:

- With 94 fewer students, the student to teacher ratio would be reduced by -0.5 to 21.3 students per teacher versus 21.8 students per teacher currently
- Brown Grade 8 would have a two teacher team (half team) for a total of 2.5 teams in Grade 8 versus 3.0 teams currently. Brown would then have half teams in Grades 6, 7, and 8. Half teams in Grade 8 are avoided if possible

### High Schools:

- With 122 fewer students in the two high schools, class size averages for the five major subjects would remain the same with the reduction of 6.75 teachers (see the incremental cost analysis below)

The complete class size analysis is included in Appendix I.

## **VII. Financial Analysis**

The analysis of the financial consequences of Newton's voluntary participation in the METCO program is challenging to do. Although there are gaps in available data, the more important problem is that different costing methodologies yield different conclusions.



Consider, for example, “full costing” versus “incremental costing” of the METCO program. The full cost method includes all costs, whether they are fixed or variable. The incremental cost method includes only those additional semi-variable or variable costs incurred as a result of having approximately 415 additional students in Newton’s school system.<sup>39</sup>

### Full Cost Analysis

On a full cost basis, it is clear that METCO’s per pupil allotment paid by Massachusetts to Newton for instructional and support services does not cover the average full cost of educating a student for a year in the Newton school system. This per pupil allotment from the Commonwealth (after direct costs for the METCO staff) of \$2,318 for FY2008 is far below the nearly \$13,450 total annual cost per pupil calculated by the Newton Public Schools according to Massachusetts Department of Elementary and Secondary Education guidelines. Indeed, this \$11,000 per pupil shortfall for FY2008 could be interpreted as a \$4,565,000 cost to the Newton school system for participating in METCO (\$11,000 shortfall x 415 METCO pupils).

This analytical approach has limitations, however. It assumes that adding 415 METCO students to an existing population of over 11,500 students (METCO students comprise 3.5% of the total student body) requires the addition of new fixed costs, such as new school rooms and other non-consumables, new administrators, new custodians, higher utilities, etc.. Arguably, this has never been the case as long as the METCO program has existed in the Newton public school system. In parallel, it assumes that subtracting 415 METCO students or 3.5% of the student body reduces costs by 3.5% (approximately \$5.6 million). Certainly, the semi-variable and variable costs go down and, over time, some portion of the fixed costs. Determining what portion of the fixed costs goes down and over what time period is difficult to determine precisely. Certainly, 415 additional or fewer students have implications for Newton’s fixed costs over the long term. In theory, in the long-run, all fixed costs are variable.

One way to conceptualize the long-term, full cost impact of 415 METCO students in the Newton Public Schools is to analyze whether one of the small elementary schools could be closed if the METCO program was phased out. There are 207 METCO children in the elementary schools in 2008-2009. If METCO was phased out gradually by no longer accepting new METCO students, in six years the number of METCO students in the elementary schools would be reduced to zero. The Newton Public Schools could then

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<sup>39</sup> Fixed costs in this context, such as classroom space, utilities, administrators and custodial services, remain constant (at least over the short run) regardless of the number of students enrolled. Semi-variable costs, such as teachers and guidance counselors, special education support, professional development, health, libraries, and English Language Learners costs, remain fixed up to a certain number of students after which they become variable. In other words, with semi-variable costs, the total number responds less than proportionately to changes in the number of students enrolled. The vast majority of costs in a school system are fixed or semi-variable so that the addition or elimination of a small percentage of students has only a small effect on total costs. Variable costs, such as textbooks and school supplies, increase in direct proportion to the number of students.

consider closing one of the smallest elementary schools (Lincoln-Eliot (284 students), Underwood (282 students), Ward (260 students) or Williams (276 students), re-districting the students of the closed school to adjacent schools or possibly redistricting more students throughout the city (since the METCO students attend all fifteen schools).

There are distinct advantages and disadvantages of this idea. The advantages of such a proposal are that (1) the direct costs of an elementary school could be saved (approximately \$422,000 for the principal, secretary, custodial positions and utility costs according to the Newton Public Schools (the FY10 projected energy and utilities range from \$30,000 - \$48,000 for the four smallest elementary schools)); (2) income from renting the school building could be realized (the amount would need to be determined), and (3) the semi-variable and variable costs of having 207 fewer students in the elementary schools could be saved (see below).

The disadvantages are very daunting. The main drawback would be losing the value of a more diverse student body and abandoning an approach to “community” education that has been an important element of the Newton Public Schools’ overall philosophy. As pointed out above, re-districting would be required. It is not clear how many elementary schools have extra capacity so there may be physical crowding. Class sizes might increase (although a detailed analysis would be required to confirm this). The income from the METCO program would be lost.

While we think an incremental cost analysis more accurately represents the true cost of adding or reducing the number of students, especially in the short-term, nonetheless the Citizen Advisory Group recommends that the School Committee and the administration of the Newton Public Schools do a full cost analysis of METCO as well as an analysis of the possibility of closing an elementary school if METCO were phased out to understand the financial impact of METCO in the long-term.

### Incremental Cost Analysis

The Citizen Advisory Group thinks an incremental cost analysis of METCO yields more relevant insights than a full cost analysis, especially if the Newton Public Schools is considering reducing the number of METCO students (rather than eliminating the program entirely).

At the request of the Citizen Advisory Group, the Newton Public Schools did a careful analysis of the financial impact of having no Boston students from the METCO program in the Newton Public Schools. Using the current headcount of 423 students in FY09, Newton Public Schools looked at the specific placements of the METCO students at each of the twenty-one schools and in each grade and classroom. In addition, the Newton Public Schools analyzed the specific special education support METCO students receive based on actual individual education program plans (IEPs). In addition, an analysis of the decreases in per pupil costs (based on the per pupil allocation to school principals) for such items as instructional, computer and library supplies, textbooks, small equipment, field trip transportation, etc. was done. While the complete details are in Appendix I, the

incremental cost analysis<sup>40</sup> of eliminating the METCO program yielded the following results:

Incremental Cost Analysis of Eliminating METCO

Teacher Expenses (Full Time Equivalents (FTEs):	
Elementary	2.2
Middle School	2.0
High School	<u>6.75</u>
	10.95 Teachers for \$618,774
Special Education Expenses (Full Time Equivalents (FTEs):	
Learning Center Teacher	1.1 for \$62,160
Aides	9.5 for \$266,000
Per Pupil Expenses	
	423 students for \$44,000
Total Variable and Semi-Variable METCO Expenses:	\$990,934
METCO Credit to Instruction:	<u>\$939,239</u>
Total Cost to Newton	\$51,695

For both FY2008 and FY2009, the METCO credit to instruction was \$939,239, approximately \$50,000 less than the variable and semi-variable expenses of the METCO students shown above. **In summary, the incremental cost analysis shows a *small cost to Newton of approximately \$50,000 for participating in METCO.***

The total cost to Newton illustrated above may be underestimated as the special education savings might be higher than calculated by the Newton Public Schools. Newton Public Schools looked at the current METCO student placements and determined that if the aide in that particular classroom was being shared with another student, then that aide would still remain even without that METCO student. In fact, the remaining student with special needs might be reassigned to another classroom where he or she could share an aide. Newton Public Schools should be asked to do this analysis and determine the impact on the number of aides.

Arguably, in the long-term, some (perhaps even many) fixed costs might decrease with 3.5% fewer students in the Newton Public Schools. However, the Citizen Advisory Group thinks that most of the fixed costs are being used at essentially full capacity. (For example, the buildings are full and supervisors and specialists are working at or above capacity. There is no evidence to suggest that the number of staff (like literacy specialists,

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<sup>40</sup> While the average teacher salary and benefits totals \$73,837, when a school system has layoffs, less senior teachers are let go. The average for salary and benefits for less senior teachers is \$56,509. The average for an aide is approximately \$28,000. For FY09, the per pupil allocation for the elementary, middle and high schools respectively are \$101, \$106, and \$108.

math coaches, curriculum coordinators or guidance counselors) would decrease appreciably with 3.5% fewer students in the school system. In many instances, there is one specialist per building, regardless of the number of students.) Thus, even with 415 fewer students, fixed costs would not decrease very much.

### Financial Analysis Conclusions

First, a full cost analysis is appropriate in the long-term, especially for analyzing the possibility of eliminating the entire program. Certainly, it is difficult to estimate the long-term financial consequences of Newton's participation in the METCO program using a full cost method of analysis. While difficult to do, such an analysis should be done.

Second, using an incremental costing approach, the financial implications of Newton participating in the METCO program are close to breakeven. In the short-term, if Newton is considering reducing the number of METCO students (rather than eliminating the program), the incremental cost approach is most appropriate.

Third, Newton's continued participation in the METCO program at its current level of commitment and scale need not, and, in our minds, should not be determined solely by financial considerations. Whatever financial costs may be associated with the program might be considered an investment in the educational goal of diversity as well as "giving back" to the greater Boston community. For sure, one could try to factor in such intangible costs as the real or imagined increased complexity of supervising a more diverse population in classes and other school activities. But no principals or teachers that the Citizen Advisory Group has interviewed see this as an issue. Indeed, they have all pointed out to us how the diversity of Newton's classrooms makes teaching in Newton such a rewarding assignment.

### **VIII. Conclusion**

Newton Public Schools provides and participates in a wide range of programs to meet its mission of educating, preparing, and inspiring students to achieve their full potential as lifelong learners, thinkers, and productive contributors. Two of its core values are to recognize the uniqueness and dignity of individuals of differing races and ethnicities and to build upon the strengths of our diverse community. As one way to achieve these goals, Newton Public Schools voluntarily participates in METCO. The school system has a financial incentive to do so in the form of a grant from Massachusetts. The financial analysis shows the METCO program essentially breaks even.

Just like other non-mandated programs, Newton Public Schools should periodically review in depth METCO: its purpose, measurable benefits and costs, and the efficacy with which the program is delivered. Therefore, the Citizen Advisory Group recommends that the School Committee and Newton Public Schools analyze and discuss openly the following types of questions:

- How can Newton best achieve its educational goals for diversity and what is METCO's role in this?
- How can Newton Public Schools measure – qualitatively and quantitatively – the learning impact of having a more diverse school community by virtue of participating in METCO?
- Is METCO achieving its full potential? Are there ways to increase its effectiveness?
- If, based on a set of assumptions, METCO costs the Newton Public Schools more than what is received in METCO grant funding, are the social and educational benefits sufficient to retain the program at its current level, a lower level, or at all?
- Will even more resources from Newton be required in the future to maintain the current scale of METCO's operations and Newton's position as a leader in multi-cultural education?
- If the state reduced or eliminated funding for METCO, would Newton Public Schools keep the program?
- Can Newton, perhaps in concert with other cities and towns, press the state to provide more funding to METCO?
- Should the scale of the METCO program be reduced and will this ensure or undermine Newton's continued leadership in multi-cultural education?
- If class sizes continue to rise in the future, how should this be factored into the analysis of METCO?
- Should some portion of the commitment to METCO be reallocated to other pressing needs within the school system?

While these are difficult questions both to discuss and to answer thoughtfully, the Citizen Advisory Group recommends that Newton Public Schools periodically (perhaps every five years) examine in depth the benefits and costs (e.g., financial, class size, teacher load) of the METCO program, its level of participation, and the quality and effectiveness of this longstanding program. This has not been done historically in an open and periodic manner. The Citizen Advisory Group also recommends that Newton Public Schools annually or biennially publish in depth data about METCO, perhaps similar to what is found in this report. While the Newton Public Schools provided us with this information when asked, it was not readily available beforehand. Just as the School Committee thinks deeply about a wide range of choices (e.g., class size, professional development, curriculum) so too should METCO be discussed openly and regularly to see if the investments provide the kind of return we hope in actualizing Newton's commitment to diversity.

## **Appendix I: Eliminating METCO: Class Size, Staff and Special Education Cost Analysis**

*Analysis and tables from Sandra Guryan, Assistant Superintendent for Business, Finance and Planning (December 11, 2008) & Paul Stein, Assistant Superintendent for Human Resources, and Lisa Reed, METCO Director (January 7, 2008)*

Please note the following potential savings as a result of reviewing the theoretical impact of no Boston students in the Newton Public Schools:

- Elementary Schools: Save 2.0 FTE classroom teachers without METCO students. Save 0.1 FTE Physical Education, Health & Wellness teacher, and save 0.1 FTE Art teacher. With 207 fewer students, there would be 248 classrooms versus 250 currently. Average class size would be reduced by -0.7 to 21.3 students versus 22.0 currently.
- Additional Elementary Impact: Burr Grade 4 would have class sizes of 27 and 26 students, numbers that are higher than most Grade 4 classes. Lincoln-Eliot Grade 1 would have class sizes of 23 and 23 students.
- Middle Schools: Save 2.0 FTE team teachers without METCO students, with no change in other subject areas. With 94 fewer students, the student to teacher ratio would be 21.3 students per teacher versus 21.8 students per teacher currently.
- Additional Middle School Impact: Brown Grade 8 would have a two teacher team (half team), for a total of 2.5 teams in Grade 8 versus 3.0 teams currently. Half teams in Grade 8 are avoided, if possible. Brown would then have half teams in Grades 6, 7 and 8.
- High Schools: A theoretical high school analysis shows to reach the same class size averages for the five major subjects as today, with 122 fewer students in two high schools, there would be a reduction of -6.75 FTE high school teachers.

We have conducted a cost analysis of the METCO students in Newton who receive special education services. We asked special education administrators responsible for staffing at each building to conduct an exercise in which they imagined that each of the METCO students no longer received or required special education services. In order to realistically conduct this exercise, we needed to base our analysis on the current staffing allocations and student population and to review our individual students' actual IEPs. In the 2008-2009 School Year, 148 of Newton's 423 METCO students receive services. (This is in comparison to 149 of Newton's 405 METCO students enrolled during the 07-08 school year.) We determined that if no METCO students receive services, Newton would be able to reduce its learning center staff by 1.1 FTE's and its aide staff by 9.5 FTE's. At \$56,509 per teacher and \$28,000 per aide, this represents a potential savings of \$328,160.

In doing this analysis, we learned that in many cases a reduction in staffing was not feasible primarily for two reasons:

- Students were spread out so thinly over different grades and schools that the elimination of their need for services would not constitute enough of a reduction in work load to reduce staffing. For instance, if a learning center teacher has a caseload of 25, and it were reduced to 23, he or she would still be within the customary caseload for a full time position.
- Many students received services in groups. For example, take the case of an aide who is responsible for 2 or 3 students in a single classroom – all of whom require an aide in that room during the entire school day. If one student left that classroom, the remaining student(s) would still require that aide to be there full time. This, in fact, reflects an economy that the special education department has already put in place. Another example is that of a middle school speech and language pathologist who primarily sees students in small groups. Again, if one or two students left a speech group, the speech and language pathologist would still need to conduct the group.

The biggest saving involves those students who required intensive aide support, thus the reduction in 9.5 aides.

**Table 16: Two Cost Summaries of Teacher Reduction**

Description	FTEs	Average Salary	Average Benefits	Total Average	Total Cost
<b><u>Using Average Teacher Salaries</u></b>					
Elementary Classroom Teachers	2.00	\$67,080	\$6,757	\$73,837	\$147,674
Elementary Physical Education, Art and Music Teachers	0.20	\$67,080	\$6,757	\$73,837	\$14,767
Middle School Team Teachers	2.00	\$67,080	\$6,757	\$73,837	\$147,674
High School Teachers - 5 Major Subjects	6.75	\$67,080	\$6,757	\$73,837	\$498,400
<b>Total</b>	<b>10.95</b>				<b>\$808,515</b>
<b><u>Using Less Senior Teacher Salaries</u></b>					
Elementary Classroom Teachers	2.00	\$50,000	\$6,509	\$56,509	\$113,018
Elementary Physical Education, Art and Music Teachers	0.20	\$50,000	\$6,509	\$56,509	\$11,302
Middle School Team Teachers	2.00	\$50,000	\$6,509	\$56,509	\$113,018
High School Teachers - 5 Major Subjects	6.75	\$50,000	\$6,509	\$56,509	\$381,436
<b>Total</b>	<b>10.95</b>				<b>\$618,774</b>

Note: The average benefits include Health Insurance, Dental Insurance and Medicare. The Medicare amount is 1.45% of the average salary used and is therefore lower in the bottom scenario. The Citizen Advisory Group found the analysis using the salary and benefits for the less senior teachers more compelling because if layoffs occur, the less senior teachers are the first to be let go.



**Table 17: Distribution of Elementary Class Sizes without METCO Students  
As of October 1, 2008**

SCHOOL	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	TOTAL	Change Without METCO
	K	K-1	1	1-2	2	2-3	3	3-4	4	4-5	5		
<b>Angier</b>			19		22		24		24		20	# Rooms	
	19		18		22		24		24		20	18	
	18	18	18	-	22	-	24	-	24	-	19		
<b>TOTAL</b>	37	18	55	0	66	0	72	0	72	0	59	379	-13
<b>Bowen</b>			21									# Rooms	
	20		21		24		27		25		21	19	
	20		21		23		26		24		20		
	19	-	20		23		26		24	-	19		
<b>TOTAL</b>	59	0	83	0	70	0	79	0	73	0	60	424	-11
<b>Burr Save 1 teacher- G.4</b>	23		21		22						19	# Rooms	
	23		20		21		26		27		19	16	
	22		20		21		26		26		18		
<b>TOTAL</b>	68	0	61	0	64	0	52	0	53	0	56	354	-15
<b>Cabot</b>							21					# Rooms	
	21		22		25		21		24		20	19	
	20		22		25		21		24		19		
	20		21		24		20		23		19		
<b>TOTAL</b>	61	0	65	0	74	0	83	0	71	0	58	412	-13
<b>Countryside</b>	22		22									# Rooms	
	22		22		24		26		25		27	20	
	21		22		24		26		25		27		
	20		22		23		26		24		27		
<b>TOTAL</b>	85	0	88	0	71	0	78	0	74	0	81	477	-2
<b>Franklin</b>							22	*				# Rooms	
	18		22		21		20		19	**	22	19	
	18		22		21		19		19		22		
	18		21		21		17		18		19		
<b>TOTAL</b>	54	0	65	0	63	0	78	0	56	0	63	379	-17
<b>Horace Mann</b>	22				22		21		23		21	# Rooms	
	21		23		21		21		21		20	17	
	21		22		21		20		21		19		
<b>TOTAL</b>	64	0	45	0	64	0	62	0	65	0	60	360	-10
<b>Lincoln-Eliot Save 1 teacher- G.1</b>							19					# Rooms	
	20		23		23		17		17		22	13	
	20		23		22		16		17		22		
<b>TOTAL</b>	40	0	46	0	45	0	52	0	34	0	44	261	-23

\*Includes 5 students in the REACH Program who are integrated into another 3rd grade class approximately 2 1/2 hours each day.

\*\*Includes 6 students in the REACH Program who are integrated into another 4th grade class approximately 2 1/2 hours each day.

\*\*\*Includes 8 students in the REACH Program who are integrated into another 5th grade class approximately 2 1/2 hours each day.

**Table 17: Distribution of Elementary Class Sizes without METCO Students  
As of October 1, 2008 (continued)**

SCHOOL	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	TOTAL	Change Without METCO
	K	K-1	1	1-2	2	2-3	3	3-4	4	4-5	5		
<b>Angier</b>			19		22		24		24		20	# Rooms	
	19		18		22		24		24		20	18	
	18	18	18	-	22	-	24	-	24	-	19		
<b>TOTAL</b>	37	18	55	0	66	0	72	0	72	0	59	379	-13
<b>Bowen</b>			21									# Rooms	
	20		21		24		27		25		21	19	
	20		21		23		26		24		20		
	19	-	20		23		26		24	-	19		
<b>TOTAL</b>	59	0	83	0	70	0	79	0	73	0	60	424	-11
<b>Burr Save 1 teacher- G.4</b>	23		21		22						19	# Rooms	
	23		20		21		26		<b>27</b>		19	16	
	22		20		21		26		<b>26</b>		18		
<b>TOTAL</b>	68	0	61	0	64	0	52	0	<b>53</b>	0	56	354	-15
<b>Cabot</b>							21					# Rooms	
	21		22		25		21		24		20	19	
	20		22		25		21		24		19		
	20		21		24		20		23		19		
<b>TOTAL</b>	61	0	65	0	74	0	83	0	71	0	58	412	-13
<b>Countryside</b>	22		22									# Rooms	
	22		22		24		26		25		27	20	
	21		22		24		26		25		27		
	20		22		23		26		24		27		
<b>TOTAL</b>	85	0	88	0	71	0	78	0	74	0	81	477	-2
<b>Franklin</b>							22	*				# Rooms	
	18		22		21		20		19	**	22	19	
	18		22		21		19		19		22		
	18		21		21		17		18		19		
<b>TOTAL</b>	54	0	65	0	63	0	78	0	56	0	63	379	-17
<b>Horace Mann</b>	22				22		21		23		21	# Rooms	
	21		23		21		21		21		20	17	
	21		22		21		20		21		19		
<b>TOTAL</b>	64	0	45	0	64	0	62	0	65	0	60	360	-10
<b>Lincoln-Eliot Save 1 teacher- G.1</b>							19					# Rooms	
	20		<b>23</b>		23		17		17		22	13	
	20		<b>23</b>		22		16		17		22		
<b>TOTAL</b>	40	0	<b>46</b>	0	45	0	52	0	34	0	44	261	-23

\*Includes 5 students in the REACH Program who are integrated into another 3rd grade class approximately 2 1/2 hours each day.

\*\*Includes 6 students in the REACH Program who are integrated into another 4th grade class approximately 2 1/2 hours each day.

\*\*\*Includes 8 students in the REACH Program who are integrated into another 5th grade class approximately 2 1/2 hours each day.

**Table 18: Distribution of Elementary Class Sizes including METCO Students  
As of October 1, 2008**

SCHOOL	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	
	K	K-1	1	1-2	2	2-3	3	3-4	4	4-5	5	TOTAL
<b>Angier</b>			20		23		25		24		21	# Rooms
	19		20		23		25		24		20	18
	18	19	19	-	23	-	25	-	24	-	20	
TOTAL	37	19	59	0	69	0	75	0	72	0	61	392
<b>Bowen</b>			22									# Rooms
	20		22		25		27		26		21	19
	20		21		24		27		25		21	
	19	-	21		24		26		25	-	19	
TOTAL	59	0	86	0	73	0	80	0	76	0	61	435
<b>Burr</b>	23		22		23				21		20	# Rooms
	23		21		22		28		19		20	17
	22		20		21		27		18		19	
TOTAL	68	0	63	0	66	0	55	0	58	0	59	369
<b>Cabot</b>							22					# Rooms
	22		23		25		22		25		22	19
	21		23		25		21		24		20	
	20		23		24		20		23		20	
TOTAL	63	0	69	0	74	0	85	0	72	0	62	425
<b>Countryside</b>	22		22									# Rooms
	22		22		24		26		25		28	20
	21		22		24		26		25		28	
	20		22		23		26		24		27	
TOTAL	85	0	88	0	71	0	78	0	74	0	83	479
<b>Franklin</b>							23	*				# Rooms
	19		23		22		20		21	**	26	19
	19		22		22		19		21		22	
	18		22		21		17		20		19	
TOTAL	56	0	67	0	65	0	79	0	62	0	67	396
<b>Horace Mann</b>	23				22		22		23		21	# Rooms
	22		26		21		22		21		20	17
	22		23		21		21		21		19	
TOTAL	67	0	49	0	64	0	65	0	65	0	60	370
<b>Lincoln-Eliot</b>			20				19					# Rooms
	22		18		25		17		20		24	14
	21		16		24		16		19		23	
TOTAL	43	0	54	0	49	0	52	0	39	0	47	284

\*Includes 5 students in the REACH Program who are integrated into another 3rd grade class approximately 2 1/2 hours each day.

\*\*Includes 6 students in the REACH Program who are integrated into another 4th grade class approximately 2 1/2 hours each day.

\*\*\*Includes 8 students in the REACH Program who are integrated into another 5th grade class approximately 2 1/2 hours each day.

**Table 18: Distribution of Elementary Class Sizes including METCO Students  
As of October 1, 2008 (continued)**

SCHOOL	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	
	K	K-1	1	1-2	2	2-3	3	3-4	4	4-5	5	TOTAL
<b>Mason-Rice</b>			21				20					# Rooms
	23		21		22		20				25	19
	22		21		21		20		27		25	
	22		21		20		20		27		24	
<b>TOTAL</b>	67	0	84	0	63	0	80	0	54	0	74	422
<b>Memorial-Spaulding</b>					21				23			# Rooms
	22		22		21		24		22		26	20
	21		21		21		24		21		26	
	19		21		20		22		20		25	
<b>TOTAL</b>	62	0	64	0	83	0	70	0	86	0	77	442
<b>Peirce</b>			23						22		21	# Rooms
	20		22		27		26		22		21	15
	19		22		27		25		21		20	
<b>TOTAL</b>	39	0	67	0	54	0	51	0	65	0	62	338
<b>Underwood</b>											21	# Rooms
	22		23		23		25		20		20	13
	21		22		22		24		20		19	
<b>TOTAL</b>	43	0	45	0	45	0	49	0	40	0	60	282
<b>Ward</b>												# Rooms
	21		26		18		25		21		20	12
	21		25		17		25		21		20	
<b>TOTAL</b>	42	0	51	0	35	0	50	0	42	0	40	260
<b>Williams</b>					19							# Rooms
	22		20		18		20		29		22	13
	21		19		18		18		28		22	
<b>TOTAL</b>	43	0	39	0	55	0	38	0	57	0	44	276
<b>Zervas</b>			19		20		20					# Rooms
	23		19		19		20		26		28	15
	23		18		19		20		26		28	
<b>TOTAL</b>	46	0	56	0	58	0	60	0	52	0	56	328

	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	
	K	K-1	1	1-2	2	2-3	3	3-4	4	4-5	5	TOTAL
<b>Grand Total:</b>	820	19	941	0	924	0	967	0	914	0	913	<b>5,498</b>
<b>Avg. Class Size:</b>	21.0	19.0	21.4	0.0	22.0	0.0	22.5	0.0	22.9	0.0	22.3	<b>22.0</b>
<b># of Rooms/Classes:</b>	39	1	44	0	42	0	43	0	40	0	41	<b>250</b>

**Table 19: FY09 Middle School Teacher Ratios without METCO Students**

School	Grade	Number of Students	Number of Teams	Average Team Size	Number of Core Teachers	Students to Teachers	Student:Teacher Ratio	Team Size	Change without METCO
Bigelow	6	177	2.00	89	8.0	22.1	22:1	88.50	
Bigelow	7	156	2.00	78	8.0	19.5	20:1	78.00	
Bigelow	8	151	2.00	76	8.0	18.9	19:1	75.50	
<b>Total Bigelow</b>		<b>484</b>	<b>6.00</b>	<b>81</b>	<b>24.0</b>	<b>20.2</b>	<b>20:1</b>	<b>80.67</b>	<b>-0.9</b> <b>-21</b>
Brown	6	217	2.50	87	10.0	21.7	22:1	86.80	
Brown	7	210	2.50	84	10.0	21.0	21:1	84.00	
<b>Brown-Save 2 Teachers</b>	8	219	2.50	88	<b>10.0</b>	21.9	22:1	87.60	
Brown	SPED	6							
<b>Total Brown</b>		<b>652</b>	<b>7.50</b>	<b>87</b>	<b>30.0</b>	<b>21.7</b>	<b>22:1</b>	<b>86.93</b>	<b>0.5</b> <b>-29</b>
Day	6	218	2.50	87	10.0	21.8	22:1	87.20	
Day	7	268	3.00	89	12.0	22.3	22:1	89.33	
Day	8	237	3.00	79	12.0	19.8	20:1	79.00	
<b>Total Day</b>		<b>723</b>	<b>8.50</b>	<b>85</b>	<b>34.0</b>	<b>21.3</b>	<b>21:1</b>	<b>85.06</b>	<b>-0.7</b> <b>-24</b>
Oak Hill	6	189	2.00	95	8.0	23.6	24:1	94.50	
Oak Hill	7	164	2.00	82	8.0	20.5	21:1	82.00	
Oak Hill	8	174	2.00	87	8.0	21.8	22:1	87.00	
<b>Total Oak Hill</b>		<b>527</b>	<b>6.00</b>	<b>88</b>	<b>24.0</b>	<b>22.0</b>	<b>22:1</b>	<b>87.83</b>	<b>-0.8</b> <b>-20</b>
<b>Total Middle School</b>		<b>2,386</b>	<b>28.00</b>	<b>85</b>	<b>112.0</b>	<b>21.3</b>	<b>21:1</b>	<b>85.21</b>	
<b>Middle School with METCO</b>		<b>2,480</b>	<b>28.50</b>	<b>87</b>	<b>114.0</b>	<b>21.8</b>	<b>22:1</b>	<b>87.02</b>	
<b>Difference</b>		<b>(94)</b>	<b>(0.5)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>(0.5)</b>	<b>(1.8)</b>	<b>(1.8)</b>	

**Table 20: FY09 Middle School Teacher Ratios including METCO Students**

School	Grade	Number of Students	Number of Teams	Average Team Size	Number of Core Teachers	Students to Teachers	Student:Teacher Ratio	Team Size
Bigelow	6	182	2.00	91	8.0	22.8	23:1	91.00
Bigelow	7	164	2.00	82	8.0	20.5	21:1	82.00
Bigelow	8	159	2.00	80	8.0	19.9	20:1	79.50
<b>Total Bigelow</b>		<b>505</b>	<b>6.00</b>	<b>84</b>	<b>24.0</b>	<b>21.0</b>	<b>21:1</b>	<b>84.17</b>
Brown	6	226	2.50	90	10.0	22.6	23:1	90.40
Brown	7	221	2.50	88	10.0	22.1	22:1	88.40
Brown	8	228	3.00	76	12.0	19.0	19:1	76.00
Brown	SPED	6						
<b>Total Brown</b>		<b>681</b>	<b>8.00</b>	<b>85</b>	<b>32.0</b>	<b>21.3</b>	<b>21:1</b>	<b>85.13</b>
Day	6	227	2.50	91	10.0	22.7	23:1	90.80
Day	7	278	3.00	93	12.0	23.2	23:1	92.67
Day	8	242	3.00	81	12.0	20.2	20:1	80.67
<b>Total Day</b>		<b>747</b>	<b>8.50</b>	<b>88</b>	<b>34.0</b>	<b>22.0</b>	<b>22:1</b>	<b>87.88</b>
Oak Hill	6	194	2.00	97	8.0	24.3	24:1	97.00
Oak Hill	7	173	2.00	87	8.0	21.6	22:1	86.50
Oak Hill	8	180	2.00	90	8.0	22.5	23:1	90.00
<b>Total Oak Hill</b>		<b>547</b>	<b>6.00</b>	<b>91</b>	<b>24.0</b>	<b>22.8</b>	<b>23:1</b>	<b>91.17</b>
<b>Total Middle School</b>		<b>2,480</b>	<b>28.50</b>	<b>87</b>	<b>114.0</b>	<b>21.8</b>	<b>22:1</b>	<b>87.02</b>

**Table 21: METCO Special Education Cost Analysis**

	Number of METCO Students on IEPs	Number of METCO Students per School	Potential Learning Center Teacher Reduction	Other Special Education Teacher Reduction*	Aide Reduction	
Angier	3	13	0	0	0	
Bowen	2	11	0	0	0	
Burr	4	15	0	0	0	
Cabot	1	13	0	0	0	
Countryside	1	2	0	0	1	
Franklin	7	17	0.4	0	1	
Horace Mann	4	10	0	0	1	
Lincoln-Eliot	3	23	0	0	0	
Mason-Rice	3	10	0	0	0	
Memorial-Spaulding	3	24	0	0	1	
Peirce	0	14	0	0	0	
Underwood	1	15	0	0	1	
Ward	1	11	0	0	0	
Williams	3	11	0	0	1	
Zervas	4	18	0	0	0	
Bigelow	10	21	0	0	0	
Brown	9	29	0	0	1	
Day	8	24	0	0	1	
Oak Hill	11	20	0	0	1	
Newton North	33	62	0.5	0	0.5	
Newton South	37	60	0.2	0	0	
TOTAL	148	423	1.1	0	9.5	
Potential Savings**			\$62,160		\$266,000	\$328,160

\*Includes Special Program Teachers, OT, PT, Speech and Language Pathologists

\*\* Computed at \$56,509 per teacher (salary of \$50,000 and benefits of \$6509 for a less senior teacher) And \$28,000 per aide.

## **D. Transportation Report**

### **I. Executive Summary**

Only 15% of Newton's regular education public school students use the bus system. Of these, 65% pay a fee to do so. Yet, transportation of regular education students within the Newton school district to both public and private schools currently costs \$1.64 million per year. The cost is in part due to two factors out of Newton's control – the mandate by Massachusetts to transport K-6 students (both public and in-town private school students) for free who live more than 2 miles from their school and high bus costs. But, a significant portion of the \$1.64 million is a result of three choices that have been made by the School Committee – bussing additional students for free, offering bus service to all students for a fee, and setting bus fees at a level substantially below full cost.

The School Committee has voluntarily chosen to offer to bus for free approximately 1270 K-5 elementary school students. Significant savings are possible if Newton only provided free transportation based on the State mandate – K-6 students who live more than 2 miles from school. Newton classifies parts of Newton as safety areas and voluntarily provides free transportation to ensure young students in these areas get to and from school safely. Approximately 970 of the 1270 K-5 students live in areas classified as safety areas. If the Newton Police provided more crossing guards, the number of students living in safety areas would decrease; as a result, costs would decrease since fewer buses would be needed or income from bus fees would increase.

In addition, Newton chooses to offer transportation for a fee of \$220 (a level substantially below full cost) to all 7 – 12 students and K-5 students who live within 1 mile of the school and 6<sup>th</sup> grade students who live within 2 miles of school.

Newton has also followed state regulations that mandate free transportation for in-town private school students. However, it appears that the mandate may no longer be enforceable. Newton's lawyers will want to pursue this question.

Communities have very different policies about who is eligible to ride for free, who is eligible to pay, and the level of fees. Compared to some communities, Newton's fees (\$220 per student with a \$440 family cap) are considerably lower (e.g., Lexington (\$550 per student with a \$1600 family cap) and Needham (\$370 per student with a \$750 family cap)). Brookline provides no bus service at all (even for a fee) for K – 8 students living within 1.5 miles of their schools and no service to 9 – 12 students (except those in South Brookline where there is no public transportation available). Wellesley follows the state mandate and only provides bus service to K – 6 students living farther than 2 miles from the school. In contrast, some communities – mostly those with far fewer students and smaller geographic areas to serve – provide bus service for free to all their students (e.g., Weston and Wayland).

There are two possible strategies for reducing the transportation cost of \$1.64 million. These alternatives can be used in combination:

- (1) Reducing the costs by reducing the number of buses by either/or
  - (a) Providing bus service to only those students mandated by law and/or



- (b) Hiring more crossing guards to reduce the number of elementary school students who need bus service for safety reasons
- (2) Increasing fee revenues by either/or
  - (a) Increasing the fee level and/or
  - (b) Having more students pay the fee (K-5 students who live between 1 – 2 miles from school, presumably in non-safety areas)
  - (c) Asking private schools to contribute to the cost of transportation

If Newton followed state mandates and only provided bus service to K-6 students that live more than 2 miles from school, this would result in a 52% reduction in the cost of transportation, or approximately \$859,980 in savings. Transportation costs would decrease from \$1.64 million to \$784,080. If Newton were able to eliminate transportation to in-town private school students, there would be net savings of \$191,360. If Newton charged fees to the elementary school students who live between 1 and 2 miles from the school in non-safety areas who currently use the bus system regularly,<sup>41</sup> fee revenues might increase by \$30,000 - \$50,000. If fee levels were increased (to either \$300 or \$400) using the current policy, additional revenues of \$80,000 to \$170,000 are likely. If both more users were charged and fees were increased, additional revenues would be \$155,000 to \$270,000. In addition, Newton should ask private schools to contribute to the cost of transportation, a form of payments in lieu of taxes (PILOTs).

All of the above mentioned issues must though be looked at in the context of the “community” side of delivering education. Newton’s “neighborhood school” system results in students in twenty-one different buildings. Yet, because of the neighborhood schools, most elementary school students live within two miles of their school. Newton is also a physically large community (18 square miles), with little transportation from the MBTA available. There are few alternatives to walking or biking to school for the younger students other than riding school buses or being driven by adults (carpools or parents). Many schools are located in dense urban settings so that if buses were eliminated and automobile counts increased, traffic might become worse and safety issues might increase for pedestrians and cyclists. Newton can expect that if bus service is decreased or fees increased, parents will be upset. When Newton recently instituted fees for K-6 students living between 1 to 2 miles from school, ridership went down and parents reacted negatively to the new policy. As the amount of money brought in by the fees was not significant in the eyes of policy makers, the School Committee changed the following year to the “no fee between 1 - 2 miles for K-5” policy.

The Citizen Advisory Group recommends that the Newton Public Schools explore all the options. Spending \$1.64 million to bus 15% of Newton’s public school students does not seem like a good use of funds in light of all the other educational priorities facing the Newton Public Schools. But, this is a choice based on values and priorities. It involves financial, safety, convenience and environmental issues. Shifting more of the burden for transportation and its costs to parents in light of other priorities for the school system seems appropriate to the Citizen Advisory Group.

## **II. Current Status**

Approximately 15% of Newton’s regular education public school students use the bus system. These transportation services are currently costing the Newton Public Schools \$1.64 million per year. This represents 1% of the Newton Public Schools total FY09 budget of \$160 million (This figure of \$1.64 million does not include over \$2.7 million for special education transportation,

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<sup>41</sup> 299 elementary school students who live 1-2 miles from school in non-safety are allowed to ride for free under the current policy.

which is mandated by law to be free and available for all special education students. It also does not include approximately \$60,000 in field trip transportation, which is partially funded by fees paid by the students participating in the field trips. It does take into account a credit of \$316,140 from the sale of bus passes and the cost of transporting private school students within Newton, as explained below.)

Massachusetts has laws governing student transportation. Under Massachusetts General Laws, students in grades K-6 who live more than 2 miles walking distance to their neighborhood school are entitled to free transportation. Similarly, according to Massachusetts General Laws, students in grades K-6 who attend private schools in Newton are entitled to free bus transportation if they live more than 2 miles walking distance to their private school. In addition, if a student's disability "requires transportation or specialized transportation arrangements in order to benefit from special education, ... [then] the student is entitled to receive transportation services to any program provided by the public school and in which the student participates."<sup>42</sup> While Newton is mandated by state law to provide this free transportation, the Commonwealth no longer reimburses school districts for transportation costs.

The number of students in grades K-6 who live more than 2 miles walking distance to their neighborhood school and are entitled to free transportation totals 387 children:<sup>43</sup>

27 public elementary school students
217 public middle school students
<u>143</u> private elementary and middle school students <sup>44</sup>
387

Some communities (e.g., Lexington) have been reviewing the mandate to provide transportation for in-town private school students who live more than two miles from school. It appears that when the Commonwealth stopped funding transportation reimbursements, their ability to enforce the regulation perhaps became unenforceable by the Department of Elementary and Secondary Education (the new moniker for the Department of Education). Newton's lawyers are reviewing this possibility.

The Newton School Committee has also approved free transportation beyond that mandated by the state to 1270 K-5 students. Elementary school students (Grades K-5) who live between 1 and 2 miles from school are provided with free transportation. In addition, elementary students (Grades K-5) who live less than 1.0 mile from school but are in a safety area are provided with free transportation. A safety area is one in which students would need to cross high traffic roads without crossing guards. Currently, there are approximately 600 elementary students who live between 1 and 2 miles from their school; of these, approximately 300 live in safety areas. In addition, 670 K-5 elementary school students live less than 1 mile from school in safety areas. In other words, there

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<sup>42</sup> Massachusetts Department of Elementary and Secondary Education's Education Laws and Regulations, specifically 603 CMR 28.05 (5) (b).

<sup>43</sup> 27 public elementary school students: see Table 1; 217 public middle school students: see Table 5 (middle school waivers for distance); 143 elementary and middle school private school students: see Table 5 ( 194 bus passes issued less 51 paid bus passes)

<sup>44</sup> Many K-6 students attending private schools qualify for free bus passes since most of them live more than two miles from the private schools they attend.

are a total of 1270 students who Newton deems eligible to be transported for free even though this is not required by state mandate. But, 970 of the 1270 K-5 students who live less than 2 miles from school live in safety areas. (Conversely, 299 elementary school students who live 1-2 miles from school in non-safety areas are allowed to ride for free under the current policy.) It is worth noting that the School Committee increased the size/number of safety areas in FY07. While safety is sacrosanct, nonetheless classification of locations as safety areas should be reviewed periodically. If the Newton Police (which hires and pays for crossing guards) provided more crossing guards, the number of students living in safety areas would decrease and more students could safely walk or bike to school. (The cost-benefit analysis of providing the bus transportation vs. crossing guards also needs to be reviewed periodically.)

The School Committee has noted that by providing free transportation beyond that mandated by the Commonwealth, they increase safety, provide parents with a convenient form of transportation, reduce the number of cars on the road (with a positive environmental impact) and, by their calculations, only decrease revenues by approximately \$100,000 - \$130,000.

**Table 1: Elementary Students Eligible for Free Transportation**

Distance from School	Students Eligible for Free Transportation per School Committee Policy 2007-08			Students <u>Not</u> Eligible for Free Transportation per School Committee Policy 2007-08	<b>Total Elementary Students 2007-08*</b>
	Students in Safety Zones	Students Not in Safety Zones	Total Eligible		
<b><u>Elementary Students 2007-08</u></b>					
Under 1 Mile	670	0	670	3,770	<b>4,440</b>
1-2 Miles	301	299	600	0	<b>600</b>
Over 2 Miles	1	26	27	0	<b>27</b>
<b>Total Eligible</b>	<b>972</b>	<b>325</b>	<b>1,297</b>	<b>3,770</b>	<b>5,067</b>
<b>Average Daily Ridership</b>			<b>402</b>		

NOTE: All student counts are estimated for 2007-08 based off City GIS data.

\*Total Elementary Students includes only students who are residents of Newton.

Source: Newton Public Schools

Under Newton Public Schools/School Committee policy, all students in Grades 6-12 (except 6th graders who live more than 2 miles from their school who ride for free by mandate) may opt to pay a user fee for bus transportation. In addition, elementary students who live less than 1.0 mile from school in non-safety areas and live in the vicinity of an existing bus stop may opt to ride the bus for a fee.

To serve those students who are eligible to ride for free and those who opt to pay the user fee, the Newton Public Schools contracts to have 30 buses drive students to and from the twenty-one public schools and seven private schools in Newton.

**Table 2: FY09 Transportation Costs<sup>45</sup>**

Public School Bus Transportation:	24 buses at \$363/day = \$1,568,150
Private and Public School Transportation:*	6 buses at \$363/day = \$392,040
Total Bus Transportation Cost:	\$1,960,200
Fee Revenue from Bus Passes:	\$316,140 <sup>46</sup>
Net School Transportation Cost:	\$1,644,060 <sup>47</sup>

Source: NPS 2009 Allocation Budget

\* Note: This table can be misleading in that the 6 buses that serve the private school students are also used to transport public school students. According to NPS, if private school pupils were not offered transportation, the net result would be the elimination of 3 buses, resulting in a decrease of total transportation costs of \$191,360, which is net of a loss of fee revenue of \$6,820 as 31 private school students will not be buying bus passes.

Bus contracts are put out for bid. The bid and the contract include the buses for daily transportation, METCO transportation and field/athletic trips. The current NPS contract with the bus company is for three years ending in June 2010 with an option for two additional years. The current rate is \$363 per day for each bus (regardless of the number of riders).<sup>48</sup> Routes are consolidated as much as possible to minimize the number of buses needed. By scheduling the twenty-one schools' start and end times strategically, one bus can be used to transport students attending different schools, including both public and private schools. (For example, the four middle schools have different start

<sup>45</sup> Includes public and private school regular education. Excludes field trip transportation and special education transportation.

<sup>46</sup> \$48,180 in waivers for students from low-income families was provided in FY09.

<sup>47</sup> Newton also pays \$13,200 for 55 MBTA passes at \$20/month for 12 months. Forty of these are distributed for free to SPED students (\$9,600). Newton also pays the bus company a fee of \$6,670 under a fuel escalation clause.

<sup>48</sup> The initial contract term is for a period of three (3) years commencing on July 1, 2007 through June 30, 2010. The City has the sole option to renew the contract for an additional two (2) year term from July 1, 2010 to June 30, 2012. Newton has taken advantage of the additional two years in past contracts by vote of the Board of Aldermen so that rates are locked in for the longer term. The contract states the number of buses for each fleet may increase up to twenty-five per cent (25%) or decrease by twenty-five percent (25%) during the initial three (3) years of the contract at the request of Newton Public Schools without adjustment in the Bus-Per-Day Rate. The rates per bus per day are as follows, with 29 buses in FY08 and 30 buses in FY09: FY08 \$359; FY09 \$363; FY10 \$367; FY11 \$371; FY12 \$375.

and end times, while the two high schools have different start times and, most days, different end times.)

While there are different ways of counting the number of riders on the buses, all the methods show that only a small percentage of Newton's students (18% at most) use bus transportation.

Eligible Riders: One method is to calculate the number of eligible riders. There are 2047 eligible riders in the public schools and 233 eligible riders for the private schools. Eligible riders include those who by law are allowed to ride for free plus those who opt to pay a user fee. Using the definition of eligible, 18% of Newton public school students use the bus system. (The number of eligible riders is critical since the Newton Public Schools' policy is to have sufficient buses to transport all eligible students.)

Average Daily Ridership: A second method is to calculate average daily ridership. Periodically, the bus drivers count the actual number of students riding on the buses (both those who ride for free and those who pay). These numbers (see the table below) are lower than the number of eligible riders. Using average daily ridership, 15.3% of public school students use the bus system. With fifteen neighborhood elementary schools located throughout Newton, only 7.4% of elementary school students use the bus system. Ridership rises to 29.6% for middle school students and 17.3% for high school students.

Bus Passes: A third method is to calculate the number of bus passes. Bus passes are not a very accurate measure since they are not required for K-5 students who live more than 1 mile from their school but are issued to those elementary school students who live less than a mile from school and who purchase bus transportation. All middle and high school students and all private school students (even those who qualify for free transportation) have bus passes.

Of these methods, the most accurate for measuring the number of students who use the bus system is the average daily ridership. But, the number of eligible riders is important for assessing the total number of buses needed.

**Table 3: School Bus Data Summary FY2008**

	Eligible Number of Riders*	Average Daily Ridership	Bus Passes Issued	Paid Bus Passes	Total Enrollment	% of Students using Bus Service**
Newton Public Schools						
Elementary		402	125	57	5408	7.4%
Middle		725	901	617	2453	29.6%
High		<u>640</u>	<u>784</u>	<u>670</u>	<u>3695</u>	<u>17.3%</u>
Total NPS	2047	1767	1810	1344	11,556	15.3%
Private Schools						
Brimmer & May/Chestnut Hill		4	6			
Jackson/Mt. Alvernia/Country Day		14	18			
Rashi		17	44			
Solomon-Schechter		<u>41</u>	<u>126</u>			
Total Private Schools	233	76	194	51		
<b>Total</b>	<b>2280</b>	<b>1843</b>	<b>2004</b>	<b>1395</b>		

\* Number of students eligible for free transportation plus number of students with bus passes

\*\* Average Daily Ridership/Total Enrollment which represents regular users

Source: NPS Transportation Office 5/13/08

To calculate the average cost per student of providing bus transportation, we used average daily ridership. At a total cost of \$1,960,200 and 1843 average daily riders, the average cost per student of bus transportation is \$1,064, part of which is offset by a total revenue of \$316,140 brought by the sale of bus passes.

Fees for transportation are set by the School Committee.<sup>49</sup> The School Committee raised the transportation fee for the 2008-2009 school year from \$200 to \$220 per child, with a cap of \$440 per family. Families could also be eligible for a “supercap,” set at \$1,000, which includes both transportation and athletic fees.

Waivers from the fees are available based on distance (e.g., private school students and 6<sup>th</sup> grade public school students who live more than 2 miles from their school but still receive bus passes), financial circumstances, safety zones, medical needs or programmatic reasons. In terms of financial considerations, students from low-income families in Newton may apply for waivers. While the criteria for obtaining free bus passes are the same as those for free/reduced lunch eligibility (i.e., eligibility based on household size and family income), the two processes are separate. Food lunch reduction/free applications require families to specify if they would let Food Services share the

<sup>49</sup> To repeat, bus fees are paid by K - 5 students that live less than 1 mile from their school (unless they live in a safety zone in which case they ride for free), 6th graders that live less than 2 miles from their middle school (unless they live in a safety zone), and all 7-12 students.

information with another school department and very few families do so. As a result, most families need to fill out a second application for waivers for bus passes. The dollar amount of the waivers provided for all reasons is currently approximately \$48,000.

**Table 4: Bus Passes in 2007-08**

	<u>Total Issued</u>	<u>Paid</u>	<u>Waivers</u>	<u>Waiver of Payment due to:</u>			<u>% Paid</u>
				<u>Distance</u>	<u>Family Cap</u>	<u>Other*</u>	
Public School:							
Elementary**	125	57	68	7	9	52	46%/14%**
Middle	901	617	284	217	7	60	68%
High	784	670	114	0	14	100	85%
Public Total	1,810	1,344	466	224	30	212	74%/65%**
Private School	194	51	143	141	1	1	26%
Total	2,004	1,395	609	365	31	213	70%

\*Other waivers include financial (146), safety (47), medical (1), and programmatic (19) for a total of 213.

\*\* Bus Passes are not issued to the approximately 550 K-5 students (275 of which regularly use the buses) that live more than 1 mile from school. Therefore, the % paid figure of 46% is misleading for elementary school students. 57 out of a total of 400 K-5 riders pay for bus passes, representing 14% of total ridership. The total figure also changes from 74% to 65% when “normalized” for the additional K-5 riders not represented in this table.

Source: NPS Transportation Department, September 2008

**Table 5: "Other" Transportation Waivers:  
Financial, Safety, Medical and Programmatic Reasons (FY04 – FY09)**

Description	FY04 Actual	FY05 Actual	FY06 Actual	FY07 Actual	FY08 Actual	FY09 Budget
# of Waivers	277	232	175	225	213	219
Total Amount Waived	\$49,730	\$41,760	\$31,500	\$43,390	\$41,660	\$48,180

Notes:

1. The bus fee for elementary students who live 1-2 miles from school was eliminated starting in FY06, resulting in fewer waivers.

2. The number of waivers was increased in FY07 due to the addition of more safety zones.

Source: Newton Public Schools 8/08



Communities have very different policies about who is eligible to ride for free, who is eligible to pay, and the level of fees. Compared to some communities, Newton’s fees (\$220 with a family cap of \$440) are considerably lower (e.g., Lexington (\$550 per student with a \$1600 family cap) and Needham (\$370 per student with a \$750 family cap)). Brookline provides no bus service at all for K – 8 students living within 1.5 miles of their schools and no service to 9 – 12 students (except those in South Brookline where there is no public transportation available). Wellesley follows the state mandate and only provides bus service to K – 6 students living farther than 2 miles from the school. In contrast, some communities – mostly those with far fewer students and smaller geographic areas to serve – provide bus service for free to all their students (e.g., Weston and Wayland).

**Table 6: Comparison of Bus Transportation Fees (2008-2009)**

<b>Core Benchmarking Communities<sup>50</sup></b>		
School System	Enrollment/# of Schools	Fee Policy
Arlington	6,663 / 9 Schools	\$300 per student. Deduct \$40 if paid by June 29 <sup>th</sup>
Belmont	3,848 / 6 schools	\$350 before 7/1; \$375 7/1 - 8/31; \$400 9/1 or after
Brookline	6,000 / 9 schools	No transportation provided if within 1.5 miles of school unless in a safety zone
Framingham	8,308 / 13 schools	\$270 per student
Lexington	6,000 / 9 schools	\$550 per student; family cap of \$1600.00
Natick	4,566 / 8 schools	\$150 per student; \$300 family cap
Needham	4,685 / 7 schools	\$370 by 6/1; \$420 after 6/1; \$750 family cap
Newton	11,700 / 21 schools	\$220 per student / \$440 family cap
Wellesley	4,016 / 9 schools	No transportation provided if within 2 miles of school
<b>Educational Excellence Benchmarking Communities<sup>51</sup></b>		
School System	Enrollment/# of Schools	Fee Policy
Brookline	6,000 / 9 schools	No transportation provided if within 1.5 miles of school unless in a safety zone
Lexington	6,000 / 9 schools	\$550 per student; family cap of \$1600.00
Newton	11,700 / 21 schools	\$220 per student / \$440 family cap
Wayland	2,820 / 5 schools	No fees; Provides bus service for all students for free
Wellesley	4,765 / 9 schools	No transportation provided if within 2 miles of school
Weston	2,416 / 5 schools	No fees; Provides bus service for all students for free

Source: Newton Public Schools, Greater Boston Pupil Transportation Information, 7/28/08  
And Citizen Advisory Group research

Newton participates in the voluntary METCO (Metropolitan Council for Educational Opportunity) program in which African American, Latino, Asian and Native American children from Boston

<sup>50</sup> Boston Public Schools students are eligible for free transportation by bus or by MBTA if they live more than 1 mile from their elementary school; 1.5 miles from their middle school (includes grades 6–8 attending K–8 schools); 2 miles from their high school.

<sup>51</sup> The Citizen Advisory Group Benchmarking Report looked at both demographically similar communities (“Core”) and a group of communities that have a comparably deep commitment to education (“Educational Excellence”).

attend school in Newton. The cost of transportation for the 415 METCO students is not included in these figures since METCO transportation costs are reimbursed by the Commonwealth (approximately \$836,000 per year).<sup>52</sup>

### **III. Issues**

Only 15% of Newton regular education public school students use the bus system. Of these, 65% pay a user fee to do so. Yet, transportation of regular education students within the Newton school district to both public and private schools currently costs \$1.64 million per year. The cost is in part due to two factors out of Newton's control – the mandate by Massachusetts to transport K-6 students (both public and in-town private school students) for free who live more than 2 miles from their school and high bus costs. But, a significant portion of the \$1.64 million is a result of three choices that have been made by the School Committee – bussing additional students for free, offering bus service to all students for a fee, and setting bus fees at a level substantially below full cost.

The School Committee has voluntarily chosen to offer to bus for free approximately 1270 K-5 elementary school students. Significant savings are possible if Newton only provided free transportation based on the State mandate – K-6 students who live more than 2 miles from school. Newton classifies parts of Newton as safety areas and voluntarily provides free transportation to ensure young students in these areas get to and from school safely. Approximately 970 of the 1270 K-5 students live in areas classified as safety areas. If the Newton Police provided more crossing guards, the number of students living in safety areas would decrease; as a result, costs would decrease since fewer buses would be needed or income from bus fees would increase.

In addition, Newton chooses to offer transportation for a fee of \$220 (a level substantially below full cost) to all 7 – 12 students and K-5 students who live within 1 mile of the school and 6<sup>th</sup> grade students who live within 2 miles of school.

Newton has also followed state regulations that mandate free transportation for in-town private school students. However, it appears that the mandate may no longer be enforceable. Newton's lawyers will want to pursue this question.

All of the above mentioned issues must though be looked at in the context of the “community” side of delivering education. Newton's “neighborhood school” system results in students in twenty-one different buildings. Yet, because of the neighborhood schools, most elementary school students live within two miles of their school. Newton is also a physically large community (18 square miles), with little transportation from the MBTA available. There are few alternatives to walking or biking to school for the younger students other than riding school buses or being driven by adults (carpools or parents). Many schools are located in dense urban settings so that if buses were eliminated and automobile counts increased, traffic might become worse and safety issues might increase for pedestrians and cyclists. Newton can expect that if bus service is decreased or fees increased,

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<sup>52</sup> The METCO students do not receive bus passes nor do they have to apply for waivers from fees. This partially explains why the percentage of students that apply for bus pass waivers is lower than the percentage that applies for free or reduced meals.

parents will be upset. When Newton recently instituted fees for K-6 students living between 1 to 2 miles from school, ridership went down and parents reacted negatively to the new policy. As the amount of money brought in by the fees was not significant in the eyes of policy makers, the School Committee changed the following year to the “no fee between 1 - 2 miles for K-5” policy.

#### **IV. Recommendations**

There are two possible strategies for reducing the transportation cost of \$1.64 million. These alternatives can be used in combination:

- (1) Reducing the costs by reducing the number of buses by either/or
  - (a) Providing bus service to only those students mandated by law and/or
  - (b) Hiring more crossing guards to reduce the number of elementary school students who need bus service for safety reasons
  - (c) Eliminating state mandated transportation to private school students
  
- (2) Increasing fee revenues by either/or
  - (a) Having more students pay the fee (K-5 students who live between 1 – 2 miles from school, presumably in non-safety areas) and/or
  - (b) Increasing the fee level and/or
  - (c) Asking private schools to contribute to the cost of transportation

#### **(1) Reducing Costs by Reducing the Number of Buses:**

##### **(a) Provide bus service to only those students mandated by law**

**FOLLOW STATE MANDATES:** There are currently 30 buses servicing the Newton regular education student population. The Newton Public School Transportation Department estimates that if Newton followed state mandates and only provided bus service to K-6 students that live more than two miles from school then only 12, rather than 30, buses would be needed. (There are 387 public and private K-6 students who fall in this category.) This would also eliminate free transportation for K-5 students living in safety areas. At a cost of \$363 per day, this would result in a **52% reduction in the cost of transportation, or approximately \$859,980 in savings** according to the Newton Public Schools analysis. **Transportation costs would be reduced from \$1.64 million to \$784,080.**

This choice is likely to be controversial. While only 7% of elementary school children use the bus system, 30% of middle and 17% of high school students use it. Parents are likely to be upset, automobile traffic would increase near the schools, and there would be negative environmental impacts. Reducing the number of buses might require a change to the start and end times of individual schools, as schedules right now are based on the current bus system. Parents of elementary school students would now be completely responsible for getting their children to school safely rather than depending on the bus system if they live in high traffic areas with no crossing guards.

**FOLLOW STATE MANDATES FOR ELEMENTARY AND HIGH SCHOOL STUDENTS:** A variation of this option is to follow state mandates for elementary and high schools students and only offer the option of paying a user fee only to middle school students. Thirty percent of middle school students (the highest percentage) use the bus service. Middle school students no longer have fifteen elementary schools quite close to their homes but instead attend four middle schools that are more distant. They are too young to drive and clearly do not have friends at school who can drive. The Newton Public Schools Transportation Department would have to model this option to see what the savings might be. We made a rough estimate that this alternative would result in a **savings of \$515,000.**<sup>53</sup>

**FOLLOW STATE MANDATES FOR ELEMENTARY STUDENTS IN NON-SAFETY ZONES AND HIGH SCHOOL STUDENTS:** Yet another variation of this option is to follow state mandates for elementary school students who live in non-safety zones and high school students and only offer the option of paying a user fee to middle school students. Elementary school students who live in safety zones would be allowed to use the bus system for free. The Newton Public Schools Transportation Department would have to model this option to see what the savings might be.

**(b) Hire more crossing guards to reduce the number of elementary school students who need bus service for safety reasons**

We recommend that, with the help of the Mayor, the Newton Public Schools and the Newton Police Department review again the safety areas. Are there instances where the cost of crossing guards would be less than the cost of providing free bus service? In the past, this discussion has been difficult because of the different source of the funds. Crossing guards are paid by the Newton Police Department which therefore has an incentive to increase the number of safety areas and decrease the number of crossing guards. The Newton Public Schools is in the opposite situation. Someone like the Mayor, who has the overall perspective of what is the lowest total cost for the City while providing a safe way for children to get to school, can do the financial analysis and help determine what is the best policy. In addition, the concept of safety areas should be reviewed. Should parents, regardless of the traffic conditions in the two mile area surrounding their elementary school, be responsible for getting their children to and from school safely or should Newton assume responsibility for this by providing either crossing guards or free bus transportation?

**(c) Eliminate state mandated transportation to private school students**

Newton has also followed state regulations that mandate free transportation for in-town private school students. However, it appears that the mandate may no longer be enforceable. Newton's lawyers are pursuing this question.

**(2) Increasing Fee Revenues:**

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<sup>53</sup> Non-middle school students account for approximately 60% of the average daily riders so 60% of the \$859,980 million in savings or \$515,000 would be realized.

While potentially a little less controversial, increasing fee revenues has significantly less financial impact.

**(a) Have more elementary school students pay the fee:**

Newton could most easily charge fees to the elementary school students who live between 1 and 2 miles from the school in non-safety areas who currently use the bus system regularly (400 students, based on daily average ridership). This is likely to increase fee income but probably would also reduce ridership. The School Committee would also have to consider whether K-5 students in safety areas should receive waivers.

