

# FY2016 –FY2020 Five-Year Capital Improvement Plan And Long Range Projection



City of Newton, Massachusetts  
Setti D. Warren, Mayor  
October 2014







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MAYOR

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October 20, 2014

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Honorable Board of Aldermen  
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Ladies and Gentlemen:

I am pleased to submit for your review the FY16-FY20 Capital Improvement Plan (CIP) for the City of Newton. This plan highlights how far we have come since January 1, 2010 and expands on the success of the risk-based model of the previous 5-year plans. Included this year is a further outlook for our long range plan for specific assets such as technology, tennis and basketball courts, park reclamations, tree planting, vehicle replacements, traffic signal upgrades, complete streets, and so much more.

We have worked diligently toward our goal of creating a blueprint for a livable, sustainable City and our capital investment plan reflects that intention. We have focused on our buildings, streets, and underground infrastructure during the past 5 years, and are now turning our attention toward other infrastructure improvements such as complete streets, traffic flow, play structures, hardscapes, and parking meters.

We have listened to the people of this City and have worked hard to develop a plan that provides the resources to implement the priorities of our residents. We will continue to analyze the metrics in order to assure our taxpayers that we are on track and that we are making our tax dollars go further.

I look forward to engaging in a thoughtful discussion of this plan. Thank you for your consideration of this matter.

Very truly yours,

Setti D. Warren  
Mayor





# **EXECUTIVE SUMMARY**

The FY16-FY20 Capital Improvement Plan (CIP) is a risk-based prioritized assessment of the capital needs of the City of Newton. Once again, the long term projection was developed through a holistic evaluation of all assets, to include the replacement of their respective major components, in concert with each department's vision for how it will be providing services in the next decade. All capital costs were determined in FY2015 dollars; an escalation factor of 3.5% per year is added in subsequent years to conservatively account for inflation impacting the future cost of construction goods and services. This results in a plan put into a financial context by which to evaluate investments over the next five years.

## **Capital Improvement Plan**

The goal of the Capital Improvement Plan is to create a logical, data-driven, comprehensive, integrated, and transparent strategic capital investment strategy that addresses infrastructure needs, reflects community values, supports City operations, programs and services, and exemplifies financial and environmental best practices. The City's capital assets are comprised of an extensive inventory valued at over one billion dollars, categorized as follows:

- (1) **Buildings**- 77 Total – 23 School buildings, 10 Public Safety, 9 Public Works, 20 Parks and Recreation, 15 Municipal;
- (2) **Roads**- 310 miles of public ways consisting of: 1,126 public streets; 226 private ways; and 105 streets that are part public/private;
- (3) **Water, Sewer, and Storm Water Infrastructure**- more than 300 miles, each;
- (4) **Parks**- 51, **Sports Fields**- 19, **Playgrounds**- 45, and **Tennis Courts**- 69;
- (5) **Motorized Vehicles & Equipment**- 334 pieces;
- (6) **Information Technology**- wired/wireless communications hardware/software, sound & projection systems, and fiber optic cable to support 3,500 employees in 62 buildings.

## **CAPITAL IMPROVEMENTS – LINKED TO THE VISION**

Funding of CIP projects is directly linked to City priorities described in the annual budget under the eight overarching desired outcomes. These same outcomes drive the City's performance management program and are the basis for all funding decisions.

1. Excellence in Education
2. Unparalleled Public Safety
3. Vibrant and Diverse Community Life
4. Improved Capital Infrastructure
5. Robust Economic Development
6. Environmental Sustainability
7. Long-Term Financial Stability
8. Community Engagement

These factors are key to the prioritization of capital projects, as all investments, whether capital or operational, are tied to these outcomes. Descriptions of these factors as well as their link to this year's CIP are listed below.

**1. Excellence in Education**

"Excellence in Education" is perhaps the single most compelling reason that people move to and remain in the City of Newton. Educational excellence requires operational, financial and capital resources to enable the Newton Public Schools to accomplish its goal of preparing and inspiring all students to achieve their full potential as lifelong learners, thinkers, and productive contributors of our global society. Characterized by residents as one of the first and foremost foundations of their city, capital projects tied with this outcome include major construction projects, such as the Angier, Zervas, and Cabot expansion projects, continued planning for condition and capacity needs throughout the district, Pre-K space needs and annual maintenance to school buildings.

**2. Unparalleled Public Safety**

"Unparalleled Public Safety" is characterized by the delivery of the highest level of police, fire, building inspections, public health and emergency medical services to the community, ensuring the public's safety and security throughout any emergencies or disasters, including incidents involving hazardous materials, water rescue, hurricanes, snow removal, and all emergencies requiring trained rescue personnel and equipment. Capital investment in public safety is of the highest priority.

The City of Newton is currently in the process of rebuilding Fire Station #10 and the Fire Department's Wires Division. Plans for the new Fire station #3 and Headquarters Building are currently going through the design phase. Additionally, appropriations for Fire Apparatus, Construction Vehicles, Emergency Communications Equipment, and Self-Contained Breathing Apparatus (SCBA), are some of the items contained in this plan.

**3. Vibrant, Diverse Community Life**

A vibrant, diverse community is defined by traditional as well as innovative recreational, leisure, social, educational and cultural programs, activities, and resources in a quality environment for residents. This core value includes programs and services provided by the Library, Senior Services, Parks & Recreation Department and Historic Newton.

This year the CIP includes improvement plans for play structures, tennis and basketball courts, ball fields, tree plantings, and further expansion of the bicycle network, all designed to maintain a vibrant, diverse community life across the City.

#### 4. **Improved Capital Infrastructure**

Improved capital infrastructure aims to have a positive impact on public safety, economic development, financial stability, and environmental sustainability. The residents of the City of Newton expect and deserve well-maintained facilities including buildings, roadways, parks, recreational spaces, and water, sewer, and storm water assets. Improved Capital Infrastructure epitomizes the purpose of the 5-year Capital Improvement Plan and supports the longer term vision, thus influencing the shorter term investments. Proper maintenance and investment in these capital assets extends their life and supports city services.

Examples of infrastructure improvements in this year's CIP include the continuation of the Angier, Zervas, and Cabot Elementary School Projects, Station #10, Wires Division, Station #3 and Fire Headquarters, and Street Paving, Sidewalk, Water, Sewer, Storm Water Projects, etc.

#### 5. **Robust Economic Development**

Robust economic development requires collaborative efforts with commercial property owners, business owners and developers so that all commercial districts are functioning at their highest and best use, contributing to the City's tax base and helping to achieve the City's vision and goals. Key components of the success of this outcome is the establishment of a good parking plan, infrastructure maintenance such as sidewalks and roadways, a tree canopy in key areas, and traffic signals that manage traffic in a smooth, safe manner allowing people to get to work or conduct business in the villages.

This year's CIP has been expanded to include a Traffic Signalization Plan. The City has completed a traffic signal evaluation to identify inefficient and unsafe intersections and has developed a plan to maximize 'green' time, passage time, vehicle and pedestrian clearance time, cycle length, etc, in areas such as West Newton Square, Auburndale Square, Nahanton Street, Watertown Street, and Washington Street.

6.

### Environmental Sustainability

Environmental Sustainability through the utilization of the City's designation as a "Green Community", implementation of energy initiatives, promotion of energy conservation efforts, and reduction of energy consumption throughout the City by 20% by the year 2020.

This year's CIP continues Phase 1 of a multiple phase building efficiency program. Phase I includes \$2.6 million of improvements to fourteen city buildings which will reduce municipal energy use by 5% and save the city approximately \$300,000 per year. The City is in the process of selecting the projects that will be included in Phase II which will be a continuation of the City's commitment to energy reduction. Additionally, this plan includes more fuel efficient replacement vehicles wherever possible.

7.

### Long-Term Financial Stability

Long term financial stability is characterized through maintenance of the City of Newton's Aaa bond rating, improved financial reserves, annual unqualified audit opinions, conservative financial forecasting, implementation of comprehensive financial policies, elimination of the "structural deficit", reduction of non-recurring funding sources to balance the annual budget, and appropriate investment in capital infrastructure.

Similar to the outcome related to improved capital infrastructure, the outcome pertaining to long-term financial stability applies to all capital projects funded by the City. It is important to note that efficient planning and forward thinking can amount to substantial savings over time. Sound and strategic capital investment strategies address infrastructure needs, support city operations, programs and services, and exemplify viable financial practices.

8.

### Community Engagement

Dynamic community engagement occurs through meaningful communication and dialog between the City, its residents, homeowners, business owners, village centers, and advisory groups.

The Technology plan included in this document will play a vital role in facilitating this communication and as a robust 21<sup>st</sup> Century network is deployed, it is envisioned that the public will participate in public hearings remotely, use the City cable TV network to watch the committee proceedings, and even use applications to voice a comment at a meeting, pay a bill on-line, or submit a work order request remotely.

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## **Appendix A- CIP Methodology**



FY 2016-2020 by Priority							ESCALATED COSTS (Costs in FY2016-2020 are escalated 3.5% a year)					
							Total	Total	Total	Total	Total	Total
							\$ 24,736,000	\$ 78,077,350	\$ 63,842,940	\$ 48,984,080	\$ 42,629,759	\$ 27,033,347
Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
1	Public Buildings	City Hall - New Elevator and Accessibility Improvements	New Elevator for the War Memorial	\$ 1,140,000	66.7	Bonding	\$ 1,140,000	\$ -	\$ -	\$ -	\$ -	\$ -
2	Schools	Angier School Replacement	\$11M anticipated from MSBA. Renovate/ replace 92 yr old school due to poor condition, aging bldg systems and inadequate space per State Ed standards.	\$ 37,500,000	63.1	Bonding /MSBA	\$ 15,000,000	\$ 17,500,000	\$ -	\$ -	\$ -	\$ -
3	Schools	Zervas School - Renovation/ Replacement	Project to address space needs due to growing enrollment, bldg systems, access.	\$ 40,000,000	60.9	Bonding/ Override Stabilization Fund	\$ 3,415,000	\$ 10,000,000	\$ 26,480,475	\$ -	\$ -	\$ -
4	DPW/ Sewer	Sewer Inflow /Infiltration Project - Project Area 3&4 - Chestnut Hill Area, Newton Center	Part of 12 yr \$49.1 M program to remove excess inflow and infiltration into sewer system. Design (FY15) and construction (FY16) for Chestnut Hill area.	\$ 8,421,000	60.6	Sewer Fund	\$ 621,000	\$ 7,800,000	\$ -	\$ -	\$ -	\$ -
5	Public Buildings / Sustainability	Energy Efficiency Upgrades to City/School Buildings	The objective of this project is to reduce energy use, energy costs and the carbon footprint of existing City owned buildings and schools.	\$ 3,610,000	60.0	Bonding/Other	\$ 2,610,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -
6	Schools	Cabot School Renovation	Replace 92 yr old school due to poor condition, aging bldg systems and inadequate space per State Ed standards.	\$ 45,000,000	59.6	Bonding /MSBA	\$ 1,000,000	\$ 1,000,000	\$ 10,350,000	\$ 21,424,500	\$ 13,304,615	\$ -
7	Fire Dept	Fire Station #3 & HQs - Renovate/Replace Newton Centre Station	Station #3 needs major repairs/upgrades. Co-located w/ Fire HQs. Upgrade systems for code compliance, access & female firefighters.	\$ 18,500,000	55.1	Bonding	\$ 750,000	\$ 8,000,000	\$ 5,175,000	\$ 5,088,319	\$ -	\$ -
8	Parks/Rec	Newton North Baseball Field - New Backstop and Nets	New Backstop and Netting to reduce the number of baseballs hit into neighboring properties.	\$ 320,000	54.3	Bonding	\$ -	\$ 320,000	\$ -	\$ -	\$ -	\$ -
9	DPW	City-Wide Traffic Signalization Upgrades	Improve upon safety, improved traffic flow, reduce congestion, meet ADA Compliance	\$ 3,495,000	54.2	Bonding/Free Cash	\$ -	\$ 1,500,000	\$ 646,875	\$ 396,353	\$ 554,359	\$ 573,762
10	DPW	DPW Snow Equipment	Purchase 2 Snow Blowers (which mount to a front end loader) and 2 Bombardier Sidewalk Snow Plows	\$ 600,000	51.1	Bonding	\$ -	\$ 600,000	\$ -	\$ -	\$ -	\$ -
11	Parks/Rec	Replace Newton South High School Tennis Courts	Replace 12 existing courts at this location.	\$ 800,000	50.4	Bonding	\$ -	\$ 800,000	\$ -	\$ -	\$ -	\$ -
12	DPW/ Storm	Project Meadow Brook at Dedham Street Design and Construction	Improvements to the drainage system on Dedham Street. Improve capture of run-off and increase capacity of drainage system to reduce flooding on properties on Dedham Street, Bound Brook Road & Heatherland Road during rain events.	\$ 450,000	50.0	Stormwater Fund	\$ -	\$ 450,000	\$ -	\$ -	\$ -	\$ -
13	DPW	Waban Hill - Rehabilitation of the central core structure	Rehabilitation of pipes, valves, and all appurtenances, and roof replacement. Includes cleaning and inspection, design, construction, and services.	\$ 500,000	49.8	Water Fund	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -
14	Library	AMH: Automatic checkin sorter	Sorter checks material in upon return, places it in ready-to shelf bins by location in the library. Save an additional 730 person-hours/yr in return processing.	\$ 203,850	48.8	Bonding	\$ -	\$ 203,850	\$ -	\$ -	\$ -	\$ -
15	Public Buildings	Manet Road Communications Building	Replace Emergency Communications Building at Manet Road	\$ 600,000	48.4	Bonding	\$ -	\$ 600,000	\$ -	\$ -	\$ -	\$ -
16	Fire Dept	Replace Fire Department SCBA Gear	Replace the department Self-Contained Breathing Apparatus (SCBA), purchased in FY 2007.	\$ 500,000	48.0	Bonding	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -
17	Library	Newton Free Library - Mechanical Upgrades	Interior air handler replacement, replace chiller controls, repair/restore ice tank system.	\$ 1,000,000	47.9	Bonding	\$ -	\$ 250,000	\$ 517,500	\$ 267,806	\$ -	\$ -
18	Public Buildings	City Hall Improvements - Heat Tape	Use Heat Tape to prevent Ice Dams from forming during the winter.	\$ 150,000	47.7	Bonding	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
19	Schools	Pre-School Program / Lincoln Eliot	Purchase Aquinas/ Renovate for Pre-K and Lincoln-Eliot students	\$ 32,750,000	45.9	Bonding/MSBA	\$ -	\$ 15,750,000	\$ 1,035,000	\$ 1,071,225	\$ 8,315,384	\$ 8,606,423
20	DPW	Street Paving - Cold Plane and Pav Streets	Watertown, Walnut, Washington, Chestnut, Lincoln, Linwood, Aspen, Hawthorne, Longfellow	\$ 4,000,000	45.6	Chapt 90/ Alt Fund	\$ -	\$ 4,000,000	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
21	Fire Dept	Replace Fire Dept Pumper Truck in Newton Corner (Engine 1)	Replace 1999 Pumper Truck exceeding NFPA 15-yr life expectancy; will replace a 1992 spare engine.	\$ 650,000	45.4	Bonding	\$ -	\$ 650,000	\$ -	\$ -	\$ -	\$ -
22	DPW/ Water	Clean and Line Water Pipes to Improve Water Quality	Cleaning and lining of water pipes to improve water quality, ensure pipe integrity and capacity. Precedes scheduled roadway paving.	\$ 4,321,500	45.1	Water Fund	\$ -	\$ 4,321,500	\$ -	\$ -	\$ -	\$ -
23	DPW/ Sewer	Sewer Inflow /Infiltration Project - Area 5	Part of 12 yr \$49.1 M program to remove excess inflow and infiltration into sewer system. Design (FY16) and constr (FY17) for Newton Centre, Newtonville, Chestnut Hill	\$ 3,877,000	44.3	Sewer Fund	\$ -	\$ 777,000	\$ 3,208,500	\$ -	\$ -	\$ -
24	DPW	DPW - Replace 1985 Excavator	Replacement of existing city vehicle/ equipment used for street & sidewalk repairs. (#110) Beyond usefull life expectancy.	\$ 280,000	43.8	Bonding	\$ -	\$ 280,000	\$ -	\$ -	\$ -	\$ -
25	DPW/ Sewer	Prairie Avenue Sewer Pump Station	Station built 1950, rehabbed in 1992. Contains 2 (5 hp) pumps. Replace wet well.	\$ 110,000	43.7	Sewer Fund	\$ -	\$ 110,000	\$ -	\$ -	\$ -	\$ -
26	DPW	Replace Gath/Albemarle Foot Bridge	Footbridge structure (steel and abutement) is in poor condition and is not wheelchair accessible.	\$ 150,000	42.3	CDBG Eligible	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
27	Fire Dept	Replace Fire Dept Bucket Truck	Replace 1996 F800 with 165K miles on it. Not cost effective to keep it on the road. Safety components are failing, putting personnel at risk.	\$ 225,000	41.8	Bonding	\$ -	\$ 225,000	\$ -	\$ -	\$ -	\$ -
28	DPW	Sidewalk Improvements	Improve pedestrian safety. Repair/replacement of sidewalks in poor condition and new sidewalks in village centers, school zones, on major roads.	\$ 750,000	41.4	Chapt 90/ Alt Fund	\$ -	\$ 150,000	\$ 155,250	\$ 160,684	\$ 166,308	\$ 172,128
29	DPW/ Sewer	Replace 1995 Sewer Jet Truck	Replacement of vehicle/ equipment used to clear out blockages in the sewer system to prevent sewer backups. (#369).	\$ 240,000	41.0	Sewer Fund	\$ -	\$ 240,000	\$ -	\$ -	\$ -	\$ -
30	DPW	Walnut Street (Homer Street to Route 9) Final Design	Eliminate deteriorated roadway condition and enhance public safety. Arterial minor. Federal funds for constr only. Design funded by City.	\$ 250,000	40.9	Chapt 90/ Alt Fund	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -
31	DPW	Parking Meters	Upgrade city parking meters to accept credit cards and smart-phone payments	\$ 1,350,000	40.6	Bonding	\$ -	\$ -	\$ 879,750	\$ 535,613	\$ -	\$ -
32	Schools	Ed Center Staircase and Accessibility Upgrades	Upgrade elevator, door hardware, and signage for accessibility. Upgrade staircase on the Craft St. Entrance	\$ 530,179	40.3	Bonding	\$ -	\$ -	\$ 155,250	\$ 407,257	\$ -	\$ -
33	DPW/ Water	Clean and Line Water Pipes to Improve Water Quality	Cleaning and lining of water pipes to improve water quality, ensure pipe integrity and capacity. Precedes scheduled roadway paving.	\$ 4,018,000	40.2	Water Fund	\$ -	\$ -	\$ 4,158,630	\$ -	\$ -	\$ -
34	Public Buildings / Sustainability	City Hall - Mechanical Upgrades	Replace condensing units. Replace and insulate ductwork and replace fans. Add mini-split A/C units in conjunction with window restoration /replacement.	\$ 500,000	40.2	Bonding	\$ -	\$ -	\$ 258,750	\$ 267,806	\$ -	\$ -
35	DPW/ Sewer	Sewer Inflow /Infiltration Project - Area 6	Part of 12 yr \$49M program to remove excess inflow and infiltration into sewer system. Design (FY17) and constr (FY18) for Newton Centre, Newtonville, Chestnut Hill, Nonantum	\$ 4,600,000	40.2	Sewer Fund	\$ -	\$ -	\$ 621,000	\$ 4,284,900	\$ -	\$ -
36	Police	Dispatch Center equipment	All dispatch equipment has met it's life expectancy and must be upgraded	\$ 600,000	40.0	Bonding	\$ -	\$ -	\$ 621,000	\$ -	\$ -	\$ -
37	Schools	Bigelow School - Mechanical Upgrades	Two boilers are 54 years old and beyond their useful life. Replace one boiler, storage, and enhance circulation system.	\$ 450,000	39.9	Bonding	\$ -	\$ -	\$ 465,750	\$ -	\$ -	\$ -
38	Schools	Newton South High School - Mechanical Upgrades - Library	Replace air handlers and roof top equipment, replace hydronic/ACCU system due to burner failures and outdated controls.	\$ 300,000	39.9	Bonding	\$ -	\$ -	\$ 310,500	\$ -	\$ -	\$ -
39	DPW	Street Paving - Cold Plane and Pav Streets	Streets include Watertown, Ward, Church, Richardson, Vernon, Eldridge, Elmwood, Braeland, Marshall, Audubon, Pond Brook.	\$ 3,100,000	39.6	Chapt 90/ Alt Fund	\$ -	\$ -	\$ 3,208,500	\$ -	\$ -	\$ -
40	Schools	FA Day School - Replace Boilers	Replace two 60 year old boilers and variable air volume (VAV) coil work.	\$ 500,000	39.6	Bonding	\$ -	\$ -	\$ 517,500	\$ -	\$ -	\$ -
41	Police	Police Headquarters - Mechanical Upgrades	Replace Roof Top Mechanical equipment that is beyond its useful life. Currently requires a lot of maintenance and service calls.	\$ 300,000	39.5	Bonding	\$ -	\$ -	\$ 310,500	\$ -	\$ -	\$ -



Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
42	Fire Dept	Fire Station #2, West Newton - Replace Emergency Generator	Replace emergency generator which is at the end of it useful life.	\$ 163,000	39.3	Bonding	\$ -	\$ -	\$ 168,705	\$ -	\$ -	\$ -
43	DPW/ Storm	Repair Hammond St Drain	Storm drain pipe has partially collapsed and requires repair to prevent flooding.	\$ 200,000	39.2	Stormwater Fund	\$ -	\$ -	\$ 207,000	\$ -	\$ -	\$ -
44	DPW/ Sewer	Quinobequin Road Sewer Pump Station - Replace Pump	Sewerage pumped to higher point and gravity fed to MWRA pipes for treatment. Replace pump 1 and motors at life expectancy.	\$ 420,000	38.9	Sewer Fund	\$ -	\$ -	\$ 155,250	\$ 160,684	\$ -	\$ -
45	Parks/Rec	Replace McGrath Playground (Warren) Tennis Courts, and Burr Park	Replace 4 existing tennis courts at McGrath Playground (Warren).	\$ 500,000	38.6	Bonding	\$ -	\$ -	\$ 517,500	\$ -	\$ -	\$ -
46	Fire Dept	Fire Station #1 and #2, Newton Corner - Replace Windows & Doors & Repair Masonry	Remove existing windows and replace w/energy efficient insulated units(64ea). Repair and repoint exterior masonry to preserve building envelope.	\$ 800,000	38.3	Bonding	\$ -	\$ -	\$ 414,000	\$ 428,490	\$ -	\$ -
47	DPW	Elliot St. Bridge	Reconstruct bridge in collaborative effort with the Town of Needham	\$ 2,000,000	38.3	Bonding	\$ -	\$ -	\$ 2,070,000	\$ -	\$ -	\$ -
48	DPW/ Storm	Laundry Brook Culvert Repairs	Repair of culverts along Laundry Brook to prevent flooding.	\$ 643,000	38.0	Stormwater Fund	\$ -	\$ -	\$ 665,505	\$ -	\$ -	\$ -
49	DPW	DPW - Replace Large Construction Trucks	Replace vehicles out of service: Vehicle #101 (1993) and #69 (1983) Required for sanding for snow and for construction work.	\$ 300,000	37.8	Bonding	\$ -	\$ -	\$ 310,500	\$ -	\$ -	\$ -
50	DPW/ Water	Replace 2004 Construction Truck	Replacement of existing city vehicle used for construction work on City water mains and for snow removal/sanding operations. Life span of vehicles is 15 yrs (#310).	\$ 130,000	37.8	Water Fund	\$ -	\$ -	\$ 134,550	\$ -	\$ -	\$ -
51	DPW/ Water	Replace 2008 Backhoe	Replacement of existing city vehicle/ equipment used in water line repairs and maintenance (#328)	\$ 120,000	37.8	Water Fund	\$ -	\$ -	\$ 124,200	\$ -	\$ -	\$ -
52	DPW	Street Paving - Cold Plane and Pave Streets	Lowell, Dedham, Highland, Albarmarle, Fuller, Vine, Pembroke, Marlboro, Arlington, Bishopsgate, Prince, Allertown	\$ 2,900,000	37.7	Chapt 90/ Alt Fund	\$ -	\$ -	\$ -	\$ 3,427,920	\$ -	\$ -
53	Parks/Rec	Newton Highlands Playgrnd - Ph I Design & Construction	Phase I of 2008 Master Plan for park renovation. Addresses drainage problems & builds new ball fields and courts. Highly used park. CPA Approved for \$200,000	\$ 2,029,384	37.6	CPA Eligible	\$ 200,000	\$ -	\$ -	\$ 1,959,682	\$ -	\$ -
54	DPW/ Sewer	Hamlet Street Sewer Pump Station - Replace Pumps	Sewerage is pumped to a higher point and gravity fed to MWRA pipes for treatment. Replace pumps and motors.	\$ 100,000	37.6	Sewer Fund	\$ -	\$ -	\$ -	\$ 107,123	\$ -	\$ -
55	Public Buildings / Sustainability	City Hall - Exterior Windows & Doors	Restore/Replace windows in phases to improve energy efficiency, functionality and comfort, and to preserve exterior wall.	\$ 1,000,000	37.5	CPA Eligible	\$ -	\$ -	\$ -	\$ 535,613	\$ 554,359	\$ -
56	DPW	DPW - Replace 1997 Backhoe	Replacement of existing city vehicle/ equipment used for street & sidewalk repairs. (#120) at useful life expectancy.	\$ 110,000	37.5	Bonding	\$ -	\$ -	\$ -	\$ 117,835	\$ -	\$ -
57	DPW/ Sewer	Replace two Large Construction Vehicles	Replace 2005 vehicles/equipment used to haul materials for trenching/ backfilling for sewer line repairs. Also used for snow plowing (#366 and #367)	\$ 300,000	37.4	Sewer Fund	\$ -	\$ -	\$ -	\$ 321,368	\$ -	\$ -
58	Parks/Rec	Oak Hill Drainage	Review Drainage at the site, repair fields	\$ 1,000,000	37.4	Bonding	\$ -	\$ -	\$ -	\$ 1,071,225	\$ -	\$ -
59	Fire Dept	Replace Fire Dept Pumper Truck (Engine 3)	Replace Engine 3, a 2004 Pumper Truck; to be used as spare to replace spare Engine 14, a 1992 pumper that should no longer be used.	\$ 650,000	37.4	Bonding	\$ -	\$ -	\$ -	\$ 696,296	\$ -	\$ -
60	Public Buildings	City Hall - Roof Repair/Replacement	Install new membrane roof on flat roofs. Repair/replace gutters on balcony roofs. Replace metal roofing/flashing as req'd.	\$ 300,000	37.3	Bonding	\$ -	\$ -	\$ -	\$ 321,368	\$ -	\$ -
61	DPW/ Water	Clean and Line Water Pipes to Improve Water Quality	Cleaning and lining of water pipes to improve water quality, ensure pipe integrity and capacity. Precedes scheduled roadway paving.	\$ 4,074,600	37.3	Water Fund	\$ -	\$ -	\$ -	\$ 4,364,813	\$ -	\$ -
62	Schools	Newton South High School - Fire Alarm Upgrades	Upgrade fire alarm system to be fully addressable.	\$ 150,000	37.3	Bonding	\$ -	\$ -	\$ -	\$ 160,684	\$ -	\$ -



Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
85	DPW	Sewer Inflow/Infiltration Project - Area 9	Part of 10 Yr \$49.1 M program to remove excess inflow and infiltration into sewer system. Desing (FY20) and construction (FY21) for Waban, Upper Falls, Oak Hill	\$ 4,600,000	36.0	Sewer Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 688,514
86	Fire Dept	Replace Fire Pumper Truck (Engine 7)	Replace Engine 7 pumper truck. Engine 7 will become a spare.	\$ 600,000	36.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
87	Schools	Mason Rice School - Replace Roof	Replace the 1990's Sarnifil roofing system on the main portion of the building. Existing roof has reached its life expectancy.	\$ 580,000	35.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
88	Schools	Bigelow School - Roof Replacement	Replace entire building roof system. Roof is beyond its useful life.	\$ 750,000	35.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
89	Schools	Burr School - Replace Roof	Replace the total building roofing system installed in the 1980's.	\$ 450,000	35.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
90	Public Buildings	City Hall - Rehabilitate Board of Alderman Chamber	Upgrade Historic Board Chamber to improve mechanical, electrical, audio/visual systems and lighting and interior finishes.	\$ 250,000	35.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
91	Schools	Countryside School - Mid-Range Renovation/Addition	Feasibility Study/Design and Construction at campus	\$ 15,000,000	35.8	Alternate Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
92	DPW/ Water	Needham Street - Clean and Line Water Main - Oak to Charlemont	Deferred. Cleaning and lining 760 LF of 8" water main, 1880. This precedes upcoming TIP funded road reconstruction project.	\$ 136,800	35.7	Water Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
93	Public Buildings / Sustainability	City Hall - Masonry Restoration of War Memorial Steps	Implement recommendations from 2007 Study of the Memorial Stairs.	\$ 185,000	35.7	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
94	DPW/ Water	Wolcott St - Replace Water Main at Wolcott St - Webster to Ionia	Deferred due to paving. Replace 1,150 LF of 6" water main with 8", 1905. This precedes scheduled roadway paving.	\$ 230,000	35.6	Water Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
95	Schools	Mason Rice School - Mechanical Upgrades	Direct Digital Controls conversion and upgrade heating distribution system.	\$ 450,000	35.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
96	DPW	Elliot St. Garage - Electrical Upgrades	Upgrade / replace egress lighting and exit signage per code. Upgrade audible fire alarm and strobes to ADA compliance. Replace receptacles, conduit, electric panels.	\$ 192,000	35.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
97	Schools	Bowen School - Mechanical Upgrades	Replace interior air handlers in first year. Direct Digital Controls conversion.	\$ 325,000	35.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
98	Public Buildings	Waban Library-Accessibility Upgrades	Upgrade toilet rooms, Replace door hardware; Modify door at stairwell or install automatic door opener.	\$ 110,000	35.4	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
99	Schools	Burr School - Sitework Sidewalk Ramp Repairs	Front stair railing collapsing; catch basin at entrance plaza, parking area, make accessible route	\$ 280,000	35.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
100	Schools	Bigelow School - Replace Windows and Doors	Replace aging windows and exterior doors to improve comfort, operation, and energy efficiency.	\$ 400,000	35.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
101	Schools	Underwood School - Accessibility Upgrades	Accessibility upgrades including compliant door hardware, Toilets, and Elevator	\$ 415,000	35.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
102	DPW	Elliot St. Operations Building - Building Envelope	Repair foundation walls and rebuild ramp foundation walls. Repair/replace areaway retaining wall. Repair cracks; repoint mortar joints.	\$ 123,000	35.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
103	Schools	Memorial Spaulding School - Mechanical Upgrades	Replace controls, air handlers. Replace 2nd boiler, hot water conversion, and Direct Digital Controls conversion.	\$ 750,000	35.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
104	Schools	Underwood School - Replace Roof	Replace whole building roof in 2 phases.	\$ 450,000	35.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
105	Schools	Oak Hill School - Mechanical Upgrades - Roof Top Units and Distribution System	Replace Roof top air handling units and distribution system	\$ 250,000	35.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
106	Parks/Rec	Burr Park Field House - Building Envelope and Window Restoration	Repair damaged exterior brick walls and trim. Remove entry landing stairs and railings and install new code-compliant landing, stairs and railings. Restore windows.	\$ 313,500	35.1	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
107	DPW/ Water	Webster St. - Clean and Line Water Main on Webster St	Deferred due to paving. Waltham to Wolcott (FY14). Cleaning and lining 3,150 LF of 8" water main, 1932. This precedes scheduled roadway paving.	\$ 759,000	35.1	Water Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
108	Parks/Rec	Emerson Community Center - Accessibility Upgrades	Upgrade toilet rooms, install accessible door hardware and drinking fountains; Resurface main entrance ramp and install handrails.	\$ 209,000	35.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
109	Schools	Williams School - Mechanical Upgrades	Replace Air handlers. Direct Digital Controls conversion for HVAC system.	\$ 200,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
110	Schools	Underwood School - Mechanical Upgrades	Upgrade Distribution system, controls, and remove underground tank.	\$ 525,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
111	Public Buildings	City Hall - Repair Front stone entry stairs	Repair and repoint stone cornice. Rebuild/reset main entry stairs and install code-compliant railings.	\$ 324,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
112	Schools	Countryside School - Mechanical Upgrades	Replace RTUs at Annex, Direct Digital Control conversion	\$ 250,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
113	Schools	Ward School - Mechanical Upgrades	Replace second boiler and steam trap work.	\$ 300,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
114	Schools	Bigelow School - Mechanical Upgrades	Replace 2nd boiler (54 yrs old) and associated equipment, distribution, univents and full DDC system.	\$ 960,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
115	Police	Police Annex - Mechanical Upgrades	Replace baseboard heaters in bathrooms. Provide proper ventilation/exhaust in locker rooms and bathrooms. Replace boiler with new high efficiency gas-fired boiler.	\$ 170,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
116	DPW	Elliot Street Sand_Salt Shed - Structural and Envelope Repairs	Replace wood truss members. Add brace supports at ends to prevent walls from buckling. Repair wood buttresses and extend push wall 10' higher to keep weight of salt off exterior wall.	\$ 142,000	34.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
117	Library	Library Short-Term Needs	A new computer classroom, a Creation Center Better Teen space integrated into a Youth Services Department. Address dangerously worn carpet areas, entry door operation, front plaza leveling, and restroom upgrades.	\$ 1,500,000	34.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
118	Public Buildings / Sustainability	Nonantum Library-Mechanical	Replace baseboard heating on first floor. Provide pipe insulation. Replace air handling unit in basement with new controls.	\$ 205,000	34.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
119	Fire Dept	Fire Station #1 (Newton Corner) - Renovation	5th station of 7 buildings to be renovated. Work includes building envelope, interior finishes, mechanical, electrical, plumbing, life/safety, ADA upgrades.	\$ 7,230,000	34.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
120	Schools	Lincoln Eliot School - Mechanical Upgrades	Hot water conversion w/renovation, 2nd boiler and distribution system.	\$ 525,000	34.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
121	Public Buildings / Sustainability	Waban Library-Electrical	Replace electrical panel. Replace exterior lighting to improve safety. Replace main electric service and wiring. Upgrade lighting to improve energy efficiency.	\$ 108,000	34.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
122	Fire Dept	Replace Fire Dept Aerial Ladder #2	Replace Ladder 2. 15 years old. Maxed out on life expectancy; to be used as spare to replace Spare Ladder 5 a 1985 ladder to be taken out of service.	\$ 1,000,000	34.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
123	Police	Police Annex - Roof Restoration/ Replacement	Remove and replace slate roofing, gutters and downspouts. Install new EPDM Roof. Reattach downspouts.	\$ 250,500	34.4	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
124	Fire Dept	Fire Station #2 (West Newton) - Repair Building Envelope	Address structural crack in CMU wall first. Repoint/repair exterior masonry.	\$ 166,000	34.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
125	Parks/Rec	Pelligrini Park Field House - Replace Roofs	Replace lower roofing membrane, gutters and downspouts. Replace upper Gym membrane roof with a new EPDM roof.	\$ 100,000	34.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
126	Health	Health Department Bldg - (ReUse Consideration)	All Health Dept Building Recommended work. Envelope is highest need. Building is in re-use process.	\$ 1,500,000	34.2	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
127	Schools	Bowen School - Electrical Upgrades	Replace electrical panels and sub-panels in original buildings.	\$ 75,000	34.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
128	Public Buildings / Sustainability	Nonantum Library-Electrical	Upgrade interior lighting and power distribution. Replace electrical panel and main electrical service.	\$ 101,637	34.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
129	Parks/Rec	Tree Crew Log Loader	Current equipment has been in service since 2006. Essential for emergency response and hazardous tree removal.	\$ 240,000	34.1	Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
130	Public Buildings	Kennard Estate - Replace Septic System	Connect to City Sewer Infrastructure.	\$ 100,000	34.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
131	Schools	Horace Mann School - Accessibility Upgrades	Installation of new elevator	\$ 220,000	33.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
132	DPW	DPW - Replace Street Sweeper	Replacement of vehicle taken out of service: Vehicle #148. Dept will not have minimum (6 ea) needed for 4 sweeps/yr efficiently.	\$ 172,000	33.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
133	Public Buildings	City Hall - Increase City Clerk Archive Storage	Develop plans to expand archival storage to accommodate and preserve archival collections and to comply with MGL mandated record storage requirements.	\$ 100,000	33.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
134	Public Buildings	Auburndale Library -Exterior Windows & Doors	Remove existing exterior wood doors and frames and replace with new doors and hardware. Repair/replace building windows.	\$ 127,000	33.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
135	Public Buildings	Waban Library-Exterior Windows & Doors	Restore exterior wood door and install panic hardware. Replace areaway and rear door. Restore windows.	\$ 118,500	33.6	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
136	Parks/Rec	Newton Highlands Playground - Phase II Design & Construction	2008 Master Plan for park renovation in 2 phases. Ph II will complete the fields to provide tennis courts and football field.	\$ 1,925,000	33.6	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
137	DPW	Salt Brine System (storage & mixing tanks, and associated pumps & piping systems)	This material will stay in place on the road surface and help prevent the formation of ice on the street once snow begins to fall, making them safer to travel on, as well as more effectively plowed with accumulating snow falls.	\$ 150,000	33.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
138	DPW	Elliot St. Garage - New Windows and Doors and Envelope Repairs	Replace metal windows and security screens. Remove and replace overhead doors with new insulated overhead doors. Repair exterior brick and at steel window lintels.	\$ 103,000	33.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
139	Schools	Ward School - Electrical Upgrades	Upgrade electrical panels and distribution system.	\$ 210,000	33.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
140	Parks/Rec	Emerson Community Center - Electrical Upgrades	Replace switchboard and increase service size to meet electrical demands. Replace original overloaded electrical panels. Install emergency audiovisual horn strobes.	\$ 108,000	33.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
141	DPW	Commonwealth Avenue (Route 128 to Washington Street) - Preliminary and Final Design	Eliminate deteriorated roadway condition, improve public safety and restore Comm Ave to previous boulevard status. Arterial minor.	\$ 500,000	33.6	Chapt 90/ Alt Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
142	DPW	Washington Street (Commonwealth Avenue to Centre Street) - Preliminary and Final Design	Eliminate deteriorated roadway condition and improve public safety. Arterial minor. Federal funds for constr only. Design funded by City.	\$ 500,000	33.6	Chapt 90/ Alt Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
143	DPW	DPW - Replace 1984 Do All Large Construction Truck	Replacement of existing city vehicle/ equipment used for street & sidewalk construction and snow removal operations. (#87)	\$ 150,000	33.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
144	Fire Dept	Fire Station #2, West Newton - Renovation	6th station of 7 buildings to be renovated. Work includes mechanical, electrical, plumbing, code compliance and accessibility upgrades.	\$ 7,700,000	33.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
145	DPW	Elliot St. Operations Building - Roof Repair/ Replacement	Remove and replace corrugated fiberglass roof. Repair/replace existing slate roof and add ice shield to prevent ice damming and icicle build-up. Repair/replace gutters.	\$ 235,000	33.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
146	Police	Police Garage - Mechanical Upgrades	Replace ceiling hung unit heaters. Provide bathroom exhaust fan and split air conditioning system. Remove abandoned steam piping to prevent possibility of freezing.	\$ 164,000	33.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
147	Schools	Williams School - Mid-Range Renovation/Addition	Feasibility Study/Design and Construction for addition to building	\$ 12,500,000	33.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
148	Senior Center	Senior Center - Sprinklers and Fire Alarm Upgrades	Install code-compliant sprinkler system in building in conjunction with any major building upgrade or addition.	\$ 170,000	33.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
149	Public Buildings	City Hall - Plumbing Upgrades	Renovate toilet rooms and replace cold and hot water piping as required. Provide insulation for all piping.	\$ 137,000	33.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
150	Schools	Ward School - Replace Roof	Replace Flat Gym 1980's built up roofing system. It has reached its life expectancy.	\$ 160,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
151	Schools	Memorial Spaulding School - Replace Roof	Replace 1980's Built up roof area. It has reached its life expectancy.	\$ 350,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
152	Parks/Rec	Burr Park Field House - Mechanical/Electrical Upgrades	Replace steam boiler, radiators, venting and piping. Replace exterior lighting to improve safety and security. Upgrade interior lighting and original wiring and conduit.	\$ 100,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
153	Public Buildings / Sustainability	Public Buildings Department-Electrical	Replace electrical distribution panels and main electrical service. Upgrade Telcom and Electrical infrastructure to BICSI and Electrical code. Replace interior lights to improve light levels and energy efficiency.	\$ 118,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
154	Schools	Bigelow School - Accessibility Upgrades	Upgrade toilet rooms, elevator, door hardware and signage for accessibility	\$ 400,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
155	Parks/Rec	Lower Falls Community Center - Replace Gym Floor	Replace gym floor with new wood flooring. Replace damaged carpeting and VCT flooring.	\$ 80,000	33.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
156	Public Buildings / Sustainability	Public Buildings Department-Mechanical	Replace duct mounted steam coils and baseboard heaters. Replace ductwork with insulated ductwork. Provide make up air dampers and control for emergency	\$ 115,000	32.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
157	Fire Dept	Fire Station #2, West Newton - Mechanical Upgrades	Remove fuel storage tanks and convert to gas. Other mechanical work to be done as part of future building renovation.	\$ 140,000	32.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
158	Parks/Rec	Newton Upper Falls/ Braceland Playground - Design & Construction	Master Plan for park renovation - Construction will include new athletic fields, new play structure and sitework and improvements.	\$ 1,675,000	32.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
159	Senior Center	Senior Center - Exterior Windows & Doors	Restore/Replace wood windows and aluminum storm windows as historically appropriate.	\$ 125,000	32.7	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
160	Parks/Rec	Pelligrini Park Field House - Exterior Windows & Doors	Replace windows and security screens with new insulated windows and new security screens. Repair and repoint masonry walls and restore murals.	\$ 130,500	32.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
161	Senior Center	Senior Center - Building Envelope	Repoint exterior masonry walls as required. Repair, reset and regrout main granite front stairs. Repair stone veneer at main entry. Rebuild rear right side areaway and stairs.	\$ 150,000	32.4	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
162	Schools	Pierce School - Plumbing Upgrades	Sanitary piping is deteriorating. Upgrades to toilet rooms and water fountains	\$ 225,000	32.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
163	Parks/Rec	Burr Park Field House - Accessibility/Site Upgrades	Accessibility upgrades to toilet rooms and fixtures, signage, drinking fountain, and door hardware. Provide accessible path to entrance and an accessible parking space.	\$ 160,500	32.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
164	Public Buildings	Kennard Estate-Building Envelope, Windows and Doors	Replace shingles and flashings. Repair foundation walls. Replace wood windows and shutters with historic, appropriate units.	\$ 240,000	32.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
165	Public Buildings / Sustainability	Auburndale Library -Mechanical Upgrades	Replace boiler with new steam oil-fired boiler. Replace breeching, combustion air dampers and ductwork. Include heating zone and radiators in basement area.	\$ 125,000	32.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
166	DPW	Crafts St DPW Operations (Stable) - Interior Renovation	Design and Construction for renovated interior including mechanical, electrical, plumbing, and accessibility upgrades.	\$ 500,000	32.2	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
167	Schools	Ed Center - Mechanical Upgrades	Replace boiler, second boiler and hot water conversion in out years. Boilers are 35 years old.	\$ 250,000	32.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
168	Parks/Rec	Pelligrini Park Field House - Electrical Upgrades	Upgrade lighting and power distribution for energy efficiency. Provide protective cages over gym fixtures. Replace electric panels.	\$ 176,000	32.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
169	Schools	Lincoln Eliot School - Replace Windows and Doors	Replace windows in 1965 addition and 1975 clerestory windows	\$ 280,000	32.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
170	Schools	FA Day School - Accessibility Upgrades / Replace Elevator	Upgrades for ADA Compliant elevator, toilet rooms, door hardware, and signage	\$ 350,000	32.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
171	Police	Police Garage - Roof Replacement	Replace PVC roof installed in the 1990's as required. It has reached life expectancy. Repair water divertor above support service door.	\$ 193,000	31.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
172	DPW	Crafts Street Garage - Replace Overhead Garage Doors	Replace ten 25-year old overhead doors and tracks. Replace exterior entrance doors and vestibule doors.	\$ 80,000	31.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
173	Parks/Rec	Replace Parks Dump Truck (replace 1998 truck #430)	Replacement of vehicle that is used daily for maintenance operations that exceeded its useful life span.	\$ 75,000	31.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
174	Schools	Ed Center - Electrical Upgrades	Upgrade electric service, panels and sub-panels to support IT server room and other building functions.	\$ 249,000	31.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
175	Schools	Franklin School - Building Envelope	Replace windows and doors and repair/restore masonry.	\$ 700,000	31.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
176	Parks/Rec	Newton Corner Parks & Rec Headquarters - Building Envelope	Repair front entry concrete. Install new side entry stairs and handrails. Remove and replace wood stairs. Install vents throughout balance of soffits.	\$ 114,500	31.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
177	Police	Police Headquarters - Repair Concrete	Repair concrete at the fire range ceiling. Rebuild tunnel ceiling, waterproof, etc. Repair interior CMU and concrete walls. Replace carpet flooring that is a tripping hazard.	\$ 100,000	31.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
178	DPW	Elliot St. Operations Building - Mechanical/ Plumbing Upgrades	Boiler upgrades per code reqts. Replace unit heaters and finned tube heaters. Upgrade bathrooms. Replace water heater.	\$ 169,000	31.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
179	Schools	Horace Mann School - Restore/Replace Modular	Existing modular is nearing the end of its useful life and will need to be reconditioned or replaced with permanent construction	\$ 1,000,000	31.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
180	Public Buildings	City Hall - War Memorial Auditorium HVAC Improvements	Restore historic hall to improve mechanical & electrical systems.	\$ 150,000	31.1	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
181	Schools	Peirce/Williams Feasibility/Addition	Feasibility Study/Design and Construction to add Capacity	\$ 15,000,000	31.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
182	Parks/Rec	Auburndale Cove Fieldhouse - Building Upgrades	Project to fully upgrade existing building or replace with new structure.	\$ 206,000	30.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
183	Public Buildings / Sustainability	City Hall - Kitchen Mechanical Upgrades	Repair, upgrade kitchen equipment and stove ventilation in cafeteria kitchen to comply with current code requirements.	\$ 168,000	30.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
184	DPW/ Water	Hillside Ave - Otis to Austin	Deferred. Replace 1048 LF of 6" water main with 8", 1877. This precedes scheduled roadway paving.	\$ 209,600	30.2	Water Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
185	Schools	Franklin School - Mechanical Upgrades	Replace boilers, hot water conversion, and Direct Digital Control conversion.	\$ 825,000	30.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
186	Schools	Bowen School - Accessibility Upgrades	Upgrades to toilet rooms, signage, hardware, railings and assembly spaces for accessibility.	\$ 200,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
187	Schools	Franklin School - Accessibility and Plumbing Upgrades	Upgrade Toilet rooms, Water fountains, Door hardware and signage for accessibility.	\$ 365,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
188	Schools	Mason Rice School - Accessibility Upgrades	Upgrade hardware, toilet rooms, and water fountains for accessibility.	\$ 185,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
189	Schools	Memorial Spaulding School - Accessibility Upgrades	Upgrade toilet rooms, door hardware, water fountains, and signage for accessibility.	\$ 300,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
190	Schools	Lincoln Eliot School - Accessibility Upgrades	Upgrade toilet rooms, door hardware, elevator, entrance ramp, and signage for accessibility.	\$ 940,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
191	DPW	DPW - Replace Street Sweeper	Replacement of vehicle taken out of service: Vehicle #148. Dept will not have minimum (6 ea) needed for 4 sweeps/yr efficiently.	\$ 172,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
192	DPW	Map Scanning Project for Engineering: Phase II	Phased project. Current maps are deteriorating rapidly. A new storage system would allow DPW to store maps after scanning.	\$ 900,000	30.1	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
193	Parks/Rec	Newton Corner Parks & Rec Headquarters - Exterior Windows & Doors	Restore/replace historic exterior doors and windows. Weatherstrip and seal for energy efficiency. Window bay foundation repairs.	\$ 217,000	30.0	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
194	Parks/Rec	Newton Corner Parks & Rec Headquarters - Site/ Accessibility Upgrades	Re-build the main entry ramp to be code compliant. Make ADA door opening device fully functioning.	\$ 86,000	30.0	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
195	Police	Police Annex - Accessibility Upgrades	Provide accessible toilet rooms, door hardware, signage and drinking fountain. Provide a lower transaction counter.	\$ 83,500	30.0	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
196	DPW	Elliot St. Operations Building - Replace Windows & Doors	Remove and replace windows. Replace overhead doors. Replace exterior and interior doors.	\$ 80,000	29.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
197	Schools	Horace Mann School - Replace Roof	Replace Total Building 1986 Built up roof area. Roof has reached its life expectancy.	\$ 400,000	29.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
198	Schools	Underwood School - Electrical Upgrades	Upgrades to electrical panels and sub-panels and emergency generator	\$ 100,000	29.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
199	Schools	Williams School - Accessibility Upgrades	Upgrade door hardware, openings, toilet rooms, railings, and signage for accessibility.	\$ 250,000	29.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
200	Senior Center	Senior Center - Roof Restoration/ Replacement	Restore/replace existing slate roof, gutters, and downspouts. Replace existing flat roof with new membrane roof and provide proper roof drains.	\$ 244,000	29.6	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
201	DPW	Crafts Street Garage - Mechanical Upgrades	Complete roof top unit work begun in stimulus project. Replace fans, duct work, unit heaters.	\$ 400,000	29.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
202	Parks/Rec	Pellegrini Field Lights	Replace sports lighting at Pellegrini	\$ 100,000	29.1	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
203	Police	Police Garage - Accessibility/Site Upgrades	Provide accessible door hardware, signage and code-compliant lower counters. Install accessible employee toilet room.	\$ 80,000	28.9	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
204	Jackson Homestead	Restoration of Historic East Burying Grounds	Preservation of Remaining 24 Tombs in two of the three burying grounds. Priority to East, then West Parish sites. Safety Concern.	\$ 148,135	28.7	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
205	Police	Police Garage - Electrical Upgrades	Connect Garage to generator. Upgrade interior and exterior lighting for energy. Replace conduit, wiring, distribution panel. Upgrade smoke/fire detection system.	\$ 207,000	28.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
206	Schools	Peirce School - Accessibility Upgrades	Upgrades to door hardware, toilet rooms, railings, and signage for accessibility.	\$ 300,000	28.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
207	Public Buildings	Nonantum Library-Roofs and Building Envelope	Remove and replace slate roof. Install new gutters and downspouts. Remove and replace existing flat roof.	\$ 200,000	28.3	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
208	IT	Upgrade to Voice Over IP Phone System	Replace 12 year old phone systems with VOIP (data/voice) capable systems, allowing faster move-add-change and lower hardware costs.	\$ 250,000	28.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
209	Parks/Rec	Newton Corner Parks & Rec Headquarters - Roof Restoration/ Replacement	Replace/restore slate roof as historically appropriate.	\$ 75,500	27.5	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
210	Jackson Homestead	Jackson Homestead - Object Collection Storage	Create offsite climate controlled space with fire protection to house 3-D museum collections. No space for add'l materials.	\$ 100,000	27.5	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
211	DPW	Crafts Street Garage - Site Upgrades	Install accessible ramp at entrance. Provide accessible toilet rooms. Resurface and re-grade pavement to comply with ADA requirements; Provide accessible parking space.	\$ 194,000	26.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
212	Schools	Lincoln Elliot School - Electrical Upgrades	Replace electric panels and sub-panels.	\$ 125,000	26.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
213	Public Buildings / Sustainability	Auburndale Library - Electrical Upgrades	Electrical and lighting upgrades for code compliance and to improve energy efficiency. Replace electric panel.	\$ 86,607	26.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
214	Public Buildings	Department HQs Bldg Roof repair	Paint corrugated metal shed roof. Install new roof shingles. Paint rafter ends and plywood. Remove skylights and replace with solar light tubes.	\$ 97,000	26.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
215	Police	Police Garage - Windows & Doors and Building Envelope	Replace overhead doors and glass block windows. Replace door to planning/research and glass block wall. Repair masonry veneer exterior. Repair step cracking in CMU walls.	\$ 140,000	26.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
216	Schools	Ward School - Renovation/ Replacement	Feasibility Study/Design and Construction	\$ 45,000,000	26.2	Bonding/MSBA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
217	Schools	Peirce School - Electrical Upgrades	Replace electric panels and sub-panels.	\$ 75,000	26.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
218	Schools	Burr School - Electrical Upgrades	Replace electric panels and sub-panels	\$ 100,000	26.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
219	Schools	Countryside School - Plumbing Upgrades	Upgrade toilet rooms and water fountains, and add fixtures per code requirements.	\$ 125,000	26.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
220	Public Buildings	Waban Library-Building Envelope and Entrance	Replace main entry walk and foundation walls and install railing. Rebuild side stairs at main entry. Rebuild stairs at rear entry. Install hand rail on one side of rear entry wall. Repair flashing of parapet walls.	\$ 200,000	25.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
221	Schools	Horace Mann School - Mechanical Upgrades	Replace 2nd boiler and replace modular roof top air handling units	\$ 300,000	25.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
222	Parks/Rec	Jeanette Curtis West Rec Ctr (The Hut) Renovation	Rehabilitation of building envelope, mechanical, electrical, plumbing systems, life-safety, and accessibility of this historically significant structure. Houses many programs.	\$ 1,500,000	25.7	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
223	DPW/ Water	Water/Utilities Department bldg - Accessibility Upgrades	Entrance ramp, toilet room and water fountain upgrades, door hardware, lift, etc to improve accessibility.	\$ 240,000	25.7	Water Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
224	Schools	Ward School - Replace Windows and Doors	Replace windows in gym wing and storefront system.	\$ 425,000	25.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
225	Public Buildings	Kennard Estate-Accessibility/Site	Provide accessible parking spaces and install accessible entrance ramp.	\$ 127,350	25.5	Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
226	Schools	Countryside School - Replace Windows and Doors	Replace single pane storefront system in connector and annex windows and exterior doors.	\$ 500,000	25.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
227	Schools	Brown School - Accessibility Upgrades	Upgrade existing elevator for code compliance, signage, hardware, and reconfigure locker rooms for accessibility.	\$ 600,000	24.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
228	Schools	Countryside School - Accessibility Upgrades	Upgrade toilets, signage, door hardware, and accessible entrance.	\$ 150,000	24.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
229	Jackson Homestead	Jackson Homestead - Exterior Windows & Doors	Restore existing windows and doors as historically appropriate.	\$ 192,000	24.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
230	DPW/ Storm	Bullough's Pond Sediment Removal	Remove built up sediment in Bullough's Pond, including DEP approved disposal material.	\$ 500,000	24.2	Stormwater Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
231	DPW/ Storm	Repair Bulloughs Pond Sluice Gate	Repair poorly functioning gate valve used to regulate water storage capacity in City Hall ponds for stormwater.	\$ 60,000	24.1	Stormwater Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
232	Public Buildings	Nonantum Library-Accessibility/Site	Reconfigure entry vestibules and reconstruct ADA compliant ramp; Upgrades for toilet rooms and drinking fountain.	\$ 204,000	23.9	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
233	Public Buildings	City Hall - Envelope - Masonry Repairs	On-going program to repair and repoint exterior masonry to preserve building envelope. Address worst areas first.	\$ 150,000	23.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
234	Schools	Mason-Rice School - Mid-Range Renovation/Addition	Feasibility Study/Design and Construction	\$ 15,000,000	23.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
235	Schools	Schools - Repave Parking Areas	Repave parking areas and sidewalks in poor condition at Ward, Brown, Underwood, Mason Rice, Oak Hill, Williams, Zervas and Peirce.	\$ 400,000	23.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
236	Parks/Rec	City Hall and War Memorial Historic Landscape Preservation Project	Restoration and preservation of City Hall grounds Historic Landscape	\$ 1,500,000	23.4	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
237	DPW	New DPW Equipment Shelter - Elliot St	Provide covered storage for vehicles and equipment. Covered storage extends life of vehicles and equipment	\$ 150,000	23.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
238	Jackson Homestead	Restoration of Historic West Burying Grounds	Preservation of Remaining 24 Tombs in two of the three burying grounds. Safety concern for visitors.	\$ 146,000	23.0	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
239	DPW	Elliot St. Garage - Roof Repair/Replacement	Replace/repair EPDM roof. Replace damaged roof panels.	\$ 91,000	22.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



