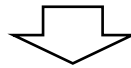


Report on Capital Infrastructure and Planning

**Citizen Advisory Group
City of Newton**

January 29, 2009

- We sought to evaluate
 - Condition of Newton's capital stock
 - Process by which these capital assets are renewed, maintained and replaced



We found serious causes for concern on both dimensions

- Summary
- Status of Capital Infrastructure & Level of Required Funding
- Capital Investment Budgeting Process
- Conclusion

- **Evaluated condition and capital needs of Newton's infrastructure**

- Interviewed key municipal and school executives
- Reviewed various capital budgets
- Analyzed historical capital spending levels
- Estimated replacement cost of City's infrastructure & required capital spending levels

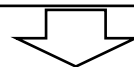
- **Evaluated capital planning and budgeting process in Newton**

- Interviewed key personnel
- Reviewed capital planning and budgeting documents
- Analyzed “case studies” of capital investment decisions
- Studied best practices of other cities in prioritizing and rationing capital investment

Report on Capital Infrastructure and Planning

Summary of Newton's Capital Stock

Infrastructure	Description	Replacement Cost
Public Buildings	<ul style="list-style-type: none">• 2.6 million square feet!<ul style="list-style-type: none">– 22 educational buildings– 6 fire stations– Police HQ & garage– Main & branch libraries	<ul style="list-style-type: none">• \$950 million ^(a)
Vehicles & equipment	<ul style="list-style-type: none">• Fire trucks• Ice & snow removal• Automobiles• IT infrastructure	<ul style="list-style-type: none">• Up to \$45 million
Roads & Traffic Signals	<ul style="list-style-type: none">• 310 miles of streets• Concrete sidewalks	<ul style="list-style-type: none">• Approximately \$50 million ^(b)
Parks & Playgrounds	<ul style="list-style-type: none">• Over 70 parks & play-grounds on over 1,100 acres• Basketball & tennis courts, swimming facilities	<ul style="list-style-type: none">• \$20 million ^(c)
Water & Sewer	<ul style="list-style-type: none">• Sizable investment but generally not funded by tax revenues	<ul style="list-style-type: none">• N/A
Total		<ul style="list-style-type: none">• Approximately \$1.1 billion



Newton has a large capital stock

- (a) At new construction costs of \$375 / sf or the present value of \$35 / sf of rental rates.
(b) Estimates of resurfacing & reconstruction costs are approximately \$150,000 / mile.
(c) The land itself is not depreciable / is assumed to have an infinite life. Represents the infrastructure & depreciable assets on the land only.

Findings

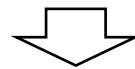
- ***City's infrastructure in need of significant investment with a large "required" maintenance & replacement backlog***
- ***Arcane and (sometimes) ineffective capital budgeting process***

Why?

- Significant historical under-funding
- Convoluted budgeting process
- Not guided by long-term vision for City
- No established prioritization criteria
- Insulated from general public
- "Rolling" budget process

Root Causes

- **Limited funds**
- **Short-term bias**
 - Preference for program over maintenance
 - Short timeframe of elected officials
 - "Silent" nature of depreciation costs
- **Lack of clear fact base**
 - Size & replacement needs of capital stock
- **Self-imposed limitations**
 - e.g. "3% rule"



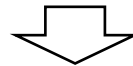
Root causes need to be addressed to "fix" capital backlog & budgeting process

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Report on Capital Infrastructure and Planning

Current Annual Funding “Gap”

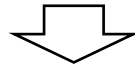
<u>Current Spending (FY 2008)</u>		<u>Appropriate Spending</u>	
		Replacement Cost of Infrastructure	\$1,100,000,000
		<u>÷ Useful Life</u>	<u>40 years</u>
Capital Investment ^(a)	\$13 M	Avg. Capital Investment	\$27-28 M
<u>Maintenance</u>	<u>\$15 M</u>	<u>Appropriate Maintenance</u>	<u>±\$20 M</u>
Total Capital & Maintenance	±\$28 M	Total Capital & Maintenance (keep up with current needs)	±\$48 M



Newton has under-funded its capital investment by an estimated \$20 million per year

(a) Excludes 2008 investment in Newton North High School as not representative of “typical capital spending level of the City.

- Sustained under-funding of repair & maintenance has led to a sizable backlog of desired capital spending
 - \$220 million for schools
 - \$76 million for municipal sector
 - up to \$300 million total

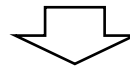


If accurate, this backlog represents approximately 30% of the \$1.1 billion replacement cost of all of Newton's capital infrastructure!