If the current fee of \$220 was applied to all elementary school students regardless of whether they lived in safety areas and if ridership stayed constant, then approximately \$88,000 could be generated in additional revenues. If ridership dropped, fee revenues might increase by only approximately **\$30,000 to \$60,000.**<sup>54</sup>

Charging fees to more elementary school students is likely to be controversial. Parents would object. Concomitantly, it might increase the amount of traffic in the city and especially around schools, as more parents would drive their children to school.

We also recommend that, with the help of the Mayor, the Newton Public Schools and the Police Department review the safety areas. Are there instances where the cost of a crossing guard would be less than the cost of providing free bus service? In the past, this discussion has been difficult because of the different source of the funds. Crossing guards are paid by the Police Department which therefore has an incentive to increase the number of safety areas and decrease the number of crossing guards. The Newton Public Schools is in the opposite situation. Someone like the Mayor, who has the overall perspective of what is the lowest total cost for the City while providing a safe way for children to get to school, can help determine what is the best policy.

**(b) Increase the level of fees:**

An additional option, which could be implemented in conjunction with imposing fees for some or all non-mandated transportation, would be to increase the level of fees and/or the family cap.

There are a number of ways of thinking about the appropriate level for user fees for bus transportation. (See a full discussion in the Appendix.) Newton certainly has a strong community interest in helping students get to and from school in a safe and efficient manner. Yet, the vast majority of students (85%) have their own means of getting to school. Furthermore, the vast majority of those that use the bus system have *not* applied for financial waivers so they might be able to afford more. Nonetheless, lacking a well-developed MBTA system in the city, the Newton Public Schools clearly would prefer to help students get to and from school by offering a fee for use of the bus system. But, the current fee levels do not

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<sup>54</sup> Newton Public Schools does not currently track the number of regular riders who live in safety zones so it is difficult to make an accurate forecast of potential fee revenues.

reflect either the actual full cost of providing the service (approximately \$1,064 per student) nor do they compare to the prices charged by many other communities. Since the bus service benefits only a small number of residents, higher fees are justified. Moreover, the Newton Public Schools has a system in place to help low-income residents with waivers. Generally, it is more efficient and equitable to subsidize directly and explicitly low-income households than to fix an artificially low charge for all.

If we use the current number of paid bus passes, an increase in the fee to \$300 would result in additional revenues of \$110,000. If the fee was increased to \$400, there would be additional revenues of \$250,000. If ridership decreased to increased prices, additional revenues might be **\$80,000 - \$170,000**.

If both more students had to pay fees and prices increased but usage dropped, additional revenues might be in the range of **\$155,000 to \$270,000**.

Table 7 summarizes how costs might be reduced and revenues increased. To save substantial amounts of money requires reducing costs by providing bus service to fewer students and thus operating fewer buses. The savings are substantial ranging from \$191,000 to over \$800,000. By charging fees to more students and raising the level of fees, income might increase by \$150,000 to \$270,000.

**Table 7: Transportation Scenarios: Reducing Costs and/or Increasing Fees**

<b>Reducing Costs</b>				
	<u>Current Cost</u>	<u>Future Cost</u>	<u>Savings</u>	
Follow State mandates	\$1,644,060	\$784,080	\$859,980	
Follow State mandates for Elementary and High School Students (with current fee levels)	\$1,644,060	\$1,129,000	\$515,000	
Do not follow State mandates for Private School Students	\$191,360	\$0	\$191,360	
<b>Increasing Fees</b>				
	<u># of Paid Passes</u>	<u>Fee</u>	<u>Revenues</u>	<u>Increase in Revenues</u>
Current Fee	1385	\$220	\$304,700	
Charge Fees to more K-6 Students	1735	\$220	\$381,700	\$77,000
Charge Fees to More Students but lower usage	1535	\$220	\$337,700	\$33,000
Increased fee (\$300)	1385	\$300	\$415,500	\$110,800
Increased fee (\$400)	1385	\$400	\$554,000	\$249,300
Increased fee (\$300) but lower usage	1285	\$300	\$385,500	\$80,800
Increased fee (\$400) but lower usage	1185	\$400	\$474,000	\$169,300
Increased fee and charge fees to more students (\$300)	1735	\$300	\$520,500	\$290,800
Increased fee and charge fees to more students (\$400)	1735	\$400	\$694,000	\$389,300
Increased fee and charge fees to more students (\$300) but lower usage	1535	\$300	\$460,500	\$155,800
Increased fee and charge fees to more students (\$400) but lower usage	1435	\$400	\$574,000	\$269,300

\*Includes increased fee and students K-5 living more than 1 mile from school (based on estimated # of students by NPS)

**(c) Ask Private Schools to Contribute to Busing Costs:**

The Citizen Advisory Group Revenue Committee has as one of its recommendations that Newton should aggressively negotiate PILOTs (payments in lieu of taxes) or SILOTs (services in lieu of taxes) with local institutions like colleges and hospitals. This is true of private schools as well. While their non-profit status exempts them from paying real estate taxes, proponents of PILOTs suggest that they should voluntarily contribute to their host community proportionate with their visibility, perceived economic stature, and their use of municipal services. To date, however, only Boston College has agreed to a PILOT arrangement, voluntarily donating \$100,000 annually since the mid 1980s as well as allowing municipal employees to take classes free of charge. As the seven private schools

within Newton directly benefit from the bus transportation provided to Newton students, they, too, should be asked to contribute to the cost of the services.

The Citizen Advisory Group recommends that the Newton Public Schools explore all the options (reduction of buses to adhere strictly to what is mandated by the State and increase in fees as well as application of fees to elementary school students that live between 1 and 2 miles from school). Using \$1.64 million to bus 15% of Newton's public school students does not seem like a good use of funds in light of all the other educational priorities. But, this is a choice based on values and priorities. Shifting more of the burden for transportation and its costs to parents in light of other priorities for the school system seems appropriate to the Citizen Advisory Group. (An appendix that provides a framework for thinking about when taxes should be used vs. user fees is included.)



## Appendix

### I. User Fees vs. Taxes:

The decision about using user fees versus taxes to pay for an activity is typically analyzed from four perspectives: cost, beneficiary, usage, and rationing:

Cost: What is the full cost of providing these government services, including direct effort, indirect supporting activities, and organizational overhead?

Beneficiary: Who benefits from these services? In other words, to what degree does the community as a whole benefit, and to what degree does it benefit the individual using the service? Is this a core service essential to Newton as a whole or does it benefit a limited number of users?

Usage: Can a core service can be linked directly to individual users and charged by volume? For example, communities like Newton charge homeowners for sewage and water services based on volume of use. In recent years, some cities and towns have also begun charging for solid waste collection (i.e., trash) based on volume.

Rationing: Is it a service for which a price signal affects a desired outcome? Services that are free, even if they are core (such as water, sewer and trash) may still justify a fee if there is sufficient variability in use among the citizens and cost can be related closely to the “volume” of use. Thus those who generate more trash create more cost and there is far more sense in apportioning the cost over the specific use than apportioning the cost based on the assessed value of the home. Charging in this case has the corollary benefit of reducing volume of use, as those charged will act in their self-interest to reduce their costs. (This is relevant to bussing if it encourages walking or biking.)

The answers to these questions will result in user fees that are not only cost-based but policy-based too. Once the full costs are known, then citizens and elected officials need to enter into a dialog about the public and private benefits of different government services and the appropriate funding sources for those mixed benefits (e.g., fees from the private citizen or general tax revenues from the community at large.) This leads to the fundamental question:

Does the general public benefit in part for a service provided and thus, should general resources, such as taxes, pay for part of the full cost of service, or does the private citizen solely benefit from the service provided, and thus, should bear more, if not all, of the costs incurred?

The answer to the question above helps determine the level of the user fee and tax subsidization. There are a number of options:

Full cost reimbursement: To determine the full cost, Newton should include the direct and indirect costs associated with providing the service. In calculating direct costs, Newton should include costs for staff salaries and benefits, supplies and materials, capital facilities and equipment, depreciation in equipment value, and any other costs attributable to the production and delivery of a service. Equipment and facility costs may include cash purchases, debt service costs, or maintenance costs. Indirect costs may include a portion of management and administrative costs for personnel to administer or provide services. Newton can decide which programs should have fees set to recover the full cost.

Partial cost reimbursement: Newton can decide that some activities and services, such as bus transportation for public school students should be, in part, supported by Newton's tax dollars, but that users of these activities or services should also pay a charge. Newton can then set the fee at a level lower than the full cost.

No cost reimbursement: Newton can also decide that some activities and services should be provided with no user fees.

Waivers or Scholarships: Generally, it is more efficient and equitable to subsidize directly and explicitly low-income households than to fix an artificially low charge for all. Scholarships can be funded by tax dollars, by private-public partnerships, by higher user fees or some combination of the three.

Competing with the Private Sector: User fees may be particularly appropriate when a local government like Newton provides services that also are provided by the private sector, particularly if they are not core government services. Using general fund taxes to subsidize such services poses two problems. First, the benefit principle is violated if taxpayers citywide fund a service they do not receive. Second, subsidies allow the government provider to undercut the prices of private sector providers, leading to unfair competition. But, user fees may not be appropriate to finance core government services, particularly social services and education programs where services and benefits are provided based upon social objectives.

Fee increases: Because the costs of providing a service may vary from year to year, user fee levels should be reviewed annually and, if needed, revised to reflect changes in costs.

Tax Implications: A final consideration is the very real drawback of shifting from property tax funding of services to user charges is the lack of federal deductibility. User charges are not deductible, while local property taxes are deductible.

## **E. Food Services Report**

### **I. Executive Summary**

Food Services in the Newton Public Schools are a \$4.2 million dollar operation. While enrollment has grown slightly by 2.5% since FY2003, lunch sales have declined by 12.7%. Only 38% of students buy lunch at school. (The Director of Food Service for Newton suggested that the number of students district-wide eating meals should be at 50% - 55%.) Even as sales have declined, total expenses have grown by 6.2%. After income and reimbursements, providing 688,695 meals (of which 636,635 were lunch) to students resulted in a loss of \$1.2 million in 2008 (i.e., the Newton Public Schools had to provide a subsidy). This loss did not come as a surprise and had been projected in the Newton Public Schools' operating budget.

The Commonwealth of Massachusetts requires all public schools to offer lunch to its students. In addition, Newton participates in the federal National School Lunch Program which provides cash subsidies and low cost food commodities to schools. As part of this program, Newton provides low income students with low-cost or free lunches. While overall sales are down, the number of free and reduced lunches has increased by 34% and 14% respectively since FY2003.

The facilities at the fifteen elementary schools have a substantial impact on the quality and costs associated with food service. The fifteen elementary schools do not have full kitchens (only re-heating ones) and only six elementary schools have designated eating areas (i.e., cafeterias). Teachers, by contract, are not responsible for students during the lunch period in elementary schools. Therefore, Newton hires lunch attendants to monitor the children at a cost of \$408,613 in FY2008. Nonetheless, the 15 elementary schools have among the smallest losses on average compared to the middle and high schools and among the lowest cost per meal. But, because there are so many elementary schools, the cumulative effect of the deficit in elementary school food services (\$496,162) is considerable. Certainly, though, food services in the elementary schools are not the sole driver of the food services deficit.

The Newton Public School lunch prices are higher than comparable schools and higher than the meals students choose to buy at many of the for-profit eateries that high school students frequent.

Food accounts for over 30% of the Food Services budget and food costs increased by 11.7% last year. Labor and benefits account for another 62% of the budget.

Food Services at the Newton Public Schools seem to be under the shadow of a "perfect storm," leading to a lot of red ink:

- The Food Service Department is losing \$1.2 million on expenses of \$4.2 million.
- Losses have been rising on a rather consistent basis.

- Prices are the highest of any benchmark schools.
- Sales of paid lunches have been falling consistently.
- Sales of free and reduced price lunches (which receive only a partial subsidy) have been increasing.
- The percentage of students buying lunch is low, particularly in the middle school, according to people experienced in this area.
- Serving only nutritious food as required by the National School Lunch Program and by Newton’s Wellness policy may result in menus that are less appealing to students, leading to decreased sales.
- Based on anecdotal evidence, students (who may have high expectations about food) complain about the low quality, unappealing taste and unsatisfactory menu choices.
- Food costs are rising.
- Labor costs are rising.
- The nature of the elementary school facilities make changes in food choices more difficult and require unusual and thus higher labor costs.
- The economic turmoil has reduced disposable income.

While other school districts are facing the same cost pressures, nonetheless it is unusual for a school system to be consistently in the red in its food service program. We know, for example, that Lexington and Wellesley (and recently Brookline) break even.

The objective for the Food Service Department should be to provide nutritious meals at a break-even financial level by increasing revenue through greater participation and lowering costs.

The Citizen Advisory Group applauds the efforts of the Newton Public Schools for the incremental changes they have already implemented and are considering right now. But, the Citizen Advisory Group believes that a more significant change is needed. We recommend that the Newton Public Schools put out to bid the management and delivery of the food services program. Both private businesses as well as the Food Service Department should be allowed to “bid” for the contract. (To be more specific, rather than bidding, the Newton Public Schools would compare an in-house management proposal to bids which would be issued according to state procurement laws.)

We are convinced that competition will lead to more appealing food choices, higher sales, and lower costs. The Town of Lexington has successfully done just this.

If the Newton Public Schools are unwilling to introduce competition and get bids, they must find a way to decrease labor hours and increase labor flexibility. Brookline can serve as a role model.

## II. Current Status

### Overview:

Food Services in the Newton Public Schools are a \$4.2 million dollar operation. It is heavily labor intensive with 62% of its costs deriving from salaries and benefits. While enrollment has grown slightly by 2.5% since FY2003, lunch sales have declined by 12.7%. Even as sales have declined, total expenses have grown by 6.2%. After income and reimbursements, providing 688,695 meals (of which 636,635 were lunch) to students resulted in a loss of \$1.2 million in 2008 (i.e., the Newton Public Schools had to provide a subsidy). This loss did not come as a surprise and had been projected in the Newton Public Schools' operating budget. As of January 2009, the loss for FY2009 is projected to remain steady at \$1.17 million. Losses have grown over time. The smallest subsidy of \$233,553 in the last six years possibly came in FY2004 during the period when the Newton Public Schools had hired an outside vendor, Chartwells, as the manager. (Note, the data for FY04 may not be accurate; in the termination of the Chartwells contract, final costs were adjusted by agreement and those adjustments may not be reflected in this table.) The current subsidy of \$1.2 million represents 0.8% of the total Newton Public

**Table 1: Newton Public Schools Food Service History (FY03 – FY08)**

	FY03*	FY04*	FY05	FY06	FY07	FY08	% Change FY03- FY08
Enrollment	11,276	11,267	11,268	11,415	11,501	11,556	2.5%
Lunches Served**	729,244	693,542	681,915	673,597	664,625	636,372	-12.7%
Total Expenses***	\$4,003,740	\$3,533,150	\$3,859,617	\$3,880,668	\$3,802,557	\$4,250,473	6.2%
Labor and Benefits	\$2,421,383	\$2,306,339	\$2,465,081	\$2,396,338	\$2,409,130	\$2,645,050	9.2%
Labor and Benefits as a % of Total Expenses	60%	65%	64%	62%	63%	62%	
Total Income excluding Reimbursements	\$2,682,769	\$2,889,895	\$2,700,624	\$2,660,071	\$2,635,863	\$2,569,469	4.2%
Reimbursements****	\$678,460	\$409,702	\$415,648	\$450,548	\$476,673	\$489,216	-27.9%
Newton Public Schools Subsidy (to break even)	\$642,511	\$233,553	\$743,345	\$770,049	\$690,021	\$1,191,788	85.5%

\*In FY03 and FY04, the Food Service program was managed by Chartwells. Commencing in FY05, the Food Service program was managed in-house.

\*\*Includes free, reduced and paid lunches for students. Does not include breakfast, a la carte sales or adult meals sales.

\*\*\* Labor, Benefits and Expenses

\*\*\*\*Reimbursements: The data from FY03 and FY04 on reimbursements when Newton used a management service may not be correct.

Source: Newton Public Schools

Schools budget of \$160 million. (Generally, the Citizen Advisory Group has found that food service operations in public schools break even. Some Newton administrators are not convinced of this, though, believing that some school districts do not include employee benefits in their cost analysis and thus under-represent their full costs.)

#### History of the Newton Public Schools Food Service Department:

The Newton Public Schools had in-house management and delivery of food services for many years until the retirement in FY97 of a long-term Food Service Director. Neither the costs of the food service employee benefits nor the costs of the Elementary Lunch Attendants were part of the Food Service Revolving Account in those early years. Instead, those costs were part of the school system operating budget.

In 1997, the Newton Public Schools put out to bid the *management* of the Food Service Department to food service management companies, and Chartwells was hired and worked under a contract from FY98 through FY04. (The existing Newton employees were retained; only the management was outsourced.) The goal was a break-even operation, including management costs, but this became difficult when including employee benefits and the Lunch Attendants in the full costs of the program. (The food service employees (almost all of whom are union employees) and the lunch attendants (who are not part of a union) continued to be Newton employees. In order for a contractor to fully manage the costs of the program, the labor component might need to be under contractor employment.) With benefit costs rising approximately 11% per year, it was difficult for the contractor to meet the goal of “break-even.” Labor costs were reviewed with a Labor Cap set in the annual budget for Food Services.

Concerned about the continuing subsidy, the School Committee decided to bring management back in-house starting in FY2005.

#### Regulations:

Food services in schools are highly regulated, both at the state and federal level. The Commonwealth of Massachusetts requires all public schools to offer lunch to its students as part of the Child Nutrition Programs (CNP). In addition, Newton chooses to participate in the federal National School Lunch Program (NSLP). The NSLP provides cash subsidies and low cost food commodities to schools with the goal of providing balanced meals to all students and supporting low income students with low-cost or free lunches. In return for participating in the NSLP, Newton must meet Federal nutritional requirements, follow safety and sanitation guidelines, and offer free or reduced price lunches to eligible children.<sup>55</sup> (A lot of paperwork is required to prove compliance.)

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<sup>55</sup> The Massachusetts Department of Education website explains the eligibility requirements for reduced-price or free meals: *Children from families with incomes at or below 130 percent of the poverty level (currently \$21,710 for a family of four) are eligible for free meals. Those between 130 percent and 185 percent of the poverty level (currently \$30,895 for a family of four) are eligible for reduced-price meals, for which students can be charged no more than 40 cents. Children from families with incomes over 185 percent of poverty pay a full price, though their meals are still subsidized to some extent. Local school food authorities set their own prices for full-price meals.*

### Breakfast:

In addition to serving lunch in all 21 school buildings, Newton serves breakfast in twelve locations: six of the fifteen elementary schools, all four middle schools, and both high schools. While by law lunch has to be offered in all schools, breakfast is mandated only for those schools where 60% or more of the student population qualifies for free/reduced meals. In Newton, only the Lincoln-Eliot Elementary School meets that requirement. Offering breakfast in the other schools is a choice on the part of the Newton Public Schools. At the elementary school level, principals sometimes prefer to have breakfast offered due to the number of children that need to get to school early, in particular METCO students. Breakfasts consist only of cold food. At the secondary school level, the choice of offering breakfast is motivated by the fact that the staff is already working during that time (no extra labor cost) and that the Newton Public Schools want to make sure that low-income students, in particular, have access to a nutritional breakfast.

### Sales:

While breakfasts and lunches are offered to everyone, in the 2007-2008 school year, meals were purchased by only 40% of elementary school students, 42% of middle school students, and 25% of high school students. (Newton, like many communities, has an open campus policy at the high schools which allows sophomores in their second semester, juniors and seniors to leave campus for lunch.) In total, 38% of students are taking advantage of the food service. (NOTE: The range of participation in the elementary schools goes from a low of 33% to a high of 43% with the exception of the Lincoln Eliot; as mentioned earlier, Lincoln-Eliot is the only school in Newton with 60% or more of its students eligible for free or reduced meals; at the Lincoln Eliot, 57% of the students have lunch.) The Director of Food Service for Newton suggested that the percentage of students eating meals should be at 50% - 55%. The Director went on to note that the goals for participation vary by grade level — elementary could be as high as 60%, middle schools about 45%, and high schools at 30-35%. The chart below shows the decline in participation from the first half of the 2007-2008 school year to the second half. Other people in the educational world note that many communities struggle with high school and elementary lunch counts but make up for it on middle school meals. From their point of view, many parents pack lunches for elementary school children while high school students leave campus for lunch. Typically, middle schools have a café and the kids are a hungry and captive audience.

**Table 2: Average Participation Rates (2007-2008)**

	Sept. - Dec. 2007	Jan. - May 2008	Difference 1st half vs. 2nd half
High Schools	30%	24%	-6%
Middle Schools	48%	41%	-7%
Elementary Schools	44%	39%	-5%
District	41%	36%	-5%

Source: Newton Public Schools

While enrollment in the elementary schools has increased by 9% since FY2003, paid lunches have decreased by 17%. Middle school enrollment has declined by 9% since FY2003 but paid lunches have declined even more, by 16%. High school enrollment has increased by 2% since FY2003 but paid lunches have decreased by 25%.

While overall sales are down, the number of free and reduced lunches has increased by 34% and 14% respectively since FY2003. While approximately 9% of all Newton students are eligible for free and reduced meals, about 19% of all meals served are free and reduced.



**Table 3: Trends in Lunch Sales by Grade Level (FY03 – FY08)**

	FY03	FY04	FY05	FY06	FY07	FY08	% Change FY03-FY08
<b>ELEMENTARY SCHOOLS:</b>							
Free Lunches	35,068	32,813	34,029	35,512	43,103	44,873	28%
Reduced Lunches	11,295	12,293	12,998	13,888	13,304	11,688	3%
Paid Lunches	285,550	252,214	254,490	245,802	249,782	237,438	-17%
Total Elementary	331,913	297,320	301,517	295,202	306,189	293,999	-11%
Elementary Enrollment	4,970	4,938	4,975	5,133	5,318	5,408	9%
<b>MIDDLE SCHOOLS:</b>							
Free Lunches	21,485	23,006	22,228	21,424	22,413	24,028	12%
Reduced Lunches	10,135	11,622	10,239	9,931	12,153	9,683	-4%
Paid Lunches	175,907	176,651	170,357	169,237	163,062	147,017	-16%
Total Middle School	207,527	211,279	202,824	200,592	197,628	180,728	-13%
Middle School Enrollment	2,688	2,673	2,620	2,534	2,474	2,453	-9%
<b>HIGH SCHOOLS:</b>							
Free Lunches	12,172	19,285	20,069	24,190	22,516	23,441	93%
Reduced Lunches	5,648	5,527	6,826	9,355	8,865	9,632	71%
Paid Lunches	171,984	160,131	150,679	144,258	129,427	128,572	-25%
Total High School	189,804	184,943	177,574	177,803	160,808	161,645	-15%
High School Enrollment	3,618	3,656	3,673	3,748	3,709	3,695	2%
<b>TOTALS:</b>							
Free Lunches	68,725	75,104	76,326	81,126	88,032	92,342	34%
Reduced Lunches	27,078	29,442	30,063	33,174	34,322	31,003	14%
Paid Lunches	633,441	588,996	575,526	559,297	542,271	513,027	-19%
Total Lunches Served	729,244	693,542	681,915	673,597	664,625	636,372	-13%
Total School Enrollment	11,276	11,267	11,268	11,415	11,501	11,556	2%
Paid Lunches as a % Total	87%	85%	84%	83%	82%	81%	

Source: Newton Public Schools

Sales are also affected by lines and the number of lunch periods. Newton North, for example, has three lunch periods with quite different average numbers of lunches sold. The first period, intended for 9<sup>th</sup> graders, has 382 lunches sold on average. The second period, mostly 10<sup>th</sup> graders, has 457 lunches sold on average. (The second period lunch is peculiar in that students attend class for thirty minutes, have lunch, and then return to that same class for another thirty minutes.) The third lunch, intended for 11<sup>th</sup> and 12<sup>th</sup> graders, has 991 lunches sold on average and lines tend to be long. Newton North prefers to allow students to eat with their grade and to encourage the different grades to respect the closed and open campus rules. Adding an additional lunch period is unappealing since it would require splitting another class in two like the second period lunch. Shortening the lines by

having longer lunch periods also is not an option since this would result in less time in classes, a violation of Massachusetts Department of Elementary and Secondary Education regulations.

### Facilities:

The facilities at the fifteen elementary schools have a substantial impact on the quality and costs associated with food service. The fifteen elementary schools do not have full kitchens (only re-heating ones) and only six elementary schools have designated eating areas (i.e., cafeterias). According to a brochure prepared by Food Service, *“The Elementary food service program is unique in comparison to most School Districts in the State. The majority of the Newton schools were built between 1900-1950, on the premise that students went home for lunch. As a result the schools do not have full service kitchens or cafeterias. In order for us to provide nutritious meals to the students in the Elementary Schools, we have to satellite meals from our central kitchen at Newton North to each of the fifteen schools. Our managers then set up and cook (NOTE: actually heat) the individual compartmentalized meals. These are then assembled onto trays for delivery to the classroom or cafeteria.”* In the elementary schools, there are three different types of lunches offered: hot, bag (a bagel, fruit, etc.), and salads/sandwiches.

The Newton Public Schools are planning to pilot a program at Angier Elementary School where hot food is prepared on-site as opposed to heating pre-assembled trays. The pilot is on hold as the Newton Public Schools are negotiating with the union that covers workers in the food service department. The union is concerned that the pilot would require workers to change their duties and/or to increase them.

Teachers, by contract, are not responsible for students during the lunch period in elementary schools. Therefore, Newton hires lunch attendants to monitor the children. Lunch attendants are not part of the union and have a shorter working year than other food service employees (140 days as opposed to 184, due to early release days). While, in theory, they are not paid benefits since they are part-time workers, we have been told many lunch attendants also do additional work in the schools and receive benefits as a result. The full costs of lunch attendants are more than \$410,000 per year. Since meals are eaten in nine of the elementary schools in the classroom at staggered intervals, the number of required lunch attendants is a function of the lunch periods and number of classes eating during those lunch periods. For example, Bowen has 19 classrooms and only 2 lunch periods so it needs to have 10 lunch attendants. If Bowen had 3 lunch periods, only 7 lunch attendants would be needed. Looking at the totals, there are 248 classrooms and 47 lunch periods in the elementary schools; for FY09, there will be 85 lunch attendants. This is down eight from FY08. Compared to other school systems, the need for lunch attendants is unusual and adds to the labor costs in the Food Service Department. In FY07, the elementary lunch attendants cost \$355,759. This cost had risen to \$408,613 by FY08, a 14.9% increase.

The four middle schools and the two high schools have cafeterias where students get in line, get their food and then pass through a sale point. Students may pay in cash or use pre-charged cards that are swiped by cashiers. When the Wellness Program was instituted around 2006 and sugary snacks and sodas were eliminated, sales of a la carte items fell by 40%.

### Fees and Reimbursements:

The fees (i.e., prices) for the meals are set by the School Committee. Fees are higher for high school students. The reimbursements from the federal government do not cover the full cost of the meals.

Over the past ten years, the School Committee has approved two price increases for school lunch with the last increase put in place in FY07.

The Newton Public Schools fees and reimbursements are as follows:

**Table 4: Fees and Reimbursements**

	Elementary	Middle	High
<b>Breakfast</b>			
Fees	\$1.25	\$1.50	\$1.50
Co-pay by student for Reduced Fee	.30	.30	.30
Reimbursement for fully paid nutritional meal	.25	.25	.25
Reimbursement for reduced fee meal	\$1.10	\$1.10	\$1.10
Reimbursement for free meal	\$1.40	\$1.40	\$1.40
<b>Lunch</b>			
Fees	\$3.00	\$3.25	\$3.50
Co-pay by student for Reduced Fee	.40	.40	.40
Reimbursement for fully paid nutritional meal	.29	.29	.29
Reimbursement for reduced fee meal	\$2.22	\$2.22	\$2.22
Reimbursement for free meal	\$2.62	\$2.62	\$2.62

Source: Newton Public Schools

In order to get reimbursed for meals provided to students, the federal government requires that the student has to put on their tray a nutritional mix of foods. (For example, at lunch, a student needs to put on his or her tray three out of five components (protein, fruit, vegetable, bread and milk). In secondary schools, “the lunch boxes software program” (points of sale) automatically provide data (and generate the forms that need to be filed) for reduced or free meals. Elementary schools provide handwritten reports that are then inputted in a computer program that prepares forms to be filed with the National School Lunch Program.)

The high school lunch fee of \$3.50 is high in two respects. First, it is higher than the price charged by other schools. It may also be more expensive than a couple of pieces of pizza at a local eatery.

(But, the meal cost of \$3.50 for pizza at the high schools includes a beverage and fruit and vegetable, so this would need to be factored into a price comparison with a local eatery. Students might in fact have to pay more if they bought the exact same lunch in town.)

**Table 5: Comparison of High School Lunch Fees**

FY09 LUNCH FEES	Communities	Lunch Fees for High School
Demographically Similar Communities	<b>Newton</b>	<b>\$3.50</b>
	Brookline	\$3.25
	Lexington	\$3.25
	Needham	\$3.00
	Wellesley	\$2.50
	<b>AVERAGE</b>	<b>\$3.10</b>
Communities with a Similar Commitment to Education	<b>Newton</b>	<b>\$3.50</b>
	Concord-Carlisle	\$2.50
	Lexington	\$3.25
	Wayland	\$2.75
	Wellesley	\$2.50
	Weston	\$3.00
<b>AVERAGE</b>	<b>\$2.92</b>	
Sources	Education Depts. of Cities and Towns	

Food Costs:

All purchasing goes through the Director of Food Service. Food Service has the option to purchase government commodities from the Department of Agriculture (e.g., cheese, chicken). Prices sometimes are significantly lower and the quality is acceptable but the availability and the product range varies from month to month. The Newton Public Schools are feeling the effects of food price increases. The cost of food totaled \$1,219,960 in FY2007, accounting for 31.8% of the total Food Services budget. Food costs increased to \$1,362,832 in FY2008, an 11.7% increase.

### Labor:

Labor (\$1,932,600) and benefits (\$673,771) totaled \$2,606,371 in FY08. This accounted for 62.0% of the total Food Service budget. Almost all food service workers are unionized (77 are in the union) and receive benefits. (There are 90 non-union food service employees, the vast majority of which are lunch attendants).

A part of the labor cost is employee attendance and absenteeism. Students attend school for 180 days per year. Last year, the approximately 80 food service employees were absent 900 days (approximately 11 days per person). (They are allowed up to 21 days for sick days, family days, and personal days by contract.) The 92 lunch attendants used 700 days (approximately 7.6 days per person). (They are allowed 7 days for sickness and personal). Since the union does not allow the Newton Public Schools to hire part-time substitutes, when employees are absent, Food Services has to respond quickly by changing menus, shifting employees from one school to another, and closing lines at the cafeterias in the secondary schools.

### Profit and Loss by School:

The Newton Public Schools have two accounting methods. The total loss comes to \$1.16 million using one method and \$1.23 million using the other. All twenty-one schools lose money on food services. The Brown Middle School and the fifteen elementary schools on average lose the least, approximately \$33,000 per school. The two high schools lose the most, approximately \$100,000 per school. (See the table on the next page, Food Service Profit and Loss by School FY2008.)

**Table 6: Food Service Profit and Loss by School (FY2008)**

FY08	High		Middle				Elementary		Admini- stration (3)	TOTAL	Finance Plus (1)	Difference of Total - Finance Plus	
	North	South	Day	Brown	Bigelow	Oak Hill	Total for 15 ES Schools	Average per ES School				Amount	%
Sales	\$566,110	\$439,097	\$348,533	\$255,303	\$187,496	\$237,332	\$1,005,076	\$67,005	\$0	\$3,038,947	\$3,059,229	(\$20,282)	-1%
Expenses													
Labor													
Salaries (2)	\$252,036	\$205,753	\$163,784	\$118,464	\$101,053	\$150,217	\$389,039	\$25,936	\$143,641	\$1,523,987			
Salaries: Lunch Attendants							\$408,613	\$27,241		\$408,613			
<u>Benefits</u>	<u>\$129,512</u>	<u>\$117,418</u>	<u>\$94,405</u>	<u>\$67,958</u>	<u>\$64,698</u>	<u>\$64,205</u>	<u>\$107,633</u>	<u>\$7,176</u>	<u>\$27,942</u>	<u>\$673,771</u>			
Total Salaries and Benefits	\$381,548	\$323,171	\$258,189	\$186,422	\$165,751	\$214,422	\$905,285	\$60,352	\$171,583	\$2,606,371	\$2,659,901	(\$53,530)	-2%
Food	\$247,811	\$181,276	\$120,272	\$85,462	\$82,395	\$96,104	\$549,512	\$36,634	\$0	\$1,362,832	\$1,362,832	\$0	0%
Direct Costs	<u>\$44,112</u>	<u>\$34,926</u>	<u>\$31,906</u>	<u>\$16,108</u>	<u>\$28,234</u>	<u>\$17,938</u>	<u>\$46,441</u>	<u>\$3,096</u>	<u>\$13,526</u>	<u>\$233,191</u>	<u>\$269,857</u>	<u>(\$36,666)</u>	<u>-16%</u>
Total Expenses	\$673,471	\$539,373	\$410,367	\$287,992	\$276,380	\$328,464	\$1,501,238	\$100,083	\$185,109	\$4,202,394	\$4,292,590	(\$90,196)	-2%
Loss	(\$107,361)	(\$100,276)	(\$61,834)	(\$32,689)	(\$88,884)	(\$91,132)	(\$496,162)	(\$33,077)	(\$185,109)	(\$1,163,447)	(\$1,233,361)	\$69,914	6%

Source: Newton Public Schools, December 2008. Note: Finance Plus is a fund accounting software application program.

(1) The calculation costs by school were a new endeavor in FY08. There will be improvement in the process in FY09 in regards to tying to Finance Plus.

The cost accounting by school differs from Finance Plus by a bottom line P & L of \$69,914, or 6%. NPS is exploring other ways to build the database by school using the Lunchbox software.

(2) Salaries: labor costs (not including benefits) for all employees except Elementary School Lunch Attendants

(3) Administration: Director, Assistant Director, secretarial support and office supplies

### Costs per Meal:

Because costs vary from school to school, the total cost per meal varies as well. Perhaps because of economies of scale, the two high schools have the lowest cost per meal at \$4.01 and \$4.26. The elementary schools (despite the cost of the lunch attendants) have a low cost per meal at \$4.72. Oak Hill Middle School has the highest at \$6.54.

**Table 7: Cost per Meal by School (FY2008)**

	<u>North</u>	<u>South</u>	<u>Day</u>	<u>Brown</u>	<u>Bigelow</u>	<u>Oak Hill</u>	<u>Elementary</u>	<u>TOTAL</u>
Total Meals (1)	167,617	126,774	83,264	59,238	53,664	50,138	318,047	858,742
Food cost as a % of sales	44%	41%	35%	33%	44%	40%	55%	45%
Salaries cost per meal (3)	\$1.50	\$1.62	\$1.97	\$2.00	\$1.88	\$2.99	\$2.51	\$2.25
Benefits cost per meal	\$0.77	\$0.93	\$1.13	\$1.15	\$1.21	\$1.28	\$0.34	\$0.78
Food cost per meal	\$1.48	\$1.43	\$1.44	\$1.44	\$1.54	\$1.91	\$1.73	\$1.59
Direct costs per meal (4)	<u>\$0.26</u>	<u>\$0.28</u>	<u>\$0.38</u>	<u>\$0.27</u>	<u>\$0.53</u>	<u>\$0.36</u>	<u>\$0.15</u>	<u>\$0.27</u>
Total Cost per meal	\$4.01	\$4.26	\$4.93	\$4.86	\$5.15	\$6.54	\$4.72	\$4.89

Source: Newton Public Schools, December 2008

1) The total number of meals uses both the number of meals and a meals conversion of A la carte, Adult, Vending and Catering sales divided by the free reimbursement rate per meal, thus converting dollars into meals. The cost per meal statistics are derived by dividing the total cost by the total number of meals with conversion.

2) The calculation of the cost per meal by school was a new endeavor in FY08. There will be improvement in the process in FY09 in regards to tying to Finance Plus. The cost accounting by school differs from Finance Plus by a bottom line P & L of \$69,914 or 6%.

NPS is also exploring other ways to build the database by using the Lunchbox school software.

(3) Includes lunch attendants

(4) Direct Costs include supplies, materials, and services

### Catering and Vending Machines:

Food Service also offers catering. All food is prepared at the two high schools. Catering revenues are approximately \$28,000, with a profit of about \$14,000. The vast majority of customers are School Department employees having meetings. Food Service is also responsible for the vending machines located in the schools. This brings in about \$50,000 in revenues with minimal labor; the cost of food in the vending machines is approximately 35%-40%. The vending machines in non-school buildings are managed by the City's Purchasing Department.

### III. Issues

Food Services at the Newton Public Schools seem to be under the shadow of a “perfect storm,” leading to a lot of red ink:

- The Food Service Department is losing \$1.2 million on expenses of \$4.2 million.
- Losses have been rising on a rather consistent basis.
- Prices are the highest of any benchmark schools.
- Sales of paid lunches have been falling consistently.
- Sales of free and reduced price lunches (which receive only a partial subsidy) have been increasing.
- The percentage of students buying lunch is low, particularly in the middle school, according to people experienced in this area.
- Serving only nutritious food as required by the National School Lunch Program and by Newton’s Wellness policy may result in menus that are less appealing to students, leading to decreased sales.
- Based on anecdotal evidence, students (who may have high expectations about food) complain about the low quality, unappealing taste and unsatisfactory menu choices.
- Food costs are rising.
- Labor costs are rising.
- The nature of the elementary school facilities make changes in food choices more difficult and require unusual and thus higher labor costs.
- The economic turmoil has reduced disposable income.

While other school districts are facing the same cost pressures, nonetheless it is unusual for a school system to be consistently in the red in its food service program. We know, for example, that Lexington and Wellesley (and recently Brookline) break even.



#### IV. Recommendations

The objective for the Food Service Department should be to provide nutritious meals at a break-even financial level by increasing revenue through greater participation and lowering costs.

The Citizen Advisory Group applauds the efforts of the Newton Public Schools for the incremental changes they have already implemented and are considering right now. In fact, Food Services are well aware of the challenges that they are facing. The Director of Food Services has outlined a number of steps to increase revenues and lower costs:

- Implement a point of sale system in the elementary schools
- Use the gyms as cafeterias in the elementary schools
- Re-engineer the number of lunch periods and the number of classrooms per lunch period to decrease the number of lunch attendants needed
- Continue improving the food court concept in the middle and high schools
- Improve marketing/communication
- Improve purchasing (e.g., join food-buying groups)
- Improve the layout of cafeterias to improve flow
- Continue serving breakfast; it costs perhaps only \$20,000 over revenues and serves important educational and social goals.

The Citizen Advisory Group believes that a more significant change is needed. We recommend that the Newton Public Schools put out to bid the management and delivery of the food services program. Both private businesses as well as the Food Service Department should be allowed to “bid” for the contract. (To be more specific, rather than bidding, the Newton Public Schools would compare an in-house management proposal to bids which would be issued according to state procurement laws.) Clearly a lot of effort will need to be put into the bid specifications. But, we are convinced that competition will lead to more appealing food choices, higher sales, and lower costs. The Town of Lexington has successfully done just this.

If the Newton Public Schools are unwilling to introduce competition and get bids, they must find a way to decrease labor hours and increase labor flexibility. Brookline can serve as a role model. We quote from the Brookline Public Schools FY09 Budget for Food Services which says, “*The FY09 budget is adjusted for cost and participation increases and premised on break even performance. The budget includes a projected 7% reduction in labor hours at the schools to reflect current participation rates. Labor hours would be restored as participation rates increase. This holds total labor cost flat for the year.*”

Improvement in facilities must also be taken into consideration. As the Newton Public Schools does its long-term strategic planning and designs new schools or renovates existing ones, it must consider the need to prepare and deliver meals to the students in an efficient and mandate-appropriate way.

## **F. Teacher Survey**

We believe that in order to develop a clear vision of teacher compensation and work environment, it is essential that we ask the teachers “what matters to them” in a clear, confidential format. We have included a sample teacher survey here that we designed. We recommend that the school department conduct an extensive survey on teachers’ views of the current state of the school system that addresses what is important to teachers in their jobs and what factors teachers believe contribute to providing an excellent education. We think surveying the teachers is essential to developing a work environment that will be attractive to talented educators.

## Sample Survey for Newton Public School Teachers

### Planning time

- Do you have adequate time to prepare for class?

YES            NO

- How important is class prep time to your overall job satisfaction?

	Neither			
Very important	Important	important nor unimportant	Unimportant	Very unimportant

- How important do you believe class prep time is to promoting excellence in teaching and learning?

	Neither			
Very important	Important	important nor unimportant	Unimportant	Very unimportant

### Professional development

- Have NPS professional development offerings made you a better teacher?

YES            NO

- Is sufficient time available for you to meet your professional development needs?

YES            NO

- How important is professional development to your overall job satisfaction?

	Neither			
Very important	Important	important nor unimportant	Unimportant	Very unimportant

- How important is professional development in promoting excellence in teaching and learning?

	Neither			
Very important	Important	important nor unimportant	Unimportant	Very unimportant

- Has the level of professional development you receive changed over the time you have taught in the NPS?

Yes, it has decreased	Yes, it has increased	No, it hasn't changed
--------------------------	--------------------------	--------------------------

- The number of early release days is:

Sufficient          Insufficient          Too many

- Please share anything else you would like regarding professional development and its impact on your effectiveness and job satisfaction

### **Collaboration**

- Do you have sufficient time and opportunities to collaborate with colleagues and supervisors?

YES          NO

- Do you believe that collaborating with your colleagues improves your teaching?

YES          NO

- How important is the ability to collaborate with colleagues and supervisors to your overall job satisfaction?

	Neither			
Very important	Important	important nor unimportant	Unimportant	Very unimportant

- How important is the ability to collaborate with colleagues and supervisors in promoting excellence in teaching and learning?

	Neither			
Very important	Important	important nor unimportant	Unimportant	Very unimportant

- Would peer coaching and evaluation help you improve as a teacher?

YES          NO

### **Supervision and Evaluation**

- Do you have sufficient access to and support from your supervisor in order to do your job effectively?

YES          NO

- Do you set annual teaching goals with your supervisor?

YES          NO

How important is having sufficient supervision to your overall job satisfaction?

Very important	Important	Neither important nor unimportant	Unimportant	Very unimportant
----------------	-----------	---	-------------	---------------------

- How important is having sufficient supervision in promoting excellence in teaching and learning?

Very important	Important	Neither important nor unimportant	Unimportant	Very unimportant
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- Has the level of supervision you have received changed over the time you have taught in the NPS?

Yes, it has decreased	Yes, it has increased	No, it hasn't changed
--------------------------	--------------------------	--------------------------

- Are you evaluated every year?

YES      NO

- Do your annual evaluations help you grow and improve professionally?

YES      NO

### **Technology**

- Do you have sufficient access to technology (including computers, printers, projectors, internet and software)?

YES      NO

- Do you believe that the use of technology improves student learning and teaching?

YES      NO

### **Class size (If you teach more than one class, please answer the following questions with your largest class in mind.)**

- Does your current class size(s) allow you to accomplish your curriculum goals?

YES      NO

- Does your current class size(s) compromise your ability to deliver differentiated instruction to all students?

YES      NO



- How important is the inclusion model Newton uses for special education to your overall job satisfaction?

Very important      Important      Neither important nor unimportant      Unimportant      Very unimportant

- How important is the inclusion model Newton uses for special education in promoting excellence in teaching and learning?

Very important      Important      Neither important nor unimportant      Unimportant      Very unimportant

- Has the support from specialists, aides and inclusion facilitators for special education requirements changed over the past 5 years?

Yes, it has decreased      Yes, it has increased      No, it hasn't changed

- Please share anything else you would like regarding special education in the NPS

### **Voice and opportunity**

- Do you have enough “say” in how your school is run?

YES      NO

- How important is your ability to have a “voice” in the way your school is run to your overall job satisfaction?

Very important      Important      Neither important nor unimportant      Unimportant      Very unimportant

- How important is your ability to have a “voice” in the way your school is run in promoting excellence in teaching and learning?

Very important      Important      Neither important nor unimportant      Unimportant      Very unimportant

- Would you be interested if there were opportunities for flexible teaching schedules?

YES      NO

- Do you believe there are opportunities for career growth within NPS?

YES      NO

- Would you be interested if NPS offered career ladder opportunities (e.g. Master Teacher)?

YES                      NO

- How important are career opportunities in the NPS to your overall job satisfaction?

		Neither		
Very important	Important	important nor unimportant	Unimportant	Very unimportant

- How important is having career opportunities in the NPS in promoting excellence in teaching and learning?

		Neither		
Very important	Important	important nor unimportant	Unimportant	Very unimportant

**Priorities**

48. Please rank from 1 to 5 what you believe are the top five factors that promote excellence in teaching and learning:

\_\_\_ Planning time during the work day

\_\_\_ Time to collaborate with colleagues

\_\_\_ Resources including instructional materials and technology

\_\_\_ Appropriate supervision

\_\_\_ Professional development opportunities

\_\_\_ Reasonable class size

\_\_\_ Classroom support from specialists (e.g. special education, literacy)

\_\_\_ Other \_\_\_\_\_



49. Please rank from 1 to 5 the top five factors contributing to overall job satisfaction.

\_\_\_\_\_ Salary

\_\_\_\_\_ Health insurance and other benefits

\_\_\_\_\_ Length of the school day

\_\_\_\_\_ Length of the school year

\_\_\_\_\_ Teaching load

\_\_\_\_\_ Professional development opportunities

\_\_\_\_\_ Career advancement opportunities

\_\_\_\_\_ Opportunities for collaboration with colleagues

\_\_\_\_\_ Reasonable class size

\_\_\_\_\_ Ability to send your children to NPS

\_\_\_\_\_ Other \_\_\_\_\_

50. If you could change three things about your job, what would you change?

--

## Career plans

51. Please select the phrase below that comes closest to describing your career plans?

- |                          |   |
|--------------------------|---|
| <input type="checkbox"/> | Continue teaching in the NPS as long as I can                               |
| <input type="checkbox"/> | Continue teaching in the NPS until a preferable teaching opportunity arises |
| <input type="checkbox"/> | Continue public school teaching but not in Newton                           |
| <input type="checkbox"/> | Continue teaching but not in public schools                                 |
| <input type="checkbox"/> | Move from teaching to another role in education                             |
| <input type="checkbox"/> | Leave education entirely  |

52. [for those who check any of the latter five responses above .....] Please rank from 1 to 3 your top reasons to leave teaching in the NPS?

- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | Salary                                   |
| <input type="checkbox"/> | Health and other benefits                |
| <input type="checkbox"/> | Job requirements                         |
| <input type="checkbox"/> | Training and other supports              |
| <input type="checkbox"/> | Work conditions (such as physical plant) |
| <input type="checkbox"/> | Personal                                 |
| <input type="checkbox"/> | Other (please state)                     |

53. Please rank the top five reasons why you chose to teach in the NPS?

- |                          |   |
|--------------------------|---|
| <input type="checkbox"/> | Salary                                    |
| <input type="checkbox"/> | Health and other benefits                 |
| <input type="checkbox"/> | Overall reputation of the system          |
| <input type="checkbox"/> | Quality of the curriculum and instruction |
| <input type="checkbox"/> | Opportunity to collaborate                |
| <input type="checkbox"/> | Other (please state)                      |

54. "Why did you choose to teach in the NPS?"

**Background**

55. How many years have you worked in the NPS?

- First year
- 2-3
- 4-6
- 7-10
- 11-20
- 20+

56. At what level do you currently teach?

- Pre-school
- Elementary (K-2)
- Elementary (3-5)
- Middle School
- High School

57. [for middle, HS teachers] What subject(s) do you teach [not sure how we'll analyze this? Should we keep?]

58. What is your current Step?

59. What is your degree status?

- Bachelor's
- Master's
- Master's + 30
- Master's + 45
- Doctorate

60. Please use the space below to share any other thoughts regarding teaching in the NPS

## **G. School Benchmarking**

### **I. Introduction**

As one of its first steps, the Citizen Advisory Group undertook a benchmarking report which was released in draft form in October 2008. Benchmarking compares one community to others. The Citizen Advisory Group wanted to collect these data to help us decide what questions we should ask about Newton. We are including the sections from the Executive Summary that relate to the Newton Public Schools here. Please find the full report at: <http://www.ci.newton.ma.us/CitizenAdvisoryGroup/reports/2008/2008-10-08-benchmarking-report.html>.

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.

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 are similar, inevitably there are anomalies. 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.

### **II. 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.

Key Questions from the School Benchmarking:

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?

### **III. Key Findings from the 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 raise 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 suggest 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 suggest 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 appear 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 than 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 4<sup>th</sup> grade MCAS testing compared to both benchmarking groups. In 10<sup>th</sup> 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 suggest 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.

## **H. Fundraising**

### **I. Introduction**

As part of its Revenue Report which was released in draft form in November 2008, the Citizen Advisory Group recommended that individual, corporate and foundation giving to the Newton Public Schools be enhanced by working more closely with these constituencies. We are including the relevant sections from the Executive Summary here. Please find the full report at: <http://www.ci.newton.ma.us/CitizenAdvisoryGroup/2008/11-19-08CAGRevenueReport.pdf>.

### **II. Recommendations**

Support to the Newton Public Schools from the Federal and State Governments via Grants: Grants, primarily from the Federal and State governments, to Newton Public Schools have grown dramatically from \$6.5 million in FY2002 to \$10.6 million in FY2009. (Individual, corporate and foundation grants account for the smallest amount of the total grant revenue (approximately 4%) or \$385,000 in FY2009.) The Citizen Advisory Group has concluded that the current level of staffing is “maxed out” writing and administering the current Federal and State grants. If Newton Public Schools determines that there are additional federal or state grants that would help the quality of Newton’s schools, the City will likely need to invest in more staff dedicated to grant writing, administration, and compliance.

Support to the Newton Public Schools from Individuals, Corporations and Nonprofits via Grants and Foundations: A relatively small amount of support for Newton Public Schools comes from individuals, foundations or corporations. Since schools are not classified as nonprofit organizations, contributions directly to the schools from individuals may not be tax deductible. Rather, individuals give to another entity (even the City), which in turn supports the Newton Public Schools. For example, the Newton Schools Foundation (NSF) is an independent, nonprofit 501c3 organization that provides approximately \$190,000 in grants, scholarships and training to Newton teachers. While it operates in close cooperation with the Superintendent, the Newton Schools Foundation proudly maintains its independence. In addition to donations to the Newton Schools Foundation, parents and others donate approximately \$900,000 annually to the schools through Parent Teacher Organizations (PTOs).

Citizen Advisory Group discussions with those involved with the Newton Schools Foundation suggest that the Foundation is going through a period of transition, reviewing its mission and working through some financial issues. For the near term, it does not seem likely that the Newton Schools Foundation will be in the position to raise significantly more revenue for the schools than it has in the past. It is certainly possible that the School Committee and/or the School Department would like to see a nonprofit emerge that has greater capacity to raise funds for the schools, and perhaps a mission of being more responsive to the expressed needs of the School Department or School Committee. One possible model to examine is Brookline 21<sup>st</sup> Century Fund. If either a re-missioned Newton Schools Foundation or an additional nonprofit emerged, the Newton School Department may wish to hire a professional development (fundraising) officer to expedite individual giving.

**I. City of Newton General Fund Budget: Allocated**

**City of Newton General Fund Budget (FY09): Unallocated & Allocated and City of Newton General Fund Budget Allocated: FY2001 - FY2009**

	<u>Total Expenditures</u>	% of Total
Newton Public Schools	\$158,484,693	55.4%
Municipal Departments	\$84,440,253	29.5%
Retirement Pensions and Benefits	\$20,961,920	7.3%
Debt and Interest	\$10,011,346	3.5%
State Assessments	\$5,603,855	2.0%
All Other	<u>\$6,498,791</u>	<u>2.3%</u>
<b>TOTAL</b>	<b>\$286,000,858</b>	<b>100.0%</b>

	Expenditures Allocated to Education/Non-Education Purposes (FY09)		
	<u>Total Expenditures</u>	<u>Education</u>	<u>Non-Education</u>
Newton Public Schools	\$158,484,693	\$158,484,693	
Municipal Departments	\$84,440,253		\$84,440,253
Retirement Pensions and Benefits	\$20,961,920	\$4,634,007	\$16,327,913
Debt and Interest	\$10,011,346	\$9,088,406	\$922,940
State Assessments	\$5,603,855		\$5,603,855
All Other	<u>\$6,498,791</u>	<u>\$241,117</u>	<u>\$6,257,674</u>
<b>Sub-Total</b>	<b>\$286,000,858</b>	<b>\$172,448,223</b>	<b>\$113,552,635</b>
Transfers to other funds	\$7,785,636	\$6,832,662	\$952,974
<b>Total</b>	<b>\$293,786,494</b>	<b>\$179,280,885</b>	<b>\$114,505,609</b>
<b>% of Total</b>	<b>100.0%</b>	<b>61.0%</b>	<b>39.0%</b>



Expenditures Allocated to Education/Non- Education Purposes (FY2001 – FY2009)			
	<u>Total</u> <u>Expenditures</u>	<u>Education</u>	<u>Non- Education</u>
FY2001	\$201,461,253 100.0%	\$116,563,130 57.9%	\$84,898,123 42.1%
FY2002	\$208,814,148 100.0%	\$122,144,565 58.5%	\$86,669,583 41.5%
FY2003	\$225,242,989 100.0%	\$134,091,303 59.5%	\$91,151,686 40.5%
FY2004	\$232,131,833 100.0%	\$138,953,720 59.9%	\$93,178,113 40.1%
FY2005	\$241,018,094 100.0%	\$144,201,998 59.8%	\$96,816,096 40.2%
FY2006	\$246,680,119 100.0%	\$149,583,542 60.6%	\$97,096,577 39.4%
FY2007	\$257,259,086 100.0%	\$156,390,706 60.8%	\$100,868,380 39.2%
FY2008	\$274,395,142 100.0%	\$171,958,943 62.7%	\$102,436,199 37.3%
FY2009	\$293,826,494 100.0%	\$179,280,885 61.0%	\$114,545,609 39.0%

Source: City of Newton Comptrollers Office, January 2009

**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

**Municipal Cost Structure**

**Final Report**

# Municipal Cost Structure

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## **I. Objectives and Methodology of the Citizen Advisory Group**

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 identify, and, within this context, (2) find innovative ways of increasing short- and long-term operational efficiency and effectiveness, and (3) identify new or enhanced sources of funding for City services.

The Municipal Cost Structure Committee met over the course of several months with the leadership of every major city department and with the City's key executive officers. We met also with union leaders, individual aldermen and numerous citizens. We received input from several open forums. The Citizen Advisory Group also analyzed numerous reports and data, including using information from a Citizen Advisory Group benchmarking report.

## II. Executive Summary

The Municipal Cost Structure Committee of the Citizen Advisory Group has found that opportunities for major cost efficiencies in Newton's municipal operations, over and above those implemented in recent years, are limited. We have also identified a number of areas that require increased funding, including health care liabilities, technology and a budget analyst. When these findings are considered with the primary conclusion of our previously released report on Municipal Revenues that Newton's opportunities to increase revenues are modest, it becomes increasingly clear that there is no painless way to resolve the long-term imbalance between the costs of maintaining existing municipal service levels and the revenues available to cover these costs.

The Citizen Advisory Group report on School Cost Structure, which also identifies only limited possible operating efficiencies in the Newton public schools, reinforces this sober conclusion. To complicate this economic picture even more, the Capital Infrastructure and Planning report reveals substantial underfunding of Newton's physical capital assets and calls for significant additional investments in this area.

These findings lead the Citizen Advisory Group to conclude that fiscal responsibility requires the community to face up to difficult choices about which municipal services and programs should be cut back or even mothballed. In the face of the serious mismatch between projected revenues and historical levels of expenditures and little apparent appetite for a property tax override, we can no longer sidestep the task of setting explicit spending and investment priorities as part of the budgeting and resource allocation process.

Newton's fiscal health naturally requires moving forward relentlessly in implementing whatever operating efficiencies exist. The Municipal Cost Structure Report identifies a variety of such opportunities. However, since much cost cutting has taken place in recent years, some of the remaining opportunities are, by themselves, quite modest, and many require further analysis of both financial and community effects.

In recent years, municipal cost cutting has been significant. In fiscal year 2001 (FY01), expenditures by municipal departments – public safety, public works, culture and recreation, etc. – (exclusive of education) represented 33% of the City of Newton's total operating budget. In each succeeding year, these municipal expenditures have slowly decreased as a share of the total operating budget, declining to a 29.5% in FY09. At the same time the annual growth rate of municipal, non-education departmental budgets has been 2.9%, noticeably below the annual growth in Newton's revenues.

Not surprisingly, most of the cost reductions came from staff reductions (78% of the municipal budget consists of salaries and benefits). Full-time equivalent staffing in FY01 was 911 positions. In the FY09 operating budget, this has dropped to 821 — a staffing reduction of 90 people or almost 10%. Staff reductions have occurred in almost every department and division of the city government, large and small departments alike. While in the 1980s and 1990s, the reduction in staffing reflected outsourcing of services, no large number of employees have been let go since 2001 as a result of outsourcing.

It is difficult for us to conclude that these staff reductions have been the consequence of improved efficiencies; rather, what we have observed is that the remaining administrative staff is significantly

burdened with handling the day-to-day tasks with little remaining time to devote to innovative, forward planning.

It is also clear to us that these staff reductions have led to service reductions, curtailments, and modifications in a gradual but inexorable way that has not necessarily been immediately evident to Newton residents. While the City has maintained a balanced budget by law, the level and quality of services over a decade has not remained constant. Indeed, the combined effect of constrained revenues, the Mayor's desire to support the Newton Public Schools, the rapid growth of health care benefit costs, and the necessity of compensating remaining staff in an environment that is competitive for talent and skills has led to a continuous and cumulatively significant down-sizing of the city's staff.

Within this context, the Citizen Advisory Group's recommendations on Municipal Costs fall into six clusters:

**1. Control Employee Compensation Costs:** The greatest potential savings in municipal operating costs lie in improving the management of employee compensation and benefits, which comprises nearly 80% of all municipal costs. The Citizen Advisory Group recommends that the City undertake a comprehensive evaluation of possible changes in salary, health care benefits, sick time, vacation, holidays, life insurance, dental and vision benefits, short and long term disability, workers compensation, and retirement benefits. The purpose of such a review is to specify changes that address both employee needs and Newton's fiscal situation. The benefits portion of this review will be especially important, because *Newton may not be able to bear the same level of benefits in the future that it has committed to in the past.*

**2. Decide Whether Joining the Group Insurance Commission (GIC) will Decrease Health Insurance Costs:** The City and the employee unions need to actively consider joining the state's health insurance program, the Group Insurance Commission (GIC). An in-depth analysis should be done immediately. Certainly the decision to join the GIC will be easier if legislation is passed that would allow municipalities to join without union approval. But, the analysis should be done regardless of whether such legislation is passed. *Savings of \$1 to \$ million are conceivable.*

**3. Begin Funding Health Care Obligations:** Newton needs to immediately convene a task force including Aldermen and staff members, and perhaps citizens, to analyze and make recommendations on how to start funding immediately the currently unfunded liability of \$433 million for retiree health care and other non-pension benefits. Newton is passing to future citizens costs that should be paid currently. Furthermore, these costs are considerably less if paid for now. Such a task force needs to address the investment vehicle for holding contributed funds, the management structure for overseeing the investment vehicle, the amount of the annual required contribution, and the sources of funding for the annual required contribution. *The additional cost may be as much as \$22 million annually.*

**4. Implement Operating Efficiencies.** The Citizen Advisory Group identified a variety of opportunities for further cost savings in municipal operations, including:

- Consolidating the Parks functions of the current Parks and Recreation Department within the Department of Public Works (DPW). *Potential savings of at least \$100,000;*

- Improving payroll management efficiency by converting the City payroll from a weekly to a biweekly cycle and the school payroll from bimonthly to biweekly. *Potential savings of over \$140,000, primarily in equivalent administrative time;*
- Analyzing regularly all capital investments on a life-cycle cost basis;
- Pursuing outsourcing opportunities;
- Reducing procurement costs;
- Resolving long-term issues regarding:
  - Reducing minimum staffing requirements on fire engines to one officer and two firefighters year-round, instead of for nine months of the year. *Potential savings of \$700,000;*
  - Eliminating the fire call box system. *Potential savings of \$200,000;*
  - Decreasing snow plowing standards. *Potential savings of \$125,000 to \$250,000;*
- Investing now to achieve future savings:
  - Increasing funding for communication and information technologies to facilitate a more efficient marshalling of resources on a daily basis;
  - Hiring a budget analyst to facilitate continuous search for operational efficiencies and efficiency planning, oversight of budget appropriations, and long-term planning;
- Allocating greater decision authority to Department managers by removing restrictions on municipal department managers on their ability to move funds between “personnel” and “operating” portions of their budgets so that all least-cost options can be more easily pursued.
- Investigating regionalization opportunities.