FY 2016-2020 by Asset Type								ESCALATED COSTS					
								(Costs in FY2016-2020 are escalated 3.5% a year)					
								Total	Total	Total	Total	Total	Total
								\$ 24,736,000	\$ 78,077,350	\$ 63,842,940	\$ 48,984,080	\$ 42,629,759	\$ 27,033,347
Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
1	Public Buildings	Building	City Hall - New Elevator and Accessibility Improvements	New Elevator for the War Memorial	\$ 1,140,000	66.7	Bonding	\$ 1,140,000	\$ -	\$ -	\$ -	\$ -	\$ -
2	Schools	Building	Angler School Replacement	\$11M anticipated from MSBA. Renovate/ replace 92 yr old school due to poor condition, aging bldg systems and inadequate space per State Ed standards.	\$ 37,500,000	63.1	Bonding/MSBA	\$ 15,000,000	\$ 17,500,000	\$ -	\$ -	\$ -	\$ -
3	Schools	Building	Zervas School - Renovation/ Replacement	Project to address space needs due to growing enrollment, bldg systems, access.	\$ 40,000,000	60.9	Bonding/ Override Stabilization Fund	\$ 3,415,000	\$ 10,000,000	\$ 26,480,475	\$ -	\$ -	\$ -
5	Public Buildings / Sustainability	Building	Energy Efficiency Upgrades to City/School Buildings	The objective of this project is to reduce energy use, energy costs and the carbon footprint of existing City owned buildings and schools.	\$ 3,610,000	60.0	Bonding/Other	\$ 2,610,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -
6	Schools	Building	Cabot School Renovation	Replace 92 yr old school due to poor condition, aging bldg systems and inadequate space per State Ed standards.	\$ 45,000,000	59.6	Bonding /MSBA	\$ 1,000,000	\$ 1,000,000	\$ 10,350,000	\$ 21,424,500	\$ 13,304,615	\$ -
7	Fire Dept	Building	Fire Station #3 & HQs - Renovate/Replace Newton Centre Station	Station #3 needs major repairs/upgrades. Co-located w/ Fire HQs. Upgrade systems for code compliance, access & female firefighters.	\$ 18,500,000	55.1	Bonding	\$ 750,000	\$ 8,000,000	\$ 5,175,000	\$ 5,088,319	\$ -	\$ -
13	DPW	Building	Waban Hill - Rehabilitation of the central core structure	Rehabilitation of pipes, valves, and all appurtenances, and roof replacement. Includes cleaning and inspection, design, construction, and services.	\$ 500,000	49.8	Water Fund	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -
15	Public Buildings	Building	Manet Road Communications Building	Replace Emergency Communications Building at Manet Road	\$ 600,000	48.4	Bonding	\$ -	\$ 600,000	\$ -	\$ -	\$ -	\$ -
17	Library	Building	Newton Free Library - Mechanical Upgrades	Interior air handler replacement, replace chiller controls, repair/restore ice tank system.	\$ 1,000,000	47.9	Bonding	\$ -	\$ 250,000	\$ 517,500	\$ 267,806	\$ -	\$ -
18	Public Buildings	Building	City Hall Improvements - Heat Tape	Use Heat Tape to prevent Ice Dams from forming during the winter.	\$ 150,000	47.7	Bonding	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
19	Schools	Building	Pre-School Program / Lincoln Eliot	Purchase Aquinas/ Renovate for Pre-K and Lincoln-Eliot students	\$ 32,750,000	45.9	Bonding/MSBA	\$ -	\$ 15,750,000	\$ 1,035,000	\$ 1,071,225	\$ 8,315,384	\$ 8,606,423
32	Schools	Building	Ed Center Staircase and Accessibility Upgrades	Upgrade elevator, door hardware, and signage for accessibility. Upgrade staircase on the Craft St. Entrance	\$ 530,179	40.3	Bonding	\$ -	\$ -	\$ 155,250	\$ 407,257	\$ -	\$ -
34	Public Buildings / Sustainability	Building	City Hall - Mechanical Upgrades	Replace condensing units. Replace and insulate ductwork and replace fans. Add mini-split A/C units in conjunction with window restoration /replacement.	\$ 500,000	40.2	Bonding	\$ -	\$ -	\$ 258,750	\$ 267,806	\$ -	\$ -
37	Schools	Building	Bigelow School - Mechanical Upgrades	Two boilers are 54 years old and beyond their useful life. Replace one boiler, storage, and enhance circulation system.	\$ 450,000	39.9	Bonding	\$ -	\$ -	\$ 465,750	\$ -	\$ -	\$ -
38	Schools	Building	Newton South High School - Mechanical Upgrades - Library	Replace air handlers and roof top equipment, replace hydronic/ACCU system due to burner failures and outdated controls.	\$ 300,000	39.9	Bonding	\$ -	\$ -	\$ 310,500	\$ -	\$ -	\$ -
40	Schools	Building	FA Day School - Replace Boilers	Replace two 60 year old boilers and variable air volume (VAV) coil work.	\$ 500,000	39.6	Bonding	\$ -	\$ -	\$ 517,500	\$ -	\$ -	\$ -
41	Police	Building	Police Headquarters - Mechanical Upgrades	Replace Roof Top Mechanical equipment that is beyond its useful life. Currently requires a lot of maintenance and service calls.	\$ 300,000	39.5	Bonding	\$ -	\$ -	\$ 310,500	\$ -	\$ -	\$ -
42	Fire Dept	Building	Fire Station #2, West Newton - Replace Emergency Generator	Replace emergency generator which is at the end of it useful life.	\$ 163,000	39.3	Bonding	\$ -	\$ -	\$ 168,705	\$ -	\$ -	\$ -
46	Fire Dept	Building	Fire Station #1 and #2, Newton Corner - Replace Windows & Doors & Repair Masonry	Remove existing windows and replace w/energy efficient insulated units(64ea). Repair and repoint exterior masonry to preserve building envelope.	\$ 800,000	38.3	Bonding	\$ -	\$ -	\$ 414,000	\$ 428,490	\$ -	\$ -
55	Public Buildings / Sustainability	Building	City Hall - Exterior Windows & Doors	Restore/Replace windows in phases to improve energy efficiency, functionality and comfort, and to preserve exterior wall.	\$ 1,000,000	37.5	CPA Eligible	\$ -	\$ -	\$ -	\$ 535,613	\$ 554,359	\$ -
60	Public Buildings	Building	City Hall - Roof Repair/Replacement	Install new membrane roof on flat roofs. Repair/replace gutters on balcony roofs. Replace metal roofing/flushing as req'd.	\$ 300,000	37.3	Bonding	\$ -	\$ -	\$ -	\$ 321,368	\$ -	\$ -
62	Schools	Building	Newton South High School - Fire Alarm Upgrades	Upgrade fire alarm system to be fully addressable.	\$ 150,000	37.3	Bonding	\$ -	\$ -	\$ -	\$ 160,684	\$ -	\$ -
63	Public Buildings	Building	Auburndale Library - Building Envelope and Roof	Repair broken roof slates. Reflash where leaks are occurring. Repair/replace gutters and downspouts. Pitch rain leaders away from bldg. Repair concrete ramp.	\$ 128,000	37.3	CPA Eligible	\$ -	\$ -	\$ -	\$ 137,117	\$ -	\$ -

Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
70	Public Buildings	Building	City Hall - Electrical Upgrades	Replace emergency generator and electrical upgrades.	\$ 225,000	37.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ 249,462	\$ -
71	Public Buildings	Building	City Hall - Fire Alarm Upgrades	Plan installation of sprinkler system and addressable fire alarm upgrades. In City Hall in conjunction with other building upgrades.	\$ 150,000	36.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ 166,308	\$ -
74	Parks/Rec	Building	Community Center / Gath Pool - New Swim Facility Design and Construction	Build new Community Center structure with Olympic sized pool facility	\$ 20,000,000	36.8	Alternative Funding	\$ -	\$ -	\$ -	\$ -	\$ 554,359	\$ 1,147,523
76	Parks/Rec	Building	Crystal Lake Bathhouse - Renovate/Replace	Existing bathhouse is in poor condition and is not accessible. Renovate/Replace bathhouse and improve site.	\$ 5,000,000	36.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ 5,543,589	\$ -
82	Schools	Building	Bowen School - Roof Replacement	Replace of 1950's portion of the building's roofing system as it has reached its life expectancy.	\$ 180,000	36.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 206,554
83	Schools	Building	Mason Rice School - Electrical Upgrades	Replace emergency generator, electrical panels and sub-panels.	\$ 325,000	36.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 372,945
84	DPW	Building	Crafts St DPW Operations (Stable) - Restore Building Envelope, Windows & Roof	Preserve historic building envelope. Repoint/repair lintels, sills and brick veneer. Restore/replace windows, doors and roof and cupola as historically appropriate.	\$ 943,000	36.0	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,082,114
87	Schools	Building	Mason Rice School - Replace Roof	Replace the 1990's Sarnifil roofing system on the main portion of the building. Existing roof has reached its life expectancy.	\$ 580,000	35.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
88	Schools	Building	Bigelow School - Roof Replacement	Replace entire building roof system. Roof is beyond its useful life.	\$ 750,000	35.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
89	Schools	Building	Burr School - Replace Roof	Replace the total building roofing system installed in the 1980's.	\$ 450,000	35.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
90	Public Buildings	Building	City Hall - Rehabilitate Board of Alderman Chamber	Upgrade Historic Board Chamber to improve mechanical, electrical, audio/visual systems and lighting and interior finishes.	\$ 250,000	35.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
91	Schools	Building	Countryside School - Mid-Range Renovation/Addition	Feasibility Study/Design and Construction at campus	\$ 15,000,000	35.8	Alternate Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
93	Public Buildings / Sustainability	Building	City Hall - Masonry Restoration of War Memorial Steps	Implement recommendations from 2007 Study of the Memorial Stairs.	\$ 185,000	35.7	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
95	Schools	Building	Mason Rice School - Mechanical Upgrades	Direct Digital Controls conversion and upgrade heating distribution system.	\$ 450,000	35.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
96	DPW	Building	Elliot St. Garage - Electrical Upgrades	Upgrade / replace egress lighting and exit signage per code. Upgrade audible fire alarm and strobes to ADA compliance. Replace receptacles, conduit, electric panels.	\$ 192,000	35.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
97	Schools	Building	Bowen School - Mechanical Upgrades	Replace interior air handlers in first year. Direct Digital Controls conversion.	\$ 325,000	35.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
98	Public Buildings	Building	Waban Library-Accessibility Upgrades	Upgrade toilet rooms, Replace door hardware; Modify door at stairwell or install automatic door opener.	\$ 110,000	35.4	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
100	Schools	Building	Bigelow School - Replace Windows and Doors	Replace aging windows and exterior doors to improve comfort, operation, and energy efficiency.	\$ 400,000	35.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
101	Schools	Building	Underwood School - Accessibility Upgrades	Accessibility upgrades including compliant door hardware, Toilets, and Elevator	\$ 415,000	35.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
102	DPW	Building	Elliot St. Operations Building - Building Envelope	Repair foundation walls and rebuild ramp foundation walls. Repair/replace areaway retaining wall. Repair cracks; repoint mortar joints.	\$ 123,000	35.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
103	Schools	Building	Memorial Spaulding School - Mechanical Upgrades	Replace controls, air handlers. Replace 2nd boiler, hot water conversion, and Direct Digital Controls conversion.	\$ 750,000	35.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
104	Schools	Building	Underwood School - Replace Roof	Replace whole building roof in 2 phases.	\$ 450,000	35.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
105	Schools	Building	Oak Hill School - Mechanical Upgrades - Roof Top Units and Distribution System	Replace Roof top air handling units and distribution system	\$ 250,000	35.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
106	Parks/Rec	Building	Burr Park Field House - Building Envelope and Window Restoration	Repair damaged exterior brick walls and trim. Remove entry landing stairs and railings and install new code-compliant landing, stairs and railings. Restore windows.	\$ 313,500	35.1	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
108	Parks/Rec	Building	Emerson Community Center - Accessibility Upgrades	Upgrade toilet rooms, install accessible door hardware and drinking fountains; Resurface main entrance ramp and install handrails.	\$ 209,000	35.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
109	Schools	Building	Williams School - Mechanical Upgrades	Replace Air handlers. Direct Digital Controls conversion for HVAC system.	\$ 200,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
110	Schools	Building	Underwood School - Mechanical Upgrades	Upgrade Distribution system, controls, and remove underground tank.	\$ 525,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
111	Public Buildings	Building	City Hall - Repair Front stone entry stairs	Repair and repoint stone cornice. Rebuild/reset main entry stairs and install code-compliant railings.	\$ 324,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
112	Schools	Building	Countryside School - Mechanical Upgrades	Replace RTUs at Annex, Direct Digital Control conversion	\$ 250,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
113	Schools	Building	Ward School - Mechanical Upgrades	Replace second boiler and steam trap work.	\$ 300,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
114	Schools	Building	Bigelow School - Mechanical Upgrades	Replace 2nd boiler (54 yrs old) and associated equipment, distribution, univents and full DDC system.	\$ 960,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
115	Police	Building	Police Annex - Mechanical Upgrades	Replace baseboard heaters in bathrooms. Provide proper ventilation/exhaust in locker rooms and bathrooms. Replace boiler with new high efficiency gas-fired boiler.	\$ 170,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
116	DPW	Building	Elliot Street Sand_Salt Shed - Structural and Envelope Repairs	Replace wood truss members. Add brace supports at ends to prevent walls from buckling. Repair wood buttresses and extend push wall 10' higher to keep weight of salt off exterior wall.	\$ 142,000	34.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
117	Library	Building	Library Short-Term Needs	A new computer classroom, a Creation Center Better Teen space integrated into a Youth Services Department. Address dangerously worn carpet areas, entry door operation, front plaza leveling, and restroom upgrades.	\$ 1,500,000	34.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
118	Public Buildings / Sustainability	Building	Nonantum Library-Mechanical	Replace baseboard heating on first floor. Provide pipe insulation. Replace air handling unit in basement with new controls.	\$ 205,000	34.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
119	Fire Dept	Building	Fire Station #1 (Newton Corner) - Renovation	5th station of 7 buildings to be renovated. Work includes building envelope, interior finishes, mechanical, electrical, plumbing, life/safety, ADA upgrades.	\$ 7,230,000	34.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
120	Schools	Building	Lincoln Eliot School - Mechanical Upgrades	Hot water conversion w/renovation, 2nd boiler and distribution system.	\$ 525,000	34.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
121	Public Buildings / Sustainability	Building	Waban Library-Electrical	Replace electrical panel. Replace exterior lighting to improve safety. Replace main electric service and wiring. Upgrade lighting to improve energy efficiency.	\$ 108,000	34.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
123	Police	Building	Police Annex - Roof Restoration/ Replacement	Remove and replace slate roofing, gutters and downspouts. Install new EPDM Roof. Reattach downspouts.	\$ 250,500	34.4	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
124	Fire Dept	Building	Fire Station #2 (West Newton) - Repair Building Envelope	Address structural crack in CMU wall first. Repoint/repair exterior masonry.	\$ 166,000	34.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
125	Parks/Rec	Building	Pelligrini Park Field House - Replace Roofs	Replace lower roofing membrane, gutters and downspouts. Replace upper Gym membrane roof with a new EPDM roof.	\$ 100,000	34.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
126	Health	Building	Health Department Bldg - (ReUse Consideration)	All Health Dept Building Recommended work. Envelope is highest need. Building is in re-use process.	\$ 1,500,000	34.2	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
127	Schools	Building	Bowen School - Electrical Upgrades	Replace electrical panels and sub-panels in original buildings.	\$ 75,000	34.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
128	Public Buildings / Sustainability	Building	Nonantum Library-Electrical	Upgrade interior lighting and power distribution. Replace electrical panel and main electrical service.	\$ 101,637	34.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
130	Public Buildings	Building	Kennard Estate - Replace Septic System	Connect to City Sewer Infrastructure.	\$ 100,000	34.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
131	Schools	Building	Horace Mann School - Accessibility Upgrades	Installation of new elevator	\$ 220,000	33.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
133	Public Buildings	Building	City Hall - Increase City Clerk Archive Storage	Develop plans to expand archival storage to accommodate and preserve archival collections and to comply with MGL mandated record storage requirements.	\$ 100,000	33.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
134	Public Buildings	Building	Auburdale Library -Exterior Windows & Doors	Remove existing exterior wood doors and frames and replace with new doors and hardware. Repair/replace building windows.	\$ 127,000	33.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
135	Public Buildings	Building	Waban Library-Exterior Windows & Doors	Restore exterior wood door and install panic hardware. Replace areaway and rear door. Restore windows.	\$ 118,500	33.6	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
138	DPW	Building	Elliot St. Garage - New Windows and Doors and Envelope Repairs	Replace metal windows and security screens. Remove and replace overhead doors with new insulated overhead doors. Repair exterior brick and at steel window lintels.	\$ 103,000	33.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
139	Schools	Building	Ward School - Electrical Upgrades	Upgrade electrical panels and distribution system.	\$ 210,000	33.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
140	Parks/Rec	Building	Emerson Community Center - Electrical Upgrades	Replace switchboard and increase service size to meet electrical demands. Replace original overloaded electrical panels. Install emergency audiovisual horn strobes.	\$ 108,000	33.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
144	Fire Dept	Building	Fire Station #2, West Newton - Renovation	6th station of 7 buildings to be renovated. Work includes mechanical, electrical, plumbing, code compliance and accessibility upgrades.	\$ 7,700,000	33.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
145	DPW	Building	Elliot St. Operations Building - Roof Repair/ Replacement	Remove and replace corrugated fiberglass roof. Repair/replace existing slate roof and add ice shield to prevent ice damming and icicle build-up. Repair/replace gutters.	\$ 235,000	33.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
146	Police	Building	Police Garage - Mechanical Upgrades	Replace ceiling hung unit heaters. Provide bathroom exhaust fan and split air conditioning system. Remove abandoned steam piping to prevent possibility of freezing.	\$ 164,000	33.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
147	Schools	Building	Williams School - Mid-Range Renovation/Addition	Feasibility Study/Design and Construction for addition to building	\$ 12,500,000	33.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
148	Senior Center	Building	Senior Center - Sprinklers and Fire Alarm Upgrades	Install code-compliant sprinkler system in building in conjunction with any major building upgrade or addition.	\$ 170,000	33.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
149	Public Buildings	Building	City Hall - Plumbing Upgrades	Renovate toilet rooms and replace cold and hot water piping as required. Provide insulation for all piping.	\$ 137,000	33.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
150	Schools	Building	Ward School - Replace Roof	Replace Flat Gym 1980's built up roofing system. It has reached its life expectancy.	\$ 160,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
151	Schools	Building	Memorial Spaulding School - Replace Roof	Replace 1980's Built up roof area. It has reached its life expectancy.	\$ 350,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
152	Parks/Rec	Building	Burr Park Field House - Mechanical/Electrical Upgrades	Replace steam boiler, radiators, venting and piping. Replace exterior lighting to improve safety and security. Upgrade interior lighting and original wiring and conduit.	\$ 100,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
153	Public Buildings / Sustainability	Building	Public Buildings Department-Electrical	Replace electrical distribution panels and main electrical service. Upgrade Telcom and Electrical infrastructure to BICSI and Electrical code.Replace interior lights to improve light levels and energy efficiency.	\$ 118,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
154	Schools	Building	Bigelow School - Accessibility Upgrades	Upgrade toilet rooms, elevator, door hardware and signage for accessibility	\$ 400,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
155	Parks/Rec	Building	Lower Falls Community Center - Replace Gym Floor	Replace gym floor with new wood flooring. Replace damaged carpeting and VCT flooring.	\$ 80,000	33.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
156	Public Buildings / Sustainability	Building	Public Buildings Department-Mechanical	Replace duct mounted steam coils and baseboard heaters. Replace ductwork with insulated ductwork. Provide make up air dampers and control for emergency generator. Replace boiler induced-draft fan and replace corroded section of breeching. Provide 75 CFM exhaust fans in mens and womens toilet rooms. Replace air handler with new fan coil unit. Provide pad for unit to prevent water damage to unit or return ductwork. Insulate steam and condensate piping in boiler room. Provide damper and controls for combustion air opening for boiler. No baseboard	\$ 115,000	32.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
157	Fire Dept	Building	Fire Station #2, West Newton - Mechanical Upgrades	Remove fuel storage tanks and convert to gas. Other mechanical work to be done as part of future building renovation.	\$ 140,000	32.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
159	Senior Center	Building	Senior Center - Exterior Windows & Doors	Restore/Replace wood windows and aluminum storm windows as historically appropriate.	\$ 125,000	32.7	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
160	Parks/Rec	Building	Pelligrini Park Field House - Exterior Windows & Doors	Replace windows and security screens with new insulated windows and new security screens. Repair and repoint masonry walls and restore murals.	\$ 130,500	32.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
161	Senior Center	Building	Senior Center - Building Envelope	Repoint exterior masonry walls as required. Repair, reset and regROUT main granite front stairs. Repair stone veneer at main entry. Rebuild rear right side areaway and stairs.	\$ 150,000	32.4	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
162	Schools	Building	Pierce School - Plumbing Upgrades	Sanitary piping is deteriorating. Upgrades to toilet rooms and water fountains	\$ 225,000	32.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
163	Parks/Rec	Building	Burr Park Field House - Accessibility/Site Upgrades	Accessibility upgrades to toilet rooms and fixtures, signage, drinking fountain, and door hardware. Provide accessible path to entrance and an accessible parking space.	\$ 160,500	32.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
164	Public Buildings	Building	Kennard Estate-Building Envelope, Windows and Doors	Replace shingles and flashings. Repair foundation walls. Replace wood windows and shutters with historic, appropriate units.	\$ 240,000	32.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
165	Public Buildings / Sustainability	Building	Auburndale Library -Mechanical Upgrades	Replace boiler with new steam oil-fired boiler. Replace breeching, combustion air dampers and ductwork. Include heating zone and radiators in basement area.	\$ 125,000	32.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
166	DPW	Building	Crafts St DPW Operations (Stable) - Interior Renovation	Design and Construction for renovated interior including mechanical, electrical, plumbing, and accessibility upgrades.	\$ 500,000	32.2	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
167	Schools	Building	Ed Center - Mechanical Upgrades	Replace boiler, second boiler and hot water conversion in out years. Boilers are 35 years old.	\$ 250,000	32.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
168	Parks/Rec	Building	Pelligrini Park Field House - Electrical Upgrades	Upgrade lighting and power distribution for energy efficiency. Provide protective cages over gym fixtures. Replace electric panels.	\$ 176,000	32.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
169	Schools	Building	Lincoln Eliot School - Replace Windows and Doors	Replace windows in 1965 addition and 1975 clerestory windows	\$ 280,000	32.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
170	Schools	Building	FA Day School - Accessibility Upgrades / Replace Elevator	Upgrades for ADA Compliant elevator, toilet rooms, door hardware, and signage	\$ 350,000	32.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
171	Police	Building	Police Garage - Roof Replacement	Replace PVC roof installed in the 1990's as required. It has reached life expectancy. Repair water divertor above support service door.	\$ 193,000	31.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
172	DPW	Building	Crafts Street Garage - Replace Overhead Garage Doors	Replace ten 25-year old overhead doors and tracks. Replace exterior entrance doors and vestibule doors.	\$ 80,000	31.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
174	Schools	Building	Ed Center - Electrical Upgrades	Upgrade electric service, panels and sub-panels to support IT server room and other building functions.	\$ 249,000	31.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
175	Schools	Building	Franklin School - Building Envelope	Replace windows and doors and repair/restore masonry.	\$ 700,000	31.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
176	Parks/Rec	Building	Newton Corner Parks & Rec Headquarters - Building Envelope	Repair front entry concrete. Install new side entry stairs and handrails. Remove and replace wood stairs. Install vents throughout balance of soffits.	\$ 114,500	31.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
177	Police	Building	Police Headquarters - Repair Concrete	Repair concrete at the fire range ceiling. Rebuild tunnel ceiling, waterproof, etc. Repair interior CMU and concrete walls. Replace carpet flooring that is a tripping hazard.	\$ 100,000	31.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
178	DPW	Building	Elliot St. Operations Building - Mechanical/ Plumbing Upgrades	Boiler upgrades per code reqts. Replace unit heaters and finned tube heaters. Upgrade bathrooms. Replace water heater.	\$ 169,000	31.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
179	Schools	Building	Horace Mann School - Restore/Replace Modular	Existing modular is nearing the end of its useful life and will need to be reconditioned or replaced with permanent construction	\$ 1,000,000	31.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
180	Public Buildings	Building	City Hall - War Memorial Auditorium HVAC Improvements	Restore historic hall to improve mechanical & electrical systems.	\$ 150,000	31.1	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
181	Schools	Building	Peirce/Williams Feasibility/Addition	Feasibility Study/Design and Construction to add Capacity	\$ 15,000,000	31.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
182	Parks/Rec	Building	Auburndale Cove Fieldhouse - Building Upgrades	Project to fully upgrade existing building or replace with new structure.	\$ 206,000	30.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
183	Public Buildings / Sustainability	Building	City Hall - Kitchen Mechanical Upgrades	Repair, upgrade kitchen equipment and stove ventilation in cafeteria kitchen to comply with current code requirements.	\$ 168,000	30.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
185	Schools	Building	Franklin School - Mechanical Upgrades	Replace boilers, hot water conversion, and Direct Digital Control conversion.	\$ 825,000	30.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
186	Schools	Building	Bowen School - Accessibility Upgrades	Upgrades to toilet rooms, signage, hardware, railings and assembly spaces for accessibility.	\$ 200,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
187	Schools	Building	Franklin School - Accessibility and Plumbing Upgrades	Upgrade Toilet rooms, Water fountains, Door hardware and signage for accessibility.	\$ 365,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
188	Schools	Building	Mason Rice School - Accessibility Upgrades	Upgrade hardware, toilet rooms, and water fountains for accessibility.	\$ 185,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
189	Schools	Building	Memorial Spaulding School - Accessibility Upgrades	Upgrade toilet rooms, door hardware, water fountains, and signage for accessibility.	\$ 300,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
190	Schools	Building	Lincoln Eliot School - Accessibility Upgrades	Upgrade toilet rooms, door hardware, elevator, entrance ramp, and signage for accessibility.	\$ 940,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
193	Parks/Rec	Building	Newton Corner Parks & Rec Headquarters - Exterior Windows & Doors	Restore/replace historic exterior doors and windows. Weatherstrip and seal for energy efficiency. Window bay foundation repairs.	\$ 217,000	30.0	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
194	Parks/Rec	Building	Newton Corner Parks & Rec Headquarters - Site/ Accessibility Upgrades	Re-build the main entry ramp to be code compliant. Make ADA door opening device fully functioning.	\$ 86,000	30.0	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
195	Police	Building	Police Annex - Accessibility Upgrades	Provide accessible toilet rooms, door hardware, signage and drinking fountain. Provide a lower transaction counter.	\$ 83,500	30.0	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
196	DPW	Building	Elliot St. Operations Building - Replace Windows & Doors	Remove and replace windows. Replace overhead doors. Replace exterior and interior doors.	\$ 80,000	29.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
197	Schools	Building	Horace Mann School - Replace Roof	Replace Total Building 1986 Built up roof area. Roof has reached its life expectancy.	\$ 400,000	29.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
198	Schools	Building	Underwood School - Electrical Upgrades	Upgrades to electrical panels and sub-panels and emergency generator	\$ 100,000	29.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
199	Schools	Building	Williams School - Accessibility Upgrades	Upgrade door hardware, openings, toilet rooms, railings, and signage for accessibility.	\$ 250,000	29.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
200	Senior Center	Building	Senior Center - Roof Restoration/ Replacement	Restore/replace existing slate roof, gutters, and downspouts. Replace existing flat roof with new membrane roof and provide proper roof drains.	\$ 244,000	29.6	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
201	DPW	Building	Crafts Street Garage - Mechanical Upgrades	Complete roof top unit work begun in stimulus project. Replace fans, duct work, unit heaters.	\$ 400,000	29.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
203	Police	Building	Police Garage - Accessibility/Site Upgrades	Provide accessible door hardware, signage and code-compliant lower counters. Install accessible employee toilet room.	\$ 80,000	28.9	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
205	Police	Building	Police Garage - Electrical Upgrades	Connect Garage to generator. Upgrade interior and exterior lighting for energy. Replace conduit, wiring, distribution panel. Upgrade smoke/fire detection system.	\$ 207,000	28.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
206	Schools	Building	Peirce School - Accessibility Upgrades	Upgrades to door hardware, toilet rooms, railings, and signage for accessibility.	\$ 300,000	28.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
207	Public Buildings	Building	Nonantum Library-Roofs and Building Envelope	Remove and replace slate roof. Install new gutters and downspouts. Remove and replace existing flat roof.	\$ 200,000	28.3	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
209	Parks/Rec	Building	Newton Corner Parks & Rec Headquarters - Roof Restoration/ Replacement	Replace/restore slate roof as historically appropriate.	\$ 75,500	27.5	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
210	Jackson Homestead	Building	Jackson Homestead - Object Collection Storage	Create offsite climate controlled space with fire protection to house 3-D museum collections. No space for add'l materials.	\$ 100,000	27.5	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
211	DPW	Building	Crafts Street Garage - Site Upgrades	Install accessible ramp at entrance. Provide accessible toilet rooms. Resurface and re-grade pavement to comply with ADA requirements; Provide accessible	\$ 194,000	26.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
212	Schools	Building	Lincoln Eliot School - Electrical Upgrades	Replace electric panels and sub-panels.	\$ 125,000	26.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
213	Public Buildings / Sustainability	Building	Auburndale Library - Electrical Upgrades	Electrical and lighting upgrades for code compliance and to improve energy efficiency. Replace electric panel.	\$ 86,607	26.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
214	Public Buildings	Building	Department HQs Bldg Roof repair	Paint corrugated metal shed roof. Install new roof shingles. Paint rafter ends and plywood. Remove skylights and replace with solar light tubes.	\$ 97,000	26.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
215	Police	Building	Police Garage - Windows & Doors and Building Envelope	Replace overhead doors and glass block windows. Replace door to planning/research and glass block wall. Repair masonry veneer exterior. Repair step cracking in CMU walls.	\$ 140,000	26.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
216	Schools	Building	Ward School - Renovation/ Replacement	Feasibility Study/Design and Construction	\$ 45,000,000	26.2	Bonding/MSBA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
217	Schools	Building	Peirce School - Electrical Upgrades	Replace electric panels and sub-panels.	\$ 75,000	26.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
218	Schools	Building	Burr School - Electrical Upgrades	Replace electric panels and sub-panels	\$ 100,000	26.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
219	Schools	Building	Countryside School - Plumbing Upgrades	Upgrade toilet rooms and water fountains, and add fixtures per code requirements.	\$ 125,000	26.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
220	Public Buildings	Building	Waban Library-Building Envelope and Entrance	Replace main entry walk and foundation walls and install railing. Rebuild side stairs at main entry. Rebuild stairs at rear entry. Install hand rail on one side of rear entry wall. Repair flashing of parapet walls.	\$ 200,000	25.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
221	Schools	Building	Horace Mann School - Mechanical Upgrades	Replace 2nd boiler and replace modular roof top air handling units	\$ 300,000	25.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
222	Parks/Rec	Building	Jeanette Curtis West Rec Ctr (The Hut) Renovation	Rehabilitation of building envelope, mechanical, electrical, plumbing systems, life-safety, and accessibility of this historically significant structure. Houses many programs.	\$ 1,500,000	25.7	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
223	DPW/ Water	Building	Water/Utilities Department bldg - Accessibility Upgrades	Entrance ramp, toilet room and water fountain upgrades, door hardware, lift, etc to improve accessibility.	\$ 240,000	25.7	Water Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
224	Schools	Building	Ward School - Replace Windows and Doors	Replace windows in gym wing and storefront system.	\$ 425,000	25.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
225	Public Buildings	Building	Kennard Estate-Accessibility/Site	Provide accessible parking spaces and install accessible entrance ramp.	\$ 127,350	25.5	Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
226	Schools	Building	Countryside School - Replace Windows and Doors	Replace single pane storefront system in connector and annex windows and exterior doors.	\$ 500,000	25.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
227	Schools	Building	Brown School - Accessibility Upgrades	Upgrade existing elevator for code compliance, signage, hardware, and reconfigure locker rooms for accessibility.	\$ 600,000	24.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
228	Schools	Building	Countryside School - Accessibility Upgrades	Upgrade toilets, signage, door hardware, and accessible entrance.	\$ 150,000	24.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
229	Jackson Homestead	Building	Jackson Homestead - Exterior Windows & Doors	Restore existing windows and doors as historically appropriate.	\$ 192,000	24.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
232	Public Buildings	Building	Nonantum Library-Accessibility/Site	Reconfigure entry vestibules and reconstruct ADA compliant ramp; Upgrades for toilet rooms and drinking fountain.	\$ 204,000	23.9	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
233	Public Buildings	Building	City Hall - Envelope - Masonry Repairs	On-going program to repair and repoint exterior masonry to preserve building envelope. Address worst areas first.	\$ 150,000	23.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
234	Schools	Building	Mason-Rice School - Mid-Range Renovation/Addition	Feasibility Study/Design and Construction	\$ 15,000,000	23.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
237	DPW	Building	New DPW Equipment Shelter - Elliot St	Provide covered storage for vehicles and equipment. Covered storage extends life of vehicles and equipment	\$ 150,000	23.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
239	DPW	Building	Elliot St. Garage - Roof Repair/Replacement	Replace/repair EPDM roof. Replace damaged roof panels.	\$ 91,000	22.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
240	Public Buildings	Building	Auburndale Library -Accessibility and Site Upgrades	Install accessible toilet rm. Enlarge landing at side entry and rebuild concrete paths. Replace door hardware to be ADA compliant. Replace handrails at basement entrance with ADA-compliant rails; Modify basement door to provide 18" wide clear maneuvering space on the latch pull side of the door or install an automatic door opener. Install a lowered transaction counter at circulation desk; Replace door hardware with hardware that is operable without tight grasping, pinching or twisting (lever type); Replace stairwell railings with ADA-compliant rails; Install a ramp in the basement to provide an accessible route to all book store stacks. Install an elevator to provide vertical access to all	\$ 265,000	21.9	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
241	Library	Building	Newton Free Library - Generator Replacement	Library used as cooling station for residents. Existing energy agreement mandates peak usage on auxiliary power when regional demand is high extreme.	\$ 250,000	21.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
242	DPW	Building	Elliot St. Operations Building - Interior and Finish Upgrades	Repaint steel framing in attic. Repair deteriorated concrete and CMU. Upgrade lighting and install new acoustical ceilings.	\$ 147,000	18.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
245	Library	Building	Library Addition / Renovation	Renovate the entire library and add a two-level 9,000sf addition	\$ 33,122,976	14.2	Fund Raising / State Grant / Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
246	Police	Building	New Police Facility	Construct new building	\$ 30,000,000	13.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
<b>Total Building = \$ 428,020,749</b>													
14	Library	Information Technology	AMH: Automatic checkin sorter	Sorter checks material in upon return, places it in ready-to shelve bins by location in the library. Save an additional 730 person-hours/yr in return processing.	\$ 203,850	48.8	Bonding	\$ -	\$ 203,850	\$ -	\$ -	\$ -	\$ -
36	Police	Information Technology	Dispatch Center equipment	All dispatch equipment has met it's life expectancy and must be upgraded	\$ 600,000	40.0	Bonding	\$ -	\$ -	\$ 621,000	\$ -	\$ -	\$ -
192	DPW	Information Technology	Map Scanning Project for Engineering: Phase II	Phased project. Current maps are deteriorating rapidly. A new storage system would allow DPW to store maps after scanning.	\$ 900,000	30.1	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
208	IT	Information Technology	Upgrade to Voice Over IP Phone System	Replace 12 year old phone systems with VOIP (data/voice) capable systems, allowing faster move-add-change and lower hardware costs.	\$ 250,000	28.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Information Technology = \$ 1,953,850</b>													
10	DPW	Large Vehicle/ Equipment	DPW Snow Equipment	Purchase 2 Snow Blowers (which mount to a front end loader) and 2 Bombardier Sidewalk Snow Plows	\$ 600,000	51.1	Bonding	\$ -	\$ 600,000	\$ -	\$ -	\$ -	\$ -
16	Fire Dept	Large Vehicle/ Equipment	Replace Fire Department SCBA Gear	Replace the department Self-Contained Breathing Apparatus (SCBA), purchased in FY 2007.	\$ 500,000	48.0	Bonding	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -
21	Fire Dept	Large Vehicle/ Equipment	Replace Fire Dept Pumper Truck in Newton Corner (Engine 1)	Replace 1999 Pumper Truck exceeding NFPA 15-yr life expectancy; will replace a 1992 spare engine.	\$ 650,000	45.4	Bonding	\$ -	\$ 650,000	\$ -	\$ -	\$ -	\$ -
24	DPW	Large Vehicle/ Equipment	DPW - Replace 1985 Excavator	Replacement of existing city vehicle/ equipment used for street & sidewalk repairs. (#110) Beyond usefull life expectancy.	\$ 280,000	43.8	Bonding	\$ -	\$ 280,000	\$ -	\$ -	\$ -	\$ -
27	Fire Dept	Large Vehicle/ Equipment	Replace Fire Dept Bucket Truck	Replace 1996 F800 with 165K miles on it. Not cost effective to keep it on the road. Safety components are failing, putting personnel at risk.	\$ 225,000	41.8	Bonding	\$ -	\$ 225,000	\$ -	\$ -	\$ -	\$ -
29	DPW/ Sewer	Large Vehicle/ Equipment	Replace 1995 Sewer Jet Truck	Replacement of vehicle/ equipment used to clear out blockages in the sewer system to prevent sewer backups. (#369).	\$ 240,000	41.0	Sewer Fund	\$ -	\$ 240,000	\$ -	\$ -	\$ -	\$ -
49	DPW	Large Vehicle/ Equipment	DPW - Replace Large Construction Trucks	Replace vehicles out of service: Vehicle #101 (1993) and #69 (1983) Required for sanding for snow and for construction work.	\$ 300,000	37.8	Bonding	\$ -	\$ -	\$ 310,500	\$ -	\$ -	\$ -
50	DPW/ Water	Large Vehicle/ Equipment	Replace 2004 Construction Truck	Replacement of existing city vehicle used for construction work on City water mains and for snow removal/sanding operations. Life span of vehicles is 15 yrs (#310).	\$ 130,000	37.8	Water Fund	\$ -	\$ -	\$ 134,550	\$ -	\$ -	\$ -
51	DPW/ Water	Large Vehicle/ Equipment	Replace 2008 Backhoe	Replacement of existing city vehicle/ equipment used in water line repairs and maintenance (#328)	\$ 120,000	37.8	Water Fund	\$ -	\$ -	\$ 124,200	\$ -	\$ -	\$ -
56	DPW	Large Vehicle/ Equipment	DPW - Replace 1997 Backhoe	Replacement of existing city vehicle/ equipment used for street & sidewalk repairs. (#120) at useful life expectancy.	\$ 110,000	37.5	Bonding	\$ -	\$ -	\$ -	\$ 117,835	\$ -	\$ -
57	DPW/ Sewer	Large Vehicle/ Equipment	Replace two Large Construction Vehicles	Replace 2005 vehicles/equipment used to haul materials for trenching/ backfilling for sewer line repairs. Also used for snow plowing (#366 and #367)	\$ 300,000	37.4	Sewer Fund	\$ -	\$ -	\$ -	\$ 321,368	\$ -	\$ -
59	Fire Dept	Large Vehicle/ Equipment	Replace Fire Dept Pumper Truck (Engine 3)	Replace Engine 3, a 2004 Pumper Truck; to be used as spare to replace spare Engine 14, a 1992 pumper that should no longer be used.	\$ 650,000	37.4	Bonding	\$ -	\$ -	\$ -	\$ 696,296	\$ -	\$ -
67	DPW/ Water	Large Vehicle/ Equipment	Replace Construction Truck	Replacement of existing city vehicle used for construction work on City water mains and for snow removal/sanding operations. Life span of vehicles is 15 yrs	\$ 130,000	37.1	Water Fund	\$ -	\$ -	\$ -	\$ 139,259	\$ -	\$ -
68	DPW	Large Vehicle/ Equipment	DPW - Replace 1994 Packer Trash Collection Vehicle	Replacement of existing city vehicle/ equipment used for collecting trash/recycling in Parks & Village Centers. (#52)	\$ 150,000	37.1	Bonding	\$ -	\$ -	\$ -	\$ 160,684	\$ -	\$ -
78	DPW	Large Vehicle/ Equipment	DPW - Replace 1998 Front End Loader	Replacement of existing city vehicle/ equipment used to load materials for street & sidewalk repairs. (#104)	\$ 160,000	36.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 183,604
79	Fire Dept	Large Vehicle/ Equipment	Replace Fire Dept Aerial Ladder #3	Replace Ladder 3. 15 years old. Ladder 3 becomes a spare, replacing spare Ladder 4.	\$ 1,000,000	36.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,147,523
86	Fire Dept	Large Vehicle/ Equipment	Replace Fire Pumper Truck (Engine 7)	Replace Engine 7 pumper truck. Engine 7 will become a spare.	\$ 600,000	36.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
122	Fire Dept	Large Vehicle/ Equipment	Replace Fire Dept Aerial Ladder #2	Replace Ladder 2. 15 years old. Maxed out on life expectancy; to be used as spare to replace Spare Ladder 5 a 1985 ladder to be taken out of service.	\$ 1,000,000	34.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
129	Parks/Rec	Large Vehicle/ Equipment	Tree Crew Log Loader	Current equipment has been in service since 2006. Essential for emergency response and hazardous tree removal.	\$ 240,000	34.1	Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
132	DPW	Large Vehicle/ Equipment	DPW - Replace Street Sweeper	Replacement of vehicle taken out of service: Vehicle #148. Dept will not have minimum (6 ea) needed for 4 sweeps/yr efficiently.	\$ 172,000	33.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
143	DPW	Large Vehicle/ Equipment	DPW - Replace 1984 Do All Large Construction Truck	Replacement of existing city vehicle/ equipment used for street & sidewalk construction and snow removal operations. (#87)	\$ 150,000	33.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
173	Parks/Rec	Large Vehicle/ Equipment	Replace Parks Dump Truck (replace 1998 truck #430)	Replacement of vehicle that is used daily for maintenance operations that exceeded its useful life span.	\$ 75,000	31.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
191	DPW	Large Vehicle/ Equipment	DPW - Replace Street Sweeper	Replacement of vehicle taken out of service: Vehicle #148. Dept will not have minimum (6 ea) needed for 4 sweeps/yr efficiently.	\$ 172,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
247	DPW	Large Vehicle/ Equipment	Wash Bay Refurbishment	Refurbish Crafts Street vehicle wash bay with automated vehicle wash system, including capture/recycle wash water.	\$ 500,000	12.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**Total Large Vehicle/Equipment = \$ 8,454,000**