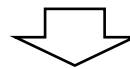
Report on Capital Infrastructure and Planning

What This Backlog Means for You

Newton Capital Investment Backlog	Up to \$300,000,000
Residential Property Tax as % of Revenue	72.4%
Newton Residents' Share of Backlog	Up to \$217,200,000
Assessed Value of Newton Residents' Property	\$19.4 billion
Liability per \$100,000 of Assessed Value	Up to \$1,121



Single Family Home Assessed Value	Household Share of Liability
\$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



Equivalent to a one-time ~\$8,000 liability for the median single family household in Newton!

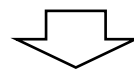
• Recommendation #1: Increase Annual Spending on Capital Maintenance and Renewal Substantially

Current Spending (FY 2008)

Capital Investment ^(a)	\$13 M
<u>Maintenance</u>	<u>\$15 M</u>
Total Capital & Maintenance	±\$28 M

Appropriate Spending

Replacement Cost of Infrastructure	\$1,100,000,000
<u>÷ Useful Life</u>	<u>40 years</u>
Avg. Capital Investment	\$27-28 M
<u>Appropriate Maintenance</u>	<u>±\$20 M</u>
Total Capital & Maintenance (keep up with current needs)	±\$48 M
<u>Additional annual spending to work off existing backlog</u>	<u>±\$14 M</u>
Total Recommended Capital & Maintenance	±\$60 M



A ~doubling of capital & maintenance spending is necessary to work off the backlog

(a) Excludes 2008 investment in Newton North High School as not representative of "typical capital spending level of the City.

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- **Three investment guidelines established after passage of Proposition 2½ in 1981**
 - Free Cash (end of year budget surplus) would only be used for capital projects
 - Capital projects > \$500,000 financed by debt; < \$500,000 out of operating budget
 - Debt service (interest + principal) = 3% of Operating Budget
- **Good intentions, but some unintended consequences**
 - Incentive to overestimate expenses and underestimate revenues to create “Free Cash”
 - Artificial “3% rule” constrained replacement of infrastructure
 - Limited budgeting of “small” (<\$500,000) capital projects
 - “Pay as you go” method inhibits systematic budget analysis

- **Budgeting process has several procedural complications**

- Only the Mayor can propose a Capital Budget
- Rolling 9 month process
- Four different capital planning processes (CIP, Supplemental Capital Budget, Mayor's submissions, Capital Stabilization Fund)

- **There are several barriers to simplifying and improving this process**

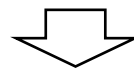
- Plan is not grounded in long-term vision for City
- No up-to-date inventory of City's infrastructure (replacement cost & useful life)
- No asset management plan or single "manager"
- Capital budgeting process is insulated from the general public
- Poor linkage with the operating plan



Capital budgeting process needs re-engineering

- **Recommendation #2: Institute a New “Capital Investment Rule”**

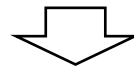
- Determine annually the replacement cost and useful life of Newton’s infrastructure
- Each year, set aside in the budget an amount equal to the replacement cost of Newton’s infrastructure \div its useful life in the “Capital Investment Reserve” account
- Draw annual capital investments from this Capital Investment Reserve
- The Capital Investment Reserve cannot be used for anything other than capital investment in existing infrastructure
- Any repayments or amortization of principal of the City’s debt are to be “counted” as if invested in the Capital Investment Reserve



Capital Investment Rule will be a forcing mechanism for the City to “save” adequately for future capital repair, replacement & maintenance

- **Recommendation #3: Introduce New Processes for Prioritizing Capital Investments**

- Consider adoption of Integrated Operating and Capital Budget
- Elevate importance of a formal Capital Improvement Plan process
- Establish a consistent and measurable set of criteria for prioritizing specific projects
- Budget for both planned and an average level of “unanticipated” capital maintenance
- Consider more decentralized process for developing and vetting annual investment priorities



Several additional changes are necessary to improve the capital budgeting process

- **Complete Detailed Inventory of the City's Stock of Capital Assets**
- **Create and Fully Support a New "Capital Asset Manager" Position**
- **Adopt Life Cycle Costing for All Significant Capital Projects**
- **Harvest Short-Term Savings**
- **Consolidate Municipal & School Maintenance in the Public Buildings Department**

- Summary
- Status of Capital Infrastructure & Level of Required Funding
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- **Limited funds, a short-term bias, lack of a clear fact base and some self-imposed limitations have led to:**
 - Under-funded capital investment and maintenance by up to \$20 million per year
 - Deterioration of infrastructure and a sizeable backlog of required investment
 - Arcane and complex decision-making process
- **But, this problem is fixable if we face the music**
 - Increase capital spending to maintain current capital stock and “catch up” on backlog
 - Establish Capital Investment Rule to make sure we “keep up” in the future
 - Simplify and amend decision-making process
- **Thank you to all who helped us complete this analysis & supported our efforts!**