**5. Invest in Energy Efficiencies.** These energy cost saving opportunities may seem small on an individual basis but collectively the combined effect can be significant. They include banning incandescent bulbs in public buildings, replacing gas burning streetlights with high efficiency bulbs, requiring the Energy Star rating on all applicable purchases, providing an energy-saving training program for appropriate City employees, and implementing a comprehensive recycling program for all municipal operations. In addition, Newton should investigate the opportunity of becoming a customer for peak demand management companies, thereby reducing demand and potentially providing energy on-site through cogeneration.

**6. Shift Appropriate Costs from the Tax Base to User Fees.** The most obvious candidates for cost-shifting involve a Pay as You Throw (PAYT) Trash Program and increased user fees for selected recreation, community education, and cultural programs.

Some of these recommendations may require changes in future collective bargaining agreements and even legislative action at the State House and/or home rule petitions from the City.

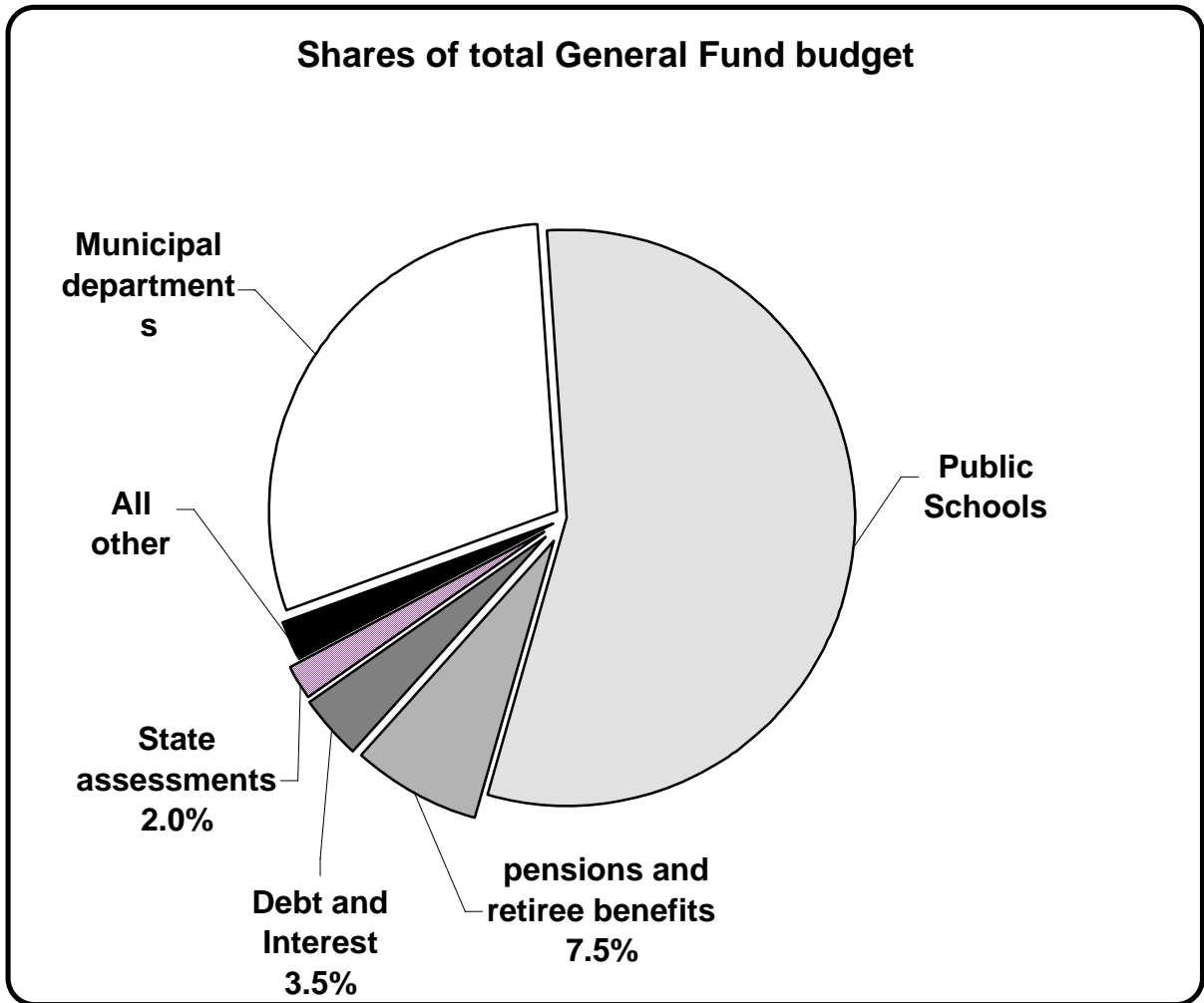
No stone should be left unturned in our efforts to narrow the growing, long-term imbalance between City revenues and expenditures. Ultimately, though, Newton must prioritize as it faces reductions in the scope and scale of some of our municipal and school services.



**Table 1**  
**FY09 - Municipal departments as share of total city General Fund budget**

		<b>% of total</b>
Municipal departments	\$84,440,253	29.5%
Public Schools	\$158,484,693	55.4%
Retirement pensions and benefits	\$20,961,920	7.3%
Debt and Interest	\$10,011,346	3.5%
State assessments	\$5,603,855	2.0%
All other	<u>\$6,498,791</u>	2.3%
<b>TOTAL</b>	<b>\$286,000,858</b>	

**Exhibit 1**



Note: A more detailed history of Municipal Government departments share of the total budget from FY00 to FY08 can be found in Appendix 1

### **III. Current Status**

#### *Structural Deficit*

In February 2007, the Report of the Blue Ribbon Commission on the Municipal Budget determined that Newton faced a significant structural deficit. In the spring of 2008, the Mayor's office updated the Commission's budget forecast. That revised forecast shows revenues in the operating budget increasing at a rate of 2.9 percent per year from 2009 through 2014, with expenditures – a combination of both the school and municipal departments – growing at a significantly higher 5.9 percent annual rate in order to fund the current range and level of public service. This 3 percent mismatch in growth rates means that Newton will be short an estimated \$7.3 million in 2010, \$25 million the next year and, by 2013, \$45 million.

The Citizen Advisory Group draft report on Municipal Revenue in November 2008 determined that Newton's opportunities to increase revenues are modest. Exploiting these opportunities by themselves will not close the widening gap between the City's expenditures and revenues.

This gap can be further forestalled, to some extent, by efforts devoted to achieving incremental operating efficiencies. But, the Municipal Cost Structure Committee of the Citizen Advisory Group has found that opportunities for major cost efficiencies in Newton's municipal operations, over and above those implemented in recent years, are limited. The Citizen Advisory Group report on School Cost Structure which also identifies only limited possible operating efficiencies in the Newton public schools, reinforces this sober conclusion.

Since, by law, cities in Massachusetts must have a balanced budget, the "big choices" currently facing Newton's residents and their elected leaders relate to which reductions in the scope and scale of municipal and school services should be made until new sources of funding can be generated or found. Newton voters' recent rejection of the property tax override ballot question, the recession, employment uncertainty, reduced access to credit, and slightly decreasing median home prices and substantially decreasing home sales suggests that there may be limited support for increasing revenues through tax increases, at least in the near term.

#### *Resource Allocation*

In FY01, expenditures by the municipal departments (all departments exclusive of education, e.g., public safety, public works, culture and recreation, etc.) represented 33% of the City of Newton's total General Fund expenditures. In each year since, the municipal government functions have represented a slowly decreasing share of the total, declining to a 29.5% share with the FY09 budget (refer to Table 1 and Exhibit 1: page 10). The budget for the Newton Public Schools comprises 55.4% of the total budget.

An analysis of compound annual growth rates in revenues and expenditures also confirms the decreasing allocation of resources to municipal functions. In the last five years since FY03, the compound annual rate of increase of the municipal non-education departmental budgets has been 2.1%. Looking at the last ten years, municipal department expenditures have increased at a 3.3% compound annual growth rate and, for the last fifteen years, at a 3.2% compound annual growth rate. (See Table 2, below.)

But, during the same time periods, Newton’s revenues have increased at a greater rate than these expenditures on the municipal departments. Simultaneously, expenditures on public education have grown more than both revenues and municipal department expenditures.

**Table 2**  
**15 Year Trend Analysis**  
**Compound Annual Growth Rates in Revenues and Expenditures**

	<b>Fiscal Year</b> <b>2008 Actual</b>	<b>Compound Annual Growth Rates</b>		
		<b>5 years</b> <b>2003-2008</b>	<b>10 years</b> <b>1998-2008</b>	<b>15 years</b> <b>1993-2008</b>
<b>REVENUES:</b>				
Property Taxes	\$215,239,592	3.7%	4.6%	4.3%
Intergovernmental Revenue	29,633,992	6.6%	8.0%	9.5%
Other	27,306,861	3.3%	2.4%	4.3%
<b>Total Revenue</b>	<b>\$272,180,445</b>	<b>3.9%</b>	<b>4.6%</b>	<b>4.7%</b>
<b>EXPENDITURES:</b>				
<b>Public Education</b>	<b>\$152,728,991</b>	<b>4.7%</b>	<b>6.5%</b>	<b>5.9%</b>
General Government	\$ 12,869,213	2.7%	3.7%	4.0%
Public Safety	31,150,150	1.3%	3.1%	3.2%
Public Works	19,871,674	1.8%	2.4%	1.9%
Health & Human Services	3,486,798	4.4%	5.8%	6.0%
Culture & Recreation	10,430,886	3.5%	4.5%	4.1%
<b>Total Municipal</b> <b>Departments</b>	<b>\$ 77,808,721</b>	<b>2.1%</b>	<b>3.3%</b>	<b>3.2%</b>
Debt & Interest	\$ 7,426,543	2.5%	3.0%	4.9%
Pensions & Retiree Benefits	19,666,614	6.9%	7.9%	4.2%
Other (2)	7,299,588	-0.1%	-2.1%	0.8%
<b>Total Expenditures</b>	<b>\$ 264,930,457</b>	<b>3.8%</b>	<b>5.1%</b>	<b>4.7%</b>

Three critical questions arise from this data:

- What impact has the declining share of City expenditures devoted to municipal operations had on the range and quality of municipal services?

- Since the underlying costs of municipal operations have risen more than the level of funding of departmental budgets, what tradeoffs or compromises have City officials made in service priorities and standards of performance?
- What actions can be taken to mitigate the adverse effects of reduced budgets and services through increased efficiencies in municipal management, including efficiency-seeking investments?

Our observations on the historical data can be summarized as follows:

- The number of municipal department employees has been cut;
- Managers' workloads have increased;
- Salary and benefit growth has not been constrained to the same level as revenue growth

### *Staffing Trends*

Full-time equivalent staffing supported by the General Fund in FY01 was 910.7 positions. Eight years later in the FY09 budget, the number has dropped to 820.8, a staffing reduction of 90 people or almost 10%. Staff reductions have occurred in almost every department and division of the city government, large and small departments alike (refer to Table 3, page 14). While in earlier years, the reduction in staffing reflected outsourcing of services to others, no large number of employees has been let go since 2001 as a result of outsourcing.

Looking at longer time periods, staffing has decreased considerably – over 20% – in the last twenty-four years. But, an indeterminate amount of these reductions in municipal employees are related to outsourcing (e.g., trash collection and forestry services). (Refer to Table 3.)

### *Changes in managers' workload*

It would be exhilarating if the Citizen Advisory Group could conclude that these staff reductions since 2001 have been the consequence of improved efficiencies; rather, what we have observed is a remaining administrative staff that is significantly burdened with handling the day-to-day tasks and that has little remaining time to devote to forward planning. It is clear to us that the substantial portion of the staff reductions have been a response to fiscal constraints and that service reductions, curtailments, and modifications have occurred in a gradual but inexorable way that has not necessarily been immediately evident to the citizenry. Each year Newton has a balanced budget, but what has occurred to the level and quality of services over a decade is dramatic.

This is not an observation about more or less taxation; rather it is an explanation of how Newton has dealt with its structural deficit over the course of this decade. The combined effect of constrained revenues, the objective of supporting the Newton Public Schools as much as possible, the rapid growth of certain non-payroll costs (especially health care benefits), and the necessity of compensating remaining staff in an environment that is competitive for talent and skills has led to the continuous and cumulatively significant down-sizing of the city's staff.

The Citizen Advisory Group thinks this gradual erosion in staffing across all departments cannot continue in the same pattern as before without noticeable effects in the quality of services.

### *Salaries and Benefits*

The Citizen Advisory Group Municipal Cost Structure Committee was charged with the task of identifying opportunities to improve the efficiency and effectiveness of Newton's municipal government operations; this is simple enough to state but far from simple to accomplish. If there were easy and obvious ways to spend less while accomplishing the desired outcomes, or even to spend less to accomplish the existing level of performance, in most cases it would have been done already.

The central fact of Newton's municipal budget is that it consists of a broad array of necessary public services that are accomplished primarily through the employment of staff. More than 77% of the FY09 General Fund budget for city departments consists of employee salary and benefits. (See Table 4 and Exhibit 2: page 15)

- Salaries are a function of the competitive marketplace and union negotiations (approximately 95% of Newton's employees are represented by a union). Salaries are forecasted to grow at approximately 4% to 4.5% annually. While this is in line with other cities and towns, nonetheless it is a higher rate than expected revenue growth.

Benefits are a function of state law (as to requirements), employer contribution rates (a collective bargaining matter, subject to minimums set by state law), plan designs (also subject to collective bargaining requirements and not able to be altered unilaterally by the municipal employer), and health care cost escalation over the past decade that is a national, not a local, problem. Benefits (including health care and pensions) are projected to grow at 7%, also exceeding revenue growth.

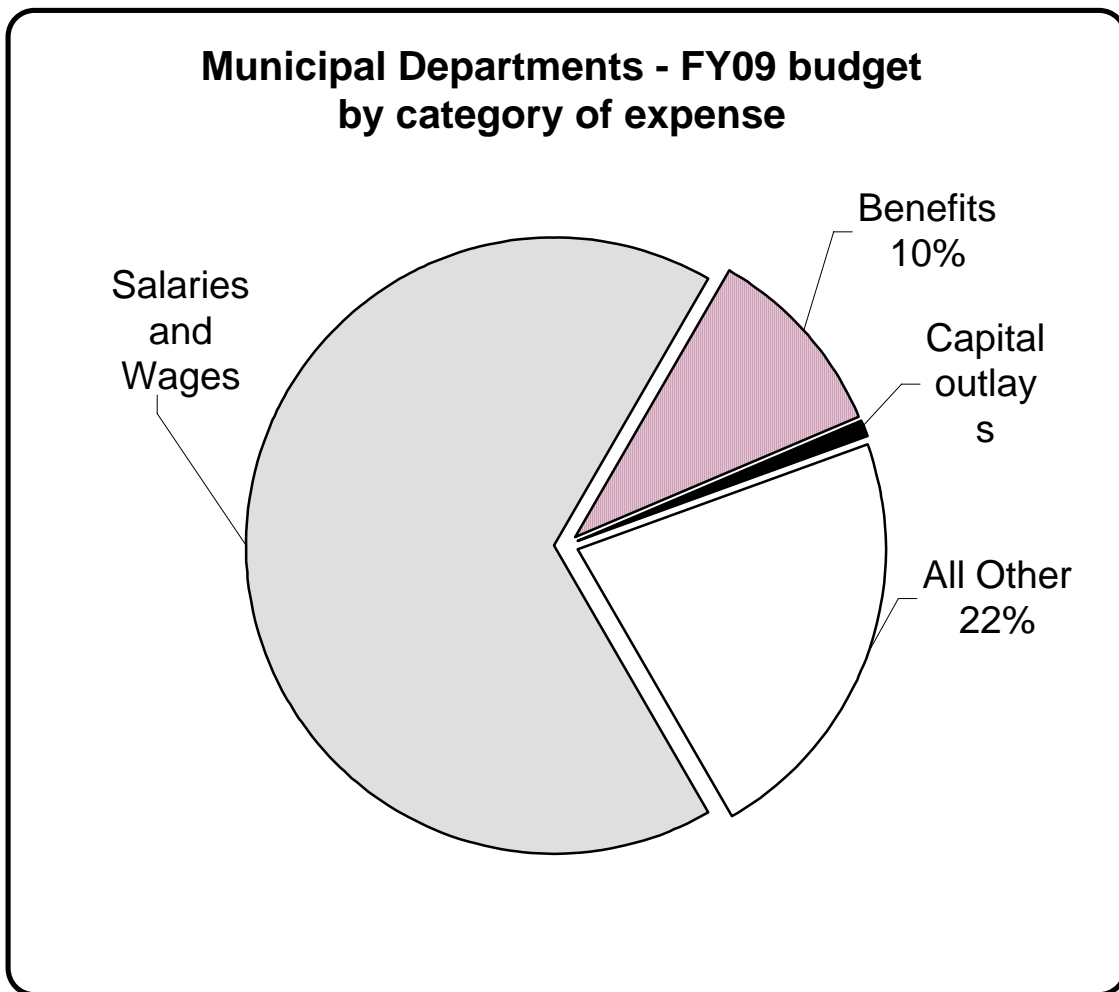
**Table 3: City of Newton: Municipal Personnel (Full Time Equivalent (FTEs) Trends**

	Change in FTEs				
	FTEs in FY09	1 Year: FY2008 - FY2009	8 Years: FY2001- FY2009	19 Years: FY1990- FY2009	24 Years: FY2009 - FY1985
General Fund FTEs	820.8	-36.6	-89.9	n.a.	n.a.
<b>Department</b>					
Clerk to the Board	6	0	0	0	1
City Clerk	4.0	-0.3	-0.8	-0.5	0.0
Executive	6.0	0.0	-0.4	-1.0	0.0
Accounting	7.9	-0.1	0.5	-3.1	-2.1
Purchasing	6.0	0.0	-3.0	-2.0	-3.0
Assessing	13.6	-1.3	-3.4	-3.4	-1.4
Treasurer	8.4	-1.6	-2.6	-4.6	-6.6
Law	9.8	0.0	-1.2	-1.2	-1.2
Human Resources	8.0	0.2	-2.0	-1.2	0.0
City Physician	0.0	0.0	-0.2	-1.2	-1.0
IT	8.4	-0.6	-3.6	-2.6	-3.6
Elections	7.4	-1.0	-1.2	-2.3	0.4
Planning	12.5	-0.6	-0.3	1.5	3.5
Building	24.0	-3.0	-7.0	-11.0	-25.0
Police	196.5	-12.4	-18.7	-62.4	-57.7
Fire	186.9	-2.0	-9.1	-59.1	-59.1
Inspectional Services	13.0	0.0	-2.7	-5.1	13.0
Weights & Measures	1.0	0.0	0.0	-0.4	0.0
Civil Defense	0.3	0.0	0.0	0.0	0.3
Public Works	141.7	-7.4	-18.3	-59.3	-78.3
Engineering	0.0	0.0	0.0	-20.6	-18.0
Water/Sewer	67.4	3.0	7.0	-1.6	2.4
Storm Water	6.0	0.0	6.0	6.0	6.0
Health	38.4	-2.7	2.4	9.7	15.4
Human Services	5.0	-0.4	-7.8	-4.6	1.0
Veterans/Licensing	2.0	0.0	0.0	0.0	0.0
Library	76.4	-2.5	-0.2	17.6	20.2
Parks and Recreation	34.9	-0.7	-10.1	-49.1	-51.1
Jackson Homestead	2.7	-0.3	-0.3	-0.5	-0.4
Community Schools	0.0	0.0	0.0	-2.0	-2.0
<b>Total</b>	<b>894.2</b>	<b>-33.6</b>	<b>-76.9</b>	<b>-263.9</b>	<b>-247.2</b>
<b>General Areas</b>					
Public Works	209.1	-4.4	-11.3	-81.5	-93.9
Police	196.8	-12.4	-18.7	-62.4	-57.4
Fire	186.9	-2.0	-9.1	-59.1	-59.1
Human Services, Health, Parks & Recreation, Library	173.4	-6.5	-18.6	-34.3	-3.8
General Government	<u>122.0</u>	<u>-8.3</u>	<u>-25.2</u>	<u>-32.6</u>	<u>-39.0</u>
	<b>888.2</b>	<b>-33.6</b>	<b>-82.9</b>	<b>-269.9</b>	<b>-253.2</b>

**Table 4**

<b>FY09 Budget for Municipal Departments</b>		
		<b>% of total</b>
Salaries and Wages	\$56,253,150	66.6%
Benefits	\$8,835,164	10.5%
Capital outlays	\$540,560	0.6%
All Other	<u>\$18,811,379</u>	22.3%
<b>TOTAL</b>	<b>\$84,440,253</b>	

**Exhibit 2**



Thus, the first place to look for efficiencies – or for cost reductions in the delivery of the current level of services – is the management of staffing levels, compensation strategies and benefit costs.

#### *Efficiencies, Effectiveness and Choices*

Efficiency can sometimes be reduced to the refrain, “doing more with less” or getting more “output” for any given level of “input.” As discussed above, it may involve having fewer workers being more productive or the same number of workers at lower compensation levels.

Effectiveness is a matter altogether different. Effectiveness can be thought of as “doing it smarter.” It involves an examination of whether the particular tasks and services are leading to desired results. If not, what tools and changes may lead to improvements? Effectiveness thus requires clarity about goals and objectives; or, as Yogi Berra has expressed it, “If you don’t know where you’re going, you probably won’t get there.”

If improvements in efficiencies and effectiveness do not lead to a balanced budget, Newton will be faced with difficult choices. We will need to reduce or even eliminate those tasks or services deemed to be of less importance to Newton’s overall objectives. The Citizen Advisory Group has concluded that this is inevitable and that fiscal responsibility requires the community to face up to these difficult choices.

Many of the Citizen Advisory Group recommendations that follow help improve efficiency or effectiveness but are definitely minor in their overall impact. A few involve the “big” items that will have a major impact:

- How do we compensate Newton employees?
- How do we reduce the cost of employee benefits, if that is even possible within our own authority under state laws?
- How do we increase the effectiveness of the City of Newton’s municipal departments?
- How do we choose the services to be diminished or eliminated?

The Citizen Advisory Group on Performance Management also provides some answers. We also provide some in this report.



#### **IV. Detailed Recommendations**

The findings and recommendations that follow are neither overt nor implied criticism of present staff or past decisions. In fact, the Citizen Advisory Group was often struck by the professionalism, talent, depth of experience, honesty and dedication of Newton's senior managers. Rather, the ideas presented are deemed worthy of further study and examination. We recognize that some will survive such scrutiny and others will fall by the wayside for a variety of legitimate reasons.

We also note that the Capital Infrastructure and Planning Committee of the Citizen Advisory Group looked in-depth at Newton's physical capital assets and in its report will reveal substantial underfunding and calls for significant additional investments in this area. During our work, the Municipal Cost Structure Committee found municipal employees hampered by substandard facilities and equipment. The workspace and the tools provided to staff are often worn and not always serving the goal of facilitating superior performance of the staff.

## 1. Control Employee Compensation Costs

The greatest potential savings in municipal operating costs lie in improving the management of employee salaries and benefits (including eligibility and contribution rates), which comprises nearly 80% of all municipal costs.

The Citizen Advisory Group recommends that the City undertake a comprehensive evaluation of possible changes in salary, health care benefits, sick time, vacation, holidays, life insurance, dental and vision benefits, short and long term disability, workers compensation, and retirement benefits (both pension and other post-employment benefits). The purpose of such a review is to specify changes that address both employee needs and Newton's fiscal situation while recognizing the quality of Newton's municipal services is directly linked to the performance of employees.

The benefits portion of this review will be especially important, because *Newton may not be able to bear the same level of benefits in the future that it has committed to in the past*. Newton will need to re-examine all of the conditions under which active employee and retiree health benefits are provided, the level of financial responsibility borne by active and retired employees, the level of benefits provided, and the eligibility of part-time employees for essentially full-time benefit levels. Where Newton's benefit levels and eligibility criteria exceed state law requirements, changes – either for all current and retired beneficiaries, or more restrictively just for newly hired and retired employees after a date certain – will need to be considered.

Any significant departure from current practices will require modification of state law. This in turn will require the active participation of the city's state legislators and the Mayor and the Board of Aldermen to agree on submittal of one or more Home Rule petitions. For example, under existing state law:

- The City does not have the authority to establish standards for the receipt of full group insurance benefits; all employees working at least 20 hours per week in regular employment are eligible for group insurance coverage on a 100% basis.
- The City does not have the authority to set different conditions for newly hired employees.
- In no event is the City permitted to bear a share of group health insurance less than 50% of the cost, for either active or retired employees.

In brief, Newton does not have the full authority to manage its employee benefit costs in ways that many citizens might conjecture. Only the state legislature can grant such authority to Newton or to any other municipality in Massachusetts, and to date no such grant of authority has issued from Beacon Hill.

## **2. Decide Whether Joining the Group Insurance Commission (GIC) will Decrease Health Insurance Costs**

The City and union leaders need to actively consider joining the state's health insurance program, the Group Insurance Commission (GIC). An in-depth analysis should be done immediately. Certainly the decision to join the GIC will be easier if legislation is passed that would allow municipalities to join without union approval. But, the analysis should be done regardless of whether such legislation is passed. (See also Pending New Legislation at the end of this section.)

*Savings of \$1 to \$6 million* are possible according to preliminary analysis by City staff.

The Citizen Advisory Group further recommends that the city continue efforts already initiated to meet with representatives of its collective bargaining units and its retired employees with the objective of determining the advisability of joining the GIC.

This discussion should include a thorough comparison of plan options available through the GIC and options presently offered by the City. In addition, cost trends and any other relevant factors of both the city and the GIC should be reviewed, all with the intention of helping Newton make the best and most informed decision about health care for the benefit of both its employees, whether actively working or retired, and the taxpayers.

### Discussion:

Blue Ribbon Commission: In its February 1, 2007 report, the Blue Ribbon Commission (BRC) described Newton's self-insured health care arrangement, as follows:

Newton's average increase in health insurance costs over the past ten years has been about 11% per year. The city offers two health insurance options to all current and retired employees, their spouses, and dependants. The city currently contributes 80% of the cost. The city is self-insured and uses Tufts Health Plan and Harvard Vanguard to provide services as third party administrators (TPAs). As such, Tufts and Harvard structure plans and pay claims on behalf of the city ... but the city is responsible for all costs. The city maintains a 'stop loss' insurance policy that protects the city in case a single claim or a series of claims exceeds an agreed upon threshold.

The Blue Ribbon Commission report also described further details of Newton's health care arrangements and opened a discussion of potential areas of savings. It concluded:

... in the absence of a change in state law, the city has few options for cost savings with regard to health care. Were the law to change with regard to collective bargaining, the city would have the ability to make changes in health benefits without needing to negotiate every aspect, providing for the possibility to build in incentives and make smaller and more frequent changes in line with the marketplace. The possibility of joining a state plan might also enable the city to take part in innovative health care cost and quality assurance programs by the state's GIC.

New Legislation in June 2007: Subsequent to the close of the work of the Blue Ribbon Commission, additional developments have reinforced the recommendation for revisiting employee group health insurance programs as an area of potential savings.

As part of his Municipal Partnership Act (MPA), on July 25, 2007, Governor Patrick signed legislation (Chapter 67 of the Acts of 2007) permitting cities and towns, under certain conditions, to join the state GIC.

The Massachusetts Municipal Association (MMA) Summary of the Act described this provision as follows:

Sections 4, 6, 7 and 8 would allow cities and towns, by local option, to use a streamlined coalition bargaining process to negotiate over whether to participate in the Group Insurance Commission. Decisions to participate would depend on the outcome of negotiations, and reaching an agreement between the municipality and a public employee committee which would include representatives from each collective bargaining unit and retirees.

The Group Insurance Commission, in its September 17, 2008 Q&A with respect to the Municipal Group Insurance Law, describes the major elements of the agreement, as follows:

**What must be in the bargained agreement to join GIC health coverage?**

Three issues: (1) whether to join GIC health coverage; (2) the health premium contribution ratios for the Municipal Employer's subscribers, which can differ only by type of plan (PPO, HMO or Indemnity) and not by type of subscriber (active, retired or survivor); and (3) the terms for revocation of section 19 if the Municipal Employer or its subscribers wish to withdraw after three or six years of enrollment in GIC health coverage."

With passage of this new law, then, the possibility exists of Newton realizing perhaps substantial, though as yet not fully quantified, savings should it choose to take the necessary steps to join the GIC. ***Caution should be the order of the day, however.*** The recent Brookline Override Study Committee (January 2008), in reviewing the attractiveness of joining the GIC, warned:

"The GIC is the health system for state government employees. The legislature recently gave municipalities the option of joining the GIC if the municipality adopts coalition bargaining and gets 70 percent of the bargaining units to agree to the change. ***Premiums for health plans similar to that offered to Brookline employees are significantly cheaper in the GIC, and GIC premium growth rates have been significantly lower in the past few years than those achieved in Brookline.*** It is unclear why the GIC is able to offer cheaper premiums. It is possible that state employees are younger and healthier on average than municipal employees. Alternatively, it is possible that the GIC has more bargaining power. It is likely that the town would save between \$1 million and \$2 million per year by joining the GIC. However, ***it is not guaranteed that these savings will be achieved. While the cost through the GIC of plans similar to those currently offered by Brookline is considerably less, the GIC also offers a higher cost indemnity plan that is not currently offered to Brookline employees. If enough Brookline employees chose the***

*indemnity plan, costs could actually go up with entry into the GIC.”* (emphasis added)

In summary, since health care benefits for Newton's employees, both actively working and retired, represent a substantial – and rising – cost to Newton, the recent change in state law, now permitting cities and towns to join the state Group Insurance Commission, makes it both timely and desirable for the city to fully explore this option.

Through the GIC, the health of more than 300,000 individuals is insured and accordingly it possesses the necessary clout to negotiate favorable costs from participating insurers. It also possesses the ability, the willingness, and the need to explore and implement creative solutions to the provision of quality health care with the hope of reining in both the overall cost and – at least as importantly – the rate of growth in health care costs.

Recent Decreases in Rates of Growth in Health Care: Employee and retiree health care benefit costs currently account for 12.6% of Newton’s General Fund budget or over \$38 million. In the last two fiscal years, Newton (and other municipalities) has experienced lower rates of cost escalation (see Table 5, page 22). For the four year period between 2004 and 2008, the cost of claims administered by Tufts, the city's primary claims administrator which handles 75% of the claims, increased by only 4.2% per year.<sup>1</sup> In contrast, Newton’s experience with Harvard-Pilgrim was significantly less favorable, with the cost per year rising 20.8%. Overall, Newton’s cost of health care claims increased at a compound annual growth rate of 7.8% from 2004 – 2008, a rate substantially higher than the increase in Newton’s revenues.

In contrast, the state's Group Insurance Commission (GIC) showed cost increases of about 8.4% per year for the comparable period:

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<sup>1</sup> Compound annual growth rate from 2004-2008.

**Table 5: Percent Increases in Health Claims, 2004 – 2008**

	Percent Increase over Prior Year in Paid Health Care Claims
FY 2004	7.6%
FY 2005	9.0%
FY 2006	11.7%
FY 2007	4.0%
FY 2008	6.5%
Total Paid Claims in FY2008: \$38,828,061	

Source: City of Newton, 6/30/08  
Annual Financial Report

Newton's recent and somewhat more favorable claims experience offers at least some breathing space with which to entertain this step without being rushed into doing so. The Citizens Advisory Group, however, believes that the current favorable cost trends may not persist indefinitely, in which case joining the GIC may well represent, in the long term, a more desirable option than not joining. In Newton's June 30, 2008 actuarial report with respect to retiree health benefits, the following was included under "assumptions":

**Trend-** Medical Costs are assumed to increase each year according to the following schedule:

<u>Year</u>	<u>Medical Trend</u>
2008	7.2%
2009	7.2%
2010	7.2%
2011	7.2%
2012	7.2%
2013	7.2%
2014	7.1%
2015	7.1%

Source: Actuarial study dated August 19, 2008, Financial Risk Analysts, LLC

### Pending New Legislation:

Two approaches to facilitate the entry of cities and towns into the GIC have been suggested:

A. End Coalition Bargaining Requirement: As was reported in the December 9, 2008 issue of the Boston Globe, then House Speaker Salvatore DiMasi said in early December 2008 that he would propose legislation in January, 2009 that would allow municipalities to join the state's health insurance program without union approval. Such legislation has not yet been submitted, although the Massachusetts Municipal Association continues to support such an approach.

Certainly, the decision to join the GIC would be easier if legislation were passed that would allow municipalities to join without union approval; however, the General Court appears to be reticent to move such a proposal forward, instead hoping that more familiarity with the current rule and greater efforts by municipalities and unions to work together collaboratively will improve the currently very low level of GIC entry.

B. Modifications to Coalition Bargaining Incentives: On January 28, 2009, Governor Patrick filed legislation: An Act Strengthening the Commonwealth's Partnership With Its Municipalities, which, if passed, would make several law changes related to GIC membership issues.

Section 19 of Chapter 32B would be amended such that the current 70% GIC entry threshold, under coalition bargaining rules, would be reduced to 50% to help municipalities meet the requirement. It is likely that this lower threshold would still require the support of the largest local union in Newton representing the teachers.

The Act would further modify Section 19 in order to provide financial incentives (in the form of penalties) for cities and towns to join the GIC:

Pursuant to a series of new rules (not specified), cities and towns which either do not join the GIC, or which withdraw from it, would be subjected to a regulatory process intended to evaluate the municipality's cost of health care to its employees. Should the "average cost per member" exceed the comparable GIC figure by more than a (unspecified percentage) safe harbor amount, then, opportunity would be provided the municipality to meet the requirement. *Should it not be possible for a non-complying city or town to improve the performance of its health plan, then, a penalty would result, equal to the difference between the municipality's "average cost per member" and the GIC equivalent, effected through a reduction in the municipality's general government aid.*

### Summary:

Though well intended, the Act's potential reduction of already inadequate local aid, for any reason, seems ill advised. This is particularly the case since union opposition rather than reluctance on the part of cities and towns to enter the GIC, at least in the view of some municipal officials, is thought to be the current impediment to greater participation in the GIC.

Given the potential for Newton to realize both current cost savings as well as likely long-term cost control by either joining the GIC or locally establishing GIC-equivalent benefits, the city's unions may prefer to retain local bargaining flexibility and support GIC-equivalent benefits.

### 3. Begin Funding Health Care Obligations

#### Current Status:

Newton, like the vast majority of cities and towns in Massachusetts and the Commonwealth of Massachusetts itself, is facing an enormous financial issue related to the unfunded liability for retiree health care and other non-pension benefits.<sup>2</sup> These non-pension post-employment benefits are, in plain English, health care and life insurance coverage for retirees and their survivors.

As noted by the Commonwealth of Massachusetts Special Commission on Other Non-Pension Employee Benefits in July 2008,

In order to recruit and retain public service employees, state and municipal governments across the country have for decades been offering pension and other post-employment benefits (OPEB), most notably health care. The offerings have, in general, helped state and local governments attract quality employees ...

At present, Newton pays for its retirees' health care and life insurance coverage on a pay-as-you-go basis. In other words, Newton did not set aside money in the past when these employees were actively working in order to pay for their health care and life insurance when they retired. Nor is Newton now setting aside funds for its current employees in order to pay for their health care once they retire in the future. Rather, these "unfunded" retiree health care costs are, as a matter of policy, paid for through annual appropriations. (The health insurance contribution rates of plan members and Newton are 20% and 80%, respectively. Newton reimburses 80% of Medicare Part B premiums paid by retirees. The plan members and Newton each contribute 50% towards a \$5,000 term life insurance premium.) In FY08, the cost of the pay-as-you-go method came to \$13.4 million dollars.

New accounting standards issues by the Government Accounting Standards Board in 2004 require municipalities to disclose the total amount of these actuarially determined future liabilities and the amount required to be paid currently to cover these future health care and life insurance costs. According to the forthcoming FY08 Comprehensive Annual Financial Report prepared by Newton's Comptroller, the total unfunded future liability stood at \$432.9 million as of June 30, 2008.<sup>3</sup> The annual required contribution (ARC) represents a level of funding that if paid on an ongoing basis in the present is projected to cover these future liabilities. *For FY08, Newton needed to pay \$22 million dollars this year (above and beyond the current \$13.4 million that we did pay) to fund our future liability.* This \$22 million payment is not a one time payment but is needed *annually* for the next thirty years and, in fact, grows over time. *In light of Newton's current budget of \$275 million budget in which there is considerable concern about lack of funds to pay for current level of services and such underfunded areas as capital maintenance and refurbishment, this \$22 million represents a significant area needing additional funding in the view of the Citizen Advisory Group.*

The pay-as-you-go method that Newton (like so many other cities and towns) is using is not sustainable. Because life expectancies and health care costs are rising simultaneously, the future retiree health care costs represent a significant unfunded obligation. Newton, like so many other cities

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<sup>2</sup> These retiree health care and other non-pension benefits are often labeled as "Other Post-Employment Benefits" with the acronym, OPEB.

<sup>3</sup> The discount rate used was 3.75%.



and towns, has made a commitment to public service employees to provide health care benefits after they retire – these commitments are growing annually and Newton, like so many others, has not adequately saved to pay for these commitments.

Pre-funding is both prudent and necessary. By saving early, the total liability is reduced dramatically. According to an analysis by the Commonwealth, full pre-funding following the guidelines of the Generally Accepted Accounting Principles for Governments *reduces the liability by 45%*.<sup>4</sup> Without pre-funding, Newton places on future Newton residents a crippling obligation. Without pre-funding, Newton also seriously threatens its commitment to pay former, current and future retirees health care and life insurance benefits.

Until very recently, individual cities and towns had to get legislative approval from the Commonwealth to establish a retiree healthcare trust fund. Cities and towns like Needham, Lexington and Wellesley did just that. They sought and received a home rule petition to set up a trust fund. In May 2007, Wellesley citizens voted yes overwhelmingly (a 68% yes vote) for a \$1.8 million debt exclusion override annually for ten years to fund their liability.

Newton is currently funding its pension liability. That funding will not be completed until 2028. One option is to appropriate nothing to the health care and life insurance liability until the pension obligation is fully funded or to appropriate minimal amounts until that time. The Citizen Advisory Group believes that strategy is not appropriate. It transfers to future Newton tax payers costs that are appropriately born by the current ones and fails to take advantage of the power of compounding that pre-funding permits. While Newton has been facing difficult funding decisions for a number of years, the City has an obligation, morally and fiscally, to find the funds to pay for its commitments to retirees. Waiting until the Commonwealth passes legislation to force municipalities to fund these liabilities (as it did with pensions) simply puts off until tomorrow payments that should be made today.

One of the important choices that the City of Newton has been making is to not set aside money currently for any of Newton's health and life insurance post-retirement benefits for employees that have already retired and for current employees who will eventually retire.

The Citizen Advisory Group strongly believes that Newton should address the commitments it has made to its employees for non-pension post-employment benefits with planning, prudence and fiscal responsibility. Just as Newton has been funding its pension liabilities, so too it should be funding its retiree health insurance liabilities.

Accordingly, the following steps are recommended:

1. Home Rule Petition: Immediately begin the process of submitting a home rule petition to the State legislature to set up a retiree health care and life insurance trust fund, or, alternatively, determine that the omnibus legislation signed by the Governor on January 10, 2009 (Chapter 479 of the Acts of 2008) is suitable for the purpose.

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<sup>4</sup> Special Commission to Investigate and Study the Commonwealth's Liability for Paying Retiree Health Care and Other Non-Pension Employee Benefits. "Reporting and Funding OPEB Liabilities." July 2008.

## 2. Unfunded Liability for Retiree Health Care and Other Non-Pension Benefits Task Force:

Immediately convene a task force including Aldermen and staff members, and perhaps citizens to analyze and make recommendations on the immediate issue of the unfunded liability for retiree health care and other non-pension benefits. The task force should be charged to address the following questions:

- The investment vehicle for holding the funds<sup>5</sup> and the management structure for overseeing it;
- The amount of the annual required contribution that should be funded now and over the next thirty years for both the annual costs and the amortized amount of the unfunded actuarially accrued liability;
- The source of funding for the annual required contribution (General Fund, debt exclusion override, general override or some combination of the three).

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<sup>5</sup> The Commonwealth may adopt legislation allowing local communities to invest these funds with the State's healthcare trust fund, providing access to top tier investment managers and investment in a larger pool of assets to increase returns

#### **4. Implement Operating Efficiencies**

##### **A. Consolidating the Parks functions of the current Parks and Recreation Department within the Department of Public Works (DPW).**

In the Citizen Advisory Group report on Revenues, the Citizen Advisory Group recommended that Newton:

Increase user fees to cover more fully the costs of recreational, community educational, and cultural programs with appropriate abatements for low income residents; and,

Consolidate these programs in one department to decrease costs, improve effectiveness and increase revenues.

The report went on to note:

Newton has a decentralized approach to providing community educational, recreational and cultural programs with the support of City funds. Many different departments create and promote programs with no central vision for Newton's overarching goals. Nor is there consistency in the amount of financial support for these programs from Newton versus degree of costs covered by user fees. There is no central clearinghouse where residents can find programs of interest. The lack of centralization results in the duplication of programs. While there are advantages to the current system (e.g., an entrepreneurial spirit results in a wide variety of programs), it also results in:

- Inconsistent policies towards user fees vs. tax supported programs within and across departments
- Administrative inefficiencies
- Program inefficiencies
- Marketing inefficiencies
- Insufficient funding for scholarships
- Insufficient use of private-public partnerships and support from individuals, corporations and foundations
- Unhealthy competition for teachers and space

The Citizen Advisory Group also thinks that there are opportunities to increase effectiveness and potentially reduce costs by having the Parks, Forestry and recreation vehicle maintenance functions of the current Parks and Recreation Department become a division within the Department of Public Works (DPW). Consolidation of related activities often leads to increased effectiveness and efficiencies. We hasten to note that we do not believe that the workforce in either the Department of Public Works or Parks and Recreation are underutilized. Everyone seems to be flat out. But, with eroding budgets, it is helpful to have a workforce that can be directed to the highest priority items at any given time.

The Parks and Recreation Department has a \$4.2 million budget. Within the department, there are four divisions: Administration (22% of the budget), Recreational Programs (24%), Parks

Maintenance and Vehicle Maintenance (66%) (approximately 18 people), and Forestry (10%)(approximately 2 people).

The Parks Maintenance division maintains approximately 1060 acres of land as well as playgrounds, school grounds, a burial ground, and all municipal grounds and recreation buildings. During the winter, they use contracted services to control snow and ice on the interior of: school grounds, City Hall, libraries, the police station, and Jackson Homestead. (Note: Interior means steps, walkways, and parking lots) Snow and ice control costs vary year by year depending on weather conditions. While budgeted for \$123,000 in FY09, it totaled over \$690,000 in FY08. (It is also worth noting that much of the maintenance of grass and fields as well as fencing is now outsourced by Parks and Recreation to private contractors.) The Recreation Vehicle Maintenance group consists of one person who takes care of non-automotive small equipment. (The name of this division is a misnomer; vehicle maintenance is done by the Department of Public Works.) The Forestry division has care and custody of approximately 30,000 public street trees. (Note: A number of years ago, the Forestry division was part of the Department of Public Works. Now it is part of Parks and Recreation. All forestry work is outsourced by the two managers in the division.) With both recreation and parks in the same department, communication about recreation activities that require park maintenance is fostered.

**Table 6**  
**Parks and Recreation Department:**  
**Parks, Forestry and Vehicle Maintenance Expenses (FY09)**

	Total Expenses	Personnel Expenses	Personnel Expenses as % of Total Expense	Non-Personnel Expenses
Parks and Recreation Administration*	\$718,297	\$692,913	96.5%	\$25,384
Public Grounds Maintenance	\$1,476,516	\$1,080,910	73.2%	\$395,606
Forestry Services	\$435,838	\$177,883	40.8%	\$257,955
Snow/Ice Control	\$123,620	\$31,320	25.3%	\$92,300
Vehicle Maintenance	\$197,721	\$60,283	30.5%	\$137,438
	\$2,951,992	\$2,043,309	71.2%	\$908,683
Total Parks and Recreation Dept.	\$4,201,584	\$3,393,705	86.0%	\$1,428,475

Note: Parks, Forestry and Vehicle Maintenance account for approximately 63% of the total Parks and Recreation budget less Administration so this is a pro-rated amount of the Administration cost (the total Administration cost is \$945,128)

The Department of Public Works has an \$18.6 million dollar. Within the department, there are six divisions: Administration (4.9% of the total budget), Engineering, Water/Sewer, Highway (which includes both Public Property Maintenance and Roadway Construction), Environmental Affairs, and Equipment Maintenance. Snow and ice control expenses vary from year to year depending on weather conditions. In FY08, snow and ice control totaled over \$2.75 million.

The demarcation of responsibilities between Parks and the Department of Public Works currently is usually clear but not always. In the summer months, DPW handles maintenance of “hardscape” (streets and sidewalks) while Parks maintains “softscape” (fields, parks, grass, trees, burial grounds, playgrounds, the grounds of public buildings, recreation buildings). In the winter months, DPW handles snow and ice on roads while Parks handles snow and ice on sidewalks, schools, and public buildings. Both the DPW and Parks subcontract much of the snow removal to outside contractors. The Parks Department maintains its own non-automotive vehicles (e.g., turf cat mowers) and equipment, areas outside the expertise of maintenance workers in the Department of Public Works. The Department of Public Works maintains 650 city vehicles and motorized equipment, including the Park and Recreation Department vehicles.. The coordination between the two departments sometimes creates friction but both Commissioners state emphatically that the departments have an excellent working relationship. Being in separate departments, there is little or no sharing of manpower and equipment. In those instances where efficiencies could occur, they are not. For example, manpower could be directed toward removal of snow and ice on sidewalks in the early morning and then re-directed to roads later in the day. When leaves have fallen, additional workers could be directed to raking and then re-directed to finishing construction projects. There are opportunities both to improve effectiveness and reduce costs.

To actualize these efficiencies would require job descriptions in both departments to be re-written to make them more versatile and interchangeable. At the moment, the job descriptions are quite distinct and a person who rakes leaves would not be allowed to help on pothole filling, for example. Re-writing job descriptions requires negotiation with the relevant unions.

It is not unusual to have the responsibility for parks within the Department of Public Works. Arlington, Belmont, Brookline, Lexington and Wellesley are organized in just such a manner. Parks and Recreation is justifiably proud of their deep commitment to public lands and trees. This commitment can continue even while being a division of Public Works rather than Parks and Recreation.

**Table 7  
Comparison of Organization Structure of Park Activities**

	<b>Within Department of Public Works (DPW)</b>	<b>Stand Alone Department</b>	<b>Notes</b>
<b>Newton</b>		<b>x</b>	<b>Stand alone Parks and Recreation Department</b>
Arlington	x		Parks and Fields Division within DPW; Separate Recreation Department
Belmont	x		Parks and Facilities Division within DPW; Separate Recreation Department
Brookline	x		Parks and Open Space Division within DPW; Separate Recreation Department
Framingham		x	Stand alone Park and Recreation Department
Lexington	x		Parks, Forestry and Cemetery Divisions within DPW; Separate Recreation Department
Natick		x	Stand alone Recreation and Parks Department
Needham		x	Stand alone Park and Recreation Department
Wellesley	x		Park and Highway Division within DPW; Separate Recreation Department

While this recommendation requires further study, the Citizen Advisory Group is convinced it will improve effectiveness and increase efficiency. While based only on limited information, we fully expect savings of at least \$100,000 (headcount reductions would have to be studied in much greater dept but we estimate at least two people).

#### **4. Implement Operating Efficiencies**

##### **B. Improving payroll management efficiency by converting the City payroll from a weekly to a biweekly cycle and the school payroll from bimonthly to biweekly.**

The Director of Human Resources reports that there are 900 city employees; about 10% are non-union managerial staff and the remainder are unionized in seven different unions. Employees are paid weekly. The Treasurer reports that an average of 1,350 paychecks is issued per week.

On the school side, there are 1,400 active employees, almost all represented by 10 different unions. School employees are paid bimonthly. The Treasurer reports that there is an average of 2,100 paychecks issued per bimonthly school payroll.

The higher number of checks issued by the Treasurer compared to the head count noted by the Human Resources Director reflects (a) temporary and part-time workers, (b) contractual provisions that require certain payments to be rendered in a second pay check, and (c) some school employees who are paid on a weekly schedule.

Payroll administration is a complex undertaking involving considerable expertise. It requires ensuring compliance with personnel rules and regulations, accuracy of pay rates, retroactive pay changes, compliance with federal and state laws, knowledge of complex rules governing taxable and non-taxable income, accuracy of deductions for the employee payroll deduction portion of various benefits, timely and accurate payment of federal and state income tax withholding, proper computation of termination pay and paid leave accruals, ... the list could continue at greater length.

*Recommendation:* Convert city payroll from weekly to biweekly cycle.

The weekly pay cycle on the city side can be altered to a biweekly cycle with considerable savings – of both direct and indirect costs. Considerable time is devoted to payroll management in the Treasurer's office and in the Information Technology office with additional related time and effort in the Comptroller's office and the Human Services Office. In addition, the direct banking transaction costs related to the issuance of 1,350 pays per week is not inconsequential.

With some 70,000 payroll items per year reduced to 35,000, and making a rough estimate that the direct and indirect cost of issuing a paycheck amounts to at least \$5, the possible savings – primarily in equivalent time savings for the administrative staff, not cash savings – could be as much as \$140,000 annually. Changing the pay frequency could save the equivalent of at least one full-time equivalent (FTE) position and possibly 2 FTEs throughout the organization, staff time that could be redirected by these various offices and by operating department staff to more productive endeavors. While no city position would be eliminated, the time savings throughout the departments and in the central administrative functions related to payroll will be significant. Communities that have already made this conversion report significant workload reduction related to payroll administrative efforts.

Certainly, payroll administration is an important – even critical – function, but many communities in recent years have recognized the cost impact of weekly payroll processing and have shifted to less frequent payrolls. Such action is permitted by MGL, Ch. 149, s. 148 as amended in 1993 (Ch. 110)

and as was further clarified by the Municipal Relief Act, Ch. 46 of the Acts of 2003 amending MGL, Ch. 41, s., 41. Unless a weekly pay cycle is required in existing collective bargaining agreements, there is no requirement that a change in the pay frequency must be subject to collective bargaining. However, MGL. Ch. 149, s. 148 requires that 90 day notice be given to affected employees, and the numerous municipalities that have made this change have found it helpful to “meet and confer” with employee groups during this 90-day period to respond to all possible questions. In almost all cases, the transition has been uneventful.

*Recommendation:* Convert school payroll from bimonthly to biweekly

The school department is not a separate employer in the eyes of the state and federal government. Accordingly, it falls to the Treasurer to coordinate city and school payroll data and to make payment of tax withholdings to the state and federal government on strict time schedules. Failure to do so, or even the slightest clerical error, is penalized punitively and virtually without recourse. The federal government, in particular, appears not to have heard of the concept of human error.

In light of this exacting and harsh environment, it would facilitate the Treasurer’s task if the payroll schedules of the city and school department could be perfectly aligned on a common schedule. Tax withholding obligations could then be consolidated and paid on a fixed schedule for the combined payrolls, resulting in greater efficiency and less chance of error.

While it is correct to note that the City could change its current weekly schedule to bimonthly, the merits of a predictable and standard pay day as the same day of the week at biweekly intervals may be more desirable from the perspective both of the departments that are integrating payroll reporting into their routine work schedules and of the employees who would also benefit from a pay-day schedule that does not wander around the week from month to month.

The first priority, therefore, is to change the city departments’ pay schedule from weekly to biweekly. The second priority, and perhaps the more challenging one, is to make the city and school pay cycles uniform. The efficiency of payroll operations will be enhanced by both steps. Direct and indirect cost savings will be worth the effort.

#### **4. Implement Operating Efficiencies**

##### **C. Analyzing regularly all capital investments on a life-cycle cost basis.**

Newton should require life cycle assessment for the evaluation of all investments over a designated value or set of criteria such vehicle purchases. Under the current financing and cost assessment approach, investments of all sizes are generally evaluated using only the upfront cost (initial capital outlay). Some projects do assess the payback when a cost-benefit is relevant. However, when assessing various options for purchase or investment, the entire cost of the purchase should be determined for the decision. This overall cost is known as the life cycle cost and includes upfront cost, operating cost over the life of the system purchased, and the disposal cost when the system expires. Using life cycle assessment in the decision-making process would ensure that decision makers can evaluate the cost, not just from the initial outlay, but over the life of the product/system.



#### **4. Implement Operating Efficiencies**

##### **D. Pursuing outsourcing opportunities**

Outsourcing can provide a very effective, inexpensive, and flexible option to sourcing a service internally. Since market pressures influence outsourced services, it ensures that the City is getting services for the rate that the market demands. It also allows the City to manage fluctuations (seasonal or otherwise) in workforce needs without having to manage excess resources during slow times or to pay excessive overtime during busy periods. Finally, outsourcing allows the City to capitalize on technology improvements without having to actually invest in the technology directly. For example, the City is investigating automated trash collection, which has the potential to push the overall cost of trash collection down. If the City was collecting trash internally, it probably would not have the capital to invest in this technology. However, since it is an outsourced service, the City can realize the benefits without having to invest in the technology.

For these reasons, Newton should rigorously pursue all opportunities to outsource when the financial or operational benefits outweigh the costs. To do this effectively, the City must first develop and maintain a financial framework/tool to help its managers effectively estimate the complete cost of its employees. This financial framework would account for benefits, pensions, overhead, and any other associated costs that would be incurred now or in the future by the City employees for the work. It would also account for the full cost of assets including maintenance, utilities, storage, and disposal costs of the asset. This would ensure that the two options must be compared on equal footing to ensure that all costs are being considered.

Once a tool has been developed, the managers should maintain a list of outsourcing opportunities within his/her department. Each manager should report the three (or more) best opportunities for outsourcing with his/her annual reporting or reviews. This would ensure that the outsourcing remains a focus of each manager.

In conjunction, the City should also develop a system that accounts for savings that extend beyond the decision maker's departmental budget. This is a separate issue that must be addressed at the top level. There are often savings that stretch across multiple departments that must be considered. Each manager should also address this component in the reported opportunities. Collaboration between departments should be encouraged at the highest level to realize the greatest benefit.

Over time, certain services have been outsourced (e.g., trash management, cleaning catch basins, and forestry services). These decisions have been made primarily as cost reduction efforts but also to increase service quality. Potential areas for outsourcing might include information technology support, custodial services, parking meter officers, building maintenance functions, and street light maintenance.

#### **4. Implement Operating Efficiencies**

##### **E. Reducing procurement costs.**

The Purchasing Department consists of six employees who perform the procurement, mailroom and print shop functions for the city's various departments. All purchases for all departments in Newton are made through the Purchasing Department. Even the School Department, which has three purchasing employees who coordinate purchasing for the schools, funnels its orders into the Purchasing Department so the City can consolidate purchases wherever possible to achieve the best possible price. The department completes approximately one hundred public bids and over seven thousand purchase orders of procured goods and services per year.

The Citizen Advisory Group recommends developing a set of procurement guidelines or "best practices" to follow when seeking all bids to reduce procurement costs. These guidelines or best practices might include:

- Putting items out to bid whenever possible. A competitive bid process will almost always yield the best result for the city. Newton already takes advantage of rates negotiated on a consolidated basis for items wherever possible (office supplies, cleaning services, fire equipment, ammunition, etc.). The department generally puts other items of any size out for bid. There are 32 exemptions in the department that do not currently need to be bid out per the department's mandate. The City should evaluate each of these items to see whether a bid process might be warranted. For example, currently school textbooks do not need to be put out for bid. It is possible the city could realize substantial savings by putting as many of these 32 items out for bid as possible.
- Evaluating the number of suppliers of each key product or service, generally targeting to have two or more suppliers wherever possible. While consolidating purchasing into one supplier can create some savings, it creates costs as well. If the city becomes dependent on one supplier for any key supplies, that creates two problems. First, if anything happens to that supplier it can cause a delay in getting the required equipment. Second, the best prices are able to be negotiated when multiple suppliers fight for business to keep each other in check. Our understanding is that most key products and services have multiple suppliers, although many do not. A refreshed evaluation of a supplier strategy makes sense given the current environment.
- Establishing a clear set of bid guidelines for the writing of bids. Suppliers will bid specifically based on what a bid summary says. The Citizen Advisory Group notes that, based on our interviews, there is a wide range of quality in the request for proposals ("RFP") made by the city. A poorly written RFP can lead to increased costs down the line as contractors or suppliers add addenda for contingencies they had not considered at the time of the bid.

The cost-saving potential of these steps has not been quantified, by the Citizen Advisory Committee submits these ideas as worthy of implementation.

#### **4. Implement Operating Efficiencies**

##### **F. Resolving long-term issues regarding:**

###### **i. Reducing minimum staffing requirements on fire engines to one officer and two firefighters year-round, instead of for nine months of the year**

As with most cities, the Newton Fire Department has minimum staffing levels for each engine in its fleet. These staffing levels are determined in a negotiation between the City and the firefighters' union (in the case of Newton, facilitated by an arbitrator). Newton has a fleet of six fire engines and three ladders. Each engine has a minimum staffing level that varies depending on the time of the year. From January-March, each engine requires at least one officer and *three* firefighters; from April-December, only one officer and *two* firefighters are required. This varied minimum employment level depending on the time of the year makes cost-efficient staffing of the engines very difficult. The Fire Department has tended to pay firefighters overtime to meet this increased staffing demand from January-March. In fact, \$1.4 million of the Fire Department's budget is spent on overtime and approximately half of this amount is estimated to be spent as a result of this increased level of minimum staffing in January-March. Newton is the only fire department in the Commonwealth that has two different workforce load requirements depending on the time of year. In Massachusetts, only Cambridge, Boston and Brookline operate with four employees per engine. Most towns use three. (Watertown and Wellesley use two.)

The Citizen Advisory Group notes that this (a) involves the issue of public and firefighter safety (and potentially insurance rates) and (b) would require a contract change with the union. The current firefighters' contract expires in July 2009. Given the hefty cost of overtime associated with having two different load requirements, the Citizens Advisory Group recommends that the City consider strategies to try to secure 3-person staffing year-round during the next contract negotiation.

The cost savings potential is approximately \$700,000.

#### **4. Implement Operating Efficiencies**

##### **F. Resolving long-term issues regarding:**

###### **ii. Eliminating the fire call box system**

Newton has a fire box system that enables residents to contact the Newton Fire Department in an emergency even if phone lines or cell phone service is not working. The system is a series of red boxes each with a pull-handle that, when pulled, transmits a signal via telegraph to the Newton Fire Department.

The fire call box system was first mass-produced in the 1860's by Gamewell Company, which was based in Newton (and is now owned by Honeywell International). In the early 1900's, these systems were installed in 500 cities or towns across the country. More recently, however, because of the prevalence of other forms of communication and the 911 communications system, many municipalities have chosen to dismantle or stop supporting the systems (as described in a *Boston Globe* article called "Boston Stands by its Fire Alarm System" on January 6, 2008, from which we have borrowed some of the history). Atlanta, Baltimore, Chicago, Dallas, Los Angeles, Philadelphia, Pittsburgh, Sacramento, St. Louis and Washington D.C. have all retired their systems along with several smaller towns in Massachusetts including Cohasset, Foxborough, Franklin, Scituate, Weymouth and Wrentham. Although Honeywell no longer manufactures the systems, it will support existing ones and several cities do continue to use their systems, including Boston, Cambridge, Brookline, Providence and New York City.

The systems are very costly to maintain. The employee time used for maintenance, the cost of rare replacement parts and the possible increase in false alarms may cost Newton several hundred thousand dollars a year. Sacramento estimated that they saved up to \$500,000 per year by retiring their system and Boston estimates that they spend \$1.8 million per year to maintain their system. Newton does receive fees from many buildings to offset the costs of maintaining these fire boxes. If Newton decides to consider retiring its fire call box system, the City should undertake a full costing analysis to determine how much money would be saved if the system were to be taken out of service.

These boxes do provide added safety in the event of a cell phone, telephone or power outage. As a result, we consider this item as a choice facing the city - money could indeed be saved by eliminating the system, but an extra layer of service and security would be eliminated as a result.

The potential savings is approximately \$200,000.