8	Parks/Rec	Parks / Open Space	Newton North Baseball Field - New Backstop and Nets	New Backstop and Netting to reduce the number of baseballs hit into neighboring properties.	\$ 320,000	54.3	Bonding	\$ -	\$ 320,000	\$ -	\$ -	\$ -	\$ -
11	Parks/Rec	Parks / Open Space	Replace Newton South High School Tennis Courts	Replace 12 existing courts at this location.	\$ 800,000	50.4	Bonding	\$ -	\$ 800,000	\$ -	\$ -	\$ -	\$ -
45	Parks/Rec	Parks / Open Space	Replace McGrath Playground (Warren) Tennis Courts, and Burr Park	Replace 4 existing tennis courts at McGrath Playground (Warren).	\$ 500,000	38.6	Bonding	\$ -	\$ -	\$ 517,500	\$ -	\$ -	\$ -
53	Parks/Rec	Parks / Open Space	Newton Highlands Playgrnd - Ph I Design & Construction	Phase I of 2008 Master Plan for park renovation. Addresses drainage problems & builds new ball fields and courts. Highly used park. CPA Approved for \$200,000	\$ 2,029,384	37.6	CPA Eligible	\$ 200,000	\$ -	\$ -	\$ 1,959,682	\$ -	\$ -
58	Parks/Rec	Parks / Open Space	Oak Hill Drainage	Review Drainage at the site, repair fields	\$ 1,000,000	37.4	Bonding	\$ -	\$ -	\$ -	\$ 1,071,225	\$ -	\$ -
72	Parks/Rec	Parks / Open Space	Forte Park Field Lights	Replace sports lighting at Forte Park	\$ 200,000	36.9	CDBG/Bonding	\$ -	\$ -	\$ -	\$ -	\$ 221,744	\$ -
136	Parks/Rec	Parks / Open Space	Newton Highlands Playground - Phase II Design & Construction	2008 Master Plan for park renovation in 2 phases. Ph II will complete the fields to provide tennis courts and football field.	\$ 1,925,000	33.6	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
158	Parks/Rec	Parks / Open Space	Newton Upper Falls/ Braceland Playground - Design & Construction	Master Plan for park renovation - Construction will include new athletic fields, new play structure and sitework and improvements.	\$ 1,675,000	32.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
202	Parks/Rec	Parks / Open Space	Pellegrini Field Lights	Replace sports lighting at Pellegrini	\$ 100,000	29.1	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
204	Jackson Homestead	Parks / Open Space	Restoration of Historic East Burying Grounds	Preservation of Remaining 24 Tombs in two of the three burying grounds. Priority to East, then West Parish sites. Safety Concern.	\$ 148,135	28.7	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
236	Parks/Rec	Parks / Open Space	City Hall and War Memorial Historic Landscape Preservation Project	Restoration and preservation of City Hall grounds Historic Landscape	\$ 1,500,000	23.4	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
238	Jackson Homestead	Parks / Open Space	Restoration of Historic West Burying Grounds	Preservation of Remaining 24 Tombs in two of the three burying grounds. Safety concern for visitors.	\$ 146,000	23.0	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
243	Jackson Homestead	Parks / Open Space	Repair/Replace Fencing at Historic Burying Grounds	Restoration of Fences at all 3 burying grounds	\$ 406,600	17.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
244	Parks/Rec	Parks / Open Space	Levingston Cove	Repair walkways, add rain gardens, remediate erosion, replace amenities.. %0% of cost will be funded by stormwater.	\$ 200,000	15.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**Total Parks/Open Space = \$ 10,950,119**

9	DPW	Roads/ Paving	City-Wide Traffic Signalization Upgrades	Improve upon safety, improved traffic flow, reduce congestion, meet ADA Compliance	\$ 3,495,000	54.2	Bonding/Free Cash	\$ -	\$ 1,500,000	\$ 646,875	\$ 396,353	\$ 554,359	\$ 573,762
20	DPW	Roads/ Paving	Street Paving - Cold Plane and Pave Streets	Watertown, Walnut, Washington, Chestnut, Lincoln, Linwood, Aspen, Hawthorne, Longfellow	\$ 4,000,000	45.6	Chapt 90/ Alt Fund	\$ -	\$ 4,000,000	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
26	DPW	Roads/ Paving	Replace Gath/Albemarle Foot Bridge	Footbridge structure (steel and abutment) is in poor condition and is not wheelchair accessible.	\$ 150,000	42.3	CDBG Eligible	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
28	DPW	Roads/ Paving	Sidewalk Improvements	Improve pedestrian safety. Repair/replacement of sidewalks in poor condition and new sidewalks in village centers, school zones, on major roads.	\$ 750,000	41.4	Chapt 90/ Alt Fund	\$ -	\$ 150,000	\$ 155,250	\$ 160,684	\$ 166,308	\$ 172,128
30	DPW	Roads/ Paving	Walnut Street (Homer Street to Route 9) Final Design	Eliminate deteriorated roadway condition and enhance public safety. Arterial minor. Federal funds for constr only. Design funded by City.	\$ 250,000	40.9	Chapt 90/ Alt Fund	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -
31	DPW	Roads/ Paving	Parking Meters	Upgrade city parking meters to accept credit cards and smart-phone payments	\$ 1,350,000	40.6	Bonding	\$ -	\$ -	\$ 879,750	\$ 535,613	\$ -	\$ -
39	DPW	Roads/ Paving	Street Paving - Cold Plane and Pave Streets	Streets include Watertown, Ward, Church, Richardson, Vernon, Eldridge, Elmwood, Braeland, Marshall, Audubon, Pond Brook.	\$ 3,100,000	39.6	Chapt 90/ Alt Fund	\$ -	\$ -	\$ 3,208,500	\$ -	\$ -	\$ -
47	DPW	Roads/ Paving	Elliot St. Bridge	Reconstruct bridge in collaborative effort with the Town of Needham	\$ 2,000,000	38.3	Bonding	\$ -	\$ -	\$ 2,070,000	\$ -	\$ -	\$ -
52	DPW	Roads/ Paving	Street Paving - Cold Plane and Pave Streets	Lowell, Dedham, Highland, Albemarle, Fuller, Vine, Pembroke, Marlboro, Arlington, Bishopsgate, Prince, Allertown	\$ 2,900,000	37.7	Chapt 90/ Alt Fund	\$ -	\$ -	\$ -	\$ 3,427,920	\$ -	\$ -
69	DPW	Roads/ Paving	Street Paving - Cold Plane and Pave Streets	Streets Include Washington, Cherry, California, Albemarle, Warwick, High, Woodcliff, Langdon.	\$ 2,900,000	37.0	Chapt 90/ Alt Fund	\$ -	\$ -	\$ -	\$ -	\$ 3,215,282	\$ -
81	DPW	Roads/ Paving	Street Paving - Cold plane and pave streets	Streets Include Centre, Nevada, Prescott, Winchester, Auburn	\$ 3,200,000	36.4	Chapt 90/ Alt Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,672,074
99	Schools	Roads/ Paving	Burr School - Sitework Sidewalk Ramp Repairs	Front stair railing collapsing; catch basin at entrance plaza, parking area, make accessible route	\$ 280,000	35.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
137	DPW	Roads/ Paving	Salt Brine System (storage & mixing tanks, and associated pumps & piping systems)	This material will stay in place on the road surface and help prevent the formation of ice on the street once snow begins to fall, making them safer to travel on, as well as more effectively plowed with accumulating snow falls.	\$ 150,000	33.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
141	DPW	Roads/ Paving	Commonwealth Avenue (Route 128 to Washington Street) - Preliminary and Final Design	Eliminate deteriorated roadway condition, improve public safety and restore Comm Ave to previous boulevard status. Arterial minor.	\$ 500,000	33.6	Chapt 90/ Alt Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
142	DPW	Roads/ Paving	Washington Street (Commonwealth Avenue to Centre Street) - Preliminary and Final Design	Eliminate deteriorated roadway condition and improve public safety. Arterial minor. Federal funds for constr only. Design funded by City.	\$ 500,000	33.6	Chapt 90/ Alt Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
235	Schools	Roads/ Paving	Schools - Repave Parking Areas	Repave parking areas and sidewalks in poor condition at Ward, Brown, Underwood, Mason Rice, Oak Hill, Williams, Zervas and Peirce.	\$ 400,000	23.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**Total Roads/Paving = \$ 25,925,000**

4	DPW/ Sewer	Sewer	Sewer Inflow /Infiltration Project - Project Area 3&4 - Chestnut Hill Area, Newton Center	Part of 12 yr \$49.1 M program to remove excess inflow and infiltration into sewer system. Design (FY15) and construction (FY16) for Chestnut Hill area.	\$ 8,421,000	60.6	Sewer Fund	\$ 621,000	\$ 7,800,000	\$ -	\$ -	\$ -	\$ -
23	DPW/ Sewer	Sewer	Sewer Inflow /Infiltration Project - Area 5	Part of 12 yr \$49.1 M program to remove excess inflow and infiltration into sewer system. Design (FY16) and constr (FY17) for Newton Centre, Newtonville, Chestnut Hill	\$ 3,877,000	44.3	Sewer Fund	\$ -	\$ 777,000	\$ 3,208,500	\$ -	\$ -	\$ -
25	DPW/ Sewer	Sewer	Prairie Avenue Sewer Pump Station	Station built 1950, rehabbed in 1992. Contains 2 (5 hp) pumps. Replace wet well.	\$ 110,000	43.7	Sewer Fund	\$ -	\$ 110,000	\$ -	\$ -	\$ -	\$ -
35	DPW/ Sewer	Sewer	Sewer inflow /Infiltration Project - Area 6	Part of 12 yr \$49M program to remove excess inflow and infiltration into sewer system. Design (FY17) and constr (FY18) for Newton Centre, Newtonville, Chestnut Hill, Nonantum	\$ 4,600,000	40.2	Sewer Fund	\$ -	\$ -	\$ 621,000	\$ 4,284,900	\$ -	\$ -
44	DPW/ Sewer	Sewer	Quinobequin Road Sewer Pump Station - Replace Pump	Sewerage pumped to higher point and gravity fed to MWRA pipes for treatment. Replace pump 1 and motors at life expectancy.	\$ 420,000	38.9	Sewer Fund	\$ -	\$ -	\$ 155,250	\$ 160,684	\$ -	\$ -
54	DPW/ Sewer	Sewer	Hamlet Street Sewer Pump Station - Replace Pumps	Sewerage is pumped to a higher point and gravity fed to MWRA pipes for treatment. Replace pumps and motors.	\$ 100,000	37.6	Sewer Fund	\$ -	\$ -	\$ -	\$ 107,123	\$ -	\$ -
65	DPW/ Sewer	Sewer	Sewer inflow /Infiltration Project - Area 7	Part of 12 yr \$49.1 M program to remove excess inflow and infiltration into sewer system. Design (FY18) and constr (FY19) for Upper Falls, Highlands, and Thompsonville	\$ 4,600,000	37.2	Sewer Fund	\$ -	\$ -	\$ -	\$ 642,735	\$ 4,434,872	\$ -
73	DPW	Sewer	Sewer Inflow/Infiltration Project - Area 8	Part of 10 Yr \$49.1 M program to remove excess inflow and infiltration into sewer system. Desing (FY19) and construction (FY20) for Upper Falls, Highlands, Thompsonville, and Oak Hill	\$ 4,600,000	36.9	Sewer Fund	\$ -	\$ -	\$ -	\$ -	\$ 665,231	\$ 4,590,092

Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020	
85	DPW	Sewer	Sewer Inflow/Infiltration Project - Area 9	Part of 10 Yr \$49.1 M program to remove excess inflow and infiltration into sewer system. Desing (FY20) and construction (FY21) for Waban, Upper Falls, Oak Hill	\$ 4,600,000	36.0	Sewer Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 688,514	
<b>Total Sewer = \$ 31,328,000</b>														
12	DPW/ Storm	Storm	Project Meadow Brook at Dedham Street - Design and Construction	Improvements to the drainage system on Dedham Street. Improve capture of run-off and increase capacity of drainage system to reduce flooding on properties on Dedham Street, Bound Brook Road & Heatherland Road during rain events.	\$ 450,000	50.0	Stormwater Fund	\$ -	\$ 450,000	\$ -	\$ -	\$ -	\$ -	
43	DPW/ Storm	Storm	Repair Hammond St Drain	Storm drain pipe has partially collapsed and requires repair to prevent flooding.	\$ 200,000	39.2	Stormwater Fund	\$ -	\$ -	\$ 207,000	\$ -	\$ -	\$ -	
48	DPW/ Storm	Storm	Laundry Brook Culvert Repairs	Repair of culverts along Laundry Brook to prevent flooding.	\$ 643,000	38.0	Stormwater Fund	\$ -	\$ -	\$ 665,505	\$ -	\$ -	\$ -	
64	DPW/ Storm	Storm	Cheesecake Brook Drainage Basin: Repair and Rebuild Retaining Wall	Wall integrity is jeopardized. Project to minimize property damage due to flooding from heavy rains and compromised conveyance systems. Phase I is survey.	\$ 175,000	37.3	Stormwater Fund	\$ -	\$ -	\$ -	\$ 187,464	\$ -	\$ -	
66	DPW/ Storm	Storm	Pellegrini Park Drain Replacement	Replace existing pipe which has settled and is causing flooding.	\$ 130,000	37.1	Stormwater Fund	\$ -	\$ -	\$ -	\$ 139,259	\$ -	\$ -	
75	DPW/ Storm	Storm	Rehabilitation of Forest Grove Storm System Pump Station	Pump station is used for flood and mosquito control of Flowed Meadow and needs upgrades and repair work to function properly.	\$ 150,000	36.8	Stormwater Fund	\$ -	\$ -	\$ -	\$ -	\$ 166,308	\$ -	
230	DPW/ Storm	Storm	Bullough's Pond Sediment Removal	Remove built up sediment in Bullough's Pond, including DEP approved disposal material.	\$ 500,000	24.2	Stormwater Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
231	DPW/ Storm	Storm	Repair Bulloughs Pond Sluice Gate	Repair poorly functioning gate valve used to regulate water storage capacity in City Hall ponds for stormwater.	\$ 60,000	24.1	Stormwater Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Total Storm = \$ 2,308,000</b>														
22	DPW/ Water	Water	Clean and Line Water Pipes to Improve Water Quality	Cleaning and lining of water pipes to improve water quality, ensure pipe integrity and capacity. Precedes scheduled roadway paving.	\$ 4,321,500	45.1	Water Fund	\$ -	\$ 4,321,500	\$ -	\$ -	\$ -	\$ -	
33	DPW/ Water	Water	Clean and Line Water Pipes to Improve Water Quality	Cleaning and lining of water pipes to improve water quality, ensure pipe integrity and capacity. Precedes scheduled roadway paving.	\$ 4,018,000	40.2	Water Fund	\$ -	\$ -	\$ 4,158,630	\$ -	\$ -	\$ -	
61	DPW/ Water	Water	Clean and Line Water Pipes to Improve Water Quality	Cleaning and lining of water pipes to improve water quality, ensure pipe integrity and capacity. Precedes scheduled roadway paving.	\$ 4,074,600	37.3	Water Fund	\$ -	\$ -	\$ -	\$ 4,364,813	\$ -	\$ -	
77	DPW/ Water	Water	Clean and Line Water Pipes to Improve Water Quality	Cleaning and lining of water pipes to improve water quality, ensure pipe integrity and capacity. Precedes scheduled roadway paving.	\$ 4,074,600	36.7	Water Fund	\$ -	\$ -	\$ -	\$ -	\$ 4,517,582	\$ -	
80	DPW	Water	Clean and Line Water Pipes to Improve Water Quality	Cleaning and lining of water pipes to improve water quality, ensure pipe integrity and capacity. Precedes scheduled roadway paving.	\$ 4,000,000	36.5	Water Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,590,092	
92	DPW/ Water	Water	Needham Street - Clean and Line Water Main - Oak to Charlemont	Deferred. Cleaning and lining 760 LF of 8" water main, 1880. This precedes upcoming TIP funded road reconstruction project.	\$ 136,800	35.7	Water Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
94	DPW/ Water	Water	Wolcott St - Replace Water Main at Wolcott St - Webster to Ionia	Deferred due to paving. Replace 1,150 LF of 6" water main with 8", 1905. This precedes scheduled roadway paving.	\$ 230,000	35.6	Water Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
107	DPW/ Water	Water	Webster St. - Clean and Line Water Main on Webster St	Deferred due to paving. Waltham to Wolcott (FY14). Cleaning and lining 3,150 LF of 8" water main, 1932. This precedes scheduled roadway paving.	\$ 759,000	35.1	Water Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
184	DPW/ Water	Water	Hillside Ave - Otis to Austin	Deferred. Replace 1048 LF of 6" water main with 8", 1877. This precedes scheduled roadway paving.	\$ 209,600	30.2	Water Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
									0					
<b>Total Water = \$ 21,824,100</b>														
								\$24,736,000	\$78,077,350	\$63,842,940	\$48,984,080	\$42,629,759	\$27,033,347	

FY 2016-2020 by Funding Source							ESCALATED COSTS (Costs in FY2016-2020 are escalated 3.5% a year)					
							Total	Total	Total	Total	Total	Total
Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
				\$ 24,736,000			\$ 78,077,350	\$ 63,842,940	\$ 48,984,080	\$ 42,629,759	\$ 27,033,347	
91	Schools	Countryside School - Mid-Range Renovation/Addition	Feasibility Study/Design and Construction at campus	\$ 15,000,000	35.8	Alternate Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
74	Parks/Rec	Community Center / Gath Pool - New Swim Facility Design and Construction	Build new Community Center structure with Olympic sized pool facility	\$ 20,000,000	36.8	Alternative Funding	\$ -	\$ -	\$ -	\$ -	\$ 554,359	\$ 1,147,523
<b>Total Alternative Funding = \$ 35,000,000</b>												
1	Public Buildings	City Hall - New Elevator and Accessibility Improvements	New Elevator for the War Memorial	\$ 1,140,000	66.7	Bonding	\$ 1,140,000	\$ -	\$ -	\$ -	\$ -	\$ -
7	Fire Dept	Fire Station #3 & HQs - Renovate/Replace Newton Centre Station	Station #3 needs major repairs/upgrades. Co-located w/ Fire HQs. Upgrade systems for code compliance, access & female firefighters.	\$ 18,500,000	55.1	Bonding	\$ 750,000	\$ 8,000,000	\$ 5,175,000	\$ 5,088,319	\$ -	\$ -
8	Parks/Rec	Newton North Baseball Field - New Backstop and Nets	New Backstop and Netting to reduce the number of baseballs hit into neighboring properties.	\$ 320,000	54.3	Bonding	\$ -	\$ 320,000	\$ -	\$ -	\$ -	\$ -
10	DPW	DPW Snow Equipment	Purchase 2 Snow Blowers (which mount to a front end loader) and 2 Bombardier Sidewalk Snow Plows	\$ 600,000	51.1	Bonding	\$ -	\$ 600,000	\$ -	\$ -	\$ -	\$ -
11	Parks/Rec	Replace Newton South High School Tennis Courts	Replace 12 existing courts at this location.	\$ 800,000	50.4	Bonding	\$ -	\$ 800,000	\$ -	\$ -	\$ -	\$ -
14	Library	AMH: Automatic checkin sorter	Sorter checks material in upon return, places it in ready-to-shelve bins by location in the library. Save an additional 730 person-hours/yr in return processing.	\$ 203,850	48.8	Bonding	\$ -	\$ 203,850	\$ -	\$ -	\$ -	\$ -
15	Public Buildings	Manet Road Communications Building	Replace Emergency Communications Building at Manet Road	\$ 600,000	48.4	Bonding	\$ -	\$ 600,000	\$ -	\$ -	\$ -	\$ -
16	Fire Dept	Replace Fire Department SCBA Gear	Replace the department Self-Contained Breathing Apparatus (SCBA), purchased in FY 2007.	\$ 500,000	48.0	Bonding	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -
17	Library	Newton Free Library - Mechanical Upgrades	Interior air handler replacement, replace chiller controls, repair/restore ice tank system.	\$ 1,000,000	47.9	Bonding	\$ -	\$ 250,000	\$ 517,500	\$ 267,806	\$ -	\$ -
18	Public Buildings	City Hall Improvements - Heat Tape	Use Heat Tape to prevent ice Dams from forming during the winter.	\$ 150,000	47.7	Bonding	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
21	Fire Dept	Replace Fire Dept Pumper Truck in Newton Corner (Engine 1)	Replace 1999 Pumper Truck exceeding NFPA 15-yr life expectancy; will replace a 1992 spare engine.	\$ 650,000	45.4	Bonding	\$ -	\$ 650,000	\$ -	\$ -	\$ -	\$ -
24	DPW	DPW - Replace 1985 Excavator	Replacement of existing city vehicle/ equipment used for street & sidewalk repairs. (#110) Beyond usefull life expectancy.	\$ 280,000	43.8	Bonding	\$ -	\$ 280,000	\$ -	\$ -	\$ -	\$ -
27	Fire Dept	Replace Fire Dept Bucket Truck	Replace 1996 F800 with 165K miles on it. Not cost effective to keep it on the road. Safety components are failing, putting personnel at risk.	\$ 225,000	41.8	Bonding	\$ -	\$ 225,000	\$ -	\$ -	\$ -	\$ -
31	DPW	Parking Meters	Upgrade city parking meters to accept credit cards and smart-phone payments	\$ 1,350,000	40.6	Bonding	\$ -	\$ -	\$ 879,750	\$ 535,613	\$ -	\$ -
32	Schools	Ed Center Staircase and Accessibility Upgrades	Upgrade elevator, door hardware, and signage for accessibility. Upgrade staircase on the Craft St. Entrance	\$ 530,179	40.3	Bonding	\$ -	\$ -	\$ 155,250	\$ 407,257	\$ -	\$ -
34	Public Buildings / Sustainability	City Hall - Mechanical Upgrades	Replace condensing units. Replace and insulate ductwork and replace fans. Add mini-split A/C units in conjunction with window restoration /replacement.	\$ 500,000	40.2	Bonding	\$ -	\$ -	\$ 258,750	\$ 267,806	\$ -	\$ -
36	Police	Dispatch Center equipment	All dispatch equipment has met it's life expectancy and must be upgraded	\$ 600,000	40.0	Bonding	\$ -	\$ -	\$ 621,000	\$ -	\$ -	\$ -
37	Schools	Bigelow School - Mechanical Upgrades	Two boilers are 54 years old and beyond their useful life. Replace one boiler, storage, and enhance circulation system.	\$ 450,000	39.9	Bonding	\$ -	\$ -	\$ 465,750	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
38	Schools	Newton South High School - Mechanical Upgrades - Library	Replace air handlers and roof top equipment, replace hydronic/ACCU system due to burner failures and outdated controls.	\$ 300,000	39.9	Bonding	\$ -	\$ -	\$ 310,500	\$ -	\$ -	\$ -
40	Schools	FA Day School - Replace Boilers	Replace two 60 year old boilers and variable air volume (VAV) coil work.	\$ 500,000	39.6	Bonding	\$ -	\$ -	\$ 517,500	\$ -	\$ -	\$ -
41	Police	Police Headquarters - Mechanical Upgrades	Replace Roof Top Mechanical equipment that is beyond its useful life. Currently requires a lot of maintenance and service calls.	\$ 300,000	39.5	Bonding	\$ -	\$ -	\$ 310,500	\$ -	\$ -	\$ -
42	Fire Dept	Fire Station #2, West Newton - Replace Emergency Generator	Replace emergency generator which is at the end of it useful life.	\$ 163,000	39.3	Bonding	\$ -	\$ -	\$ 168,705	\$ -	\$ -	\$ -
45	Parks/Rec	Replace McGrath Playground (Warren) Tennis Courts, and Burr Park	Replace 4 existing tennis courts at McGrath Playground (Warren).	\$ 500,000	38.6	Bonding	\$ -	\$ -	\$ 517,500	\$ -	\$ -	\$ -
46	Fire Dept	Fire Station #1 and #2, Newton Corner - Replace Windows & Doors & Repair Masonry	Remove existing windows and replace w/energy efficient insulated units(64ea). Repair and repoint exterior masonry to preserve building envelope.	\$ 800,000	38.3	Bonding	\$ -	\$ -	\$ 414,000	\$ 428,490	\$ -	\$ -
47	DPW	Elliot St. Bridge	Reconstruct bridge in collaborative effort with the Town of Needham	\$ 2,000,000	38.3	Bonding	\$ -	\$ -	\$ 2,070,000	\$ -	\$ -	\$ -
49	DPW	DPW - Replace Large Construction Trucks	Replace vehicles out of service: Vehicle #101 (1993) and #69 (1983) Required for sanding for snow and for construction work.	\$ 300,000	37.8	Bonding	\$ -	\$ -	\$ 310,500	\$ -	\$ -	\$ -
56	DPW	DPW - Replace 1997 Backhoe	Replacement of existing city vehicle/ equipment used for street & sidewalk repairs. (#120) at useful life expectancy.	\$ 110,000	37.5	Bonding	\$ -	\$ -	\$ -	\$ 117,835	\$ -	\$ -
58	Parks/Rec	Oak Hill Drainage	Review Drainage at the site, repair fields	\$ 1,000,000	37.4	Bonding	\$ -	\$ -	\$ -	\$ 1,071,225	\$ -	\$ -
59	Fire Dept	Replace Fire Dept Pumper Truck (Engine 3)	Replace Engine 3, a 2004 Pumper Truck; to be used as spare to replace spare Engine 14, a 1992 pumper that should no longer be used.	\$ 650,000	37.4	Bonding	\$ -	\$ -	\$ -	\$ 696,296	\$ -	\$ -
60	Public Buildings	City Hall - Roof Repair/Replacement	Install new membrane roof on flat roofs. Repair/replace gutters on balcony roofs. Replace metal roofing/flushing as req'd.	\$ 300,000	37.3	Bonding	\$ -	\$ -	\$ -	\$ 321,368	\$ -	\$ -
62	Schools	Newton South High School - Fire Alarm Upgrades	Upgrade fire alarm system to be fully addressable.	\$ 150,000	37.3	Bonding	\$ -	\$ -	\$ -	\$ 160,684	\$ -	\$ -
68	DPW	DPW - Replace 1994 Packer Trash Collection Vehicle	Replacement of existing city vehicle/ equipment used for collecting trash/recycling in Parks & Village Centers. (#52)	\$ 150,000	37.1	Bonding	\$ -	\$ -	\$ -	\$ 160,684	\$ -	\$ -
70	Public Buildings	City Hall - Electrical Upgrades	Replace emergency generator and electrical upgrades.	\$ 225,000	37.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ 249,462	\$ -
71	Public Buildings	City Hall -Fire Alarm Upgrades	Plan installation of sprinkler system and addressable fire alarm upgrades in City Hall in conjunction with other building upgrades.	\$ 150,000	36.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ 166,308	\$ -
78	DPW	DPW - Replace 1998 Front End Loader	Replacement of existing city vehicle/ equipment used to load materials for street & sidewalk repairs. (#104)	\$ 160,000	36.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 183,604
79	Fire Dept	Replace Fire Dept Aerial Ladder #3	Replace Ladder 3. 15 years old. Ladder 3 becomes a spare, replacing spare Ladder 4.	\$ 1,000,000	36.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,147,523
82	Schools	Bowen School - Roof Replacement	Replace of 1950's portion of the building's roofing system as it has reached its life expectancy.	\$ 180,000	36.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 206,554
83	Schools	Mason Rice School - Electrical Upgrades	Replace emergency generator, electrical panels and sub-panels.	\$ 325,000	36.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 372,945
86	Fire Dept	Replace Fire Pumper Truck (Engine 7)	Replace Engine 7 pumper truck. Engine 7 will become a spare.	\$ 600,000	36.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
87	Schools	Mason Rice School - Replace Roof	Replace the 1990's Sarnifli roofing system on the main portion of the building. Existing roof has reached its life expectancy.	\$ 580,000	35.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
88	Schools	Bigelow School - Roof Replacement	Replace entire building roof system. Roof is beyond its useful life.	\$ 750,000	35.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
89	Schools	Burr School - Replace Roof	Replace the total building roofing system installed in the 1980's.	\$ 450,000	35.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
95	Schools	Mason Rice School - Mechanical Upgrades	Direct Digital Controls conversion and upgrade heating distribution system.	\$ 450,000	35.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
96	DPW	Elliot St. Garage - Electrical Upgrades	Upgrade / replace egress lighting and exit signage per code. Upgrade audible fire alarm and strobes to ADA compliance. Replace receptacles, conduit, electric panels.	\$ 192,000	35.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
97	Schools	Bowen School - Mechanical Upgrades	Replace interior air handlers in first year. Direct Digital Controls conversion.	\$ 325,000	35.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
99	Schools	Burr School - Sitework Sidewalk Ramp Repairs	Front stair railing collapsing; catch basin at entrance plaza, parking area, make accessible route	\$ 280,000	35.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
100	Schools	Bigelow School - Replace Windows and Doors	Replace aging windows and exterior doors to improve comfort, operation, and energy efficiency.	\$ 400,000	35.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
101	Schools	Underwood School - Accessibility Upgrades	Accessibility upgrades including compliant door hardware, Toilets, and Elevator	\$ 415,000	35.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
102	DPW	Elliot St. Operations Building - Building Envelope	Repair foundation walls and rebuild ramp foundation walls. Repair/replace areaway retaining wall. Repair cracks; repoint mortar joints.	\$ 123,000	35.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
103	Schools	Memorial Spaulding School - Mechanical Upgrades	Replace controls, air handlers. Replace 2nd boiler, hot water conversion, and Direct Digital Controls conversion.	\$ 750,000	35.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
104	Schools	Underwood School - Replace Roof	Replace whole building roof in 2 phases.	\$ 450,000	35.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
105	Schools	Oak Hill School - Mechanical Upgrades - Roof Top Units and Distribution System	Replace Roof top air handling units and distribution system	\$ 250,000	35.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
108	Parks/Rec	Emerson Community Center - Accessibility Upgrades	Upgrade toilet rooms, install accessible door hardware and drinking fountains; Resurface main entrance ramp and install handrails.	\$ 209,000	35.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
109	Schools	Williams School - Mechanical Upgrades	Replace Air handlers. Direct Digital Controls conversion for HVAC system.	\$ 200,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
110	Schools	Underwood School - Mechanical Upgrades	Upgrade Distribution system, controls, and remove underground tank.	\$ 525,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
111	Public Buildings	City Hall - Repair Front stone entry stairs	Repair and repoint stone cornice. Rebuild/reset main entry stairs and install code-compliant railings.	\$ 324,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
112	Schools	Countryside School - Mechanical Upgrades	Replace RTUs at Annex, Direct Digital Control conversion	\$ 250,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
113	Schools	Ward School - Mechanical Upgrades	Replace second boiler and steam trap work.	\$ 300,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
114	Schools	Bigelow School - Mechanical Upgrades	Replace 2nd boiler (54 yrs old) and associated equipment, distribution, univents and full DDC system.	\$ 960,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
115	Police	Police Annex - Mechanical Upgrades	Replace baseboard heaters in bathrooms. Provide proper ventilation/exhaust in locker rooms and bathrooms. Replace boiler with new high efficiency gas-fired boiler.	\$ 170,000	34.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
116	DPW	Elliot Street Sand_Salt Shed - Structural and Envelope Repairs	Replace wood truss members. Add brace supports at ends to prevent walls from buckling. Repair wood buttresses and extend push wall 10' higher to keep weight of salt off exterior wall.	\$ 142,000	34.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
117	Library	Library Short-Term Needs	A new computer classroom, a Creation Center Better Teen space integrated into a Youth Services Department. Address dangerously worn carpet areas, entry door operation, front plaza leveling, and restroom upgrades.	\$ 1,500,000	34.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
118	Public Buildings / Sustainability	Nonantum Library-Mechanical	Replace baseboard heating on first floor. Provide pipe insulation. Replace air handling unit in basement with new controls.	\$ 205,000	34.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
119	Fire Dept	Fire Station #1 (Newton Corner) - Renovation	5th station of 7 buildings to be renovated. Work includes building envelope, interior finishes, mechanical, electrical, plumbing, life/safety, ADA upgrades.	\$ 7,230,000	34.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
120	Schools	Lincoln Eliot School - Mechanical Upgrades	Hot water conversion w/renovation, 2nd boiler and distribution system.	\$ 525,000	34.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
121	Public Buildings / Sustainability	Waban Library-Electrical	Replace electrical panel. Replace exterior lighting to improve safety. Replace main electric service and wiring. Upgrade lighting to improve energy efficiency.	\$ 108,000	34.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
122	Fire Dept	Replace Fire Dept Aerial Ladder #2	Replace Ladder 2. 15 years old. Maxed out on life expectancy, to be used as spare to replace Spare Ladder 5 a 1985 ladder to be taken out of service.	\$ 1,000,000	34.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
124	Fire Dept	Fire Station #2 (West Newton) - Repair Building Envelope	Address structural crack in CMU wall first. Repoint/ repair exterior masonry.	\$ 166,000	34.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
125	Parks/Rec	Pelligrini Park Field House - Replace Roof	Replace lower roofing membrane, gutters and downspouts. Replace upper Gym membrane roof with a new EPDM roof.	\$ 100,000	34.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
127	Schools	Bowen School - Electrical Upgrades	Replace electrical panels and sub-panels in original buildings.	\$ 75,000	34.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
128	Public Buildings / Sustainability	Nonantum Library-Electrical	Upgrade interior lighting and power distribution. Replace electrical panel and main electrical service.	\$ 101,637	34.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
130	Public Buildings	Kennard Estate - Replace Septic System	Connect to City Sewer Infrastructure.	\$ 100,000	34.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
131	Schools	Horace Mann School - Accessibility Upgrades	Installation of new elevator	\$ 220,000	33.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
132	DPW	DPW - Replace Street Sweeper	Replacement of vehicle taken out of service: Vehicle #148. Dept will not have minimum (5 ea) needed for 4 sweeps/yr efficiently.	\$ 172,000	33.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
137	DPW	Salt Brine System (storage & mixing tanks, and associated pumps & piping systems)	This material will stay in place on the road surface and help prevent the formation of ice on the street once snow begins to fall, making them safer to travel on, as well as	\$ 150,000	33.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
138	DPW	Elliot St. Garage - New Windows and Doors and Envelope Repairs	Replace metal windows and security screens. Remove and replace overhead doors with new insulated overhead doors. Repair exterior brick and at steel window lintels.	\$ 103,000	33.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
139	Schools	Ward School - Electrical Upgrades	Upgrade electrical panels and distribution system.	\$ 210,000	33.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
140	Parks/Rec	Emerson Community Center - Electrical Upgrades	Replace switchboard and increase service size to meet electrical demands. Replace original overloaded electrical panels. Install emergency audiovisual horn strobes.	\$ 108,000	33.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
143	DPW	DPW - Replace 1984 Do All Large Construction Truck	Replacement of existing city vehicle/ equipment used for street & sidewalk construction and snow removal operations. (#87)	\$ 150,000	33.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
144	Fire Dept	Fire Station #2, West Newton - Renovation	6th station of 7 buildings to be renovated. Work includes mechanical, electrical, plumbing, code compliance and accessibility upgrades.	\$ 7,700,000	33.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
145	DPW	Elliot St. Operations Building - Roof Repair/ Replacement	Remove and replace corrugated fiberglass roof. Repair/ replace existing slate roof and add ice shield to prevent ice damming and icicle build-up. Repair/replace gutters.	\$ 235,000	33.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
146	Police	Police Garage - Mechanical Upgrades	Replace ceiling hung unit heaters. Provide bathroom exhaust fan and split air conditioning system. Remove abandoned steam piping to prevent possibility of freezing.	\$ 164,000	33.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
147	Schools	Williams School - Mid-Range Renovation/Addition	Feasibility Study/Design and Construction for addition to building	\$ 12,500,000	33.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
148	Senior Center	Senior Center - Sprinklers and Fire Alarm Upgrades	Install code-compliant sprinkler system in building in conjunction with any major building upgrade or addition.	\$ 170,000	33.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
149	Public Buildings	City Hall - Plumbing Upgrades	Renovate toilet rooms and replace cold and hot water piping as required. Provide insulation for all piping.	\$ 137,000	33.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
150	Schools	Ward School - Replace Roof	Replace Flat Gym 1980's built up roofing system. It has reached its life expectancy.	\$ 160,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
151	Schools	Memorial Spaulding School - Replace Roof	Replace 1980's Built up roof area. It has reached its life expectancy.	\$ 350,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
152	Parks/Rec	Burr Park Field House - Mechanical/Electrical Upgrades	Replace steam boiler, radiators, venting and piping. Replace exterior lighting to improve safety and security. Upgrade interior lighting and original wiring and conduit.	\$ 100,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
153	Public Buildings / Sustainability	Public Buildings Department-Electrical	Replace electrical distribution panels and main electrical service. Upgrade Telcom and Electrical infrastructure to BICSI and Electrical code. Replace interior lights to improve	\$ 118,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
154	Schools	Bigelow School - Accessibility Upgrades	Upgrade toilet rooms, elevator, door hardware and signage for accessibility	\$ 400,000	33.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
155	Parks/Rec	Lower Falls Community Center - Replace Gym Floor	Replace gym floor with new wood flooring. Replace damaged carpeting and VCT flooring.	\$ 80,000	33.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
156	Public Buildings / Sustainability	Public Buildings Department-Mechanical	Replace duct mounted steam coils and baseboard heaters. Replace ductwork with insulated ductwork. Provide make up air dampers and control for emergency generator.	\$ 115,000	32.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
157	Fire Dept	Fire Station #2, West Newton - Mechanical Upgrades	Remove fuel storage tanks and convert to gas. Other mechanical work to be done as part of future building renovation.	\$ 140,000	32.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
158	Parks/Rec	Newton Upper Falls/ Braceland Playground - Design & Construction	Master Plan for park renovation - Construction will include new athletic fields, new play structure and sitework and improvements.	\$ 1,675,000	32.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
160	Parks/Rec	Pelligrini Park Field House - Exterior Windows & Doors	Replace windows and security screens with new insulated windows and new security screens. Repair and repoint masonry walls and restore murals.	\$ 130,500	32.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
162	Schools	Pierce School - Plumbing Upgrades	Sanitary piping is deteriorating. Upgrades to toilet rooms and water fountains	\$ 225,000	32.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
163	Parks/Rec	Burr Park Field House - Accessibility/Site Upgrades	Accessibility upgrades to toilet rooms and fixtures, signage, drinking fountain, and door hardware. Provide accessible path to entrance and an accessible parking	\$ 160,500	32.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
164	Public Buildings	Kennard Estate-Building Envelope, Windows and Doors	Replace shingles and flashings. Repair foundation walls. Replace wood windows and shutters with historic, appropriate units.	\$ 240,000	32.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
165	Public Buildings / Sustainability	Auburndale Library -Mechanical Upgrades	Replace boiler with new steam oil-fired boiler. Replace breeching, combustion air dampers and ductwork. Include heating zone and radiators in basement area.	\$ 125,000	32.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
167	Schools	Ed Center - Mechanical Upgrades	Replace boiler, second boiler and hot water conversion in out years. Boilers are 35 years old.	\$ 250,000	32.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
168	Parks/Rec	Pelligrini Park Field House - Electrical Upgrades	Upgrade lighting and power distribution for energy efficiency. Provide protective cages over gym fixtures. Replace electric panels.	\$ 176,000	32.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
169	Schools	Lincoln Eliot School - Replace Windows and Doors	Replace windows in 1965 addition and 1975 clerestory windows	\$ 280,000	32.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
170	Schools	FA Day School - Accessibility Upgrades / Replace Elevator	Upgrades for ADA Compliant elevator, toilet rooms, door hardware, and signage	\$ 350,000	32.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
171	Police	Police Garage - Roof Replacement	Replace PVC roof installed in the 1990's as required. It has reached life expectancy. Repair water diverter above support service door.	\$ 193,000	31.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
172	DPW	Crafts Street Garage - Replace Overhead Garage Doors	Replace ten 25-year old overhead doors and tracks. Replace exterior entrance doors and vestibule doors.	\$ 80,000	31.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
173	Parks/Rec	Replace Parks Dump Truck (replace 1998 truck #430)	Replacement of vehicle that is used daily for maintenance operations that exceeded its useful life span.	\$ 75,000	31.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
174	Schools	Ed Center - Electrical Upgrades	Upgrade electric service, panels and sub-panels to support IT server room and other building functions.	\$ 249,000	31.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
175	Schools	Franklin School - Building Envelope	Replace windows and doors and repair/restore masonry.	\$ 700,000	31.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
176	Parks/Rec	Newton Corner Parks & Rec Headquarters - Building Envelope	Repair front entry concrete. Install new side entry stairs and handrails. Remove and replace wood stairs. Install vents throughout balance of soffits.	\$ 114,500	31.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
177	Police	Police Headquarters - Repair Concrete	Repair concrete at the fire range ceiling. Rebuild tunnel ceiling, waterproof, etc. Repair interior CMU and concrete walls. Replace carpet flooring that is a tripping hazard.	\$ 100,000	31.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
178	DPW	Elliot St. Operations Building - Mechanical/ Plumbing Upgrades	Boiler upgrades per code reqts. Replace unit heaters and finned tube heaters. Upgrade bathrooms. Replace water heater.	\$ 169,000	31.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
179	Schools	Horace Mann School - Restore/Replace Modular	Existing modular is nearing the end of its useful life and will need to be reconditioned or replaced with permanent construction	\$ 1,000,000	31.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
181	Schools	Peirce/Williams Feasibility/Addition	Feasibility Study/Design and Construction to add Capacity	\$ 15,000,000	31.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
182	Parks/Rec	Auburdale Cove Fieldhouse - Building Upgrades	Project to fully upgrade existing building or replace with new structure.	\$ 206,000	30.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
183	Public Buildings / Sustainability	City Hall - Kitchen Mechanical Upgrades	Repair, upgrade kitchen equipment and stove ventilation in cafeteria kitchen to comply with current code requirements.	\$ 168,000	30.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
185	Schools	Franklin School - Mechanical Upgrades	Replace boilers, hot water conversion, and Direct Digital Control conversion.	\$ 825,000	30.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
186	Schools	Bowen School - Accessibility Upgrades	Upgrades to toilet rooms, signage, hardware, railings and assembly spaces for accessibility.	\$ 200,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
187	Schools	Franklin School - Accessibility and Plumbing Upgrades	Upgrade Toilet rooms, Water fountains, Door hardware and signage for accessibility.	\$ 365,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
188	Schools	Mason Rice School - Accessibility Upgrades	Upgrade hardware, toilet rooms, and water fountains for accessibility.	\$ 185,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
189	Schools	Memorial Spaulding School - Accessibility Upgrades	Upgrade toilet rooms, door hardware, water fountains, and signage for accessibility.	\$ 300,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
190	Schools	Lincoln Eliot School - Accessibility Upgrades	Upgrade toilet rooms, door hardware, elevator, entrance ramp, and signage for accessibility.	\$ 940,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
191	DPW	DPW - Replace Street Sweeper	Replacement of vehicle taken out of service: Vehicle #148. Dept will not have minimum (6 ea) needed for 4 sweeps/yr efficiently.	\$ 172,000	30.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
196	DPW	Elliot St. Operations Building - Replace Windows & Doors	Remove and replace windows. Replace overhead doors. Replace exterior and interior doors.	\$ 80,000	29.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
197	Schools	Horace Mann School - Replace Roof	Replace Total Building 1986 Built up roof area. Roof has reached its life expectancy.	\$ 400,000	29.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
198	Schools	Underwood School - Electrical Upgrades	Upgrades to electrical panels and sub-panels and emergency generator	\$ 100,000	29.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
199	Schools	Williams School - Accessibility Upgrades	Upgrade door hardware, openings, toilet rooms, railings, and signage for accessibility.	\$ 250,000	29.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
201	DPW	Crafts Street Garage - Mechanical Upgrades	Complete roof top unit work begun in stimulus project. Replace fans, duct work, unit heaters.	\$ 400,000	29.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
205	Police	Police Garage - Electrical Upgrades	Connect Garage to generator. Upgrade interior and exterior lighting for energy. Replace conduit, wiring, distribution panel. Upgrade smoke/fire detection system.	\$ 207,000	28.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
206	Schools	Peirce School - Accessibility Upgrades	Upgrades to door hardware, toilet rooms, railings, and signage for accessibility.	\$ 300,000	28.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
208	IT	Upgrade to Voice Over IP Phone System	Replace 12 year old phone systems with VOIP (data/voice) capable systems, allowing faster move-add-change and lower hardware costs.	\$ 250,000	28.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
211	DPW	Crafts Street Garage - Site Upgrades	Install accessible ramp at entrance. Provide accessible toilet rooms. Resurface and re-grade pavement to comply with ADA requirements; Provide accessible parking space.	\$ 194,000	26.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
212	Schools	Lincoln Eliot School - Electrical Upgrades	Replace electric panels and sub-panels.	\$ 125,000	26.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
213	Public Buildings / Sustainability	Auburdale Library - Electrical Upgrades	Electrical and lighting upgrades for code compliance and to improve energy efficiency. Replace electric panel.	\$ 86,607	26.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
214	Public Buildings	Department HQs Bldg Roof repair	Paint corrugated metal shed roof. Install new roof shingles. Paint rafter ends and plywood. Remove skylights and replace with solar light tubes.	\$ 97,000	26.5	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
215	Police	Police Garage - Windows & Doors and Building Envelope	Replace overhead doors and glass block windows. Replace door to planning/research and glass block wall. Repair masonry veneer exterior. Repair step cracking in CMU walls.	\$ 140,000	26.4	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
217	Schools	Peirce School - Electrical Upgrades	Replace electric panels and sub-panels.	\$ 75,000	26.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
218	Schools	Burr School - Electrical Upgrades	Replace electric panels and sub-panels	\$ 100,000	26.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
219	Schools	Countryside School - Plumbing Upgrades	Upgrade toilet rooms and water fountains, and add fixtures per code requirements.	\$ 125,000	26.0	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
221	Schools	Horace Mann School - Mechanical Upgrades	Replace 2nd boiler and replace modular roof top air handling units	\$ 300,000	25.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
224	Schools	Ward School - Replace Windows and Doors	Replace windows in gym wing and storefront system.	\$ 425,000	25.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
226	Schools	Countryside School - Replace Windows and Doors	Replace single pane storefront system in connector and annex windows and exterior doors.	\$ 500,000	25.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
227	Schools	Brown School - Accessibility Upgrades	Upgrade existing elevator for code compliance, signage, hardware, and reconfigure locker rooms for accessibility.	\$ 600,000	24.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
228	Schools	Countryside School - Accessibility Upgrades	Upgrade toilets, signage, door hardware, and accessible entrance.	\$ 150,000	24.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
233	Public Buildings	City Hall - Envelope - Masonry Repairs	On-going program to repair and repoint exterior masonry to preserve building envelope. Address worst areas first.	\$ 150,000	23.9	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
234	Schools	Mason-Rice School - Mid-Range Renovation/Addition	Feasibility Study/Design and Construction	\$ 15,000,000	23.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
235	Schools	Schools - Repave Parking Areas	Repave parking areas and sidewalks in poor condition at Ward, Brown, Underwood, Mason Rice, Oak Hill, Williams, Zervas and Peirce.	\$ 400,000	23.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
237	DPW	New DPW Equipment Shelter - Elliot St	Provide covered storage for vehicles and equipment. Covered storage extends life of vehicles and equipment	\$ 150,000	23.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
239	DPW	Elliot St. Garage - Roof Repair/Replacement	Replace/repair EPDM roof. Replace damaged roof panels.	\$ 91,000	22.2	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
241	Library	Newton Free Library - Generator Replacement	Library used as cooling station for residents. Existing energy agreement mandates peak usage on auxillary power when regional demand is high extreme.	\$ 250,000	21.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
242	DPW	Elliot St. Operations Building - Interior and Finish Upgrades	Repaint steel framing in attic. Repair deteriorated concrete and CMU. Upgrade lighting and install new acoustical ceilings.	\$ 147,000	18.1	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
244	Parks/Rec	Levingston Cove	Repair walkways, add rain gardens, remediate erosion, replace amenities.. %0% of cost will be funded by stormwater.	\$ 200,000	15.3	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
246	Police	New Police Facility	Construct new building	\$ 30,000,000	13.8	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
247	DPW	Wash Bay Refurbishment	Refurbish Crafts Street vehicle wash bay with automated vehicle wash system, including capture/recycle wash water.	\$ 500,000	12.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
<b>Total Bonding = \$ 157,795,773</b>												
2	Schools	Angier School Replacement	\$11M anticipated from MSBA. Renovate/ replace 92 yr old school due to poor condition, aging bldg systems and inadequate space per State Ed standards.	\$ 37,500,000	63.1	Bonding /MSBA	\$ 15,000,000	\$ 17,500,000	\$ -	\$ -	\$ -	\$ -
6	Schools	Cabot School Renovation	Replace 92 yr old school due to poor condition, aging bldg systems and inadequate space per State Ed standards.	\$ 45,000,000	59.6	Bonding /MSBA	\$ 1,000,000	\$ 1,000,000	\$ 10,350,000	\$ 21,424,500	\$ 13,304,615	\$ -
19	Schools	Pre-School Program / Lincoln Eliot	Purchase Aquinas/ Renovate for Pre-K and Lincoln-Eliot students	\$ 32,750,000	45.9	Bonding /MSBA	\$ -	\$ 15,750,000	\$ 1,035,000	\$ 1,071,225	\$ 8,315,384	\$ 8,606,423
216	Schools	Ward School - Renovation/ Replacement	Feasibility Study/Design and Construction	\$ 45,000,000	26.2	Bonding /MSBA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Bonding/MSBA = \$ 160,250,000</b>												
3	Schools	Zervas School - Renovation/ Replacement	Project to address space needs due to growing enrollment, bldg systems, access.	\$ 40,000,000	60.9	Bonding/ Override Stabilization Fund	\$ 3,415,000	\$ 10,000,000	\$ 26,480,475	\$ -	\$ -	\$ -
<b>Total Bonding/Override Stabilization Fund = \$ 40,000,000</b>												
9	DPW	City-Wide Traffic Signalization Upgrades	Improve upon safety, improved traffic flow, reduce congestion, meet ADA Compliance	\$ 3,495,000	54.2	Bonding/Free Cash	\$ -	\$ 1,500,000	\$ 646,875	\$ 396,353	\$ 554,359	\$ 573,762
<b>Total Bonding/Free Cash = \$ 3,495,000</b>												
5	Public Buildings / Sustainability	Energy Efficiency Upgrades to City/School Buildings	The objective of this project is to reduce energy use, energy costs and the carbon footprint of existing City owned buildings and schools.	\$ 3,610,000	60.0	Bonding/Other	\$ 2,610,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -
<b>Total Bonding/Other = \$ 3,610,000</b>												
26	DPW	Replace Gath/Albemarle Foot Bridge	Footbridge structure (steel and abutment) is in poor condition and is not wheelchair accessible.	\$ 150,000	42.3	CDBG Eligible	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
98	Public Buildings	Waban Library-Accessibility Upgrades	Upgrade toilet rooms, Replace door hardware; Modify door at stairwell or install automatic door opener.	\$ 110,000	35.4	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
194	Parks/Rec	Newton Corner Parks & Rec Headquarters - Site/ Accessibility Upgrades	Re-build the main entry ramp to be code compliant. Make ADA door opening device fully functioning.	\$ 86,000	30.0	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
195	Police	Police Annex - Accessibility Upgrades	Provide accessible toilet rooms, door hardware, signage and drinking fountain. Provide a lower transaction counter.	\$ 83,500	30.0	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
202	Parks/Rec	Pellegrini Field Lights	Replace sports lighting at Pellegrini	\$ 100,000	29.1	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
203	Police	Police Garage - Accessibility/Site Upgrades	Provide accessible door hardware, signage and code-compliant lower counters. Install accessible employee toilet room.	\$ 80,000	28.9	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
232	Public Buildings	Nonantum Library-Accessibility/Site	Reconfigure entry vestibules and reconstruct ADA compliant ramp; Upgrades for toilet rooms and drinking fountain.	\$ 204,000	23.9	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
240	Public Buildings	Auburdale Library -Accessibility and Site Upgrades	Install accessible toilet rm. Enlarge landing at side entry and rebuild concrete paths. Replace door hardware to be ADA compliant. Replace handrails at basement entrance	\$ 265,000	21.9	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total CDBG Eligible = \$ 1,078,500</b>												
72	Parks/Rec	Fort Park Field Lights	Replace sports lighting at Fort Park	\$ 200,000	36.9	CDBG/Bonding	\$ -	\$ -	\$ -	\$ -	\$ 221,744	\$ -
<b>Total CDBG/Bonding = \$ 200,000</b>												
20	DPW	Street Paving - Cold Plane and Pave Streets	Watertown, Walnut, Washington, Chestnut, Lincoln, Linwood, Aspen, Hawthorne, Longfellow	\$ 4,000,000	45.6	Chapt 90/ Alt Fund	\$ -	\$ 4,000,000	\$ -	\$ -	\$ -	\$ -
28	DPW	Sidewalk Improvements	Improve pedestrian safety. Repair/replacement of sidewalks in poor condition and new sidewalks in village centers, school zones, on major roads.	\$ 750,000	41.4	Chapt 90/ Alt Fund	\$ -	\$ 150,000	\$ 155,250	\$ 160,684	\$ 166,308	\$ 172,128
30	DPW	Walnut Street (Homer Street to Route 9) Final Design	Eliminate deteriorated roadway condition and enhance public safety. Arterial minor. Federal funds for constr only. Design funded by City.	\$ 250,000	40.9	Chapt 90/ Alt Fund	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -
39	DPW	Street Paving - Cold Plane and Pave Streets	Streets include Watertown, Ward, Church, Richardson, Vernon, Eldridge, Elmwood, Braeland, Marshall, Audubon, Pond Brook.	\$ 3,100,000	39.6	Chapt 90/ Alt Fund	\$ -	\$ -	\$ 3,208,500	\$ -	\$ -	\$ -
52	DPW	Street Paving - Cold Plane and Pave Streets	Lowell, Dedham, Highland, Albemarle, Fuller, Vine, Pembroke, Marlboro, Arlington, Bishopsgate, Prince, Allertown	\$ 2,900,000	37.7	Chapt 90/ Alt Fund	\$ -	\$ -	\$ -	\$ 3,427,920	\$ -	\$ -
69	DPW	Street Paving - Cold Plane and Pave Streets	Streets Include Washington, Cherry, California, Albemarle, Warwick, High, Woodcliff, Langdon.	\$ 2,900,000	37.0	Chapt 90/ Alt Fund	\$ -	\$ -	\$ -	\$ -	\$ 3,215,282	\$ -
81	DPW	Street Paving - Cold plane and pave streets	Streets Include Centre, Nevada, Prescott, Winchester, Auburn	\$ 3,200,000	36.4	Chapt 90/ Alt Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,672,074
141	DPW	Commonwealth Avenue (Route 128 to Washington Street) - Preliminary and Final Design	Eliminate deteriorated roadway condition, improve public safety and restore Comm Ave to previous boulevard status. Arterial minor.	\$ 500,000	33.6	Chapt 90/ Alt Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
142	DPW	Washington Street (Commonwealth Avenue to Centre Street) - Preliminary and Final Design	Eliminate deteriorated roadway condition and improve public safety. Arterial minor. Federal funds for constr only. Design funded by City.	\$ 500,000	33.6	Chapt 90/ Alt Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Chapt 90/Alt Fund = \$ 18,100,000</b>												
53	Parks/Rec	Newton Highlands Playgrnd - Ph I Design & Construction	Phase I of 2008 Master Plan for park renovation. Addresses drainage problems & builds new ball fields and courts. Highly used park. CPA Approved for \$200,000	\$ 2,029,384	37.6	CPA Eligible	\$ 200,000	\$ -	\$ -	\$ 1,959,682	\$ -	\$ -
55	Public Buildings / Sustainability	City Hall - Exterior Windows & Doors	Restore/Replace windows in phases to improve energy efficiency, functionality and comfort, and to preserve exterior wall.	\$ 1,000,000	37.5	CPA Eligible	\$ -	\$ -	\$ -	\$ 535,613	\$ 554,359	\$ -
63	Public Buildings	Auburdale Library - Building Envelope and Roof	Repair broken roof slates. Reflash where leaks are occurring. Repair/replace gutters and downspouts. Pitch rain leaders away from bldg. Repair concrete ramp.	\$ 128,000	37.3	CPA Eligible	\$ -	\$ -	\$ -	\$ 137,117	\$ -	\$ -
76	Parks/Rec	Crystal Lake Bathhouse - Renovate/Replace	Existing bathhouse is in poor condition and is not accessible. Renovate/Replace bathhouse and improve site.	\$ 5,000,000	36.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ 5,543,589	\$ -
84	DPW	Crafts St DPW Operations (Stable) - Restore Building Envelope, Windows & Roof	Preserve historic building envelope. Repoint/repair lintels, sills and brick veneer. Restore/replace windows, doors and roof and cupola as historically appropriate.	\$ 943,000	36.0	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,082,114
90	Public Buildings	City Hall - Rehabilitate Board of Alderman Chamber	Upgrade Historic Board Chamber to improve mechanical, electrical, audio/visual systems and lighting and interior finishes.	\$ 250,000	35.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
93	Public Buildings / Sustainability	City Hall - Masonry Restoration of War Memorial Steps	Implement recommendations from 2007 Study of the Memorial Stairs.	\$ 185,000	35.7	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
106	Parks/Rec	Burr Park Field House - Building Envelope and Window Restoration	Repair damaged exterior brick walls and trim. Remove entry landing stairs and railings and install new code-compliant landing, stairs and railings. Restore windows.	\$ 313,500	35.1	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
123	Police	Police Annex - Roof Restoration/ Replacement	Remove and replace slate roofing, gutters and downspouts. Install new EPDM Roof. Reattach downspouts.	\$ 250,500	34.4	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
126	Health	Health Department Bldg - (ReUse Consideration)	All Health Dept Building Recommended work. Envelope is highest need. Building is in re-use process.	\$ 1,500,000	34.2	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
133	Public Buildings	City Hall - Increase City Clerk Archive Storage	Develop plans to expand archival storage to accommodate and preserve archival collections and to comply with MGL mandated record storage requirements.	\$ 100,000	33.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
134	Public Buildings	Auburndale Library -Exterior Windows & Doors	Remove existing exterior wood doors and frames and replace with new doors and hardware. Repair/replace building windows.	\$ 127,000	33.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
135	Public Buildings	Waban Library-Exterior Windows & Doors	Restore exterior wood door and install panic hardware. Replace areaway and rear door. Restore windows.	\$ 118,500	33.6	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
136	Parks/Rec	Newton Highlands Playground - Phase II Design & Construction	2008 Master Plan for park renovation in 2 phases. Ph II will complete the fields to provide tennis courts and football field.	\$ 1,925,000	33.6	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
159	Senior Center	Senior Center - Exterior Windows & Doors	Restore/Replace wood windows and aluminum storm windows as historically appropriate.	\$ 125,000	32.7	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
161	Senior Center	Senior Center - Building Envelope	Repoint exterior masonry walls as required. Repair, reset and regROUT main granite front stairs. Repair stone veneer at main entry. Rebuild rear right side areaway and	\$ 150,000	32.4	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
166	DPW	Crafts St DPW Operations (Stable) - Interior Renovation	Design and Construction for renovated interior including mechanical, electrical, plumbing, and accessibility upgrades.	\$ 500,000	32.2	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
180	Public Buildings	City Hall - War Memorial Auditorium HVAC Improvements	Restore historic hall to improve mechanical & electrical systems.	\$ 150,000	31.1	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
192	DPW	Map Scanning Project for Engineering: Phase II	Phased project. Current maps are deteriorating rapidly. A new storage system would allow DPW to store maps after scanning.	\$ 900,000	30.1	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
193	Parks/Rec	Newton Corner Parks & Rec Headquarters - Exterior Windows & Doors	Restore/replace historic exterior doors and windows. Weatherstrip and seal for energy efficiency. Window bay foundation repairs.	\$ 217,000	30.0	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
200	Senior Center	Senior Center - Roof Restoration/ Replacement	Restore/replace existing slate roof, gutters, and downspouts. Replace existing flat roof with new membrane roof and provide proper roof drains.	\$ 244,000	29.6	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
204	Jackson Homestead	Restoration of Historic East Burying Grounds	Preservation of Remaining 24 Tombs in two of the three burying grounds. Priority to East, then West Parish sites. Safety Concern.	\$ 148,135	28.7	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
207	Public Buildings	Nonantum Library-Roofs and Building Envelope	Remove and replace slate roof. Install new gutters and downspouts. Remove and replace existing flat roof.	\$ 200,000	28.3	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
209	Parks/Rec	Newton Corner Parks & Rec Headquarters - Roof Restoration/ Replacement	Replace/restore slate roof as historically appropriate.	\$ 75,500	27.5	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
210	Jackson Homestead	Jackson Homestead - Object Collection Storage	Create offsite climate controlled space with fire protection to house 3-D museum collections. No space for add'l materials.	\$ 100,000	27.5	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
220	Public Buildings	Waban Library-Building Envelope and Entrance	Replace main entry walk and foundation walls and install railing. Rebuild side stairs at main entry. Rebuild stairs at rear entry. Install hand rail on one side of rear entry	\$ 200,000	25.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
222	Parks/Rec	Jeanette Curtis West Rec Ctr (The Hut) Renovation	Rehabilitation of building envelope, mechanical, electrical, plumbing systems, life-safety, and accessibility of this historically significant structure. Houses many programs.	\$ 1,500,000	25.7	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
229	Jackson Homestead	Jackson Homestead - Exterior Windows & Doors	Restore existing windows and doors as historically appropriate.	\$ 192,000	24.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
236	Parks/Rec	City Hall and War Memorial Historic Landscape Preservation Project	Restoration and preservation of City Hall grounds Historic Landscape	\$ 1,500,000	23.4	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
238	Jackson Homestead	Restoration of Historic West Burying Grounds	Preservation of Remaining 24 Tombs in two of the three burying grounds. Safety concern for visitors.	\$ 146,000	23.0	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
243	Jackson Homestead	Repair/Replace Fencing at Historic Burying Grounds	Restoration of Fences at all 3 burying grounds	\$ 406,600	17.8	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total CPA Eligible = \$ 20,624,119</b>												
245	Library	Library Addition / Renovation	Renovate the entire library and add a two-level 9,000sf addition	\$ 33,122,976	14.2	Fund Raising / State Grant / Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Project Title	Project Description / Justification	Est Cost in FY2016	Risk Factor	Funding Source	Prior Year Funding	FY2016	FY 2017	FY2018	FY2019	FY2020
<b>Total Fund Raising/State Grant/Bonding = \$ 33,122,976</b>												
129	Parks/Rec	Tree Crew Log Loader	Current equipment has been in service since 2006. Essential for emergency response and hazardous tree removal.	\$ 240,000	34.1	Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
225	Public Buildings	Kennard Estate-Accessibility/Site	Provide accessible parking spaces and install accessible entrance ramp.	\$ 127,350	25.5	Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Other = \$ 367,350</b>												
4	DPW/ Sewer	Sewer Inflow /Infiltration Project - Project Area 3&4 - Chestnut Hill Area, Newton Centre	Part of 12 yr \$49.1 M program to remove excess inflow and infiltration into sewer system. Design (FY15) and construction (FY16) for Chestnut Hill area.	\$ 8,421,000	60.6	Sewer Fund	\$ 621,000	\$ 7,800,000	\$ -	\$ -	\$ -	\$ -
23	DPW/ Sewer	Sewer Inflow /Infiltration Project - Area 5	Part of 12 yr \$49.1 M program to remove excess inflow and infiltration into sewer system. Design (FY16) and constr (FY17) for Newton Centre, Newtonville, Chestnut	\$ 3,877,000	44.3	Sewer Fund	\$ -	\$ 777,000	\$ 3,208,500	\$ -	\$ -	\$ -
25	DPW/ Sewer	Prairie Avenue Sewer Pump Station	Station built 1950, rehabbed in 1992. Contains 2 (5 hp) pumps. Replace wet well.	\$ 110,000	43.7	Sewer Fund	\$ -	\$ 110,000	\$ -	\$ -	\$ -	\$ -
29	DPW/ Sewer	Replace 1995 Sewer Jet Truck	Replacement of vehicle/ equipment used to clear out blockages in the sewer system to prevent sewer backups. (#369).	\$ 240,000	41.0	Sewer Fund	\$ -	\$ 240,000	\$ -	\$ -	\$ -	\$ -
35	DPW/ Sewer	Sewer Inflow /Infiltration Project - Area 6	Part of 12 yr \$49M program to remove excess inflow and infiltration into sewer system. Design (FY17) and constr (FY18) for Newton Centre, Newtonville, Chestnut Hill, Nonantum	\$ 4,600,000	40.2	Sewer Fund	\$ -	\$ -	\$ 621,000	\$ 4,284,900	\$ -	\$ -
44	DPW/ Sewer	Quinobequin Road Sewer Pump Station - Replace Pump	Sewerage pumped to higher point and gravity fed to MWRA pipes for treatment. Replace pump 1 and motors at life expectancy.	\$ 420,000	38.9	Sewer Fund	\$ -	\$ -	\$ 155,250	\$ 160,684	\$ -	\$ -
54	DPW/ Sewer	Hamlet Street Sewer Pump Station - Replace Pumps	Sewerage is pumped to a higher point and gravity fed to MWRA pipes for treatment. Replace pumps and motors.	\$ 100,000	37.6	Sewer Fund	\$ -	\$ -	\$ -	\$ 107,123	\$ -	\$ -
57	DPW/ Sewer	Replace two Large Construction Vehicles	Replace 2005 vehicles/equipment used to haul materials for trenching/ backfilling for sewer line repairs. Also used for snow plowing (#366 and #367)	\$ 300,000	37.4	Sewer Fund	\$ -	\$ -	\$ -	\$ 321,368	\$ -	\$ -
65	DPW/ Sewer	Sewer Inflow /Infiltration Project - Area 7	Part of 12 yr \$49.1 M program to remove excess inflow and infiltration into sewer system. Design (FY18) and constr (FY19) for Upper Falls, Highlands, and	\$ 4,600,000	37.2	Sewer Fund	\$ -	\$ -	\$ -	\$ 642,735	\$ 4,434,872	\$ -
73	DPW	Sewer Inflow/Infiltration Project - Area 8	Part of 10 Yr \$49.1 M program to remove excess inflow and infiltration into sewer system. Design (FY19) and construction (FY20) for Upper Falls, Highlands,	\$ 4,600,000	36.9	Sewer Fund	\$ -	\$ -	\$ -	\$ -	\$ 665,231	\$ 4,590,092
85	DPW	Sewer Inflow/Infiltration Project - Area 9	Part of 10 Yr \$49.1 M program to remove excess inflow and infiltration into sewer system. Design (FY20) and construction (FY21) for Waban, Upper Falls, Oak Hill	\$ 4,600,000	36.0	Sewer Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 688,514
<b>Total Sewer Fund = \$ 31,868,000</b>												
12	DPW/ Storm	Project Meadow Brook at Dedham Street Design and Construction	Improvements to the drainage system on Dedham Street. Improve capture of run-off and increase capacity of drainage system to reduce flooding on properties on Dedham Street, Round Brook Road & Heatherland Road	\$ 450,000	50.0	Stormwater Fund	\$ -	\$ 450,000	\$ -	\$ -	\$ -	\$ -
43	DPW/ Storm	Repair Hammond St Drain	Storm drain pipe has partially collapsed and requires repair to prevent flooding.	\$ 200,000	39.2	Stormwater Fund	\$ -	\$ -	\$ 207,000	\$ -	\$ -	\$ -
48	DPW/ Storm	Laundry Brook Culvert Repairs	Repair of culverts along Laundry Brook to prevent flooding.	\$ 643,000	38.0	Stormwater Fund	\$ -	\$ -	\$ 665,505	\$ -	\$ -	\$ -
64	DPW/ Storm	Cheesecake Brook Drainage Basin: Repair and Rebuild Retaining Wall	Wall integrity is jeopardized. Project to minimize property damage due to flooding from heavy rains and compromised conveyance systems. Phase I is survey.	\$ 175,000	37.3	Stormwater Fund	\$ -	\$ -	\$ -	\$ 187,464	\$ -	\$ -
66	DPW/ Storm	Pellegrini Park Drain Replacement	Replace existing pipe which has settled and is causing flooding.	\$ 130,000	37.1	Stormwater Fund	\$ -	\$ -	\$ -	\$ 139,259	\$ -	\$ -
75	DPW/ Storm	Rehabilitation of Forest Grove Storm System Pump Station	Pump station is used for flood and mosquito control of Flowed Meadow and needs upgrades and repair work to function properly.	\$ 150,000	36.8	Stormwater Fund	\$ -	\$ -	\$ -	\$ -	\$ 166,308	\$ -





# **NEWTON PUBLIC SCHOOLS**

The Executive Department and the Public Buildings Department are committed to insuring that the Newton Public Schools are able to deliver an excellent education in facilities that enable the students, faculty and staff to perform at their potential in a secure, comfortable environment, conducive to teaching and learning and allowing the City's youngest residents to reach their full potential. Therefore, the Executive Department and the School Administration meet regularly throughout the year to assess school projects and to prioritize school needs.

With the passage of the override questions in March of 2013, the citizens of the City of Newton cemented their commitment to the replacement and/or addition to three of the City's elementary schools. However, there are many more capital requirements in a district the size of the Newton Public School system which must be addressed. Recognizing that major school replacements and/or large renovations may require a lengthy timeline, the School Administration has developed Short-Term, Mid-Range and Long-Term Space needs in addition to required preventive maintenance needs.

## **1. Special Education Program Short-Term Space Needs**

To address short-term space needs for the Special Needs Programs at multiple grade levels, funding of \$400,000 is requested to relocate the four modular classrooms from Zervas Elementary School to Newton South High School. An existing corrugated metal building, which houses the High School Special Education Program (HSP) as well as school storage, will be demolished as it does not meet building codes and must be replaced. In summer 2015, the metal building will be demolished and three temporary construction trailers will be installed in September 2015, to house the HSP and Middle School Special Education Program (MSP); the MSP is currently in a modular building at the Education Center. By this move, in September 2015 there will be additional classroom space for the Newton Early Childhood Program to relocate two remaining pre-school classrooms from Lincoln-Eliot to the Education Center. HSP and MSP programs will move to the new modular space in January 2016 and the temporary trailers will be removed.

## **2. Pre-School Space Needs Feasibility Study and Solution**

In order to address the space needs of the growing student population of the Pre-school Program (Newton Early Childhood Program), funding of \$200,000 during FY16 is recommended to conduct a feasibility study. The feasibility study will result in options for the Pre-school program, one of which will be funded in FY18. In the summer of 2014 one new classroom was constructed at the Education Center and a second classroom was relocated from Lincoln-Eliot. At present there are two pre-school program classrooms at

Lincoln-Eliot and ten at the Education Center. By September 2015, all twelve classes will be housed at the Education Center. This program is expected to grow and has outstripped capacity to provide proper instructional group size. The associated risks of this space deficiency are: non-compliant special education programming and inappropriate learning settings for children requiring an inclusionary environment.

### 3. **Mid-Range and Long-Range Projects**

The following projects were requested by the School Committee and included in Long Range Projection of the CIP presented in October 2013. The FY16 – FY20 funding requests include feasibility studies for smaller mid-range renovation/addition projects, similar to the Day Middle School expansion, and a potential MSBA project. These are:

- Peirce/Williams Feasibility/Addition - \$1,000,000 to conduct a feasibility study in FY18, design in FY19 and construction in FY20. The selected site will be dependent upon growth in enrollment.
- Countryside School - \$1,000,000 to conduct a feasibility study and design in FY20
- Lincoln-Eliot School - \$1,000,000 to conduct a feasibility study in FY20

### **Customary Maintenance Capital Projects**

Roof replacement, generators, boilers, air handlers, windows, masonry and other systems are integrated into the CIP based on assessment of need over the next five years and beyond. The following include modifications or new projects added to those listed in the prior CIP.

1. **Energy efficiency projects** at school and city buildings have been removed from the Newton Public Schools request list as these projects will be funded by the City as part of the NSTAR preferred vendor program.
2. **F.A. Day Generator** A new request for replacement of the Day generator has replaced the Horace Mann generator due to the fact that the Day generator has exceeded its useful life and should be replaced as soon as possible.
3. **The Education Center** exterior masonry work project is more specifically defined as the redesign of the entrance and stairway at the Crafts Street parking lot entrance. Funding will be for \$150,000.
4. **The Ed Center** accessibility upgrades project has been modified to include a new code compliant elevator to provide direct access to the parking lot. The funding estimate has been changed from \$110,872 to \$350,000.
5. **The Newton South Library** HVAC system equipment and controls are outdated and a new request of \$300,000 for replacement has been added.





# **INFORMATION TECHNOLOGY**

## **Executive Overview**

Developing a meaningful five-year municipal technology vision for the City of Newton is an integral part of the framework as the administration continues to build a livable, sustainable, model city for the 21<sup>st</sup> century. The explosive rate of advancement of the technological evolution has changed the way business is conducted in the City of Newton as well as around the world. Advances from mainframes, to minicomputers, to personal computers, to the worldwide web, and now to virtual servers and the “cloud” have continued to create a new technological paradigm.

Current trends include moving applications and software from dedicated servers to virtual servers with storage area networks, in order to establish a downsized yet more versatile IT infrastructure that reduces the data center foot print, is easier to administer and significantly reduces energy costs. “Cloud computing” is expected to further shift technology from internal infrastructure solutions to cloud-based strategies that will deliver increased functionality and flexibility using a mix of public and private cloud-based application and platform services. Data security and data privacy will remain paramount requiring automated capabilities that detect, assess, and respond immediately to threats.

During the past several years, technology has become more local, social and mobile, with smart phones capable of acting as standalone computer devices that can take pictures, search the Internet, and send emails and text messages. It is anticipated that a desire for an improved “user experience” will drive the creation of more layered approaches in application design with the emphasis on increasing citizen services and untethering desktop workers by providing wireless devices, increased mobility, and improved efficiency for employees and citizens alike.

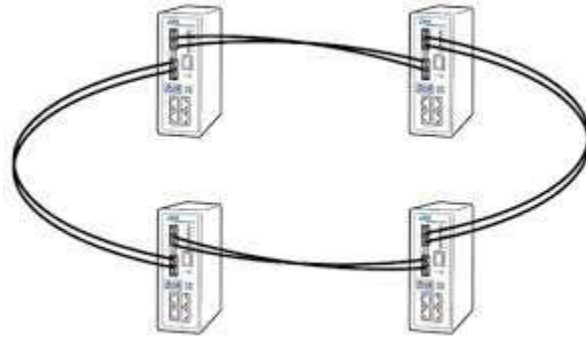
Establishing a vision and positioning the City of Newton for the future requires a continuous evaluation of current infrastructure, applications, security, and customer interfaces, an understanding of the future of technology, and the development of a blueprint for investments in and modernization of the City’s technology.

## **Fiscal Year 14 Accomplishments**

The initial year of the five year plan focused primarily on infrastructure – the foundation on which all current and future projects will rely. Projects designed to improve the technology infrastructure throughout the City, such as the citywide fiber project, reliable data wiring within the City’s more than 60 buildings, and more robust wireless networks to increase the

productivity and mobility of the workforce either have been or are in the process of being completed. Accomplishments of FY2014 are as follows:

**Installation of the City Wide Fiber Optic Network:** The design and installation of a fully redundant, multi-ringed fiber optic network has been completed to 60 sites across the City. This network has been designed with 4 hubs and a bisector in order to withstand multiple points of failure. All city buildings are connected by lateral fiber runs to provide several paths to the main ring.



There are multiple benefits of a city owned fiber network including:

#### **Data**

A secure, reliable, scalable foundation is critical to accommodate new technology, growing bandwidth needs and an ability to reshape based upon changing need.

- Schools
  - Bring Your Own Device initiative to accommodate burgeoning and predicted need
  - Data sharing across schools and across the country
  - Reliable delivery of data to all 21 school buildings as well as the Education Center and any temporary buildings
  - Fiber backbone is the core to providing quality wireless access points at all schools
- Municipal
  - Any cloud-based initiatives will require high speed, reliable connections to enable quality customer service
  - Reliability and adequate bandwidth are prerequisites for any public safety network; with 18 square miles of area, our buildings are geographically distributed over a large region
  - Customer Service related data access from remote sites – being down is not an option, especially during inclement weather and emergencies

#### **Voice**

- To recognize future savings using Voice over IP, a reliable high quality of service backbone and cable plant must be in place to support the requirements of a successful system.

## Video

- Security :
  - video monitoring of critical sites such as communications towers
  - video monitoring of high traffic accident risk sites
  - video monitoring of public areas such as Library parking lot
  - video monitoring of school areas
- Training and Distance Learning:
  - Enable educational collaboration between Newton Schools and other communities
  - Enable training video to be broadcast from one location such as Fire HQ to all Fire Stations
  - Enable Distance Learning for Community Ed
  - Enable new opportunities to work with NewTV
  - Enable new opportunities to share media with local news stations

**Migration of municipal users to Microsoft Exchange in the cloud:** While the City's former email system had served it well for many years, increased capacity needs, growing hardware requirements, mobility demands, and the desire for a collaborative calendaring system prompted the City to search for a more robust email and calendaring solution. As a result, all municipal email accounts have been moved to "Microsoft Exchange in the Cloud", a solution that allows users to be more productive by enabling them to manage increasing volumes of communications across multiple devices.

**Preparation of municipal and school facilities for the convergence of Voice, Data and Video:** The City has begun embarking on a Voice over IP (VoIP) solution for the Education Center, the new Carr School, and one-third of City Hall. VoIP enables in the consolidation of separate voice and data networks into a single network where voice and data functionality overlap and enable opportunities such as video conference, instant messaging, awareness of presence, voice messages into email, etc.

**Preparation for the impact of "Bring Your Own Device" (BYOD), social media, cloud-based applications and additional mobility:** In an effort to meet the increasing capacity demands of a student population that averages 2 networked devices per student, the Newton Public Schools have continued to upgrade their wireless networks in the middle and secondary schools. The former equipment was redeployed to City Hall, the Fire Stations, the Parks and Recreation Administration building, and the Newton Free Library. This collaborative redeployment of equipment has enabled WiFi throughout City Hall, improved data delivery to the Fire Department Mobile Data Terminals, improved connectivity for the Parks and Recreation department and increased bandwidth at the Library.



The City has recently developed a “Social Media Policy” to address user needs while protecting the City. The policy committee is currently developing training for all account administrators. A web page has been created, detailing all valid Newton social media accounts, assisting the public in choosing city-administered accounts for their information delivery.

**Consolidating Systems to achieve transparency and pursue integrated application solutions that reduce redundant labor and consume time:** As with many large, decentralized organizations, the City of Newton has multiple software applications which could be consolidated to create efficient integration of information, allow increased efficiency when multiple departments are involved, and reduce support challenges. The City has concluded that the “Community Plus” system, originally implemented in 2005 to consolidate databases for building permits, plumbing and gas permits, electrical permits and code enforcement has been identified as the system solution. Last fall the City added the Sidewalk Permitting module enabling collaboration across many departments including Health & Human Services, Police, Fire, Engineering, Public Works and Inspectional Services. Fire Alarm permitting, permit applications and online payments for large mechanical contractors are scheduled to be completed this year.

**Protection of the City, its people and their data:** Although securing the City’s “firewalls” will always remain a priority, mobility and new functionality initiatives demand newer and faster security solutions. The FY2014 implementation of “Active Directory” (a system that enables administration and management of user accounts and applications by IT staff from a single point of access) has provided the ability to use new, “push-style” antivirus software to desktops and mobile devices, as well as cloud-based mobile device management software, allowing comprehensive control of devices even in the field.

**Consolidate purchases through the core IT entities:** Working with the Purchasing Department, Information Technology now reviews all hardware and software purchases to ensure consistency and compatibility throughout all departments.

**Implementation of the Technology Disaster Recovery Plan:** Ensuring business continuity has always been a key concern for the City. In the past 18 months a true business-level solution combining the City’s storage area network, a disk back up system and a remotely located disaster recovery system that mirrors the primary system has been configured to take over almost immediately should the primary systems become compromised.

In 2014 the City also replaced the UPS (Uninterrupted Power Supply) that powers the City Hall computer room and phone bank with a larger, more robust model. The UPS is intended as a bridge to cover the approximate 45 seconds between loss of power and bypass to the City Hall 250 gallon generator. It also protects the data center equipment from brown outs and surges.

The IT Department is currently in the process of replacing the UPS that backs up the Police combined dispatch area. As with City Hall, the existing UPS had outlived its life expectancy.

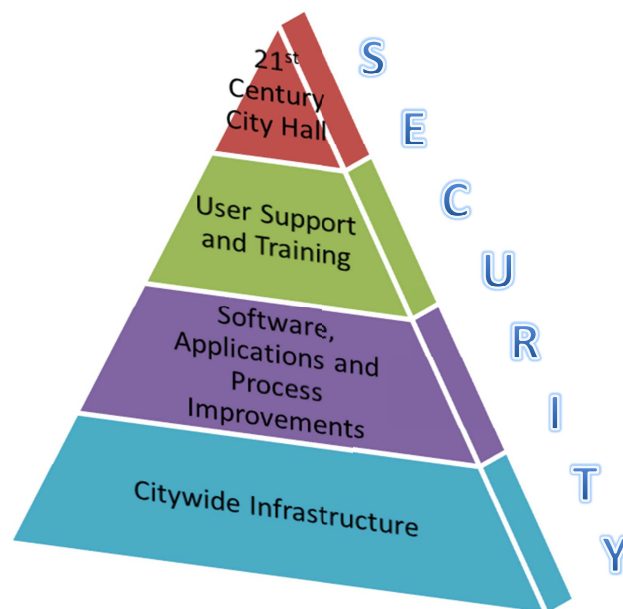
**Consolidation of data centers:** The IT Department is actively participating in the design of Fire Station #3 and Headquarters. Upon completion of that project all servers will be moved from City Hall to a combined, secure, state of the art phone and data center in the new Station 3.

**Improved quality of experience of customer service at all levels using technology:** Creating a 21<sup>st</sup> century city hall requires the ability for citizens conduct their business when it is convenient for them, whether City Hall is open or not.. The IT Department continues to work with all stakeholders to expand online bill payment, online program registration, and online search capabilities.

During the past year the City has also developed “**Village Views**” pages, displaying scheduled road work, restaurants and businesses specific to each village. Additionally, the **MyNewton** web portal has been developed to allow residents to create and tailor their own personal home page to receive the information, news, events and site page updates that are of interest to them.

### Categorizing Citywide Needs - Overview

Four broad categories have been defined to construct a framework for better interpretation and planning. These four categories: [Citywide Infrastructure](#), [Software/Applications and Process Improvement](#), [Security](#), and [User Support/Training](#) form the basis of all detailed initiatives and technology concerns.



## Citywide Infrastructure

**Components:** *Physical Plant, Fiber, Copper, Redundancy, Data Centers, Wireless, Convergence, and the future of Voice, Data and Video.*

**Overview:** Providing the city with an infrastructure capable of handling current and future technology needs is the foundation upon which all projects, both current and future, will rely. Due to the aging infrastructure, the majority of the immediate needs identified in the FY14-FY19 Technology Plan centered on this component.

Installation of a modern, redundant fiber network was a primary need. It was paramount in enabling the City to build a mirror-imaged, disaster-prepared system capable of keeping financial systems, public safety, and other critical data available in the event of catastrophe and was also a critical component as the Newton Public Schools move their technology forward. The “loop” design ensures a secondary path to any location and with “spanning tree enabled switches” costs for multiple paths can be kept in check. Extra fiber strands will allow dedicated connections outside of the data network for special projects, security initiatives, one time interactive projects as well as live feeds to NewTV.

The City phone system was installed in the early 2000’s. The system is a conventional service with many limitations. The installation of a state of the art fiber network will now allow a systematic upgrade to a scalable, mobile, robust VoIP offering many opportunities, such as elimination of phone wiring, cost savings, and improved functionality such as auto attendant, voice mail, ring groups, advanced reporting, and even “roaming” capabilities. VoIP will also be able to eliminate long distance calls by using the Internet instead of the phone company.

Demand for network bandwidth continues to be a challenge for the Newton Public Schools. Support for “Bring Your Own Device” (BOYD) is fast becoming a component of education in the 21<sup>st</sup> century. Current projections anticipate each student will bring an average of 2 mobile devices to school. Providing a wireless network to handle this demand is critical; providing enough bandwidth upstream requires scalability, management and redundancy in front of these wireless endpoints.

Inasmuch as “Bring Your Own Device” (BYOD) has already arrived at the Newton Public Schools and the Newton Free Library, there is no doubt that municipal areas will be next. Policies, practices and procedures must be implemented prior to this arrival. Municipal challenges in this new, mobile environment include the technological ability to meet Freedom of Information Act (FOIA) requests and the protection of the information of constituents. While the expectation is that more desktops will be replaced with mobile solutions to better address evolving job requirements and the ever-growing demand for access to real-time data, securely delivering that data into the field will become a high priority challenge.

While the physical plant is established, all IT entities continue to invest in Storage Area Network (SAN) solutions with virtual servers hosting the applications that access this data. The virtual server framework provides efficiencies such as power conservation (reducing dedicated server foot print), ease of administration, and downtime reduction. SAN technology allows for similar efficiencies managing disk storage devices as a separate network subsystem rather than being physically connected to each server. This architecture allows for quickly assigning additional storage space from the SAN to individual physical or virtual servers and managing SAN disk space efficiently from the central SAN system. The continued investment in virtual servers and SAN technology will save the City time as well as money.

Consolidating data centers frees up time, environmental and maintenance costs, valuable office space, and centralizes equipment and security. After the initial investment of time and money to consolidate sites, the ongoing savings will easily outweigh the consolidation costs.

### Software, Applications, and Process Improvements

**Components:** *21<sup>st</sup> Century City Hall, Financial Systems, Email and Calendaring System, Asset Management, Work-Order Processing, Integrated Solutions, Increased Operational Efficiencies, Better Decision Making, Coordinated Resources, Interdepartmental Collaboration, Increased Communication with the Public*

**Overview:** The City of Newton currently has several enterprise applications that address the needs of many departments:

- Finance Plus- The payables system;
- Community Plus- Permit, licensing and code enforcement system;
- Munis- Receivables system;
- GIS- Geographic Information Systems;
- Hansen- Resource and project tracking for Public works ;
- QED- Public Safety system;
- Document Indexing – ISYS
- Document Scanning – Laserfiche
- Exchange in the Cloud- The City email and calendar system.

Universal applications that meet the needs of many departments but built on a shared core module allow everyone to share information, stay informed, and minimize software and server maintenance, licensing and support. Adding modules or applications to a few robust systems performing the needs of many independent groups brings a value of consistency and fluidity that extends far beyond that of silo solutions that cater only to individual groups. Legacy applications should be evaluated and removed before their shortcomings compound into farther reaching issues. Legacy services can be added in to existing enterprise-wide applications with minor modifications to processes. Therefore, before any new systems are

procured, a full review of the current functionality and how it can be used to address the challenge at hand will be conducted.

One of Mayor Warren's key initiatives is the development of a state of the art website capable of enabling residents, business owners, or contractors to conduct their business with the City remotely at any time – day or night. An inventory of the forms, service requests, payment types, applications and public information requests numbers close to 1000.

Requirements of a 21<sup>st</sup> century municipal website include the following:

- Online applications - not just forms for printing or mailing;
- Multiple options for online payments for items such as licensing and permitting;
- Ability to securely query the information systems for public data;
- Work with the City's website or in the cloud;
- Ensure the safety of the City's data;
- Be mobile friendly for both the inside and outside facing parties;

Universal solutions enabling applicants to visit one "counter" or webpage, find all information, forms, feedback and an acceptable payment procedure will increase efficiencies and customer satisfaction while reducing counter lines, as well as business and resident frustration.

## Security

**Components:** *Disaster Recovery, Alarms, Monitoring, Video Based-Security, Policy, Consistent Solutions across Departments.*

**Overview:** There are many facets to security that must be addressed, specifically the following:

- Protection from the Internet – the domain of firewalls, routers, up to date operating systems that remain current with patches and fixes;
- Protection from users – education and awareness will help prevent employees from bringing and using unsecured devices in the work place;
- Protection from disgruntled or departing staff – an early warning system covering all manner of employee departure initializing standard protective steps to ensure the safety of data and equipment. Standardize onboarding and terminations;
- Protection during remote access – Every department has key employees who remotely access systems. Even during catastrophic weather events that leave the city shutdown to all but essential personnel, there are still many people doing business as usual.

The protection of the City's data and networks begins on the inside. The City must continually review and upgrade security systems and practices to address new concerns that were historically non-issues. With the installation of new technology and solutions the City must

remain vigilant in the fight to eliminate potential exploits so as to protect the City, its employees and its residents.

Video monitoring of schools, public buildings, public spaces, weather forecasts, traffic, and known crime zones, to insure the safety of students and the community are a high priority. Responsibility varies by location and audience. Consistent solutions that work across all departments will provide efficiency, enable cooperation, and will enable the consolidation of back end equipment to conserve server needs, licensing, and maintenance and support costs.

Additionally, the City will need to standardize storage of historic video, develop consistent means of retrieval, and insure compliance with State and Federal laws while protecting the rights of all citizens.

### **User Support & Training**

**Components:** *Training for IT Staff and End Users, Enhanced User Awareness of Technological Opportunities, Opportunities for Remote Access, BYOD Awareness*

**Overview:** In-house training for technical staff is critical in preserving the City's IT investments. Rapid changes in technology and solutions require frequent, in-depth training and re-education on these new or updated systems and solutions.

Keeping the IT staff knowledgeable in current applications is only one piece of the challenge; training for users and documentation of processes must be available. Time and again functions and processes that are performed infrequently are often the source of mistakes. The best training practices include repetition. If that is not an option, frequent training opportunities are critical to keeping all staff current.

Ensuring all employees are aware and informed of changes in policy and how it affects them should have a structure and delivery mechanism that insures everyone remains knowledgeable.

Training delivery methods have evolved as well. New methods of training such as pre-recorded classes available from the internet/intranet, sophisticated FAQ web pages, even user groups can supplement the old teacher-pupil system.

## FY2016 – FY2020 Needs Analysis by Department

### Dept 101 – Clerk of the Board, Board of Aldermen, City Clerk, Elections

**Clerk of the Board FY16-FY20 Needs:** Agenda Management, Enhanced Website Search, Community Plus for Special Permits

**Clerk of the Board:** Providing searchable access to the information held by the Clerk of the Board is perhaps the greatest technology challenge for the Board of Aldermen and the staff of this department. Successes include the use of ISYS for internal document management. Along with the Law Department, BOA uses ISYS to track every Microsoft Office document. The file systems date back to the mid-1980's and have experienced exponential growth in both file size and quantity. IT has converted these departments to the SAN where disk space and processing power can be allocated as needed.

The Board also uses the Civica website system for organization in displaying agenda, minutes and pertinent files associated with the Full Board as well as the six standing committees. The biggest drawback for the Board of Aldermen and the City as a whole is the poor search functionality on the site. The issue seems to be a lack of full compatibility between the City's proprietary content management system and the major search engines.

Equally challenging has been the identification of a robust agenda management system. The successful system must be able to take input from all other departments, allow splitting, and assignment to multiple standing committees. Securing this type of system continues to be a priority.

A centralized method to track Special Permits from inception to permit issuance detailing all documentation with updates and revisions as well as payments is yet another unmet need.

Speech to text and closed captioning solutions are two opportunities to enhance the public experience in attending meetings as well as reducing the time required to transcribe recorded audio into minutes for posting on the website.

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### **City Clerk FY16-FY20 Needs:** Dogs Database and Business Licensing into Community Plus

**City Clerk:** The City Clerk's office maintains multiple small Access databases. Systems include Businesses, Dogs, Births and Deaths. While the business database does have a place in the Community Plus system, the Births and Deaths are basically stand alone with no other apparent required interfaces. Looking forward, a method of enabling people to query and print birth and death certificates may be an option, however, at this time official documents still require endorsement by a licensed Notary. The Dogs database does have a place in Community Plus

and its opportunity to share data with the Police Department animal control officer gives it a value that could benefit many.

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**Elections FY16-FY20 Needs:** Hardware upgrades for desktops.

**Elections:** Voter registration and election administration are two of the primary duties of the Election Commission. Managing the census database and interfacing with the Commonwealth's VRIS system is the other. With assistance from the IT department, election night automation and reporting is far more advanced than any other city or town in Massachusetts. Live results are consistently posted within the hour of poll closings on election night.

A state sponsored solution is needed for efficiency in census collection.

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**Dept 103 – Executive Office**

**Executive FY16-FY20 Needs:** Enhanced support for mobility.

**Executive:** Small document tracking applications were designed in the past few years that efficiently enable departments to track the progress of documents requiring signatures. As a very mobile department, the biggest challenge from the Executive Office is enabling continuous remote access to staples such as email and calendars.