#### **4. Implement Operating Efficiencies**

##### **F. Resolving long-term issues regarding:**

##### **iii. Decreasing snow plowing standards**

The Citizen Advisory Group recommends the City of Newton consider a lower level of plowing standards in an effort to reduce its street plowing costs. The City currently has a black streets policy: “Black roads on 100% of roads for 100% of snow falls.” This is extremely expensive. The average annual expenditure for snow removal over the past five years is about \$2.5 million. The policy requires the salting of all roads in the City within a very short period of a snow/ice event. While this is convenient for residents, it comes at a substantial cost, as it requires more materials (sand and salt) as well as extensive overtime pay for plow drivers.

The City could reduce its costs in this area by lowering its plowing standards. For example, it could have a black roads policy for all primary roads and a lower level of clearing for all secondary streets. More specifically, salting and sanding could be eliminated on secondary streets unless conditions are icy. This would result in substantial savings. Another option is to use less overtime to clear roads by having roads cleared over a longer period of time.

The Public Works Director should be asked to analyze the potential savings that could be achieved by reducing snow plowing standards; the CAG considers that savings in the range of 5%-10% of annual costs is conceivable. This would represent \$125,000 to \$250,000 in a typical year.

#### **4. Implement Operating Efficiencies**

##### **G. Investing now to achieve future savings:**

###### **i. Increasing funding for communication and information technologies to facilitate a more efficient marshalling of resources on a daily basis**

Investment in information technology (IT) is a primary means to gain efficiencies in a service organization like the City's operations. It is critical that the City actively leverage IT to ensure that it can attain greater efficiencies in the future. To do this, the City must; (1) allocate a designated portion of the annual budget to the continuous investment into information systems and technologies; and (2) bring all IT personnel and departmental appropriations under the direct supervision of the IT department. These actions will enable the IT department to effectively implement new systems across the City and ensure that the systems are developed and maintained in the most cost-effective manner possible.

The annual budget for information technologies should be augmented by an additional amount (to be determined) that will enable the continuous renewal and updating of technological tools needed in the day-to-day operations of all city departments. This funding source would allow for direct targeting of efficiency measures through information systems. In general, this effort should focus on assessing processes in each department and determining where information systems could eliminate redundancies and inefficiencies.

Some software has already been installed that has improved efficiencies and effectiveness, and this effort would accelerate these initiatives. For example, financial software packages have been installed to eliminate the need for redundant data entry. This has resulted in fewer errors and less time needed to complete the specific tasks; ultimately reducing the number of employee hours needed to complete certain tasks. Similarly, Purchasing has developed and launched an on-line, Open Bid software system that has dramatically reduced the number of phone calls that they must manage with interested bidders/contractors for each project. They have also expanded this to posting the winning bids, which has further reduced the need for managing phone calls from bidders who had submitted.

Newton should also consolidate technology personnel and funding from all individual departments. This would have broad reaching implications. First, it would enable the IT Director to ensure that all hardware, software, and infrastructure are compatible and based on selection criteria that minimize overall operating costs and maintenance of the systems over their lives. Second, it would enable the IT Director to have resources devoted specifically to proactive operational improvement opportunities both intra- and inter-departmentally. Finally, it would allow the IT Director to move resources across the various roles as there are fluctuations in needs within the IT department. Currently, the resources are spread across departments, so there is no ability to harness a resource or prioritize IT needs.

With this consolidation and funding allocation, it would be critical for the IT Department to develop a comprehensive IT plan for the City, which would be reviewed and reassessed every year. This would ensure that priorities are set and aligned with specific departmental needs. The plan would also be a major component to the City's efforts to develop efficiencies and eliminate redundancies in its operations; moving from an IT department equipped principally to be reactive to one that has a very strong proactive strategic plan.

#### **4. Implement Operating Efficiencies**

##### **G. Investing now to achieve future savings:**

###### **ii. Hiring a budget analyst to facilitate the continuous search for operational efficiencies and efficiency planning, oversight of budget appropriations, and long-term planning**

The Citizen Advisory Group recommends Newton create a new position of Budget Analyst to be supervised by the Chief Administrative Officer.

In our interviews, we found many worthwhile ideas circulating from many sources. Our attention could be given to only a handful of the most promising ones, but the process of digging deeper into city operations and finding improvement opportunities is a continuous one that requires the attention of full-time professional staff. Our anecdotal information about communities that have added a Budget Analyst position suggests it will more than pay for itself in relentlessly identifying and acting upon cost-saving opportunities from a data-based foundation.

#### **4. Implement Operating Efficiencies**

##### **H. Allocating greater decision authority to Department managers by removing restrictions on the authority of department heads to shift budgeted funds between “personnel” and “operating” categories so that all least-cost options that arise during the course of the year can be pursued promptly and efficiently.**

This recommendation applies to all municipal departments but we will use the Police Department as an example.

The Newton Police Department \$16.5 million budget is divided into two areas: (1) personnel (\$15.4 million, which includes salaries and benefits) and (2) operating expenditures (\$1.1 million, which includes all capital spending and non-personnel expenditures). The Citizen Advisory Group notes that once the department’s budget is set, the department can move funds around *within* these two categories (for example, from one type of personnel expense to another), but not *across* these two categories (for example, hiring one fewer officer but instead spending that money on technology that might save costs over the long run). Any funds that need to be moved from personnel to operating costs, or vice versa, requires the approval of the Board of Aldermen.

We believe that this restriction is unnecessary and counterproductive. It provides the illusion of tight financial controls but works against the objective of managing the municipal budget for outcomes. The attention of senior department managers and city administrators ought to be fully concentrated on the management of results within the overall departmental spending authority granted by the adopted budget, not on the management of budget line items.

Organizations tend to run most efficiently when the managers with the most information also have “decision rights” on how to utilize given resources based on that information. In this case, the Aldermen not only determine the allocation of funds to the Police Department (which is sensible), but they also govern (and, potentially, hinder) the utilization of these funds in a very specific way.

Controls should of course remain in place regarding allocation of funding to permanent and temporary staffing levels, but these controls should be exercised by the executive branch rather than the legislative branch of the city government.

#### **4. Implement Operating Efficiencies**

##### **I. Investigating regionalization opportunities**

Newton has a large enough population and City government to typically realize economies of scale within the City's own operations. However, this should not rule out investigating any opportunities to realize efficiency gains by consolidating certain functions with surrounding communities. Some activities may lend themselves to this type of regionalization to drive down the cost of the service. Some potential areas to consider include property assessments, dispatching, tax collection, and health services. The City should be in regular communication with other communities to investigate potential opportunities.



## 5. Invest in Energy Efficiencies

These energy cost saving opportunities may seem small on an individual basis but collectively the combined effect can be significant. They include banning incandescent bulbs in public buildings, replacing gas burning streetlights with high efficiency bulbs, requiring the Energy Star rating on all applicable purchases, providing an energy-saving training program for appropriate City employees, and implementing a comprehensive recycling program for all municipal operations. In addition, Newton should investigate the opportunity of becoming a customer for peak demand management companies, thereby reducing demand and potentially providing energy on-site through cogeneration.

The City of Newton spends over \$3 million on utilities every year:

**Table 8**  
**FY09 Utilities Budget**

Electricity	\$1,453,637
Natural Gas	\$344,350
Water & Sewer	\$169,517
Heating Oil	\$429,556
Gasoline	\$581,615
<u>Diesel</u>	<u>\$230,606</u>
TOTAL	\$3,209,281

Source: Comptroller's memorandum dated May 9, 2008

The City has already completed some valuable cost saving measures that have resulted in dramatic reductions in energy costs. For example, under the guidance of the Energy Engineer, it has replaced the traffic lights with LED's, replaced streetlights with high efficiency bulbs, and invested in high efficiency mechanical systems for various buildings.

With the rising and highly volatile cost of energy, it is critical that the City continues to reduce its energy consumption. Not only will this allow the City to bring down operating costs, but it will also reduce the uncertainty in forecasting one of the most fluctuating items in its budget.

In order to reduce the energy costs, the City must address various short- and long-term options. Some of these options require investment in more energy efficient equipment, but in almost all cases, the payback on these items is well under five years. With this in mind, the following energy conservation strategies should be considered.

### Incandescent Bulb Ban

*Recommendation:* The City should consider creating a policy that bans the purchase of energy inefficient, incandescent bulbs.

The School Operations Department, Public Buildings Department, and the City's Energy Engineer have implemented various programs to replace many buildings' interior light bulbs with compact fluorescent bulbs. City Hall, for example, now uses compact fluorescent bulbs. These bulbs, while substantially more expensive to buy than incandescent bulbs, have a payback that is measured in mere months due to their dramatic reduction in energy use. While removal of many incandescent bulbs has been effective in reducing lighting costs, it is not a required by City employees when purchasing bulbs. This policy would ensure that the practice is a permanent one with long-term cost saving implications

*Estimated Savings:* Compact fluorescent bulbs reduce building lighting costs by 75% typically.

#### Energy Star Equipment/Appliance Purchasing

*Recommendation:* The City should require an Energy Star rated system or product for any purchase that has the option.

*Description:* The City purchases a variety of products every year that have direct operating cost implications. These products include appliances, heating and cooling systems, electronics, office equipment, lighting products, and other service equipment. The Energy Star Program has rated all of these categories of products and identified the most efficient with the Energy Star. To ensure that the City is buying the most energy efficient systems, all products that fit in the specified categories should be required by mandate to have the Energy Star rating, otherwise they could not be purchased.

#### Life Cycle Costing

*Recommendation:* The City should require life cycle assessment for the evaluation of all investments over a designated value or set of criteria.

*Description:* Under the current financing and cost assessment approach, investments of all sizes are evaluated using only the upfront cost (initial capital outlay). Some projects do assess the payback when a cost-benefit is relevant. However, when assessing various options for purchase or investment, the entire cost of the purchase should be determined for the decision. This overall cost is known as life cycle cost and includes upfront cost, operating cost over the life of the system purchased, and the disposal cost when the system expires. Using life cycle assessment in the decision-making process would ensure that decision makers can evaluate the cost of a specific decision, not just from its initial cost, but over the life of the product/system.

The Capital Cost Structure Report has more detailed recommendations and a case study to showcase the value of this technique.

#### Energy Training Program

*Recommendation:* The City should implement an energy-training program for appropriate City employees and staff who work in City buildings.

*Description:* The mechanical systems in City buildings often have complex user interfaces for heating, air conditioning, lighting, and other building climate systems. Studies have shown that most buildings are not used as they had been intended and the result is wasted energy. These energy training programs ensure that occupants understand how to use the various mechanical systems most effectively and efficiently. This type of training should also be an integral part of new employee training to ensure its on-going effectiveness.

*Estimated Savings:* Studies have shown that a comprehensive energy-training program for building occupants will reduce energy costs by 20% and improve the overall comfort of the indoor environment.

#### Recycling Implementation

*Recommendation:* The City should implement a comprehensive recycling program for all of the municipal run areas of the City including schools, parks, recreation areas, libraries, and other municipal buildings.

*Description:* The City has a comprehensive recycling plan for all residents for their curbside pickup. This program results in approximately 40% of the trash being diverted into recycling, which is far less costly for hauling. However, the City does not have required recycling at any municipal buildings. Some schools voluntarily separate trash and put their recycling curbside for pickup with the residents. However, in general, an intensive and coordinated effort to implement a recycling program has not been developed.

*Estimated Cost Savings:* Recycling diversion is 35% less per ton on average than standard trash disposal.

#### Replace Gas Burning Streetlights with High Efficiency Bulbs

*Recommendation:* The City should replace the gas-burning filament in the historic streetlamps scattered across the City with a high efficiency bulb.

*Description:* The City still has a small percentage of historic, gas-burning streetlights scattered throughout the City in historic areas. These natural gas lamps are extremely inefficient, as well as ineffective. These light filaments can be replaced with much higher efficiency bulbs that will not affect the overall historic look of the lamps. Such an effort is underway on Farlow Hill. To make the change requires the running of electricity to each lamp. However, the payback on such an effort will be favorable and should be pursued.

#### Peak Demand Provider

*Recommendation:* The City should investigate the opportunity of becoming a customer for peak demand management companies; reducing demand and potentially providing energy on-site through cogeneration.

*Description:* Peak energy is the period when energy is most expensive for utilities to generate. It is typically identified as a period of hours each day over the highest 40 days of energy consumption each year. This energy can often be three times as expensive to generate for the utility company. As a result, peak demand management companies contract with utilities to reduce the peak energy consumption and contract with energy users to reduce their usage at any peak demand period. This reduction saves the utilities money, which is shared amongst the utility, the peak demand management company, and the energy reducer. When the utility is approaching its peak demand, it notifies the peak demand management company, which in turn automatically and manually reduces energy demand through its client (the energy users).

Given the City's energy profile and usage, it is likely to benefit from contracting with a peak demand company. For example, it could reduce load through raising thermostats slightly in the summer and reducing lighting load. It could also provide power to the grid through on-site combined heat and power systems. This would be an opportunity to generate some revenues, reduce energy costs, and provide a positive environmental impact.

## 6. Shift Appropriate Costs from the Tax Base to User Fees

We reiterate here some recommendations in the Citizen Advisory Group report on Revenues for shifting some municipal costs currently paid for by taxes to user fees, as they bear not only on the revenue stream but also in important ways on the efficient allocation of resources and thus may lower costs while simultaneously generating revenue.

### A. Implement a Pay as You Throw (PAYT) Trash Program

Implement a “Pay As You Throw” (PAYT) trash collection regime requiring residents to pay only for trash services they use and encouraging increased recycling.

*Municipal revenue enhancement and cost savings -- \$1.0 to \$6.8 million annually*

The Citizens Advisory Group urges the Mayor and Board of Alderman to adopt a complete Pay As You Throw (“PAYT”) program to make the Garden City truly become a green city. With appropriate protections for low-income residents, Pay As You Throw promises an equitable and efficacious way to increase municipal revenues by 2% while attaining valuable environmental goals. While this is the largest potential revenue strategy identified by the Citizen Advisory Group, no proposal is likely to be more controversial. Nevertheless, Pay As You Throw is potentially able to simultaneously increase municipal revenues while meeting the socially desirable goals of reducing solid waste and increasing recycling.

Currently, Newton spends \$6.8 million annually (about \$250 per household) to collect and dispose of residential trash although there is no legal obligation for Commonwealth municipalities to either collect or dispose of municipal waste. In fact, local policies vary widely though 59% of Massachusetts’s Massachusetts municipalities have implemented Pay As You Throw programs. For example, locally, Wellesley has no trash collection, requiring residents to contract for collection privately or bring their own trash to Wellesley’s “dump.” Needham has no public trash collection and charges residents \$1.50 for each 30 gallon bag they bring to Needham’s Recycling and Transfer Station. In addition, Natick, one of CAG’s Core Benchmarking Communities, has had PAYT in place since 2003.

According to the Massachusetts Department of Environmental Protection (MA DEP), Pay As You Throw (PAYT), also known as unit-based or variable-rate pricing, is a system in which residents pay for each *unit of waste discarded* rather than paying a fixed tax per residential household.<sup>6</sup> Recycling is encouraged and is entirely free. It is equivalent to putting a price tag on each container of trash that is placed at the curb for disposal. As residents pay directly for waste disposal services, they have a financial incentive to reduce their waste through recycling, composting, and source reduction. As with other utilities such as water and sewer, oil and gas, or electricity, residents can reduce their bills and not subsidize their neighbors. In addition, residents can clearly see the cost savings associated with innovations like automated trash collection which should foster greater support.<sup>7</sup>

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<sup>6</sup> See the Appendix for a discussion of User Fee vs. Taxes.

<sup>7</sup> Newton’s Department of Public Works has recommended fully automated trash collection as it would produce cost savings of \$1 million annually or a 15% reduction in cost. Automated trash collection is widely used with established methods and technologies. Nevertheless, the Board of Aldermen, reflecting concerns of constituents, only permitted DPW to begin a limited six-month trial involving just one-sixth of the City in November 2008.

## **6. Shift Appropriate Costs from the Tax Base to User Fees**

### **B. Increase User Fees for Recreation, Community Education and Cultural Programs**

Increase user fees to cover more fully the costs of recreational, community educational, and cultural programs with appropriate abatements for low income residents including, but not limited to, Gath Pool and Crystal Lake, summer camps, and playing fields. Consolidate these programs in one department to decrease costs, improve effectiveness and increase revenues.

*Municipal revenue enhancement -- \$100,000 - \$500,000 annually*

Newton should more thoughtfully determine how much of the full cost of recreation, community education, and cultural programs should be covered by user fees and also increase the amount of funds available for scholarships to ensure access for low income residents.

Newton has a decentralized approach to providing community educational, recreational and cultural programs with the support of City funds. Many different departments create and promote programs with no central vision for Newton's overarching goals. Nor is there consistency in the amount of financial support for these programs from Newton versus degree of costs covered by user fees. There is no central clearinghouse where residents can find programs of interest. The lack of centralization results in the duplication of programs. While there are advantages to the current system (e.g., an entrepreneurial spirit results in a wide variety of programs), it also results in:

- Inconsistent policies towards user fees vs. tax supported programs within and across departments
- Administrative inefficiencies
- Program inefficiencies
- Marketing inefficiencies
- Insufficient funding for scholarships
- Insufficient use of private-public partnerships and support from individuals, corporations and foundations
- Unhealthy competition for teachers and space

The Citizen Advisory Group recommends Newton:

1. Develop a thoughtful policy about degree of tax subsidization vs. user fees for each of the community educational, recreational and cultural programs.
2. Consider creating a Culture, Recreation and Community Education Department unifying Recreation from the Parks and Recreation Department, Community Education from the Schools Department, the Newton History Museum and other cultural, recreational and community education programs from other departments to decrease costs, improve effectiveness and increase revenues.
3. Significantly increase scholarships for low-income residents to maintain universal access.

## Summary and recapitulation

Finally, we want to highlight and reiterate the fact that our recommendations must be understood in the context of the existing authority to implement them:

- Some are within the existing authority of Newton’s executive and legislative branches of the city government to execute;
- Some would require changes in future collective bargaining agreements with unions;
- Some would require state legislative action and/or Home Rule petitions from the Newton city government to the state legislature.

To gain the most benefit from this report, several steps should be taken. First, efficiencies described in this report (#4, items A-F, and #5) should be verified with the relevant City staff and then pursued. We believe that these opportunities will come at no cost to the City, will not be detrimental to the associated services, and will reduce the operating costs in the identified areas.

Second, the investment opportunities (#4, item G) should be vetted further and examined to determine the exact return on investment with City staff. Then all opportunities identified that provide a payback that is better than the cost of capital should be pursued immediately. These investments will result in long-term operating costs for the City.

Operating efficiencies that we were able to quantify sum to a savings range of \$1,265,000 to \$1,390,000:

	<u>Savings estimate</u>
4A – consolidate Parks functions	\$100,000
4B – adjust payroll frequency	\$140,000 (mostly non-cash)
4Fi – fire minimum staffing	\$700,000
4Fii – eliminate fire call box system	\$200,000
4 Fiii – snow plowing	\$125,000 - \$250,000

The greatest potential savings exist in reconsidering employee compensation and in the employee benefits area. Joining the Group Insurance Commission may offer considerable savings (\$1 to \$6 million), depending upon the results of the required coalition bargaining process. But even the GIC option will not resolve the problem of employee group health insurance cost increases annually outpacing the City’s normal revenue growth rate. Significant change in this area will require fundamental changes in state laws regarding how eligibility is determined and how plans are designed, along with the difficult topic of how much the city can afford to contribute to its active employees coverage (the subject of collective bargaining for most employees) and to its retirees.

The Municipal Cost Structure Committee has recommended several areas in which higher levels of spending are urged. This may appear to be at cross purposes to the mission, but in fact it is our conclusion that certain expenditures may be required in order to set the stage for

future efficient operations (technology), to internalize the continuous identification of operating improvements (hire a budget analyst), or to better manage a long-term liability that will not go away simply by temporarily ignoring it (OPEB funding, an area that has an enormous price tag, currently \$22 million annually).

Finally, two municipal service areas should be moved from the tax base to full user fee support (with some provision for subsidized rates for low-income residents). Trash collection should be converted into a “Pay As You Throw” program, with a tax and cost saving impact ranging from \$1 million to almost \$7 million annually. User fees should fund appropriate recreational, community educational and cultural programs, increasing municipal revenues by an estimated \$100,000 to \$400,000 annually.

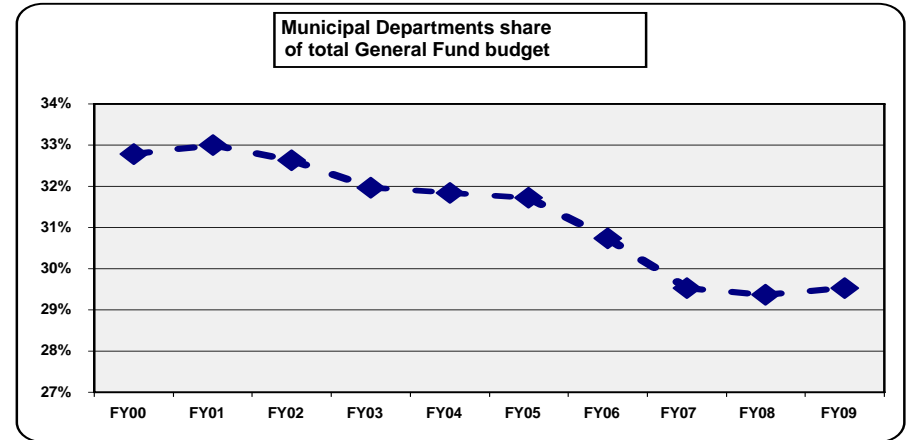
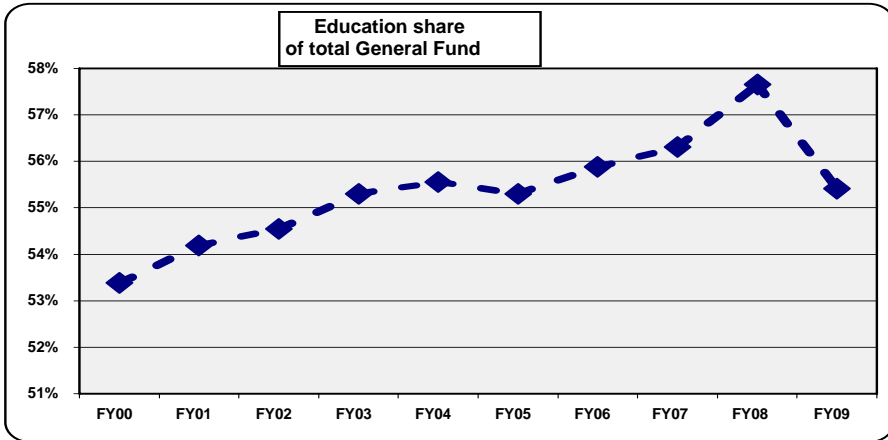
### **Thanks**

The Committee expresses its appreciation to the many city officials, department heads, union representatives, current and former Aldermen and citizens who shared ideas with us and helped us to gain a deeper understanding of city operations. We acknowledge in particular the generous assistance and patient feedback provided by the Chief Administrative Officer, Sandy Pooler, and by the City Comptroller, David Wilkinson. Any errors or omissions in this report are, however, the sole responsibility of the committee. We welcome further feedback and correction from readers.

## Appendix 1: Municipal Government Departments share of total budget - History FY00-08 - actual expenditures, FY09 Budget

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	Budget FY09
General Government	\$9,737,015	\$10,826,003	\$10,775,258	\$11,283,075	\$11,797,954	\$11,949,508	\$11,976,662	\$12,005,616	\$12,869,213	\$13,038,632
Public Safety	\$23,366,880	\$26,064,683	\$28,716,622	\$29,268,549	\$29,966,945	\$29,740,137	\$30,068,050	\$30,699,871	\$31,150,150	\$37,430,097
Public Works	\$15,518,200	\$17,445,836	\$16,431,772	\$18,155,841	\$18,293,423	\$20,148,173	\$19,263,826	\$18,364,315	\$19,871,674	\$20,469,570
Health & Human Services	\$2,291,133	\$2,568,941	\$2,604,095	\$2,811,454	\$3,069,951	\$3,075,274	\$3,137,962	\$3,198,602	\$3,486,798	\$3,720,151
Culture & Recreation	\$7,384,552	\$8,231,510	\$8,107,655	\$8,765,001	\$8,959,792	\$9,751,169	\$9,699,748	\$9,573,179	\$10,430,886	\$9,781,803
<b>subtotal</b>	<b>\$58,297,780</b>	<b>\$65,136,973</b>	<b>\$66,635,402</b>	<b>\$70,283,920</b>	<b>\$72,088,065</b>	<b>\$74,664,261</b>	<b>\$74,146,248</b>	<b>\$73,841,583</b>	<b>\$77,808,721</b>	<b>\$84,440,253</b>
Education	\$94,934,131	\$106,951,501	\$111,385,998	\$121,587,962	\$125,792,918	\$130,156,996	\$134,803,237	\$140,824,276	\$152,728,991	\$158,484,693
All other	\$24,604,479	\$25,269,917	\$26,170,212	\$27,980,214	\$28,555,709	\$30,564,192	\$32,291,338	\$35,426,007	\$34,392,745	\$43,075,912
<b>TOTAL</b>	<b>\$177,836,390</b>	<b>\$197,358,391</b>	<b>\$204,191,612</b>	<b>\$219,852,096</b>	<b>\$226,436,692</b>	<b>\$235,385,449</b>	<b>\$241,240,823</b>	<b>\$250,091,866</b>	<b>\$264,930,457</b>	<b>\$286,000,858</b>
Municipal % share	32.78%	33.00%	32.63%	31.97%	31.84%	31.72%	30.74%	29.53%	29.37%	29.52%
Education % share	53.38%	54.19%	54.55%	55.30%	55.55%	55.30%	55.88%	56.31%	57.65%	55.41%
All Other	<u>13.84%</u>	<u>12.80%</u>	<u>12.82%</u>	<u>12.73%</u>	<u>12.61%</u>	<u>12.98%</u>	<u>13.39%</u>	<u>14.17%</u>	<u>12.98%</u>	<u>15.06%</u>
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Annual % change:</b>										
<b>Municipal departments</b>		11.7%	2.3%	5.5%	2.6%	3.6%	-0.7%	-0.4%	5.4%	8.5%
<b>Education</b>		12.7%	4.1%	9.2%	3.5%	3.5%	3.6%	4.5%	8.5%	3.8%
<b>Total</b>		11.0%	3.5%	7.7%	3.0%	4.0%	2.5%	3.7%	5.9%	8.0%

Municipal Cost Structure Report





## Appendix 2: City of Newton General Fund Budget: Allocated

City of Newton General Fund Budget (FY09): Unallocated & Allocated and City  
of Newton General Fund Budget Allocated: FY2001 - FY2009

	<u>Total Expenditures</u>	% of Total
Newton Public Schools	\$158,484,693	55.4%
Municipal Departments	\$84,440,253	29.5%
Retirement Pensions and Benefits	\$20,961,920	7.3%
Debt and Interest	\$10,011,346	3.5%
State Assessments	\$5,603,855	2.0%
All Other	<u>\$6,498,791</u>	<u>2.3%</u>
<b>TOTAL</b>	<b>\$286,000,858</b>	<b>100.0%</b>

### Expenditures Allocated to Education/Non-Education Purposes (FY09)

	<u>Total Expenditures</u>	<u>Education</u>	<u>Non- Education</u>
Newton Public Schools	\$158,484,693	\$158,484,693	
Municipal Departments	\$84,440,253		\$84,440,253
Retirement Pensions and Benefits	\$20,961,920	\$4,634,007	\$16,327,913
Debt and Interest	\$10,011,346	\$9,088,406	\$922,940
State Assessments	\$5,603,855		\$5,603,855
All Other	<u>\$6,498,791</u>	<u>\$241,117</u>	<u>\$6,257,674</u>
<b>Sub-Total</b>	<b>\$286,000,858</b>	<b>\$172,448,223</b>	<b>\$113,552,635</b>
Transfers to other funds	\$7,785,636	\$6,832,662	\$952,974
<b>Total</b>	<b>\$293,786,494</b>	<b>\$179,280,885</b>	<b>\$114,505,609</b>
<b>% of Total</b>	<b>100.0%</b>	<b>61.0%</b>	<b>39.0%</b>

Expenditures Allocated to Education/Non-Education Purposes (FY2001 – FY2009)

	<u>Total</u> <u>Expenditures</u>	<u>Education</u>	<u>Non-</u> <u>Education</u>
FY2001	\$201,461,253 100.0%	\$116,563,130 57.9%	\$84,898,123 42.1%
FY2002	\$208,814,148 100.0%	\$122,144,565 58.5%	\$86,669,583 41.5%
FY2003	\$225,242,989 100.0%	\$134,091,303 59.5%	\$91,151,686 40.5%
FY2004	\$232,131,833 100.0%	\$138,953,720 59.9%	\$93,178,113 40.1%
FY2005	\$241,018,094 100.0%	\$144,201,998 59.8%	\$96,816,096 40.2%
FY2006	\$246,680,119 100.0%	\$149,583,542 60.6%	\$97,096,577 39.4%
FY2007	\$257,259,086 100.0%	\$156,390,706 60.8%	\$100,868,380 39.2%
FY2008	\$274,395,142 100.0%	\$171,958,943 62.7%	\$102,436,199 37.3%
FY2009	\$293,826,494 100.0%	\$179,280,885 61.0%	\$114,545,609 39.0%

Source: City of Newton Comptrollers Office, January 2009



City of Newton  
Citizen Advisory Group

Defining Important Choices facing the City,  
Improving the City's Operational Efficiency and Effectiveness, and  
Developing New or Enhanced Sources of Funding

Report on Capital Infrastructure and  
Planning

# Report on Capital Infrastructure and Planning

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## INTRODUCTION

Committee Objectives. Over the past seven months, the Capital Infrastructure and Planning Committee of the Citizen Advisory Group has pursued two broad objectives:

- Assessing the condition of Newton’s public infrastructure or physical capital assets, and
- Evaluating the process by which these capital assets are maintained, renewed, improved, and replaced.<sup>1</sup>

Initial reconnaissance interviews revealed serious causes for concern in both areas. This report elucidates these concerns, presents substantiating research, and offers recommendations to improve the City’s capital infrastructure and related capital planning and budgeting process.

Early in our work, we sensed that Newton's public infrastructure was not immune to the under-funding that has plagued public capital across the country. We suspected that deferred maintenance and a failure to fund the investment necessary to replace normal depreciation were responsible for what appears to be a sizeable backlog of capital improvement projects for the City’s municipal buildings, schools, roadways, equipment, parks, and recreational facilities. We further thought that two factors, singly and in combination, had created this problem. The first was that municipal revenue had simply been too low to be consistent with the extensive level of public services that Newton has traditionally provided. The second was that Newton’s arcane approach to capital planning and investment—which is biased against making long-term capital commitments and systematically favors current expenses over capital expenditures—had magnified the adverse effects of relatively low municipal revenues.

While we did not fully appreciate either the scale of Newton’s under-funding of capital spending or its various causes when we started, our intuition led us to organize our work around the following, more detailed objectives:

- Defining the dimensions of capital underfunding, including the maintenance backlog for capital assets in municipal and school departments,
- Preparing recommendations for how to improve the City’s capital budgeting and capital maintenance processes so that the most efficient use of limited funds for capital investments can be assured,
- Suggesting ways of prioritizing the City’s capital projects,
- Determining how much the City should invest in the renewal and maintenance of capital assets in the next few years in light of expected cash flows, available debt capacity, and credit rating considerations, and
- Identifying savings from increased attention to the management of Newton’s capital assets.

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<sup>1</sup> Maintenance refers to maintaining functionality, but not affecting the useful life of an asset. It is typically focused on continuing service and preventing breakdowns. Renewal refers to repair and replacement of facility systems and components having a life less than the anticipated life of the facility itself. Examples of renewal are replacing inoperable equipment and meeting building codes. Improvement refers to extending the life of an asset. Replacement is self-explanatory. See Appendix for more complete definitions.

We knew that if we accomplished each of these research objectives, we would then be in a strong position to help the Mayor, the President of the Board of Aldermen, and the Chair of the School Committee define the “big” choices facing the City going forward on the capital planning and budgeting front.

Methodology. Our first step in pursuing this research agenda involved interviewing key municipal and school executives and reviewing various capital budgets to get a handle on the size of the capital renewal and maintenance problem. This led to subsequent estimates of the replacement costs of the City’s infrastructure and capital spending levels required to keep up with annual needs. A summary of the relevant data and related analysis is presented in Section 4.1. (Section 4 as a whole presents all the background data and analysis supporting our findings and recommendations.)

As a second step, we prepared a description of the City’s capital planning and investment process based on a review of relevant planning and budgeting documents and multiple interviews with key participants in the process. This detailed work is summarized in Section 4.2.

These baseline descriptions and related analyses were then supplemented with case studies of three capital investment projects, which allowed us to test and extend our general observations about capital planning and budgeting in the context of specific capital projects. This material is presented in Section 4.3.

Section 4.4 summarizes our investigation of how capital maintenance is managed across the City—with particular attention to the City’s schools, which comprise about 80 percent of Newton’s buildings and 90 percent of its bonded debt.

While these basic data gathering activities were proceeding, we also initiated a study aimed at identifying best practices of other cities across the country on prioritizing and rationing capital. A summary of this work appears in Section 4.5.

Finally, with all this data in hand, we were in position to start thinking about appropriate changes in Newton’s capital budgeting and capital maintenance processes.

Summary of Findings and Recommendations. In subsequent sections of the report, we spell out in increasing detail our principal findings, specific recommendations, and supporting background data and analysis.

In the way of foreshadowing a full discussion of these items, we can summarize the major headlines of our report as follows:

- **Newton is spending too little money maintaining its infrastructure.** Capital spending for schools and municipal purposes in FY 2008 was roughly \$13 million, apart from the Newton North High School project. Likewise, maintenance spending was on the order of \$15 million for a combined capital and maintenance spending of \$28 million. This compares with the \$50 million that we estimate is required to keep up with annual needs. If we take these amounts for FY 2008 as typical, they imply an annual gap in combined capital and maintenance on the order of \$22 million.
- **In addition, Newton has a huge backlog of capital spending that has accumulated over the years as a result of infrastructure under-spending.** This backlog, which would be larger if not for the recent investment in Newton North High School, may be

\$300 million or more. The financial implications of this number are substantial. If, for example, the City were to try to “work off” only the school building part of this \$300 million backlog (roughly \$220 million) over 15 years, that would require an additional \$14 million per year of capital expenditures. As a result, we believe the City would need to increase its capital spending so that it averages approximately \$64 million per year for the foreseeable future (the \$50 million “normalized” spending plus \$14 million per year to partially catch up on the backlog).

- **Newton’s capital planning and budgeting process has features that detract substantially from its effectiveness as a resource allocation tool.** To a large extent, Newton lives with a highly incremental, short-term, pay-as-you-go capital planning and budgeting process. It is not guided by either an explicit, long-term vision for the City or set of formal, analytic building blocks. As a result Newton does not have a city-wide master plan and related departmental plans reflecting carefully laid out growth projections, level-of-service standards, and capital spending priorities. Another problematic feature is that the rolling submissions of capital projects throughout the fall and spring deprive budget reviewers, including the Board of Aldermen, of the chance to view individual capital projects all at the same time as single Capital Budget, understand the relative importance of different capital projects, and assess the impact of these projects on the Operating Budget. Other practices can also be seen as undermining effective planning and budgeting: the process is insulated from the general public, contributing to its reactive rather than proactive nature; it lacks an up-to-date inventory of municipal assets and capital asset management plan, which greatly inhibits a preventive maintenance regime; since Newton does not include a “Reserve for Depreciation” account in its Operating Budget, the City is falling increasingly in arrears in infrastructure maintenance; capital projects are often mistakenly evaluated on their initial expenditure alone rather than their total costs over their life cycle, leading to higher maintenance costs than expected; and Newton’s historic commitment to setting total debt service to a restrictive “3% of revenues” has contributed to the City’s persistent underfunding of capital investment, perpetuated the large backlog of capital renewal and maintenance projects, and reinforced the City’s short-term bias in both planning and investment

The recommendations presented in this report flow directly from these findings. The first three address the attitudes, financial commitments, and administrative processes that define the essence of Newton’s capital planning and budgeting policy. The remaining five recommendations support and extend these broad recommendations. In sum, these recommendations span the following matters:

- Increasing annual spending on capital maintenance and renewal substantially,
- Instituting a new capital investment rule that would require making provision for the annual reserve of funds necessary to ensure that infrastructure can be maintained, repaired, and replaced when necessary,
- Introducing new processes for prioritizing public capital assets related to the services they help provide,
- Completing a detailed inventory of the City’s stock of capital assets (which is absolutely key to getting the first recommendation “right”),



- Creating and fully supporting a new “Capital Asset Manager” position in the Mayor’s office, reporting to the Chief Administrative Officer or, possibly, a new Chief Financial Officer,
- Adopting life cycle costing for all significant capital projects,
- Harvesting short-term savings from increased attention to capital renewal and maintenance, and
- Consolidating municipal and school maintenance in the Public Building Department.

Due the large size of Newton’s infrastructure and the complexity of its administrative and political processes, these findings and recommendations must be viewed as more indicative than definitive. While there is much that this Committee was able to observe and comment upon in the course of its research, the words of this report are clearly not the “last word” in determining Newton’s path forward in municipal governance. While we have clear positions on all matters addressed in the report, we have embedded them in the context of major choices facing the City. These choices—pertaining to both the level of capital investment and the conduct of capital planning and budgeting—remain for our elected and aspiring officials to address. It for this reason that the first substantive section of this report begins with “Choices.”

Caveats. While we are confident that the “big picture” drawn by our findings is reasonably accurate, there are two qualifications that should be noted at the outset. First, our quantitative assessment of the city’s current stock of capital assets and the spending to maintain and renew those assets is a very rough estimation. The truth is that Newton does not currently keep an up-to-date inventory of the condition and extent of its capital assets. Indeed, it is absolutely critical that the City allocate the funds necessary to develop such accounts. Without a systematic evaluation of its capital assets, rationalization of Newton’s infrastructure planning is impossible. Our second qualification is equally straightforward. It is that readers should understand that the investigative work of our Committee did not address the City’s water and sewer operations and capital budgeting, since the maintenance and renewal of these assets are funded separately from the rest City’s physical capital structure by a combination of user fees and State grants.

Neither did our Committee attempt a detailed review of planning and budgeting for the Newton North High School project. Our early interviews revealed that a serious, retrospective study of this complicated, non-routine project would require far more time and investigative resources than we had available to us. We quickly discovered that many of the apparent “facts” comprising this case history were subject to widely varying definitions and interpretations. Sorting out these basic economic and behavioral facts, which changed in both mix and relative importance over time, would have taken many months of concentrated, systematic investigative work. In this respect, we were also mindful of the mantra of every practicing historian: “A fact is never a fact until everyone agrees that it is a fact.” While there are certainly “facts” in this report that are subject to dispute, it proved far easier for us to cross-check and verify a more limited fact base than the prospect of doing the same for the still-controversial Newton North project. In addition, this report sought to focus on the required future capital investment and maintenance requirements of the City, rather than dwell on debate over the appropriateness of past actions.

Acknowledgements. In pursuing our investigative and analytical work, many City officials helped our Committee along the way. Initial briefings and continuing Q and A sessions with Chief Administrative Officer Sandy Pooler, City Controller David Wilkinson, and School

Superintendent Jeff Young helped us identify many of the planning and budgeting issues and choices that we address in this report. All three individuals made themselves available to us throughout this project on an almost instantaneous basis. For both their access and insights we are most thankful. Susan Burstein, the City’s Chief Budget Officer, and Sandy Guryan, Assistant School Superintendent for Business and Finance, also fielded innumerable questions about operating and capital budgets and related administrative processes. Both of these officials are data mavens of the first order and skilled architects of municipal and school budgets. Leaders of the City’s operating departments have been equally accessible and helpful: Mike Cronin, Tom Daley, Lieutenant Hugh Downing, Mike Kruse, Chief Joseph LaCroix, Josh Morse, Nick Parnell, Fran Towle, and Dave Turocy. So, too, has Shawna Sullivan of the City Clerk’s Office, been invaluable in scheduling our meetings and coordinating various aspects of our work. Finally, readers of early drafts—all representing the “incorporators” of this Citizen Advisory Group—provided unvarnished commentary when it was needed most: Sandy Pooler from the Mayor’s Office, Chairpersons Dori Zaleznik and Marc Laredo of the School Committee, and President Lisle Baker of the Board of Aldermen. Each of these individuals contributed valuable observations and commentary. Many offered constructive counsel. A few stepped forward with equally constructive criticism when it was most necessary. While this Committee has benefitted immeasurably from all these contributions, the findings and recommendations expressed in this report are, of course, those of the Committee and the Citizen Advisory Group alone.

## 2. FINDINGS

### 2.1. Choices

In the face of an increasingly and unexpectedly large operating deficit at the State level, Governor Duval Patrick recently noted, “We have tough choices among miserable options.”

These words are relevant to the City of Newton, even though Newton’s options may not be as “miserable” as the State’s at the present time. The first three reports of the Citizen Advisory Committee identify many tough choices of a policy and administrative nature that we must make in working to close the gap between the City’s revenues and expenditures. This report, which addresses Newton’s capital infrastructure and planning, magnifies these tough choices.

A constant theme of the Citizen Advisory Group, based on seven months of investigative work, is that even if the full potential of our recommended revenue enhancements and operating efficiencies is *instantaneously* achieved, which is highly unlikely, Newton will still not be able to close the revenue-expenditure gap for more than a year or so. As a result, under the current economic model we can no longer look forward to funding the quality and scale of public services that Newton has historically provided and that Newton’s residents have come to expect. This is why the City currently faces tough choices pertaining to spending priorities and expenditures in the annual *operating budget*.

So, too, does Newton face tough choices with respect to its *capital budget*: specifically, the priorities driving the level and scope of investments in the City’s infrastructure (its schools, municipal buildings, roadways, parks, and community places) and the processes followed in allocating capital to the maintenance and renewal of this infrastructure.

Choices Pertaining to the Level of Capital Investments. This report documents significant shortfalls in the level of investment in the City’s capital infrastructure. This Committee believes as a result of these shortfalls in infrastructure funding, the City faces a major choice regarding how best to deal with the City’s capital investment backlog:

- Either the amount of capital stock in the City needs be reduced, leaving residents to live with reduced services that utilize significant capital assets,
- Or capital spending needs to be substantially increased to “catch up” for historical underfunding of the maintenance, renewal, and replacement of our physical plant and equipment.

We cannot, of course, predict what decision will be made in this regard. However, since about 80 percent of the City’s infrastructure is devoted to the schools, it seems quite likely that the schools’ physical plant and equipment will loom large in the consideration. So, too, will the deteriorating condition of Newton’s roadways.

It is important to emphasize that Newton’s significant underfunding of capital maintenance and renewal, and the choices it presents for the future, are not unique among Massachusetts’ cities and towns. As in many other communities, infrastructure maintenance and renewal have been competing for budget dollars with the salaries and expenses of people who provide municipal and educational services.

In this competition for funds, it appears that Newton's leaders have assigned a higher priority to continuing programs, keeping teachers in the classrooms, and minimizing the layoffs of municipal employees than to maintaining and renewing physical plant. This well-intended choice between competing priorities, which can be ascertained by studying the City's Operating and Capital Budgets, now threatens Newton's capacity to deliver the intended quality of those programs and services requiring well-maintained capital assets. The time for reviewing this choice or "revealed preference" is thus at hand.

This Committee is not neutral with respect to this choice. We believe that a commitment to reverse the current underfunding of Newton's infrastructure is required, for two straightforward reasons: to preserve the quality of life in Newton that has taken so many years to build up, and to avoid bequeathing an empty nest egg to future City residents. With respect to the latter point, the City has essentially been transferring the costs of capital renewal from older to younger members of the community. This, we believe, amounts to an inter-generational wealth transfer that should be ended and, indeed, reversed.

Choices Pertaining to Capital Planning and Budgeting Processes. It is doubtful that the significant shortfalls in infrastructure funding can be systematically reversed without eliminating shortcomings in the way Newton's capital investment decisions are made. Indeed, we argue in this report that the City's current approach to capital investments actually contributes to the continuing buildup of maintenance and renewal backlog. This conclusion leaves Newton with two sets of choices pertaining to the planning and budgeting of infrastructure spending

Since the balance of power in the capital planning and budgeting process tilts heavily towards the Mayor's Office, it is up to the executive branch of City government to consider the following:

- Whether to retain the predominantly reactive, short-term, pay-as-you-go approach to capital maintenance, renewal, and replacement (summarized and described in detail below),
- Or to commit to a more strategic planning and budgeting process built upon an explicit, long-term vision for the City and linked to a more proactive, multi-year capital budget embodying clear level-of-service standards and capital spending priorities.

A decision to follow the second track would lead to changes in current investment guidelines and financial accounting practices, as well as administrative practices. Each of these changes, we should emphasize, have already been pioneered or adopted by comparable cities across the nation. We recommend Newton pursue some version of the second approach to capital planning and budgeting, and our specific recommendations are consistent with this attitude.

Such a reorientation presents yet another set of choices involving the setting of investment priorities: whether or not the Mayor's Office and the Board of Aldermen should experiment with a more decentralized process for establishing and vetting investment priorities before capital infrastructure projects become high priority funding items in the Capital Budget.

One of the defining characteristics of Newton's capital planning and budgeting process is how insulated it is from the general public. In this regard, the City may want to review precedents for village-based (or neighborhood-based) participation in planning and resource

allocation decisions, along with the positive experiences of other communities, identified in Section V below, with such innovative practices.

\* \* \* \* \*

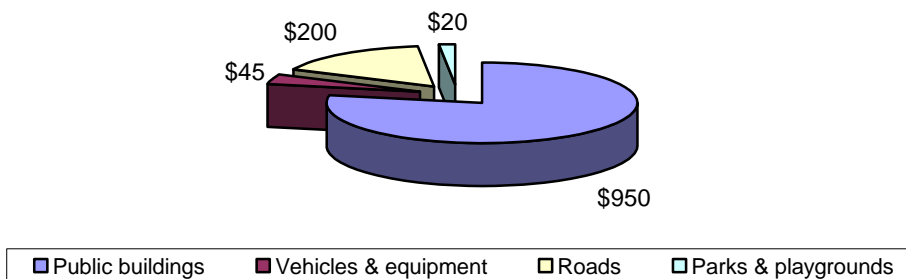
This report is the last in a quartet of reports addressing Newton’s current economic model. Taken together, these four reports suggest that a major reassessment of this model is called for, that certain changes should be made, and that difficult choices remain to be considered. The detailed Findings summarized in the following sections of this report hopefully make the nature of these difficult reassessments and choices clear in the specific area of capital infrastructure planning and budgeting.

## 2.2. The Condition Of Newton’s Infrastructure

An important fact to acknowledge at the outset of this report is that no one in City government (or on the Citizen Advisory Group) fully understands the complete status of Newton’s capital assets—the true value of these assets, the condition of these assets, and their required maintenance and renewal expenditures. Of course, the City Comptroller knows the book value of the City’s physical assets and every year reports on their insured value; but what is noticeably missing is a precise understanding of the replacement costs of these assets and their useful life. Consequently, there is no mechanism for ensuring that replacement costs are incorporated in the City’s operating and capital budgets. Since replacements costs and useful life matter a great deal when it comes to planning and budgeting for capital maintenance and renewal, this Committee has had to make a variety of estimates, and most of these estimates are expressed as a range of values.

That said, our best analysis shows that the total replacement cost of Newton’s public capital facilities (including municipal and school buildings, equipment, the 300-mile road system, playgrounds, is approximately \$1.2 billion. Quite possibly, the value is even higher. This omits the water and sewer system infrastructure, which is not funded by taxes but instead is meant to rely on fees and MWRA for any infrastructure needs. The figure below summarizes our estimate of the replacement cost of Newton’s infrastructure:

**Figure 1**  
**Replacement Cost of Newton’s Infrastructure**  
**(in \$millions)**



Of course, the \$1.2 billion estimate is fairly rough. A precise itemization of the city's capital would require much more time and expense than the Committee could provide. Nevertheless, we think that the evidence broadly supports our estimate of \$1.2 billion. We further believe that evidence also suggests that the City's infrastructure has been significantly underfunded over time.

If one assumes an average life of 40 years for existing capital assets, the nearly \$1.2 billion estimated value would imply setting aside approximately \$28 to \$30 million per year (in 2008 dollars) just to keep up with the implied 2.5% depreciation rate. Our more detailed analysis below confirms this rule-of-thumb calculation. Adding maintenance requirement to the calculations would bring annual expenditures for both capital and maintenance to roughly \$48 million to keep the existing infrastructure both intact and functioning properly, as well as to insure that each asset enjoys its full useful life. Moreover, this figure does not include additional spending required to address any backlog in capital projects in a timely fashion. It only addresses the current needs.

As mentioned above, the evidence suggests that prior to the Newton North High School project, the City spent a fraction of this amount over most of the past 25 years. Capital spending for schools and municipal purposes in FY 2008, for example, was roughly \$13 million, apart from the Newton North High School project. Likewise, maintenance spending was on the order of \$15 million for a combined capital and maintenance spending of \$28 million compared to the \$48 million required to keep up with annual needs. If we take these amounts as typical, they would imply an annual gap in combined capital and maintenance on the order of \$20 million for FY 2008, as shown in Table 1 below. In addition, as also shown in Table 1 and described below, we believe the City would need to fund an additional \$14 million per year to begin working off its \$300 million backlog of deferred capital spending.

**Table 1**  
**Combined Capital and Maintenance Spending Gap for FY 2008**

<u>Current Spending (FY 2008)</u>		<u>Appropriate Spending</u>	
		Replacement Cost of Infrastructure	\$1,200,000,000
		÷ Useful Life	40 years
			—————
Capital Investment*	\$13 M	Avg. Capital Investment	\$28-\$30 M
Maintenance	\$15 M	Appropriate Maintenance	±\$20 M
	—————		—————
<b>Total Capital &amp; Maintenance</b>	<b>±\$28 M</b>	<b>Total Capital &amp; Maintenance (to keep up with current needs)</b>	<b>±\$50 M</b>
		Additional annual spending to work off existing backlog	±\$14 M
			—————
		<b>Total Recommended Capital &amp; Maintenance</b>	<b>±\$62-\$64 M</b>

\* This number excludes FY 2008 spending on Newton North High School

To put this annual capital and maintenance gap of \$20 to \$22 million in perspective, a permanent continuation of this gap would imply that projects on the scale of the current Newton North effort will be necessary every ten years or so to restore the city's infrastructure.

Evidence of this level of underfunding is confirmed by the large backlog of capital spending that has accumulated over the years for the City's schools, municipal buildings and grounds, and streets. As the School Committee's Long-Range Facilities Plan makes clear, 16 of Newton's 21 school buildings are over 50 years old and three are over 80 years old. Even the most conservative of the School Committee's facilities options would require spending on the order of \$220 million to address the needed investment in educational buildings. In addition, the City's own Capital Improvement Plan (CIP) for fiscal years 2009-20013 lists \$194 million in desired capital projects. Even allowing for the overlap in these plans and making prudent cuts in the CIP list, the Committee still finds a capital project backlog of \$300 million in our schools and municipal sectors combined.<sup>2</sup>

Put somewhat differently, each household and business in Newton faces a substantial liability to pay for the upcoming required deferred maintenance and replacement of Newton's capital stock. Table 2 below illustrates the magnitude of this liability. The median single-family home in Newton's share of this capital investment liability is a one-time payment of about \$8,000:

**Table 2**  
**Household Liability for Required Replacement and Deferred Maintenance**  
**of Newton's Capital Stock**

*Panel A*

Newton Capital Investment Backlog	\$300,000,000
Residential Property Tax as % of Revenue	72.4%
Newton Residents' Share of Backlog	\$217,200,000
Liability per \$100,000 of Assessed Value	\$1,121

*Panel B*

<b>Single Family Home Assessed Value</b>	<b>Household Share of Liability</b>
\$400,000	\$4,484
\$500,000	\$5,605
\$600,000	\$6,726
\$700,000	\$7,847
\$800,000	\$8,968
\$900,000	\$10,089
\$1,000,000	\$11,210

Source: Committee estimates and computations

So how do we fund this liability? First, the City must increase its level of annual capital

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<sup>2</sup> The 2009-20012 Capital Improvement Plan lists \$194 million worth of projects. About \$33 million of this is for water and sewer facilities that, as noted, are not part of the infrastructure considered here. An additional \$85 million reflects spending on Newton North. This leaves \$76 million for other capital projects deemed necessary. We have interpreted this \$76 million plus the \$220 million deemed necessary to implement the School Committee's Long-Rang Facilities Plan as a backlog resulting from underinvestment in previous years. Some have argued however that all or part of these funds reflects instead a forward-looking anticipation of future needs based on an expectation of capital underfunding in the future. We think the evidence is more consistent with our interpretation.

spending and maintenance just to ensure that this liability doesn't continue to *grow*. As described above, we estimate the City must spend, on average, about \$50 million per year just to maintain its capital stock if there were no backlog. This represents a substantial increase over the \$28 million the City spent in FY 2008. Second, the City has two choices on how to deal with the current capital investment backlog:

- 1) Reducing the amount of the capital stock in the city and living with the consequences (reduced quality of life and diminished services that utilize significant capital assets); or
- 2) Increasing capital spending to “catch up” for historical underfunding

After deliberation, the Committee concludes that choice #1, a significant reduction of the capital stock, is not a viable alternative. As noted, Newton faces \$300 million of backlogged capital investment, representing the equivalent of replacing almost 30% of its infrastructure. What would happen if the City were to not invest this money and allow its buildings and infrastructure to continue to deteriorate? The City may be able to plug some holes by selling off some small public buildings, but most of the referenced infrastructure is comprised of schools, other large public buildings used daily, the road system, public safety equipment, and recreational facilities. All of this infrastructure will ultimately need to be repaired, renovated or replaced. Deferring capital investment on this backlog is only likely to increase required investment in the future.

Therefore, we believe the City must increase its annual capital and maintenance spending above the “normalized” level of \$48 to \$50 million for some period of time to meet both the current needs and to “catch up” on this underfunded backlog. Apart from new, tax-related sources of revenues or a massive reallocation of City funds from other uses, this increased spending could be funded either by borrowing funds today or by working off the backlog over time. Newton cannot, however, borrow the full \$300 million without materially affecting its credit rating and borrowing costs. We do believe, however, Newton may have the opportunity to borrow some additional funds today without affecting its AAA credit rating to fund a portion of this backlog (assuming a normal flow of credit). The remainder must be funded by increased capital spending from the City's Operating Budget over time.

Even if the City were to try to “work off” only the school building part of the \$300 million backlog (roughly \$220 million) over 15 years, that would require an additional \$14 million per year of capital expenditures. As a result, we believe the City will need to increase its capital spending so that it averages approximately \$63 or \$64 million per year for the foreseeable future (\$50 million “normalized” level + \$14 million per year to partially catch up on the backlog).

Of course, this investment will not be easy. It will require either cuts in other City services or increased revenues through increased tax burdens on citizens (either debt exclusions or other tax strategies). Additionally, we believe several capital allocation process changes are necessary to ensure that this money is spent wisely. But, it is clear that not increasing capital spending simply represents a decision to reduce the City's infrastructure to an unsustainable level of disrepair and to change dramatically both the landscape and services of the City dramatically by eliminating capital assets.



### 2.3. Newton’s Capital Planning and Budgeting Process

Certain features of Newton’s capital planning and budgeting process render it opaque and incomprehensible to both the general public and many city managers and elected officials. These features naturally detract from its effectiveness as a resource allocation tool. As reported in Section 4.5 below, other communities have installed less arcane and more effective processes.

Newton’s capital planning and budgeting process is not guided by an explicit, long-term vision for the City. While the Mayor’s annual “State of the City” address typically expresses a set of goals for the upcoming year, a broader, long-run vision for the City linked to a multi-year capital budget does not exist as an explicit roadmap for the City. In other words, there are no formal, analytic building blocks for either Newton’s Capital Improvement Program (CIP) or the derivative Supplemental Capital Budget—no city-wide master plan and related departmental plans that explicitly build upon carefully laid out growth projections, level-of-service standards, and capital spending priorities. While overall revenue and expenditure projections are prepared for the *Operating Budget*, the City’s capital investment program and *Capital Budget* is not based upon such a fundamental analytic process. Rather, the CIP is principally a long, unprioritized “wish list” of projects that various departments want to put in queue for funding during the coming five-year period.

Relatedly, Newton’s capital planning and budgeting process is not guided by explicit, long-run investment priorities (and investment trade-offs) proposed by the Mayor’s office and shared with the general public. This is not to say that the Mayor does not have priorities. Indeed he does, but these priorities or preferences are only revealed by inspecting the pattern of capital requests submitted over time by the Mayor to the Board of Aldermen. These “revealed preferences” may be useful in explaining the past, but they are of limited use as a plan for the future.

Another notable feature of Newton’s capital planning and budgeting process is how insulated it is from the general public. Unlike many other cities like St. Paul, Dayton, Portland (OR), Seattle, Kansas City, Birmingham, and Los Angeles, all larger and more complex than Newton, there is no step in the capital planning and budgeting process that is explicitly designed to inform city residents about current priorities and difficult trade-offs and elicit substantive input from residents. The only opportunity for public input in Newton is reactive rather than proactive, and the process is not set up to receive substantive ideas that might come from individuals, neighborhoods, or villages. Thus, to the extent that municipal capital budgeting is an exercise in social choice (a claim that we discuss below), Newton’s current process largely fails to meet this standard.

Yet another feature of Newton’s planning and budgeting process is that the Mayor submits capital projects to the Board of Aldermen for both ratification and the appropriation of funds on a rolling basis from November through May. Invariably, these rolling submissions represent a mix of projects previously identified in a long wish list of departmental projects (the CIP), unanticipated emergency requests from municipal and school departments, and short-term political accommodations. Some of these projects are bonded; some are funded with the City’s so-called Free Cash. Due to their incremental nature and diverse funding sources, these multiple *Capital Budget* submissions are not systematically integrated with the annual *Operating Budget*. As a result, this highly incremental and detached process deprives budget reviewers, including the Board of Aldermen, of the chance to view annual capital projects all at the same time,

understand the relative importance of different capital projects, and assess the impact of these projects on the Operating Budget.<sup>3</sup> Viewed in the context of the City’s increasingly constrained financial resources and deferred capital spending, the current capital planning and budgeting process makes it very difficult for City officials to craft an investment program that both protects residents from further declines in the condition of Newton’s physical capital structure and prioritizes the funding of competing capital projects in an explicit manner.

There are, of course, some real benefits to be gained from Newton’s highly incremental, short term, pay-as-you-go capital planning and budgeting process. For example, keeping the City’s capital investments and maintenance on a very short leash provides the Mayor with the comfort that he or she will never inadvertently run short of cash in any given year. And Newton should be proud that the City has never run out of cash, missed a payroll, or created any doubts in anybody’s mind about its solvency. But, the objective of never running out of cash could be otherwise accomplished if the list of projects and expenditures was prioritized at the beginning of the annual budgeting cycle and cash earmarked for both most important spending items and unpredictable contingencies.

There are at least two unfortunate side effects of the current incremental planning and budgeting process. First, while the availability of cash *is* certainly preserved, capital spending priorities remain opaque to both the Board of Aldermen and the public at large. Second, this process reinforces a general bias against long-term capital planning and budgeting throughout the City. This short-term bias is a major cause of the persistent underfunding and large backlog of capital renewal and maintenance projects.

Other practices can also be seen as undermining Newton’s capital planning and budgeting capabilities. First, the absence of an up-to-date inventory of municipal assets deprives City officials of detailed knowledge of the condition and degree of maintenance underfunding for Newton’s capital assets. Second, the absence of a system for quantifying the costs of delayed investments in the maintenance of capital assets compounds this problem. Third, the lack of a systematic capital asset management plan identifying what work is required to maintain the City’s infrastructure and other capital assets contributes to a reactive rather than preventive maintenance regime, while at the same time contributing to the long-term deterioration of the City’s capital assets and steadily inflating maintenance costs. Fourth, since Newton does not include a “Capital Outlay” or “Reserve for Depreciation” account in the annual Operating Budget (in contrast to many municipalities that set aside 2 percent of the budget annually for projects that do not fall into the “let’s bond it” category), the City is falling into increasing arrears in capital maintenance. Fifth, capital projects are typically and mistakenly evaluated on their initial expenditure alone, not on their total cost over their life cycle. This approach to capital budgeting fails to recognize that paying more up front can sometimes make for a better quality facility or mechanical system that conserves precious capital in the long run. Sixth, application of the Newton’s historic rule of thumb setting total debt service (principal plus interest) to “3% of revenues” has contributed to Newton’s persistent underfunding of capital investment, perpetuated the large backlog of capital renewal and maintenance projects, and reinforced the City’s short-term bias in both planning and investment.