The Mayor's Office uses Code Red for the City's emergency warning system. The Executive Department also uses a subscription to Survey Monkey that is maintained by the IT Department.

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**Dept 104 – Comptroller's Office & Newton Retirement System**

**Comptroller FY16-FY20 Needs:** Enable efficient online payment system.

**Comptroller/Financial Reporting:** Primary systems are Finance Plus and Microsoft Office. The Comptroller's Office relies heavily on the City website and intranet to relay financial information and forms. In recent years, the Comptrollers' office has made a great push to scan all documents and store as collections in the batches from which they were processed. This makes document retrieval infinitely quicker and negates the need for trips to a vault to search for hard copy. Online payments from many departments need to be created in such a way as to create further efficiencies for the financial departments (Comptroller, Treasury).

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**Newton Retirement System FY16-FY20 Needs:** Ongoing support, as needed.

**Newton Retirement System:** The Newton Retirement system is a separate entity that is intricately tied to the City's financial system. Therefore, the IT department provides PC support, recommendations on new equipment, and access to the City's network.

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#### **Dept 105 – Purchasing**

**Purchasing FY16-FY20 Needs:** Enhanced office automation and increased service offerings via the City Hall Print Shop.

**Purchasing:** Between Finance Plus for purchase orders and heavy use of the Civica “Bids and RFPs” module, office automation for Purchasing is very efficient. However, there are significant opportunities in the print shop to expand operations including the creation of a city-wide scanning area, and a one-stop shredding location. IT could be instrumental in networking the required equipment.

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#### **Dept 106 – Assessing**

**Assessing FY16-FY20 Needs:** Assessing specific systems should be migrated to the storage area network; review opportunities to relocate the online Assessor's database which may be better served in the cloud.

**Assessing:** The Assessing Department uses the Vision database to manage the “valuation of property”. Data is imported from Vision into Community Plus once per year. The department maintains a robust set of web pages that allow residents, businesses and realtors to query property information online. Internal systems are slated for migration to the SAN, while the City is exploring the opportunity to move the web applications to the cloud of the Assessor's database systems developer. IT exports all building permits from Community Plus for import into the Vision system twice per year. This allows Assessing to be aware of where property valuations are likely to require review. Several of the Assessing department specific systems are approaching end of life and should be migrated to the storage area network. The Assessor's database may best be served in the cloud but requires more research and discussion.

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#### **Dept 107 – Treasury**

**Treasury FY16-FY20 Needs:** Voice over IP phone system, enhanced online payment systems.

**Treasury:** The current state of computers, printers, server storage and staffing enable the Treasurer's office to operate in an efficient manner. The most significant technology needs for

Treasury will be better online payment opportunities that eliminate data entry and a Voice over IP (VoIP) system that will enable new methods of functionality and customer service to better serve the public. Both systems are high priorities for the City.

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### **Dept 108 – Law**

**Law FY16-FY20 Needs:** More digitization using Laserfiche, automation of document transit and tracking, WestLaw enhancements, audio/visual enhancements for Law Library including smart board and speaker system.

**Law:** In general, the Law Department is a paper intensive group largely resulting from the nature of their job and the legal system in Massachusetts. Enhanced search capabilities and access to information are perhaps the most important technology needs of this department.

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### **Dept 109 – Human Resources**

**Human Resources FY16-FY20 Needs:** PC replacement, training assistance, support for new software initiatives that dovetail with existing applications and processes.

**Human Resources** Finance Plus is the primary application for HR and the most important piece may be additional training and a revision of the Standard Operating Procedures for proper and consistent use of the system. The department is currently investigating a Human Resources Information System specializing in application, recruitment management, onboarding, etc. The Human Resources Department has also been scanning records into a database on the same Laserfiche system as originally purchased by the Assessing Department.

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### **Dept 111 – Information Technology**

**Information Technology FY16-FY20 Needs:** The department will need to maintain a full complement of staff and sufficient annual appropriation of funding to enable the realization of the technology vision.

**Information Technology:** With hiring needs met, project management is now receiving full attention from senior staff members. Increased capacity of the Storage Area Network, Disaster Recovery System and Backup systems will allow the department to continue consolidation.

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### **Dept 114 – Planning & Development**

**Planning FY16-FY20 Needs:** Smartboard, laptop and audio system for basement conference room; laptops for mobile employees, additional portable folding AV cart for home and away events, licenses for ISYS and/or Laserfiche.

**Planning & Development:** The Planning and Development Department requires significant resources; from bandwidth to disk space to file sharing and web presence. Additionally, a document indexing system, such as ISYS, would enable better opportunities for staff members to access information. The City has invested heavily in Laserfiche, a scanning-centric document management system. Both of these solutions could help automate planning as well as enhance lost time searching for documents.

The Planning and Development Department also consistently meets with and presents to the public and requires a simple system, easily launched, and equipped with high quality audio and visual opportunities.

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### **Dept 115 – Public Buildings**

**Public Buildings FY16-FY20 Needs:** Remote access with enhanced connectivity, digital bridge to span disparate systems.

**Public Buildings:** The Public Buildings Department is a remote department with many employees managing critically important large projects, constantly in meetings at construction sites and elsewhere; therefore, mobility is critical. Administration on Eliot Street is a never-ending tidal wave of paperwork with duplicate entry of information between disparate systems.

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### **Dept 118 – Financial Information Systems**

**Financial Info Systems FY16-FY20 Needs:** Continue support for the department.

**Financial Info Systems:** FIS is the gatekeeper for the administration of the data for Finance Plus and Munis. The IT department oversees user administration, hardware support, and works alongside FIS in projects such as the recent upgrade of Finance Plus and Community Plus and the move away from dedicated servers to the storage area network.

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### **Dept 201 – Newton Police Department**

**Police Department FY16-FY20 Needs:** Implement enhanced Police Wireless, migrate to IT SAN, converge support staff, new CJIS system, implement Telestaff to better manage auctioning of overtime hours. Police online data dashboard (Crimesight) managed in-house.

**Police:** From dispatch to detectives, the Police network is quite sophisticated. Drawbacks are the distributed database and file systems running on older devices. Many Police Applications are not future scalable and inhibit security updates and current web browsers. The support staff at Police is limited and would be better served if these systems (PCs, hardware, networking) were brought onto the City network and SAN to allow better administration by a full staff and allow the Police IT Specialist to focus more on application upgrades for forward compatibility.

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### **Dept 210 – Newton Fire Department**

**Fire Department FY16-FY20 Needs:** Reliable software for the Mobile Data Terminals, additional training, quality inside support for EOC and applications such as LUA, shared permitting and inspections in Community Plus.

**Fire:** In the past year the IT Department has assisted in the implementation of many technology initiatives in the Fire Department. With the recent assumption of Emergency Operations, a new EOC has been assembled at Fire Headquarters. With assistance from IT much equipment has been purchased, networks have been built, and processes have been defined. The LUA application has enabled smart phones to take a step forward in assisting emergency operations requirements. Advancing the use of Community Plus will benefit all without additional cost.

IT continues to work with NFD on the implementation of the first fleet of mobile data terminals in Fire vehicles and expects continued adjustments for enhanced support.

Fire has many opportunities for inspections and permitting. The City is confident that Community Plus will create efficiencies and will enable two-way communications with the inspectors from other departments.

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### **Dept 220 – Inspectional Services**

**Inspectional Services FY16-FY20 Needs:** Broader Community Plus use, eGov portal for applications and payments, major scanning project, new portable device initiatives.

**Inspectional Services:** A very public facing department, ISD has a very good system in Community Plus already in place. However there are many areas where the system is not yet utilized. The facets that can enhance public services are many and require some time to properly deploy, but with the current skill set and experience in the department, future enhancements are attainable.

The eGov portal is the web interface in front of Community Plus and is intended to allow high volume contractors the ability to apply for permits and pay for them online. It allows contractors or their office managers to handle the paperwork from their desks. This should alleviate the need for many of the high volume contractors to visit City Hall, creating efficiencies both for the contractors as well as staff at City Hall. Additionally, this will free up time at the ISD counter to enable the “one time” visitors, often homeowners, with many questions and relative lack of experience, more time with the building inspectors.

A front counter eGov portal for visitors and training will allow city staff to set prospective contractors up on site with assistance and support so that in the future they will be able to manipulate the application swiftly and correctly.

In the field the push is for better mobility, smaller devices, reliable connectivity and secure access to all pertinent data. While most of this has been delivered, the push for smaller devices and broader data access continues.

Sharing the system, especially with the Fire and Health Departments promotes a consolidation of data that allows a new level of information sharing. The IT Department is in the early phases of rolling out licensing and permitting solutions.

The City is currently determining the best approach to scanning the entire contents of the ISD parcel records. ISD personnel are currently working with the Clerk’s Office and the City Archivist to develop a viable plan.

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#### **Dept 401 – Department of Public Works**

**Public Works FY16-FY20 Needs:** Update “Roads Manager” program to include degradation curves to assess annual changes in road conditions; Identify a comprehensive Asset Management program that incorporates all streets, sidewalks, water, sewer, and storm water infrastructure; Expand the use of mobile devices to increase efficiencies and productivity;

**Department of Public Works:** Public Works uses the “Roads Manager” software program, which includes a uniform Pavement Condition Index (PCI) rating for all roads in developing the annual paving plan. The PCI data is 5 years old and D.P.W. is currently conducting a re-survey of all of the City’s streets. In addition, the department is working with the software contractor to:

- i. Improve their pavement degradation curves so that the City can more accurately assess annual changes to street conditions, and
- ii. Update their road repair strategies to be more inclusive of all paving and preventive maintenance methodologies to more fully evaluate options to improve and maintain road conditions annually.

Additionally, D.P.W. uses Hansen Asset Management software to streamline the work processes, track and report inventory, and schedule maintenance programs. As a result of the age of the software, future enhancement is recommended. Public Works is exploring a comprehensive Asset Management program that incorporates all streets, sidewalks, water, sewer, and storm water infrastructure. This plan would identify the assets, their GPS coordinates and characteristics, useful life expectancy, maintenance and replacement schedules, cost estimates, and include GIS overlays to help identify points of conflict and opportunity. Included in the program would be a consolidated work order system that could be used by all and correlate directly to Customer Service/WebQA. This would significantly improve the efficiency and effectiveness of the department.

Close to completion is an advanced wireless water meter monitoring system. This gives the city the ability to observe water usage at 5 hour intervals and respond quickly to critical pipe breakage by excess demand alerts at residential and commercial locations. DPW can quickly answer questions customers may have regarding billing by supplying detailed usage reports and graphical water consumption charts.

Expanded use of mobile devices to increase efficiencies and productivity would also prove beneficial to the department. Examples include immediate reporting from the field, completing work orders on site and the ability to give current and live data on road conditions and projects. Mobile device management will also be needed as the use expands. The City will need to have the resources to remote wipe, update software and secure city data on smart phones, tablets, etc. as their use increases. VoIP should also be implemented to streamline the communication between the customer service department, water billing department and residents.

Several projects are entering the planning or testing phase which will provide noticeable benefits to the City:

**GPS fleet tracking:** will allow the city to provide real time data of plowing operations and street conditions. Accurate data displaying vehicle location brings the capability of deploying the closest vehicles quickly to respond to hazardous road situations.

**ROAM:** a remote street light monitoring and control system may provide energy savings and reduce the number of street light outages by providing wireless control and measurement.

**SCADA (Supervisory Control and Data Acquisition):** This system will provide remote monitoring and control of the city's water pumping system and allow the Department of Public works to respond quickly to any abnormalities within the system including sudden changes in water pressure. Predictive maintenance will also be a benefit which will allow for proactive rather than reactive planning.

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### **Dept 501 – Health & Human Services**

**Health & Human Services FY16-FY20 Needs:** Migrate applications into Community Plus, additional employees may need mobility solutions.

**Health & Human Services:** One of the pioneering departments in a push to use Social Media to inform the public, the Health Department has expanded their services, their staff and their technology needs. IT has written a few small web-based applications to track Human Services visits, blood pressure monitoring, etc. There are many opportunities for permitting and licensing to join in Community Plus as well as annual and recurring inspections and liquor-related events. The IT Department looks forward to incorporating more systems as a result of the successful implementation of the sidewalk permitting module.

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### **Dept 502 – Senior Services**

**Senior Services FY16-FY20 Needs:** Public and private wireless, PC replacement as needed.

**Senior Services:** The Newton Senior Center on Walnut Street serves as a multipurpose building for seniors over the age of 50, and Veterans of any age. There is an administration network connected by fiber to city hall and there is a public access network that enables visitors to access the Internet as well as seasonal opportunities such as having their taxes done by a professional online. As technology makes its way further into the retirement age bracket, we anticipate increased demand for wireless internet access on the public side. Assistive listening technologies for public access to amplified voice systems would also benefit the patrons of the building.

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### **Dept 503 – Veterans' Services**

**Veterans' Services FY16-FY20 Needs:** Laptop with training and support.

**Veterans' Services:** As a result of the restructuring of the delivery of services to the City's population of Veterans, the Veteran Services Officer will now spend 50% of his/her time at City Hall and 50% at the Newton Senior Center. Therefore, it is imperative that they be equipped with a laptop with wireless access to the administration network in each building.

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### **Dept 601 – Newton Free Library**

**Newton Free Library FY16-FY20 Needs:** Enhanced internet access, increased bandwidth on wireless, consolidation and redundancy of routers and firewalls, attention to 5 year PC replacement plan

**Newton Free Library:** The Newton Free Library has made great strides in recent years solidifying their network infrastructure, improving the wireless network available for public use and reducing the number of servers in use by virtualization.

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### **Dept 602 – Parks & Recreation**

**Parks & Recreation FY16-FY20 Needs:** Upgrade equipment, wireless services, re-evaluate “Sportsman” software to potentially include under an umbrella application.

**Parks & Recreation:** As a remote site with high mobility requirements, Parks and Recreation may best be served with a fleet of portable devices that provide access to the city data network and also serve double duty as payment terminals for their many program registrations. Hardware upgrades for remote sites such as Gath Pool, Crystal Lake, and a dozen summer camps should all utilize similar devices on a shared, private wireless solution. Mobile devices that support standard video feeds back to City Hall and the Internet would assist in determining resource assignment during weather related events. A very data intensive department with high visibility web pages that require timely updates, reliable access from the office and the field are prime requirements for efficiency.

Future opportunities for Parks and Recreation include use of GIS to assist endeavors ranging from tree maintenance and inventory to centrally organizing all of the green spaces for which they are responsible. Moving the tree maintenance permitting into Community Plus should alleviate busy work and make the system more efficient as well as sharable.

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### **Dept 603 – Historic Newton**

**Historic Newton FY16-FY20 Needs:** Wireless access, equipment upgrades

**Jackson Homestead:** The History Museum now has its collections in multiple locations: the Jackson Homestead, Durant-Kenrick, and the archives in the Newton Free Library. Consequently, staff mobility is becoming more important. With the anticipated overhaul of Jackson Homestead slated for calendar year 2014, it will be important to address issues of connectivity.



## Five Year Technology Plan

Category	Dept # - Description	Overview	Year of Implementation						
			Funding Source	Estimated Cost	FY16	FY17	FY18	FY19	FY20
Software, Applications and Process Improvements	101 - Agenda Management	Web-based database managed system capable of supporting all of the needs of our Board of Aldermen as well as their subcommittees, tracking items from inception to final approval. We continue to look for an acceptable solution. It will not be cheap and will probably generate a hefty annual fee.	TBD	\$ 120,000	\$ 60,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000
Software, Applications and Process Improvements	101 - Community Plus for Business Licensing and Dog Database	Migrate from Microsoft Access applications into Community Plus allows better data sharing, eliminates silos, enables Police to stay up to date on dogs.	FY16 Budget	\$ 20,000	\$ 12,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
Software, Applications and Process Improvements	101 - Community Plus for Special Permits	Special permits in Community Plus allows cross department collaboration and a logical means to track related documents.	No additional cost	\$ -					
Software, Applications and Process Improvements	101 - Enhanced Website search	Site indexing leaves much to be desired and too much to chance. Better method of indexing and retrieval, especially for committee-oriented pages and documents is critical for a transparent City Hall. We have not yet found a solution that works with Civica.		\$ -					
Citywide Infrastructure	101 - Hardware Upgrades for Election PCs	Part of our annual 20% replacement project		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Citywide Infrastructure	103 - Enhanced Mobility Support	Enable anywhere access to working documents for Executive office as well as other departments, especially those frequently involved in after hours and off-site meetings. Equipment upgrades include iPads, laptops, subscription based internet access, secure gateways to our data, and consistent solutions for all users		\$ -					
Software, Applications and Process Improvements	104 - Enable Online Payments	Ongoing project, we do not expect a cost to be associated with this project, merely a significant investment in employee time.	No additional cost	\$ -					
Software, Applications and Process Improvements	105 - Increased automation in the Print Shop	Update SOPs for job requirements, enhance security for the room, purchase industrial shredding machine, contract with a recycler for regular pickup of large bin container. High definition, high speed scanners, industrial shredder. Please also see 108 and 114.		\$ 35,000	\$ 35,000				
Software, Applications and Process Improvements	106 - Move Assessor's Online Database to the cloud	Using standard coding maintained by Applied Geographics with tier 3 hosting, we would expect exceptional response time, immediate updates and patches, and uninterrupted support.		\$ 35,000	\$ 15,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Citywide Infrastructure	106 - Move Assessing data to SAN	Continuing on in our process of moving all standalone servers to a more robust system		\$ 20,000	\$ 15,000	\$ 5,000			
Software, Applications and Process Improvements	107 - Enhanced online payments	Enable further opportunities to apply and pay online for licenses and permits.		\$ -					
Citywide Infrastructure	107 - Voice over IP for Treasury	Enhanced phone system to enable better support for customers.	In FY15 Budget	\$ -					

## Five Year Technology Plan

Category	Dept # - Description	Overview	Year of Implementation							
			Funding Source	Estimated Cost	FY16	FY17	FY18	FY19	FY20	
Software, Applications and Process Improvements	108 - Archive scanning with OCR	Scanning in the Law Department's historic documents will save space and research time. It will also preserve copies of paper documents digitally. See 105.		\$ -	\$ -					
Citywide Infrastructure	108 - Permanently Mounted Proj. and screen for Law Library	The newest conference room in City Hall has no resources built in. All equipment is brought in on an as needed basis.		\$ 2,500	\$ 2,500					
Software, Applications and Process Improvements	109 - Job Applicant Module	Web-based front end in the cloud interfaces with our Finance Plus system, enables online job applications and moves the data entry to the applicant.		\$ 50,000	\$ 50,000					
Citywide Infrastructure	109 - PC Upgrades	PC upgrades for HR - must meet requirements of specialized software packages	In FY15 Budget	\$ 2,000	\$ 1,000	\$ 1,000				
Citywide Infrastructure	111 - Electronics for City of Newton Fiber Project	Building a 21st century citywide fiber optic network supporting 10gb for the schools and public safety.	Most in 111 Capital Acct	\$ 190,000	\$ 150,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Citywide Infrastructure	111 - AV For BOA and War Memorial	Oversight of AV project for Aldermanic Chambers and War Memorial.	In IT Capital Acct		\$ 50,000					
Citywide Infrastructure	111 - Networking Enhancements to support future growth and bandwidth demands	Review and rewire some of our oldest wiring runs, done in the 1990's with standard Cat3 and Cat4 wire. Some may work with the new needs, but it is smarter to replace these with modern standards.	Applied in FY16 CIP	\$ 165,000	\$ 85,000	\$ 40,000	\$ 20,000	\$ 10,000	\$ 10,000	\$ 10,000
Citywide Infrastructure	111 - Support for video over the data network	LiveStream is a cloud based solution that enable video over IP and stores events on their archives. Configuring each room to broadcast and receive these streams will solve overflow concerns once and for all as well as providing a drastically cheaper means of sharing overflow into the War Memorial.	Applied in FY16 CIP	\$ 70,000	\$ 30,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Citywide Infrastructure	111 - Voice over IP for City Hall and the Library	Expand efficiencies to the high volume departments.	Applied in FY16 CIP	\$ 145,000	\$ 145,000					
Software, Applications and Process Improvements	114 - Document OCR, imaging and indexing	The number of employees, the volume of documentation and the inflow of public pieces of information make consistent document storage and retrieval a challenge. Couple with the high turnover rate, a standard method endorsed and enforced for the department would benefit all. See 105.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Citywide Infrastructure	114 - Enhanced Mobility	Remote access for meetings and gatherings away from the office are always a challenge. Having data at their fingertips could reduce meetings and increase productivity.	In FY15 Budget	\$ 20,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000
Citywide Infrastructure	114 - Fully Equipped A/V Cart	Portable multimedia projecting system with internet access, sound, microphone, projector, DVD/BluRay player.	Probable in FY16 Budget	\$ 10,000	\$ 5,000					\$ 5,000
Citywide Infrastructure	114 - Permanently mounted projector and screen with PC and audio	For planning department conference room in basement	Probable in FY16 Budget	\$ 2,500	\$ 2,500					



## Five Year Technology Plan

Category	Dept # - Description	Overview	Year of Implementation						
			Funding Source	Estimated Cost	FY16	FY17	FY18	FY19	FY20
Citywide Infrastructure	501 - Remote access solutions for mobile employees	As with Planning and Public Buildings, many HHS employees are often away from their desks and productivity should not be tethered to a desktop PC.	In FY15 Budget	\$ 10,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
Citywide Infrastructure	502 - PC upgrades as needed	Serving the over 50 and offering social services, reliable equipment is paramount to offering the best services to our constituents.	In FY15 Budget	\$ 5,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Citywide Infrastructure	502 - Wireless for Senior Center	Public and Private access enabling mobility for all	In FY15 Budget	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Citywide Infrastructure	503 - Laptop with training and support	It is critical to get our Veteran's Administrator off on the right foot with all the technological advantages to assist.	In FY15 Budget	\$ -					
Citywide Infrastructure	601 - Consolidation and redundancy of routers	Library demands continue to increase; load balancing and availability for all manner of BYOD devices continues to escalate.		\$ 40,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 5,000	\$ 5,000
Citywide Infrastructure	601 - Enhanced Internet Access	Expand bandwidth with MinLib, Comcast and RCN		\$ 20,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000
Citywide Infrastructure	601 - PC Replacement Plan	Five year replacement plan - PCs in use up to 13 hours per day, 7 days per week.	In FY15 Budget	\$ 20,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000
Citywide Infrastructure	601 - Upgrade wireless bandwidth	Current system maxes out often		\$ 20,000	\$ 10,000		\$ 10,000		
Citywide Infrastructure	602 - PC upgrades	Admin staff still work from desks, others need better access from the field.	In FY15 Budget	\$ 10,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
Citywide Infrastructure	602 - Re-evaluate Sportsman	A very good system, not perfect, requires more data entry than expected.	Review Only	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Citywide Infrastructure	602 - Tree Permitting	Bring this application into Community Plus.	No additional cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Citywide Infrastructure	602 - Wireless	Part of the mobility solution for Parks & Rec	No additional cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Citywide Infrastructure	603 - Equipment Upgrades	Many of the Museums PCs are neglected or underprioritized during upgrade periods	No additional cost	\$ 8,000	\$ 2,000	\$ 1,000	\$ 2,000	\$ 1,000	\$ 2,000
Citywide Infrastructure	603 - Wireless Access	Public access to our constituents, private to serve our mobility requirements.	No additional cost	\$ 2,000	\$ 2,000	\$ -	\$ -	\$ -	\$ -
Grand Total, All Projects				Estimated Cost	FY16	FY17	FY18	FY19	FY20
					\$ 875,000				

## **“COMPLETE STREETS”**

“Complete Streets” is a transportation policy and design approach that requires streets to be planned, designed, operated and maintained to a standard that enables safe, convenient and comfortable travel and access for users of all ages and abilities, regardless of their mode of transportation. In short, “Complete Streets” allow for safe travel by those walking, bicycling, driving automobiles, or riding public transportation.

Accordingly, the City’s Capital Improvement Plan includes dedicated funding for street and sidewalk construction and repair, bicycle and pedestrian improvements, handicapped accessibility upgrades, transportation and traffic calming initiatives, and major roadway and bridge upgrade designs.

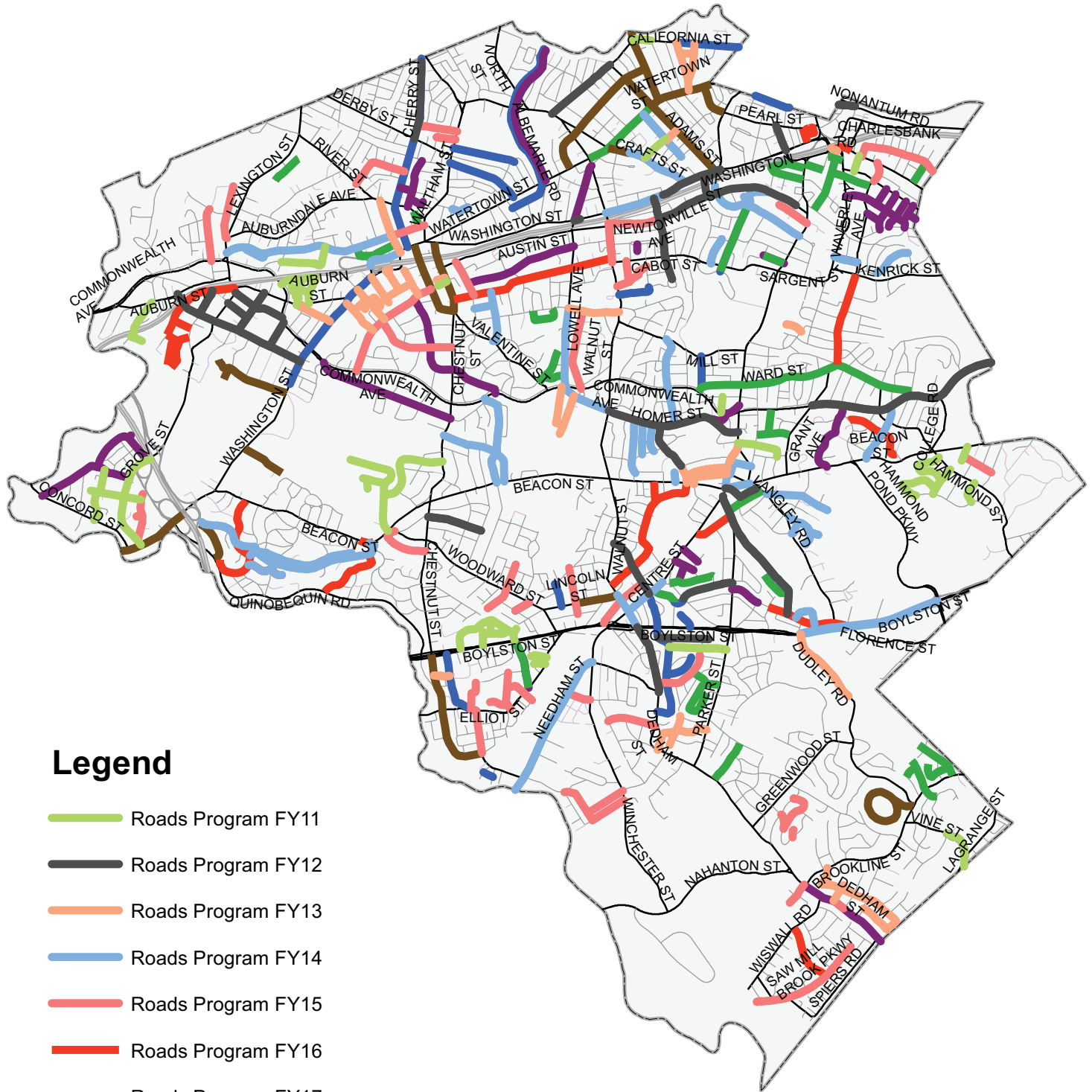
The City’s Roads Program utilizes approximately \$2.3 million in Chapter 90 funding per year to fund major street maintenance work, such as roadway cold-planing and paving, plus preventive maintenance measures including micro-surfacing, infra-red treatment and crack-sealing, as well as bicycle, pedestrian and bridge improvement projects and upgrades. As a result of the passage of the 2013 Operating Override, the City now designates an additional \$1.0 million per year for roadway and sidewalk maintenance. These combined funds allow the Department of Public Works to complete approximately eight (8) miles of roadway and two (2) miles of sidewalk installation and repair work, as well as the installation of more than 100 handicapped accessible ramps per year.

Public Works utilizes a Pavement Management program that has surveyed all city roads and assigned a pavement condition index (PCI) rating, along with a Roadway Asset Management spreadsheet to develop a comprehensive, long-range Roadway Maintenance Plan. The asset management software program uses roadway characteristics, including classification, PCI value, age of pavement, traffic counts, number of homes, and accident history, as well as other utility work (water, sewer, gas, electric), targeted improvement projects, bicycle and pedestrian improvements, traffic signal upgrades, street trees, and related neighborhood work. Weighting factors are then applied to each category, in order to develop a priority ranking for each road. Public Works is currently in the process of re-evaluating the pavement condition index of each road, in order to update the PCI data for the road asset management program.



# City of Newton

## Roads Map FY11 - FY15 Completed, FY16 - FY20 Proposed



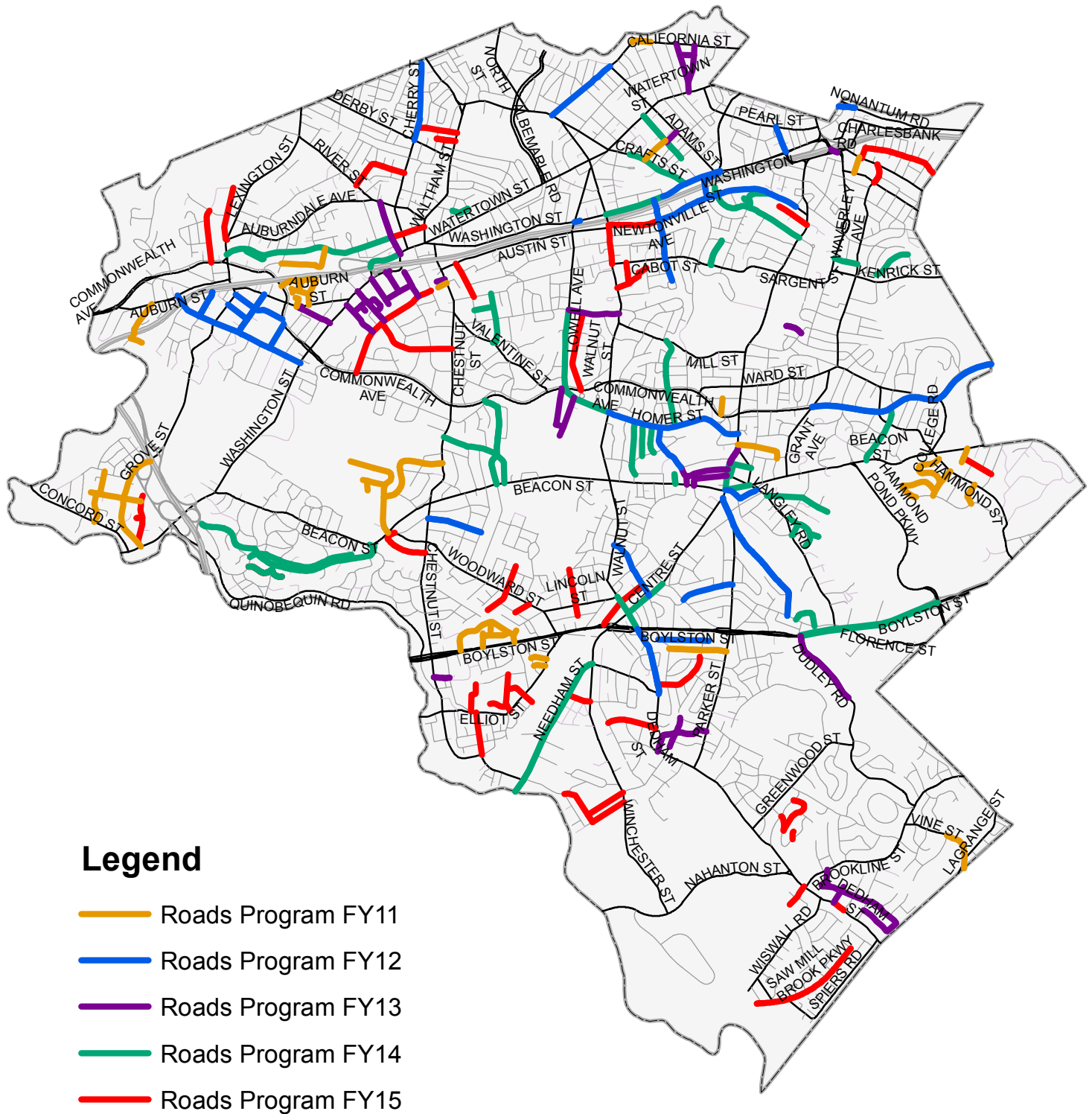
### Legend

- Roads Program FY11
- Roads Program FY12
- Roads Program FY13
- Roads Program FY14
- Roads Program FY15
- Roads Program FY16
- Roads Program FY17
- Roads Program FY18
- Roads Program FY19
- Roads Program FY20



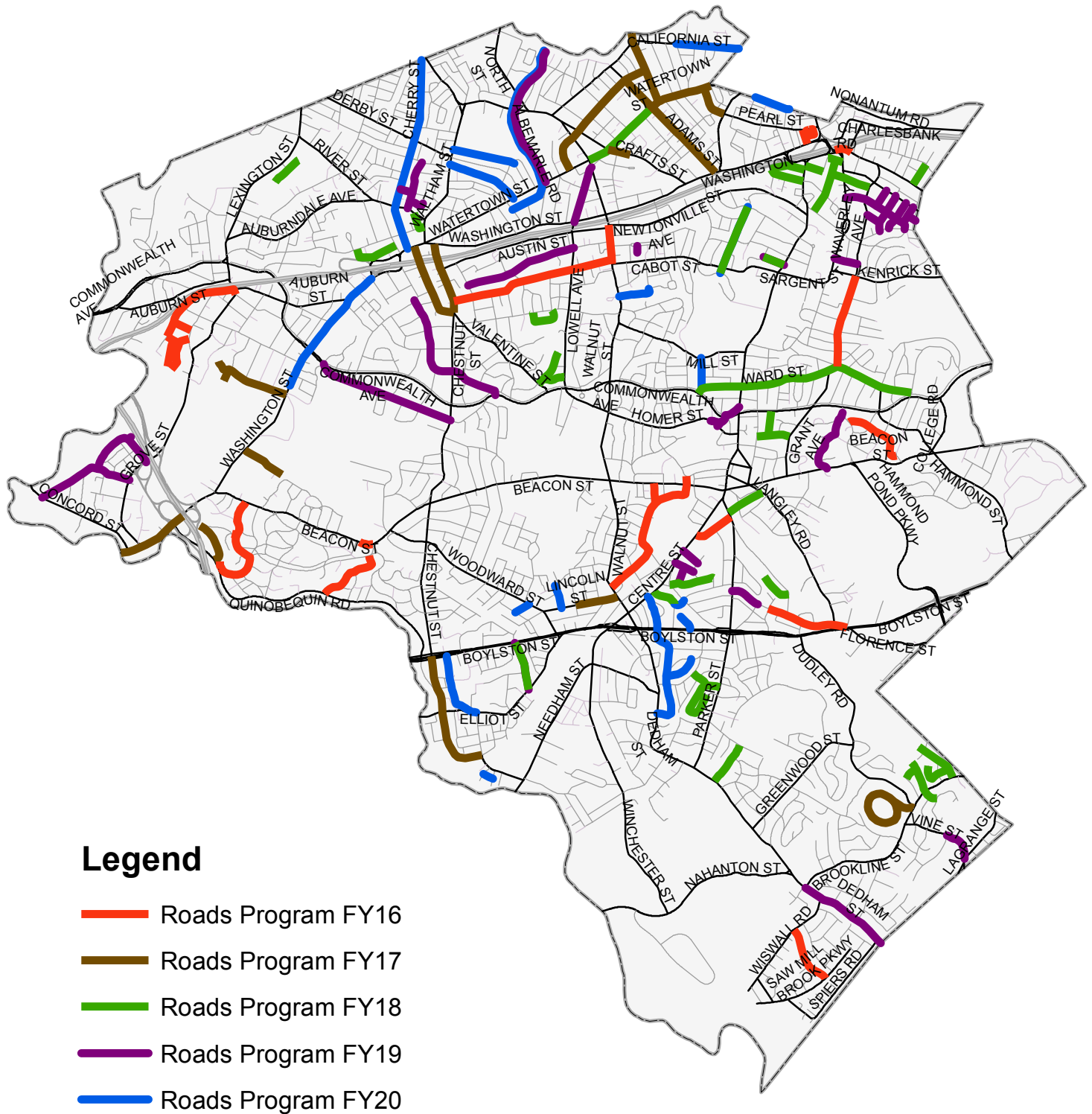


# City Of Newton Road Construction History FY11 - FY15





# City Of Newton Roads Program FY16 - FY20





ROADS PROGRAM 5-YEAR CIP, FY 2016-FY 2020					BUDGET DISTRIBUTION				
					3.5% Cost Escalation Factor Used				3.5%
Project Title	PCI	Length (Feet)	Bike and Pedestrian?	FY2016	FY2017	FY 2018	FY2019	FY2020	
				Walnut St (Newtonville to Cabot)	59	1,000		\$ 144,000	\$ -
Washington St (Newton Corner)	52	1,200		\$ 172,800	\$ -	\$ -	\$ -	\$ -	
Otis St	55	4,721		\$ 339,912	\$ -	\$ -	\$ -	\$ -	
Central St (Grove to Leighton)	55	2,000		\$ 144,000	\$ -	\$ -	\$ -	\$ -	
Lake Ave	50	4,486		\$ 322,992	\$ -	\$ -	\$ -	\$ -	
Crystal St	53	562		\$ 40,464	\$ -	\$ -	\$ -	\$ -	
Jackson St (White to Rt 9)	62	1,240		\$ 89,280	\$ -	\$ -	\$ -	\$ -	
Waverly (Ward to Kenrick)	59	2,421		\$ 174,312	\$ -	\$ -	\$ -	\$ -	
Paul St	64	1,145		\$ 82,440	\$ -	\$ -	\$ -	\$ -	
Berwick Rd	43	792		\$ 57,024	\$ -	\$ -	\$ -	\$ -	
Bacon St	57	416		\$ 29,952	\$ -	\$ -	\$ -	\$ -	
Hanson Road	42	1,731		\$ 124,632	\$ -	\$ -	\$ -	\$ -	
Monadnock Rd	52	1,934		\$ 139,248	\$ -	\$ -	\$ -	\$ -	
Fern St	65	541		\$ 38,952	\$ -	\$ -	\$ -	\$ -	
Leighton Rd	53	395		\$ 28,440	\$ -	\$ -	\$ -	\$ -	
Williston Rd	56	622		\$ 44,784	\$ -	\$ -	\$ -	\$ -	
Oakwood Rd (Aub)	72	763		\$ 54,936	\$ -	\$ -	\$ -	\$ -	
Varick Rd	54	3,139		\$ 226,008	\$ -	\$ -	\$ -	\$ -	
Annawan Rd	52	1,932		\$ 139,104	\$ -	\$ -	\$ -	\$ -	
Pearl St Parking Lot	35			\$ 120,000	\$ -	\$ -	\$ -	\$ -	
Elliot St Bridge Final Design				\$ 150,000	\$ -	\$ -	\$ -	\$ -	
Pearl St (Watertown to Jackson)	48	1,000		\$ -	\$ 144,000	\$ -	\$ -	\$ -	
Watertown St (Capital to Adams) conc panels	48	2,000		\$ -	\$ 288,000	\$ -	\$ -	\$ -	
Washington St (128 to Wellesley Line)	66	1,800		\$ -	\$ 129,600	\$ -	\$ -	\$ -	
Chestnut St (Boylston to Oak)	54	3,800		\$ -	\$ 273,600	\$ -	\$ -	\$ -	



Project Title	PCI	Legnth (Feet)	Bike and Pedestrian?	FY2016	FY2017	FY 2018	FY2019	FY2020
Chestnut St (Valentine to Washington)	54	2,000		\$ -	\$ 144,000	\$ -	\$ -	\$ -
Highland St (Chestnut to Washington)	57	2,361		\$ -	\$ 169,992	\$ -	\$ -	\$ -
Lincoln St (Walnut to Bowdoin)	54	1,000		\$ -	\$ 72,000	\$ -	\$ -	\$ -
Linwood Ave	53	3,940		\$ -	\$ 283,680	\$ -	\$ -	\$ -
Bald Pate Hill	52	3,256		\$ -	\$ 234,432	\$ -	\$ -	\$ -
East Quinobequin Road	55	1,336		\$ -	\$ 96,192	\$ -	\$ -	\$ -
Aspen Ave	66	1,782		\$ -	\$ 128,304	\$ -	\$ -	\$ -
Hawthorne Ave	89	1,500		\$ -	\$ 108,000	\$ -	\$ -	\$ -
Longfellow Rd	53	1,314		\$ -	\$ 94,608	\$ -	\$ -	\$ -
Crafts St (DPW Yard to Watertown)	74	1,000	Y	\$ -	\$ 72,000	\$ -	\$ -	\$ -
Bridge St	52	2,100		\$ -	\$ 151,200	\$ -	\$ -	\$ -
Adams St	56	4,265		\$ -	\$ 307,080	\$ -	\$ -	\$ -
Ward St	65	6,201		\$ -	\$ -	\$ 446,472	\$ -	\$ -
Church St (Richardson to Centre)	60	700		\$ -	\$ -	\$ 50,400	\$ -	\$ -
Richardson St	56	978		\$ -	\$ -	\$ 70,416	\$ -	\$ -
Truman Rd	56	2,121		\$ -	\$ -	\$ 152,712	\$ -	\$ -
Vernon St	65	1,687		\$ -	\$ -	\$ 121,464	\$ -	\$ -
Eldredge Rd	64	1,602		\$ -	\$ -	\$ 115,344	\$ -	\$ -
Elmwood Rd	71	440		\$ -	\$ -	\$ 31,680	\$ -	\$ -
Braeland Ave	74	1,125		\$ -	\$ -	\$ 81,000	\$ -	\$ -
Marshall St	72	933		\$ -	\$ -	\$ 67,176	\$ -	\$ -
Chestnut Terrace	62	695		\$ -	\$ -	\$ 50,040	\$ -	\$ -
Audubon Dr	57	1,325		\$ -	\$ -	\$ 95,400	\$ -	\$ -
Pond Brook Rd	55	1,340		\$ -	\$ -	\$ 96,480	\$ -	\$ -
Drew Rd	57	387		\$ -	\$ -	\$ 27,864	\$ -	\$ -
High Rock Terrace	54	1,017		\$ -	\$ -	\$ 73,224	\$ -	\$ -
Circuit Ave	42	1,391		\$ -	\$ -	\$ 100,152	\$ -	\$ -

Project Title	PCI	Legnth (Feet)	Bike and Pedestrian?	FY2016	FY2017	FY 2018	FY2019	FY2020
Watertown St (Adams to Walnut) conc panels	48	2,000		\$ -	\$ -	\$ 288,000	\$ -	\$ -
Converse Ave	47	625		\$ -	\$ -	\$ 45,000	\$ -	\$ -
Oak Cliff Rd	58	1,103		\$ -	\$ -	\$ 79,416	\$ -	\$ -
Whittier Rd	55	595		\$ -	\$ -	\$ 42,840	\$ -	\$ -
Mildred Rd	78	515		\$ -	\$ -	\$ 37,080	\$ -	\$ -
Rowena Rd	56	1,284		\$ -	\$ -	\$ 92,448	\$ -	\$ -
Miller Rd	56	715		\$ -	\$ -	\$ 51,480	\$ -	\$ -
Warren Ave (w/ Webster)	56	453		\$ -	\$ -	\$ 32,616	\$ -	\$ -
Border Street (portion)	52	500		\$ -	\$ -	\$ 36,000	\$ -	\$ -
Sharpe Road	44	1,253		\$ -	\$ -	\$ 90,216	\$ -	\$ -
Dedham St (portions)	52	500		\$ -	\$ -	\$ 36,000	\$ -	\$ -
Elmhurst Rd (Hunnewell to Washington)	61	687		\$ -	\$ -	\$ 49,464	\$ -	\$ -
Albert Road (esp. cul-de-sacs)	60	958		\$ -	\$ -	\$ 68,976	\$ -	\$ -
Sheffield Rd	47	1,010		\$ -	\$ -	\$ 72,720	\$ -	\$ -
Bow Rd	51	909		\$ -	\$ -	\$ 65,448	\$ -	\$ -
Langdon Ave	58	2,039		\$ -	\$ -	\$ 146,808	\$ -	\$ -
Lowell Ave (Wash to Walnut) conc panels	68	1,600		\$ -	\$ -	\$ -	\$ 230,400	\$ -
Dedham St (Brookline to W.R.line)	52	2,800		\$ -	\$ -	\$ -	\$ 201,600	\$ -
Highland Ave (Lowell to Hillside)	52	3,200		\$ -	\$ -	\$ -	\$ 230,400	\$ -
Albemarle Rd (east side)	54	5,722	N	\$ -	\$ -	\$ -	\$ 411,984	\$ -
Fuller (Chestnut to Comm East)	67	1,287		\$ -	\$ -	\$ -	\$ 92,664	\$ -
Vine St (Wayne to LaGrange)	70	800		\$ -	\$ -	\$ -	\$ 57,600	\$ -
Henshaw St	51	820		\$ -	\$ -	\$ -	\$ 59,040	\$ -
Henshaw Terrace	55	450		\$ -	\$ -	\$ -	\$ 32,400	\$ -
Kilburn Rd	54	874		\$ -	\$ -	\$ -	\$ 62,928	\$ -
Pembroke St	52	1,139	Y	\$ -	\$ -	\$ -	\$ 82,008	\$ -
Marlboro St	57	843		\$ -	\$ -	\$ -	\$ 60,696	\$ -



Project Title	PCI	Legnth (Feet)	Bike and Pedestrian?	FY2016	FY2017	FY 2018	FY2019	FY2020
Belmont St	57	524		\$ -	\$ -	\$ -	\$ 37,728	\$ -
Durant St	76	408	Y	\$ -	\$ -	\$ -	\$ 29,376	\$ -
Arlington St	65	1,990		\$ -	\$ -	\$ -	\$ 143,280	\$ -
Ricker Rd	52	477		\$ -	\$ -	\$ -	\$ 34,344	\$ -
Ricker Terr	52	248		\$ -	\$ -	\$ -	\$ 17,856	\$ -
Bishopsgate Rd	52	1,708		\$ -	\$ -	\$ -	\$ 122,976	\$ -
Prince St	49	1,495		\$ -	\$ -	\$ -	\$ 107,640	\$ -
Allerton Rd (Hereward to Centre)	56	1,650		\$ -	\$ -	\$ -	\$ 118,800	\$ -
Locksley Rd	56	499		\$ -	\$ -	\$ -	\$ 35,928	\$ -
Rotherwood Rd	57	398		\$ -	\$ -	\$ -	\$ 28,656	\$ -
Grafton St	57	726	Y	\$ -	\$ -	\$ -	\$ 52,272	\$ -
Deforest Rd	76	825	N	\$ -	\$ -	\$ -	\$ 59,400	\$ -
Clearwater Rd	55	1,330	N	\$ -	\$ -	\$ -	\$ 95,760	\$ -
Town House Dr	51	215		\$ -	\$ -	\$ -	\$ 15,480	\$ -
Daniel Rd	65	847		\$ -	\$ -	\$ -	\$ 60,984	\$ -
Circuit Ave	51	497		\$ -	\$ -	\$ -	\$ 35,784	\$ -
Converse Ave	47	1,467		\$ -	\$ -	\$ -	\$ 105,624	\$ -
Ruthven	44	679		\$ -	\$ -	\$ -	\$ 48,888	\$ -
Pine Grove	67	1,474	N	\$ -	\$ -	\$ -	\$ 106,128	\$ -
Washington St (Comm to Perkins) conc panels	48	2,700		\$ -	\$ -	\$ -	\$ -	\$ 388,800
Cherry St (conc panels)	54	2,298		\$ -	\$ -	\$ -	\$ -	\$ 330,912
Washington St (Comm to Mary Mount)	55	1,200		\$ -	\$ -	\$ -	\$ -	\$ 86,400
California St (Wat line to Faxon)	61	1,800		\$ -	\$ -	\$ -	\$ -	\$ 129,600
Albemarle Rd (west side)	54	5,722		\$ -	\$ -	\$ -	\$ -	\$ 411,984
Randlett Park	52	2,042		\$ -	\$ -	\$ -	\$ -	\$ 147,024
Warwick Rd	55	1,758		\$ -	\$ -	\$ -	\$ -	\$ 126,576
High St (Upper Falls)	52	2,032		\$ -	\$ -	\$ -	\$ -	\$ 146,304

Project Title	PCI	Legnth (Feet)	Bike and Pedestrian?	FY2016	FY2017	FY 2018	FY2019	FY2020
Woodcliff Rd	54	3,945		\$ -	\$ -	\$ -	\$ -	\$ 284,040
Cloverdale Rd (Clark to Miller)	55	945		\$ -	\$ -	\$ -	\$ -	\$ 68,040
Payne Rd	54	473		\$ -	\$ -	\$ -	\$ -	\$ 34,056
Langdon St	58	1,993		\$ -	\$ -	\$ -	\$ -	\$ 143,496
Trowbridge Ave	44	742		\$ -	\$ -	\$ -	\$ -	\$ 53,424
Boyd St	46	371		\$ -	\$ -	\$ -	\$ -	\$ 26,712
Butts St	46	298		\$ -	\$ -	\$ -	\$ -	\$ 21,456
Randolph St	46	419		\$ -	\$ -	\$ -	\$ -	\$ 30,168
Morseland Ave	50	345		\$ -	\$ -	\$ -	\$ -	\$ 24,840
Mountfort Rd	50	665		\$ -	\$ -	\$ -	\$ -	\$ 47,880
Alexander Rd	51	918		\$ -	\$ -	\$ -	\$ -	\$ 66,096
			<b>Total</b>	\$ 2,663,280	\$ 2,696,688	\$ 2,814,336	\$ 2,778,624	\$ 2,567,808

# **SIDEWALKS**

Sidewalk improvements include the construction of new concrete sidewalks where none currently exist or filling in missing gaps of sidewalk networks. Public Works is focusing initially on school zones, as well as village centers, for new sidewalk installations and the repair to existing walks that are cracked, lifted or otherwise not properly accessible.

Utilizing paving contractors dedicated to sidewalk repair, as well as in-house staff, the Department of Public Works will add over 2 miles of new sidewalk to the City and repair over 2 miles of existing sidewalks annually. In FY 2016, Public Works will focus on installing new sidewalks in the school walking routes around the Ward, Mason Rice, Angier, Williams and Lincoln Elliot Schools. The department will also improve sidewalks in Newtonville and Waban.

## **FY2016**

Ward School  
Mason Rice School  
Angier School & Waban  
Williams School  
Lincoln Eliot School  
Newtonville  
Waban

## **FY2017**

Bigelow School  
Underwood School  
Carr School  
Central School Office Area  
Newton Corner  
Newton Centre

## **FY2018**

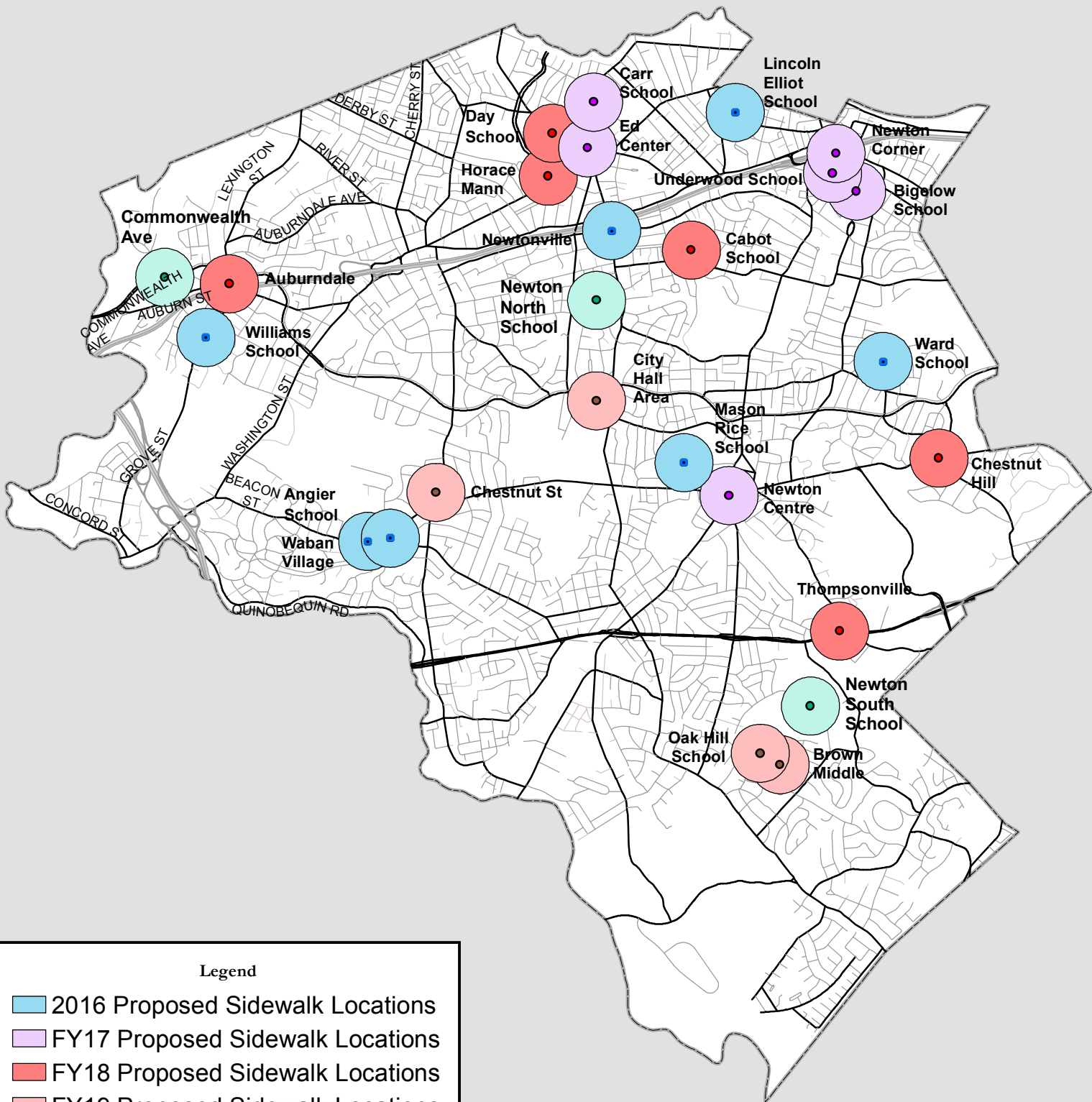
Cabot School  
Horace Mann  
F.A. Day  
Auburndale  
Chestnut Hill  
Thompsonville

## **FY2019**

Brown School  
Oak Hill School  
City Hall Area  
Chestnut Street

## **FY2020**

Newton North  
Newton South  
Commonwealth Ave



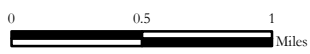
**Legend**

- 2016 Proposed Sidewalk Locations
- FY17 Proposed Sidewalk Locations
- FY18 Proposed Sidewalk Locations
- FY19 Proposed Sidewalk Locations
- FY20 Proposed Sidewalk Locations

# FY16-FY20 Proposed Sidewalk Locations

*City of Newton, Massachusetts*

CITY OF NEWTON, MASSACHUSETTS  
 Mayor - Setti D. Warren  
 GIS Administrator - Douglas Greenfield



Map Date: October 17, 2014



The information on this map is from the Newton Geographic Information System (GIS). The City of Newton cannot guarantee the accuracy of this information. Each user of this map is responsible for determining its suitability for his or her intended purpose. City departments will not necessarily approve applications based solely on GIS data.

# **BICYCLE NETWORK**

The Bicycle Network is an essential part of the City's transportation infrastructure with the primary goal of providing safe, non-motorized transportation options along our roads and trails for commuting, business and recreation. The network is designed to increase the number of bicycle trips throughout our community for many reasons but with special focus on environmental, health and quality-of-life benefits. The City of Newton is officially recognized as, and proud to be, a Green Community and is committed to promoting sustainability in all thirteen of its villages. Due to the fact that motorized vehicle transportation represents one third (1/3) of the City's carbon emissions, the City is building a bicycle network to encourage residents to cycle and thus lower the City's carbon footprint.

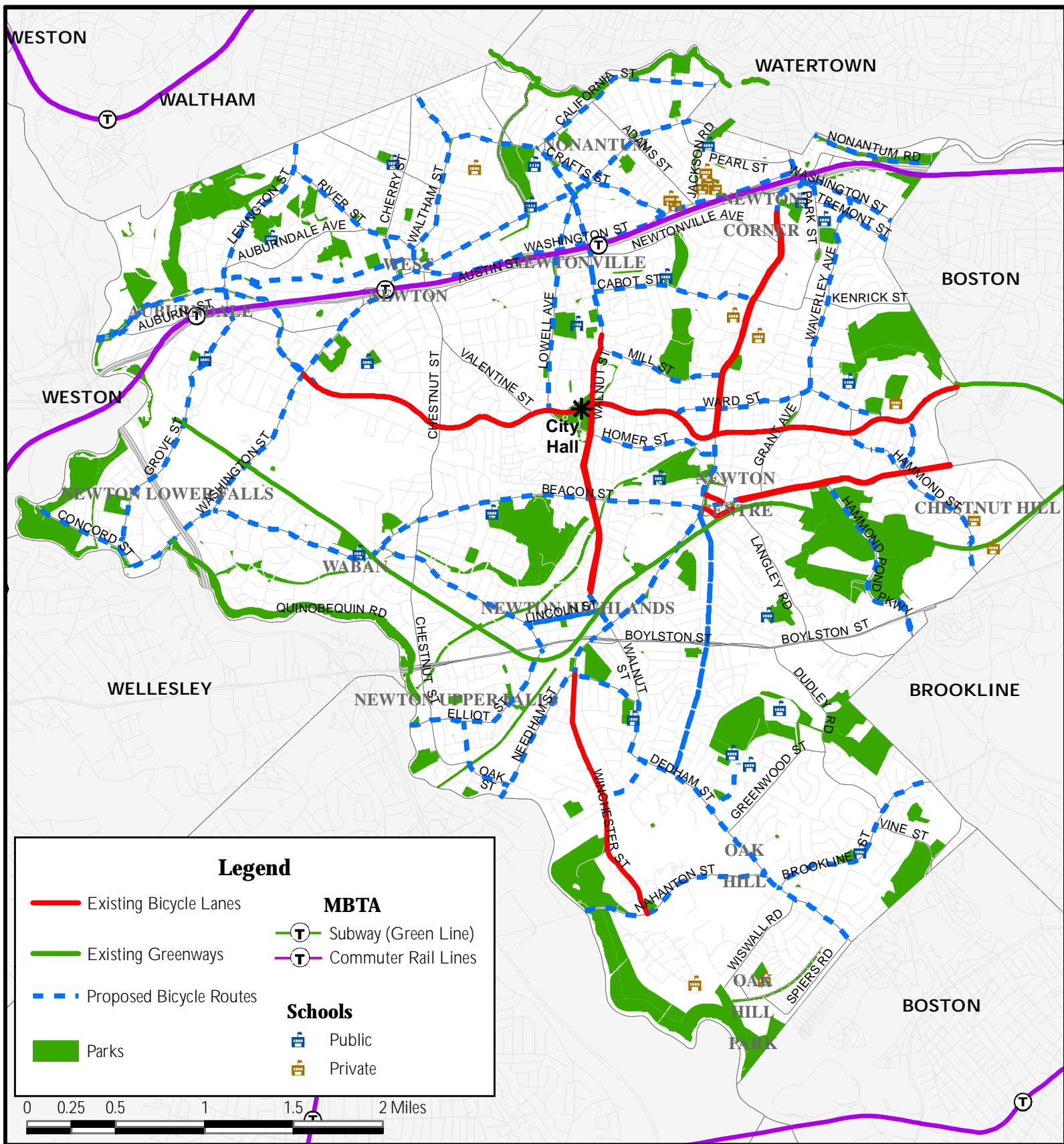
The primary objective of the Bicycle Network Plan is to provide a planning framework for the creation of a safe and coherent bicycle network within the Newton city limits and connect to neighboring communities and other regional networks by:

- **Classifying** roads in terms of their expected contribution to the bicycle network;
- **Defining** the accommodations expected (bike lane, cycle track, shared use etc.) along each route;
- **Prioritizing** routes based on destination and connectivity

The primary goals of the plan are to:

- **Develop** safe bicycle routes in Newton according to the latest design standards and practices;
- **Increase** the number of routes in Newton by creating a complete network of safe, low-stress routes according to a timeline established by the Bicycle Advisory Committee;
- **Create** first-class bicycle routes along critical north/south and east/west corridors that provide connections to key destinations, schools, villages, train stations, adjacent communities etc.

The City has developed a five-year plan to implement approximately 25 miles of shared-use and/or exclusive bicycle routes throughout the City using both Chapter 90 funds and the annual Transportation Division operating budget. Major roadways will define the west-east/south-north corridors including Beacon, Centre, Winchester, Needham, Washington, Parker, Walnut, Watertown and Commonwealth, while connector streets will provide access to schools, train stations, libraries and neighboring municipalities including Dedham, Lowell, Wheeler, Grove, Ward, Waverly, Cabot and Crafts.



# Proposed Bicycle Route Schematic

## City of Newton, Massachusetts



CITY OF NEWTON, MASSACHUSETTS  
 Mayor - Setti D. Warren  
 GIS Administrator - Douglas Greenfield  
 Map Date: October 17 2014

SOURCE: City of Newton GIS



# TRAFFIC SIGNALIZATION

The Public Works Department maintains 95 signalized locations throughout the City that include fully-actuated, semi-actuated and pedestrian activated traffic signals. The oldest set of signals dates back to the year 1958 (Comm. Ave/Ash St & Waltham St/Lodge Rd), the most recent 2013 (Parker St & Route 9). The signals range in type such as single poles versus mast arms; complexity such as pre-timed sequences versus loop/camera detection; ADA compliance such as standard pushbuttons and hand/man pedestrian timers versus audible pushbuttons and countdown timers; various sequence and timing including exclusive pedestrian, concurrent pedestrian or lead pedestrian phases.

In 2012 the City completed a Traffic Signal Evaluation to document, evaluate, develop recommendations for specific improvements and prioritize all 95 signalized intersections throughout the City. In addition, a signal timing policy was developed outlining various signal strategies with the intent to maximize the efficiency and safety of existing and future traffic signal installations including minimum/maximum green time, passage time, vehicle and pedestrian clearance time, cycle length, exclusive and/or current pedestrian phasing, time of day plans, and a number of various signal settings, modes and upgrades.

This prioritized Traffic Signalization Plan has been developed utilizing the traffic signal evaluation study, key traffic data including age, average daily traffic (ADT), crash rating and ADA compliance; along with other identified and anticipated traffic improvement needs. These needs range from extensive traffic delays and back-ups in getting through poorly coordinated traffic signals to public safety concerns for vehicles and pedestrians in heavily used, but unsignalized intersections. Many of these signal controllers need to be replaced in order to allow them to be synchronized with other traffic signals; while others need replaced signal posts/mast arms for improved visibility; loop/camera detection to allow for proper communication between signals; and improved geometry to address pedestrians, bicyclists and ADA compliance.

This CIP targets 17 of the most inefficient, frustrating and unsafe intersections in the City of Newton. The goals are to reduce the long back-ups that can extend several blocks, minimize the queues that prevent traffic from moving through green lights, increase the number and efficiency of vehicles that get through intersections, add detection systems to adjust signal timing based on traffic volume, improve vehicle safety at intersections, allow for safer left-turn movements on heavily traveled roads, improve visibility of signals to motorists, reduce damage/knockdown of traffic signals, enhance pedestrian movements at intersections, and ensure ADA compliance to improve safety for all motorists and pedestrians alike.

The 17 major intersections addressed in this CIP are:

## **1. West Newton Square**

Washington Street in West Newton experiences traffic delays from Chestnut St. to Elm St. with the greatest problems between Chestnut/Watertown & Waltham Streets. The minimal queuing space there makes it particularly difficult to enter from Chestnut Street, while loop

detectors damaged from underground utility work degrade the efficiency of the lights. The traffic signal controllers will be upgraded and reprogrammed to better enable them to synchronize operations with each other, and in-pavement loop detectors will be replaced with overhead camera detection. This will allow more efficient movement through these intersections and reduce back-ups.

**Work includes:** Reprogram signal controllers, repair broken loops/loop amplifiers, implement new coordination patterns/splits/offsets, upgrade equipment with ADA compliant pushbuttons, wheelchair ramps, countdown timers, etc. at the following intersections:

- Washington Street at Chestnut St
- Washington Street at Watertown St/Waltham St
- Washington Street at Highland/Cherry Street
- Washington Street at Elm Street

## **2. Auburndale Square**

Commonwealth Avenue back-ups routinely extend to the Marriott Hotel in one direction and beyond the Mass Pike bridge in the other direction. Similar delays are experienced on Grove Street and Lexington Street. This project will focus on synchronizing the signals at Comm/Lexington, Comm/Melrose and Lexington/Melrose, while also looking to Grove/Central, Comm/Ash and Lexington/Auburndale to improve traffic flow through the intersection and minimize queuing delays in all directions.

**Work includes:** Reprogram signal controllers, repair broken loops/loop amplifiers, implement new coordination patterns/splits/offsets, upgrade equipment with ADA compliant pushbuttons, wheelchair ramps, countdown timers, etc.

- Commonwealth Avenue at Lexington Street
- Commonwealth Avenue at Melrose Street
- Lexington Street at Wolcott Street

## **3. Waban**

In conjunction with the Angier School Construction Project, the intersection of Beacon Street at both Collins Road & Waban Avenue will be reconfigured to eliminate the criss-crossing traffic between Collins and Waban, improve parking and realign the traffic signal with the new entrance to the school.

**Work includes:** Geometry modifications at the intersection of Beacon/Collins, install new fully actuated traffic signals, camera detection, ADA upgrades, APS pushbuttons, countdown, timers, new sidewalks, parking upgrades and street lighting.

## **4. Crafts Street at Walnut Street**

This intersection is currently under stop sign control at Walnut Street, which results in severe delays, vehicle queuing and several accidents due to difficulties in turning on to Crafts Street. New traffic signals will result in a safer and more efficient intersection,



allowing cars to turn left from Walnut onto Crafts more easily and safely; and should also serve to reduce bypassing traffic that congests the nearby Crafts/Linwood intersection.

**Work includes:** Install new fully actuated traffic signals mounted on single mast arm, minor geometric upgrades, countdown timers, APS pushbuttons, new wheelchair ramps and camera detection.

#### **Nahanton Street – Projects 5 & 6**

While Nahanton Street is already experiencing traffic delays and safety concerns, it is expected that these issues will be exacerbated significantly in the near future as MassDOT completes their new Rte. 128 exit on Kendrick Street (Needham) and increases the number of vehicles that will be utilizing this corridor. This adds to the immediacy of addressing the concerns addressed in these two projects.

#### **5. Nahanton Street at Winchester Street**

This intersection is currently under stop sign control at Winchester Street and has poor sight lines for vehicles turning onto Nahanton Street. This results in severe delays, vehicle queuing and accidents. New traffic signals will result in a safer and more efficient intersection, particularly for Winchester Street traffic turning onto Nahanton Street; and will be synchronized with existing signals on Nahanton and Wells Ave to improve traffic movement.

**Work includes:** Install new fully actuated traffic signals mounted on single mast arm, minor geometric upgrades, countdown timers, APS pushbuttons, new wheelchair ramps and camera detection.

#### **6. Dedham St at Nahanton & Brookline/Carlson**

Current intersection geometry makes it difficult to turn left onto Dedham from Nahanton due to poor sight line visibility and stacked traffic on Dedham Street. This work will modify the intersection in order to make the left turn movement controlled by traffic signals and flow at a more controlled and safer pace.

**Work includes:** Geometry modifications at Dedham/Nahanton intersection, reprogram signal controllers, repair broken loops/loop amplifiers, implement new coordination patterns/splits/offsets with adjacent intersection and new Fire Station No. 10, upgrade equipment with ADA compliant pushbuttons, wheelchair ramps, countdown timers, etc.

#### **7. Watertown Street at Adams Street**

This is a very tight intersection that has inefficient traffic flow resulting from obscured traffic signal posts, and which also experience frequent damage/knockdowns from turning trucks. This project will add overhead mast arms that are more visible and less likely to be damaged.

**Work includes:** Replace existing signal posts with single mast arm to eliminate potential damage from turning trucks, upgrade existing equipment with new controller, camera

detection, ADA compliant pushbuttons and countdown timers.

**8. Watertown Street at Pearl Street**

Existing traffic signals are located at Capital Street, which now has significantly less traffic than the nearby Pearl Street, due to changes in the neighborhood over the years. Traffic turning on to Watertown Street from Pearl Street has poor sight lines that make it difficult to turn onto heavily trafficked road. Moving these signals will improve safety for the main traffic flow in that neighborhood.

**Work includes:** Relocate existing traffic signals from intersection of Watertown Street at Capital Street to the intersection of Watertown Street at Pearl Street. Upgrade existing equipment with new controller, camera detection, ADA compliant pushbuttons and countdown timers.

**9. California Street at Bridge Street**

This intersections controls traffic into/from Watertown and experiences queueing and delays due to lack of synchronization with traffic signals in Watertown. Public Works is working with Watertown representatives to ensure traffic signals are coordinated and traffic moves through the respective intersections at a more efficient pace.

**Work includes:** Replace existing traffic signal equipment (rusted), new mast arm, realign/reposition signs, reprogram signal controller, install new camera detection, implement new coordination patterns/splits/offsets, coordinate with adjacent intersection in Town of Watertown, upgrade equipment with ADA compliant pushbuttons, wheelchair ramps, countdown timers, etc.

**10. Beacon Street at Walnut Street**

This intersection has heavy vehicle and pedestrian use whose flow can be improved with updated equipment/technology that allows variable signal timing upon loop detection.

**Work includes:** Modify geometry, upgrade existing controller with Dynamic Max function, install new mast arms, realign/reposition signs, install new camera detection, implement new coordination patterns/splits/offsets, upgrade equipment with ADA compliant pushbuttons, wheelchair ramps, countdown timers, etc.

**11. Beacon Street at Chestnut Street**

This intersection has heavy vehicle use whose flow can be improved with updated equipment/technology that allows variable signal timing upon loop detection.

**Work includes:** Upgrade existing controller with Dynamic Max function, install new mast arms, realign/reposition signs, install new camera detection, implement new coordination patterns/splits/offsets, upgrade equipment with ADA compliant pushbuttons, wheelchair ramps, countdown timers, etc.

## **12. Washington Street at Exit 16 Massachusetts Turnpike (Off-Ramp)**

This intersection accommodates an enormous amount of traffic exiting/entering the Massachusetts Turnpike from the east and west thru Newton Corner to Washington Street WB and Centre Street SB. In addition, due to the hotel and numerous businesses along Washington Street, there is significant pedestrian traffic that needs to be accommodated. The existing signal equipment has experienced damage over the years which has compromised the infrastructure, in particular the underground communication and power connections. The existing controller and cabinet have also been damaged and need to be replaced.

**Work includes:** Replace damaged controller cabinet and assemblies, coordinate with adjacent traffic signals, install new mast arms, repair broken loops/loop amplifiers, implement new coordination patterns/splits/offsets, upgrade equipment with ADA compliant pushbuttons, wheelchair ramps, countdown timers, etc.

### **Washington Street – Projects #13, 14 & 15**

These three intersections along Washington Street are within 1000 feet of each control and control heavy volumes of traffic for West Newton and Mass Turnpike. They are not synchronized to best allow for efficient flow of traffic through this very heavily used corridor. These projects would upgrade the controller equipment at each intersection and allow their operations to be better coordinated. We would also address pedestrian and ADA compliance at these intersections.

## **13. Washington Street at Auburn Street**

**Work includes:** Install new mast arms with overhead signals, new controller/cabinet, coordinate with adjacent traffic signals, repair broken loops/loop amplifiers, implement new coordination patterns/splits/offsets, upgrade equipment with ADA compliant pushbuttons, wheelchair ramps, countdown timers, etc.

## **14. Washington Street at Perkins Street**

**Work includes:** Reprogram signal controller, install new mast arm with 4-section head, repair broken loops/loop amplifiers, implement new coordination patterns/splits/offsets, upgrade equipment with ADA compliant pushbuttons, wheelchair ramps, countdown timers, etc.

## **15. Washington Street at Prospect Street**

**Work includes:** Install new mast arms with overhead signals, replace damaged controller/cabinet, coordinate with adjacent traffic signals, repair broken loops/loop amplifiers, implement new coordination patterns/splits/offsets, upgrade equipment with ADA compliant pushbuttons, wheelchair ramps, countdown timers, etc.

## **16. Centre Street at Walnut Street**

This is a very tight intersection that experiences frequent damage/knockdowns from turning trucks, which would be replaced by overhead mast arms. Traffic flow and safety would be improved with these overhead mast arms as they provide for better visibility for drivers,

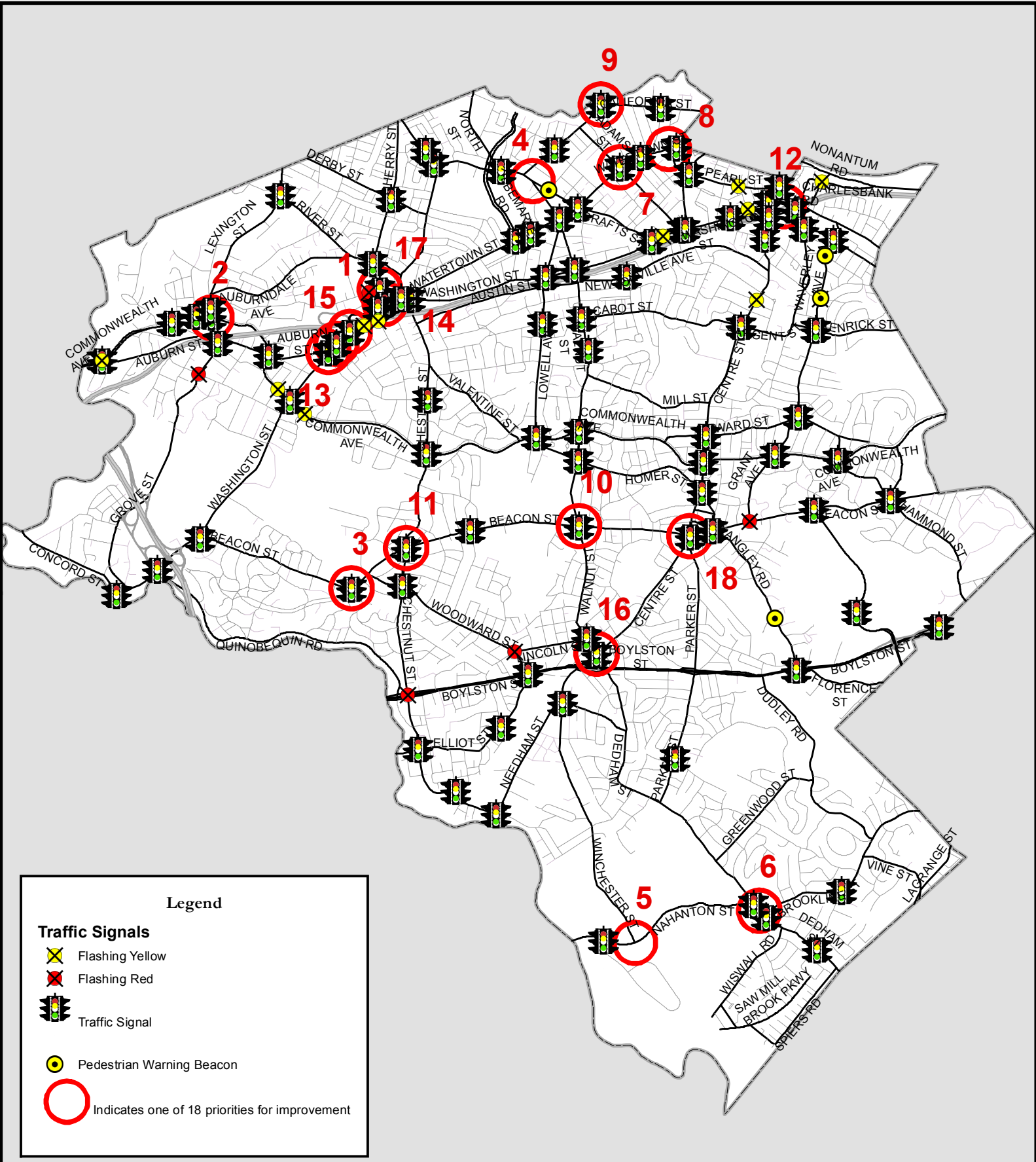
especially those turning left, northbound onto Walnut Street. New signals would also be coordinated with Walnut & Highland traffic signals.

**Work includes:** Install new mast arms with overhead signals, new controller/cabinet, coordinate with adjacent traffic signals, repair broken loops/loop amplifiers, implement new coordination patterns/splits/offsets, upgrade equipment with ADA compliant pushbuttons, wheelchair ramps, countdown timers, etc.

#### **17. Cherry Street at Webster**

This intersection has heavy vehicle use whose flow can be improved with updated equipment/technology that allows variable signal timing upon loop detection as well as improved visibility with mast arms.

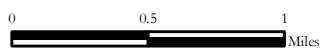
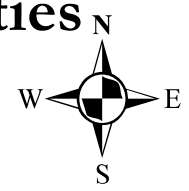
**Work includes:** Install new mast arms with overhead signals, new controller/cabinet, repair broken loops/loop amplifiers, install new pavement loop detection, implement new coordination patterns/splits/offsets, upgrade equipment with ADA compliant pushbuttons, wheelchair ramps, countdown timers, etc.



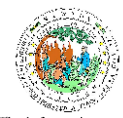
# Traffic Signal Priorities

City of Newton, Massachusetts

CITY OF NEWTON, MASSACHUSETTS  
 Mayor - Setti D. Warren  
 GIS Administrator - Douglas Greenfield



Map Date: October 09, 2014



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Traffic Signalization 5-YEAR CIP, FY 2016-FY 2020			BUDGET DISTRIBUTION				
			FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
#	Project Title	Project Description					
1	Traffic Signal Improvements - West Newton (Washington Street @Chestnut, Watertown, Cherry, Elm)	Coordination/timing to improve flow and reduce congestion thru square. Improve pedestrian safety, ADA compliance	\$ 138,000				
2	Traffic Signal Improvements - Auburndale Square (Comm @ Lexington, Melrose; Lexington@ Melrose	Coordinate all signals, minor geometric changes to improve flow and reduce congestion at all approaches. Address Carriage Road access, ped/bike safety, ADA compliance	\$ 500,000				
3	Install new Traffic Signal and Geometry modifications - Waban/Angier School	Reconfigure intersection, replace ex signals. Improve ped/bike safety, access to school. Improve traffic flow/safety	\$ 1,200,000				
4	Install new Traffic Signal - Crafts/Walnut	Install new traffic signals. Improve traffic flow, reduce congestion thru corridor from Watertown to North		\$ 225,000			
5	Install new Traffic Signal - Nahanton @ Winchester	Install new traffic signals, improve veh/ped/bike safety. Reduce congestion on Winchester	\$ 225,000				
6	Traffic Signal Improvements - Dedham @ Nahanton; Dedham @ Brookline	Geometry improvements, new signals, imp ex signals, coordinate signals, improve flow, reduce congestion		\$ 275,000			
7	Traffic Signal Improvements - Nonantum (Watertown @ Adams)	New mast arm to reduce damage from turning trucks, coord with adjacent signals, imp flow, reduce congestion	\$ 150,000				
8	Traffic Signal Replacement - Nonantum (Watertown @ Pearl)	Replace signal at Watertown @ Capital with new at Watertown @ Pearl, improve vehicle and pedestrian safety	\$ 150,000				
9	Traffic Signal Improvements - California @ Bridge	New mast arm, coordinate w/ Town of Watertown traffic signal, improve flow and reduce congestion	\$ 75,000				
10	Traffic Signal Improvements - Beacon @ Walnut	Upgrade traffic signal equipment, new mast arms, camera detection, ADA compliance, improve pedestrian safety and overall efficiency		\$ 200,000			
11	Traffic Signal Improvements - Beacon @ Chestnut	Upgrade traffic signal equipment, new mast arms, camera detection, ADA compliance, improve pedestrian safety and overall efficiency		\$ 100,000			
12	Traffic Signal Improvements - Washington in Newton Corner	Install new mast arms, repair damaged conduit, coordinate signals, reconfigure geometry, improve traffic flow and reduce congestion, improve pedestrian access/safety			\$ 625,000		
13	Traffic Signal Improvements - Washington @ Auburn	New mast arms, ADA compliance, coordinate with adjacent signals, improve flow, reduce congestion	\$ 125,000				
14	Traffic Signal Improvements - Washington @ Perkins	New mast arms, ADA compliance, coordinate with adjacent signals, improve flow, reduce congestion	\$ 125,000				
15	Traffic Signal Improvements - Washington @ Prospect	New mast arms, ADA compliance, coordinate with adjacent signals, improve flow, reduce congestion, improve pedestrian safety to Learning Prep School	\$ 125,000				
16	Traffic Signal Improvements - Centre @ Walnut	New mast arms, ADA compliance, coordinate with Lincoln signals, reduce congestion, improve flow and access to Rte 9				\$ 150,000	
17	Traffic Signal Improvements - Cherry @ Webster, Derby	Replace aging equipment, ADA compliance, improve traffic flow, reduce congestion				\$ 220,000	
18	Traffic Signals - Centre @ Willow & Cypress	Install new signals, coordinate with adjacent signals, improve flow, reduce congestion					\$ 500,000
			\$2,813,000	\$ 800,000	\$ 625,000	\$ 370,000	\$ 500,000





# VEHICLE REPLACEMENT PLAN

This year's CIP includes a formal vehicle and motorized equipment plan. This twenty year replacement plan includes a combined total of over 300 vehicles, prioritized based on factors including: vehicle age, mileage and overall condition. The Administration has developed a rating scale for vehicle condition that accounts for variables including: mechanical, paint/body, interior, and frame conditions. A vehicle condition scale, along with the vehicle age and mileage used to calculate the percent of useful life, and a rating for the impact related to both life safety and city operations has provided a data driven fleet replacement schedule. Vehicle replacement costs valued over \$75k, meeting the capital improvement criteria for funding, are included in the formal CIP plan. The remaining vehicles scheduled to be replaced under the \$75k threshold will be included in the annual operating budget.

Overall Condition input	% Life Left as input	% Life Left from data			CONSEQUENCES OF FAILURE (IF NOT IMPLEMENTING PROGRAM) RATINGS AND WEIGHTS --0 (No Impact) to 10 (High)		
		Weight	Weight		Weight	Weight	Weight
Condition- 0 worst- 20 best	% Life Left 0: Expired to 100: New	Vehicle Year	Mileage	Est. Service Life (yrs)	City Operations	Life-safety	Department Mission
12	0%	2000	109%	5	10	10.00	10
8	0%	1988	79%	10	10	10.00	10
8	0%	2001	126%	5	9	9.00	9
8	0%	2002	128%	5	9	9.00	9
8	0%	2003	94%	5	10	10.00	10
8	0%	1993	112%	10	9	9.00	9
8	0%	2004	117%	6	10	10.00	10
12	0%	2003	84%	5	10	10.00	10
11	0%	1987	179%	18	8	10.00	8
12	0%	2005	118%	5	10	10.00	10



# FY2016-2020 Vehicle Replacement Schedule

Priority	Dept	Vehicle Year	Make	Model	Mileage	Est Cost in FY2016	Total	Funding Source	FY 2016	FY2017	FY 2018	FY 2019	FY2020
1	Police	2004	FORD	EXPEDITION	78,865	\$ 40,000	136.3	General Fund Operating Budget	\$ 19,000	\$ -	\$ -	\$ -	\$ -
2	Police	2008	FORD	CVPI	91,310	\$ 40,000	134.9	General Fund Operating Budget	\$ 43,000	\$ -	\$ -	\$ -	\$ -
3	DPW	2011	FORD	FOCUS	47,851	\$ 16,000	130.6	Utilities Budget	\$ 16,000	\$ -	\$ -	\$ -	\$ -
4	Parks and Rec	1994	Chevrolet	1 Ton Dump	SURPLUSED	\$ 60,000	117.3	General Fund Operating Budget	\$ 60,000	\$ -	\$ -	\$ -	\$ -
5	Public Buildings	2000	FORD	F-150	110,000	\$ 32,000	116.7	General Fund Operating Budget	\$ 24,000	\$ -	\$ -	\$ -	\$ -
6	Public Buildings	1996	FORD	Taurus	130,000	\$ 13,000	113.3	General Fund Operating Budget	\$ 15,000	\$ -	\$ -	\$ -	\$ -
7	Police	2006	FORD	EXPLORER	75,739	\$ 19,000	111.3	General Fund Operating Budget	\$ 19,000	\$ -	\$ -	\$ -	\$ -
8	DPW	2005	FORD	EXPLORER	73,249	\$ 25,000	107.8	Utilities Budget	\$ 25,000	\$ -	\$ -	\$ -	\$ -
9	Fire	1996	FORD	AERIAL BUCKET	73,645	\$ 220,000	107.3	Capital Improvement Plan-General Fund	\$ 220,000	\$ -	\$ -	\$ -	\$ -
10	DPW	1990	BOBCAT	843H	2,839	\$ 35,000	106.6	General Fund Operating Budget	\$ 35,000	\$ -	\$ -	\$ -	\$ -
11	DPW	1999	FORD	DRWSUP	74,796	\$ 60,000	106.1	General Fund Operating Budget	\$ 60,000	\$ -	\$ -	\$ -	\$ -
12	Police	2014	FORD	FORD	15,506	\$ 40,000	105.2	General Fund Operating Budget	\$ 39,988	\$ -	\$ -	\$ -	\$ -
13	DPW	2003	VACTOR	TRUCK	7,848	\$ 320,000	104.9	Capital Improvement Plan Utilities	\$ 320,000	\$ -	\$ -	\$ -	\$ -
14	Police	2011	FORD	CVPI	79,772	\$ 40,000	104.4	General Fund Operating Budget	\$ 39,988	\$ -	\$ -	\$ -	\$ -
15	DPW	2005	FORD	F350	78,916	\$ 25,000	103.9	Utilities Budget	\$ 25,000	\$ -	\$ -	\$ -	\$ -
16	DPW	2000	FORD	F150	72,141	\$ 25,000	101.9	General Fund Operating Budget	\$ 25,000	\$ -	\$ -	\$ -	\$ -
17	Police	2011	FORD	CVPI	72,141	\$ 40,000	101.8	General Fund Operating Budget	\$ 39,988	\$ -	\$ -	\$ -	\$ -
18	DPW	1985	GRADALL	660	7,000	\$ 290,000	101.3	Capital Improvement Plan-General Fund	\$ 290,000	\$ -	\$ -	\$ -	\$ -
19	Police	2014	FORD	EXPLORER	10,336	\$ 41,445	101.2	General Fund Operating Budget	\$ 36,776	\$ -	\$ -	\$ -	\$ -
20	Police	2008	FORD	TAURUS	65,570	\$ 43,000	100.2	General Fund Operating Budget	\$ 19,000	\$ -	\$ -	\$ -	\$ -
21	Police	2011	FORD	CVPI	46,714	\$ 40,000	99.6	General Fund Operating Budget	\$ -	\$ 40,000	\$ -	\$ -	\$ -
22	Police	2006	FORD	TAURUS	63,464	\$ 19,000	99.5	General Fund Operating Budget	\$ 19,000	\$ -	\$ -	\$ -	\$ -
23	Police	2014	FORD	EXPLORER	4,763	\$ 41,445	97.9	General Fund Operating Budget	\$ 36,776	\$ -	\$ -	\$ -	\$ -
24	Public Buildings	2003	FORD	Econoline Van	100,335	\$ 22,000	96.8	General Fund Operating Budget	\$ 22,000	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Vehicle Year	Make	Model	Mileage	Est Cost in FY2016	Total	Funding Source	FY 2016	FY2017	FY 2018	FY 2019	FY2020
25	DPW	1989	INTERNATIONAL	2554	96,371	\$ 170,000	96.5	Capital Improvement Plan-General Fund	\$ -	\$ 170,000	\$ -	\$ -	\$ -
26	Fire	1999	EMERGENCY ONE	PUMPER	73,688	\$ 650,000	96.4	Capital Improvement Plan-General Fund	\$ 650,000	\$ -	\$ -	\$ -	\$ -
27	DPW	2003	FORD	F150	151,302	\$ 25,000	96.2	General Fund Operating Budget	\$ -	\$ 25,000	\$ -	\$ -	\$ -
28	DPW	2002	ELGIN	PELICAN	72,141	\$ 180,000	95.2	Capital Improvement Plan-General Fund	\$ -	\$ 180,000	\$ -	\$ -	\$ -
29	DPW	2008	FORD		108,266	\$ 16,000	94.4	General Fund Operating Budget	\$ -	\$ 16,000	\$ -	\$ -	\$ -
30	Police	2008	FORD	TAURUS	65,743	\$ 19,000	94.1	General Fund Operating Budget	\$ 19,000	\$ -	\$ -	\$ -	\$ -
31	DPW	2003	FORD	F350	62,622	\$ 25,000	93.7	General Fund Operating Budget	\$ -	\$ 25,000	\$ -	\$ -	\$ -
32	Public Buildings	2002	FORD	E350 Van	82,077	\$ 22,000	91.9	General Fund Operating Budget	\$ -	\$ 23,000	\$ -	\$ -	\$ -
33	DPW	2007	FORD	FOCUS	109,995	\$ 16,000	91.5	General Fund Operating Budget	\$ -	\$ 16,000	\$ -	\$ -	\$ -
34	DPW	1992	BOBCAT	853H	400	\$ 35,000	91.4	General Fund Operating Budget	\$ -	\$ 35,000	\$ -	\$ -	\$ -
35	Public Buildings	2002	FORD	E250 Van	72,304	\$ 22,000	90.9	General Fund Operating Budget	\$ -	\$ 23,000	\$ -	\$ -	\$ -
36	Police	2009	FORD	ESCAPE	89,058	\$ 19,000	90.8	General Fund Operating Budget	\$ 19,000	\$ -	\$ -	\$ -	\$ -
37	DPW	2012	FORD	FOCUS	70,000	\$ 16,000	90.0	Utilities Budget	\$ -	\$ -	\$ 16,000	\$ -	\$ -
38	DPW	2000	FORD	E250	39,394	\$ 20,000	89.8	General Fund Operating Budget	\$ -	\$ -	\$ 20,000	\$ -	\$ -
39	Police	2010	FORD	EXPLORER	62,395	\$ 41,445	89.7	General Fund Operating Budget	\$ -	\$ 41,445	\$ -	\$ -	\$ -
40	Fire	2004	FORD	CROWN VICTORIA	79,772	\$ 40,000	88.8	General Fund Operating Budget	\$ 17,000	\$ -	\$ -	\$ -	\$ -
41	Police	2011	FORD	CVPI	67,818	\$ 40,000	88.7	General Fund Operating Budget	\$ -	\$ 40,000	\$ -	\$ -	\$ -
42	DPW	1995	JCB	214S 4X4X4	1,917	\$ 130,000	87.3	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ 130,000	\$ -	\$ -
43	Police	2011	FORD	CVPI	53,394	\$ 41,445	87.2	General Fund Operating Budget	\$ -	\$ 40,000	\$ -	\$ -	\$ -
44	Parks and Rec	2002	Chevrolet	2500 PU	77,319	\$ 26,000	86.8	General Fund Operating Budget	\$ 26,000	\$ -	\$ -	\$ -	\$ -
45	Public Buildings	2002	FORD	Taurus	39,105	\$ 13,000	86.7	General Fund Operating Budget	\$ -	\$ 16,000	\$ -	\$ -	\$ -
46	DPW	2009	FORD	F350	35,000	\$ 60,000	86.3	Utilities Budget	\$ -	\$ -	\$ 60,000	\$ -	\$ -
47	DPW	2005	INTERNATIONAL	400 SERIES	37,237	\$ 160,000	86.3	Capital Improvement Plan Utilities	\$ -	\$ -	\$ 160,000	\$ -	\$ -
48	DPW	2002	FORD	F350	67,228	\$ 65,000	85.7	General Fund Operating Budget	\$ -	\$ -	\$ 65,000	\$ -	\$ -
49	DPW	2008	FORD	TAURUS	113,582	\$ 16,000	85.7	General Fund Operating Budget	\$ -	\$ -	\$ 16,000	\$ -	\$ -
50	DPW	2005	INTERNATIONAL	700SER LG.CONST	43,889	\$ 180,000	85.6	Capital Improvement Plan Utilities	\$ -	\$ -	\$ 180,000	\$ -	\$ -
51	DPW	1993	INTERNATIONAL	2554	21,961	\$ 170,000	85.5	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ 170,000	\$ -	\$ -

Priority	Dept	Vehicle Year	Make	Model	Mileage	Est Cost in FY2016	Total	Funding Source	FY 2016	FY2017	FY 2018	FY 2019	FY2020
52	Parks and Rec	1993	Chevrolet	1 Ton Dump	SURPLUSED	\$ 60,000	85.3	General Fund Operating Budget	\$ -	\$ 60,000	\$ -	\$ -	\$ -
53	Parks and Rec	1997	Ford	Ford Taurus	SURPLUSED	\$ 15,000	85.3	General Fund Operating Budget	\$ -	\$ -	\$ 15,000	\$ -	\$ -
54	Police	2006	FORD	EXPLORER	79,070	\$ 40,000	85.2	General Fund Operating Budget	\$ -	\$ 45,000	\$ -	\$ -	\$ -
55	Parks and Rec	2001	Ford	Taurus	72,141	\$ 40,000	84.7	General Fund Operating Budget	\$ -	\$ -	\$ 15,000	\$ -	\$ -
56	Police	2006	FORD	CVPI	93,752	\$ 19,000	84.5	General Fund Operating Budget	\$ -	\$ 19,000	\$ -	\$ -	\$ -
57	Fire	2004	FORD	CROWN VICTORIA	60,332	\$ 17,000	84.0	General Fund Operating Budget	\$ 17,000	\$ -	\$ -	\$ -	\$ -
58	DPW	2009	FORD	F350	40,000	\$ 50,000	83.8	Utilities Budget	\$ -	\$ -	\$ 25,000	\$ 25,000	\$ -
59	Parks and Rec	2002	Ford	Taurus	74,102	\$ 15,000	83.4	General Fund Operating Budget	\$ -	\$ -	\$ 15,000	\$ -	\$ -
60	Police	2014	FORD	EXPLORER	12,037	\$ 40,000	82.2	General Fund Operating Budget	\$ -	\$ 40,000	\$ -	\$ -	\$ -
61	Parks and Rec	2002	Ford	Pick up	SURPLUSED	\$ 16,000	82.2	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 16,000	\$ -
62	Parks and Rec	2001	Ford	Ecowag Van	45,107	\$ 21,000	82.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 21,000	\$ -
63	Police	2001	FORD	ECOVAN	87,170	\$ 26,000	81.7	General Fund Operating Budget	\$ -	\$ 35,000	\$ -	\$ -	\$ -
64	DPW	2004	FORD	F350	61,019	\$ 25,000	80.3	General Fund Operating Budget	\$ -	\$ -	\$ 25,000	\$ -	\$ -
65	Parks and Rec	2008	Ford	F150 Pickup	55,126	\$ 16,000	79.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 16,000	\$ 19,000
66	DPW	2004	FORD	F250	68,503	\$ 25,000	79.1	General Fund Operating Budget	\$ -	\$ -	\$ 25,000	\$ -	\$ -
67	Parks and Rec	2002	Ford	4x4 Pickup	SURPLUSED	\$ 16,000	79.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
68	Parks and Rec	2006	STERLING	LT9500	144,717	\$ 240,000	78.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
69	Public Buildings	2003	FORD	E350 Van	47,740	\$ 22,000	77.6	General Fund Operating Budget	\$ -	\$ -	\$ 24,000	\$ -	\$ -
70	Parks and Rec	2005	INTERNATIONAL	4300	155,012	\$ 95,000	77.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
71	Fire	2009	FORD	TAURUS SE	64,881	\$ 17,000	77.0	General Fund Operating Budget	\$ -	\$ 17,000	\$ -	\$ -	\$ -
72	Public Buildings	2007	FORD	Econo Van	80,518	\$ 22,000	76.5	General Fund Operating Budget	\$ -	\$ -	\$ 24,000	\$ -	\$ -
73	Parks and Rec	2004	INTERNATIONAL	4300	74,080	\$ 210,000	75.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
74	Fire	2010	FORD	EXPLORER	63,700	\$ 27,000	75.5	General Fund Operating Budget	\$ -	\$ 27,000	\$ -	\$ -	\$ -
75	Police	2011	FORD	FUSION	42,989	\$ 19,000	74.3	General Fund Operating Budget	\$ -	\$ 19,000	\$ -	\$ -	\$ -
76	Police	2009	FORD	FOCUS	37,277	\$ 19,000	73.5	General Fund Operating Budget	\$ -	\$ 19,000	\$ -	\$ -	\$ -
77	Fire	2004	EMERGENCY ONE	PUMPER(FOAM)	72,141	\$ 40,000	73.1	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ 600,000	\$ -	\$ -
78	Police	2011	FORD	CVPI	52,081	\$ 40,000	72.9	General Fund Operating Budget	\$ -	\$ -	\$ 40,000	\$ -	\$ -