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<sup>3</sup> The operating budget of the School Department is allocated by the Mayor and the Board of Aldermen as a lump sum, and the Superintendent of Schools then works with the School Committee in reallocating that amount to various programs and needs identified in its annual operating plan.

### 3. RECOMMENDATIONS

Of the Committee's nine recommendations, the first three address the attitudes, financial commitments, and administrative processes that define the essence of Newton's capital planning and budgeting policy. Five additional recommendations support and extend these broad recommendations for change. Each of these recommendations flow from the Committee's major findings summarized above and the detailed, supporting analyses presented in Section V of this report.

#### *Capital Planning and Budgeting Policy*

##### **3.1. Increase Annual Spending on Capital Maintenance and Renewal Substantially.**

If Newton wishes to maintain its current services over time, it needs to increase the amount that it spends annually on the maintenance, renewal, and replacement of infrastructure required to maintain the quality of public services for which the City has traditionally been known. We estimate Newton needs to increase its combined capital spending and maintenance from \$28 million in fiscal year 2008 (excluding Newton North) to \$50 - \$64 million per year.

In FY 2008, the City's capital investment spending for schools and municipal building, equipment, roadways and public land improvements amounted to \$13.4 million. Our estimate of maintenance spending is about \$15 million. Thus, the total infrastructure spending—gross investment plus maintenance—amounted to approximately \$28 million (excluding the Newton North High School project). We think that a rough but prudent estimate of the spending that would have been necessary to maintain the assets in good working condition is approximately \$50 million, implying a gap between required and actual spending of about \$22 million per year. To be sure, the loss of existing capital through depreciation does not have to be replaced with new investment each year. The City can wait until an asset has deteriorated substantially before re-investing in it or replacing it outright. However, letting the depreciation accumulate over time only delays the needed expenditure. It does not remove it. Further, if the assets are not properly maintained, that depreciation rate will be faster and the day of reckoning will come sooner.

In many ways, we believe that the City is facing that day of reckoning now. Under-maintenance and deferred replacement have left Newton with a weakened infrastructure and a sizeable backlog of needed investment. This backlog includes capital projects with a value of at approximately \$300 million and probably much more. A good guess is that addressing only the school building part of this backlog would require annual expenditures on the order of \$14 million for over 15 years. Accordingly, to work down the existing backlog and to keep the existing capital assets intact will require expenditures that, in present value terms, are equivalent to annual capital expenditures (gross investment plus maintenance) of about \$63 to \$64 million (\$50 million for current assets plus \$14 million to address the current backlog). As noted previously, the city can defer the annual expenditures of \$27 million or so needed to cover the depreciation on existing assets. If it does, however, within ten to twenty years, an even larger new backlog of capital projects will have accumulated.

The bottom line then is this. Annual capital expenditures of about \$50 million (in 2008 dollars) are necessary to maintain the quality and quantity of public services that the City

now provides. Addressing the backlog of existing projects to restore the infrastructure to earlier levels would require an additional \$14 million annually (again, in present value terms).

This shortfall or gap needs to be considered explicitly throughout the City's capital planning and budgeting processes, and decisions to either close or live with this gap should be reported and explained to residents by the Mayor's Office and the Board of Aldermen.

**3.2. Institute a New Capital Investment Rule.** The City needs to establish a Capital Investment Rule to require setting aside an adequate annual reserve of funds to ensure that infrastructure can be maintained, repaired and replaced when necessary. This rule would have 5 components

- a. Determine annually the replacement cost and useful life of Newton's infrastructure.
- b. Each year, set aside in the budget an amount equal to the replacement cost of Newton's infrastructure divided by its useful life in the "Capital Investment Reserve" account.
- c. Draw annual capital investments from this Capital Investment Reserve.
- d. The Capital Investment Reserve cannot be used for anything other than capital investment in existing infrastructure.
- e. Any repayments or amortization of principal of the City's debt are to be "counted" as if invested in the Capital Investment Reserve account.

Only the establishment of this rule can ensure that the City is "saving" for the required maintenance, repair or replacement of each of its capital investments. An example will help illustrate this point. Consider the construction of a new public building costing \$40 million. Assume that this building will last exactly 40 years, after which point it will fall down, but that this building will require no capital investment over the next 40 years. Under Newton's current accounting, no expense will be recognized in the budget for the next 40 years. However, when the building's life expires in 40 years, no funds will have been set aside to deal with the required new investment (at that time, after 40 years of inflation, likely much more than \$40 million!). With the Capital Investment Rule above, the City would deposit \$1 million each year (or more, if the replacement cost of the building increased over time with inflation) into the Capital Investment Reserve. The City would then be able to replace this building after its 40-year life without straining its debt burden. Of course, in reality no building will fall down after 40 years, but neither will a building go 40 years without any required capital investment in repair or maintenance. The Capital Investment Reserve need not build unused for 40 years, but could also be used for this interim capital investment as well. Without the establishment of a rule like this one, there will always be an incentive to defer capital spending in favor of current programs, causing an ever-larger future capital investment liability.

Repayment (or amortization) of the principal of indebtedness could also be considered reserving capital investment for the future. In the example above, instead of setting aside \$1 million each year to "save" funds until a replacement of the building is required, the City could borrow the \$40 million today and repay that loan over 40 years. Then, when the building had to be replaced, a new \$40 million could be borrowed. The City should

avail itself of this borrowing capacity where appropriate by reevaluating its so-called “3% rule.”

Capital spending in Newton on amounts over \$500,000 has historically been funded by the issuance of debt. This makes sense: the City is matching long-lived capital investments with long-term financing that allows the City to pay for these investments over a number of years. However, until the new high school project, Newton has essentially limited the amount of debt it would borrow to a self-imposed policy that debt service should not be more than 3% of revenues. The 3% policy was originally intended as a placeholder since that was the historical number and no one knew what level of capital spending might be required in the future. However, in the years since 1981, this guideline has appeared in annual capital plans reviewed and approved by the Board of Aldermen and been accepted by both the executive and legislative branches of city government as both a floor below which debt service should not drop and a ceiling above which debt would not increase. Over the past 28 years, Newton has been true to this policy: annual interest and principal payments on bonded debt have varied little from the 3% of revenue rule.

The application of this rule of thumb has historically led to much lower borrowing in Newton than in other similar communities that also maintain debt rated AAA. Prior to the current fiscal year, Newton’s debt per capita was approximately half the level of other benchmark communities with AAA bond rating. This has contributed directly to Newton’s underfunding of capital investment. In the last two fiscal years Newton’s debt has increased by \$42 million from \$68 million to \$110 million, driven largely by school financing. This brings Newton’s current debt service close to 5% of revenues, already a major departure from past practice. But by increasing its debt service to 6% of revenues or even higher, Newton can raise tens of millions of additional dollars to fund capital investment without necessarily jeopardizing its credit rating, although Moody’s would need to be the final arbiter on this matter once the full debt burden of Newton North High School is factored in. Significantly, debt service as a percent of revenues for comparable communities with AAA credit ratings was 7.4% in 2007, so some unused debt capacity apparently exists even after the commitment to Newton North. Increasing debt service limits would of course have the effect of spending proportionally more of the Operating Budget on interest and principal repayment and less on other non-capital expenditures until new sources of revenue can be found or developed.

- 3.3. Introduce New Processes for Prioritizing Capital Investments:** The City needs to develop processes, both for its Capital Improvement Plan and for its capital budgeting, to anticipate and forecast capital spending, and to explicitly prioritize specific projects for the purpose of ensuring that high priority capital projects are funded, and the only funded projects are high priority. (Note, in theory there is no need to set priorities for capital maintenance, because once one commits to a capital project, one also commits to its maintenance.) To this end, the City should seriously consider adopting an Integrated Operating and Capital Budget, because the City’s currently separate operating and capital budgets include funds directed to the maintenance, renewal, and replacement of physical capital assets. As a minimum, this integrated budget needs to include capital spending as one or more “line-items” in its annual budget. The City should elevate the importance of a formal Capital Improvement Plan process, and ensure that the resulting Capital

Improvement Plan represents City agencies' and residents highest priorities, preferably through a standardized system that is comparable across departments, fact-based, and uses an agreed-upon scoring and weighting process. The City should budget for both planned capital spending (consistent with priorities in the CIP that are known at the beginning of the budget process) and unplanned capital spending. The City should also budget for "unanticipated capital maintenance." Although it may not be clear what capital stock items need to be repaired or replaced at the time the budget is proposed, submitted, or acted on by the Board of Aldermen, it is clear that each year *something* needs to be repaired or replaced. By budgeting a specific amount, the City will avoid the need to defer planned and prioritized projects because of otherwise unplanned exigencies. Finally, building on precedents for village-based or neighborhood-based capital planning in Newton, the City's experience with ad hoc citizen groups, and the positive experience of other communities, the City should consider developing a more decentralized process for establishing and vetting investment priorities before capital projects become high priority funding items in the City's Capital Budget.

#### *Supporting Measures*

- 3.4. Complete Detailed Inventory of the City's Stock of Capital Assets:** A necessary first step in long-term capital planning and budgeting is completing an inventory of the City's capital stock and identifying asset maintenance and replacement priorities. The School Department has already done this for its buildings. The rest of the City's capital stock needs to be inventoried in the next year. Many cities hire an outside consultant to catalogue municipal capital assets and evaluate their condition. The resulting report is then updated very five years. The Department of Public Works' new pavement management software looks like another productive step in this direction.
- 3.5. Create and Fully Support a New "Capital Asset Manager" Position:** To facilitate the above, the City should create the position of a Capital Asset Manager, reporting to the Chief Administrative Officer or, possibly, a new Chief Financial Officer, endowed with the necessary capabilities and resources to (1) inventory and evaluate the condition of the City's existing capital infrastructure, (2) confirm this Committee's assessment of working off the current maintenance backlog for municipal buildings and infrastructure and putting the maintenance and replacement of municipal facilities back on an economic basis, (3) develop a system to quantify the cost of delaying maintenance, (4) monitor the progress and costs of systematic capital asset renewal, (5) validate or reject the accuracy of the data submitted by department heads and citizens groups in support of new or contested capital projects, (6) conduct cost-benefit analyses of alternative or competing capital investment projects, (7) assist the chief budgeting officer in regularly comparing the fully loaded costs (including overhead, worker's compensation, pension, benefits, etc.) of internally provided services with the costs of outsourcing these same services to external suppliers, and (8) help the Mayor prioritize capital requests and City needs on a purely financial basis.
- 3.6. Adopt Life Cycle Costing for All Significant Capital Projects:** The City has a long history of focusing only on "first costs." As an antidote to this shortsighted focus, the economics of all significant capital investments should be assessed using life cycle costing. Life cycle costs are the anticipated expenditures for each stage in the life of a facility and its components. They include capital investment costs, financing, operations and maintenance, repair and replacement, facility alterations and improvements, and

functional use costs. Life cycle costing is a critical step in ensuring better-managed operating expenses over the life of a building or any other capital asset. What can seem like a large initial expense in vetting full life-cycle costs of large projects can in fact save the City money over the long run. The adoption of life cycle costing requires political will because normal political processes tend to promote and reinforce a short-term time horizon in matters of capital spending.

**3.7. Harvest Short-Term Savings from Increased Attention to Capital Renewal and Maintenance:** There are a number of possible efficiencies in the way Newton invests its maintenance and renovation dollars. While these will not solve the chronic and critical underfunding of capital projects in general, they illustrate the kind of savings that could flow from increased attention to renewal and maintenance of the City's capital issues. As a first example, it makes sense to replace all boilers in City buildings that have a lower life cycle cost with a replacement boiler. Currently, only boilers that fail are being replaced. Second, it also makes sense to upgrade boilers to run on natural gas so the City has the option to switch from oil to natural gas depending on which fuel is cheaper. Third, any major municipal renovation or new building should be required to meet Energy Star rating to reduce overall energy expenses over the life of the buildings. Fourth, the City should invest in software that will allow more effective management of infrastructure and associated costs, thereby improving prioritization and deferred costs (as the DPW is currently doing with its new pavement management software program). Fifth, given that regular maintenance can often prolong the life of capital assets, it would serve the City well to support this effort by bringing together all maintenance under the supervision of one manager to better control costs and to prioritize work.

**3.8 Consolidate Municipal and School Maintenance in the Public Buildings Department:** Under the current system of managing the upkeep of City buildings, maintenance responsibilities are split between the Public Buildings Department and the School Operations. The Public Buildings Department is responsible for all maintenance of municipal buildings (City Hall, libraries, office buildings, and other facilities), while school maintenance is conducted by both Newton Public Schools' Operations and the Public Buildings Department. This process is detailed in Section 4.4.

As a result of this split process, maintaining accountability and control of costs is extremely difficult. By bringing all of the maintenance under the Public Building Department's responsibility, the City can realize many benefits including; (1) scheduling efficiencies, (2) better assessment of which projects to outsource, (3) greater accountability, (4) better scheduling control, (5) better effectiveness through eliminated process redundancies, and (6) greater ability to prioritize. This consolidation will also enable many of the previous recommendations to be implemented and maintained much more effectively than under the current configuration.

While this may at first appear to reduce the School Department's control over its maintenance work, it would actually enhance control because all accountability and responsibility would lie with one manager (the Public Buildings Commissioner). Under the current situation of fractured authority, the Newton Public Schools have much less control than imagined. It will though be important to identify performance metrics and goals to ensure that the Buildings Department prioritizes and manages the maintenance of the school facilities in line with the specific goals of the School Department.

## 4. BACKGROUND DATA AND ANALYSIS

### 4.1. Size and Status of Newton's Capital Infrastructure

Existing Infrastructure. Like many urban cities of comparable size, Newton has a substantial investment in public capital facilities. The insured value of its buildings alone is currently \$560 million.<sup>4</sup> These include the 22 educational buildings (21 schools plus the Education Center), the six fire stations, police headquarters and garage, the main and branch libraries, numerous public works garages and sheds, the Senior Center, and of course, City Hall, among others. Moreover, even a cursory evaluation of the schedule of insured values strongly suggests that the \$560 million reflects a significant underestimate of the true value of these assets. For example, the new Newton North High School building has an insured value of \$100 million even though its actual cost is closer to \$200 million. Thus, a conservative estimate of value of Newton's public building infrastructure would inflate the \$560 million value by 50 percent to \$840 million.

This is a conservative estimate because other valuation approaches suggest a greater value. For example, a survey of educational institutions and construction companies suggests that the current cost of major renovation work or new construction in the Boston area is on the order of \$375 to \$400 per square foot (see school building estimates from HMFH below). In Newton, the total public building space is roughly 2.6 million square feet. Hence, a reproduction cost estimate of the current building infrastructure would be at least \$975 million.

Similarly, the real estate firm, Cushman and Wakefield, reported an average commercial rental rate of \$50 per square foot in central Boston in August of 2008.<sup>5</sup> Reducing this to \$35 per square foot to allow for both the subsequent decline in the rental market and Newton's distance from downtown Boston would still yield a discounted present value of the buildings on the order of \$950 million or possibly a good bit higher with reasonable assumptions regarding depreciation and the discount factor.<sup>6</sup> In short, rough but sensible estimates of the value of the City's building infrastructure are on the order of \$950 million or higher.

Of course, the buildings are not the only component of Newton's physical capital assets. To begin with, there is an extensive assortment of equipment capital needed to provide public services. This includes fire engines, snow plows, a fleet of vehicles and motorcycles for police, the mayor's office, and other officials, snow plows, computers, dump trucks, audio/video equipment, backhoes, street sweepers, large construction trucks, small pickup trucks, cargo and personnel vans, calcium chloride storage tanks, information technology equipment including computers, network servers, and police and fire communications equipment, telephones, bullet proof vests, and voting machines. These currently have a book value based on historical cost of

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<sup>4</sup> Office of Comptroller, City of Newton, Schedule of Building Insured Values, August, 2008.

<sup>5</sup>This is net of utilities. <http://www.cushwake.com/cwglobal/jsp/newsDetailPrinter.jsp?repId=c18500002&Language=EN&Country=GLOBAL>.

<sup>6</sup>As with most of the numbers in this report, this is a rough estimate. It is not clear, for example, what interest rate should be used in discounting the future cash flows. Because we abstract from inflation and hold the rental value constant at \$35 per square foot, a real interest rate is relevant. However, nominal interest rates include a premium for expected inflation. Since city borrowing costs are on the order of 4 to 5 percent, and since long-run inflation is likely on the order of 1 to 2 percent, one might employ a discount factor based on an interest rate of anywhere from 2 to 5 percent depending on what precise assumptions one made. However, the commercial value of the buildings to private investors would reflect the interest rate at which they could acquire funds and this would likely be noticeably higher than the City's borrowing rate. We have assumed straight line depreciation of two percent per year and a discount factor based on an interest rate of 7.5 percent per annum to establish this lower bound.



close to \$30 million. Again, this historical cost estimate is almost certainly too low. We believe that an estimate more closely based on replacement cost is likely on the order of \$45 million.<sup>7</sup>

There are also the 310 miles of streets, associated traffic signals, sidewalks, and curbing. Approximately two-thirds of Newton's streets have concrete sidewalks and granite curbing.<sup>8</sup> Estimates of the reproduction value of these assets will vary greatly depending on what one assumes about the construction effort that would be needed to replace the existing stock. However, the rate of deterioration varies inversely with the condition to which the roads are restored. As a result, the ultimate impact on the estimated annual depreciation cost varies much less than does the estimated reproduction cost. Given the range of possible costs, we believe that a conservative estimate of the reconstruction cost would be a little over \$600,000 per mile or approximately \$200 million in total. However, the value could be on the order of \$350 million if the maximum rebuilding cost of \$1.1 million per street mile is assumed and due allowance for sidewalk and curb restoration is made.<sup>9</sup>

Beyond the buildings and roadways, Newton also maintains over seventy parks and playgrounds. These include 22 basketball courts, 71 tennis courts, athletic fields, swimming facilities, and play structures over more than 1100 acres.<sup>10</sup> While the land itself should not depreciate, it does require maintenance. Mowing, seeding, fencing, weed control, trash and snow removal, tree conservation, and related activities are needed to keep the open land usable. Equipment used for such purposes must also be maintained. Similarly, the physical structures will deteriorate prematurely unless properly maintained. Swimming facilities will degrade, court surfaces will crack, picnic and game tables will break, and bleachers and other facilities will wear out. Of course, even with maintenance, such structures will depreciate and someday need replacement. The value of these assets including the land is considerable. Focusing only on the depreciable assets however, we believe that that \$20 million is a conservative estimate.<sup>11</sup>

Finally, the City has a sizable investment in water and sewer assets. However, water and sewer capital expenditures are not funded by tax revenues. Instead, they are financed by a combination of fee revenues and MWRA grants. For this reason, we focus in this report on the substantial infrastructure investment that Newton has made in assets outside the sewer and water systems, even though there may be a backlog of renewal and maintenance work in this domain as well.

Adding up the totals above, it seems prudent to estimate the non-water, non-sewer depreciable public capital at an aggregate value approximating \$1.2 billion, and quite possibly higher.

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<sup>7</sup> Office of Comptroller, City of Newton, General Fixed Asset Account Group, Schedule of Equipment, 30 June, 2008. Note that price-to-book values for equity shares for S&P 500 firms have averaged around 2.4 over the last 30 years.

<sup>8</sup> City of Newton, Capital Improvement Plan, 2009-2013, <http://www.ci.newton.ma.us/Exec/fy09-fy13cip.pdf>

<sup>9</sup> The city has a number of strategies for addressing street repair. These range in cost from a low-priced thin mix overlay process that costs \$80,000 per mile to reconstruction with a concrete overlay that runs to over \$1 million per mile. The \$200 million estimate takes the midpoint of this range (about \$645,000 per mile) as a starting point for the calculation adjusted for curb and sidewalk restoration.

<sup>10</sup> There is also a community golf course, operated by a private contractor but that requires some support from the City.

<sup>11</sup> This is a very rough estimate. Explicit maintenance expenditures for building and equipment for the Parks and Recreation Department in the fiscal year ending 2008 were over \$500,000. If these expenditures were meant to cover depreciation rather than maintenance on existing depreciable assets, then assuming that this covered two percent of the total value would imply a total of capital asset value \$25 million. However, if they are purely maintenance expenditures, they probably account for one percent of value or less, implying a total value of \$50 million. Note that Newton recorded about \$150,000 in book depreciation in the Parks and Recreation Department for fiscal 2008. If this is two percent of book value, then book value would be \$7.5 million, implying a market value of about \$18 million. Thus, the estimated value ranges from \$18 to \$50 million.

Maintenance and Depreciation. Buildings, equipment, and roadways inevitably depreciate over time. Wear and tear from usage as well as economic obsolescence of mechanical systems and other components will ultimately erode the value of any capital, public or private. Yet, just as changing the oil and tuning a car's engine on a regular basis are necessary for an automobile to realize its full economic life, so too are proper maintenance expenditures necessary for public infrastructure to achieve its full duration. In the absence of such maintenance, buildings and roads and equipment will decline faster and additional capital expenditures will be necessary to replace these assets. (See the Appendix for definitions of such terms as maintenance, deferred maintenance, renewal and renovation.)

Of course, even proper maintenance cannot extend the life of such assets indefinitely. Ultimately, maintaining Newton's capital assets requires re-investment expenditures. Thus, proper management of the City's infrastructure necessitates both regular maintenance expenditures and new investment funds to repair and/or rebuild aging assets, although it is not always easy to separate these two functions in practice.

Unfortunately, it appears that Newton is similar to many commonwealth communities in underfunding and thus deferring needed maintenance. When maintenance is not done, capital assets underperform and lose value more quickly than they should and often future maintenance activities are more expensive. In addition, insufficient funds are set aside for replacing decaying assets.

*Maintenance.* Evidence of insufficient maintenance abounds. The 85 structures that comprise Newton's stock of public buildings account for a total of approximately 2.6 million square feet. In fiscal 2008, the schools spent about \$2.3 million of their budget on explicit maintenance, possibly more depending on how one counts related expenditures for personnel, administration, and the maintenance shop. In addition, about \$1.2 million of the Buildings Department budget will be spent on school maintenance. Accordingly, it appears that the school maintenance effort in fiscal 2008 amounts to something on the order of \$3.5 to \$4 million. Since the schools comprise 2 million square feet, school building maintenance expenditures appear to be about \$2 per square foot, if we use the upper value estimate. Moreover, the Building Department estimates that of the \$1.4 million of its budget not allocated to school maintenance, about \$800,000 is overhead not directly attributable to either school or municipal maintenance. This leaves about \$600,000 to maintain the approximately 600,000 square feet of municipal buildings, implying a municipal maintenance effort of about \$1 per square foot. The weighted average maintenance expenditure per square foot is therefore about \$1.77 across the City.

In contrast, Buildings Department Commissioner, Nicholas Parnell and Joshua Morse, the HVAC technologist in the Department, argued that extensive research on Boston area maintenance by private firms implies that the true value of needed maintenance expenditure is approximately \$4 per square foot. An annual study by Whitestone Research<sup>12</sup> suggests that the difference may not be quite so high but is still substantial as Boston-area maintenance and repair costs are estimated to be on the order of \$3.35 per square foot in 2007. Thus, a lower bound of annual maintenance *underfunding* would appear to be on the order of  $(\$3.35 - \$1.77)$  per square foot  $\times$  2.6 million square feet = \$4,110,000 or a bit over \$4 million for the building component of the City's infrastructure alone (or possibly \$4.6 million if total school maintenance is as low as \$3.5 million). Taking the Building Department's estimate of \$4 per square foot yields a higher

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<sup>12</sup> Whitestone Building Maintenance and Repair Cost Reference, 2007-08, P. Lufkin and I. Gersten, Washington, D.C. (2008)

upper bound estimate for the amount of maintenance under spending of  $(\$4 - \$1.77) \times 2.6$  million square feet = \$5,800,000. An even higher upper bound is suggested by the work of Steve Poftak, Director of Research at the Pioneer Institute of Public Policy Research, which argues that the Massachusetts public sector needs to commit to annual expenditures of two percent of the actual value of the underlying assets for maintenance and repair. If one takes the total building value to be \$840 million as suggested above, applying this standard would imply annual maintenance expenditures of nearly \$17 million would be appropriate.<sup>13</sup> While spending at this level might include some capital replacement and therefore exceed to some extent what is needed as purely maintenance expenses, it nevertheless serves as a cautionary warning regarding just how insufficient Newton's maintenance efforts are.

Moreover, it is again worth recalling that the City's infrastructure consists of more than just its buildings. For example, consider the maintenance needed to keep up the roadways. A 2002 study by the International City Managers Association estimated that the median street maintenance spending per capita across cities with a population of 100,000 or more was \$20.44 in 2000.<sup>14</sup> Newton is in a sufficiently dense population area that this number is likely a good starting point for discussion. However, the highway and street construction price index compiled by the Bureau of Labor Statistics has since risen by over 62 percent, suggesting that the cost today would be roughly \$34 per capita.<sup>15</sup> Further, Massachusetts's construction wages are at least 20 percent above the national average.<sup>16</sup> Hence, the relevant figure for Newton is likely closer to \$40 per capita. This would imply street maintenance spending for Newton on the order of \$3.4 million (about \$11,000 per mile) if it wishes to be at the national median in maintenance efforts. Indeed, as noted below, Highway Division personnel believe that Newton's roads have been permitted to deteriorate to a point where the necessary maintenance is over \$12,000 per mile or more than \$46 per capita. (The data for 2008 indicate that Newton only spent about \$37 per capita in FY2008.) Hence, needed street maintenance over the last year probably falls in a range of \$3.4 to \$3.9 million. This amount would rise by an additional \$3 million if lighting and snow and ice removal were included.

Turning to park and open space maintenance, data from the Massachusetts Department of Conservation and Recreation suggest that a minimal effort for parks and open spaces is likely on the order of \$0.07 per square foot or about \$3,000 per acre, or possibly higher. According to the Department's maintenance standards, the Chestnut Hill Reservation would need an average of \$0.06 per square foot (about \$26,000 per acre) in 2006 dollars. However, that same document notes that the *Maintenance Plan for the Muddy River Parks of the Emerald Necklace, Muddy Rivers Restoration Project* estimated at maintenance costs of \$0.08 per square foot (\$3,500 per acre) for the Arnold Arboretum in Boston and \$0.12/square foot (\$5,200 per acre) for Prospect Park in Brooklyn, New York. The Maintenance and Management Plan for the Muddy River Parks of the Emerald Necklace established a need of \$0.10/square foot.<sup>17</sup> Indeed, a study for Trinity River Corridor Project in Dallas that surveyed other park maintenance costs estimates that these costs amount to \$6,800 per acre along the nine parks that form Boston's Emerald

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<sup>13</sup> S. Poftak, "Fixing Maintenance in Massachusetts" Pioneer Institute.[http://www.pioneerinstitute.org/pdf/Fixing\\_Maintenance\\_in\\_MA.pdf](http://www.pioneerinstitute.org/pdf/Fixing_Maintenance_in_MA.pdf)

<sup>14</sup> [https://outlook.web.tufts.edu/exchange/dricha03/Drafts/RE:%20Most%20recent%20draft.EML/1\\_text.htm#\\_ftn1](https://outlook.web.tufts.edu/exchange/dricha03/Drafts/RE:%20Most%20recent%20draft.EML/1_text.htm#_ftn1)

<sup>15</sup> [https://outlook.web.tufts.edu/exchange/dricha03/Drafts/RE:%20Most%20recent%20draft.EML/1\\_text.htm#\\_ftn2](https://outlook.web.tufts.edu/exchange/dricha03/Drafts/RE:%20Most%20recent%20draft.EML/1_text.htm#_ftn2)

<sup>16</sup> [https://outlook.web.tufts.edu/exchange/dricha03/Drafts/RE:%20Most%20recent%20draft.EML/1\\_text.htm#\\_ftn3](https://outlook.web.tufts.edu/exchange/dricha03/Drafts/RE:%20Most%20recent%20draft.EML/1_text.htm#_ftn3)

<sup>17</sup> Massachusetts Department of Conservation and Recreation, Resource Management Planning, Chestnut Hill Reservation, Appendix E. <http://www.mass.gov/dcr/stewardship/rmp/downloads/CHR/18Appendix%20E%20Maintenance%20Standards-Nov06.pdf>

Necklace.<sup>18</sup> Thus, we believe that conservative estimates of the annually needed maintenance expenditures for the City's parks and open lands are likely on the order of \$3,500 per acre or about \$3,800,000 in total.

To see how these numbers compare with actual expenditures, consider first the case of roadway maintenance. In 2008, it appears that Newton allocated about \$3.1 million in total for explicit street and sidewalk maintenance. Adding in additional amounts for snow and ice removal and lighting maintenance yields an estimate of total street maintenance spending of about \$6.1 million. This leaves a maintenance shortfall of about \$300,000 for the City's road infrastructure given the \$6.4 million total of estimated road maintenance need. Even this is likely to be an underestimate however according to City employees. The industry norm is that road deterioration is something like a light bulb. Just as a light bulb works fine for virtually all of its life but then suddenly becomes totally dysfunctional, roads depreciate slowly over say the first fifteen years but the decline accelerates rapidly over the next five. In the view of Dave Turocy, the Deputy Department of Public Works Commissioner, Newton has let many of its roads slip into this latter state of decline with the result that needed maintenance for these streets is much greater. Consequently, the needed roadway maintenance apart from ice and snow removal and lighting, is quite possibly 15 percent greater than the \$3.4 million estimate above implying an additional road maintenance shortfall of \$510,000. When added to the lower estimate of \$300,000, this suggests that under-maintenance of the current road system may well be on the order of \$800,000.

Now consider the maintenance of parks and open spaces. The total budget for the Parks and Recreation Department in 2008 was just over \$5 million. Of this amount, about \$2.5 million was explicitly allocated to maintenance efforts for land, structures, snow and ice removal, and forestry. The shortfall in this case would amount to a further \$1.3 million given the above estimated need of \$3.8 million.

Finally, there is the very large stock of vehicles and equipment that the City owns. A review of the budget data suggest that across the City's various departments, approximately \$1.1 million was spent on equipment maintenance beyond that used for Water and Sewer services. However, we emphasize that this is a very rough estimate. Each department's maintenance spending includes costs such as fuel that are not really part of maintenance per se, but a review of the detailed budget of each department also makes clear that drawing the line between maintenance and non-maintenance expenditures is a matter of judgment. If, as estimated earlier, the vehicle and equipment stock has a value of \$45 million, a maintenance effort of \$1.1 million would reflect about 2.4 percent. Whether this amount is adequate or not is difficult to gauge. For example, the Police Department maintains 69 vehicles and replaces about ten percent of these each year. Hence, the average vehicle age is about five years. If the average maintenance expenditure is \$50 per month or \$600 per year and if the average, five-year old vehicle has a value of \$20,000, this would imply that proper maintenance costs run closer to three percent per year. Applying this percentage to all of the City's \$45 million of equipment would imply a proper maintenance expense of \$1.4 million per year, and therefore, an equipment maintenance

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<sup>18</sup>See [http://www.trinityrivercorridor.org/pdf/vision\\_plan/ImplementationOperations.pdf](http://www.trinityrivercorridor.org/pdf/vision_plan/ImplementationOperations.pdf) for the complete study of the Trinity River Corridor Project.

gap of about \$300,000 per year.<sup>19</sup> Certainly, anecdotal evidence suggests that some maintenance gap exists. In 2007, a firefighter was injured due to faulty suspension on a ladder truck. One of the cars used by the Inspectional Services Department has a rotted floorboard. Our overall judgment is that the gap of \$300,000 is reasonably accurate yet it is not definitive. For this reason, we estimate the City’s maintenance gap as a range of values between zero and the \$300,000 dollar value estimate above.

In sum, Newton currently underfunds the maintenance of its capital assets except, possibly, its stock of equipment and vehicles. A summary of the estimated amount of this underfunding by category appears in Table 4, below. For fiscal 2008, it implies that the total underfunding is on the order of \$5.7 to \$7.9 million, spread somewhat proportionately across its buildings, roadways, and parklands and open spaces. In evaluating this result, it is important to recognize that every effort has been made to use the most conservative approach, and thus minimize, our estimates of the needed or best-practice maintenance expenditures in all cases. Hence, we view the estimates in Table 4 as potentially low.

**Table 4**

**City of Newton: Estimates of Actual and Needed (Best Practice) Infrastructure Maintenance Spending By Category, FY 2008**

<i>Infrastructure Type</i>	<i>Best-Practice Maintenance</i>	<i>Actual Maintenance</i>	<i>FY 2008 Maintenance Gap (Best Practice Less Actual)</i>
<i>Public Buildings</i>	\$8.7 Million to \$10.4 Million	\$4.6 Million	\$4.1 Million to \$5.8 Million
<i>Roads and Streets</i>	\$6.4 Million to \$6.9 Million	\$6.1 Million	\$300,000 to \$800,000
<i>Parks and Open Spaces</i>	\$3.8 Million	\$2.5 Million	\$1.3 Million
<i>Equipment</i>	\$1.4 Million	\$1.1 Million	\$300,000
<b>Total</b>	<b>\$20.3 to \$22.5 Million</b>	<b>\$14.3 Million</b>	<b>\$6.0 Million to \$8.2 Million</b>

Source: Committee estimates and computations

*Depreciation and Net Investment.* According to conventional business accounting, depreciation is recorded as a cost in the income statement. (Depreciation is a noncash expense that reduces the value of an asset as a result of wear and tear, age, or obsolescence. Most assets lose their value over time (in other words, they depreciate), and must be replaced once the end of their useful life is reached. There are several accounting methods that are used in order to write off an asset's depreciation cost over the period of its useful life.) Recording depreciation as a cost in the income statement has the advantage of making clear the capital costs incurred in generating the goods and services the firm provides. For this purpose, firms (and now government bodies) typically rely on depreciation schedules consistent with good accounting practice. The Commerce Department, Bureau of Economic Analysis (BEA), estimates an

<sup>19</sup> The maintenance of fire equipment is a more complicated calculation. While the fire chief has said that fire trucks and engines have a 20-year life, it is absolutely imperative that they work at top form all the time. This requires constant maintenance and repair, often at rates above those applied to other city vehicles.

economically useful life for school buildings of 50 years or a straight-line depreciation rate of two per cent per year.<sup>20</sup>

If this accounting practice were applied to the 2008 estimated building stock of \$975 million and the additional \$20 million of parkland structures, it would imply a building depreciation cost of about \$20 million was incurred by Newton in providing educational and municipal services during the fiscal year. Since streets and roads are also subject to a slightly lower straight line depreciation rate of 1.67 percent, implying a useful life of about 60 years. As noted above, however, the appropriate rate may be higher if the road condition is of low quality. The Highway Division has suggested that 20 years is more reasonable given the current condition of Newton roads. We have therefore generated a range of estimates by applying a 3.5 percent rate to the lower reconstruction value of \$200 million and the Commerce Department rate of 1.67 percent to our higher reconstruction value of \$350 million. This implies a street and sidewalk depreciation cost in 2008 for Newton of \$5 million to \$7 million, suggesting in turn a value of \$6 million as a prudent estimate.

Land is generally not included in this type of analysis since it does not depreciate.

The depreciation of the City's vehicles and equipment can also be quantified. As noted above, the BEA estimated that the useful life for construction equipment, trucks, and vehicles is much shorter than that for buildings. These capital items are regarded as having a useful life on the order of ten or eleven years, implying a depreciation rate of about nine percent per year. Given a rolling stock of \$45 million, this would imply a further depreciation expense of \$4 million.

In total then, we estimate that Newton incurred a depreciation cost about \$30 million in providing municipal and education services in 2008, which was not recorded in the City's Operating Budget. (Neither were funds set aside for the eventual replacement of the relevant capital assets.)

How does this amount compare with what the City actually spent on capital renewal? A detailed review of the City's Supplemental Capital Budget for 2008 and the projects from that budget for which funds were eventually appropriated indicates that total gross investment in new capital for schools and municipal purposes, apart from sewer and water investments of about \$5 million, was approximately \$13.4 million. This was funded by free cash, debt issuance, Community Preservation Act (CPA) funds, Community Development Block Grants (CDBG), and various other sources including operating revenues and parking meter collections.<sup>21</sup> Since we needed to spend \$30 million, this would leave a shortfall of \$16.6 million needed to keep the City's capital stock intact, above and beyond maintenance funding. It is not completely straightforward to allocate this shortfall across the three classes of depreciable assets -- buildings, equipment, and roadways. Such an exercise requires making somewhat arbitrary judgments regarding how to classify certain projects such as the Newton South High School turf field expenditures and various neighborhood and improvement projects. Table 5 below provides a rough sense of the distribution of the underfunding. Here, we have put the bulk of the park and recreation capital spending in the buildings (and structures) category and considered two different allocations of \$2.7 million in

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<sup>20</sup> See, e.g., "BEA Depreciation Estimates", Department of Commerce, Bureau of Economic Analysis, 2004. <http://www.bea.gov/national/FA2004/Tablecandtext.pdf>

<sup>21</sup> City of Newton, "FY08 Supplemental Capital Budget and Five-Year Capital Improvement Plan, FY09-13" <http://www.ci.newton.ma.us/Exec/fy09-fy13cip.pdf>.

public works projects along designated street neighborhoods between building and road capital investment.

**Table 5**  
**City of Newton: Rough Estimates of Depreciation and Gross Investment Spending**  
**By Depreciable Asset Category, FY 2008**

<i>Infrastructure Type</i>	<i>Estimated Depreciation or Needed Investment</i>	<i>Actual Investment</i>	<i>Net Underinvestment</i>
<i>Public Buildings</i>	\$20 Million	\$6.8 Million	\$13.2 Million
<i>Roads and Streets</i>	\$6 Million	\$2.8 Million	\$ 3.2 Million
<i>Equipment</i>	\$4. Million	\$3.8 Million	\$ 0.2 Million
<i>Total</i>	<b>\$30 Million</b>	<b>\$13.4 Million</b>	<b>\$16.6 Million</b>

Source: Committee estimates and computations

Again, it is important to bear in mind the caveats that apply to Table 5. First, these are rough estimates at best. Because the City does not maintain well-specified capital accounts, the Citizen Advisory Group has had to rely on industry rules of thumb and “back-of-the-envelope” methods that undoubtedly have some large standard errors. Second, precisely because the estimates are rough ones, we have made every effort to be conservative. If the estimates have a bias, it is probably one that *underestimates* the net deterioration of Newton’s infrastructure.<sup>22</sup> Despite these caveats, the conclusion that Newton is significantly underfunding its investment in capital assets is absolutely clear.

If we consider the maintenance and net investment estimates together, the results suggest that in fiscal 2008, the City of Newton should be spending a total of approximately \$50 million annually to cover the combined costs of maintenance and depreciation. In contrast, the City appears to have spent about \$28 million in total to cover these costs. This leaves a maintenance and capital-spending gap of approximately \$22 million for the fiscal year.<sup>23</sup> Furthermore, these are ongoing, annual costs, not one-time funding requirements.

<sup>22</sup> As one small but instructive example of underestimating depreciation and spending needs, the City has been under-investing in the building and technology infrastructure of the “new” library since it was built. The Newton Free Library building, while only 17 years old, hasn’t been painted in 15 years, needs significant repair to its heating and ventilation systems, and has much of its furniture in need of replacement. Most significantly, the library’s \$12,000 / year technology budget reflects enough money to only replace existing technology and does not allow for investment in new technologies that may provide for lower future costs and / or better future services. In fact, the budget may not even be large enough to replace existing technology: the library has reduced the number of microfiche machines it offers from 10 in 1991 to 1 today as the library has not had the allocated capital to replace those machines as they have broken. There are many potential uses of technology in libraries to reduce costs. For example, self-checkout workstations and radio frequency identification tags on books would require up-front technology investment but may save enough labor, processing and theft costs to justify the investment. Other technology investments such as further building out the library’s web site may create low-cost ways to enhance the library’s services.

<sup>23</sup> The most recent data indicate that about \$25 million will be spent this year for the NNHS project, and \$200 will be spent in a few years. While this project therefore represents a significant increase in the City’s existing infrastructure it may be regarded as a necessary expenditure to undo the infrastructure decline that is necessary if the maintenance and depreciation gaps found here have been persistent over time.

Historic Shortfalls and Future Needs. The Citizen Advisory Group has not had the person-power to go through previous fiscal years in the same detail as the current one. However, a cursory examination of the data suggests that the maintenance and capital asset funding shortfalls have been the norm in past. Hence, the City's physical capital has likely been allowed to decline over recent years. Moreover, while the past shortfalls have probably not been particularly large in any one year, their cumulative effect can be.

Some evidence of the infrastructure decline is revealed in the current Capital Improvement Plan<sup>24</sup> that lists nearly \$200 million worth of municipal capital projects that need to be funded. All of these are worthwhile. More importantly, they reflect expenditures necessary to replace municipal assets that have been under-maintained for some time.

Additional evidence of Newton's history of under-supporting its physical capital assets is revealed in the long-range facilities study recently conducted by the School Committee. As that study showed, Newton's public school buildings have been prominent victims of capital neglect with the result that of the 21 schools, sixteen are over 50 years old and three are over 80 years old. Virtually all of these run on very outdated mechanical systems and many suffer from overcrowding. Moreover, even a conservative estimate of pursuing the least expensive (Option 1) of the three options proposed by the architectural firm HMFH is on the order of an \$200 million based on mid-2007 construction prices. Since that time, the Bureau of Labor Statistics index for new school construction costs have risen by nine percent bringing the current total cost to a minimum of nearly \$220 million (on top of the aforementioned \$200 million for municipal infrastructure).<sup>25</sup> This is the inflation-adjusted HMFH assessment of what is required to bring the 21 schools (16 of which are over 50 years old and three of which are over 80 years old) into the standards of the 21<sup>st</sup> century.

This assessment is consistent with survey evidence cited at the outset of this analysis, namely that current construction costs are on the order of \$400 per square foot. To be precise, the HMFH estimates implicitly reflect a cost range from \$336 to \$337 per square foot in mid-2007 dollars. Using the BLS school inflation adjustment again, this implies that in current construction dollars this range would extend from \$356 to \$409. Indeed, when design and site development costs are added in, expenses can rise even higher. For example, the total cost of the current Wellesley High School project is now \$133 million. Given that that new school is 280,000 square feet this implies a total project cost of will cost \$475 per building square foot. (For comparison, at \$198 million the current \$405,000 square foot Newton North project that is LEED certified and includes both a swimming pool and Vocational Technical Education facilities will cost \$488 per building square foot.)

The bottom line is that the historic underfunding of public infrastructure has left Newton with a sizeable backlog of desired capital spending amounting to roughly \$300 million in the school and municipal sectors combined. In this light, the new Newton North High School may be seen as a significant effort to redress the decline of prior years. Still, even after the investment in the high school, important infrastructure needs remain very substantial, on the order of \$300 million. Even if the City attempts to address the school portion of these needs, and does so over an extended period of say 15 years, it will need to allocate substantial sums to capital projects, in addition to the amounts of maintenance and renewal expense it will need to incur just to sustain its current stock of

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<sup>24</sup>Ibid.

<sup>25</sup>US Department of Labor, Bureau of Labor Statistics, Producer Price Index, Industry Series, ID: PCU236222236222, New School Construction, [http://data.bls.gov/PDO/servlet/SurveyOutputServlet?series\\_id=PCU236222236222](http://data.bls.gov/PDO/servlet/SurveyOutputServlet?series_id=PCU236222236222).



capital assets. If the City is not willing to sustain such expenditures, it will need to make difficult choices regarding which infrastructure projects it deems most worthwhile and understand the financial and service level/quality consequences of deferring maintenance and renovations.

In other words, if Newton wishes to maintain the quality of public services for which it has traditionally been known, it will need to maintain the infrastructure required to provide those services. Our rough but prudent estimate in this regard is that annual maintenance and depreciation spending of about \$50 million to keep the existing infrastructure intact plus an additional \$14 million each year to address the capital project backlog in a timely fashion would be necessary, above and beyond the current spending (including that on Newton North). The resultant annual need of over \$60 million (2008 dollars) in infrastructure spending is large (although it is approximately being achieved in very recent years when one includes this year's spending on the Newton North project). Again, these expenditures are average values and not necessarily what must be spent each and every year. However, to the extent that spending is delayed through some years, it will only raise the amount necessary to spend at a later date. If the City is not prepared to make this capital commitment (which we again think is a conservative one), it will either continue to erode the capital stock of the City or increase the backlog of deferred capital investments. Along the way, choices regarding the quality of municipal services and the scope and scale of public capital investments will only become increasingly difficult.

#### **4.2. Newton's Capital Planning and Investment Process**

Investment Guidelines and Basic "Rules of the Game". After Proposition 2½ was passed in 1981, the executive branch of city government established guidelines designed to protect and ration capital investment. The first guideline was that Free Cash (the end of year cash surplus from the Operating Budget resulting from underestimated revenues and/or under-spending of budgeted expenditures) would only be used for capital projects. The second was that capital projects over \$500,000 would be financed by General Obligation Bonds issued by the City, while those under \$500,000 would not be bonded and would be paid for by either the Operating Budget or residual Free Cash. The third was that debt service, or interest and principal on bonded debt, would be no less, but also no more than, 3% of the Operating Budget's revenue. Thus, the amount of capital projects over \$500,000 that would be funded each year was capped.<sup>26</sup>

The 3% policy was originally intended as a placeholder since that was the historical number and no one knew what level of capital spending might be required in the future. However, in the years since 1981, this guideline has appeared in annual capital plans reviewed and approved by the Board of Aldermen and been accepted by both the executive and legislative branches of city government as both a floor below which debt service should not drop and a ceiling above which debt would not increase. Over the past 28 years, Newton has been true to this policy: annual interest and principal payments on bonded debt have varied little from the 3% of revenue rule. This policy may, however, be undergoing change. In the last two years, the City's recent bond financings and the Mayor's recently issued capital plans (both driven by school financing needs) have increased this percent close to the 5% level.

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<sup>26</sup> In practice, the financing of capital improvements and maintenance projects is a bit more complex since the monies come from both tax-supported and non-tax-supported sources and find their way into both large scale and small scale capital projects. Tax-supported sources include General Obligation Bonds (a very large proportion), the General Fund Operating Budget (a very small proportion), so-called Free Cash (essentially any cash surplus from the Operating Budget), and several other lesser sources. Non-tax-supported sources include State and Federal Grants, Parking Meter Receipts, Water/Sewer/Stormwater Fund Revenues, Community Development Block Grants, and the like.

Most likely, the original purpose of the 3% rule, together with the use of Free Cash to fund capital projects, was to shore up the City's commitment to public infrastructure. However, this does not appear to have worked as planned in recent years, since, as noted, the 3% rule has tended to act as an informal ceiling on capital spending until very recently.

Free Cash, which is calculated in the summer months after the books are closed for the fiscal year on June 30, is largely the result of overestimations of costs and underestimations of revenues earlier in the budget year. Historically, these estimates may have had the effect of protecting some of the City's resources from the incessant claims for current expenses that the political process generates in an effort to reserve such funds for needed capital projects beyond what the 3% rule would otherwise sustain. In recent years, however, this possibility has diminished as real revenue growth has ebbed and Free Cash has increasingly been used to fund current and recurring expenses such as ice and snow removal.

This problem has been compounded by the application of the informal 3% rule of thumb. A simple, stylized example illustrates this point. Let's assume that Newton could issue new 10-year debt at a 3% interest rate for a total 13% annual cost (10% amortization + 3% interest). If Newton were to increase its debt service from its historic 3% to 6% of General Fund revenue, it could borrow an additional \$63 million ( $3\% * \$275M / 13\%$  annual cost) to fund some of this capital investment backlog. In point of fact, Newton has already started down this road. In the last two fiscal years Newton's debt has increased by \$42 million, from \$68 million to \$110 million, driven largely by financing for school buildings.<sup>27</sup> This brings Newton's current debt service close to 5% of revenues. All of the communities reviewed in the Citizen Advisory Group's benchmarking report used substantially more borrowing to finance capital investment. As shown in Table 6 below, Belmont, Brookline, Lexington, Needham and Wellesley, all of which have a AAA bond rating, used an average of 7.4% of their operating budget in 2007 to fund debt service.<sup>28</sup> At a 6% level, Newton would most likely still be below today's benchmark average.

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<sup>27</sup> Approximately ninety percent of Newton's debt service recorded in the General Fund's Operating Budget is related to educational purposes.

<sup>28</sup> Note that Newton, as well as the above listed communities, also borrows money outside of its General Fund. Total Newton debt service for the mayor's proposed 2009 budget is \$11.3 million, which also reflects \$2.1 million of debt service for the water fund and \$1.0 million of debt service for the sewer fund. Including the full \$11.3 million of debt service, Newton anticipates spending 4.1% of its General Fund revenues on debt service. If borrowing outside of the General Fund is included for the benchmark communities above as well, they spend on average 8.2% of their General Fund on debt service.

**Table 6****Borrowing Statistics for AAA-rated Communities in CAG Benchmarking Report**

	<i>Population</i>	<i>Total Outstanding Debt</i>	<i>General Fund Debt Service</i>	<i>General Fund Revenue</i>	<i>Debt Service as a % of Revenue</i>	<i>Bond Rating</i>
<i>Belmont</i>	23,308	\$36,018,056	\$4,418,856	\$72,648,326	6.1%	AAA
<i>Brookline</i>	55,241	\$104,508,761	\$13,348,303	\$178,351,775	7.5%	AAA
<i>Lexington</i>	30,231	\$55,984,978	\$9,183,414	\$109,042,144	8.4%	AAA
<i>Needham</i>	28,368	\$50,190,631,	\$7,165,726	\$111,963,488	6.4%	AAA
<i>Wellesley</i>	26,987	\$61,195,935	\$8,510,042	\$99,379,191	8.6%	AAA
<i>Average</i>	<b>32,827</b>	<b>\$61,579,672</b>	<b>\$8,525,268</b>	<b>\$114,276,985</b>	<b>7.4%</b>	<b>AAA</b>
<i>Newton (09E)</i>	<b>82,819</b>	<b>\$110,289,973</b>	<b>\$8,253,127</b>	<b>\$275,085,378</b>	<b>3.0%</b>	<b>AAA</b>

Source: Citizen Advisory Group, Benchmarking Study, October 22, 2008

Another important procedural matter related to capital spending is that, by law, only the Mayor can propose a Capital Budget (or Operating Budget for that matter) for consideration by the Board of Aldermen, and only the Board can appropriate funds. In the jargon of the City, “The Mayor proposes and the Board disposes.” While the Board can cut items out of a budget submitted by the Mayor, it cannot add items to a budget proposed by the Mayor. While the Board of Alderman can pass resolutions suggesting various capital investments, it has limited ability to initiate changes in investment priorities and shoulders limited responsibility for how the City’s funds are spent. Thus, the Mayor carries most of the responsibility for whatever explicit and implicit priorities are embedded in the City’s capital spending plan.

Details of Newton’s Capital Planning and Investment Process. Newton’s approach to planning for and investing in its long-term assets (e.g., buildings, land, vehicles, equipment, sewers, roads) involves a flow of activities, documents, and accounting procedures that stretch out over a nine-month period, every year. The four activities and related documents that define Newton’s annual planning and investment process are:

- The Capital Improvement Program (CIP)
- The Supplemental Capital Budget
- The Mayor’s Submissions to the Board of Aldermen
- The Capital Stabilization Fund

The Capital Improvement Program. The CIP contains a list of all capital improvements in excess of \$500,000 (with completion dates longer than a single year) that have been proposed by municipal and school departments for the upcoming five-year period. Every year the CIP is revised and a new five-year program created. All capital improvement projects included in the CIP are sufficiently large to warrant financing through bonded debt.

Capital improvement projects of less than \$500,000 (along with those with completion dates shorter than a single year) are typically relegated to the General Fund's Operating Budget. These smaller projects are financed by Free Cash.

Newton defines a capital improvement project as a physical public betterment or improvement involving facilities, land, or equipment, with a substantial useful life and a cost of \$10,000 or more. Items typically classified as capital improvement projects include: new public buildings; significant alterations, additions or improvements to existing public buildings; land improvements, acquisition, and development; equipment replacement and/or refurbishing; street reconstruction and major resurfacing; pedestrian walkway construction and rehabilitation; and maintenance projects in the Water and Sewer Divisions.

The CIP's list of proposed projects is not linked to an explicit, comprehensive plan for the City.<sup>29</sup> Rather, capital projects qualify as being valid in a strategic sense by meeting at least one of the following, functional criteria: enhancing protection of public health and/or safety; ensuring compliance with state and/or federal law or administrative regulations; reducing and/or stabilizing Operating Budget costs; prolonging the functional life of a capital asset of the City by 10 years or more; encouraging further expansion of the City's real estate tax base, employment or housing; or improving the ability of the City to deliver services.

Each year during the months of July and August the Mayor's Office asks all department heads to submit their large capital requests for the coming five-year period. This composite list must be submitted to the Board of Aldermen before the Mayor's annual Operating Budget is submitted and considered by the Board. Upon its receipt, the Board of Aldermen is required by charter to publish in one or more newspapers of general circulation in the City a summary of the Capital Improvement Program and a notice stating: (1) the times and places where copies of the CIP are available for inspection by the public, and (2) the date, time, and place, not less than two weeks after such publication, when a public hearing on the CIP is supposed to be held by the Board of Aldermen. It is not clear that these hearings actually take place in the form implied by the City's charter.

Although originally conceived as a planning exercise over thirty ago, current City officials often refer to the capital plan portion of the CIP as a "clerical exercise" resulting in a "wish list" of projects. Indeed, it appears that there are strong incentives for department heads to get as many of their future projects on this list as early as possible as a way of staking out a claim for future capital improvement dollars. As a result the CIP, which contained projects totaling \$235 million for 2008-2012, does not present a realistic match-up of dollars available and capital requests. Nor does it reflect any tough choices about what projects to put in and leave out of the five-year plan and what investment priority each of these proposed capital projects should carry

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<sup>29</sup> Newton does not have, as far as we know, a truly Comprehensive Plan for the City. In November 2007, a distinguished citizen committee did submit as so-called "comprehensive plan" that addressed, for the most part, the City's land use development options and proposed decision guidelines, values, and processes that seemed appropriate. This is a very thorough and professional plan, but it does not represent a truly comprehensive strategic plan for the City. Nor was it intended to be.

on a departmental or citywide basis. In other words, the Capital Improvement Program is not used for planning, prioritizing, or making decisions.

Supplemental Capital Budget. Although submitted to the Board of Aldermen along with the CIP in October of each year, the one-year Supplemental Capital Budget is the product of a completely different planning process.

First of all, in contrast to the five-year CIP, this one-year Capital Budget is composed within the constraints of the Mayor's rough estimate of how much money will be available during the coming year for all capital projects, including those that are bonded (with debt) and those that are not. This estimate is typically developed during the summer months after the Comptroller closes the books (on June 30) for the preceding year and prepares his first estimate of how much Free Cash the City has at its disposal. As noted, the CIP is not prepared in relation to resource availability.

Second, the Supplemental Capital Budget for any given year is considerably smaller than that listed in the CIP for the same year. For example, the Supplemental Capital Budget for FY 2007— including projects funded by bonded debt, state grants, Chapter 90 funds from the State Highway Department, and water and sewer fees—totaled \$23 million versus capital projects totaling nearly three times that amount for the same year that appeared in earlier CIP plans.

Third, in contrast to the five-year CIP, some projects in the Supplemental Capital Budget receive priority #1, #2, or #3 rankings. Some are not ranked. The group of ranked projects includes only those likely to be funded by Free Cash. Most of these capital projects are below \$100,000, but in FY 07 ten out of thirty-three prioritized projects were between \$100,000 - \$250,000. Two projects were much larger: a \$1 million street lighting project and a \$900,000 capital allocation to the schools. The Free Cash portion of the Supplemental Capital Budget in FY 07 was 27% of the total.

It is not entirely clear how the ranking of *individual* capital projects in Free Cash portion of the Supplemental Capital Budget are determined or what the ranking designations actually mean. As will be explained below, these project-specific priorities are not necessarily followed in actual practice. Nevertheless, the Chief Budget Officer does set some unpublished, overall budget priorities at the beginning of this budget process in consultation with the Mayor and the Chief Administrative Officer as a way of paring down the much larger list of capital projects appearing in the CIP.

For the remaining 73% of capital projects in the Supplemental Capital Budget (representing the bonded portion of the budget) investment priorities are not assigned. It is unclear why this is so.

Like the CIP, the Supplemental Capital Budget is only a plan. Like the CIP, it is submitted to the Board of Aldermen each October. It is not, however a formal request for capital. That process starts later. In fiscal 2007, the Supplemental Capital Budget or capital plan included 85 separate projects totaling \$26.7 million, with individual projects ranging in size from \$8,500 to \$2,600,000.

The Mayor's Submissions to the Board of Aldermen. Starting in the late fall, the Mayor begins a six-month (or so) process of submitting multiple, sequential requests for the appropriation of funds for capital projects. These requests include projects previously listed in the Supplemental Capital Budget.

This process of requesting appropriations gathers steam in March as the Mayor develops a clearer picture of how much Free Cash is likely to be generated from the Operating Budget. A final burst of submissions for capital funding can appear as late as May, if funds reserved for snow and ice removal are not fully consumed.

The Mayor's periodic submissions to the Board are a way of incrementally fine-tuning capital requests as more and more is learned about the availability of Free Cash for the current year. However, due to the unpredictable nature of Free Cash as a source of funds for capital appropriations, along with political pressures operating on the Mayor's Office, the Mayor's formal requests to the Board of Aldermen for capital rarely follows the priorities set forth in the previously submitted Supplemental Capital Budget.

For example, rather than the Mayor's submissions constituting a systematic progression through the #1 priority list, followed by a sequential selection of priority #2 and #3 projects in the Supplemental Capital Budget, there are always unexpected events (like a boiler failure, for example) that crowd out other pre-assigned priorities. So, too, do normal political developments and considerations affect previously assigned priorities. Thus, in any single year only about half of the #1, #2, and #3 priorities of the Supplemental Capital Budget are included in the Mayor's Submissions to the Board of Aldermen (and actually get done). This is because the Mayor picks and chooses capital projects off the Supplemental Capital Budget according to the current needs of the City and the financial and political realities presented to him.

One obvious feature of this capital planning and investment process is that the Board of Aldermen is never given an opportunity to make alternate choice decisions from a full, fiscally realistic menu of possible capital projects for any given year. Rather, the Board is asked to approve or disapprove separate lists of projects at various times throughout the year without a comprehensive picture of capital needs and available capital resources in front of them. While this incremental appropriation process may assure the City that current over-spending does not inadvertently occur, it also deprives the Board of making systematic trade-offs among longer-term investment priorities and capital needs.

The Capital Stabilization Fund. According to Newton's Chief Administrative Officer, "The Capital Stabilization Fund is where the real capital planning takes place." It is one of two sources of funds for the City's debt service.

The first source of funds for interest and principal payments on debt is property tax revenue, which flows into the Operating Budget and out to the holders of *existing* or previously issued debt. The second source of funds are transfers of money from the State's School Building Reimbursement Fund, which the Mayor has decided to put into the so-called Capital Stabilization Fund for *future* debt payments. Thus, while existing debt is serviced directly by tax revenues out of the Operating Budget, reimbursements from the State for debt service on previously bonded school buildings are sequestered for debt service on new capital projects, like Newton North High School. As a result, the cash balance in Capital Stabilization Fund is a key determinant of what the City chooses to finance (via bonding) in the future.

State reimbursements transferred to the Capital Stabilization Fund are supplemented by a second, much smaller amount of money coming from net surpluses generated from the

completion of previously authorized capital projects at less than projected costs or other gains.<sup>30</sup> Both the larger and smaller portions of the Capital Stabilization Fund are used to service the City's debt, although the smaller fund also doubles as a “piggy bank.” No capital expenditures are ever made from the larger fund; it is reserved for debt.

Throughout the year, the Comptroller provides the Mayor and Board of Aldermen with quarterly reports on the status of all capital appropriations, including a summary of the resulting debt payments and thus all activity into and out of the Capital Stabilization Fund. These updates enable the Mayor and the Board to regulate the flow of spending on both large and smaller projects by matching available cash in the Capital Stabilization Fund with the needs cash previously approved, large projects and other, emerging small projects. In other words, the Capital Stabilization Fund enables the lion's share of all new capital spending throughout the year, and the amount of monies available determine what the Mayor can propose in his rolling submissions to the Board of Aldermen.

Conclusion. At one level of observation, Newton's capital planning and budgeting process appears straightforward and practical. The Mayor figures out how much the City can spend on capital investments, based on what's available for spending in the Capital Stabilization Fund. The Mayor's priorities are revealed on a rolling basis throughout the year(s) in submissions for capital spending to the Board of Aldermen. The Board examines each submission as it comes along, and votes a simple “go” or “no go.”