Priority	Dept	Vehicle Year	Make	Model	Mileage	Est Cost in FY2016	Total	Funding Source	FY 2016	FY2017	FY 2018	FY 2019	FY2020
79	Police	2012	FORD	FUSION	47,714	\$ 19,000	69.2	General Fund Operating Budget	\$ -	\$ 19,000	\$ -	\$ -	\$ -
80	Police	2011	FORD	CVPI	40,947	\$ 40,000	69.2	General Fund Operating Budget	\$ -	\$ -	\$ 40,000	\$ -	\$ -
81	DPW	2007	FORD	FIVE HUNDRED	65,566	\$ 20,000	68.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 20,000	\$ -
82	Police	2011	FORD	CROWN VIC	42,208	\$ 40,000	68.0	General Fund Operating Budget	\$ -	\$ -	\$ 40,000	\$ -	\$ -
83	Fire	2009	FORD F-250	PICK-UP	35,288	\$ 33,000	66.8	General Fund Operating Budget	\$ -	\$ -	\$ 33,000	\$ -	\$ -
84	Public Buildings	2006	FORD	Econo Van	51,896	\$ 22,000	65.0	General Fund Operating Budget	\$ -	\$ -	\$ 24,000	\$ -	\$ -
85	Public Buildings	2007	FORD	Econo Van	58,905	\$ 22,000	63.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 25,000	\$ -
86	Public Buildings	2007	FORD	Econo Van	40,978	\$ 22,000	62.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 25,000	\$ -
87	Police	2011	FORD	FUSION	56,456	\$ 19,000	62.2	General Fund Operating Budget	\$ -	\$ -	\$ 19,000	\$ -	\$ -
88	DPW	1994	INTERNATIONAL		199,720	\$ 170,000	61.8	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ 170,000	\$ -
89	Parks and Rec	2002	Ford	Ranger Supercab	SURPLUSED	\$ 16,000	61.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
90	DPW	2004	FORD	DRWSUP	69,242	\$ 65,000	61.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 65,000	\$ -
91	Police	2011	FORD	FOCUS	53,384	\$ 19,000	61.1	General Fund Operating Budget	\$ -	\$ -	\$ 19,000	\$ -	\$ -
92	Police	2008	FORD	CVPI	53,900	\$ 40,000	61.0	General Fund Operating Budget	\$ -	\$ -	\$ 43,000	\$ -	\$ -
93	Police	2006	FORD	TAURUS	46,554	\$ 19,000	60.8	General Fund Operating Budget	\$ -	\$ -	\$ 19,000	\$ -	\$ -
94	DPW	1998	INTERNATIONAL	200SER	57,762	\$ 170,000	60.3	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ 170,000	\$ -
95	DPW	2009	FORD	F350	32,948	\$ 25,000	59.3	Utilities Budget	\$ -	\$ -	\$ -	\$ 25,000	\$ -
96	DPW	2006	FORD	FUSION	81,410	\$ 16,000	59.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 16,000	\$ -
97	Public Buildings	2010	FORD	E250 Van	46,980	\$ 22,000	59.2	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 25,000	\$ -
98	DPW	2005	INTERNATIONAL	700SER LG.CONST	39,173	\$ 180,000	59.2	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ 180,000	\$ -
99	Police	2012	FORD	FUSION SEL	42,191	\$ 19,000	59.1	General Fund Operating Budget	\$ -	\$ -	\$ 19,000	\$ -	\$ -
100	Police	2012	FORD	FUSION SEL	51,845	\$ 19,000	58.9	General Fund Operating Budget	\$ -	\$ -	\$ 19,000	\$ -	\$ -
101	Police	2003	FORD	TAURUS	56,937	\$ 19,000	58.7	General Fund Operating Budget	\$ -	\$ -	\$ 19,000	\$ -	\$ -
102	Police	2011	FORD	FOCUS	55,281	\$ 19,000	58.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 19,000	\$ -
103	Fire	2009	FORD	FOCUS	22,767	\$ 17,000	57.6	General Fund Operating Budget	\$ -	\$ -	\$ 17,000	\$ -	\$ -
104	Police	2011	FORD	FOCUS	46,074	\$ 19,000	57.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 19,000	\$ -
105	Fire	2009	FORD	TAURUS SE	60,870	\$ 17,000	57.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 17,000	\$ -

Priority	Dept	Vehicle Year	Make	Model	Mileage	Est Cost in FY2016	Total	Funding Source	FY 2016	FY2017	FY 2018	FY 2019	FY2020
106	DPW	2006	INTERNATIONAL	700SER		\$ 220,000	56.6	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ 220,000	\$ -
107	Fire	2009	FORD	FOCUS	34,349	\$ 17,000	56.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 17,000	\$ -
108	Fire	2009	FORD	FOCUS	28,835	\$ 17,000	56.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 17,000	\$ 26,000
109	Police	2006	FORD	TAURUS	90,888	\$ 19,000	56.2	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 19,000	\$ -
110	Fire	2009	FORD	EXPEDITION	78,499	\$ 50,000	55.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
111	Police	2010	FORD	CVPI	71,507	\$ 40,000	54.9	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ 39,988
112	Police	2012	FORD	ESCAPE LIMITED	33,495	\$ 19,000	54.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ 19,000	\$ -
113	Public Buildings	2010	FORD	E250 Van	41,216	\$ 22,000	54.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ 22,000
114	DPW	1998	INTERNATIONAL	200SER 10 WHEELER	94,257	\$ 190,000	54.0	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ 190,000
115	Police	2008	FORD	FOCUS	18,227	\$ 19,000	53.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
116	Police	2014	FORD	EXPEDITION	3,482	\$ 40,760	53.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ 19,000
117	Fire	1992	EMERGENCY ONE	PUMPER(FOAM)	125,500	\$ 600,000	53.1	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
118	DPW	1992	CHEVROLET	TC31003 KOD	22,246	\$ 80,000	52.7	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ 80,000
119	Police	2011	FORD	CVPI	50,171	\$ 40,000	52.2	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
120	Fire	1992	FEDERAL MOTORS PROTECTOR	PUMPER	113,000	\$ 600,000	51.9	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
121	Parks and Rec	2013	Ford	Fusion	43,925	\$ 15,000	51.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
122	Police	2011	FORD	FUSION SEL	53,608	\$ 19,000	51.2	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
123	Police	2008	FORD	CVPI	102,714	\$ 40,000	50.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
124	Police	2008	FORD	CVPI	102,714	\$ 40,000	50.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
125	Health Dept	2001	FORD	RANGER	77,731	\$ 15,000	49.9	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
126	Police	1995	FLEETWOOD	BOUNDER	39,800	\$ 325,000	49.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
127	Public Buildings	2000	FORD	Ranger Pick-up	61,351	\$ 19,500	49.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
128	DPW	2002	ELGIN	PELICAN	6,143	\$ 180,000	49.1	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ 180,000
129	Police	2013	FORD	EXPEDITION	5,212	\$ 46,925	48.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
130	Police	2003	CHEVY	IMPALA	94,052	\$ 19,000	48.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
131	Police	2008	FORD	CVPI	60,643	\$ 40,000	48.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
132	DPW	2002	INTERNATIONAL	400 SERIES		\$ 80,000	48.0	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ 80,000

Priority	Dept	Vehicle Year	Make	Model	Mileage	Est Cost in FY2016	Total	Funding Source	FY 2016	FY2017	FY 2018	FY 2019	FY2020
133	Police	2009	FORD	ESCAPE HYB	64,320	\$ 40,000	47.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
134	Police	2007	FORD	TAURUS	31,413	\$ 19,000	47.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
135	Police	2007	LEXUS	IS250	35,176	\$ 19,000	47.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
136	Police	2006	FORD	CVPI	62,920	\$ 40,000	47.2	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
137	Police	2014	FORD	EXPLORER	1,292	\$ 43,000	47.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
138	Police	2007	HD	FLHTP	21,699	\$ 19,000	46.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
139	Police	2006	HD	FLHTP	21,137	\$ 19,000	46.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
140	Police	1994	CHEVY	CHEYENNE 3500	26,124	\$ 20,000	46.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
141	Police	2011	FORD	CVPI	72,783	\$ 40,000	46.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
142	Public Buildings	2003	FORD	E250 Van	94,506	\$ 22,000	46.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
143	DPW	2008	LEEBOY	PAVER	437	\$ 130,000	45.8	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
144	Police	2010	FORD	CVPI	67,080	\$ 40,000	45.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
145	DPW	2013	FORD	F250	8,071	\$ 25,000	45.3	Utilities Budget	\$ -	\$ -	\$ -	\$ -	\$ -
146	Police	1999	JEEP	GRAND CHEROKEE	127,679	\$ 19,000	44.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
147	ISD	2007	TOYOTA	PRIUS	54,125	\$ 15,000	44.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
148	DPW	2011	FORD	F350	37,266	\$ 25,000	44.6	Utilities Budget	\$ -	\$ -	\$ -	\$ -	\$ -
149	DPW	2011	FORD	F350 BOX	31,469	\$ 25,000	44.5	Utilities Budget	\$ -	\$ -	\$ -	\$ -	\$ -
150	Fire	1989	CHEVROLET	CAB & CHASSIS	7,268	\$ 200,000	43.6	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
151	DPW	2007	INTERNATIONAL	2554	33,463	\$ 180,000	43.5	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -
152	Parks and Rec	2006	INTERNATIONAL	400 SER	33,193	\$ 185,000	43.3	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
153	IT	2000	FORD	Econoline Van	16,143	\$ 24,000	43.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
154	Parks and Rec	2006	Ford	Ecowag Pass Van	29,660	\$ 21,000	43.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
155	Parks and Rec	1995	Ford	Van	41,388	\$ 21,000	43.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
156	Fire	2006	PIERCE ARROW XT	PUMPER(FOAM)	42,370	\$ 600,000	42.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
157	ISD	2008	FORD	FUSION	56,337	\$ 15,000	42.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
158	ISD	2008	FORD	FUSION	52,211	\$ 15,000	41.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
159	Police	2005	JEEP	GRAND CHEROKEE	125,865	\$ 19,000	41.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -



Priority	Dept	Vehicle Year	Make	Model	Mileage	Est Cost in FY2016	Total	Funding Source	FY 2016	FY2017	FY 2018	FY 2019	FY2020
160	Police	2014	FORD	FUSION	10,000	\$ 43,000	41.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
161	Parks and Rec	2008	Ford	F150 Pickup 4x2	32,887	\$ 26,000	41.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
162	DPW	2006	FORD	F350	51,367	\$ 55,000	40.8	Utilities Budget	\$ -	\$ -	\$ -	\$ -	\$ -
163	DPW	2012	CHEVY	SIVERADO	12,084	\$ 25,000	40.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
164	DPW	2002	INTERNATIONAL	400 SER	109,803	\$ 160,000	40.6	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -
165	Health Dept	2002	TOYOTA	PRIUS	44,440	\$ 15,000	40.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
166	Police	2005	FORD	CROWN VIC	118,777	\$ 40,000	40.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
167	DPW	2004	FORD	F350	67,027	\$ 65,000	40.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
168	DPW	2001	INTERNATIONAL	200SER 10 WHEELER	67,061	\$ 190,000	40.2	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
169	DPW	1998	VOLVO	120C		\$ 180,000	40.0	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
170	Public Buildings	2001	FORD	E350 Van	155,114	\$ 22,000	39.9	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
171	DPW	2001	INTERNATIONAL	700SER	43,797	\$ 170,000	39.9	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
172	ISD	2008	FORD	FUSION	43,450	\$ 15,000	39.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
173	Parks and Rec	2009	Ford	F350 4x4 Pickup	16,518	\$ 40,000	39.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
174	DPW	2004	ELGIN	PELICAN	5,916	\$ 180,000	39.8	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
175	ISD	2008	FORD	FUSION	43,053	\$ 15,000	39.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
176	DPW	2005	FORD	F150	110,058	\$ 40,000	39.7	Utilities Budget	\$ -	\$ -	\$ -	\$ -	\$ -
177	DPW	2001	INTERNATIONAL	200SER 10 WHEELER	46,427	\$ 220,000	39.6	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -
178	ISD	2008	FORD	FUSION	42,053	\$ 15,000	39.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
179	DPW	2002	GRADALL	XL4100	2,000	\$ 300,000	39.5	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
180	DPW	2014	FORD	RANGER	60,130	\$ 25,000	39.4	Utilities Budget	\$ -	\$ -	\$ -	\$ -	\$ -
181	Police	1993	CHEVY	PICK UP	112,086	\$ 20,000	39.2	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
182	Fire	2007	PIERCE	MIDMOUNT PLAT	41,707	\$ 1,000,000	39.2	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
183	ISD	2008	MERCURY	SABLE	39,343	\$ 15,000	39.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
184	DPW	2000	INTERNATIONAL	4700	41,976	\$ 170,000	38.9	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
185	DPW	2009	FORD	E150	26,996	\$ 20,000	38.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
186	ISD	2007	FORD	FOCUS	26,074	\$ 15,000	38.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Vehicle Year	Make	Model	Mileage	Est Cost in FY2016	Total	Funding Source	FY 2016	FY2017	FY 2018	FY 2019	FY2020
187	DPW	2005	FORD	F250	87,075	\$ 25,000	38.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
188	DPW	2008	FORD	F350	27,910	\$ 65,000	38.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
189	DPW	2013	ELGIN	PELICAN	600	\$ 180,000	38.3	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
190	ISD	2008	FORD	FOCUS	36,142	\$ 15,000	38.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
191	DPW	2004	INTERNATIONAL	400SER	37,629	\$ 160,000	38.2	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
192	DPW	1999	INTERNATIONAL	200SER 10 WHEELER	84,560	\$ 190,000	38.1	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
193	DPW	2006	ELGIN	PELICAN	5,540	\$ 180,000	38.1	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
194	DPW	2008	FORD	FUSION	75,993	\$ 16,000	38.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
195	DPW	1997	GRADALL	XL4100	3,917	\$ 300,000	37.9	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
196	DPW	2005	FORD	F150	85,770	\$ 25,000	37.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
197	DPW	1997	JCB	214-3	5,084	\$ 130,000	37.5	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
198	DPW	2003	JCB	215-P21	67,818	\$ 130,000	37.5	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -
199	DPW	1985	INTERNATIONAL	7600 10 WHEELER	93,702	\$ 205,000	37.5	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
200	DPW	2012	FORD	FUSION	103,944	\$ 20,000	37.5	Utilities Budget	\$ -	\$ -	\$ -	\$ -	\$ -
201	DPW	2012	FORD	FUSION	100,656	\$ 20,000	37.4	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -
202	DPW	1996	BOBCAT	853H	3,241	\$ 35,000	37.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
203	DPW	2004	FORD	F350	60,725	\$ 65,000	37.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
204	DPW	2014	FORD	RANGER	60,130	\$ 25,000	37.3	Utilities Budget	\$ -	\$ -	\$ -	\$ -	\$ -
205	DPW	2002	FORD	ES50	35,468	\$ 280,000	37.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
206	DPW	2001	INTERNATIONAL	400SER	44,779	\$ 170,000	36.6	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
207	DPW	2002	FORD	4X4	67,818	\$ 25,000	36.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
208	DPW	2000	GRADALL	XL4100 - GW59441	1,847	\$ 300,000	36.6	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
209	Police	2010	FORD	CVPI	66,999	\$ 40,000	36.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
210	DPW	2005	TRACKLESS	MT-5	779	\$ 125,000	36.5	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
211	Fire	1996	EMERGENCY ONE	75' AERIAL (QUINT)	62,574	\$ 1,000,000	36.4	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
212	DPW	2001	FORD	F150	80,974	\$ 25,000	36.4	Utilities Budget	\$ -	\$ -	\$ -	\$ -	\$ -
213	Police	2013	FORD	TAURUS	38,578	\$ 25,000	36.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Vehicle Year	Make	Model	Mileage	Est Cost in FY2016	Total	Funding Source	FY 2016	FY2017	FY 2018	FY 2019	FY2020
214	DPW	2002	VOLVO	EC55	5,000	\$ 290,000	36.3	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -
215	Fire	2007	PIERCE ARROW XT	PUMPER(FOAM)	48,624	\$ 600,000	36.2	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
216	DPW	1994	BOBCAT	853H	2,572	\$ 35,000	36.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
217	DPW	2012	FORD	F350	58,076	\$ 65,000	36.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
218	DPW	2012	FORD		106,250	\$ 16,000	35.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
219	DPW	2003	INTERNATIONAL	4300	47,274	\$ 170,000	35.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
220	DPW	2003	INTERNATIONAL	4300	50,689	\$ 170,000	35.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
221	Police	2010	FORD	CVPI	60,384	\$ 40,000	35.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
222	Parks and Rec	2008	Ford	F250 Pickup 4x4	8,300	\$ 26,000	35.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
223	DPW	2004	INTERNATIONAL	700 SER	53,504	\$ 170,000	34.7	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
224	DPW	1999	FORD	F 350	85,662	\$ 60,000	34.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
225	DPW	2008	FORD		92,125	\$ 15,500	34.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
226	ISD	2007	FORD	FOCUS	28,156	\$ 15,000	34.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
227	DPW	2008	INTERNATIONAL 700 SER		4,598	\$ 330,000	34.0	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -
228	Parks and Rec	2012	Ford	1 Ton Dump Super Duty	4,912	\$ 60,000	34.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
229	DPW	2000	INTERNATIONAL	400SER	38,846	\$ 170,000	33.8	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
230	DPW	2002	FORD	F350	121,060	\$ 25,000	33.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
231	DPW	2009	FORD	F350	29,093	\$ 85,000	33.5	Utilities Budget	\$ -	\$ -	\$ -	\$ -	\$ -
232	DPW	2002	INTERNATIONAL	4700	39,048	\$ 170,000	33.1	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
233	DPW	2004	INTERNATIONAL	7400 SER	45,739	\$ 170,000	33.1	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
234	Police	2013	FORD	FUSION	1,066	\$ 19,000	32.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
235	DPW	2012	FORD	F 350	6,707	\$ 65,000	32.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
236	DPW	2006	FORD	F350	44,102	\$ 65,000	32.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
237	DPW	2005	INTERNATIONAL	700SER	35,923	\$ 170,000	31.8	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
238	DPW	2002	FORD	TAURUS	80,140	\$ 15,500	31.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
239	DPW	2008	ELGIN	PELICAN	3,855	\$ 180,000	30.9	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
240	DPW	2005	INTERNATIONAL	700 SER	36,608	\$ 170,000	30.8	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Vehicle Year	Make	Model	Mileage	Est Cost in FY2016	Total	Funding Source	FY 2016	FY2017	FY 2018	FY 2019	FY2020
241	DPW	2005	KASI			\$ 50,000	30.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
242	DPW	2011	FORD	FOCUS	64,671	\$ 16,000	30.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
243	Police	2002	HD	FLHTP	28,085	\$ 19,000	30.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
244	Parks and Rec	2002	Ford	Windstar	130,000	\$ 21,000	30.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
245	DPW	2004	FORD	DRWSUP	80,398	\$ 65,000	30.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
246	Public Buildings	2004	INTERNATIONAL MODEL	4300 SBA Bucket Truck	33,227	\$ 150,000	30.0	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
247	Police	2013	FORD	ESCAPE	36,429	\$ 19,000	29.9	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
248	DPW	2000	FORD	E250	91,027	\$ 20,000	29.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
249	DPW	2008	ELGIN	PELICAN	3,435	\$ 180,000	28.8	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
250	DPW	2007	INTERNATIONAL	700 SER	33,644	\$ 170,000	27.1	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
251	DPW	2010	VOLVO L120F		4,215	\$ 180,000	27.0	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
252	DPW	2006	INTERNATIONAL	700 SER	36,401	\$ 170,000	26.9	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
253	Police	2012	FORD	FUSION	32,182	\$ 19,000	26.9	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
254	DPW	2012	FORD	FOCUS	29,682	\$ 16,000	26.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
255	DPW	1997	INTERNATIONAL	4700	110,926	\$ 65,000	25.9	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
256	Fire	1987	EMERGENCY ONE(REFURB FY05)	PUMPER	127,089	\$ 600,000	25.5	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
257	Assessing	2008	FORD	FOCUS	28,889	\$ 15,000	25.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
258	DPW	2008	VOLVO	L70F	4,472	\$ 180,000	25.3	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
259	DPW	2009	FORD	F350	22,344	\$ 25,000	25.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
260	DPW	2007	FORD	TAURUS	37,707	\$ 16,000	25.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
261	Public Buildings	2014	FORD	LNG Pickup	125,000	\$ 58,000	24.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
262	DPW	2007	INTERNATIONAL	700 SER	31,849	\$ 170,000	24.5	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
263	Assessing	2007	FORD	FOCUS	13,912	\$ 15,000	24.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
264	Health Dept	2007	TOYOTA	PRIUS	22,234	\$ 15,000	24.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
265	DPW	2007	INTERNATIONAL	700 SER	29,231	\$ 170,000	23.9	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
266	DPW	2007	INTERNATIONAL	700 SER	28,979	\$ 170,000	23.9	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
267	DPW	2007	INTERNATIONAL	700 SER	34,370	\$ 170,000	23.9	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Vehicle Year	Make	Model	Mileage	Est Cost in FY2016	Total	Funding Source	FY 2016	FY2017	FY 2018	FY 2019	FY2020
268	Police	2012	FORD	FUSION SEL	46,545	\$ 19,000	23.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
269	Assessing	2008	FORD	FOCUS	21,397	\$ 15,000	23.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
270	Health Dept	2007	FORD	FOCUS	13,321	\$ 15,000	22.9	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
271	DPW	2008	INTERNATIONAL	7400 SER	31,679	\$ 170,000	22.9	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
272	Fire	2009	PIERCE ARROW XT	105' AERIAL	26,609	\$ 1,000,000	22.3	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
273	DPW	2007	INTERNATIONAL	700 SER 35kibs	26,021	\$ 170,000	22.1	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
274	DPW	2007	FORD	FUSION	63,950	\$ 16,000	22.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
275	DPW	2008	INTERNATIONAL		73,751	\$ 180,000	21.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
276	Parks and Rec	2010	INTERNATIONAL	cabover	15,003	\$ 75,000	21.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
277	DPW	2007	INTERNATIONAL	700 SER	23,069	\$ 170,000	21.5	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
278	DPW	2005	VOLVO	L-90	1,430	\$ 180,000	21.2	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
279	DPW	2008	FORD	DRWSUP	25,581	\$ 65,000	21.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
280	DPW	2004	TRACKLESS	MT-5		\$ 125,000	20.5	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
281	DPW	2009	FORD	TAURUS	49,971	\$ 16,000	20.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
282	Assessing	2009	HONDA	CIVIC	21,217	\$ 15,000	20.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
283	Fire	2010	PIERCE ARROW XT	PUMPER(FOAM)	28,481	\$ 600,000	20.0	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
284	DPW	2010	INTERNATIONAL	7600 10 WHEELER	26,678	\$ 190,000	20.0	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
285	DPW	2008	INTERNATIONAL	700 SER	17,293	\$ 170,000	19.9	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
286	DPW	2005	FORD	F150	61,422	\$ 25,000	19.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
287	DPW	2005	TRACKLESS	MT-5		\$ 125,000	19.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
288	DPW	2008	INTERNATIONAL	7400 SER	19,728	\$ 170,000	19.3	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
289	DPW	2009	INTERNATIONAL	700SER	21,227	\$ 170,000	19.2	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
290	DPW	2009	INTERNATIONAL	700 SER	20,152	\$ 170,000	19.0	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
291	DPW	2006	VOLVO		243	\$ 290,000	18.9	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -
292	DPW	2006	TRACKLESS	MT-5		\$ 125,000	18.3	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
293	DPW	2006	INTERNATIONAL	400 SER	33,193	\$ 250,000	17.6	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
294	DPW	2008	KOMATSU	WB156PSS		\$ 135,000	17.4	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Vehicle Year	Make	Model	Mileage	Est Cost in FY2016	Total	Funding Source	FY 2016	FY2017	FY 2018	FY 2019	FY2020
295	DPW	2010	INTERNATIONAL	7600 10 WHEELER	18,624	\$ 190,000	16.0	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
296	DPW	2005	FORD	F150	31,691	\$ 25,000	15.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
297	DPW	2010	INTERNATIONAL	7600 10 WHEELER	17,245	\$ 190,000	15.7	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
298	DPW	2007	JCB	214	32	\$ 130,000	15.1	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
299	Fire	2013	FORD	TAURUS SE	24,500	\$ 30,000	14.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
300	DPW	2006	FORD	F150	24,399	\$ 25,000	14.1	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
301	DPW	2012	FORD	DRWSUP	5,469	\$ 65,000	14.0	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
302	DPW	2004	INTERNATIONAL 7400SER		78,232	\$ 130,000	13.9	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -
303	DPW	2013	FORD	FUSION	76,522	\$ 16,000	13.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
304	DPW	2012	INTERNATIONAL	700 SER	20,829	\$ 170,000	13.4	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
305	DPW	2012	INTERNATIONAL	700 SER	20,829	\$ 170,000	13.4	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
306	DPW	2012	CHEVY	SILVERADO	14,535	\$ 25,000	12.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
307	Health Dept	2010	FORD	FOCUS	19,750	\$ 15,000	12.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
308	Fire	2012	EMERGENCY ONE	TYPHOON/PUMPER	13,777	\$ 600,000	12.1	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
309	DPW	2007	FORD	FOCUS	44,017	\$ 16,000	11.7	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
310	Public Buildings	2012	FORD	Focus	30,000	\$ 20,000	11.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
311	Public Buildings	2012	FORD	Focus	30,000	\$ 20,000	11.3	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
312	DPW	2011	VOLVO	870	779	\$ 130,000	10.5	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
313	DPW	2012	FORD	F250	6,293	\$ 25,000	8.9	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
314	DPW	2012	INTERNATIONAL	700SER	8,599	\$ 170,000	8.6	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
315	DPW	2012	INTERNATIONAL	700SER	8,599	\$ 170,000	8.6	Capital Improvement Plan-General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
316	Fire	2012	FORD	TRANSIT	9,685	\$ 28,000	8.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
317	Fire	2012	FORD	PICK-UP	9,000	\$ 52,035	8.4	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
318	DPW	2009	BOBCAT	300	412	\$ 35,000	8.0	Utilities Budget	\$ -	\$ -	\$ -	\$ -	\$ -
319	DPW	2012	INTERNATIONAL	7400SER	6,270	\$ 65,000	7.2	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
320	DPW	2012	FORD	F250	4,370	\$ 65,000	6.9	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
321	DPW	2012	JCB	2155 4X4X4	722	\$ 135,000	5.6	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Vehicle Year	Make	Model	Mileage	Est Cost in FY2016	Total	Funding Source	FY 2016	FY2017	FY 2018	FY 2019	FY2020
322	DPW	2013	FORD	F250	3,974	\$ 25,000	5.3	Utilities Budget	\$ -	\$ -	\$ -	\$ -	\$ -
323	DPW	2013	INTERNATIONAL	700SER	4,740	\$ 170,000	5.2	Capital Improvement Plan- General Fund	\$ -	\$ -	\$ -	\$ -	\$ -
324	DPW	2013	VOLVO	BL20	642	\$ 135,000	3.5	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -
325	DPW	2013	INTERNATIONAL	7400	1,008	\$ 180,000	2.3	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -
326	DPW	2013	INTERNATIONAL	400 SERIES	2,786	\$ 180,000	1.8	Capital Improvement Plan Utilities	\$ -	\$ -	\$ -	\$ -	\$ -
327	Parks and Rec	2014	FORD	F150	3,204	\$ 26,000	0.8	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
328	Parks and Rec	2014	FORD	F150	2,377	\$ 26,000	0.6	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
329	Parks and Rec	2014	FORD	F150	1,808	\$ 26,000	0.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
330	Fire	2013	EMERGENCY ONE	110'AERIAL	3,524	\$ 1,000,000	0.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
331	Fire	2013	FORD	EXPEDITION	67,818	\$ 40,000	0.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
332	Fire	2007	FORD	EXPEDITION	237,027	\$ 40,000	0.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
333	Fire	1997	Ford (DONATED AMBULANCE)	ECOVAN	173,856	NA	0.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
334	Fire	2014	FORD	DRWSUP	2,150	\$ 190,000	0.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
335	Police	2014	FORD	FUSION	1,515	\$ 19,000	0.5	General Fund Operating Budget	\$ -	\$ -	\$ -	\$ -	\$ -
									\$ -	\$ -	\$ -	\$ -	\$ -

\$ 33,126,000.00

\$ 2,197,516.00 \$ 990,445.00 \$ 1,936,000.00 \$ 1,146,000.00 \$ 655,988.00





## PARKS

The Parks & Recreation Department has positioned itself with an eye toward the future. All parks and playgrounds have been inventoried and the current condition of each of the elements located there assessed. By assessing the elements and giving them a ranking, the department has been able to give these sites a quality rating. The assessment has reaffirmed that Newton Highlands Playground is the site that would most benefit from an entire reclamation. To that end the department continues to move Newton Highlands through the CPA process. In FY15, the department was awarded funding for the development of construction documents for Newton Highlands.

While it is practical to look at sites in their entirety and bring them forward as a unit, this strategy is cost intensive and entails significant time lines. Each of these sites is made up of hardscapes, such as buildings, tennis courts, basketball courts and play structures. Along with the hardscapes, many of these sites have athletic turf surfaces as well. In FY15, the department focused on the elements and began addressing turf fields, play structures and hard courts.

In FY15, Parks & Recreation received an additional \$200,000 in the Operating Budget to address turf management on the premier fields throughout the city. The department instituted a turf plan that will allow the City to address 3 to 5 fields per year on a rotating basis. As of this writing, the department has completed the Halloran Sports & Recreation Complex football field, and is currently addressing Warren House and Weeks House fields.

An assessment of the 56 play structures that are located on park and school lands has also recently been completed. In the past, the funding for replacements has fallen on the school PTO's and other special interest groups. It is the belief of the Executive Office, that the funding for a base play structure should be the responsibility of the city, more specifically within the operating budget of Parks & Recreation. In accordance with the assessment the City will now fund the replacement of two structures per year through the operating budget.

The hard courts consist of tennis and basketball surfaces. As part of the evaluation process, not only was the overall condition of these surfaces taken into account, the viability of the courts and possible alternative uses were considered as well. This past year, two courts were removed from Burr School, increasing the green space. Sites that have four or more courts will remain on the CIP list. Those sites that have three or fewer will now be funded through the operating budget, with the expectation that three courts will be reclaimed each year.



## FY 2016 – FY2020 FUNDING BY ELEMENT

### Play Structures

The assessment of the 56 play structures consisted of reviewing structural integrity, accessibility, condition of the hardware, non-compliance, as well as protrusions and entrapments. Upon completion of the assessment parameters, each structure was ranked as to its current condition. We then prioritized those structures based on their rankings.

The Parks & Recreation Department will replace two structures per year, beginning in FY16. The department is committing \$75,000 to each location with the intent to provide a base structure at each site. We will look at 3-5 different designs with varied elements for placement at a site. The decision on which design will be implemented will be made after conferring with interested parties and coming to a consensus. These groups will also have the opportunity to add to these base structures with the use of alternative funding sources, upon approval of the Parks & Recreation Department.

Site	Description	Cost
<b>FY16</b> Horace Mann 687 Watertown St., Newtonville	Replacement of a wood structure that was installed in 1993. This is a school age structure.	\$75,000



Auburndale Cove  
West Pine St., Auburndale

Replacement of a wood structure that was installed in 1997. This is a tot and school age structure.

\$75,000



**FY17**

Education Center  
100 Walnut St., Newtonville

Replacement of a wood structure that was installed in 1992. This is a tot structure.

\$75,000



Bowen School  
280 Cypress St., Newton Ctr.

Replacement of a wood structure that was installed In 1995. This is a tot structure.

\$75,000



**FY18**

Underwood School  
101 Vernon St., Newton Cr.

Replacement of a wood structure that was installed In 1994.

\$75,000



Hyde Playground  
Lincoln St., Newton Hglds.

Replacement of a wood structure that was installed  
In 1998.

\$75,000



**FY19**

Solomon Schechter  
60 Stein Cr., Newton

Replacement of a metal structure that was installed  
in 1996. This is a tot and school age structure.

\$75,000



Richardson Field  
Allen Ave., Waban

Replacement of a metal structure that was installed  
in 1999. This is a tot structure.

\$75,000





**FY20**

River St. Playground  
River St., W. Newton

Replacement of a metal structure that was installed  
in 1990. This is a school age structure.

\$75,000



Forte Park  
233R California St.

Replacement of a metal structure that was installed  
in 1997. This is a tot structure.

\$75,000



## Tennis Court Reclamation

The work to be performed on courts would be site specific. In general this would consist of a full renovation including reclamation of existing asphalt paving, new sub-base as required, asphalt coursing and color coating, striping, new sleeves and net posts, new perimeter vinyl coated chain link fence as needed. Alleviating drainage issues when required. Re-grading as needed at each site.

**FY 16 - Newton South High School- 12 Lighted courts- Cost: \$800,000**



**FY 17 - McGrath Park- 4 courts (West side) Cost:\$240,000**



**FY17 - Burr Park- 4 courts Cost: \$240,000**



**FY 18 - Ward School- 2 courts Cost: \$120,000**



**FY 19 - Auburndale Cove- 2 courts Cost: \$120,000**



**FY 20 - Solomon Schechter- 2 courts Cost: \$120,000**





## Ball Fields

As part of our continuing efforts to improve our City assets, the Parks and Recreation Maintenance Division will renovate baseball diamond infields. For the next five years (FY 16-20) we will renovate one ballfield per fiscal year. The area of focus is home plate, pitcher's mound, base paths, infield turf and immediate outfield turf perimeter. Laser grade infields as needed.

**FY 16 - Cabot Park Baseball Field**

Cost \$30,000



**FY 17 - Newton Centre Park.**

Cost \$30,000



**FY 18 - Russ Halloran Baseball Field**

Cost \$30,000



**FY 19 - Bobby Braceland Baseball Field**

**Cost \$30,000**



**FY 20 - Lincoln Warren and the West Newton Common baseball fields**

**Lincoln Warren**

**Cost \$30,000**



**West Newton Common**

**Cost \$30,000**



# **STREET TREE REVITALIZATION PLAN**

Since the late 1970's the City's street tree population has been declining. At the current pace the City will have nearly no street trees by the year 2050. The City's street tree population peaked at about 42,000 street trees during the mid-1970s. Starting in the late 1980s the City no longer planted as many trees as were being removed. The resulting net loss has reduced the current street tree population to about 24,000. This loss of trees has resulted in a number of undesirable effects, including; increased storm water runoff, increased electric costs to residents, increased greenhouse gases, and reduction of property value.

Some of the quantitative benefits of the City's current street tree population are:

- Over 20 billion gallons of storm water is intercepted each year,
- Nearly 2 million kwh of electricity are saved by Newton Residents annually, and
- Atmospheric carbon is reduced by 11 billion pounds each year.

Among other things, the City of Newton, the "Garden City", is identified for its trees and green spaces. The City's trees dramatically contribute to the quality of life of its residents and visitors. The street trees of Newton create a sense of place and provide a uniform connection among the villages and business centers.

Fiscal year 2015 is the first year of a fifteen year planting initiative. The planting initiative is a major step forward in combating the net loss of trees in the City. Starting in FY2016 the City will enhance this program and will address the planting needs in a comprehensive, three-pronged approach:

- Complete Streets, Tree Care and Planting,
- Urban Forest Restoration and Planting, and
- Customer Request Tree Planting Program.

**Complete Streets, Tree Care and Planting** – Each year sidewalks and roads are reconstructed throughout the City. In most cases these locations have City owned trees. The intention of this component is to not only address the sidewalk and road needs in an area but to address the tree needs as well. To be proactive Urban Forestry will work with the Department of Public Works to address the tree needs of locations where they are doing major reconstruction work. Through this plan, over the next five years, it is the City's goal to plant over 400 trees, prune over 1,000 trees, and remove any hazardous trees in these areas

**Urban Forest Restoration, Tree Planting** – 2015 marks the first year of the Urban Forest Restoration Plan. Starting in FY2015 the City will plant over 100 street trees as part of a comprehensive plan. In 2013 and 2014 the City did a detailed analysis of the streets in the City where the highest percentage of trees are missing. Using this data a 15 year plan has been developed that stabilizes the City's street tree population. Over the next five years the City has a goal of planting nearly 1,500 trees as part of this plan.

**Customer Request Tree Planting Program** – In the last 10 years the City has received nearly 700 requests for new trees to be planted. The City intends to annually plant trees that will address requests received. The City will provide these trees through a number of combined efforts. In addition to a portion of the trees being planted by the City it will work with volunteer efforts and provide trees to residents for planting.

<b><u>Project Title</u></b>	<b><u>Project Description</u></b>	<b><u>FY2016</u></b>	<b><u>FY2017</u></b>	<b><u>FY2018</u></b>	<b><u>FY2019</u></b>	<b><u>FY2020</u></b>
Complete Streets Tree Care and Planting	Prune, remove, and plant trees annually in locations where sidewalks and roadways are being reconstructed and in Village Centers	\$105,000	\$105,000	\$105,000	\$105,000	\$105,000
Urban Forest Restoration Tree Planting	Plant trees annually to address the net loss of street trees with a goal of not net annual loss by 2020	\$40,000	\$60,000	\$76,000	\$162,000	\$230,000
Customer Request Tree Planting Program	Plant up to 70 trees per year	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
		\$165,000.00	\$185,000.00	\$201,000.00	\$287,000.00	\$355,000.00

## **Complete Streets, Tree Care and Planting Locations**

Over the next five fiscal years the City will plant over 400 trees and prune over 1000 trees throughout the areas listed below. These are locations currently scheduled to receive road and sidewalk improvements by the Department of Public Works. Urban Forestry will work with the Department of Public Works to address the major tree needs in conjunction with DPW's work.

### **FY2016**

Ward School  
Mason Rice School  
Angier School & Waban  
Williams School  
Lincoln Eliot School  
Newtonville

### **FY2017**

Bigelow School  
Underwood School  
Carr School  
Central School Office Area  
Newton Corner  
Newton Centre

### **FY2018**

Cabot School  
Horace Mann/F.A.Day  
Auburndale  
Chestnut Hill  
Thompsonville  
Burr School  
Memorial Spaulding

### **FY2019**

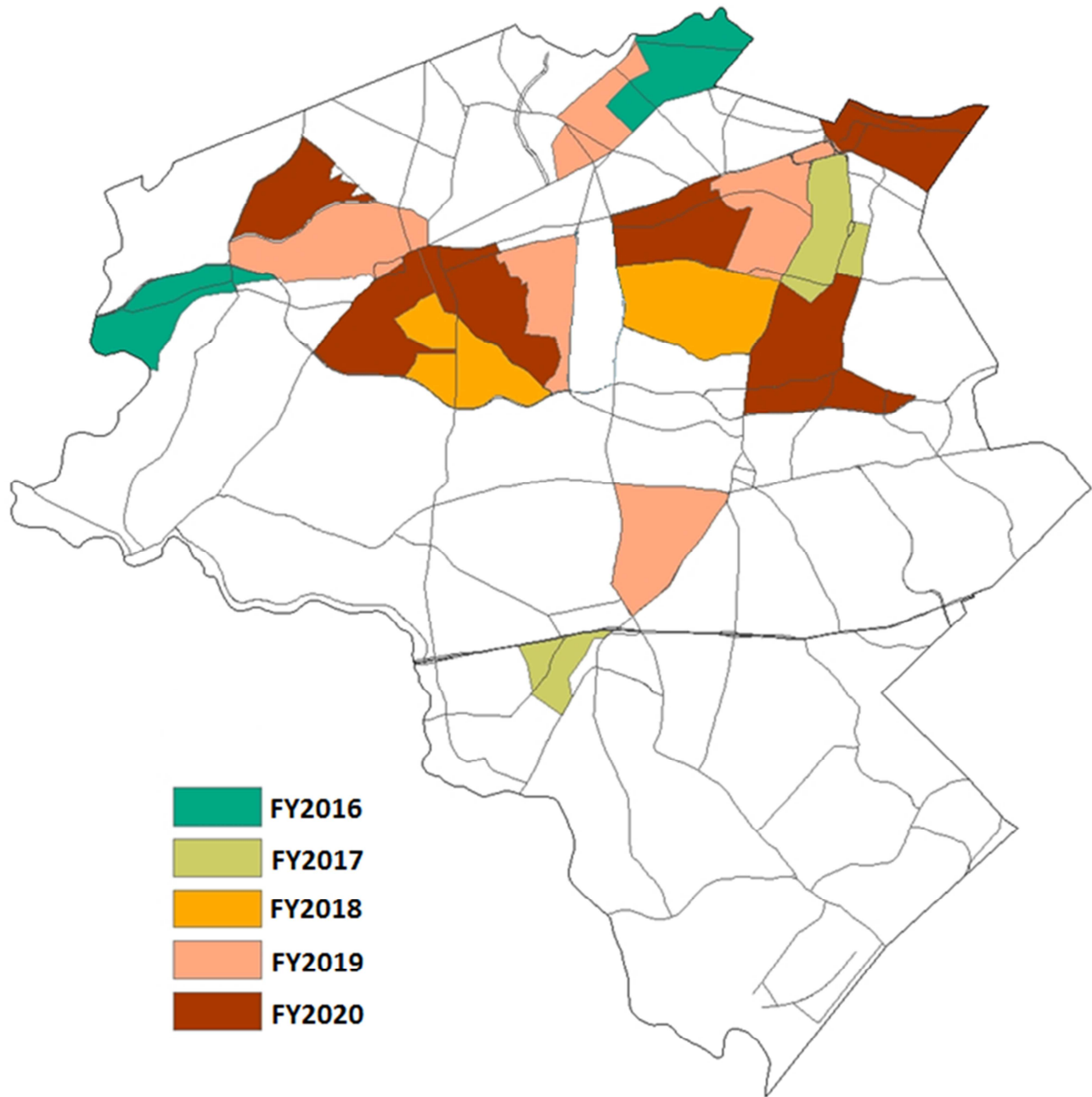
Brown & Oak Hill Schools  
City Hall  
Chestnut Street

### **FY2020**

Newton North  
Newton South  
Commonwealth Ave

## Urban Forest Restoration Tree Planting

Over the next five years the City's goal is to plant nearly 1,500 trees as part of its plans to restore the number of trees growing on the City's streets. In 2013 and 2014 the City did a detailed analysis of the streets in the City and determined where the highest percentage of trees are missing. The following information depicts the currently intended locations to receive trees.



## **Urban Forest Restoration Tree Planting, Streets to Be Addressed**

### **Urban Forest Restoration - FY2016**

Ash St. Allison St.	Beech St. Bourne St.	Chapel St. Charles St.	Phillips St. Rustic St.	Woodbine St. Woodland Rd.
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### **Urban Forest Restoration - FY2017**

Baldwin St. Billings Pk. Buswell Pk Centre St. Charles St.	Church St. Circuit Ave. Eldredge St. Elliot St. Elmwood St.	Frances St. Franklin St. Garden Rd. George St. Hollis St.	Hyde Ave. Jameson Rd. Margaret Rd. Park St. Ruthven Rd.	Sargent St. Vernon St. Waterston Rd.
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### **Urban Forest Restoration - FY2018**

Ascenta Ter. Atwood Ave. Barnstable Rd. Blake St. Bonad Rd. Bonwood St. Bristol Rd. Burnham Rd.	Cabot St. Clyde St. Colbert Rd. Dartmouth St. Ellis Rd. Exeter St. Fairfax St. Frederick St.	Gay St. Hampshire St. Harvard St. Howland Rd. Inis Cir Kirkstall Rd. Langdon St. Lockwood Rd.	Morse Rd. Oakwood Rd. Prince St. Pulsifer St. Risley Rd. Rochester Rd. Sewall St. Trowbridge Ave	Upland Rd. Valentine Pk. Wauwinet Rd. Westchester Rd. Whitney Rd. Withington Rd. Wykeham Rd.
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### **Urban Forest Restoration - FY2019**

Adams St. Albion Pl. Albion St. Allerton Rd. Allston St. Arden Rd. Bellevue St. Bennington St. Berwick Rd. Birch Hill Rd. Bolton Rd. Bridge St. Broadway Bunny Cir. Calvin Rd. Cherry St.	Churchill St. Claremont St. Colonila Ave. Concolor Ave. Converse Ave Crescent Ave. Crescent St. Crystal St. Cumberland Rd. Cushing St. Doris Cir Elm St. Elmwood Pk. Fairfield St. Fairmont Ave. Fernwood Rd.	Floral St. Forest Ave. Gray Birch Ter. Greylock Rd. Highland St. Hyde St. Ionia St. Kenmore St. Lake Ave. Lakewood Rd. Langdon St. Larkin Rd. Laudholm Rd. Lawn Ave. Leonard Ave. Linwood ave.	Lombard St. Maple Ave. Melbourne Ave. Minot Pl Moreland Ave. Mt. Ida St. Mt. Vernon St. Murray Rd. Newbury St. Newtonville Ave. Norwood Ave. Oak Ave. Oak Cliff Rd. Pine Crest Rd. Prairie Ave. Richardson St.	Rogers St. Rowe St. Saxon Rd. Sheffield Rd. Station Ave. Stratford Rd. Surrey Rd. Trowbridge St. Walden St. Webster Pk. Webster St. Westwood St. Whittier Rd. Wolcott St. Woodrow Ave. Worth Cir.
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## Urban Forest Restoration - FY2020

Albert Rd.	Cotton St.	Harvard St.	Norwood St.	Somerset Rd.
Alden St.	Crestwood Rd.	Hillside Ave.	Nottingham St.	Sterling St.
Alderwood Rd.	Crown St.	Hilltop St.	Oakleigh Rd.	Stuart Rd.
Ardmore Rd.	East Boulevard Rd.	Hobart Rd.	Oldham Rd.	Summer St.
Ardmore Ter.	East Side Pkwy	Hunnewell Ave.	Orris St.	Sunset Rd.
Ashford Rd.	Eastbourne Rd.	Ireland Rd.	Park Ave.	Sylvan Ave.
Auburndale Ave.	Eastbourne Rd.	Irving St.	Parkview Ave.	Tennyson Rd.
Avondale Rd.	Edgewood Rd.	Kenyon St.	Perkins St.	Town House Dr.
Ballard St.	Elmhurst Rd.	King St.	Perry Rd.	Valentine St.
Berkeley St.	Estabrook Rd.	Lancaster Rd.	Pine St.	Ward St.
Bigelow Rd.	Exmoor Rd.	Lenox St.	Prairie Ave.	Washburn Ave.
Bowers St.	Fairview St.	Lewis St.	Prentice Rd.	Washington Pk.
Brackett Rd.	Farquhar Rd.	Lewis Ter.	Princeton St.	Waverley Ave.
Breamore Rd.	Fountain St.	Linder Ter.	Prospect St.	Wessex Rd.
Bridges Ave.	Francis St.	Loring St.	Regent St.	West Boulevard Rd.
Bruce La.	Gambier St.	Madision Ave.	Roberta Rd.	Westbourne Rd.
Burrage Rd.	Garner St.	Merrill Rd.	Ruane Cir.	Westfield Rd.
Chesterfield Rd.	Glendale Rd.	Merton St.	Ruane Rd.	Westview Ter.
Clarendon St.	Grant Ave.	Mignon Rd.	Salisbury Rd.	Willard St.
Clements Rd.	Grasmere St.	Myrtle St.	Shaw St.	Wimbledon Cir.
Coolidge Rd.	Green Pk.	Newell Rd.	Sherbrooke Rd.	Winchester Rd.
Copley St.	Hammond St.	Nobscot Rd.	Shirley St.	Winthrop St.