A more granular view of this process reveals, however, that the *investment guidelines* used to calculate Newton's maximum allowable spending on bonded capital projects (the historic 3% policy) and the *processes* followed in overall capital budgeting are suboptimal on some important dimensions.

We have shown that the historic “3% of revenues rule” has been unduly restrictive. Holding aside the special history of the Newton North High School project, the City's capital budgeting process has generally compounded the underfunding driven by the financial restrictions of the 3% rule by imposing a short-term bias in planning and investment, which both inhibited a systematic discussion of investment priorities and perpetuated the persistent underfunding and large backlog of capital renewal and maintenance projects.

Another troublesome feature of Newton's capital budgeting regime is that it is not guided by a central, long-term vision for the City. Neither is it guided by investment priorities related to this vision—priorities proposed by the Mayor's office and ratified by the Board of Aldermen. Rather, the City's highly incremental capital budgeting and investment process appears to reflect an understandable preoccupation with short-term cash management, even though more disciplined cash forecasting and planning could certainly mitigate the risk of cash shortfalls. In addition, Newton's highly incremental approach to capital budgeting makes it impossible for the Board of Aldermen to systematically examine a complete Capital Budget and vote upon either short-term or long-term investment priorities embedded in such a plan. This has the (intended or

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<sup>30</sup> As capital projects are completed during the course of a fiscal year, the responsible department head notifies the Comptroller who closes unobligated appropriation balances to the Capital Stabilization Fund. All year-end encumbered capital appropriation balances are brought forward from one year to the next. Not later than July 15 of each fiscal year, each department head having a capital appropriation in either the Capital Improvement or General Fund, for which there is an unexpended and unencumbered balance at June 30, provides the Comptroller with a detailed request to carry the balance forward into the new fiscal year. Any undesignated and unreserved funds in the smaller part of the Capital Stabilization Fund at the time that the capital budget is submitted to the Board of Aldermen serves as the principal source of funds for additional capital needs.

unintended) effect of strengthening the power of the Mayor vis-à-vis the Board of Aldermen in resource allocation matters by effectively limiting important capital funding decisions to him.

Similarly, the City's current approach to capital planning and budgeting not only denies the Board of Aldermen and the School Committee an opportunity to absorb and discuss the investment priorities affecting the funding of the community's numerous services and programs, but also the larger Newton community as well. Thus, to the extent that municipal capital budgeting is an exercise in social choice, Newton's current process fails to meet this standard.

One can argue, of course, that the "social choice" metric is not a correct indicator of an effective capital budgeting and investment process because (a) the budget is not legally subject to voter referendum and (b) the elected Board of Aldermen has to approve major spending much like a corporate board of directors. Similarly, one can question why a mayor should bring capital projects to local neighborhoods or village communities for discussion and feedback when neither state governors nor presidents do so.

There are several possible answers to this question. It is far easier to discuss investment priorities and seek feedback from neighborhoods in a city of Newton's size than it is in larger political entities like states and entire nations; Newton has already used this outreach process in the vetting and allocation of CPC and CDBG funds; other communities like St. Paul, Dayton, Portland (OR), Seattle, Kansas City, Birmingham, and Los Angeles, all much larger than Newton, have moved to a system where capital projects are proposed and vetted with neighborhoods before they become high priority funding items in the cities' capital budgets (as described in Section V.1 below); and given Newton's severely constrained financial resources, City officials dearly need to find ways of building political support for investment priorities that will inevitably result cutbacks and deferred projects until new sources of funds can be found or developed.

#### **4.3. Three Case Studies on Newton's Capital Investment Process**

The previous section describes the Newton's capital budgeting and investment process on a citywide basis. However, both before a Capital Budget is proposed by the Mayor and after a menu of capital projects have been funded by the Board of Aldermen, many project-specific activities take place that determine the economic merits and outcomes of these projects. These activities relate to costing methods, project vetting practices, and capital planning. The three case studies summarized in this section bring our level of analysis down to the project level and give further insight to the strengths and weaknesses of current capital budgeting and investment practices. Taken as a group, these cases studies reinforce the following conclusions of the Citizen Advisory Group:

- All capital projects should be evaluated according to their estimated, comprehensive life cycle costs, not simply their initial construction costs or simple payback.
- On the executive side of Newton government, there needs to be a Capital Asset Manager position with the necessary capabilities and resources for assessing the accuracy of the data submitted in the capital planning and budgeting process, and the authority to either approve or reject submissions for further consideration by the Mayor's office on the basis of this assessment.
- The risks and costs of reactive, incremental capital budgeting can and should be reduced by a greater commitment to long-term capital planning and systematic prioritization of capital spending.



- The City should pursue any opportunity that has a higher return than the cost of capital if it will reduce the operating costs for the City.

### Case Study #1: Mechanical Systems at NNHS and the Importance of Life-Cycle Costing.

*Overview.* Life cycle costing is a method of evaluating the entire cost of a product or system in present value terms by including initial capital outlay, operating costs (utility costs, maintenance costs, etc.), disposal costs, and life of the product. Life cycle costing is not used systematically throughout Newton in the preparation of capital projects. The case of mechanical systems at the new Newton North High School demonstrates why life cycle assessments should be used in all major capital projects. Indeed the process described below is a very good template for the approach that the City should adopt when making investment decisions.

The principal facts of this case are straightforward. The design team for the new NNHS was evaluating various options for the mechanical system to be installed in the new building. Under escalating cost pressures, the City of Newton added unit ventilators as a potential option because its construction cost was \$1.5 million less than the other options. However, due to the high energy and maintenance costs, the total life cycle cost (in net present value (NPV) terms) turned out to be \$11 million more than the base option being considered. By employing a life cycle cost analysis, a fiscally responsible capital investment decision was made by rejecting an option with the lowest initial capital cost.

*Background.* The Newton North High School project was initially a proposal for a major renovation of the existing high school building. The School Superintendent, Jeffrey Young, initiated the proposal. The reasons for the renovation at NNHS were overcrowding, projected enrollment increases, a required mechanical system overhaul, and the desire to improve educational spaces.

Throughout the process, there were various decisions made by a wide range of stakeholders including the Mayor, the Board of Alderman, the School Department, the School Committee, the Design Review Committee, and the Public Buildings Department. These decisions were based on information provided by engineers, architects, accountants, and other experts.

An initial study in 2001 by architects Strelakovsky and Hoit indicated that it would cost \$40 million to renovate the existing building and that it could be done without having to vacate the school. However, with further investigation, it was determined that it would be impossible to complete such a renovation without the removal of the students from the site.

By December 2003, three options were under consideration; a major renovation, a hybrid using part of the existing building with a major addition, or a completely new building. The recommendations to the School Committee were to abandon any idea of renovation alone. The cost estimate had risen to \$70 million from the original \$40 million due to soaring construction costs and expanding scope. It was also recommended that the School Committee reject the hybrid proposal because, at \$95 million, it was close in cost to the new school option of \$108 million. Ultimately, the new school option was selected because it seemed to be the best value.

The new high school project went through a long process that included selecting a project manager, selecting an architect, reviewing and approving a design, and selecting a construction company. The excavation began in 2008 as scheduled. From the time of the initial estimate for a new building to the beginning of construction in 2008, the estimated cost of the building increased from \$108 million to almost \$200 million.

This dramatic rise in price caused intense scrutiny of the entire high school project. While some of the costs were within the control of the City, many were not. Regardless, great pressure was felt by all parties involved to reduce the upfront construction cost.

*Mechanical System: The Options.* These systems are a major cost component of the new high school building. They include air handling, heating, air-conditioning, and other related systems that are installed in the building. These have critical and far reaching implications because they determine much of the utility and maintenance costs for the building over its lifetime

As the building design began to take shape for NNHS, the design team had to select a system from several options. These options included the following five systems:

- System 1 – Base Case – Rooftop Package Units (DX Cooling, Gas Furnace)
- System 2A – Central Chiller Plant with Rooftop Mounted Air Handling Units (Centrifugal Chillers, Gas Heat)
- System 2B – Central Chiller Plant with Indoor Air Handling Units (Centrifugal Chillers, Gas Heat)
- System 3 – Distributed Heat Pumps
- System 4 – Ground Coupled Distributed Heat Pumps (GSHP)
- System 5 – 4-pipe Unit Ventilators attached to a Central Chiller Plant (Classrooms only – other areas similar to system 2A)
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Due to the intense pressure for lower cost, the design team added a sixth option.

System 6 – Compressorized Unit Ventilators with Electric Heat (Classrooms only – other areas similar to System 1)

Unit ventilators were added because their initial installation cost was approximately \$1.5 million less than a standard rooftop system. This was looked at as possibly the most cost effective option available, given the cost reduction pressures.

The breakdown of construction costs is summarized in Table 7 below.

**Table 7**  
**Estimated Construction Cost Differential**

System		Construction Cost					
		System Total	Acoustic Mitigation	Building Height Change	Building SF Change	Total Cost	Delta from Base
1	Package Rooftop - Base	\$12,000,000	\$1,129,000	\$0	\$0	\$13,290,000	\$0
2A	Rooftop AHU - Central Plant	\$14,267,717	\$0	\$0	\$514,500	\$14,782,217	\$1,492,217
2B	Indoor AHU - Central Plant	\$15,505,265	\$0	\$0	\$5,740,000	\$21,245,265	\$7,955,265
3	Heat Pumps	\$11,435,764	\$0	\$0	\$2,118,000	\$13,553,764	\$263,764
4	GSHP	\$16,435,764	\$0	\$0	\$2,118,000	\$18,553,764	\$5,263,764
5	Unit Vents - Plant	\$13,877,000	\$0	-\$500,000	\$514,500	\$13,891,500	\$601,500
6	Unit Vents - Compressorized	\$11,344,000	\$918,000	-\$500,000	\$0	\$11,762,000	-\$1,528,000

*Life Cycle Analysis of Mechanical Systems.* Each of the mechanical systems was evaluated for life cycle cost, maintenance requirements, risk of failure, and other criteria to determine the best option. A Sustainability Engineer conducted the life cycle costing analysis, which included energy and maintenance costs. Different life-cycle scenarios assumed different rates of inflation for energy over time. The engineer also modeled three different cases for the building’s overall operating efficiency.

Case 1 shown in Table 8 below is based on a Massachusetts Energy Code Compliant building. All assemblies and equipment efficiencies are based on code minimums.

**Table 8**

**Case 1: Code Compliant**

	<b>Elec (kWh/yr)</b>	<b>Gas (Therms/yr)</b>	<b>\$/yr</b>	<b>CO2 (MT/yr)</b>
<b>1 - Package Rooftop (Base)</b>	<b>3893859</b>	<b>265818</b>	<b>\$986,167</b>	<b>3950</b>
<b>2 - AHU - Central Plant</b>	<b>3424309</b>	<b>265536</b>	<b>\$900,018</b>	<b>3647</b>
<b>3 - Heat Pumps</b>	<b>5321658</b>	<b>87827</b>	<b>\$1,052,322</b>	<b>3838</b>
<b>4 - GSHP</b>	<b>3996251</b>	<b>0</b>	<b>\$739,663</b>	<b>2615</b>
<b>5 - Unit Vents - Plant</b>	<b>3513086</b>	<b>378948</b>	<b>\$1,028,952</b>	<b>4298</b>
<b>6 - Unit Vents - Compressors</b>	<b>11680730</b>	<b>0</b>	<b>\$2,160,923</b>	<b>7639</b>

Case 2 shown in Table 9 below incorporates improvements outlined in the Advanced Building Benchmark program. Benchmark is a “model” energy code designed to be 30% better than our current energy code. It provides a good guideline for cost effective improvements, and is used by local utilities to determine eligibility for rebates.

**Table 9**

**Case 2: Benchmark Case**

	<b>Elec (kWh/yr)</b>	<b>Gas (Therms/yr)</b>	<b>\$/yr</b>	<b>CO2 (MT/yr)</b>
<b>1 - Package Rooftop (Base)</b>	<b>3409507</b>	<b>221815</b>	<b>\$852,613</b>	<b>3401</b>
<b>2 - AHU - Central Plant</b>	<b>2986286</b>	<b>222251</b>	<b>\$774,723</b>	<b>3127</b>
<b>3 - Heat Pumps</b>	<b>4618638</b>	<b>48008</b>	<b>\$902,695</b>	<b>3274</b>
<b>4 - GSHP</b>	<b>3470391</b>	<b>0</b>	<b>\$642,035</b>	<b>2270</b>
<b>5 - Unit Vents - Plant</b>	<b>3071827</b>	<b>317742</b>	<b>\$886,040</b>	<b>3687</b>
<b>6 - Unit Vents - Compressors</b>	<b>9917826</b>	<b>0</b>	<b>\$1,834,812</b>	<b>6486</b>

Case 3 summarized in Table 10 below reflects the current design. All the changes in Case 2 are incorporated. In addition, this case includes daylight-dimming control in perimeter spaces, and heat recovery (where possible) on air systems.

**Table 10**

**Case 3: Design Case**

	Elec (kWh/yr)	Gas (Therms/yr)	\$/yr	CO2 (MT/yr)	\$/yr	CO2 (MT/yr)
<b>1 - Package Rooftop (Base)</b>	<b>3013139</b>	<b>198119</b>	<b>\$755,558</b>	<b>3017</b>	<b>base</b>	<b>base</b>
<b>2 - AHU - Central Plant</b>	<b>2628592</b>	<b>175943</b>	<b>\$660,023</b>	<b>2647</b>	<b>-\$95,535</b>	<b>-370</b>
<b>3 - Heat Pumps</b>	<b>3913864</b>	<b>45022</b>	<b>\$769,098</b>	<b>2797</b>	<b>\$13,540</b>	<b>-219</b>
<b>4 - GSHP</b>	<b>3054242</b>	<b>0</b>	<b>\$565,041</b>	<b>1997</b>	<b>-\$190,517</b>	<b>-1,019</b>
<b>5 - Unit Vents - Plant</b>	<b>2650297</b>	<b>269482</b>	<b>\$759,794</b>	<b>3156</b>	<b>\$4,236</b>	<b>139</b>
<b>6 - Unit Vents - Compressors</b>	<b>9142614</b>	<b>0</b>	<b>\$1,691,394</b>	<b>5979</b>	<b>\$935,836</b>	<b>2,963</b>

Maintenance cost was also estimated for each system over the life of the system. More specifically, each system was evaluated for average annual maintenance costs based on the system’s estimated life, as summarized in Table 11.

**Table 11**

**Summary of Maintenance and Life Cycle**

System	Annual Maintenance	Estimated Life Span (years)
<b>1 Package Rooftop - Base</b>	<b>\$256,000</b>	<b>15</b>
<b>2A Rooftop AHU - Central Plant</b>	<b>\$276,000</b>	<b>20</b>
<b>2B Indoor AHU - Central Plant</b>	<b>\$276,000</b>	<b>22</b>
<b>3 Heat Pumps</b>	<b>\$296,000</b>	<b>15</b>
<b>4 GSHP</b>	<b>\$296,000</b>	<b>15</b>
<b>5 Unit Vents - Plant</b>	<b>\$316,000</b>	<b>17</b>
<b>6 Unit Vents - Compressor</b>	<b>\$296,000</b>	<b>15</b>

From this data, the overall life cycle cost was estimated for each system with the following results summarized in Table 12 below.

**Table 12**

**Summary of Life Cycle Cost Inputs**

System		Simple Payback vs System 1 (yrs)	Simple Payback vs. System 6 (yrs)	15 yr PV of Annual Costs	15 yr LCC
<b>1</b>	<b>Package Rooftop - Base</b>	<b>base</b>	<b>1.6</b>	<b>-\$12,997,775</b>	<b>-\$26,287,775</b>
<b>2A</b>	<b>Rooftop AHU - Central Plant</b>	<b>19.8</b>	<b>2.9</b>	<b>-\$12,027,206</b>	<b>-\$26,809,423</b>
<b>2B</b>	<b>Indoor AHU - Central Plant</b>	<b>105.3</b>	<b>9.2</b>	<b>-\$12,027,206</b>	<b>-\$33,272,471</b>
<b>3</b>	<b>Heat Pumps</b>	<b>infinite</b>	<b>1.9</b>	<b>-\$13,685,725</b>	<b>-\$27,239,489</b>
<b>4</b>	<b>GSHP</b>	<b>35.0</b>	<b>6.0</b>	<b>-\$11,063,743</b>	<b>-\$29,617,507</b>
<b>5</b>	<b>Unit Vents - Plant</b>	<b>infinite</b>	<b>2.3</b>	<b>-\$13,823,161</b>	<b>-\$27,714,661</b>
<b>6</b>	<b>Unit Vents - Compressor</b>	<b>lower first cost</b>	<b>base</b>	<b>-\$25,536,549</b>	<b>-\$37,298,549</b>

*Conclusion.* From the life cycle assessment, the rooftop system (System1) was selected as the lowest cost solution, with a top PV life cycle cost of just under \$26.3 million. Likewise, the analysis revealed that the unit ventilators were actually the most expensive option, despite its lower initial construction cost. This outcome resulted from the high energy and maintenance costs of the unit ventilators.

While life cycle cost is not the only criteria by which a capital investment decision should be made, it clearly provides a better lens through which to examine the cost implications of the decision. Without it, there is a risk of making decisions without adequately weighing the potential long-term cost implications.

The City has often focused on low initial capital investments (“first costs”), which has often been detrimental. When the City pushes for low front-end construction costs, for example, without conducting a comprehensive life cycle assessment, it exposes itself to significant, unforeseen operating costs in the future. In the case of the NNHS mechanical systems, a proper life cycle cost analysis was in fact conducted. However, to ensure the lowest costs over the life of the entire high school, the entire building design should have been evaluated by the same methodology.

## Case Study #2: The Turf Battle at NSHS and the Vetting of Competing Investment Proposals

*Overview.* In 2005, the Mayor and a group of supporters moved forward with a proposal to install a new type of artificial turf in the field at Newton South High School to address drainage and overuse issues. The process was met with strong opposition and many questions were raised about the data and information being presented. Over time, interested groups distributed two distinctly different sets of data to various stakeholders, resulting in a difficult decision making process.

*Background.* The playing fields at Newton South High School are heavily used. This usage in conjunction with very poor draining has resulted in fields that are in poor condition and in need of continuous maintenance. In the summer of 2005, the Mayor and a group of supporters brought forward an idea to install artificial turf to address the problem. This seemed to some like a reasonable solution because it would address the wear and drainage issues, and the newest turf systems seemed to provide a much safer surface with far fewer injuries than the old turf fields.

The Mayor brought this idea to the School Committee for review. The estimated cost was projected around \$4.5 million for 5 acres. The School Committee said it was open to the idea but could not finance it out of its own budget. So the Mayor brought the project before the Community Preservation Committee (CPC) for funding.

At this point, the project gained much greater exposure. Strong opposition grew from several groups. These groups opposed a number of aspects of the proposal: (1) Some felt that this was not something that should be funded with Community Preservation Act (CPA) money. (2) Others felt that the turf had not been properly vetted from a financial perspective to justify its use. (3) Others were concerned about health, environmental, and safety issues pertaining to the product. (4) And, finally, others were dissatisfied with the decision making process.

In June of 2006, the CPC voted that the turf project was eligible for funding through the CPA. This was not a vote to actually fund the specific project but just to consider it. The opposition to the project grew stronger and ten citizens filed an unrelated lawsuit against the City after the CPC's decision. The suit argued, successfully, among other things, that CPA funds could not be used to renovate athletic fields in cases where the City owned the fields prior to its adoption of the CPA and were not acquired with CPA funds, as the law requires. Additionally, the suit successfully argued that the improvements contemplated were more in the nature of deferred maintenance (a prohibited expenditure under the CPA) than the creation of a first use for the intended purpose. The City appealed the decision but lost in unanimous decision by the Supreme Judicial Court in 2008. In light of this decision, the chances of the turf project being funded with CPA funds were essentially stopped. Since the court's finding, the Mayor has found new sources of funding within the general budget to move forward with the process.

Throughout the process, however, there was strong discontent within the City over the lack of transparency in a variety of areas, including gaining access to data and evaluating the opportunity.

*Serious Discrepancies in Data and Information.* Cost data was a major issue in this debate. The data changed over time, and various proposals were put on the table with slightly varying information from the supplier. However, Table 13 below gives a good sense of the dramatic differences in the data; the first provided by the company that bid on the project and the second from the opposing residents.

**Table 13**

**Conflicting Cost Estimates for NSHS Artificial Turf**

Maintenance Costs	Supplier Estimates (Gale Associates)	Opposition Estimates (synturg.org)
Annual Routine Maintenance	\$2,500	\$29,000
Carpet Replacement (Annualized)	\$37,000	\$50,000+
Product Life	12 years	8 years
Disposal	Not Addressed	\$260,000
Security	Not Addressed	\$40,000 over life

These are dramatically different values coming from two biased stakeholders. They utilize varying assumptions, and their estimates are multiples of one another in some cases. With this type of information, there is no way to thoughtfully make an investment decision because it is not clear what cost data should be used.

Besides cost data, there were other informational uncertainties involving field temperatures in summer, safety risks to players, and toxicity levels of material. It was not clear, for example, if there were any health risks with exposure to the product. It was also very unclear what the environmental impact was for the product, since no long-term studies had yet been performed.

In addition to conflicting claims about product cost and performance, there was confusion over conflicting product information. For example, the supplier initially identified the product as recycled sneaker soles. Later it was determined that the product also used old tires. These confusing pieces of information led to ever-stronger dissatisfaction from the opposition.

*Conclusion.* While the Citizen Advisory Group is not taking a position on the pros or cons of the turf proposal, we do believe that, in sorting through complex data issues surrounding many of the City’s capital investment proposals, the Mayor, the Board of Aldermen, and City staff must have the best and most unbiased information available. The proposed Capital Asset Manager could play a constructive role in this process by working to ensure that the most accurate information is being used in making these investment decisions. This could be achieved as long as such an individual has access to relevant resources within the City’s staff (engineering, procurement, etc.) to adequately vet information and ensure that the most objective information possible is made available to decision makers.

### Case Study #3: Upgrading the Boilers of City Buildings

There are many opportunities to reduce the operating costs of the City's buildings by investing in infrastructure systems that would have a higher return on investment (ROI) than the City's cost of borrowed capital, which historically has been quite low. Such investments are, by definition, value-creating opportunities, even though the payback period may be longer than the City's current preference for only funding capital projects whose payback period are 4 years or less. The case of upgrading the boilers in City buildings shows how this financial logic works. However, many other, similar investments have been by-passed because they do not meet the questionable 4-year payback requirement.

*Background.* Newton owns and manages 85 buildings across the City. The operations and complexities of the building systems vary greatly from building to building. The operating requirements also cover a wide range of constraints. All of these buildings have some type of boiler system that is used to heat the building and sometimes to facilitate hot water heating.

Some of these systems are oil-burning systems, while others are gas-burning boilers. The boilers are all fitted with a burner. The burner component can be modified and replaced as needed without replacing the entire boiler system. In most cases, the burner also drives the type of fuel that can be burned in the boiler.

*The Economic Opportunity.* When the prices of oil and natural gas, were on the increase, the Public Buildings Department and the Energy Engineer recommended that the City switch over the systems of ten oil burning boilers to natural gas burning boilers. These buildings include: Bigelow, Brown, Angier, Cabot, Franklin, Underwood, Oak Hill, Williams, City Hall, and Carr.

The retrofit would cost the City approximately \$750,000 to complete, and the resulting simple payback for overall fuel cost was estimated to be under one year. As depicted Table 14 below, fuel cost savings are determined by the combined effects of the level of oil consumption, the cost of oil, and cost of an equivalent supply of gas.



**Table 14**

**Fuel Savings from Converting 10 City Buildings to Natural Gas Burning Boilers**

**(Assuming hedged fuel prices July 2008 – July 2009)**

	<b>Oil Consumption (gal)</b>	<b>Oil Cost @ 4.278/gal</b>	<b>Gas Equivalent Cost @ 2.223/gal</b>	<b>Projected 2009 Savings</b>
Bigelow	45,000	\$192,510	\$100,035	\$92,475
Brown	95,000	\$406,410	\$211,185	\$195,225
Angier	30,000	\$128,340	\$66,690	\$61,650
Cabot	32,000	\$136,896	\$71,136	\$65,760
Franklin	55,000	\$235,290	\$122,265	\$113,025
Underwood	35,000	\$149,730	\$77,805	\$71,925
Oak Hill	50,000	\$213,900	\$111,150	\$102,750
Williams	32,000	\$136,896	\$71,136	\$65,760
City Hall	40,000	\$171,120	\$88,920	\$82,200
Carr	37,000	\$158,286	\$82,251	\$76,035
<b>Total</b>	<b>451,000</b>	<b>\$1,929,378</b>	<b>\$1,002,573</b>	<b>\$926,805</b>

Another source of efficiency can be realized through burning a cleaner fuel. In the pricing environment assumed in Table 14, this would result in an improvement of approximately 5% from a baseline efficiency of the typical oil burning system of 86% on average. Finally, the burner itself is approximately 5% more efficient.

With these efficiencies and the fuel cost improvements, this looked like an extremely appealing payback. However, even without the payback benefits from the changeover to gas, this 10% increase in efficiency from an average of 86% to 94.6% (an increase of 8.6%) would provide a simple payback of less than nine years on the investment. In other words, if the prices of the two fuels was the same, the City would still get a payback of nine years on this project just through realized gains in efficiency. Table 15 below shows the efficiency effects of switching to natural gas burning boilers.

**Table 15**

**Efficiencies from Converting 10 City Buildings to Cleaner Natural Gas Burning Boilers**

	<b>Oil Consumption (gal)</b>	<b>Gas Equivalent Cost @ 2.223/gal</b>	<b>Efficiency Saving (10%)</b>
Bigelow	45,000	\$100,035	\$8,603
Brown	95,000	\$211,185	\$18,162
Angier	30,000	\$66,690	\$5,735
Cabot	32,000	\$71,136	\$6,118
Franklin	55,000	\$122,265	\$10,515
Underwood	35,000	\$77,805	\$6,691
Oak Hill	50,000	\$111,150	\$9,559
Williams	32,000	\$71,136	\$6,118
City Hall	40,000	\$88,920	\$7,647
Carr	37,000	\$82,251	\$7,074
<b>Total</b>	<b>451,000</b>	<b>\$1,002,573</b>	<b>\$86,221</b>

*Other Opportunities to Increase Efficiency.* The Public Building Department and the Energy Engineer have pursued various opportunities like this for the City. However, there are many opportunities that have longer horizon paybacks than the example laid out in Table 12 where the combined effects of fuel costs and cleaner boilers deliver a payback of less than one year. These opportunities, showing payback periods as long as the nine-year period estimated in Table 13, can reduce utility and maintenance costs with returns that are still below the City’s cost of capital. These opportunities—such as replacing controllers to reduce maintenance costs and retrofitting steam traps to dramatically improve efficiencies—have historically proven more difficult to secure funding.

*Conclusion.* The City needs to expand its payback horizon as long as the total return on capital investments at least matches the cost of capital that it will incur from borrowing through bonds. More specifically, the informal “maximum four-year payback rule” should be dropped. Since the cost of capital for the City is low given its AAA bond rating, the City should leverage this opportunity to drive down its operating costs by investing in cost reduction investments like the example provided above.

#### **4.4. The Current Maintenance Management Process**

The maintenance of the City buildings is a complex process with the management of buildings, staff, and priorities divided up between two different departments – Public Buildings and School Operations. As a result, the lines of control and accountability have been blurred with neither department having the ability to improve the effectiveness or efficiency of the building maintenance.

The Public Buildings Department is responsible for the maintenance of all municipal buildings including City Hall, libraries, city office buildings, and other related facilities, as well as a large portion of the projects in the schools. It addresses approximately 7,500 work orders annually (20 to 50 per day) with a staff of twenty-four and outsourced resources. The Public Buildings can outsource any project if it deems that it does not have the resources to complete it with internal staff. Since 2003, the staff has been reduced by six people due to budget cuts. The result of this staff reduction has been a lack of ability to be proactive and focus on preventative maintenance. Instead, the department's resources are primarily focused on being reactive to various requests. The Public Buildings Commissioner manages the budget, staff, priorities, and process in maintaining all aspects of the municipal buildings.

On the school buildings side, the process is managed very differently. The School Department's Chief of Operations and his maintenance staff of three employees generate work orders for projects. The school's maintenance staff completes some of this work. The majority of the work, however, is submitted to the Public Buildings Department for completion by their staff. This work is completed in one of three ways: (1) on regular maintenance hours during the day; (2) on overtime hours by the Public Buildings team; or (3) by an outside resource that is contracted for the specific work.

Some of the maintenance budget is distributed to each department as well. For fiscal year 2009, the Public Buildings Department had a budget of \$1.1 million, while the School Operation was allocated \$1.9 million in "Charter Maintenance." These funds, however, are not budgeted in proportion to the actual funds spent by each department on maintenance; some of the school maintenance is built into the Public Buildings budget. The school line item that each will use for three specific areas as follows: (1) building materials, (2) outsourced maintenance, and (3) overtime maintenance provided by the Public Buildings Department. All maintenance provided to the Schools by the Public Buildings Departments on regular hours is provided at no charge to the School's budget, but instead is absorbed by the Public Buildings budget via its salaries and benefits. It becomes quickly apparent that this budgeting has the potential to create conflicts in priorities and to diminish each manager's ability to maximize effectiveness and efficiencies.

The scheduling process is similarly split, with the school and municipal functions each having some of the responsibility. The School Department's Chief of Operations schedules all work projects that involve his three employees. Anything that requires a work order being submitted by the School Operations to the Public Buildings Department is scheduled by the Public Buildings Department. So once a project is submitted to the Public Buildings Department, the School Department has far less control over a project's scheduling. Also, the Public Buildings may decide to outsource any project if it deems that it does not have the resources to complete it with internal staff. The Public Buildings Department also has the right to take any project prior to it being outsourced; the School Department does not make these

decisions for the school buildings.

The School Operations Chief has been using a project management software tool<sup>31</sup> in managing the maintenance projects of the school. The database tracking includes metrics for the number of work orders outstanding, the time-to-complete work orders, completion notification, resources required, material costs, and reporting capabilities. The Public Buildings Department does not use this system, so it is not looking at the same information in real-time. Also, the school has created a set of performance metrics to determine the success of each project. The Public Buildings Department is not using the same system, but it has begun to use this system when managing the school projects. Again, there is no uniformity or overarching system that manages and evaluates each project in the work order system.

In all aspects of the maintenance of the City's buildings, the divided nature of the system (budget, workforce, project management, etc.) between the municipal buildings and the school buildings has created a system that is generally agreed to be ineffective and inefficient. Prioritization is not clear because each department has separate priorities and related goals. Consequently, there is no clear accountability because responsibility falls across two departments for many school building maintenance projects. There is also little opportunity to maximize the system's efficiency because neither has enough control to properly assess the opportunities.

Both departments would benefit from a consolidation of all maintenance within the Public Buildings Department. In consolidating however, it would be critical that the system addresses the following critical issues:

- **Budgeting:** The budgeting consolidation would have to ensure that the School Department could continue to maintain enough funding to cover what it feels to be the adequate level of funding for its facilities.
- **Scheduling:** The School Department must have a mechanism to ensure that critical projects are completed in a fast-track approach as needed. Due to the nature of the school's operations, this will be of critical importance to gaining buy-in.
- **Performance:** The Public Buildings Department would have to develop performance metrics in agreement with the School Department to ensure that the School Department's priorities and goals are addressed in the comprehensive maintenance strategy.

With the development of a comprehensive process that ensures these items are addressed, the School Department could actually attain greater control over the maintenance of the school buildings, while handing off the day-to-day operations of school building maintenance to the Public Buildings Department.

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<sup>31</sup> ([www.schooldude.com](http://www.schooldude.com))

## 5. Practices And Innovations In Capital Budgeting Across The Nation

Municipal capital budgets and budgeting may be among the most important actions of local government, yet they also represent one of the most arcane and least understood parts of governance. Newton has some unique features that probably make its capital budgeting more arcane than most. In broad outline, and with the caveats discussed in this report, Newton's capital budgets and budgeting processes are not terribly different from those practiced in other communities around the U.S. Consistent with recommendations found earlier in this report, this section specifically addresses possible ways that Newton could change its capital budgeting in ways that perhaps better reflect the long-term needs and goals of the City. It does so by targeting specific aspects of the City's capital budgets and budgeting processes that could and should be improved. This discussion is based on a review of capital planning and budgeting in a variety of cities across the nation.

Although the broad outline of Newton's capital improvement and budgeting may look unremarkable at first blush, there are some detailed features that make it somewhat unique. For example:

- There is no clear-cut mechanism for choosing among priorities identified in the CIP;
- There is often little or no connection between the CIP and the resulting Supplemental Capital Budgets sent to the Board of Aldermen;
- Supplemental Capital Budgets are dealt with separately from Operating Budgets;
- Priority setting and capital project recommendations to be funded through federal Community Development Block Grant funds (currently a little over \$200,000 a year) are subject to a separate process from other capital projects;
- With the exception of setting priorities for projects that use federal Community Development Block Grant funds, there is no process that ensures selected projects represent high priorities for Newton's city administrative departments or among Newton's residents;

The consequence of these features is a Operating Budget that appears neither transparent nor rational, and may well result in under-funding of important priority projects, privileging less expensive, shorter-term, lower priority projects over more expensive, longer-term, higher priority projects. As a secondary consequence, it undermines residents' confidence in the competence and legitimacy of the City's policymakers. All of these features represent issues and challenges faced in other communities, and many cities have discovered ways of addressing them.

### Capital Budgeting in Comparable Cities in the U.S.

As the Citizen Advisory Group has made progress in understanding Newton's capital needs and expenditures, numerous questions have arisen as to how to compare Newton's experiences to those of other cities around the country. Perhaps primarily because Newton has developed a somewhat unique approach to the details of capital planning and budgeting, information about the capital budgeting experiences in some other cities should shed some light on what Newton might do and to what end.

The descriptions provided here are based on the contemporary experiences of a number of cities selected largely because of their similarities to Newton in terms of size and socio-economic characteristics. These are among the cities identified as possible comparison cities in the Citizen Advisory Group's Benchmark Report.<sup>32</sup> We acknowledge up front that, as discussed in this Benchmarking Report, finding perfectly appropriate comparison cities is a difficult and perhaps a futile endeavor. However, this comparison is motivated by an expectation that some of the best practices found elsewhere might prove to be useful for Newton.

The Benchmarking Report strongly suggests that Newton's capital expenditures are substantially below those of other cities. Beyond this, there are many ways that the capital planning and budgeting experiences of cities might be compared. The focus in this report is on five primary issues: 1) the processes used to create Newton's Capital Improvement Plan; 2) the need for Integrated Capital Budgeting; 3) reconciling capital planning and budgeting with comprehensive planning; 4) processes used for setting priorities (selecting projects) in the capital budgeting process; and 5) the potential for neighborhood-based capital planning and priority setting.

### The Selected Cities

For the purposes of this report, information is gleaned from a number of sources related to capital planning and budgeting in ten cities outside of Massachusetts. These cities were selected mainly because of their comparable size to Newton. Below is a basic overview of how these cities compare on other demographic characteristics. Perhaps the largest difference between Newton and most of the comparison cities is that many of the comparison cities do not have direct responsibility for schools either in their operating or capital budgets. This report also provides information about Cambridge, Massachusetts, which is also included in the table below.

As discussed in the Citizen Advisory Group Benchmarking Report, there are no cities that are unambiguously similar to Newton. Table 16 below presents some basic demographic characteristics of Newton and eleven other cities included in comparisons. Cities that are similar in size may have higher or lower per capita household incomes, may be a little younger or older, may be better or less well educated, etc. However, most of the selected cities are similar enough to warrant a discussion of their respective capital budgeting.

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<sup>32</sup> <http://www.ci.newton.ma.us/CitizenAdvisoryGroup/reports/2008/10082008-CAGBenchmarkingReport.pdf>

**Table 16****Summary Information about Cities Used to Identify Capital Budgeting Processes and Innovations**

	Population size 2006	P/C 1999 income	Median age	Percent with at least a college degree	Median owner-occupied house value
Newton	89,918	\$ 45,987	38.1	71.4	\$ 690,200
Cambridge	91,867	\$ 40,086	32.6	69.8	\$ 560,000
Boulder, CO	92,474	\$ 31,539	29.1	70.3	\$ 455,900
Westminster, CO	104,001	\$ 28,846	35.2	32.0	\$ 229,200
Longmont CO	84,880	\$ 26,670	34.9	36.0	\$ 241,300
Santa Monica, CA	88,244	\$ 57,230	40.7	62.5	\$ 1,000,000+
Palo Alto, CA	58,598	\$ 56,257	40.2	74.4	\$ 811,800
Madison WI	214,098	\$ 28,184	32.3	52.6	\$ 215,500
New Rochelle, NY	72,735	\$ 35,551	37.9	38.3	\$ 603,000
Norwalk, CT	78,141	\$ 39,031	40.0	32.8	\$ 519,700
West Hartford, CT	63,589	\$ 33,468	40.0	53.0	\$ 176,400
Cherry Hill, NJ	71,621	\$ 38,284	41.9	51.6	\$ 301,200

If the need for capital budgeting and capital expenditures is a function, at least in part, of the size of a municipality (with larger cities having greater need), then many of the comparison cities should see little need for separate capital budgeting, as is the case in Newton, and should have a similar profile of capital expenditures to Newton.

#### The Capital Improvement Plan

Most cities, including Newton, now have some form of Capital Improvement Plan (CIP). A CIP culminates in the preparation of a capital-planning document that outlines specific capital projects for a specified period of time, usually 3 to 5 years. A capital project is one that requires expenditure of a significant amount of money on a non-recurring basis. Newton's policy stipulates that a capital project is a public physical betterment or improvement involving facilities, land, or equipment with a substantial useful life and a cost of \$10,000 or more. Theoretically, at least, the CIP represents a statement of priorities for capital funding along with justifications and cost estimates.

In Newton, as in many other communities, the CIP is revised annually based on expected and emerging needs as expressed by city administrative department heads. Although individual department heads can identify which capital projects should receive their highest priority for funding, it is the Mayor's office that has the responsibility for determining which of the many projects will be included in the city's Supplemental Capital Budget sent to the Board of Aldermen. As noted earlier in this report, it is not at all clear through what process or with what criteria these determinations are made. One of the features of the CIP and its processes is that it does not seem to be taken very seriously. In other words, there seems to be widespread recognition that the projects outlined in the CIP represent a "wish list" of projects that will probably never be done. As a result, the CIP contains a hodgepodge of projects that often do not reflect the true priorities of the city, there is little incentive for projects to be well thought-out or adequately costed out, and there is little incentive to remove a project from the list even after it no longer appears needed.<sup>33</sup>

Cities vary considerably in the processes used to derive their capital budgets or to develop their CIPs. Many cities rely on the chief financial officer or city manager who, working with department heads, assesses city needs and project costs. Other cities delegate these tasks to a specific city department, such as a planning department, or an independent planning commission or board. Still others involve extensive public participation in the process of setting priorities (see Capital Planning and Budgeting in Neighborhoods Section below). Perhaps the greatest variation exists in whether, and how, cities account for their capital assets and include explicit assessment of capital depreciation when setting capital spending priorities.

Westminster, CO, has Total Enterprise Asset Management (TEAM) under contract with Accela, Inc. This is a software system that allows city managers to create and maintain a timely capital asset database, to provide regular updates and valuations. This allows managers to track assets as they depreciate, and to take this depreciation into consideration at the time of creating CIP content, and when formulating capital and Operating Budget requests for the following fiscal years. In other words, the software is used as a mechanism for explicitly connecting asset depreciation to the capital planning and budgeting process.

One of the remarkable features of the CIP process in Newton is how totally insulated it is from the general public. There certainly is no step in the process that is explicitly designed to elicit substantive input from city residents. The only point in the process where the public has much of any opportunity to be heard is well after priorities and budgets have been proposed. The only opportunity for public input, then, is reactive rather than proactive, and not receptive to substantive ideas that might come from individuals, neighborhoods, or villages.

The Newton Comprehensive Plan suggested the need to reform the process of establishing the priorities reflected in the CIP. It argued that one of the reasons why capital projects have been so under-funded may have something to do with the lack of public involvement and public support. This is an issue that will be discussed more fully below.

The Supplemental Capital Budget, presumably, is fashioned in response to the CIP. As noted earlier in this report, this Capital Budget is presented to, and acted upon by, the Board of Aldermen well after the Operating Budget. As a result, the connection between the Operating Budget and Operating Budget is very weak. Indeed, the only real connection is found on the line items of the Operating Budget that require expenditures for capital projects approved and funded

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<sup>33</sup> An example might include, from the most recent CIP, projects to significantly improve branch libraries that are no longer open.



in previous years. One result of this is that capital budgeting becomes almost an after-thought. One way of addressing this problem is to practice integrated budgeting, where the operating and capital budgets are dealt with essentially at the same time.

### Integrated Operating and Capital Budgeting

Although there appear to be few Massachusetts cities that engage in integrated budgeting, nationally there are many cities that do so. An integrated budget is simply one where the budget documents, proposed, revised, and enacted, reflect both regular operating expenditures and capital projects expenditures. In Massachusetts, the City of Cambridge uses such an approach to budgeting, and it has received numerous awards and recognition as an exemplary budget document and process. The primary advantage of an integrated approach is that it allows budget reviewers, including the Board of Aldermen, to address capital projects all at the same time. This allows such reviewers to understand the relative importance of different projects, and to assess the impact of capital projects on the Operating Budget.<sup>34</sup> Moreover, because Cambridge uses a performance budget, the capital portion of the budget is readily subjected to performance measurement.

Table 17 below provides a brief glimpse into the Cambridge budget document. Since that city's budget document is well over 600 pages in length, it is somewhat difficult to provide even a very modest sense of what its Integrated Budget looks like. What the table shows is that both the operating and capital budgets are presented within a single document. The Operating Budget includes all new capital spending proposed or approved for the specified fiscal year, FY09. Table 18 then shows a page from the section of the city's budget that applies to "Community Maintenance and Development," which includes public ways, solid waste management, parks and urban forestry, public buildings, vehicles and equipment, community development and housing, historic and conservations commissions, cable TV, and other functions. This includes the budget for the next fiscal years (in this case, FY09) and the projected budgets five years out. Each line of this part of the budget summary includes capital expenditures and debt service for projects approved in previous years as well as new projects. The detailed budget document (not shown here) provides a comprehensive breakdown of these capital expenditures.

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<sup>34</sup> Cambridge's FY09 budget can be found at:  
[http://www.cambridgema.gov/CityOfCambridge\\_Content/documents/FY09\\_Adopted\\_Budget.pdf?tnltext=FY09%20Adopted%20Budget%28PDF%29](http://www.cambridgema.gov/CityOfCambridge_Content/documents/FY09_Adopted_Budget.pdf?tnltext=FY09%20Adopted%20Budget%28PDF%29)

**Table 17**

**Summaries of the FY09 Budgets from Cambridge, MA**

**SUMMARY: OPERATING BUDGET (all funds)**

FY07 ACTUAL	FY08 PROJECTED	PROGRAM EXPENDITURES	FY09 BUDGET
\$38,511,600	\$38,680,550	General Government	\$47,517,470
84,880,185	88,622,875	Public Safety	93,253,190
81,925,415	86,042,700	Community Maintenance & Development	93,477,320
23,019,220	24,394,705	Human Resource Development	26,187,535
122,566,600	126,511,200	Education	130,704,170
<u>37,294,040</u>	<u>40,986,435</u>	Intergovernmental	<u>42,987,305</u>
\$388,197,060	\$405,238,465		\$434,126,990

FINANCING PLAN	FY09 BUDGET
Taxes	\$278,093,435
Licenses & Permits	6,536,100
Fines & Forfeits	9,961,325
Charges for Service	65,408,660
Intergovernmental Revenue	51,875,030
Miscellaneous Revenue	<u>22,252,440</u>
	\$434,126,990

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**SUMMARY: CAPITAL BUDGET**

PROGRAM EXPENDITURES	FY09 BUDGET
General Government	\$550,000
Public Safety	7,985,000
Community Maintenance & Development	19,366,615
Human Resource Development	440,000
Education	<u>225,000</u>
	\$28,566,615

FINANCING PLAN	FY09 BUDGET
Property Taxes	\$1,200,000
Free Cash	1,000,000
Parking Fund	900,000
Fund Balance/Parking	1,750,000
Sewer Service Charge	1,600,000
Water Service Charge	1,000,000
Water Fund Balance	1,000,000
Block Grant	1,533,225
Chapter 90	1,908,525
Street Preservation Offset Fund (SPOF)	304,865
Bond Proceeds	16,330,000
Golf Course Fees	<u>40,000</u>
	\$28,566,615

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**Table 18**

**Summary of the FY09 Integrated Operating & Capital Budgets  
with Five-Year Projections from Cambridge, MA**

**SUMMARY: COMMUNITY MAINTENANCE & DEVELOPMENT**

	FIVE YEAR APPROPRIATION PLAN					
	FY09	FY10	FY11	FY12	FY13	TOTAL
Public Building Renovations	\$180,000	\$1,000,000	\$ -	\$1,000,000	\$75,000	\$2,255,000
Street/Sidewalk Reconstruction	2,543,390	2,238,525	2,238,520	2,238,525	2,238,525	11,497,490
Park and Cemetery Tree Pruning	50,000	50,000	50,000	50,000	50,000	250,000
Parking Improvements	500,000	500,000	500,000	500,000	500,000	2,500,000
Yerxa Road Underpass Construction	-	1,000,000	-	-	-	1,000,000
Water System Improvements	2,000,000	1,600,000	1,900,000	2,300,000	1,900,000	9,700,000
Sewer Reconstruction	10,230,000	35,368,325	37,458,370	29,854,885	42,564,080	155,475,660
Traffic Calming	400,000	400,000	400,000	400,000	400,000	2,000,000
Brookline Street Reconstruction Project	1,750,000	-	-	-	-	1,750,000
Façade Improvement Program	150,000	150,000	150,000	150,000	150,000	750,000
Employment Program Fund	350,000	350,000	350,000	350,000	350,000	1,750,000
Housing Rehab & Development	965,225	965,225	965,225	965,225	965,225	4,826,125
Neighborhood Business Development	218,000	218,000	218,000	218,000	218,000	1,090,000
Public Art	-	-	-	-	-	-
Public Art Conservation Fund	30,000	30,000	30,000	30,000	30,000	150,000
	<u>\$19,366,615</u>	<u>\$43,870,075</u>	<u>\$44,260,120</u>	<u>\$38,056,635</u>	<u>\$49,440,830</u>	<u>\$194,994,275</u>

	FIVE YEAR REVENUE PLAN					
	FY09	FY10	FY11	FY12	FY13	TOTAL
Property Taxes	\$365,000	\$285,000	\$135,000	\$210,000	\$360,000	\$1,355,000
Free Cash	375,000	275,000	425,000	350,000	275,000	1,700,000
Parking Fund Revenues	900,000	900,000	900,000	900,000	900,000	4,500,000
Fund Balance/Parking Fund	1,750,000	-	-	-	-	1,750,000
Sewer Service Charge	1,600,000	600,000	700,000	1,200,000	1,000,000	5,100,000
Water Service Charge	1,000,000	1,600,000	1,900,000	2,300,000	1,900,000	8,700,000
Water Fund Balance	1,000,000	-	-	-	-	1,000,000
Block Grant	1,533,225	1,533,225	1,533,225	1,533,225	1,533,225	7,666,125
Street Preservation Offset Fund (SPOF)	304,865	-	-	-	-	304,865
Chapter 90	1,908,525	1,908,525	1,908,525	1,908,525	1,908,525	9,542,625
MWRA Grant	-	17,121,765	12,000,000	11,401,320	1,556,055	42,079,140
Bond Proceeds	8,630,000	19,646,560	24,758,370	18,253,565	40,008,025	111,296,520
	<u>\$19,366,615</u>	<u>\$43,870,075</u>	<u>\$44,260,120</u>	<u>\$38,056,635</u>	<u>\$49,440,830</u>	<u>\$194,994,275</u>

Reconciling Capital Planning and Comprehensive Planning

The Newton Comprehensive Plan noted the importance of linking the stated goals and objectives of the Plan to the programs and policies adopted and implemented by the City, and made explicit reference to the lack of such a linkage in capital planning and budgeting. It specifically recommended that the City consider ways of trying to ensure that capital projects actually funded reflect the articulated policies of City departments, the City as a whole, and perhaps even residents. Indeed, this is a message that the Citizen Advisory Group heard from numerous parties within City departments and outside of city government. Although the Plan was not very specific about how this should or could be accomplished, there is clearly a need to address the way the City currently engaged in capital planning – i.e. how priorities among competing projects are decided.

## Priority Setting in Capital Planning

No city has enough funding to pay for all of the capital projects that are listed in its CIP. Indeed, only projects with the greatest importance or urgency make it to the final list of funded projects. In Newton, however, even in the face of the apparent fact that less overall funding is available for capital projects than elsewhere, there seems to be concern that capital projects that get funded are not those that are, or ought to be, the highest priority. Newton's official policy purported to govern decisions on capital projects specifies six criteria, and a particular project would have to fulfill at least one of these to be funded. Any funded project would have to enhance protection of public health and/or safety; ensure compliance with state or federal law or regulations; reduce and/or stabilize the city's Operating Budget; prolong the life of a capital asset of the City by 10 years or more; encourage expansion of the City's real estate tax base, employment, or housing; or improve the ability of the City to provide services. Even with all of these criteria, there are many more projects that could be funded in a given year than there are funds to support them. Moreover, there is no stipulation that projects that accomplish more of any of these goals should be privileged over those that accomplish less. In short, other criteria end up being used to distinguish those projects that get funded from those that do not. This is not an uncommon problem, and is certainly not unique to Newton's experience.

Various Massachusetts state offices, including the one-time Office of Commonwealth Development (OCD) and the Department of Administration and Finance, have made extensive recommendations concerning how municipalities might go about trying to ensure that their respective CIPs reflect only the highest priority items.<sup>35</sup> These recommendations outline a ten step process, one of which involves explicit priority setting using "self-scoring" that takes into consideration the extent to which each project fulfills the municipalities articulated goals. Such scoring would be conducted by each member of the city's CIP Committee, and projects recommended for funding would be those that received the highest average scores across all members of the Committee.

## Capital Planning and Budgeting in Neighborhoods

The Newton Comprehensive Plan suggests that there might be value in designing and following a capital improvement planning process that is more extensive than that currently used. In it, the Plan notes that there is great need to ensure that funded capital projects reflect high priorities of both City departments and the general public when it suggests that the City might "...construct a procedure which would assure City departments that observing it really would result in enhanced priority in the funding of their requests...[and]...might be more extensive, involving some level of interagency exchange and public involvement." (p. 10-15) On the latter point, indeed, Newton has no established procedure for involving the public in the CIP process other than well after priorities are identified, offering a short period of public commentary. The process does not provide opportunities for residents to express their preferences early on, or to involve the general public in any sort of priority setting. As a result, there is no systematic way for testing whether the priorities of residents overlap or match the priorities established in the CIP or in the Operating Budget itself. Not only does this tend to preclude developing political support that might exist for specific capital projects, it also undermines public confidence in the way the City is governed.

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<sup>35</sup> *Developing a Capital Improvements Program: A Manual for Massachusetts Communities*. Found at: <http://www.mass.gov/Ador/docs/dls/publ/misc/cip.pdf> See Form E in the Appendix of this online document.

Many cities, including cities much larger than Newton, have addressed this kind of issue by creating a more decentralized process for developing the projects and priorities in their respective CIPs. This decentralization usually takes place at the neighborhood level, providing residents in each and every neighborhood within a city the opportunity to influence the process and its outcomes. Cities such as St. Paul, MN, Dayton, OH, Portland, OR, Seattle, WA, Kansas City, MO, Birmingham, AL, and most recently Los Angeles, CA, have moved to a system where capital projects are proposed and vetted with neighborhoods before they become high priority funding items for their cities' capital budgets.<sup>36</sup>

In short, the CIP process would have three major steps. First, it would begin each year with creation of a list of projects proposed by departments, much like Newton does now. The projects are sorted according to whether their primary and intended impacts are on a single or small number of neighborhoods or citywide. Second, each neighborhood is then asked to express its views on whether each project that would affect it should receive a high priority funding. Multiple projects are assigned priorities. In many cities, scoring systems are used to determine which projects the neighborhood would give the highest priorities. In other cities, the neighborhood is actually given a target dollar of capital expenditure and asked to decide how it would spend that money. In any case, once each neighborhood conducts its ranking (with projects that it does not want presumably receiving a low ranking), the third step involves a citywide vetting. In some cities, this is done by a citywide group made up of representatives from each neighborhood. In other cities, it is done by a group appointed by the mayor and/or city council. It is this citywide body that is used to ensure that neighborhoods do not act parochially for its own interests against the best interests of the city as a whole. Only projects that emerge as high priorities from these three steps find their way onto the city's CIP and into the proposed Operating Budget.

Although such a process might seem quite foreign to the experiences of Newton, the fact is that Newton is very well positioned to consider establishing a procedure that would deeply involve residents. Unlike other cities that have embarked on such systems of capital planning and budgeting, Newton already has clearly identified neighborhoods across the entire City. Our fourteen or so Villages could quite readily become the foundation for following a more decentralized CIP process. Evidence suggests that when such procedures are used, public confidence can be built and maintained.

There is actually some modest precedent for Village-based capital planning. Although the general CIP process and the City's Capital Budget are not the result of any sort of neighborhood or Village based process, the process used to set priorities for Community Development Block Grant (CDBG) and other federal funds does involve specific villages. As part of establishing eligibility for receiving CDBG funding, the City designated four Villages as "target neighborhoods" – Newton Corner, Newtonville, West Newton, and Nonantum.<sup>37</sup> In 2005, the City Planning and Development department established a "citizen participation plan" that created an advisory board to set priorities to be reflected in the requests for federal funds.<sup>38</sup> The citizen participation plan created the Newton Corner Advisory Committee, the Newtonville Advisory

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<sup>36</sup> See Jeffrey Berry, Kent Portney, and Ken Thomson. *The Rebirth of Urban Democracy*. Washington, D.C.: Brookings Institution Press, 1993).

<sup>37</sup> For a full description of the Consolidated Plan that governs priority setting for these funds, see <http://www.ci.newton.ma.us/Planning/Con%20Plan%20Master.pdf>

<sup>38</sup> For a complete description of the Citizen Participation Plan, see <http://www.ci.newton.ma.us/Planning/NewtonCitizenParticipationPlanrevisedMarch2005.pdf>

Committee, the West Newton Advisory Committee, and the Nonantum Advisory Committee, each of which is populated by residents, business leaders, and other interested parties appointed by the Mayor.

The Village based system used for making recommendations concerning federal funds could quite easily be expanded and adapted to address all of the City's capital planning and budgeting. The result would be a stronger connection between Village priorities and funded projects. Based on precedents for village-based or neighborhood-based capital planning in Newton, the City's experience with ad hoc citizen groups, and the positive experience of other communities, the Citizen Advisory Group recommends that the City consider developing a more decentralized process for establishing and vetting investment priorities before capital projects become high priority funding items in the City's Capital Budget.

## Sources of Information about City Capital Budgets and CIPs

Santa Monica, CA: <http://www01.smgov.net/finance/budget/2008-09/AdoptedBudget/2008-09AdoptedBudget.pdf>

Santa Monica, CA Capital budget Process: [http://www01.smgov.net/finance/budget/2008-09/AdoptedBudget/05\\_BudgetPriorities.pdf](http://www01.smgov.net/finance/budget/2008-09/AdoptedBudget/05_BudgetPriorities.pdf)

West Hartford, CT: [http://www.west-hartford.com/TownServices/CIP\\_Adopted\\_2009-2020.pdf](http://www.west-hartford.com/TownServices/CIP_Adopted_2009-2020.pdf)

Norwalk, CT: <http://www.norwalkct.org/Budgets/20082009CapBud/TOC.htm>

Westminster, CO: <http://www.ci.westminster.co.us/files/cip.pdf> and  
<http://www.ci.westminster.co.us/962.htm>

Westminster CO Integrated budget FY09/10 <http://www.ci.westminster.co.us/files/12-PWU0910.pdf>

Longmont, CO: <http://www.ci.longmont.co.us/finance/budget/documents/CIPprojects.pdf> and  
<http://www.ci.longmont.co.us/cs/budget/forum.htm>

Boulder, CO:

[http://www.bouldercolorado.gov/files/City%20Council/Study%20Sessions/2008/07-29-08/memo\\_cip.pdf](http://www.bouldercolorado.gov/files/City%20Council/Study%20Sessions/2008/07-29-08/memo_cip.pdf) and

[http://www.bouldercolorado.gov/files/City%20Council/Study%20Sessions/2008/07-29-08/packet\\_july\\_29th\\_ss\\_final.pdf](http://www.bouldercolorado.gov/files/City%20Council/Study%20Sessions/2008/07-29-08/packet_july_29th_ss_final.pdf)

Palo Alto, CA: <http://www.cityofpaloalto.org/civica/filebank/blobload.asp?BlobID=13066>

Madison, WI: <http://www.cityofmadison.com/comp/2009CapBud/capbudindex.htm>

Cherry Hill, NJ: <http://www.cherryhill-nj.com/pdfs/2008BudgetCherryHillTownship.pdf>

Cambridge, MA:

[http://www.cambridgema.gov/CityOfCambridge\\_Content/documents/FY09\\_Adopted\\_Budget.pdf?tnltext=FY09%20Adopted%20Budget%28PDF%29](http://www.cambridgema.gov/CityOfCambridge_Content/documents/FY09_Adopted_Budget.pdf?tnltext=FY09%20Adopted%20Budget%28PDF%29)

Exemplars from Seattle, Capital facilities element:

[http://www.seattle.gov/DPD/cms/groups/pan/@pan/@plan/@proj/documents/Web\\_Informational/cos\\_004491.pdf](http://www.seattle.gov/DPD/cms/groups/pan/@pan/@plan/@proj/documents/Web_Informational/cos_004491.pdf)

[http://www.seattle.gov/DPD/cms/groups/pan/@pan/@plan/@proj/documents/Web\\_Informational/cos\\_004505.pdf](http://www.seattle.gov/DPD/cms/groups/pan/@pan/@plan/@proj/documents/Web_Informational/cos_004505.pdf)

## 5. APPENDIX: DEFINITIONS OF MAINTENANCE AND DEFERRED MAINTENANCE

**Deferred Maintenance** occurs when the facility owner leaves unperformed planned maintenance, repairs, replacement, and renewal projects due to a lack of resources or perceived low priority and deferral of the activity results in a progressive deterioration of the facility condition or performance. The cost of the deterioration including capital costs, operating costs, and productivity losses is expected to increase if the activity continues to be deferred.

**Deferred Maintenance Backlog** is the total dollar amount of deferred maintenance deficiencies identified by a comprehensive facilities condition assessment of facilities and their integral systems and equipment.

### **Four Levels of Maintenance:**

**Operational Maintenance** is the day-to-day operations of a facility to maintain its functionality. This would include security, janitorial, housekeeping and other cleaning services, utilities, snow removal, infrastructure and landscaping functions. These activities do not affect the useful life of an asset.

**Continuous Maintenance** is the preserving of facilities and their components from failure or deterioration, which is necessary to realize its originally anticipated useful life. These activities include preventive maintenance; cyclic maintenance; repairs; painting; resurfacing; periodic inspection, adjustment lubrication, and cleaning (non-janitorial) of equipment; special safety inspections; periodic condition assessments; and other actions to assure continuing service and to prevent breakdown. Examples include changing belts, inspecting roofs, and replacing filters.

**Capital Renewal** is the planned repair and replacement of facility systems and components having a life less than the life of the facility so the systems and components will last as long as the anticipated life of the facility. Such projects could include the repair or replacement of damaged or inoperable equipment, components of a plant, or existing utility systems; correction of deficiencies in property and plant that are required to conform with building and safety codes or those regulations associated with hazardous condition correction; or correction of deficiencies in fire protection, energy conservation, and handicapped access. Examples include replacing a roof or heating system that has a useful life of 20 years in a building with a useful life of 40 years.

**Capital Improvement and Renovation** is the rebuilding or restoring of facilities through additions or alterations so they can be used more efficiently and effectively and better meet programmatic needs. These improvements and renovations will extend the useful life and preserve the useable condition of the facilities, components, and systems.



### **Types of Maintenance Activities:**

**Preventive** is the periodic scheduling and planning of maintenance activities that extends and controls deterioration of permanent equipment and plant facilities. This includes repetitive and anticipated work planned to perform inspections, provide adjustments, continuous cleaning, and minor repairs of building systems and equipment.

**Routine** is the unscheduled, simple maintenance activities, which occur day-to-day and can be accomplished within a reasonable time frame.

**Corrective** is maintenance performed on malfunctioning equipment or building systems and components whose failure does not jeopardize personnel, equipment, or significant agency services.

**Emergency** is the repair or replacement of property requiring immediate attention because the functioning of a critical system is impaired, or because health, safety, security of life or property is endangered.

City of Newton  
Citizen Advisory Group

Defining Important Choices Facing the City,  
Improving the City's Operational Efficiency and Effectiveness, and  
Developing New or Enhanced Sources of Funding

Report on Performance Management

# Performance Management

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## 1. INTRODUCTION

### *Background*

The Citizen Advisory Group's charge explicitly included an instruction "to help identify...innovative ways of increasing short- and long-term operational efficiency and effectiveness." With this charge in mind, the Citizen Advisory Group created the Performance Management Committee to investigate internal management practices in Newton. Our objective was to ensure that the City of Newton takes advantage of every opportunity to achieve greater operational efficiencies in its day-to-day activities and to ensure that citizens' tax money is spent wisely and economically.

This report focuses on key management systems in place on both the Municipal side of government and in the Schools, and in particular how effective these systems seem to be. Given the critical role that organization structure and human resources play in overall management effectiveness, we have also included some analysis of executive roles and responsibilities in one particular area that we feel merits attention.

To help evaluate Newton's effectiveness, we have brought an external perspective of what other government entities have done as well as what we might learn from the business world. We have then used those perspectives to evaluate what we actually observed occurring in Newton. Our ultimate goal has been to make specific recommendations about what Newton should do to improve the internal management and operational control over the implementation of programs, budgets, activities, and personnel.

We should note from the outset that neither this Committee, nor the Citizen Advisory Group as a whole, was in the position to conduct a full-scale assessment of the City's management efficiency and effectiveness or all its performance management systems. Comprehensively connecting internal management practices to program and budget performance in a city is a difficult task, and to do so would require greater resources and expertise than those available to us.

We also want to emphasize that the spirit of this report is to indicate ways of improving Newton's performance. The current approach to municipal management, which has served the City well in many respects over the past decades, now requires, in our opinion, some major changes, especially in light of our increasingly resource-constrained operating environment. Many City and School employees and their managers have been working tirelessly over the years to deliver first-rate municipal and educational services. Many departments are staffed by highly qualified people who understand their jobs, have statewide reputations, are attuned to the Mayor's aspirations for the City, work well together, and feel a high degree of responsibility for their work. In addition, the Mayor and his department heads have remained steadfast in their commitment to preserving a top-notch educational system, a public safety system that has made Newton one of the safest cities in America, and a government that provides key quality of life programs—such as senior services, library services, parks and recreation programs, just to name a few. Newton residents have also benefitted from many innovations in service delivery related, for example, to Health & Human Services and Senior Services. Indeed, Newton has a reputation

among other Massachusetts communities for superior services not only because we have more resources compared to most communities, but also because the Mayor and his team believe in high standards. And where senior managers have had to be eased out of their jobs, the Mayor has done so without public spectacle. The Mayor has consistently sought to populate the City with talented, self-motivated individuals who are committed to the highest standards of public service and integrity. As a result, many of Newton's departments have shown their innovative capacity time and time again—whether it is the Department of Public Works in their efforts to run equipment more efficiently in the face of escalating energy costs and constrained resources or the Police and Fire Departments in their efforts to reorganize their approaches to policing and fire prevention or the Newton Public Schools as they introduce new curriculum and teacher coaching. But, the management practices that have got us to where we are now are unlikely to get us to where we need to go, given the squeeze on funding and residents' continued desire for first class services.

With all this in mind, the intent in this report is not to diminish Newton's many accomplishments and administrative talents, but rather to identify and recommend ways of leveraging these capabilities and improving administrative effectiveness in the difficult years that lay ahead. One of the hallmarks of organizational excellence is the insistence on continual improvement. We recommend improving Newton's performance through a new management system, which has elements that have been neither requested nor required before, but which we believe will be essential tools to help Newton redirect its efforts and maximize its performance in the future. This is therefore a report focused on the future that uses an assessment of the current state not as a critique but rather as a foundation for determining opportunities to improve.

### *Objectives.*

The objectives of the Performance Management Committee were threefold:

- To develop a framework for understanding the effectiveness of current performance management processes in Newton;
- To conduct an “as-is” assessment of performance management;
- To recommend changes to improve overall managerial and operational effectiveness, and also to support the implementation of recommendations of the other Citizen Advisory Group committees.

### *Methodology*

The Committee proceeded along multiple research tracks: (1) conducting a series of interviews and discussions with leading members of Newton’s management on both the City and School sides; (2) reviewing a number of internal documents that shed light on current performance management practices; (3) researching both how other cities were approaching the challenges of performance management and identifying ideas and practices from the business world that have clear relevance to city government. A list of interviewees is included in Appendix A.

### *Overview*

Earlier reports of the Citizen Advisory Group have suggested a number of changes to help address Newton’s structural deficit and, in particular, to improve cost effectiveness, to achieve efficiencies, and to increase revenue generation. In the current operating environment—where recession (and possibly deflation) is bound to be succeeded by inflation, which in turn will make balancing municipal budgets more difficult than ever since property tax revenues (80% of total revenues) are largely capped by Proposition 2 1/2 while key operating costs are not—we believe that it is especially important for Newton to have a robust management system in place to support officials in developing and implementing their cost and effectiveness improvement strategies. For example, we believe that the management team should be assisted in conducting operational reviews at a more detailed level than they currently do (and is possible by such ad hoc groups as the Citizen Advisory Group) and streamlining and continuously improving Newton’s municipal and school operations.

To this end, we believe that the management system should reinforce and even require the City’s operating managers to think outside of the box and beyond department boundaries or “silos”—looking at the big picture of city government as well as managing the details of their departments—and to tirelessly pursue the objective of continuous improvement. In short, the management system should repeatedly encourage these managers to identify the changes to make on behalf of the public, thereby pre-empting the need for multiple citizen advisory groups and other similar task forces in the future.

For this to happen, operations improvement needs to be reinforced by a management system embedded in the organization’s operating model. When supported by a routine administrative process, Newton’s managers will have a stronger likelihood of success under adverse operating conditions. This is because the ideas that are routinely generated, evaluated, and implemented

by an organization's employees carry with them the kind of specific organizational knowledge that no outsider possesses. Individuals inside the organization have a unique ability to generate such informed ideas, given the right operating culture. Creating and sustaining such a culture requires giving managers to be given the tools, systems, and incentives that reinforce this kind of thinking and behavior.

Our overall observation is that while senior officials currently pursue innovation throughout the City, Newton's current approach to management nonetheless needs to change to increase the level of commitment and the amount of daily attention to the rigorous pursuit of continuous improvement in municipal operations. To this end, we believe that Newton's operating managers could and should be more systematically supported in their operational improvement responsibilities by the introduction of a more formal management system. (While there is also room for improvement in the management system of the Newton Public Schools, we found that the School's management system contained several important features that were absent in municipal operations.)

In general, Newton's current *modus operandi* is much more informal than the approach we are recommending. The Mayor tries to hire good people, give them direction, intervene when problems arise, and support and encourage his strong management team. As noted above, this management approach has served the City well in the past, although the City's annual surveys, sent to all households, asking residents to assess the quality of municipal services, may suggest that public perceptions of City services have declined over the past five year. (See Appendix B for a summary report on the perceived quality of public services in Newton.)

Given the economic headwinds that we are facing as a city, we believe that it is essential to upgrade our approach to *performance management*. Performance management refers to how an organization sets long- and short-term goals for itself, which are consistent within an overall mission; how its leadership measures achievement against these goals; and how systems of accountability (with related consequences) both motivate and guide the behavior of managers and employees toward the achievement of established goals.

Performance management also refers to how an organization attracts and retains top performers and creates a management culture that is forward looking, proactive, focused on objectives, and dedicated to continuous performance improvement.

In this report, we set out a framework for how we think performance management could work in Newton and identify where changes with current practice may be needed.

To get started, we lay some groundwork by presenting a generalized, descriptive overview of the best performance management practices used by other communities.

From this general discussion and our collective experience in both the private and public sectors, we then introduce a more formal way of thinking about what a complete performance management system entails and how Newton currently measures up against such a system's characteristics. We are perfectly aware that we are setting a high, but achievable (and increasingly necessary), standard of performance.

Finally, we recommend some specific actions that we believe Newton should take to begin to fill the gap between the best practices that we have outlined and Newton's current *modus operandi*.

## 2. SUMMARY OF RECOMMENDATIONS

This Performance Management Committee of the Citizen Advisory Group recommends that the Mayor, the Board of Aldermen, and the School Committee work collectively to implement the following seven recommendations. The first six refer to the substance of performance management. The seventh addresses public input and participation in the performance management process.

- **Strategic and Operational Planning.** Develop a living document that represents a full and complete statement of the Mayor's vision for Newton. Serving as a strategic plan, this document must connect annual and longer-term department-specific goals, benchmarks, program performance metrics or measures, and priorities to this vision; it must include explicit timetables for organizational accomplishment; it must be reviewed and revised regularly (say, every two years) in response to changing priorities and fiscal realities; and it should take full advantage of the work contained in the *Newton Comprehensive Plan*.<sup>1</sup>
- **Monitoring Organizational Performance.** Develop and use a system for monitoring organizational performance on a continuous basis to ensure that departmental goals and other elements of the City's strategic and operational plans are met and that employees, elected officials, and residents have a clear picture of performance.

More specifically, we recommend that Newton augment its capacity to monitor and control its performance by (1) identifying high level performance measures that reflect the City's strategic plan priorities, (2) identifying department performance metrics that align with the high level metrics, (3) reporting on these key performance metrics at appropriate time intervals, and (4) communicating them with employees and citizens (to achieve transparency).

There are a variety of monitoring and control systems and software tools available to municipal government. This Committee has been impressed with the potential of the PerformanceStat process—we could call it NewStat for Newton—as *the* principal tool for monitoring and controlling the performance of Newton's municipal operations.

What the Committee likes best about a PerformanceStat process, which would be tailored to Newton's specific needs and objectives, is that it can tie departmental performance directly to the City's Strategic Plan and Operating Plan and Budget. NewStat can help elected officials, managers, employees and citizens focus on such questions as: What are we trying to achieve? What monies are being spent to achieve these goals? How efficient are various programs and initiatives versus alternative arrangements? Are we achieving our goals? A serious PerformanceStat process would also complement the City's strategic planning process by being relentlessly incremental when it comes to strategy implementation, the monitoring of results, and mid-course corrections.

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<sup>1</sup> Available at <http://www.ci.newton.ma.us/Planning/2008-comp-plan.pdf>.



While the specifics of a PerformanceStat process would need to reflect the interests and management style of the Mayor, what differentiates this process from other management control processes such as the one Newton currently uses, MBO (Management by Objectives), TQM (Total Quality Management), or Balanced Scorecards is that PerformanceStat typically includes the following features:

- Detailed operational measurements or metrics related to city goals,
- Information technology sufficient to support data collection and the systematic analysis of a fact base relevant to city goals,
- Detailed “fast-track” tracking of results,
- Relentless follow-up of decisions,
- A reporting process that requires the participation of all department managers so as to capture the social discipline of peer review and promote cross-department innovation and simplification, and,
- Most importantly, the mayor’s participation in the day-to-day conduct of the process.

The precise nature of mayoral participation in a PerformanceStat process necessarily varies from community to community, but an absolutely essential feature of any successful process is the commitment of a mayor to vet all important (non-personnel) management decisions via the PerformanceStat forum. Off line decisions or side-deal agreements by the mayor that circumvent the PerformanceStat process would end up killing the process faster than strychnine.

This Committee recommends that, at the earliest possible time, the current Mayor or his successor in office announce the intention to institute a formal monitoring and control system. In our view, the fastest and most likely way to succeed is to use a PerformanceStat process and to hire an experienced PerformanceStat officer to lead Newton in the initial developmental phase and the subsequent implementation phase of a disciplined monitoring and control function. This officer should have direct, daily access to the Mayor (similar to daily national security briefing at the White House), and speak for the Mayor in his or her absence on all matters related to performance management. We think a NewStat process (tailored to the specific goals of Newton)—or its functional equivalent—should be the principal tool for linking the City’s vision and priorities to department goals and other municipal objectives, thereby providing a means to assess and align management performance effectively. Were Newton to retain the executive position of Chief Administrative Officer (CAO), which we recommend, then the CAO’s primary responsibilities would be overseeing and supporting departmental operations on a continuing basis. Thus, while the job of the chief PerformanceStat officer would focus on active analysis, monitoring, and control of departmental operations, the CAO’s job would be more clearly managerial in both content and scope.

To get started, we recommend that the Mayor’s Office select one or two municipal departments as beta-sites for a more comprehensive process. These “centers of initiative” should be selected on the basis of (a) the richness of the department’s existing operations

database, (b) the enthusiasm and commitment of the department’s leaders, and (c) the opportunity to make significant improvements in either efficiency or effectiveness.

We also recommend that the PerformanceStat process not be initiated immediately in Newton’s Public Schools—which exist under a different governance structure than municipal departments (the elected School Committee) and face many complicated issues pertaining to performance measurement. After five years of reportedly successful experience with SomerStat, Somerville is only now beginning think through the potential application of this process (tentatively called “SchoolStat”) to the city’s schools.

Based on the experience of Somerville, we think that a PerformanceStat Director and a Senior Analyst would be an adequate start as far as staffing is concerned—with a first year personnel cost somewhere close to \$120,000-\$130,000 (assuming \$70,000 for a Director and \$50,000 for a Senior Analyst, or something close to those numbers).

- **Performance Appraisal and Feedback.** Develop a personnel performance appraisal process for the City that assigns clearly defined goals to individual managers and then holds them accountable for their achievement. Such a process needs to assess both goal achievements and competencies of personnel, provide timely and actionable feedback, and integrate with personal development planning. This would be a developmentally focused process. While the process could eventually be used to determine eligibility for appropriate, merit-based salary increases, we are not recommending the implementation of a pay-for-performance program at this time.

To facilitate this process, the City needs to define the behaviors and skills required by City personnel to carry out their duties effectively and achieve the goals as articulated in an expanded Strategic Plan. These definitions need to reflect, but go beyond, simple job descriptions.

- **Personal Development Planning.** Design and implement a career development and succession planning process that assesses the talent available, manages the risk of losing key individuals, and also provides career development paths for high talent/high potential individuals.
- **Compensation Policy and Management.** Develop a compensation philosophy for municipal and school personnel that balances (a) the competitive necessity of using pay as an important tool for recruiting and retaining excellent personnel with (b) the economic necessity of limiting the average, long-run rate of salary and benefit increases to the average, long-run growth rate of City revenues. Ideally, both goals can be achieved. However, if competitive pay, or an inability to control benefit cost increases through collective bargaining, means that total compensation grows faster than the current and predicted growth in City revenues, then a combination of productivity increases or decreases in scope and quality of service will be required—unless, of course, residents are willing to commit to perpetual tax overrides.

The *level* and *growth rate* of total compensation constitute essential elements of any compensation policy. We recommend that the Mayor initiate a public discussion of how

these two critical elements should be applied to Newton's unionized and management employees.<sup>2</sup>

With respect to the *level* of total compensation, this Committee recommends that elected officials set an explicit goal expressed in terms of paying City and School employees so that they fall, for example, into the top quartile or top third of total compensation paid to employees in cities of comparable size, in the case of the municipal employees, and cities with a similar commitment to education, in the case of school employees.

With respect to the average, long-run *growth rate* of total compensation for City employees, we recommend that this rate should be limited to the historic long-run growth rate of City revenues. There are many details involved in calculating the average growth rates (such as base years in the time series data, end years, nominal versus real dollar increases, and the role, if any, of revenue and inflation forecasts in computing average, long-run growth rates when union contracts come up for renegotiation). These critical details need to be worked out in consultation with unions representing Newton's employees. But the principle of relating the rate of growth in total compensation to the rate of growth in City revenues is an essential one.

If total employee compensation continues to grow faster than revenues, Newton has only a few choices (which can be used in combination): (a) property tax overrides, as noted above; (b) reducing the absolute *level* of employee pay, with potentially adverse impacts on the availability and quality of human resources; (c) decreasing scope or quality of service levels to reduce manpower requirements; (d) and/or productivity increases

To expand on the concept of productivity increases, this compensation policy has two obvious implications for the management of municipal affairs. First, since the rate of growth in healthcare costs and other benefits is currently higher than the rate of growth in City revenues by a substantial margin and, furthermore, since the rate of growth in employee benefits have been uncapped (in part by a national trend in the increase in health care costs, which are difficult to control, and in part by Newton's negotiations with unions over which we do have control) while property tax revenues are largely capped by Proposition 2 1/2, the gap between the total amount paid out in employee compensation and the total amount of revenues received by the City will need to be closed in part by perpetual productivity increases. These productivity increases, which will need to come from new ways of organizing work and the delivery of services, can be expected to reduce, over time, the number of employees on City payrolls. This is a principal way of balancing the rate of growth in employee compensation (which is 80% of Newton's cost structure) with the rate of growth in municipal revenues (80% of which is derived from capped property tax revenues) without resorting to tax overrides. (This implication obviously relates to our recommendation, discussed above, to implement a rigorous monitoring and control performance management system like NewStat.)

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<sup>2</sup> The Benchmarking Report of the Citizen Advisory Group has already contributed to this discussion. This Report found that, in general, the minimum and maximum salaries in Newton, regardless of department or pay level, are above average compared to the benchmarking communities. It appears that the benefits we offer may also be above average. It is not clear, however, whether or not this pattern is the result of an explicit compensation policy or a more incremental union bargaining process.

Second, to the extent that headcount cannot be reduced through value engineering and the reorganization of work, then the scope and quality of City services and programs will have to be reduced to make the growth rates of total compensation (for a reduced number of employees) and City revenues match over the long-run.

On a completely different matter related to compensation practices, this Committee also recommends investigating the potential of team-based recognition and other non-financial rewards for meeting agreed upon goals.

- **Citizen Participation in Performance Management.** Commit to incorporating public participation in Newton’s performance management process. As recently stated by the Government Finance Officers Association (GFOA), “Good public participation practices can help governments be more accountable and responsive, and can also improve the public’s perception of government performance and the value the public receives from local government.”<sup>3</sup>

This recommendation is entirely consistent with the detailed research by one of this report’s authors on efforts to expand citizen participation beyond the act of voting in five U.S. cities.<sup>4</sup> It is also consistent with the thinking of the Citizen Advisory Group expressed in its Report of Capital Infrastructure and Planning, where we acknowledged and discussed capital planning and budgeting in the public sector as an act of social choice.

As pointed out by the GFOA, public participation has traditionally meant voting, running for office, being involved in political campaigns, attending public hearings, and keeping informed on important issues of the day by reading government reports or the local newspaper. An increased level of involvement currently pursued by some governments includes surveys; focus groups; interviews; structured public hearings; the creation of public or neighborhood advisory groups to seek information during planning and information gathering phases; and reporting to the public via newsletters, public notices in community media, and public reports such as “Budgets in Brief” or “Annual Financial Reports.”

Public participation efforts can be extremely valuable. But, superficial or poorly designed efforts will waste valuable staff time and financial resources, and increase public cynicism, if the public perceives that its input has not been taken seriously. To be taken seriously in cities such as Newton, the purposes of public participation must be made explicit and the City must provide feedback to the public on how their input is being used. According to the GFOA, this requires collecting, maintaining, monitoring, and analyzing information gained from public involvement activities, and using multiple communication mechanisms to ensure that those involved or interested in the process are notified of opportunities for additional feedback and of decisions made based on the public involvement process. Most importantly (in Newton’s case), the Mayor’s Office, together with the Board of Aldermen and the School Committee,

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<sup>3</sup> Government Finance Officers Association, “Recommended Practice: Public Participation in Planning, Budgeting, and Performance Management,” 2009.

<sup>4</sup> Jeffrey M. Berry, Kent E. Portney, and Ken Thomson, *The Rebirth of Urban Democracy* (The Brookings Institution, 1993).

also needs to explain how public involvement has made a difference in plans, budgets, and performance, and gather public feedback on how successful the process has been through the public's eyes.

- **Top Management Structure.** Modify the current management structure of the City to include a Chief Financial Officer (CFO) position to assist the Mayor in designing and implementing an enhanced financial planning and management operation. A CFO would work collaboratively with the existing Chief Administrative Officer and a new PerformanceStat Officer (recommended above). In Section 5 below, we lay out the logic for this expanded top management structure and present an initial sketch of a new executive role constellation at City Hall. Since there is a provision for a city "Finance Director" in the early versions of the Newton's charter, we do not believe that this recommendation requires charter reform.

Even though a new Mayor would obviously want to select his or her own CFO, and recognizing that the FY2010 budget is tight, we do not think the City of Newton can afford to wait for the next Mayor to bolster and improve the financial analysis done in the City.

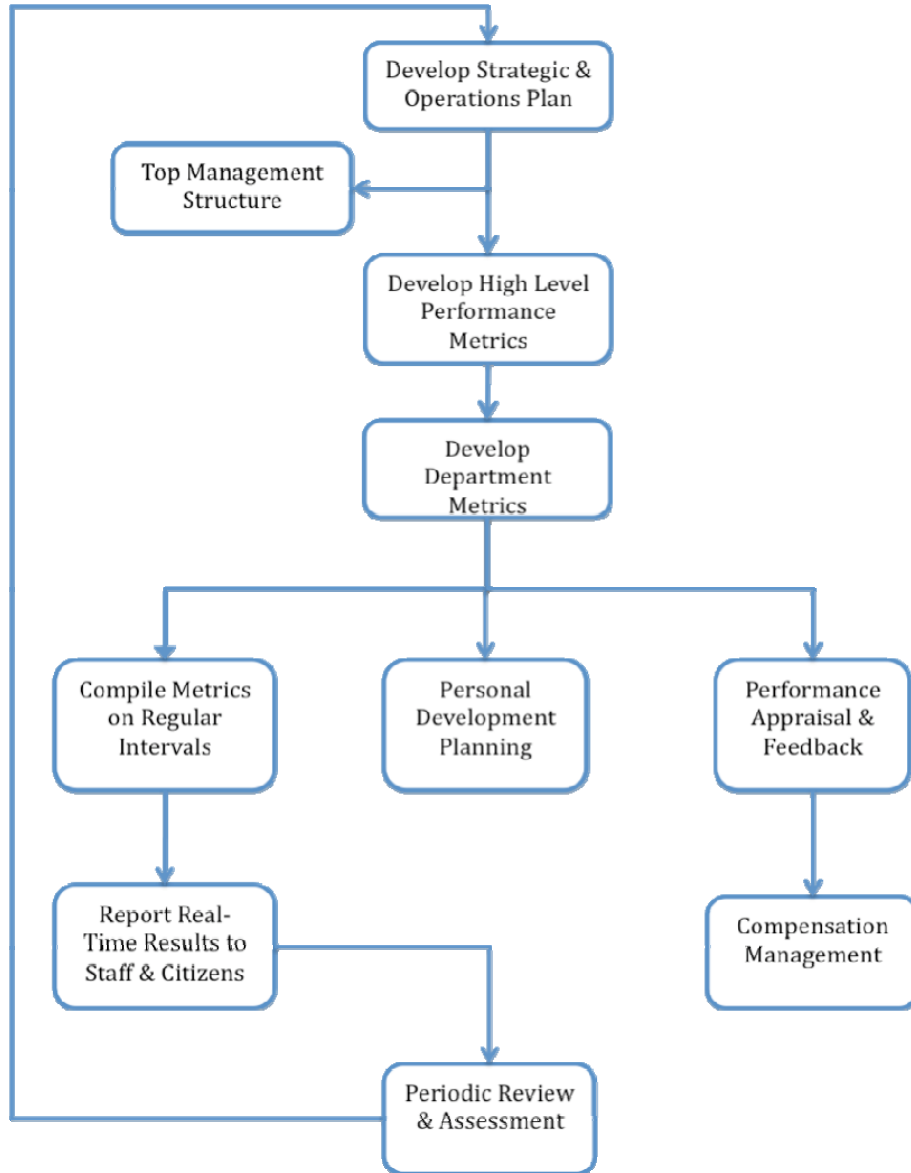
A conceptual blueprint or process map summarizing these recommendations appears below in Figure 1. Two of the "boxes"—namely Compensation Policy and Management and Top Management Structure—involve critical policy choices.

The former clearly has major implications for the conduct of important "union-management" relationships throughout the City, many of which are occurring right now. Indeed, Compensation Policy and Management is not only a key aspect of monitoring and control, but transcends this core management process as one of the most defining policies of a city's operating strategy.

The latter – Top Management Structure – affects the constellation of executive roles used to govern the City, and also is central to defining a city's *modus operandi*.

**Figure 1**

**Process View of Performance Management Recommendations**



### 3. A GENERAL INTRODUCTION TO PERFORMANCE MANAGEMENT IN MUNICIPAL GOVERNMENT

In an era of lean government, structural budget deficits, widespread perceptions of declining public services, and troubling economic headwinds, the importance of promoting management efficiency and effectiveness cannot be overstated. Compared to most cities and towns in Massachusetts, Newton's management is considered a leader. Nonetheless, studies of organizational practices in both business and municipal government suggest that the presence of an explicit mission, strategic planning, goals and objectives, and performance assessment most assuredly creates the conditions for improvements in effectiveness and efficiency. Yet, we have found that there are few departments in Newton's city government that systematically and consistently set measurable objectives and assess their progress. Rather, managers measure performance informally and qualitatively. Suffice it to say that the City, as a whole, is not fully engaged in what has variously been called "strategic management" or "performance management." As one city administrator put it, "it is not Newton's style."

This section focuses on the potential benefits that could accrue to Newton should it begin the systematic and explicit process of linking strategic planning, and objective and goal setting with performance assessment. It provides some examples of how such management systems operate in other municipalities, with special emphasis on how internal management systems try to ensure that there are links between the activities of departments, the finances that are budgeted and expended, and the measurable goals of the department and the city.

The goal of all performance management systems in government, whatever the specifics of their design, is to ensure that in the day-to-day operation of city departments maximum attention is being paid to the achievement of specified goals and objectives.

There is certainly no single best system for accomplishing performance management, but it is important for municipalities to have some system in place. In the best of all worlds, performance management systems fully integrate the day-to-day operations of municipal departments with overarching goals of the sort that might be articulated in a comprehensive strategic plan. In other words, performance management systems try to ensure that all of the day-to-day activities of city departments are consistent with, and in service to, achievement of the larger, long-term goals of the city. Moreover, performance management systems also integrate the programmatic goals of departments with their personnel management processes, thereby ensuring that departmental employees who bear responsibility for implementing programs are evaluated and rewarded on the basis of success, i.e. achieving program goals.

The vast majority of cities and towns in Massachusetts have not invested systematically in such management systems. Rather, like Newton, they use more qualitative, informal

management styles. Some exceptions include Andover, Arlington, Bedford, Hingham, Lexington, Needham, and Somerville—which have adopted performance management practices to varying degrees and participate in the International City Management Association’s (ICMA) Center for Performance Measurement initiative. In other states, local governments have made such investments, and much of what is discussed in this report comes from the experiences of two such states that stand out in this regard – Colorado and New Jersey.<sup>5</sup> In the latter, a major effort was undertaken starting in 2001 to institute the New Jersey Initiative, an effort to build municipal management capacity, and to assess various methods of managing for results.

### *Strategic and Comprehensive Planning*

The starting point for municipal performance management is often the strategic or comprehensive plan. Without going into a lot of detail here, municipal strategic plans represent efforts of city leaders to articulate the mission, goals, and objectives that the municipality seeks to achieve over some designated period of time. Most cities work under five year time frames, with periodic revisions to the plan. In current practice, strategic plans start with the broad mission of the City and clearly defined priorities (especially in periods of fiscal constraint). Then, the strategic plans are organized around city service and program areas, such as land use, transportation, public safety, education, housing, economic development, environment and sustainability, and other areas—rather than by the department or agency that provides specific services.<sup>6</sup>

With most strategic plans, each program area includes metrics that are developed to measure performance, define goals and set timetables, and contains a process for regularly monitoring progress toward achieving the goals. These are usually accompanied by an assessment of the legal authorities, resources, and impediments to achieving the stated goals. Management systems (discussed in more detail later) are put in place to try to ensure that this monitoring actually takes place, and if progress is not being made, actions can be taken. In other words, efforts are made to ensure that the performance information is actually used in making program management decisions.

An example of a city’s strategic plan may provide a clearer picture of how such plans can serve as the foundation for performance management. Figure 2 below is one page from the lengthy *Toward a Sustainable Seattle* strategic plan in Seattle, Washington. This plan, issued in 2005 and updated annually, provides a comprehensive statement of the City’s policy goals. This particular page comes from the “Capital Facilities Element” section that provides a wide array of specific goals as targets for the City’s capital improvement process. This particular section omits capital facilities that would be used for public transportation, and utilities, both of which are

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<sup>5</sup> Other examples come from cities participating in the International City Management Association’s (ICMA) Center for Performance Measurement. For more information about this Center, see <http://www1.icma.org/main/bc.asp?bcid=107&hsid=1&ssid1=50&ssid2=220&ssid3=297&t=0>

<sup>6</sup> This is very much like the way the recently adopted Newton Comprehensive Plan is organized. This plan contains sections on Land Use, Transportation and Mobility, Housing, Economic Development, Open Space and Recreation, Natural Resources, Planning, Facilities and Services, and several other areas.



covered by separate strategic plans. This strategic plan element is accompanied by a comprehensive inventory of the city's capital assets (not shown here).


Figure 2 shows the specific goals (labeled CFG1 through CFG9) and associated policies (labeled CF1 through CF16) designed to achieve these goals. Largely because these capital Facilities goals and policies are created to support the goals and policies found in other functional departments, they tend to be stated in rather general terms. In this section, a concerted effort is made to ensure that the “strategic capital investment policies” (CF1 through CF8), the “facility siting policies” (CF9 through CF12), and the “relations with other public entities policies” (CF13 through CF16) are explicitly connected to the goals. All of this is meant to convey the idea that any and all city policies that affect capital facilities maintenance and replacement are identified and understood so that specific projects can be fully coordinated.

Importantly, Seattle has a management system in place that focuses the attention of all relevant city administrators on achieving the goals outlined in the Plan, measuring progress, and reporting on results. As specific departments and agencies engage in planning and implementation of capital projects, they are responsible for ensuring that such projects comply and conform to these outlined goals and policies. The management system ensures that the day-to-day capital project activities are monitored, and that they are consistent with the articulated goals.

Another key feature of cities' strategic plans is that they serve as official policy statements of the goals, missions, and timetable affecting all city government departments and agencies. As an official statement, a strategic plan represents a consensus articulation of where the city is headed and how it is going to get there. It presumably reflects a consensus among all the key actors, including the mayor, the city council (Seattle's counterpart to Newton's board of aldermen), and top administrators, as well as the general public and other stakeholders. Of course, achieving consensus on the wide range of issues contained in a strategic plan requires explicit attention to the planning processes, an issue discussed more fully later in this document.

Figure 2

Sample of Goals and Policies from the Comprehensive Plan in Seattle (WA)

Seattle's Comprehensive Plan   <i>Toward a Sustainable Seattle</i>		5.3	
<b>Capital Facilities Element</b>			
<b>A Capital Facilities Policies</b>			
<b>discussion</b>			
<p>This section does not apply to transportation or utilities capital facilities. Please see the Transportation or Utilities Elements of this Plan for policies related to those facilities. Various agencies, such as the Seattle Department of Parks and Recreation, the Seattle Center and the Seattle Public School District, prepare functional plans to guide development of specific facilities for carrying out their respective missions.</p>			
<b>goals</b>			
<b>CFG1</b>	Provide capital facilities that will serve the most pressing needs of the greatest number of Seattle citizens, and that will enable the City to deliver services efficiently to its constituents.	<b>CFG8</b>	Incorporate sustainability principles and practices including protection of historic resources, into the design, rehabilitation, and construction of City buildings and other types of capital facilities.
<b>CFG2</b>	Preserve the physical integrity of the City's valuable capital assets and gradually reduce the major maintenance backlog.	<b>CFG9</b>	Encourage the protection of City-owned historic facilities when planning for alteration or maintenance of these facilities.
<b>CFG3</b>	Make capital investments consistent with the vision of the Comprehensive Plan, including the urban village strategy.	<b>strategic capital investment policies</b>	
<b>CFG4</b>	Site and design capital facilities so that they will be considered assets to the communities in which they are located.	<b>CF1</b>	Plan capital investments strategically, in part by striving to give priority to areas experiencing or expecting the highest levels of residential and employment growth when making discretionary investments for new facilities. The City will use fiscal notes and policy analysis to assist in making informed capital investment choices to achieve the City's long-term goals.
<b>CFG5</b>	Provide capital facilities that will keep Seattle attractive to families with children.	<b>CF2</b>	Assess policy and fiscal implications of potential major new and expanded capital facilities, as part of the City's process for making capital investment choices. The assessment should apply standard criteria, including the consideration of issues such as a capital project's consistency with the Comprehensive Plan and neighborhood plans, and its effects on Seattle's quality of life, the environment, social equity, and economic opportunity.
<b>CFG6</b>	Encourage grass-root involvement in identifying desired capital projects for individual neighborhoods.	<b>CF3</b>	Emphasize the maintenance of existing facilities as a way to make efficient use of limited financial and physical resources.
<b>CFG7</b>	Encourage community input to the siting of public facilities.		
		capital facilities element	
		A	
		January   2005	

## *Performance Metrics*

Without ways of measuring programmatic performance, strategic plans would seem like pie-in-the-sky statements with little hope of affecting the quality of city services. Performance management requires specification of quantitative and qualitative performance metrics that can be used to measure and monitor achievement of municipal goals.

The metrics used to measure progress toward achieving goals vary greatly from place to place and from department to department. There is no universal set of metrics that every city can or should use. In some program areas, such as public safety, there is great commonality across cities in what is measured, but different cities set different standards. For example, measures of crime rates, response times, and clearance rates are essentially universal, and nearly all city police departments utilize very similar measures. In other areas, metrics are far less standardized, and can vary greatly from place to place. Indeed, in many programmatic areas, the metrics must be “home-grown” to reflect the unique character or unique goals of specific municipalities.<sup>7</sup> Many, but certainly not all, performance metrics are designed to either measure program efficiencies or effectiveness (amount of output or activity per dollar of expenditure).

To be clear, there are specific program areas where Newton does have either explicit or implicit metrics of performance. In its discussions with city administrators, members of the Citizen Advisory Group heard about explicit metrics in public safety and in public works, and implicitly in capital financing with regard to the City’s bond rating. To some degree, metrics are also in place in the Newton Public Schools, and these metrics are discussed more fully elsewhere in this report. The point here is that there is no systematic effort to develop goals and metrics across *all* of Newton’s administrative departments. Combined with the absence of a fully articulated citywide mission and goals, the absence of performance metrics means that Newton lacks clarity about what it is trying to accomplish and whether its results are acceptable. Details concerning some performance metrics will be provided below.<sup>8</sup>

Some examples of cities’ performance metrics might help to clarify the foundation of performance management. Figure 3 below shows a single page from Westminster, Colorado’s annual performance measurement report. Westminster is a city of about 105,000 people. This page shows two of the many metrics used to monitor the city’s performance.

At the top of the page is a statement of the objectives or goals that apply to parks and recreation. Below is a description of what the City’s Park Services Division does to achieve

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<sup>7</sup> In many respects, selecting metrics to measure performance involves the same issues confronted by the CAG’s Benchmarking effort. The metrics used in the Benchmarking Report, in part, reflect an effort to devise some means by which to compare Newton’s program performance to other municipalities. Just as this Benchmarking effort encountered major challenges, so too do efforts to establish program performance metrics as part of internal management systems. See the Benchmarking Report at: <http://www.ci.newton.ma.us/CitizenAdvisoryGroup/reports/2008/10082008-CAGBenchmarkingReport.pdf>

<sup>8</sup> For a comprehensive list of performance metrics developed by the ICMA’s Center for Performance Management, see <http://www.icma.org/main/bc.asp?bcid=133&hsid=12&ssid1=2470&ssid2=2546>

these goals, followed by a graph and discussion showing how Westminster compares to other Colorado cities in terms of the efficiency of maintaining parkland. Thus, this report shows how well the city is meeting its specified goals, and allows the city to understand how it stacks up against other comparison municipalities. The lower half of Figure 3 shows analogous information about the performance of the city's public library. As noted later, Westminster is one of now seventeen Colorado and Wyoming municipalities that have created the Colorado Performance Measurement Consortium, and nearly all of these municipalities use very similar performance metrics.<sup>9</sup>

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<sup>9</sup> The municipalities in Colorado include Colorado, Aurora, Centennial, Colorado Springs, Denver, Englewood, Fort Collins, Golden, Longmont, Loveland, Northglenn, Thornton, Westminster, and Windsor; and in Wyoming Casper.

Figure 3

Performance Metrics from Westminster, Colorado



Objectives: Increase green space (parks, open space, etc.) — Preserve vistas and view corridors — Increase public and cultural arts — Attractive low water use landscaping — Well-designed and maintained private developments and buildings

To meet this challenge, Park Services has reorganized crews to provide better coverage for the most visible maintenance needs. Staff is still in the process of fine-tuning crew assignments, but staff believes that the positive effects of the reorganization will be reflected in 2008 Citizen Survey results. Staff is also evaluating contracted facility landscape maintenance to determine if these and other areas can be maintained efficiently through an outside contractor. When compared to 2006 data from other Colorado cities that participate in CPM, Westminster's number of FTE per 100 acres was 2.0, which was slightly under the average of 2.5. This is another indicator of the efficiency of Park Services crews. This indicator, along with an increase in Citizen Survey ratings of park maintenance as "good" or "very good" from 70% in 2004 to 80% in 2006, shows an effective use of limited resources.



\* 2006 ICMA CPM Data

Providing a Balanced, Up-To-Date, and Cost Effective Library System

Supporting lifelong learning and cultural enrichment also helps achieve a "Beautiful City." The City strives to operate its libraries, College Hill and Irving Street, in the most cost-effective manner possible while providing a level of service that is better or comparable to other libraries. Two key indicators that the City uses to gauge achievement of these goals are circulation per capita and cost per circulating item. The Colorado State Library requires that all libraries within the State report statistics to the Library Research Service (LRS), allowing for comparison of services libraries offered. Of the 12 public library systems serving a population larger than 100,000 in Colorado during 2006, Westminster Libraries' circulation per capita was 13.83, which was well above the average of 11.69. This shows strong activity at the libraries that is supported by a variety of relevant materials and resources. Westminster Libraries' cost per circulating item was the lowest of all other reporting libraries at \$1.83, which was well below the average of \$4.53. Compared to the 74 library systems that reported data to ICMA CPM for 2006, Westminster had the third lowest operating and maintenance expenditures per item circulated at \$1.75, well below the average of \$4.15. This cost data shows that Westminster libraries are being managed very efficiently.



\* Per 2006 Library Research Service (LRS)

Source: Take A Closer Look: How Performance Measures Build a Better City. The Westminster 2007 Performance Report, p. 19. Found at: <http://www.ci.westminster.co.us/files/takeacloserlook2007.pdf>

## *The Conduct of Performance Management*

Sustained, relentless, and systematic attention to performance ensures that the activities of department managers and employees are focused on achieving specified long-term goals and objectives. It also helps identify problems with implementing the policies and programs designed to achieve those goals, and to prescribe management interventions that can be taken to minimize inefficiencies that might result from these problems. Perhaps the most important aspect of any performance management system is the intent to “align” every aspect of municipal government activity to goals and priorities. In other words, it represents a systematic effort to ensure that employees’ time allocation, budgets and budget management (actually spending the authorized and allocated funds), personnel policies and personal evaluations, information technology, and other administrative functions of government are all in sync.

In the absence of a performance management system, the lack of progress toward achieving a particular objective or goal may not be discovered for a significant period of time, a state of affairs that seems common in many municipal governments. Indeed, analysis from the New Jersey Initiative highlights how prevalent it is for the activities of local government to be unrelated to specified goals and objectives.<sup>10</sup> Although performance management has been advocated at all levels of government since at least the early 1990s, progress toward developing performance management systems has been quite slow. Yet, there is emerging evidence that using performance management carries great promise in helping to make municipal government more effective and efficient.<sup>11</sup>

In recent years, there have been numerous efforts under way to promote the development of performance management systems. In one of these, the International City Management Association (ICMA) created its Center for Performance Management, where it has recruited municipal governments from all around the country to participate in efforts to engage in citywide performance management. As noted earlier, the municipalities of Andover, Arlington, Bedford, Hingham, Lexington, Needham, and, most particularly, Somerville are listed as Massachusetts participants. In another, the National Advisory Council on State and Local Budgeting, and the Government Finance Officers Association have worked to promote the use of performance management and measurement in local budgeting.<sup>12</sup> In New Jersey, the New Jersey Initiative has sought to design performance management systems based on actual experiences in that state.<sup>13</sup> Seventeen municipal governments in Colorado and Wyoming are now part of the Colorado Performance Measurement Consortium.

Cities that engage in performance management exhibit a wide array of specific methods and techniques. Some adopt systems developed elsewhere, including variations on the

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<sup>10</sup> Dana Harsell and Vernon Dale Jones, “Managing for Results: Implementing Challenges Faced in New Jersey Municipal Government.” Paper presented at the 2002 Meetings of the American Political Science Association, Boston.

<sup>11</sup> Thomas Plant and Janine Douglas, “The Performance Management Continuum in Municipal Government Organizations,” in *Performance Improvement*, Vol. 45, No. 1m January 2006, pp. 43-48.

<sup>12</sup> For more information about this initiative, see

[http://www.gfoa.org/index.php?option=com\\_content&task=view&id=489&Itemid=259](http://www.gfoa.org/index.php?option=com_content&task=view&id=489&Itemid=259)

<sup>13</sup> <http://www.maxwell.syr.edu/campbell/nji/QAaboutNJ.htm>

PerformanceStat or CitiStat system as used in Baltimore, Maryland and Somerville, Massachusetts;<sup>14</sup> some develop their own, almost from scratch; and still others purchase and adopt “turnkey” systems developed by third party private sector vendors, such as Albuquerque’s adoption of a data collection and information sharing system marketed by IBM’s Cognos division.<sup>15</sup> (A summary examination of the PerformanceStat model, especially as developed as SomerStat in Somerville, is presented in Section 4.3 below. )

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<sup>14</sup> Teresita Perez and Reece Rushing, *The CitiStat Model: How Data-Driven Government Can Increase Efficiency and Effectiveness*. Center for American Progress, April 2007. Found at [http://www.americanprogress.org/issues/2007/04/pdf/citistat\\_report.pdf](http://www.americanprogress.org/issues/2007/04/pdf/citistat_report.pdf) For more information about the CitiStat model, and its application in Somerville, see the proceedings and supporting materials from the 2003 Workshop “Bringing CitiStat to Massachusetts: Can CitiStat Work in Greater Boston?” held at the Kennedy School of Government, found at <http://www.hks.harvard.edu/rappaport/training/special/citistat.htm> .

<sup>15</sup> <http://www.cognos.com/company/success/albuquerque.pdf>

#### 4. ELEMENTS OF PERFORMANCE MANAGEMENT ADDRESSED IN THIS REPORT

In order to be clear about the term “performance management” used throughout this report, we have included below a list of seven components that are commonly thought to make up such a management system. They can be cast in different ways, but collectively each of these components need to be in place in some fashion and in an integrated manner for an organization to optimize its effectiveness:

- Strategic planning
- Operational planning
- Monitoring organizational performance
- Individual and team goal setting
- Performance appraisal and feedback
- Personal development planning
- Compensation policy and management

Each of these seven components is described below in turn, followed by our assessment of what we believe to be the current state of these elements in Newton—in both the municipal and school environments.



## 4.1 STRATEGIC PLANNING

### *Definition*

Common usage of the term “strategic planning” refers to the process by which an organization clarifies or changes its long-term objectives and the manner by which those objectives will be met. The purpose of strategic planning is help organizations assess the current environment, anticipate and respond appropriately to changes in the environment, envision the future, and develop means of bridging the gap between present conditions and the envisioned future. Strategic planning for public organizations is based on the premise that leaders must be effective strategists if their organizations are to fulfill their missions, meet their mandates, and satisfy their constituents in the years ahead.

The strategic planning process often includes the coming together of the organization’s leadership in an “offsite” meeting to get away from the day-to-day operational demands on leadership’s time that might otherwise get in the way of sustained thinking about the future. The process is typically led by the senior manager (e.g., Chairperson, CEO, Mayor) but all managers are involved – operations, finance, technology, human resources, etc. In the municipal government, this process might also include the Board of Aldermen, the School Committee, and members of the public at large. The output of such a meeting or series of meetings should be a clear-cut mission statement from which the organization’s goals, strategies, programs, and activities logically flow. One of the critical uses of such a mission statement is to help an organization decide what it should do and, more importantly, what it should not be doing.

The organization’s stakeholders are typically the starting point for re-thinking strategy – defining what their expectations are and how they will be met. Other environmental factors are also taken into account, such as macro economic or legacy issues specific to the organization concerned. Normally, external reports, benchmarking data or other sources of intelligence are commissioned to create a fact-based context for strategic planning.

One common outcome is not just broad objectives and a prioritization of objectives, but also the development of a “scorecard” with a small number of metrics that individually measure key aspects of the strategy’s success and, taken together, represent a “balanced” overall view of the health of the organization.

One aspect of strategic planning that has become more prevalent recently is “workforce planning.” This specific aspect of the strategy looks at the talent pipeline of an organization and relates it to the anticipated demand for talent, based on both numbers and skill-sets required over the coming few years. This is very important as it can sometimes take years to build up a full functioning team and the alternative of hiring externally can be very expensive and risky. Similarly, with changing resource needs re-skilling and re-deployment of people becomes much more feasible if this longer-term approach is employed. At more senior levels, this approach is used in succession planning, which can be seen as both a risk mitigation and leadership development strategy.

Finally, the strategy is developed as a three, five or ten year plan or roadmap to achieve the ultimate mission of the organization. (In the case of a municipality, it is longer than elected terms of office.) Then the plan is communicated broadly using a variety of media such as a website, “town hall meetings,” meetings of community leaders with citizen interest groups, manager briefings and the like. In this way, the process is shared throughout the organization so that all employees have the opportunity to see how their role fits in with that of the organization as a whole and to get on board with its mission. In addition, this communication process facilitates citizen understanding of the objectives of elected officials and gives them an opportunity to reflect upon and respond to the priorities embedded in the strategic plan.

### *Municipal Perspective*

Newton’s Mayor, the Board of Aldermen, and the School Committee represent the City’s principal stakeholders, the citizens. One of the Mayor’s key roles should be to set out a vision or plan for the City, not just for the Mayoral term, but also for the following ten years, and then, working with department heads, to establish specific long-term goals.

The Mayor uses an informal planning process rather than a systematic, formal one. His goals are set forth in qualitative terms by such means as his Annual State of the City report. However, the Citizen Advisory Group found little evidence of *systematic* strategic planning and explicit, measurable goal setting. Earlier in the current Mayor’s tenure, some strategic planning was conducted but was felt by many department heads to have never led to any new or innovative action plans. Today, there are many interactions between the Mayor’s Office and department heads where the Mayor has a chance to set goals and give directions, but we believe that the informal planning and goal setting process will not get us to where we need to be in the future.

Our interviews also revealed that there is a range of opinion among City managers about the value of strategic planning in the first instance, with one or two voices expressing frustration at its absence and other voices expressing doubts about its value or relevance. Without such a process, however, we believe that the employees of the City cannot have an opportunity to relate their roles to something larger than their discrete daily activities and to work effectively as a group in pursuing breakthrough ideas to achieve more with available resources.

When we look at Newton’s problems in the area of long-term capital planning, the Committee concludes that this lack of *systematic* strategic planning involving the Mayor, the Board of Aldermen, the School Committee, and department heads is an important factor in the significant under-funding of the City’s infrastructure and the services that depend upon this infrastructure. For example, capital spending decisions other than those requiring bonds to be issued have commonly become tactical “up or down” votes on individual items. They have lacked an overall context of how any individual spending priority compares to all the others in importance or how it fits within a long term plan targeted at a specific objective. Also, the funds made available for such capital spending are drawn from any cash surplus at the end of the year rather than from a fund that has been created to support a planned, long-term strategic capital improvement program. (See the Citizen Advisory Group’s Report on Capital Infrastructure and Planning for a detailed discussion of these administrative practices.)

### *School Perspective*

On the School side, there has been a much more visible process of strategic planning. The process has focused on identifying the skills and behaviors that those kindergarteners entering the school system now would need by the time they graduate from high school—using that perspective to then work backwards to ensure that programs and processes are in place to deliver those skills and behaviors. The process has involved parents, citizens and other stakeholders in terms of prioritization and focus. This initiative should be commended as the kind of exercise that helps sets objectives and choices.

However, an effective strategic planning process also needs to be both inclusive and closely managed with clear milestones, tight meeting management and, especially, effective communications. It is not entirely clear that this was the case with the recent visioning planning process that the Schools went through. Similarly, effective strategic planning requires significant administrative leadership and direction if, in the inevitable absence of constituency consensus on goals and priorities, watered down goals and vague objectives are to be avoided. This is as great a challenge for the Newton Public Schools as it is for many other municipal, for-profit and non-profit organizations.

No matter how effective or ineffective the strategic planning process has been in terms of developing a credible action plan, its success is ultimately dependent on how it is integrated with the capital planning and budgeting processes. One of our concerns is that the process by which approximately 56% of Newton's total Operating Budget is allocated to the Schools does not take the School Department's strategic plans or vision into account. As a result, the School Department subsequently has to continually adjust their plans in accordance with how much money has been allocated. Although financial reality has to be the foundation of any strategic plan, it does not appear that the School's visioning and the City's budgeting processes are linked together. As an example, while the Newton Public School department developed a three year technology plan in January 2008, it received only 15% of the recommended funding. If strategic plans are to mean anything in a practical sense, they need to be funded and implemented even when there are short-term competing requirements pulling in other directions.

## 4.2 OPERATIONAL PLANNING

### *Definition*

Operational planning uses the overarching mission and strategy as the starting point for what is typically a one-year “tactical” planning process. Operational planning is focused on one-year goals, typically also tied to the annual budgeting process. Departmental goals are established that are consistent with the longer term strategy and which should align with the “scorecard” metrics described above. Goals are sometimes said to “cascade” from the strategic to the operational/departmental to individual manager or employee goals providing, if done correctly, a clear line of sight for individuals from their efforts to the collective achievement of the organization’s strategy.

Unlike strategic planning, there is typically a very clear annual timetable linked to the end of the previous financial year and the establishment of the budgets for the upcoming year in the operational planning phase. Budgets are developed, rolled up, revised and rolled down in multiple iterations until the numbers are satisfactory. Operational planning should, if managed correctly result in a continuous re-allocation of resources consistent with both short- and long-term goals (and the changing operating environment) and be viewed almost as a contract between individual managers and the organization: these resources are granted for one year to achieve the goals laid out. Of course, where mandated services are involved in government, such as with Police and Fire Departments, a failure to meet goals cannot result in a reallocation of resources; nevertheless, there are always ways to meet mandated standards with increasing efficiency, and operational planning and resource allocations can and should address this possibility.

### *Municipal Perspective*

There is a very clear annual budgeting process in place for the City. It is essentially incremental in nature because the process begins with last year’s numbers as a baseline and then is adjusted based on available funds, new initiatives, and current circumstances. This process has also been described by several of the people we interviewed as a “numbers game” that does not really involve thinking about priorities from a City-wide or strategic perspective. Eventual approval of budgets by the Board of Aldermen seems to be based more on the instincts of the Aldermen and not on an underlying data-driven or strategic rationale for specific spending plans.

Even though the Board of Aldermen has recently started asking department heads to come in with goal statements as prefaces to their budgets and then to update the Board on their progress, there are apparent teething problems with this process. We heard that one specific department pro-actively prepared detailed work plans to lay out priorities and provide a framework for accountability for their implementation. When these plans were eventually presented to the Board of Aldermen to help inform its setting of departmental priorities, the Aldermen did not seem to have an informed process for responding to the department’s initiative or using the plans in the Board’s own decision-making. Not surprisingly, this time-consuming effort to develop detailed work plans was abandoned quickly.

Within the current budget process, department goals are established and recognition is given of prior year accomplishments. However, these goals are developed largely by the department heads, and although they are encouraged to make them materially different from the prior year, they do not relate to any overarching set of strategic or City-wide objectives. Departments thus have a lot of leeway or discretion in determining their own goals, which while promoting initiative also risks a lack of consistency with the City's overarching mission.

Once drafted, department goals are checked for compatibility with the Mayor's wishes, which strikes us as being the wrong way round. While Newton's department managers are competent and knowledgeable about their many opportunities and lingering problems, who else than the Mayor, armed with a long-run vision for the City, is in a better position to articulate broad departmental goals and priorities for the coming year? In addition, the current approach risks a continual "business as usual" mindset. The current approach to setting goals and priorities also appears to us as a tactical, "silo'd" exercise that is not coordinated across city departments. Indeed, during times of severe resource constraints, the managerial instinct is to draw back and look inward, focusing increasingly only on those functions clearly within a specific department's purview, exacerbating this silo effect. There is thus a serious risk of few shared goals and little collaboration or teamwork across departments.

Equally important, apart from periodic questioning by the Mayor's Office and episodic questions by Aldermen during the budget process or in the context of other appropriation requests during the year, it is not clear how accountability for achievement or non-achievement of goals is monitored and enforced. Neither is it clear how the consequences of achievement or non-achievement are managed (other than extreme cases where managers need to be eased out). Further, there is no structured forum for managers to describe achievement of goals or barriers to achievement on a regular basis (even though the Mayor does hold monthly meetings with senior staff and department heads). Such a forum can be a powerful, reinforcing incentive to managers to achieve success

There could also be a much more visible planning process that presents choices to citizens. For example, in the Department of Public Works, the Pavement Condition Index (PCI) for roads and pavement might be a good metric to use to confirm priorities. PCI measures road and pavement quality – a score of 80 means good condition, while at 70 the roads are starting to go. Using this language system, an example of a publicly agreed goal could be that Newton wants to maintain class 1 roads at 80% and class 2 roads at 75% and resources would be allocated to meet this goal. (To the credit of the DPW, this department has developed an encouraging approach to data analysis that will allow them to initiate precisely the kind of goal setting and the concomitant resource allocation mentioned above.)

Following from such an operational plan for each department, a work plan or program could be developed with tasks, milestones and budget requirements to deliver on these agreed-upon goals. Such a plan could then be monitored, and the department concerned would have a clear target for their own work planning.

### *School Perspective*

In the Newton Public Schools, the budget process starts around Thanksgiving each year with a sub-committee of the School Committee issuing budget guidelines for the upcoming year to the

Superintendent. These guidelines can be annual or span several years. The critical step in the process occurs, however, around January when the Mayor tells the Superintendent what percent increase the School Department can expect in its budget. At this point, the Superintendent starts building a budget to meet the Mayor's financial requirement.

From December through March, the Superintendent works with the Administrative Council (Principals, Department heads, and the central management team) in crafting a budget based on these two sets of guidelines. In the first week of March, the Superintendent's Proposed Budget is presented to the School Committee and is discussed in several meetings in March. At the end of March or early April, the School Committee votes, and it becomes the official Committee budget. The latitude for redeploying resources within the budget, year-on-year, is quite small given that much of the budget is made up of fixed costs. Still, some choices have to be made since there is never enough money allocated to cover what is originally proposed. The final step is for the Board of Aldermen to formally approve the budget in late April or early May. The amount of discussion among the Board of Aldermen before approval is quite variable. The goals for the year are then published on the website. The budget year then runs July 1<sup>st</sup> to June 30<sup>th</sup>.

The process for operational planning in the Schools is tied closely to its internal budget process and appears to be effective at deploying resources where they are needed short term. We believe that the Schools have a very clear knowledge of where the money is being spent. For example, the School Department makes trade-offs each year between class sizes and individual programs, and the operating budget reflects these trade-off decisions.

What concerns this Committee, however, is that these short-term operating decisions often become *de facto* long-term ones in the absence of the kind of longer term integrated plan described above. Indeed, one of the deterrents to effective operational planning is that in the absence of a long-term strategic plan and corresponding set of financial commitments, the City's practice of making budget allocations only for one year at a time inhibits the ability of the Newton Public Schools to put in place annual operating plans that relate to a longer term strategic plan. (See pages 28-29 of the School Cost Structure Report for detailed recommendations addressing how Newton Public Schools should structure planning and budgeting to avoid the short-term orientation and incrementalism of the current administrative process.)

## 4.3 MONITORING ORGANIZATIONAL PERFORMANCE

### *Definition*

Any effective organization needs information in order to make decisions. That information should be collected and presented in such a way that management can see what is happening and take action accordingly. A typical approach is to develop a set of performance measures that sum up how well the organization is doing against its goals—goals that are both financial and operational, and based on the needs of external and internal stakeholders. While largely numerical, these metrics can be qualitative as well. Such metrics are typically reported monthly with crucial metrics being reported more frequently. Without such management reporting, an organization is “flying blind” and will often not realize problems until they are too late to address.

Before evaluating Newton’s current practices, we set out below one of the most promising tools that could assist City executives in promoting and tracking departmental and personal accountability and performance. It is known in its most general form as the PerformanceStat process. This process has been used in municipalities of various sizes over the past decade

A municipality can be said to employ a PerformanceStat process if “it holds an ongoing series of regular, frequent, periodic, integrated meetings during which the chief executive and/or principal members of the chief executive’s leadership team plus the individual director (and the top managers) of different subunits use data to analyze the unit’s past performance relative to its goals, to follow up on previous decisions and commitments to improve performance, to establish its next performance objectives, and to examine the effectiveness of its overall performance strategies.”<sup>16</sup>

Based on a series of visits to Somerville where a PerformanceStat process has been adopted and heartedly supported by the Mayor, discussions with faculty at Harvard’s Kennedy School who are active students of PerformanceStat processes in a wide array municipal governments, and a close reading of the research available on similar initiatives around Massachusetts, New England, and the nation as a whole, we think this methodology—in some form—could substantially improve Newton’s operations. We have observed how such a process can be a very effective way of tracking and managing the performance of municipal operations against a variety of performance measures that both include and go way beyond costs. It may also be applicable to school operations.<sup>17</sup> While we are particularly impressed with PerformanceStat, we note that there are many variations of the PerformanceStat process, many important success variables, and some substitute methodologies as well. In addition, we point out that PerformanceStat can be implemented gradually.

### *PerformanceStat Overview*

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<sup>16</sup> Robert D. Behn, “Designing PerformanceStat,” *Public Performance & Management Review*, Vol. 32, No. 2, December 2008, p. 207.

<sup>17</sup> PerformanceStat is only the latest of several planning, and control tools that have attracted the attention of, and been adopted by, both for-profit and non-profit organizations. MBO (Management by Objectives) and TQM (Total Quality Management) in their various renditions are only two of several other mechanisms that serve similar planning and control functions. All share a commitment to rigorous data gathering, data analysis, and tracking of relevant performance metrics.

The definition of PerformanceStat given above is broad enough to bring a lot of varied activities into its tent. But there are several defining and qualifying features of a true PerformanceStat process. We have noted that such a process requires a specific focus on performance (past, present, and future), the use of data to analyze changes in performance and the effectiveness of efforts to improve performance, and frequent high-level meetings to analyze progress and follow-up on previous decisions and commitments. A casual perusal of municipal websites reveals that many pale imitations of PerformanceStat processes abound. A truly effective use of the PerformanceStat process requires the leaders of an adopting municipality, agency, or department to pay careful attention to several key design features.<sup>18</sup> In particular, they need to:

- Specify the performance purpose to be achieved. “What are we trying to accomplish?”
- Choose which organizational elements to include in the process. All municipal departments? Start with some first? The School Department?
- Decide what performance data will be collected and analyzed. “What data do we have? How directly do such data reflect the results we seek to produce? What other data would be more valuable? Can we obtain these additional data? How easily can the data be manipulated? Verified? Benchmarked?”
- Build staff, or train at least one analyst, to analyze these data. Data do not speak for themselves. Analysts must always be asking, “How do the data help us understand how well we are doing in achieving our purpose and do better in the future?” Thus, analysts need to be creative in determining what data will be the most revealing, how current data should be compared with past data, how performance should be compared across different subunits and jurisdictions, and what deviations in performance actually mean.
- Develop the requisite infrastructure . Two pieces of infrastructure are absolutely critical: software to help collect, analyze, and display data and a dedicated room equipped with the appropriate computers, video technology, and layout to facilitate discussion of different aspects of performance.
- Determine how performance management meetings will be conducted. This is often where the process lives or dies. Organizing key aspects of the performance management meetings are neither easy nor obvious. Here are some key questions that need to be answered: “Who runs the meeting? Is the meeting a show-and-tell led by the head of the subunit whose performance is being examined? Or is the meeting conducted by the Mayor? In the Mayor’s absence, who has full and clear authority to run the meeting? How often are meetings held? How often do individual department heads report? How does this reporting cycle fit with the data availability cycle? Who attends PerformanceStat sessions? Just department heads? Department employees? Aldermen? The public? What tone should be set? Is the meeting collegial or adversarial, feel-good or high-pressure cross-examination? What’s the proper

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<sup>18</sup> Behn, p. 208 ff.



balance? How can bland discussions be avoided and a spirit of disciplined experimentation, learning, and improvement be nurtured?

- Create an explicit mechanism to follow up on the problems identified, solutions proposed, and decisions made at these meetings. Relentless follow-up is also a key to success. Often, follow-up tends to be “worshipped more than practiced.” Tools to use include follow-up calls, memos, and electronic ticklers, all aimed at solving the problem and preparing for the next meeting where action items, problems, proposed solutions, decisions, and commitments will be reviewed.
- Think through carefully how to adapt the features and principles of other versions of PerformanceStat to Newton’s particular situation. PerformanceStat is a demanding leadership strategy. No one gets it precisely “right” at the beginning. The process will surely fail unless the nature of performance to be improved is explicitly defined. Beyond that, however, there are open questions about data, analysis, meetings, and behavior that need to be reviewed and often revised, over and over, in light of the special demands and conditions of cities and their various departments and cities.

#### *The Origins of PerformanceStat and Its Adoption in Somerville, Massachusetts*

The PerformanceStat process, first known as CompStat, was pioneered by the New York Police Department. Later it was adopted by the City of Baltimore in all major departments, shortly after the election of Martin O’Malley as Mayor in 1999. Under O’Malley’s leadership CompStat was renamed CitiStat. Over the past fifteen years, Baltimore has become the “gold standard” among CitiStat practitioners. The total start-up cost and operating cost of Baltimore’s program in its inaugural year sixteen years ago was \$285,000. By 2003, CitiStat in Baltimore was costing \$400,000, mainly for staff salaries.<sup>19</sup> According to the Mayor’s Office, CitiStat produced over \$43 million in cost savings, cost avoidances, and revenues enhancements in its first three years of operation.<sup>20</sup>

Closer to home, Joseph Curtatone, a Somerville alderman who was frustrated with the lack of knowledgeable discussion of annual budgets, ran for mayor as a promoter of CitiStat. Upon taking office in January 2004, Curtatone promptly organized a series of trips to Baltimore with top staff. The result was “SomerStat,” which is now a standard practice throughout Somerville’s municipal operations. One result of this management innovation was that the line items in Somerville’s budgets were quickly accompanied by performance-related costing. This initial innovation eventually eased the city into considering a much broader array of performance measures. (It has not been adopted yet by Somerville’s School Committee.)

The CitiStat/SomerStat process uses simple computer models to track many aspects of city government. After department officials gather data and enter them into computer databases, CitiStat analysts pore over the information, provide summaries of key trends and issues, and create visual depictions of the data in charts, graphs, and maps. Every other week, the Mayor and his top aides meet with officials from each department—sometimes as a group in order to

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<sup>19</sup> Baltimore is seven times larger than Newton with a population of 640,000 persons.

<sup>20</sup> In September 2003, Mayor Cohen attended a seminar at Harvard’s Kennedy School of Government along with thirteen others from the City (ranging from the Chief of Police to the Chief Budget Officer) on “Bringing CitiStat to Massachusetts.”

maximize cross-departmental learning. At these sessions, officials review the data to assess whether departments are meeting short- and long-term goals, meeting budget, finding ways of improving performance, and drawing up “to-do” lists for the next two-week cycle.

The bi-weekly meetings of department heads are central to the conduct of the CitiStat process. Prior to these meeting, analysts assess each department’s performance on a wide range of issues, identify important trends and trouble spots, and format the presentation on large screens in the CitiStat Room. A department chief may be asked by the Mayor and key aides, “Why is garbage pick-up so much slower in that neighborhood?” or “Why is your absenteeism rate so high?” One can imagine that in the domain of cost management, a department chief may be asked to answer questions related to procurement, competitive bidding, infrastructure maintenance, energy costs, capacity utilization, snow and ice removal—the list goes on. No departmental executive leaves these bi-weekly meetings without a “to do” list, which is reviewed in two weeks’ time and afterwards, if necessary.

During its first year of operation in 2005, SomerStat’s start-up personnel budget, which included a Director and a Senior Analyst, totaled \$120,000. By 2009, as the scope of SomerStat’s work expanded, the personnel budget had grown to \$215,000 for a Director, two Senior Analysts, and one Junior Analyst. The vast proportion of SomerStat budget has pretty much been personnel spending, although additional monies have been spent software, hardware for a dedicated SomerStat room, and minor start-up costs at the departmental level.

#### *Specific Tasks of SomerStat’s Director*

PerformanceStat programs are designed to assist a mayor in overseeing service delivery by using data and frequent accountability checks to monitor departmental performance and improve city operations. The Mayor is supported by a PerformanceStat (SomerStat) Director that has specific tasks and activities. While the organization of Somerville’s government differs somewhat from Newton’s (for example, Somerville currently has a Finance Director reporting to the Mayor), the job description of the SomerStat Director is useful imagining the scope of responsibilities and talents that such a person in Newton might embrace. In Somerville, the Director of SomerStat:

- Briefs the Mayor daily on city-wide problem areas or opportunities for improvement or innovation.
- Prepares for, convenes, and facilitates meetings with department heads and a SomerStat panel staffed by heads of the core management departments.
- Assists the Mayor in developing strategic goals for the City and in coordinating department level goals that relate to Mayoral goals.
- Monitors City departments in service delivery, financial performance, and completion of projects and priorities established by departments and the Mayor.
- Secures personnel, financial, service, and operations data from administrative systems and external sources. Cleans, integrates, and analyzes data to develop recommendations.

- Continuously updates a database of tasks assigned to staff throughout the City, and updates department heads and the Mayor on open tasks at least weekly.
- Assists the Finance Department and the Mayors Office in the preparation of a program/performance-based annual operating budget.
- Solicits and manages partnerships with academia that enable the City to pursue new innovations.
- Presents to other municipalities and governmental agencies on the SomerStat model.
- Oversees administration of regular resident and staff surveys.
- Manages major new initiatives of the Mayor’s Office, as requested.

*PerformanceStat in Boston and Beyond*

The process sketched here has been adopted by a variety of cities and states (StateStat). Some cities have considered it, but haven’t generated sufficient energy to adopt it fully. Others, like the city of Boston, have adopted skinned down versions of this process. As part of a larger management initiative unveiled by Mayor Thomas Menino nearly two years ago, he adopted some portions of the PerformanceStat process to create more accountability in city government.<sup>21</sup> The National League of Cities (in conjunction with the Urban Institute) has mounted an effort aimed at accelerating its adoption by helping elected officials to use a more performance-based view of government programming and budgeting. What’s so interesting and important about this initiative—and its promise for Newton—is that a larger, performance-informed picture of municipal operations includes but goes *far* beyond cost containment.

Jackie Nytes, a veteran of the Indianapolis City Council who is also chair of the City Futures Finance Panel at the National League of Cities, makes a strong case for making clear connections between dollars and results.

Revenues are getting tighter and tighter, and we’re not going to micromanage our way through this. We have to reframe the discussion with the taxpayer. This isn’t about looking for fluff in budgets, for waste. We’re already efficient. The question is, are we efficient at the right things? So this is about what we want to budget for: What are our priorities and what do these cost, and then explaining to citizens the tough choices.<sup>22</sup>

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<sup>21</sup> According to city officials, since the program was created, department heads have been called to task for poor performance and their pay raises have been based on relevant performance measures. See, Donovan Slack, “Boston puts city performance stats online,” *The Boston Globe*, February 18, 2009. As of February 2009, the City of Boston publishes statistics on the Internet showing how various city departments are performing, including fire, police, and schools.

<sup>22</sup> Jonathan Walters, “Data-Driven Decisions,” [governing.com](http://governing.com)

He could have added that processes like CitiStat not only help connect dollars with results, but also helps track the relationship between allocated dollars and expected results—the centerpiece of effective monitoring and management control.

*Implementation: “Normandy Invasion” vs. “Toe-Hold”*

The premise and promise of PerformanceStat is very appealing, especially in times of fiscal constraint, increasing municipal expenditures, and tax-fatigue. Getting started does not necessarily require a “Normandy invasion” approach to installing a PerformanceStat process. Securing a “toe-hold” position can also work if the mayor gets things started by articulating the purpose of the process, holding structured meetings, mobilizing data that already exists in the system, practicing relentless follow-up (every two or three weeks), and making it clear that whomever steps in for the mayor in his or her absence speaks for the mayor. In other words, getting started is amazingly straightforward.

To be considered consequential, it must be clear to everyone that any PerformanceStat process is “a direct line” to the mayor. Once this condition is added to those mentioned above, a city can be on its way to enhanced performance management. As an absolute minimum, such a process allows department heads to see the mayor regularly on substantive issues of performance *with hard data to highlight results* outside of a crisis situation. This can be the kind of platform from which a more disciplined and formal performance management initiative can be launched.

*Municipal Perspective*

Newton does not have a systematic or data-driven process for tracking and monitoring organizational performance in such areas as service quality, cost containment, or operational efficiency. In our view, Newton is thus constraining itself unnecessarily in its desire to deliver planned service improvements and desired efficiency gains.

While some municipal departments, such as the Department of Public Works and the Police Department, have instituted internal monitoring and control mechanisms in the past (see below), they are for the most part incomplete and unevenly employed. Municipal departments do make reports (sometimes twice a month, occasionally monthly or quarterly) to the Mayor, but the agendas of these reviews are reportedly quite informal, without an established reporting framework and few immediate consequences for failing to meet previously agreed-upon objectives. The individual Departments are largely left to their own devices to develop what makes sense to them in terms of reporting. These reports are typically not tied to the long-term goals of the City.

There is some reporting of year-to-date budget spending, but departmental budgets do not appear to indicate when in the year expenses are anticipated to occur. Due to this lack of calendarization, year-to-date expense reporting becomes less valuable since it does not provide an accurate assessment of how much money is needed to complete work programs or how much money may be left under spent at the end of the fiscal year.

The Department of Public Works (DPW) is one department that actively uses some metrics to report internally, amounting to 24-30 pages of individual performance measures in a presentation style report. Data for these reports comes from a work order management system, which includes a way of tying the data back in an “auditable” manner. However, even for a department as

engaged in performance measurement as the DPW is, it is unclear what specific City goals these measures relate to and, in fact, how some implicit goals (such as to “maintain black roads” after snowfalls) were determined in the first place. In addition, there seems to be little or no formal departmental accountability for these performance measures and outcomes to the Mayor’s Office.

The DPW has used outside consulting firms to provide an objective source of data on what public works need to be done. The Consultants’ reports could also be used to establish long-term goals and assist in prioritization decisions. For example, a decision on how long a backlog on pavement or sidewalk repairs we want could be informed by an assessment of what size the backlog is and the actual condition of the pavements.

Across all City departments, including the DPW, we see an opportunity to improve monitoring and control by developing a reporting framework that includes a limited number of key metrics that collectively as well as individually indicate whether Newton is on track compared to its goals.

### *School Perspective*

For the Newton Public Schools, the key performance measures revolve around student achievement. There has been in recent years an increased and very significant focus on assessment of students at different levels—to the point that many within the School community believe too much attention is paid to student achievement that can be measured in tests. There are also difficulties sometimes in determining appropriate measures of effectiveness. For example, the Special Education program, which is governed by mandates that prescribe costs that Newton must pay, consumes a very significant proportion of the Schools budget. Yet, it is extremely difficult to come up with measures that could determine whether Newton is getting its money’s worth.

In about May or June of each year, the Superintendent issues a report on how the Schools have done against the goals and budget for the year. The School Department also prepares quarterly budget updates and conducts periodic reviews for the School Committee (on which the Mayor sits). But, in this instance, reviews are typically focused on highly aggregated line items in the budget rather than operating details. For this reason, it is difficult for the School Committee to continuously monitor the costs, quality, and planned improvements of various programs and services.

On the whole, it is our Committee’s opinion that the goal setting and management reporting processes in the Schools are more fully developed than on the municipal side but still have room for improvement. Performance metrics can be expanded in almost every area of activity (although we are not proposing additional measures of student academic achievement). In addition, in some instances, there may be a reluctance to describe complicated problems openly and fully. For example, when preparing the School Cost report, members of the Citizen Advisory Group found that it was difficult to obtain information regarding the effectiveness and financial implications of the METCO program because it had never been gathered and that there was a general reluctance on the part of the School Department to discuss the issue on the grounds that it might either stigmatize the children in the program or provide ammunition to those who might oppose the program in general. Although we can fully understand these concerns, the program –

like so many others – is nevertheless an important one to measure. For this reason, effort needs to be placed first and foremost on how best to communicate the information rather than simply on whether it should be gathered and communicated at all. As it turns out, our analysis reveals that except for one segment of the program, the achievement levels of METCO children were higher than for children enrolled in the Boston public schools but often lower than Newton residents. This is exactly that kind of information that could give credit where credit is due within the School Department and provide meaningful feedback where corrective action of some sort needs to be taken.

It is noteworthy that the specific PerformanceStat discipline has not, to our knowledge, yet been applied to school departments. However, the former SomerStat director is currently working on developing just such a program (SchoolStat) for Somerville.

## 4.4 INDIVIDUAL AND TEAM GOAL SETTING

### *Definition*

The basic premise behind goal setting is that if individuals or teams or workgroups develop clearly defined goals and are given the resources to achieve them and then held accountable for their achievement, the individuals involved will have a much greater likelihood of achieving the desired outcomes. By so doing, the individuals will have a clearer picture of the value of their role, and their morale and productivity will be improved. The process of setting individual and group goals can be greatly enhanced, of course, by the PerformanceStat process described and recommended above.

Without such goals, individuals and groups are left to their own devices to decide how they will carry out their day-to-day responsibilities and what they will achieve. Such an environment is not likely to result in operational efficiency or effectiveness. We would also add that specific goals do not hamper initiative and creativity. Managers and union employees still have full opportunity to improve operational efficiency and effectiveness.

Goal setting can be pushed well into the organization, but it is most effective for those management and supervisory roles where individuals do have some discretion over how to manage their time. As with the example of organizational goals described earlier in the report, individual goals can be made to balance a mix of hard financial measures (e.g., staying within budget) with softer qualitative ones (e.g., customer satisfaction). A mix of goals such as these helps intermediate between often-conflicting priorities, while establishing a minimum threshold of performance in each important category. As an example, such a mix of goals might include developmental goals—developing oneself and others—as well as addressing the organization’s service goals and financial imperatives.

Goals should be set as early in the financial or budget year as possible to allow individuals the longest time possible within the year to achieve them. Multi-year goals can be set as well.

### *Municipal Perspective*

From our interviews, the Committee learned that Newton lacks a formal process for setting objectives with municipal department heads and their direct reports. This is not to say, of course, that no expectations are discussed. They are. But to the extent that Newton lacks a systematic goal setting process, it makes performance appraisals and personal feedback all the more difficult than it naturally is. (See Performance Appraisal section below). Similarly, it makes holding individuals accountable for achieving departmental goals all the more difficult, as well.

### *School Perspective*

The Newton Public Schools have a much more robust individual and team goal setting process. The Superintendent sets goals for each of his direct reports. Examples of such goals have included reducing staff and being more efficient in specific areas. For example, over the past year, one manager had the opportunity of making some consolidations in her staff organization to reduce cost. This was, in fact, one of her goals for the year, and that goal was duly achieved.

In addition, all the direct reports of the Superintendent are challenged to respond to general goals with specific actions over the coming year. Because of lack of time, the Committee has no knowledge as to what extent, if any, the Superintendent's direct reports set goals in turn for their reports.



## 4.5 PERFORMANCE APPRAISAL

### *Definition*

A typical approach with a non-unionized management work is to have a mid-year and end-of-year appraisal process where goals (if they have been set) and job responsibilities are evaluated.

A mid-year appraisal is less formal and can just be a “check-in” to ensure that the individual is on track and, if not, what if any corrective action should be taken. There may be no actual forms completed. If forms exist, the parties may not go through a detailed review and approval process, given the interim nature of the mid-year check-in.

The end-of-year process is typically more formal, with the reviewer taking time to assemble evidence of accomplishments. Some organizations institute a self-assessment, which can be an effective means to encourage individuals to examine their own performance and evaluate it. Then, comparing a self-assessment with the reviewer’s assessment can add a richness to the overall evaluation and also encourage the reviewee to “own” his or her evaluation as well as the recommendations that come from them.

Performance evaluations are best seen as conversations between the parties involved and, as such, should be seen as just a formal continuation of what should be happening regularly throughout the year. Ultimately, there should be no surprises during a final assessment.

The assessment should be viewed as a motivation to the individual – recognition for achievements and overall performance and also highlighting important areas for improvements. For non-unionized, management personnel, there typically needs to be some visible consequences to the reviewee for performance or non-performance—such as more professional development opportunities, more opportunities to develop new skills, or greater responsibility with additional compensation. If not, the appraisal becomes a meaningless form-filling exercise, which merely gives the appearance of compliance with the process. (This discussion of performance appraisals should not be taken as a recommendation of “pay-for-performance” in the municipal setting. It is not. Rather, our main interest is in seeing performance appraisals used for developmental purposes.)

Once the basic performance information is captured, it can be used for a broader “Talent Review” process where a whole group (such as a management grade) are evaluated together. In some organizations a forced ranking of management employees is done to categorize individuals into performance groups and to prevent everyone being rated “Exceeds Expectations.” Under this system, fixed percentages are allocated to each performance group. As an example, there may only be 20% of a population who are allowed to be classified as “Exceeds Expectations”.

One of the advantages of such a Talent Review, whether forced ranking is used or not, is that it can help identify the high potentials and top performers so that they can be thought of as a strategic asset to the organization. Particular attention is typically paid to this group to ensure

that their commitment level stays high, their skills and responsibilities grow, and that they do not leave the organization.

Another important process linked with Talent Reviews is succession planning. There is a risk to many organizations that key individuals leave without a successor having been groomed. While it might be a luxury in a municipal setting to have every management position backfilled, nonetheless having a succession plan protects the organization in the short-term if someone important leaves or is incapacitated suddenly. The need to find someone senior and at short notice can be a challenge and often very expensive. In a business sector succession plan, every key role will have one or two backups that are themselves in other roles that require backups and so on. The plan should never be viewed as an entitlement or guarantee for specific positions.

Finally, performance appraisals for management personnel can and sometimes should result in a decision to terminate for non-performance. While no-one wants to see this eventuality occur, there needs to be a process in place to remove individuals whose performance or behavior are adversely affecting the performance of a department or team.

### *Municipal Perspective*

Mayor Concannon first suggested using performance appraisals for executives in City government, and, upon taking office, Mayor Cohen also indicated his intention to introduce them. For maybe two years, performance appraisals were conducted in some fashion, but there were apparently little or no consequences for supervisors not doing them. In recent years, this practice has effectively ceased in a formal sense. During this past year, there has been some renewed talk about performance appraisal for executive-level employees, although it has not progressed very far to date. As a result, there is no formal performance appraisal process for non union personnel. Performance appraisal for municipal managers is a very informal process now, and the Human Resources Department is only involved where there are serious problem cases requiring disciplinary action, and never when people have done an outstanding job.

Of course, the unions (seven different ones for the City; the Schools are organized separately) play a critical role in determining job definitions and pay rates for Newton's 900 or so unionized municipal employees (FY09 FTEs), not counting the City's 92 management personnel. The unions have historically been totally against the introduction of performance appraisals on the grounds that managers will have favorites that they want to reward or that it could be used for discriminatory purposes. This, of course, greatly inhibits personal accountability for the performance of unionized staff.

There is also no way to address the performance problems of unionized employees except for the most egregious cases that require disciplinary action. Even here, the process can take years with all the various warning steps. There is a six-month probationary period for new hires during which time people who do not measure up can be exited, but once past that point it becomes very difficult to move people out.

While officials in both the Mayor's Office and municipal departments could tell us where there is a likelihood of staff moving up to top management positions, this is qualitatively different from developing a strong culture of talent development. In the absence of such a culture, a city is at risk of key personnel defections. Indeed, workforce demographics suggest a potential "brain

drain” from many employees retiring in the next few years. Some work has been done to establish standard operating procedures in certain departments (police and fire have to do this, by law) which would help alleviate the problem of losing experienced people, but perhaps more creative approaches such as job sharing with retired employees would enable better knowledge management and reduce the risk to the City. This would require some joint brainstorming with City unions where unionized employees are concerned.

### *Schools Perspective*

The Newton Public Schools have a more robust performance appraisal system than the municipal side of Newton. For example, the Superintendent uses a comprehensive evaluation form and conducts an in depth discussion with each of his direct reports. This appears to be an effective process.

Unlike the Municipal side of the house, the Schools have negotiated a performance appraisal process as part of the union contract. It took some five years of negotiations to achieve this, which may be something to be pursued with the City’s municipal unions. . The review form that is used as the basis of the performance appraisal is a very well thought through tool with a comprehensive set of competencies at its core.

For the teachers, there is a biennial performance review cycle after they have achieved “Professional Status” similar to a tenured position; all other (non-tenured) teachers receive annual reviews. It takes three complete years for a new teacher to reach Professional Status, and it is generally agreed to be important to determine in that timeframe whether there are any performance issues that would suggest the person should not be awarded the status. The cycle for teachers with Professional Status also has, as part of its design, the idea that years 1 and 3 of a new teacher joining are “growth years” and years 2 and 4 are the evaluative years, confirming Professional Status in the 4<sup>th</sup> year.

After that point, the Schools “own” the teacher and it becomes difficult to remove a teacher that has achieved Professional Status. It appears that performance reviews after such status is awarded can only be conducted, according to the negotiated contract with the teachers’ union, once every two years. We believe this two-year cycle should be re-considered, since performance conversations should take place between managers and direct reports frequently in the spirit of promoting continuous improvement. If the conversations are conducted regularly, then the formal annual process becomes much less onerous. It is thus a false economy to short-change performance discussions. Affecting this process, however, is the degree of overall supervision of teachers that is possible given the current burden on department chairs, the very limited number of curriculum coordinators to work with the teacher population, and the high ratio of teachers to principals. The coordinators and principals should be available to assess how well individual teachers are doing and improve their skills by coaching them. This may be more difficult for principals, since with diminishing administrative support they describe how often they need to get involved in administrative issues that distract them from the supervisory role that they are ideally qualified and positioned to play.

## 4.6 PERSONAL DEVELOPMENT PLANNING

### *Definition*

Many organizations formally create skill development plans and advancement trajectories for people in Individual Development Plans or IDPs. These are formal documents often developed after a mid-year evaluation meeting where there is more time to think about careers and some time remaining in the current year to address issues before the formal year-end appraisal. IDPs are drafted by either the reviewer or reviewee, but are discussed and agreed by both parties. Development goals often require the assistance of a manager in their completion, and the commitment to provide such help can also be included in the IDP process.

Development planning benefits both the individual and the organization. For the individual, development means that he or she is increasing their adaptability and capability and therefore opening up better career prospects within the organization. For the organization, development can act as a retention tool for high potentials or top performers who often view development opportunities as more important than pay raises. Also, the organization will have a broader base of talent from which to staff required positions.

Development activities can take the form of formal training courses or self-study, but often more effectively include specific short-term assignments or projects. Development can also occur through mentoring arrangements with others in the organization or externally. Many “best practices” experts will say that the best form of development is on-the-job development and that formal training, although it has its place, will by its short-term nature not provide the hoped for lasting benefit.

### *Municipal Perspective*

There appears to be no systematic developmental planning in Newton’s municipal operations, although managers do have the opportunity of attending conferences and training. This lack of development planning relates, no doubt, to the fact that shrinkage in municipal staffing over the past years has not left as many opportunities for advancement as once existed

We also heard in a number of our interviews that too many City employees have a very narrow perspective on their role, which inhibits career progression and limits the value they bring to the City. This suggests that opportunities may exist for cross-training in different departments that could help existing employees become more valuable to the City, while improving their career prospects and, possibly, their overall job satisfaction levels.

Improving job satisfaction plays an important role in improving productivity and commitment. Both are valuable attributes for any organization. An organization that is motivated and competent can achieve far more with the same or less resources than one that is not. A committed workforce is by definition a low turnover one, and although in tough economic times turnover generally becomes less of an issue, top talent can always be a flight risk. To minimize such occurrences, it would be productive to begin talking with the unions about supporting personal development planning and an organizational development ethos. Indeed, our perspective is that a performance appraisal process that is focused on development might be

viewed positively by the unions. It would be a positive message for their members and would be a move in the right direction of communicating performance and behavior expectations as opposed to mere job duties.

### *School Perspective*

As discussed in the Citizen Advisory Group Report on School Cost Structure, funding for direct teacher professional development opportunities has diminished in recent years, including the opportunity for teachers to attend summer workshops, to create curriculum, to participate in programs like Teachers as Scholars, and to take courses and receive compensation for those costs. For example, in FY03, \$577,294 was invested in professional development. This decreased to \$182,956 in FY07 and was expected to be \$245,300 in FY09.

Nevertheless, the Citizen Advisory Group Benchmarking Report noted that Newton spends 49.5% more on professional development than communities with a similar commitment to education. Thus, while Newton has cut those aspects of professional development that provide growth opportunities for teachers, it continues to invest more heavily than other communities in other areas that the Massachusetts Department of Elementary and Secondary Education also classifies as professional development: 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.

In sum, Newton's teachers, while receiving significant support from other Newton Public Schools' staff that focus on curriculum coordination and curriculum development, have less opportunity for the more traditional professional development activities than they have had in the past. Additionally, it is important to note, that many of the instructional supervisors noted above have a far greater number of supervisees than they had in the past. What is clear to the Citizen Advisory Group is that Newton's ability to provide professional development, when compared to previous years, has diminished. We would add that some educational experts consider that the capacity to provide quality professional development is what distinguishes great school systems from good ones. Professional development may very well fall in the category of essential qualities of excellent schools.

## 4.7 COMPENSATION POLICY AND MANAGEMENT

### *Definition*

No area of management has a greater impact on Newton's Operating Budget than compensation practices (wages, benefits, and incentives), because employee costs account for over 80% of the City's Operating Budget. Compensation management is clearly a vital economic matter for Newton, as it is for every other municipality in Massachusetts.

Similarly, few instruments of management evoke more powerful and complex emotions in an organization's membership than its system of compensation. The sources of these emotions often involve feelings of fairness about how individual contributions are valued and compensated. By definition, a compensation system contains a scheme of pay differentials that attempt to scale the value of individual contributions, typically within the context of a competitive labor market, which forces the organization—and the individual—to answer questions about the value of his or her work. From an employee perspective, compensation is a major preoccupation even though it may not always be the strongest driver of organizational commitment.

In this emotionally and economically charged environment, an explicit compensation philosophy helps manage the expectations of employees and guide organizational leaders in their efforts to design and administer a compensation system. Such a philosophy or system typically addresses three basic elements: composition of pay, level of pay, and the functional form of pay. "Composition" refers to the mix of wages and benefits; "level" refers to size or total value of the of the compensation package and its growth over time; and "functional form" refers to the variability of pay over time or, more specifically, how the realized level of compensation relates to individual or group performance and how that performance is measured.

As in other communities, unions represent the vast majority of municipal and school employees in Newton. This means that in municipal government the composition, level and growth, and functional form of compensation are always negotiated outcomes. But what guidelines or compensation principles should guide these negotiations? This the most fundamental question in compensation management.

### *Municipal Perspective*

It is not entirely clear to this Committee what principle or principles have guided the compensation of Newton's municipal employees over the past decades. Certainly, labor negotiations have been carefully planned and bargained. Some have gone smoothly over the years, while others have been quite contentious. But, if we were to ask what principle or principles have been used to organize thinking about employee compensation in the past, the answer would most probably reference both current market conditions and the City's ability to pay. The question, of course, is whether or not these two criteria are sufficient to guide wage determination and the compensation of municipal employees in the future. This Committee thinks a more robust and transparent compensation policy is needed, because the relationship between the average, long-run growth rate of employee compensation and the average, long-run growth rate of City revenues is so critical to Newton's economic viability.

As relevant background for this recommendation, we will describe the current compensation structure for both municipal and school employees.

Today, the composition of pay for Newton's union and non-union employees consists of current wages and health benefits, plus future post-retirement pension and health benefits.

The level of total compensation is tightly tied to "market prices," and compensation adjustments are made based on either cost of living percentage increases or "Step" increases based on seniority or a combination of both. The City has periodically studied salary comparables union by union as necessary during negotiations, but as a general matter, once a wage pattern has been established by one union settling, comparables tend to lose their meaning. For management employees compensation levels have been benchmarked in the past, the latest being 2005 (by Rutherford Associates). Previously, a similar survey was conducted in 1995 (by Hay Associates). These studies have been used to justify pay increases.

As far as the functional form of compensation is concerned, there is no merit-based adjustment, and there is no bonus plan or merit increases for either union or non-union employees. Similarly, there is no relationship between either achievement of goals (or assessment of in-job performance) and the awarding of Step increases. Because there has been no common framework for performance evaluation or goal setting, there is no systematic way of awarding pay increases to superior performers. (For this reason, along with the absence of any clear precedents in similarly unionized communities, we are not suggesting linking financial rewards to superior performance for Newton's unionized employees at the present time.)

For employees in departments other than the Police and Fire Departments (which have a slightly different scheme), promotion opportunities are also considered to be an important element of compensation systems. The promotion process for Newton's union workers is based on seniority and length of service. The promotion steps mandate specific percentage increases in compensation. Steps are automatic annual increments, and because there are only eight steps on the municipal side, there are many people who have already achieved the maximum and will only qualify for cost-of-living increases from that point on. (The cost-of-living increases are somewhat of a misnomer; they are not necessarily tied to inflation rates but rather reflect a negotiated salary increase, which might reflect competitive market dynamics.)

For non-union management level employees (in the so-called Hay group or "H Grade"), pay increases mirror that of the unionized workforce to ensure that they, too, obtain a pay raise. There is no other parallel process that would ensure that they get increases. There is, however, some internal dissatisfaction about pegging increases in the compensation of non-union management employees to those compensation increases negotiated with the unions. In addition, job descriptions for non-union executive positions (approximately 92 out of nearly 4,000 employees) have not been updated since 1987. This may reflect a fear that doing so would inevitably create calls for management compensation to be increased. The lack of action on job descriptions may also be contributing to the current lack of clarity and focus on goals and priorities.

### *School Perspective*

As on the municipal side of the house, all compensation adjustments for school personnel other than principals and senior administrative officers are subject to collective bargaining with the approximately ten unions involved. There are many important questions of compensation philosophy that can influence the course of these negotiations. For example, should Newton pay teachers a premium over the average market price in comparable communities in order to attract and retain top performers? Do we need to do so? Or can we count on other motivators for a committed teacher population beyond the size of the paycheck and benefits? Finally, is there another, more precise compensation logic or principle that could help define the City's long-term compensation strategy and guide the City in its triennial bargaining with the unions and on-going conversations about pay with management level employees?

Such a principle might take the form of pegging employee compensation (wages and benefit) to the composition, level, and functional form of employee compensation negotiated in comparable communities. Alternatively, such a principle may be to offer a package of wages and benefits that puts Newton employees in a top percentile of all communities within the State. Finally, Newton might consider a compensation principle (for municipal employees as well as teachers) that pegs the rate of increase in total employee costs to the long-run rate of growth in City revenues. In recent years, the rate of growth in employee compensation is exceeding the revenue growth rate. If employee costs continue to increase a rate that substantially exceeds the current and predicted growth in City revenues—80% of which come from capped property taxes—then the City's economic model will no longer be sustainable.

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In light of the current economic environment and enormous financial demands being put on the Operating Budget—stemming from the backlog of long-deferred capital investments and the size of Newton's underfunded post-retirement health and pension benefits—the Committee believes that the second and third principles merit collective study and vetting by school and municipal employees, their union representatives, and the executive and legislative branches of City government. Indeed, a key element of our recommendations with respect to employee compensation is that the average, long-run rate of salary and benefit increases be limited to the average, long-run growth rate of City revenues, while at the same time ensuring that the level of pay is sufficient to continue recruiting and retaining excellent personnel.

With respect to the level of total compensation, this Committee recommends that elected officials set an explicit goal expressed in terms of paying City and School employees so that they fall, for example, into the top quartile or top third of total compensation paid to employees in cities of comparable size, in the case of the municipal employees, and cities with a similar commitment to education, in the case of school employees.

With respect to the average, long-run growth rate of total compensation for City employees, we recommend that this rate should be limited to the historic long-run growth rate of City revenues. There are many details involved in calculating the average growth rates (such as base years in the time series data, end years, nominal versus real dollar increases, and the role, if any, of revenue and inflation forecasts in computing average, long-run growth rates when union contracts come up for renegotiation). These critical details need to be worked out in consultation with unions



representing Newton's employees. But the principle of relating the rate of growth in total compensation to the rate of growth in City revenues is an essential one.

Focusing compensation policy on the growth rate of total employee costs for the City is critical because a failure to match this growth rate with that of overall City revenues means that, to balance the Operating Budget, Newton will either have to pursue successive property tax overrides, reduce the absolute level of individual employee pay, decrease the scope or quality of service levels to reduce manpower requirements, achieve consistent productivity increases through new ways of organizing work and delivering services, or some combination of the above.

## 4.8 CITIZEN PARTICIPATION IN PERFORMANCE MANAGEMENT

Many reformers of all political stripes have argued that the key to sustaining American democracy is to give citizens meaningful control over decisions that affect their lives.<sup>23</sup> This argument has recently been supported by no less a main stream municipal organization than the Government Finance Officers Association (GFOA) in their recent statement on the matter of citizen participation: “Good public participation practices can help governments be more accountable and responsive, and can also improve the public’s perception of government performance and the value the public receives from local government.”<sup>24</sup>

Citizen participation requires that political officials not only open up meaningful channels of participation, but also practice a high level of transparency in executive and political decision-making so that citizens remain aware of the priorities and decision criteria that are being used in both raising and spending financial resources.

Newton’s three most important governance structures—the Mayor’s Office, the Board of Aldermen, and the School Committee—use a variety of forums to gather feedback on proposals or budgets and to inform the public on municipal and school affairs. It is the view of this Committee that such forums need to be continually supported and enriched, and that their reach needs to be widened to capture greater level of citizen participation than our experience has been to date. The GFAO suggests a variety of ways of doing this, which have been incorporated into our summary recommendations. But the major point to made in this more general discussion is that we strongly believe that whatever tools are used to increase citizen participation, the critical precondition for robust citizen participation is “substance”—that is, only well-researched and artfully presented substantive presentations will consistently bring citizens out of their homes and into hearings and committee meetings to discuss community choices, priorities, and performance. In the absence of such artful and accessible substance, citizen participation will inevitably fade away.

Under the best of conditions, face-to-face democracy and community participation in performance management activities can be intimidating for both municipal officials and citizens. Important ideas are usually difficult to elaborate with precision; complex data are difficult to present with clarity; different parties in a room inevitably have different levels of understanding of, and experience with, the topics under discussion; and socioeconomic, residential, and other differences (and biases) always complicate and intensify citizen participation and conflict. Even where participants may know each other, the give-and-take of small group politics can be a stressful way for neighbors to spend an evening. Still, the goal of citizen participation in transparent discussions pertaining to community choices and performance strikes us as a *sine qua non* of sustained excellence in city government—especially where governance processes can bring politically energetic and informed citizens together in communal and cooperative activities (rather than in isolating activities).

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<sup>23</sup> Berry, Portney, and Thompson, p. 97.

<sup>24</sup> Government Finance Officers Association, “Recommended Practice: Public Participation in Planning, Budgeting, and Performance Management,” 2009.

## 5. ORGANIZATIONAL ISSUES

In addition to our observations on management process and systems, the Performance Management Committee has also developed some views about the decision-making structure of City government and the challenges it faces.

### *Newton's Current Executive Management Structure*

As part of Newton's Charter, the City of Newton has: (1) a Collector-Treasurer who is appointed by the Mayor (and confirmed by the Board of Aldermen) and is in charge of the treasury and collections and disbursements. The Collector-Treasurer also pays salaries; (2) a Comptroller of Accounts who is responsible for the financial supervision and oversight of the City and its retirement system, including managing the accounting department and keeping a complete set of books and accounts. The Comptroller is elected by the Board of Aldermen for a term of two years. In addition, the Mayor (not as part of Newton's charter but rather as a management prerogative) has as part of his staff (3) a Chief Administrative Officer (CAO) who directly supervises Department Heads and works with the Board of Aldermen, the School Committee and School Department, and Committees, Commissions and Boards. In addition, the Chief Administrative Officer helps with recruiting and professional development and takes a lead role in collective bargaining. The CAO is also deeply involved in the budget decisions and budget policy; and (4) a Chief Budget Officer who develops the long range municipal fiscal policy which involves forecasting, operations budgeting, capital budgeting, free cash management and debt management. The Chief Budget Officer interacts regularly with the Assessor, the Comptroller, the Treasurer, other department heads, and such entities as the MWRA and the MBTA. The Chief Budget Officer is responsible for developing the Five Year Forecast, the Annual Operating Budget, the Supplemental Capital Budget, the Capital Improvement Program, and the Annual Legislative Package.

### *Recommendations from Previously Issued Citizen Advisory Group Reports*

Three Citizen Advisory Group committee reports point to significant shortcomings in Newton's financial analysis and planning capabilities and make recommendations for additional personnel.

In the *Municipal Cost Structure Report*, we remarked on an administrative staff that is significantly burdened with handling the day-to-day tasks and little remaining time to devote to innovative, forward planning and financial analysis. Newton's staff does not, for example, regularly analyze capital investments on a life-cycle cost basis (although there are some recent good examples of life-cycle costing on the Newton North High School project) or aggressively pursue outsourcing opportunities. We recommended hiring a budget analyst in the Mayor's Office to facilitate continuous search for operational efficiencies and efficiency planning, to conduct full-cost and life-cycle cost analyses of proposed capital investments, to vet outsourcing opportunities, to provide oversight of budget appropriations, and to engage in long-term budget planning. The Budget Analyst would also assist the Chief Financial Officer in the creation of the regularly recurring reports (e.g., the Five Year Forecast, the Annual Operating Budget, the Supplemental Capital Budget, the Capital Improvement Program, and the Annual Legislative Package), and regular performance monitoring activities. Finally, the Budget Analysts would

also assist the PerformanceStat Officer in the preparation of timely (bi-weekly) budget performance reports.

Currently, attention can only be given to a handful of the most promising ideas for operational improvements, but the process of digging deeper into city operations and finding improvement opportunities must be a continuous one that requires the attention of full-time professional staff. Our anecdotal information about communities that have added a Budget Analyst position suggests it will more than pay for itself in relentlessly identifying and acting upon cost-saving opportunities from a data-based foundation.

In the *Capital Infrastructure Report*, we noted a series of problems in the capital planning and budgeting process that detract substantially from its effectiveness as a resource allocation tool. To address some of these issues, we recommended creating and fully supporting a new Capital Asset Analyst position in the Mayor's office, reporting to the Chief Administrative Officer or, possibly, a new Chief Financial Officer. This person would:

- (1) Inventory and evaluate the condition of the City's existing capital infrastructure,
- (2) Confirm this Committee's assessment of the current maintenance backlog for municipal buildings and infrastructure and putting the maintenance and replacement of municipal facilities back on an economic basis,
- (3) Develop a system to quantify the cost of delaying maintenance,
- (4) Monitor the progress and costs of systematic capital asset renewal,
- (5) Validate or reject the accuracy of the data submitted by department heads and citizens groups in support of new or contested capital projects,
- (6) Conduct cost-benefit analyses of alternative or competing capital investment projects,
- (7) Assist the chief budgeting officer in regularly comparing the fully loaded costs (including overhead, worker's compensation, pension, benefits, etc.) of internally provided services with the costs of outsourcing these same services to external suppliers, and
- (8) Assist the Mayor in capital investment planning.

In the *School Cost Structure Report*, we recommended creating a Chief Financial Officer (CFO) position within the School Department and implementing a long-term scenario planning and budgeting process. While the school administration does an excellent job of accounting, control, and forecasting, the Citizen Advisory Group believes that creating an *additional*, departmental Chief Financial Officer position would enable the school system to focus more attention on analysis and in developing and implementing a long-term financial strategy. As the ninth largest school system in Massachusetts and with responsibility for managing a \$160 million enterprise, comprising 56% of Newton's total expenditures, this looks like a very good investment. The School Department (like most city departments) appears locked into a short-term budgeting process that inhibits its ability to make long-term decisions on funding critical priorities. The current strategic planning process is essential to creating a long-term vision for the school

system, but without integrating this plan into a long-term financial framework, the Newton Public Schools will remain mired in short-term priorities.

In this report, we also recommend hiring an experienced PerformanceStat executive—or its equivalent—to lead Newton in the initial developmental phase and the subsequent implementation and management phases of a disciplined monitoring and control function. We recommend that this executive should have direct, daily access to the Mayor.

### *Synthesis of Recommendations*

If the incoming Mayor decides to augment the City's current financial capabilities and management processes, as we have recommended, then we suggest adding manpower to further develop the City's financial strategy and take the monitoring and reporting of Newton's municipal operations to the next level of proficiency. Specifically, we suggest that the current Chief Budget Officer position be redefined as a Chief Financial Officer with two new positions reporting to this person: a Budget Analyst (described above) and a Capital Asset Analyst (also described above).<sup>25</sup> The Chief Financial Officer would:

- Oversee the City's financial management and reporting
- Lead integrated strategic and financial planning
- Frame, cost, and analyze resource allocation decisions,
- Supervise the work of the proposed Budget Analyst and Capital Asset Analyst,
- Integrate Newton's Operating and Capital Budgets,
- Establish standards and metrics for performance management purposes,
- Improve the nature and quality of information flowing among City managers so that those with management responsibilities can be more effectively held accountable for the stewardship, monitoring, and control of City resources, and
- Prepare annual reports to residents on the financial condition of the City.

The new Chief Financial Officer would serve side-by-side with the existing Chief Administrative Officer and a new PerformanceStat Officer, as recommended above. In this structure, the new Chief Financial Officer and PerformanceStat Officer would initially share the new Budget Analyst. This new structure would involve a net increase of two senior executives and one more junior employee.

To clarify the respective roles of the Chief Administrative Officer and the new PerformanceStat Officer, the primary responsibility of the former would be overseeing and supporting departmental operations on a day-to-day basis. The focus of the latter would be the active analysis of department operations and monitoring of commitments made and plans vetted through the PerformanceStat process. In short, the role of the former would be executive management; the role of the latter would be intensively analytical.

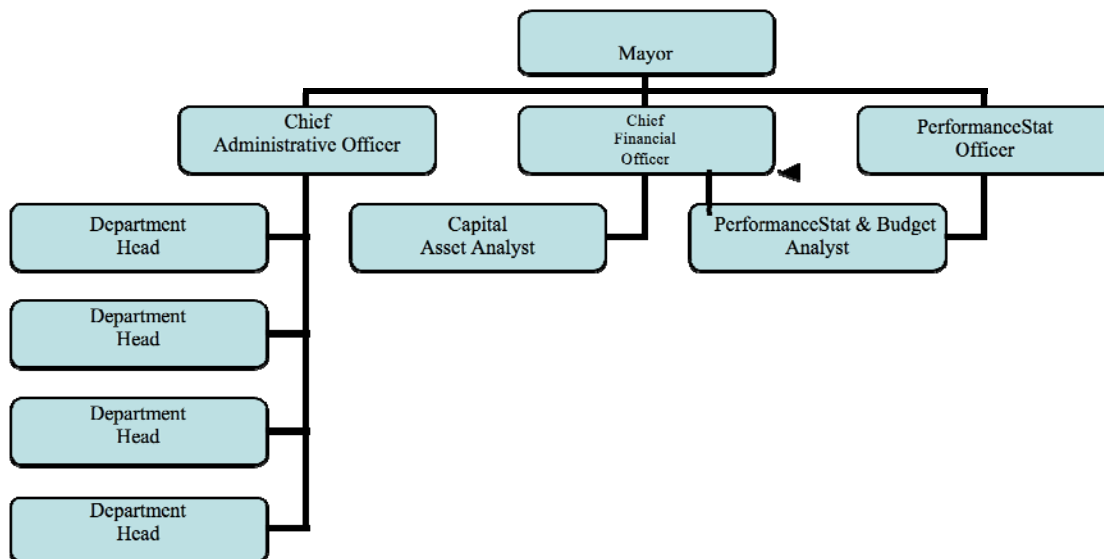
A revised top management structure might look like that depicted in Figure 4 below.

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<sup>25</sup> Note: There is no mention of a Chief Financial Officer in the current charter.

**Figure 4**

**Initial Sketch of New Top Management Structure**



*Conclusion*

Our overall assessment of Newton’s current top management structure and systems is that the Mayor lacks necessary support in directing and overseeing City affairs in an increasingly demanding economic and operating environment. This “management gap” prevents strategic goals being rigorously developed and then effectively employed to inform the budgeting process and support operational planning and performance management. This shortcoming results in a “short-termism” that hides major problems in capital funding and resource prioritization. In addition, without meaningful strategic goals being set and performance measured against these goals, there is no effective basis for holding managers accountable for their work.

Given this situation, we believe that the installation of a new performance management process and an expanded constellation of top management talent is required to begin addressing Newton’s current management gap. We therefore place the highest priority on the implementation of these two fundamental recommendations.

## 6. APPENDIX A: LIST OF INTERVIEWEES

1. Susan Burstein, Chief Budget Officer
2. Tom Daley, Commissioner of Public Works
3. Dan Funk, City Solicitor
4. Sandy Guryan, Director of Finance for the School Department
5. Dolores Hamilton, Director of Human resources
6. Mike Kruse, Director of Planning and Development
7. Sandy Pooler, Chief Administrative Officer
8. Paul Stein, Assistant Superintendent of Schools for Human Resources
9. Jeff Young, Superintendent of Schools
10. Other municipal and school employees interviewed in the course of preparing predecessor reports

## 7. APPENDIX B: THE PERCEIVED QUALITY OF PUBLIC SERVICES IN NEWTON

It is very difficult to draw definite conclusions from available data about the perceived quality of Newton's public services. Still, one of the recurring themes the Citizen Advisory Group has heard is the idea that Newton is experiencing real declines in the quality of services. Some attribute this to deterioration in the city's operating budget. Others ask whether the City's management system may also be a cause.

Whatever the mix of causes, the concern is that Newton residents have experienced and perhaps will continue to experience incremental reductions in services. We have also heard another side – the view that there have been little or no major reductions in services, and there is plenty of revenue to fund all of the services Newton residents expect and desire. For many, the problem is more one of a loss of confidence in the city's leadership than actual reductions in services.

The City conducts an annual survey, sent to all households, asking residents to assess the quality of municipal services.<sup>26</sup> The CAG has analyzed the resulting information and started to build a picture of these public assessments. What is not debatable is that public perceptions of city services have declined almost across the board over the last five years. Those who express deep concern with the quality of the services provided by the City have good reason to be concerned. The 5 year trend paints a picture where:

- Residents' evaluations show a decline in the perceived quality of many city services, including education and the schools. Other notable declines have occurred in evaluations of public grounds maintenance, sidewalk maintenance, public facilities maintenance, energy conservation, pedestrian facilities, neighborhood improvement programs, public parking facilities, street sweeping, street maintenance, and many other areas.
- Evaluations show improvements in very few services, and in those service areas where improvements are discernable, the trend is not consistently upward. Building code enforcement and zoning showed slight improvements, as did snow and ice removal.
- Assessments of most services have remained about the same, including many services whose evaluations are consistently very high, such as law enforcement, ambulance services, and library facilities, as well as some services whose evaluations are consistently quite low, such as bicycling facilities, and pedestrian facilities.
- Comparisons with other cities, including Needham, Lincoln, Somerville, and Lowell suggest that other cities have not experienced similar declines. Assessments in Lincoln and Somerville have improved, and in Needham and Lowell have remained fairly constant.

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<sup>26</sup> The City has used the same service assessment questionnaire for many years, even though it is sometimes difficult to interpret exactly what specific municipal service residents are being asked to evaluate. The CAG did not conduct these surveys, and did not decide which questions would be asked or how these questions would be worded. No municipal office has conducted analysis of how the resulting assessments have changed over time.

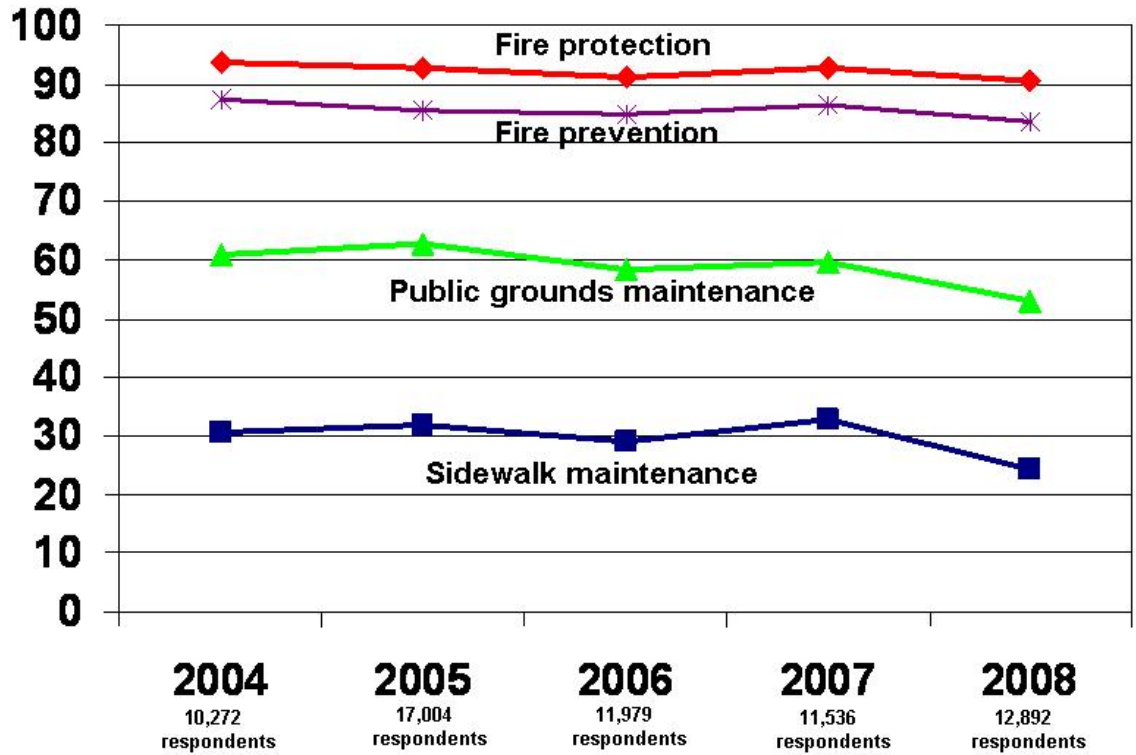


A brief overview of the trends demonstrates the magnitude of the problem. Below we present graphs showing five-year trends of groupings of services.

- The first graph shows that the public thinks the quality of fire prevention and fire protection services has declined slightly. It also shows that the public thinks that public grounds and sidewalk maintenance have declined significantly.
- The second graph shows that public perceptions of street sweeping, neighborhood improvement programs, and housing rehabilitation programs are steep declines, and perceptions of public parking facilities have also declined
- Graph 3 shows that the public thinks the quality of recycling, health code enforcement, public facilities maintenance, and energy conservation have all declined significantly.
- The fourth graph shows that public perceptions of public transit, pedestrian facilities, and street maintenance have declined markedly. Perceptions of bicycling facilities have declined less steeply because they started out at such a low level to begin with.
- Perhaps most concerning for a city that prides itself on the quality of the schools, the trends show that the public sees substantial declines in the schools at all levels.
- Finally, the graphs show that some services—sidewalk maintenance, bicycling facilities, and public parking facilities—are ranked as quite poor.

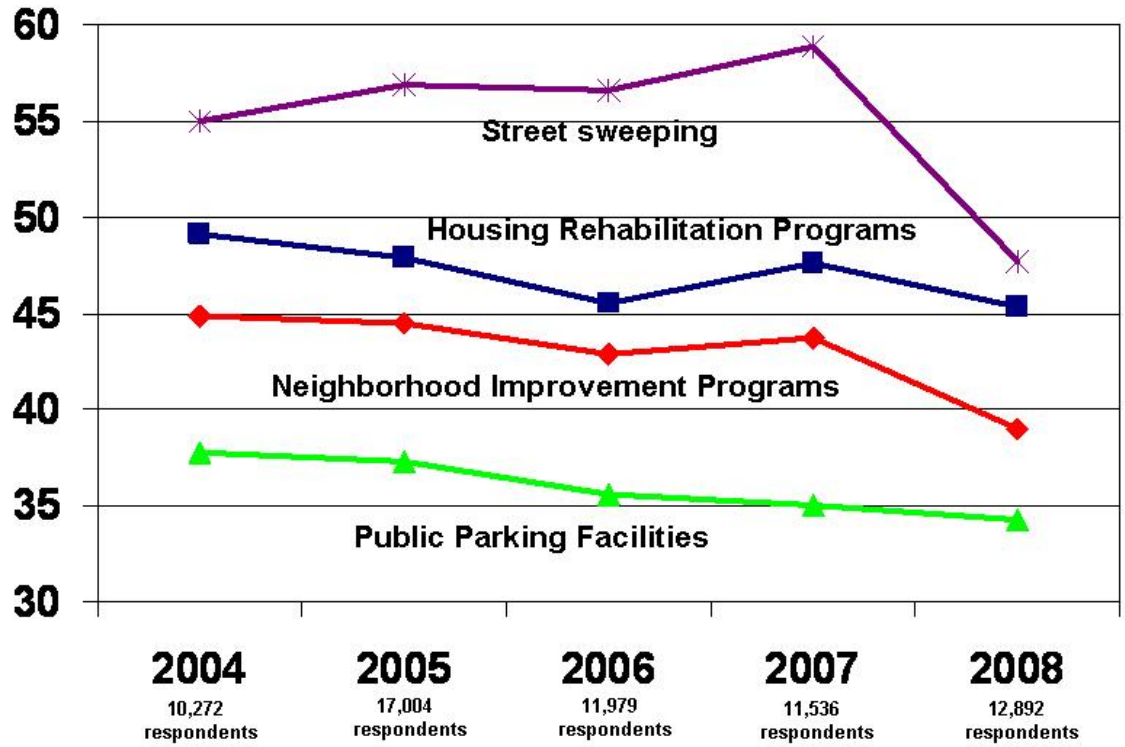
**Graph 1:**

**Newton Resident Evaluations of Services, 2004-2008  
(Percent saying service is "Good")**



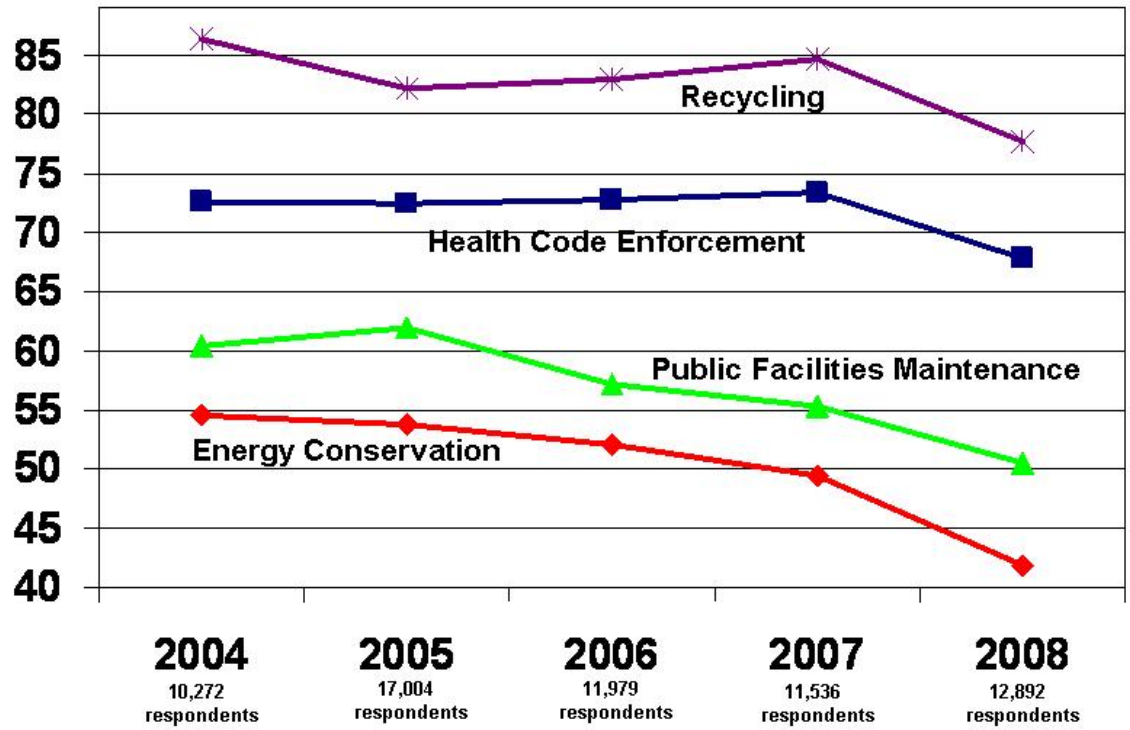
**Graph 2:**

**Newton Resident Evaluations of Services, 2004-2008  
(Percent saying service is "Good")**



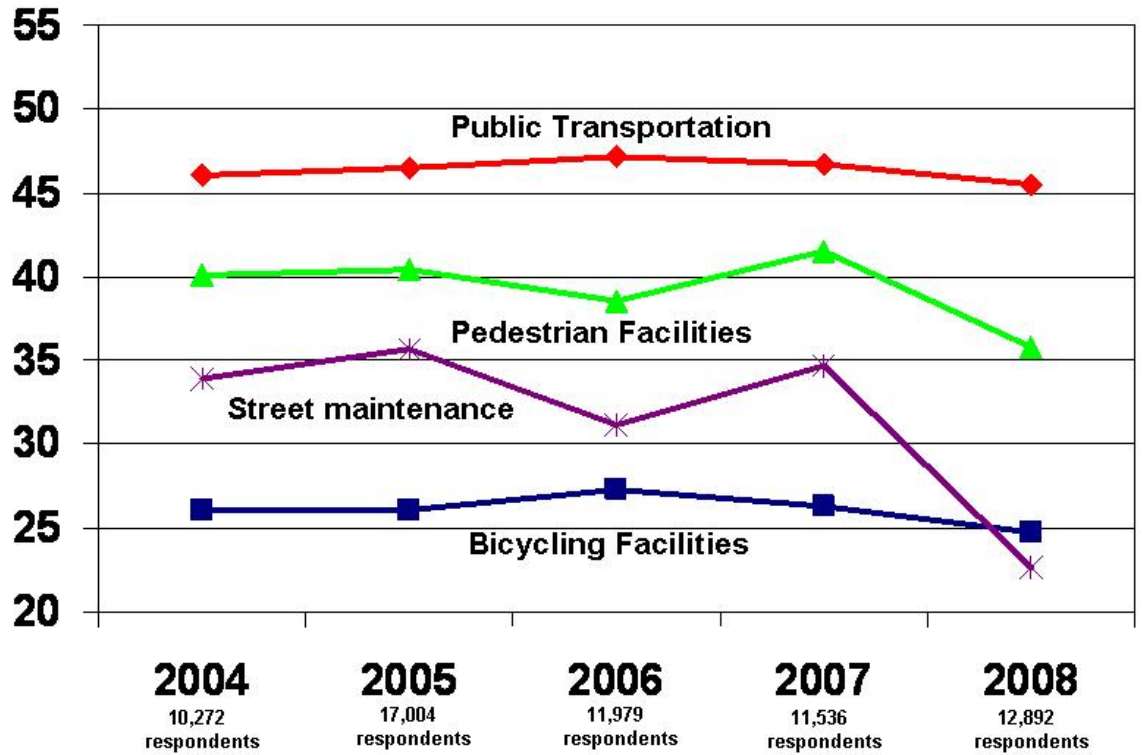
**Graph 3:**

**Newton Resident Evaluations of Services, 2004-2008  
(Percent saying service is "Good")**



**Graph 4:**

**Newton Resident Evaluations of Services, 2004-2008  
(Percent saying service is "Good")**



## Graph 5:

**Newton Resident Evaluations of Services, 2004-2008**  
(Percent saying service is "Good")