## **SEWER SYSTEM**

Prior to the development of the City's comprehensive strategic plan for the improvement of its sewer infrastructure, it was estimated that more than 60% of the sewerage and wastewater that was sent to the Massachusetts Water Resource Authority (MWRA) for processing by the City of Newton was the result of Inflow (illegal hookups) and Infiltration (groundwater that gets into the sewer pipes through cracks and other imperfections). This was costing the City in excess of \$5 million per year. Furthermore, back-ups in the sewer lines due to insufficient capacity with the additional groundwater resulted in sewer surcharges from some street and park manholes.

The City developed an 11-year program to systematically address the approximately 300 miles of sewer mains, and related manhole structures, beginning with those areas known to have significant Inflow and Infiltration problems, as well as those areas that were experiencing flooding or sewer surcharging problems. The work in each project area is divided into 3 categories: Inspection and Assessment, including heavy cleaning; Design of repair work; and Construction, including post-construction flow assessment. Each project area is expected to be completed over a 2-3 year period. As a result of the financial benefits of recent MWRA sewer assessment increases that are much lower for Newton than most other MWRA communities, this program has been accelerated.

In FY 2016, Public Works expects to complete the post-construction flow evaluation in Project Area 2 (Auburndale, Lower Falls, West Newton), complete 60% of the Construction work in Project Areas 3 & 4 (Chestnut Hill, Newton Centre, Newtonville), and complete the Inspection and Assessment, as well as Design of repair work, in Project Area 5 (Newton Centre, Newtonville, Nonantum).











# NEWTON, MA SEWER SYSTEM CAPITAL IMPROVEMENT PROJECTS SCHEDULE

Updated September 8, 2014

ID	Task Name	Duration	Start	Finish	Predecessors	Cost	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1	CIP Project 1	489 days	Thu 10/17/13	Tue 9/11/15		\$4,003,923.30											
2	CIP Project 1 Construction/Construction Services	186 days	Thu 10/17/13	Thu 7/3/14		\$3,978,048.30											
3	CIP Project 1 Re-Test and Post Construction Flow Evaluation	110 days	Wed 4/1/15	Tue 9/1/15	2FS+193 days	\$25,875.00		4/1	9/1								
4																	
5	CIP Project 2	939 days	Fri 2/1/13	Wed 9/7/16		\$5,689,675.43											
6	CIP Project 2 Inspection and Assessment	260 days	Fri 2/1/13	Thu 7/30/14		\$482,300.43	1/30										
7	CIP Project 2 Design	128 days	Mon 3/24/14	Wed 9/17/14		\$181,500.00	2/24	9/17									
8	CIP Project 2 Construction/Construction Services	200 days	Thu 12/11/14	Wed 9/16/15	7FS+60 days	\$5,000,000.00	12/11	9/16									
9	CIP Project 2 Re-Test and Post Construction Flow Evaluation	110 days	Thu 4/17/16	Wed 9/7/16	8FS+145 days	\$25,875.00		4/17	9/7								
10																	
11	CIP Projects 3 and 4	910 days	Mon 3/24/14	Fri 9/15/17		\$9,698,985.00											
12	CIP Projects 3 and 4 Inspection and Assessment	200 days	Mon 3/24/14	Fri 12/26/14		\$1,263,735.00	2/24	12/26									
13	CIP Projects 3 and 4 Design	150 days	Mon 12/29/14	Fri 7/24/15	12 days	\$621,000.00	12/29	7/24									
14	CIP Projects 3 and 4 Construction/Construction Services	350 days	Mon 9/21/15	Fri 1/20/17	13FS+40 days	\$7,762,500.00	9/21	1/20									
15	CIP Projects 3 and 4 Re-Test and Post Construction Flow Evaluation	110 days	Mon 4/17/17	Fri 9/15/17	14FS+60 days	\$51,750.00		4/17	9/15								
16																	
17	Progress Flow Monitoring 1	120 days	Tue 3/1/16	Mon 8/15/16		\$155,250.00			3/1	8/15							
18																	
19	CIP Project 5	935 days	Mon 2/2/15	Fri 8/31/18		\$3,907,125.00											
20	CIP Project 5 Inspection and Assessment	200 days	Mon 2/2/15	Fri 11/6/15		\$569,250.00	2/2	11/6									
21	CIP Project 5 Design	120 days	Mon 11/9/15	Fri 4/22/16	20 days	\$207,000.00	11/9	4/22									
22	CIP Project 5 Construction/Construction Services	200 days	Mon 6/20/16	Fri 3/24/17	21FS+40 days	\$3,105,000.00	6/20	3/24									
23	CIP Project 5 Re-Test and Post Construction Flow Evaluation	110 days	Mon 4/2/18	Fri 8/31/18	22FS+265 days	\$25,875.00		4/2	8/31								
24																	
25	CIP Project 6	935 days	Mon 2/1/16	Fri 8/30/19		\$3,907,125.00											
26	CIP Project 6 Inspection and Assessment	200 days	Mon 2/1/16	Fri 11/4/16		\$569,250.00	2/1	11/4									
27	CIP Project 6 Design	120 days	Mon 11/7/16	Fri 4/21/17	26 days	\$207,000.00	11/7	4/21									
28	CIP Project 6 Construction/Construction Services	200 days	Mon 6/19/17	Fri 3/23/18	27FS+40 days	\$3,105,000.00	6/19	3/23									
29	CIP Project 6 Re-Test and Post Construction Flow Evaluation	110 days	Mon 4/1/19	Fri 8/30/19	28FS+265 days	\$25,875.00		4/1	8/30								
30																	
31	Progress Flow Monitoring 2	110 days	Wed 3/1/17	Tue 8/1/17		\$51,750.00			3/1	8/1							
32																	
33	CIP Projects 8, 9, 10, and 11 Smoke Testing	140 days	Wed 6/1/16	Tue 12/13/16		\$388,137.00			6/1	12/13							
34																	
35	CIP Project 7	935 days	Wed 2/1/17	Tue 9/1/20		\$3,884,355.00											
36	CIP Project 7 Inspection and Assessment	200 days	Wed 2/1/17	Tue 11/7/17		\$546,480.00	2/1	11/7									

Note:  
Years listed at the top of the schedule denote Fiscal Year.

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# NEWTON, MA SEWER SYSTEM CAPITAL IMPROVEMENT PROJECTS SCHEDULE

Updated September 8, 2014

ID	Task Name	Duration	Start	Finish	Predecessors	Cost	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
37	CIP Project 7 Design	120 days	Wed 11/8/17	Tue 4/24/18	36	\$207,000.00				11/8	4/24						
38	CIP Project 7 Construction/Construction Services	200 days	Wed 6/20/18	Tue 3/26/19	37FS+40 days	\$3,105,000.00					6/20	3/26					
39	CIP Project 7 Re-Test and Post Construction Flow Evaluation	110 days	Wed 4/1/20	Tue 9/1/20	38FS+265 days	\$25,875.00						4/1	9/1				
40																	
41	<b>Progress Flow Monitoring 3</b>	<b>110 days</b>	<b>Thu 3/1/18</b>	<b>Wed 8/1/18</b>		\$51,750.00					3/1	8/1					
42																	
43	<b>CIP Project 8</b>	<b>935 days</b>	<b>Thu 2/1/18</b>	<b>Wed 9/1/21</b>		<b>\$3,941,280.00</b>											
44	CIP Project 8 Inspection and Assessment	200 days	Thu 2/1/18	Wed 11/7/18		\$603,405.00					2/1	11/7					
45	CIP Project 8 Design	120 days	Thu 11/8/18	Wed 4/24/19	44	\$207,000.00					11/8	4/24					
46	CIP Project 8 Construction/Construction Services	200 days	Thu 6/20/19	Wed 3/25/20	45FS+40 days	\$3,105,000.00					6/20	3/25					
47	CIP Project 8 Re-Test and Post Construction Flow Evaluation	110 days	Thu 4/1/21	Wed 9/1/21	46FS+265 days	\$25,875.00						4/1	9/1				
48																	
49	<b>CIP Project 9</b>	<b>935 days</b>	<b>Fri 2/1/19</b>	<b>Thu 9/1/22</b>		<b>\$3,946,973.00</b>											
50	CIP Project 9 Inspection and Assessment	200 days	Fri 2/1/19	Thu 11/7/19		\$609,098.00					2/1	11/7					
51	CIP Project 9 Design	120 days	Fri 11/8/19	Thu 4/23/20	50	\$207,000.00					11/8	4/23					
52	CIP Project 9 Construction/Construction Services	200 days	Fri 6/19/20	Thu 3/25/21	51FS+40 days	\$3,105,000.00					6/19	3/25					
53	CIP Project 9 Re-Test and Post Construction Flow Evaluation	110 days	Fri 4/1/22	Thu 9/1/22	52FS+265 days	\$25,875.00						4/1	9/1				
54																	
55	<b>CIP Project 10</b>	<b>935 days</b>	<b>Mon 2/3/20</b>	<b>Fri 9/1/23</b>		<b>\$3,922,650.00</b>											
56	CIP Project 10 Inspection and Assessment	200 days	Mon 2/3/20	Fri 11/6/20		\$584,775.00					2/3	11/6					
57	CIP Project 10 Design	120 days	Mon 11/9/20	Fri 4/23/21	56	\$207,000.00					11/9	4/23					
58	CIP Project 10 Construction/Construction Services	200 days	Mon 6/21/21	Fri 3/25/22	57FS+40 days	\$3,105,000.00					6/21	3/25					
59	CIP Project 10 Re-Test and Post Construction Flow Evaluation	110 days	Mon 4/3/23	Fri 9/1/23	58FS+265 days	\$25,875.00						4/3	9/1				
60																	
61	<b>CIP Project 11</b>	<b>935 days</b>	<b>Mon 2/1/21</b>	<b>Fri 8/30/24</b>		<b>\$4,003,898.00</b>											
62	CIP Project 11 Inspection and Assessment	200 days	Mon 2/1/21	Fri 11/5/21		\$666,023.00					2/1	11/5					
63	CIP Project 11 Design	120 days	Mon 11/8/21	Fri 4/22/22	62	\$207,000.00					11/8	4/22					
64	CIP Project 11 Construction/Construction Services	200 days	Mon 6/20/22	Fri 3/24/23	63FS+40 days	\$3,105,000.00					6/20	3/24					
65	CIP Project 11 Re-Test and Post Construction Flow Evaluation	110 days	Mon 4/1/24	Fri 8/30/24	64FS+265 days	\$25,875.00						4/1	8/30				

Note:  
Years listed at the top of the schedule denote Fiscal Year.

# Sewer System Capital Improvement Program Costs

<b>Project Area #1</b>	Activity	Estimated Cost
	Inspection & Assessment	\$849,725
	Design	\$166,000
	Construction	\$3,573,675
	Construction Services	\$496,200
	<b>Total</b>	<b>\$5,085,600</b>
Location: Newtonville, West Newton, Auburndale		

<b>Project Area #2</b>	Activity	Estimated Cost
	Inspection & Assessment	\$1,031,390
	Design	\$310,500
	Construction	\$3,407,125
	Construction Services	\$500,000
	<b>Total</b>	<b>\$5,249,015</b>
Location: Auburndale, Lower Falls, West Newton		

<b>Project Areas #3 &amp; #4</b>	Activity	Estimated Cost
	Inspection & Assessment	\$1,263,735
	Design	\$621,000
	Construction	\$6,864,250
	Construction Services	\$950,000
	<b>Total</b>	<b>\$9,698,985</b>
Location: Lower Falls, Chestnut Hill, Newton Centre, Newtonville		

<b>Project Areas #5</b>	Activity	Estimated Cost
	Inspection & Assessment	\$724,500
	Design	\$207,000
	Construction	\$2,630,875
	Construction Services	\$500,000
	<b>Total</b>	<b>\$4,062,375</b>
Location: Chestnut Hill, Newton Centre, Newtonville		

# Sewer System Capital Improvement Program Costs

<b>Project Areas #6</b>	Activity	Estimated Cost
	Inspection & Assessment	\$957,387
	Design	\$207,000
	Construction	\$2,630,875
	Construction Services	\$500,000
	<b>Total</b>	<b>\$4,295,262</b>
Location: Newton Centre, Newtonville, Nonantum, Chestnut Hill		

<b>Project Areas #7</b>	Activity	Estimated Cost
	Inspection & Assessment	\$598,230
	Design	\$207,000
	Construction	\$2,630,875
	Construction Services	\$500,000
	<b>Total</b>	<b>\$3,936,105</b>
Location: Newton Upper Falls, Newton Highlands, Thompsonville		

<b>Project Areas #8</b>	Activity	Estimated Cost
	Inspection & Assessment	\$655,155
	Design	\$207,000
	Construction	\$2,630,875
	Construction Services	\$500,000
	<b>Total</b>	<b>\$3,993,030</b>
Location: Newton Upper Falls, Newton Highlands, Thompsonville, Oak Hill		

<b>Project Areas #9</b>	Activity	Estimated Cost
	Inspection & Assessment	\$609,098
	Design	\$207,000
	Construction	\$2,630,875
	Construction Services	\$500,000
	<b>Total</b>	<b>\$3,946,973</b>
Location: Waban, Newton Upper Falls, Oak Hill Park		



# Sewer System Capital Improvement Program Costs

Project Areas #10	Activity	Estimated Cost
	Inspection & Assessment	\$584,775
	Design	\$207,000
	Construction	\$2,630,875
	Construction Services	\$500,000
	<b>Total</b>	<b>\$3,922,650</b>
Location: Waban, Newton Highlands, Newton Centre, Newton Corner		

Project Areas #11	Activity	Estimated Cost
	Inspection & Assessment	\$666,023
	Design	\$207,000
	Construction	\$2,630,875
	Construction Services	\$500,000
	<b>Total</b>	<b>\$4,003,898</b>
Location: Chestnut Hill, Newton Corner, Oak Hill, Thompsonville		



## **WATER SYSTEM**

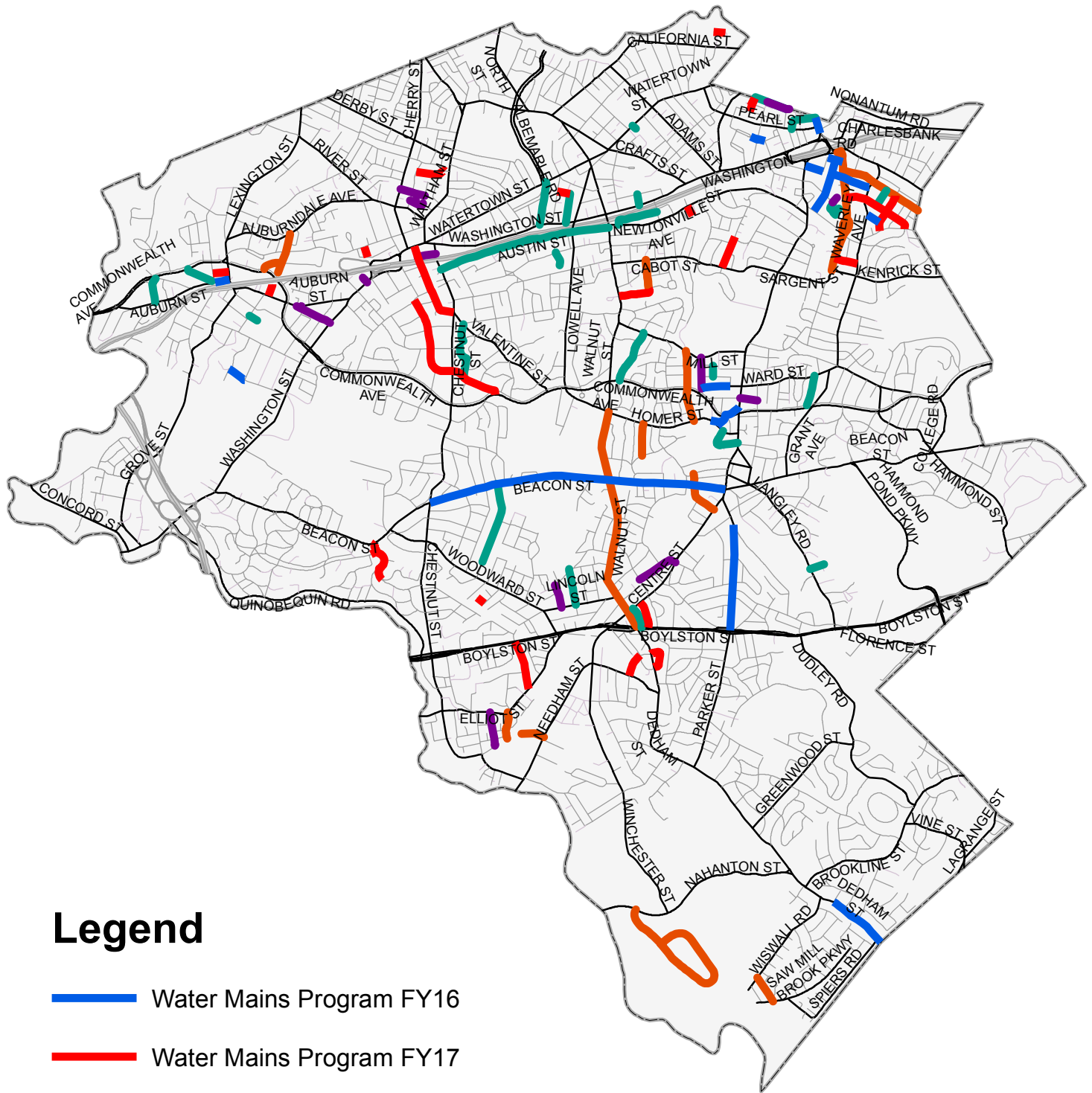
The Department of Public Works has been identifying, evaluating and improving Newton's water main distribution system for many years. Among the improvements recently completed were replacements of the last of the city's asbestos lined pipes, which were eliminated over the past 10 years. However, DPW recognized the need to increase the renewal of the aging water distribution pipe network, much of which dates back to the 1870's, and developed a comprehensive capital improvement program as part of the Strategic Plan initiative.

Public Works utilized a pipe renewal needs forecasting software program to provide long-range calculation of the anticipated pipe replacement quantities required to keep pace with the expected end of useful service life of pipe assets in the distribution system. The results take the form of a customized pipe replacement needs distribution curve for the City's pipe assets showing graphically, by pipe type, how much replacement is required annually. The results of the analysis indicate that the City should be renewing approximately 4 to 5 miles of water main pipe per year, which is supported within this CIP.

In addition, a risk-based ranking system was developed for integrating and managing the water system pipe asset rankings. The ranking takes into account the consequence of failure of the pipe, and the probability of failure of the pipe. Consequence of failure takes into account the proximity of the pipe to critical facilities (hospitals, schools), as well as the potential for flood damage due to breakage. Probability of failure takes into account pipe type, age, joint type, and vibrations under heavy loads (highways, railroad tracks). The water main assets were then grouped into a risk matrix, by condition and criticality, from low priority to high priority, with recommended actions that range from immediate pipe replacement to acoustic monitoring, advanced in-pipe inspection, as well as cleaning and cement lining.



# City Of Newton FY16 - FY20 Water Mains Program



## Legend

- Water Mains Program FY16
- Water Mains Program FY17
- Water Mains Program FY18
- Water Mains Program FY19
- Water Mains Program FY20



**5-YEAR WATER MAIN REHABILITATION PLAN FY 2016 TO FY 2020**

**Required to improve water quality and water flow requirements**

**MWRA Loan is \$1,360,200 per year**

**Water Bond is \$2,700,000 per year**

	PROJECT TITLE	PROJECT DESCRIPTION/JUSTIFICATION	LINEAR FEET	EST PROJECT COST	FUNDING SOURCE	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
DPW/Water	Ward St (Elsmore to Morseland)	Replace 836 LF of 6" water main with 8", 1895. This precedes scheduled roadway paving.	836	\$ 167,200	Bond	\$ 167,200				
DPW/Water	Parker St (Cypress to Boylston)	Cleaning and lining 2,876 LF of 6" & 8" water main, 1882. This precedes scheduled roadway paving.	2,876	\$ 517,680	Bond	\$ 517,680				
DPW/Water	Beacon St (Chestnut to Centre)	Cleaning and lining 8,553 LF of 8" water main, 1877. This precedes scheduled roadway paving.	8,553	\$ 1,539,540	MWRA Loan	\$ 1,539,540				
DPW/Water	Center St (Washington to Carlton @ Galen)	Cleaning and lining 580 LF of 12" water main 1877. This precedes scheduled roadway paving.	580	\$ 104,400	Bond	\$ 104,400				
DPW/Water	Waban St (Waban Park to Hovey)	Replace 400 LF of 6" water main with 8", 1876. This precedes scheduled roadway paving.	400	\$ 80,000	Bond	\$ 80,000				
DPW/Water	Elmwood St	Replace 560 LF of 6" water main, 1877 with 8". This precedes scheduled roadway paving.	560	\$ 112,000	Bond	\$ 112,000				
DPW/Water	Vernon St	Cleaning and lining 1,926 LF of 8" water main, 1876. This precedes scheduled roadway paving.	1,926	\$ 346,680	Bond	\$ 346,680				
DPW/Water	Eldredge St	Replace 1,606 LF of 4" & 6" water main with 8", 1876. This precedes scheduled roadway paving.	1,606	\$ 321,200	Bond	\$ 321,200				
DPW/Water	Aspen Ave (Hawthorne to Vista)	Replace 558 LF of 6" water main with 8", 1893. This precedes scheduled roadway paving.	558	\$ 111,600	Bond	\$ 111,600				
DPW/Water	Auburn St (Melrose to Lexington)	Clean & line 442 LF of 8" water main, 1877. This precedes scheduled roadway paving.	442	\$ 79,560	Bond	\$ 79,560				
DPW/Water	Grafton St	Cleaning and lining 689 LF of 8" water main, 1877. This precedes scheduled roadway paving.	689	\$ 124,020	Bond	\$ 124,020				
DPW/Water	Durant St	Replace 405 LF of 6" water main with 8", 1880. This precedes scheduled roadway paving.	405	\$ 81,000	Bond	\$ 81,000				
DPW/Water	Dedham St (Longmeadow to W. Roxbury line)	Cleaning and lining of 2,620 LF of 6" & 8" water main, 1901. This precedes scheduled roadway paving.	2,620	\$ 471,600	MWRA Loan	\$ 471,600				
DPW/Water	Highland St (Washington to Chestnut)	Replace 2595 LF of 6" water main with 8", 1876. This precedes scheduled roadway paving.	2,595	\$ 519,000	MWRA Loan		\$ 519,000			
DPW/Water	Langdon Ave (Surry to Cabot)	Replace 944 LF of 6" water main with 8", 1893. This precedes scheduled roadway paving.	944	\$ 188,800	MWRA Loan		\$ 188,800			
DPW/Water	Munroe St	Replace 714 LF of 6" water main with 8", 1897. This precedes scheduled roadway paving.	714	\$ 142,800	MWRA Loan		\$ 142,800			
DPW/Water	Midland Ave	Add 200 LF of new 8" new water main.	200	\$ 40,000	MWRA Loan		\$ 40,000			
DPW/Water	Mayflower Terrace	Loop dead end water main with 100 LF of new 8".	100	\$ 20,000	MWRA Loan		\$ 20,000			
DPW/Water	Proctor St	Replace 372 LF of 6" water main with 8", 1933. This precedes scheduled roadway paving.	372	\$ 74,400	MWRA Loan		\$ 74,400			

	PROJECT TITLE	PROJECT DESCRIPTION/JUSTIFICATION	LINEAR FEET	EST PROJECT COST	FUNDING SOURCE	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
DPW/Water	Southgate Park	Replace 972 LF of 6" water main with 8", 1917. This precedes scheduled roadway paving.	972	\$ 194,400	MWRA Loan		\$ 194,400			
DPW/Water	Solon St	Replace 706 LF of 6" water main with 8", 1932. This precedes scheduled roadway paving.	706	\$ 141,200	Bond		\$ 141,200			
DPW/Water	Stony Brae Rd (Shady Hill to Dedham)	Cleaning and lining 666 LF of 8" water main, 1934. This precedes scheduled roadway paving.	666	\$ 119,880	Bond		\$ 119,880			
DPW/Water	Melrose Ave	Replace 195 LF of 2" steel water main with 8", 1877. This precedes scheduled roadway paving.	195	\$ 39,000	Bond		\$ 39,000			
DPW/Water	Aberdeen St	Replace 752 LF of 6" water main with 8", 1894. This precedes scheduled roadway paving.	752	\$ 150,400	Bond		\$ 150,400			
DPW/Water	Fayette St/Pl	Replace 550 LF of 6" and 2" water main with 8", 1877. This precedes roadway paving.	550	\$ 110,000	Bond		\$ 110,000			
DPW/Water	Ruthven Rd	Replace 672 LF of 6" water main with 8", 1895. This precedes scheduled roadway paving.	672	\$ 134,400	Bond		\$ 134,400			
DPW/Water	Trowbridge Ave	Replace 920 LF of 6" water main with 8", 1889. This precedes scheduled roadway paving.	920	\$ 184,000	Bond		\$ 184,000			
DPW/Water	Harvey Pl	Replace 320 LF of 6" water main with 8", 1897. This precedes scheduled roadway paving.	320	\$ 64,000	Bond		\$ 64,000			
DPW/Water	Rand Terr	Replace 366 LF of 6" water main with 8", 1877. This precedes scheduled roadway paving.	366	\$ 73,200	Bond		\$ 73,200			
DPW/Water	Pembroke St	Replace 1143 LF of 4" and 6" water main with 8", 1878. This precedes scheduled roadway paving.	1,143	\$ 228,600	Bond		\$ 228,600			
DPW/Water	Prince St	Replace 4150 LF of 6" water main with 8", 1888. This precedes scheduled roadway paving.	4,150	\$ 830,000	Bond		\$ 830,000			
DPW/Water	Circuit Ave	Replace 1204 LF of 6" water main with 8", 1892. This precedes scheduled roadway paving.	1,204	\$ 240,800	Bond		\$ 240,800			
DPW/Water	Collins Rd (Beacon to Fenwick)	Cleaning and lining 1,260 LF of 8" & 10" water main, 1890. This precedes scheduled roadway paving.	1,260	\$ 226,800	Bond		\$ 226,800			
DPW/Water	Arlington St	Replace 1455 LF of 6" water main with 8", 1880. This precedes scheduled roadway paving.	1,455	\$ 291,000	Bond		\$ 291,000			
DPW/Water	Alden St	Replace 276 LF of 6" water main with 8", 1895. This precedes scheduled roadway paving.	276	\$ 55,200	MWRA Loan			\$ 55,200		
DPW/Water	Butts St	Replace 288 LF of 6" water main with 8", 1902. This precedes scheduled roadway paving.	288	\$ 57,600	MWRA Loan			\$ 57,600		
DPW/Water	Morseland Ave	Replace 802 LF of 6" water main with 8", 1900. This precedes scheduled roadway paving.	802	\$ 160,400	Bond			\$ 160,400		
DPW/Water	Boyd St	Replace 956 LF of 6" water main with 8", 1876. This precedes scheduled roadway paving.	956	\$ 191,200	Bond			\$ 191,200		
DPW/Water	Mountfort Rd	Replace 642 LF of 6" water main with 8", 1889. This precedes scheduled roadway paving.	642	\$ 128,400	Bond			\$ 128,400		



	PROJECT TITLE	PROJECT DESCRIPTION/JUSTIFICATION	LINEAR FEET	EST PROJECT COST	FUNDING SOURCE	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
DPW/Water	Henshaw St/Pl/Tr	Replace 1606 LF of 4" and 6" water main with 8", 1877. This precedes scheduled roadway paving.	1,606	\$ 321,200	Bond			\$ 321,200		
DPW/Water	Jepsen Ct	Replace 126 LF of 2" steel water main with 8", 1877. This precedes scheduled roadway paving.	126	\$ 25,200	Bond			\$ 25,200		
DPW/Water	Greenough St	Replace 980 LF of 6" water main with 8", 1896. This precedes scheduled roadway paving.	980	\$ 196,000	Bond			\$ 196,000		
DPW/Water	Algonquin Rd	Cleaning and lining 1,690 LF of 6" and 8" water main, 1905. This precedes scheduled roadway paving.	1,690	\$ 304,200	Bond			\$ 304,200		
DPW/Water	Allen Pl	Replace 138 LF of 6" water main with 8", 1890. This precedes scheduled roadway paving.	138	\$ 27,600	Bond			\$ 27,600		
DPW/Water	Allerton Rd (Centre to Hyde)	Replace 1204 LF of 6" water main with 8", 1890. This precedes scheduled roadway paving.	1,204	\$ 240,800	Bond			\$ 240,800		
DPW/Water	Wellington Terr	Replace 155 LF of 4" water main with 8", 1899. This precedes scheduled roadway paving.	155	\$ 31,000	Bond			\$ 31,000		
DPW/Water	Linden St	Replace 412 LF of 6" water main with 8", 1900. This precedes scheduled roadway paving.	412	\$ 82,400	Bond			\$ 82,400		
DPW/Water	Davis St	Replace 515 LF of 4" water main with 8", 18776. This precedes scheduled roadway paving.	515	\$ 103,000	Bond			\$ 103,000		
DPW/Water	Applegarth St	Replace 322 LF of 6" water main with 8", 1907. This precedes scheduled roadway paving.	322	\$ 64,400	MWRA Loan				\$ 64,400	
DPW/Water	Ash St	Replace 776 LF of 6" water main with 8", 1890. This precedes scheduled roadway paving.	776	\$ 155,200	MWRA Loan				\$ 155,200	
DPW/Water	Austin St	Replace 5000 LF of 6" water main with 8", 1876. This precedes scheduled roadway paving.	5,000	\$ 1,000,000	MWRA Loan				\$ 1,000,000	
DPW/Water	Avondale Rd	Replace 322 LF of 6" water main with 8", 1898. This precedes scheduled roadway paving.	322	\$ 64,400	MWRA Loan				\$ 64,400	
DPW/Water	Barnstable Rd	Replace 926 LF of 6" water main with 8", 1899. This precedes scheduled roadway paving.	926	\$ 185,200	Bond				\$ 185,200	
DPW/Water	Barrieau Court	Replace 284 LF of 4" dead end water main with 8", 1897. This precedes roadway paving.	284	\$ 56,800	Bond				\$ 56,800	
DPW/Water	Beach St Newtonville	Replace 292 LF of 6" water main with 8", 1886. This precedes scheduled roadway paving.	292	\$ 58,400	Bond				\$ 58,400	
DPW/Water	Beethoven Ave (485 ft from Woodward)	Replace 485 LF of 6" water main with 8", 1896. This precedes scheduled roadway paving.	485	\$ 97,000	Bond				\$ 97,000	
DPW/Water	Belmont St	Replace 526 LF of 4" water main with 8", 1876. This precedes scheduled roadway paving.	526	\$ 105,200	Bond				\$ 105,200	
DPW/Water	Berkeley Place	Replace 292 LF of 4" water main with 8", 1886. This precedes scheduled roadway paving.	292	\$ 58,400	Bond				\$ 58,400	
DPW/Water	Billings Park	Replace 662 LF of 2" and 4" water main with 8", 1890. This precedes scheduled roadway paving.	662	\$ 132,400	Bond				\$ 132,400	
DPW/Water	Birch Hill Rd	Replace 410 LF of 6" water main with 8", 1895. This precedes scheduled roadway paving.	410	\$ 82,000	Bond				\$ 82,000	

	PROJECT TITLE	PROJECT DESCRIPTION/JUSTIFICATION	LINEAR FEET	EST PROJECT COST	FUNDING SOURCE	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
DPW/Water	Bourne St	Replace 774 LF of 6" water main with 8", 1884. This precedes scheduled roadway paving.	774	\$ 154,800	Bond				\$ 154,800	
DPW/Water	Bowdoin St (Hillside to Lincoln)	Replace 1050 LF of 6" water main with 8", 1880. This precedes scheduled roadway paving.	1,050	\$ 210,000	Bond				\$ 210,000	
DPW/Water	Bowen St	Replace 1032 LF of 6" water main with 8", 1880. This precedes scheduled roadway paving.	1,032	\$ 206,400	Bond				\$ 206,400	
DPW/Water	Bowers St	Replace 218 LF of 6" water main with 8", 1876. This precedes scheduled roadway paving.	218	\$ 43,600	Bond				\$ 43,600	
DPW/Water	Boyd St (Fayette to Emerson)	Replace 956 LF of 6" water main with 8", 1876. This precedes scheduled roadway paving.	956	\$ 191,200	Bond				\$ 191,200	
DPW/Water	Boylston Rd	Replace 592 LF of 6" water main with 8", 1895. This precedes scheduled roadway paving.	592	\$ 118,400	Bond				\$ 118,400	
DPW/Water	Brooks Ave	Replace 738 LF of 6" water main with 8", 1877. This precedes scheduled roadway paving.	738	\$ 147,600	Bond				\$ 147,600	
DPW/Water	Brookside Ave (Albemarle to Washington)	Replace 752 LF of 6" water main with 8", 1890. This precedes scheduled roadway paving.	752	\$ 150,400	Bond				\$ 150,400	
DPW/Water	Burnham Rd	Replace 472 LF of 6" water main with 8", 1899. This precedes scheduled roadway paving.	472	\$ 94,400	Bond				\$ 94,400	
DPW/Water	Bullough Park	Replace 1486 LF of 6" water main with 8", 1919. This precedes scheduled roadway paving.	1,486	\$ 297,200	Bond				\$ 297,200	
DPW/Water	Carleton St	Replace 860 LF of 6" water main with 8", 1876. This precedes scheduled roadway paving.	860	\$ 172,000	Bond				\$ 172,000	
DPW/Water	Carlisle St	Replace 552 LF of 6" water main with 8", 1885. This precedes scheduled roadway paving.	552	\$ 110,400	Bond				\$ 110,400	
DPW/Water	Cedar St	Replace 2012 LF of 6" water main with 8", 1877. This precedes scheduled roadway paving.	2,012	\$ 402,400	MWRA Loan					\$ 402,400
DPW/Water	Park St	Replace 2678 LF of 6" water main with 8", 1876. This precedes scheduled roadway paving.	2,678	\$ 535,600	MWRA Loan					\$ 535,600
DPW/Water	Tremont St	Replace 2446 LF of 6" water main with 8", 1877. This precedes scheduled roadway paving.	2,446	\$ 489,200	MWRA Loan					\$ 489,200
DPW/Water	Sherman Pl	Replace 195 LF of 2" steel water main with 8", 1928. This precedes scheduled roadway paving.	195	\$ 39,000	Bond					\$ 39,000
DPW/Water	Gay St	Replace 906 LF of 6" water main with 8", 1907. This precedes scheduled roadway paving.	906	\$ 181,200	Bond					\$ 181,200
DPW/Water	Walnut St - Homer to Boylston	Replace 120 water services from main to edge of sidewalk; This precedes upcoming TIP funded road reconstruction project.		\$ 180,000	Bond					\$ 180,000
DPW/Water	Tower Rd	Loop 500 LF of 8" dead end main. This eliminates dead end main, improving water quality. This precedes proposed Tower Rd extension to Oak St., and precedes scheduled road reconstruction project (Needham St).	500	\$ 100,000	Bond					\$ 100,000
DPW/Water	Charlotte Rd	Replace 882 LF of 6" water main with 8". This precedes scheduled roadway paving.	882	\$ 176,400	Bond					\$ 176,400
DPW/Water	Rowe St	Replace 1758 LF of 6" water main with 8". This precedes scheduled roadway paving.	1,758	\$ 351,600	Bond					\$ 351,600
DPW/Water	Crescent Ave	Replace 1300 LF of 6" water main with 8". This precedes scheduled roadway paving.	1,300	\$ 260,000	Bond					\$ 260,000
DPW/Water	Gay St	Replace 834 LF of 6" water main with 8". This precedes scheduled roadway paving.	834	\$ 166,800	Bond					\$ 166,800

	PROJECT TITLE	PROJECT DESCRIPTION/JUSTIFICATION	LINEAR FEET	EST PROJECT COST	FUNDING SOURCE	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
DPW/Water	Van Roosen Rd	Replace 767 LF of 6" water main with 8". This precedes scheduled roadway paving.	767	\$ 153,400	Bond					\$ 153,400
DPW/Water	Mechanic St	Replace 800 LF of 6" water main with 8". This precedes scheduled roadway paving.	800	\$ 160,000	Bond					\$ 160,000
DPW/Water	Wells Ave	Clean & Line 5725 LF of 6" water main with 8". This precedes scheduled roadway paving.	5,725	\$ 1,030,500	Bond					\$ 1,030,500
						\$ 4,056,480	\$ 4,012,680	\$ 1,924,200	\$ 3,955,800	\$ 4,226,100



## **STORM WATER SYSTEM**

Like many communities, Newton's storm water system is old and faces challenges related to storm water quantity and quality; system maintenance and upgrades; and localized flooding. In 2006, the City initiated a Storm Water Fee to help fund these necessary improvements.

While the City has completed a number of localized drainage repairs, the Department of Public Works recognizes the need to develop a comprehensive plan to identify and address all storm water needs throughout the City and to establish a funding plan to accomplish this work. In addition, the National Pollutant Discharge Elimination System (NPDES) Phase II Permit, which is mandated for all communities by the EPA, is in the process of being updated and will increase requirements for maintaining and improving storm water quality. These needs must also be factored into all storm water planning.

Therefore, the City has undertaken a system-wide assessment to identify its program needs and develop a Storm Water Infrastructure Improvement Plan, expected to be completed by the spring of 2015. The three primary areas being evaluated are: Stream Maintenance, Localized Flooding, and Culvert Maintenance. Recommended projects include removal of debris within the stream bed and on nearby embankments; removal of sediment in stream beds, culverts and ponds; structural and capacity evaluation; rehabilitation and maintenance of pipes and culverts; and the repair of failing retaining walls.

A methodology and rating criteria will be used to prioritize the list of projects based on probability of failure and consequence of failure. Probability of failure is based on two factors; the age of the asset and the condition of the asset. Consequence of failure will look at the potential impacts related to failure of the asset, including: public health and safety, property damage, cost of deferred maintenance, number of people influenced, traffic severity, and City development priorities. Combined with regulatory timelines for implementation of projects associated with the pending NPDES Phase II Permit and the financial impacts for each of the identified projects, the City will prioritize the results for a finalized Storm Water Infrastructure Improvement Plan.

# I. CAPITAL IMPROVEMENT PLAN METHODOLOGY

## A Risk-Based Approach

This comprehensive and integrated capital plan utilized a risk-based approach to analyze and prioritize capital needs across the city.

### Overview

In the context of asset management, *Risk* is defined as the probable magnitude of a future loss, and is expressed mathematically as a probability of failure (PF) multiplied by the magnitude of its consequence of failure or its expected loss (Q). This risk-based approach considers that an asset may “fail,” due to its age or condition and the inherent consequences of that “failure”. Failure here is used to mean that an asset fails to meet its intended purpose or use. Using this methodology, Probability of Failure is multiplied by a weighted Consequence (or impact) of Failure to arrive at a Risk Factor score. Broken into its components, the mathematical formula looks like this:

$$PF = \frac{P_{\%Life\ left} + (2)P_{Overall\ Condition}}{3}$$

Where:

PF: Probability of Failure

P<sub>%Life Left</sub>: Probability of failure for the *percent life left* failure mode

P<sub>Overall Condition</sub>: Probability of failure for the *overall condition* failure mode

Next for Consequence (Q):

$$Q = \sum_{i=1}^{i=8} Q_i \frac{W_i}{W_T}$$

Where:

i: consequence counter

Q<sub>i</sub>: i-th consequence rating

W<sub>i</sub>: Weight of i-th consequence

W<sub>T</sub>: Total weight

Finally, calculating Risk Factor (R):

$$R = PF \times Q$$

Graphically, the results will fall into categories as shown in Figure 8 below. Assets that have a high probability of failure and a high consequence of failure would therefore have a high risk factor score and would be a high priority for the City.

## Risk-Based Prioritization

		Consequence of Failure				
		2	4	6	8	10
Probability of Failure (%)	100	Second Priority			Highest Priority	
	80	Second Priority			Highest Priority	
	60	Second Priority			Highest Priority	
	40	Lowest Priority			Regular Monitoring	
	20	Lowest Priority			Regular Monitoring	

**Figure 1. Prioritization Grid for Risk Calculation**

Referring to the prioritization grid above, if for example a city building roof is in poor condition, the probability of failure for the roof and it leak (failing to serve its intended purpose) will be high. In addition, the consequence of that leak could be high as well as it could impact the health and safety of employees and city operations, depending on which roof is being analyzed. This situation would fall into the “Highest Priority” category for mitigation actions in the chart above.

This methodology allows the City to more objectively evaluate potential CIP projects across the spectrum of asset categories and inform decisions about allocation of capital dollars across different types of projects.

### **Detailing the variables in evaluating Risk and Consequences**

Together the CIP Steering Committee standardized the weighting of the variables, based on the perceived relative importance to the community and how they reflected the City’s vision.

A description of the “*Probability of Failure*” and the “*Consequence of Failure*” are defined below.

**A. “Probability of Failure”** is comprised of two ratings which are then weighted.

- (1) **Age or percent life left** of an asset (measured on a scale of “new” to “beyond useful life”)
- (2) **Condition** of the asset (measured on a scale of “excellent” to “very poor”)

Percent life left is an indicator of how old, or how far along the life expectancy curve an asset is. This failure mode is important when there is no data about the condition of the asset. Each project has been assigned a percent life left value. For example, a project consisting of replacing the main entrance stairs of a building will have a percent life left value corresponding to the stairs of that building, and derived from their installation date and their expected service life.

Each percent life left rating is assigned a probability of failure. A new asset, with 100% life left, is unlikely to fail, or has a probability of failure of 0, and an old asset which is past its useful life, has a probability of failure of 1. The table below shows the percent life left ratings and their assigned probabilities of failure.

<b>% Life Left</b>	
<b>Description</b>	<b>Value</b>
<b>100%</b>	0
<b>90%</b>	0.1
<b>80%</b>	0.2
<b>70%</b>	0.3
<b>60%</b>	0.4
<b>50%</b>	0.5
<b>40%</b>	0.6
<b>30%</b>	0.7
<b>20%</b>	0.8
<b>10%</b>	0.9
<b>0%</b>	1.0

Overall condition is evaluated similarly. This failure mode is important to consider because assets that have been maintained properly may be near their expected useful life but still be in good condition and functioning. The values considered also range between 0 and 10, 0 being the worst condition, and 10 being the best condition. Each value is assigned a corresponding probability of failure, so that assets in good condition have lower probability of failure than assets in poor condition. The table below shows the overall condition values and assigned probabilities of failure.

<b>Overall Condition</b>	
<b>Description</b>	<b>Value</b>
<b>10 – New / Pristine</b>	0
<b>9 – Excellent</b>	0.1
<b>8 – Very Good</b>	0.2
<b>7- Good / Minor Deferred Maintenance</b>	0.3
<b>6 – Above Average / Satisfactory</b>	0.4
<b>5 – Average / Functional</b>	0.5
<b>4 – Below Average / Sub-Standard</b>	0.6
<b>3 – Poor / Serious Condition</b>	0.7
<b>2 – Bad / Critical Condition</b>	0.8
<b>1 – Very Bad / Imminent Failure</b>	0.9
<b>0 – Not Functioning / Failed</b>	1



A weighted average approach is used to calculate the project's overall probability of failure. More weight is given to the condition of an asset, rather than to its life expectancy. "Percent life left" is assigned a weighting factor of 1 and "Overall condition" a weighting factor of 2.

**B. Consequences of Failure** – Consequences of failure rate the impact that the failure of an asset would have. Consequences are evaluated in terms of "how much negative impact this project would have if it is not pursued and the asset were to fail". Consequences considered for all projects and assets are:

- Impact on **Health and Safety**
- Impact on **City Operations**
- Impact on **Programs or Services** to the public
- Future **Costs and/or Savings**
- Potential for **Property Damage**
- Impact on **Quality of Life**
- Impact on **Energy Consumption/Conservation**
- Support of the **Department's Mission/Vision**

A description of the consequence categories and their weighted factors are provided:

**(1) Impact to Health and Safety** (weight = 10) – Protection of health and safety of residents, city personnel and visitors. This could have direct impacts on other categories such as Quality of Life.

- \*Who is impacted in what way (adults, children)?
- \*How severe is that impact?
- \*How many people are impacted?

**(2) Impact to City Operations** (weight = 9) – The requirement to deploy additional City resources to complete the function of this capital asset, or the subsequent impact on another department's mission. The ability of the government to continue to operate.

- \*What is the department's Plan B?
- \*How many people/employees are impacted by not implementing the project?

**(3) Impact to Delivery of Programs and Services** (weight = 6) – The programs that would need to be cancelled or moved to alternate locations. This could have related impact on cost. The department services to the public at large if this is not funded.

- \*What specific programs are impacted?
- \*What percent of the department's mission are these cancellations?
- \*Who and how many are impacted by the reduction?

**(4) Potential Cost/Savings Ratio** (weight = 8) – Return on investment due to reduced maintenance/operating expenses. New projects may save the City operating expenses, while making a repair may avoid additional costs to maintain or repair more extensive damage later.

- \*What will be the cost/savings to the City compared to investments if not funded?
- \*What is the payback period?
- \*What is the cost of Plan B?

- (5) Potential for Property Damage** (weight = 5) – Potential to cause or sustain damage to public or private property. Physical damages that impede the ability of the City to operate. Private damage that may cost the City through litigation.
- \*How many are impacted by this damage?
  - \*To what extent is the potential for damage?
- (6) Impact to Quality of Life** (weight = 7) – The reasons that people want to live in Newton. If these underlying feelings about the quality of life are compromised, the value to the residents living here would be decreased.
- \*What aspect of the QOL is diminished?
  - \*Would the project’s absence diminish the kinds of things that Newton prides itself in?
- (7) Impact to Energy Consumption** (weight = 6) – The potential to reduce energy consumption and help the City reach its “Green Community” and “Energy Smart Newton” goals. This could also impact costs, quality of life and department/City Mission.
- \*Would this be a missed opportunity to reduce consumption?
  - \*What is the magnitude of the potential energy reduction?
  - \*How quick is the potential payback in operational savings?
- (8) Support of Department Mission/City Vision** (weight = 6) – The impact of accomplishing stated goals of the department. The vision of the Mayor reflecting the will of the residents would not be advanced or would be contrary to those values.
- \*Would this project negate a primary reason for the department’s existence?
  - \*Have the residents expressed an expectation of this project directly or indirectly?

The “intensity or impact” of the consequence is expressed by the rating associated with each value. Values for consequences range between 0 - “no impact” and 10 - “very negative impact”. Consequence values have corresponding ratings, which range between 0 and 10. The table below shows the consequence values and their corresponding ratings.

Consequence	
Value	Rating
<b>0 – No Impact</b>	0
1-	1
<b>2- Very Little Impact</b>	2
3-	3
4-	4
<b>5 – Moderate Impact</b>	5
6 –	6
7 -	7
<b>8 – High Impact</b>	8

9 -	9
10 - Very High Impact	10

### Relative Impact of Weighting Consequences

To calculate the final consequence score, a weighted average method was used. Weights were assigned to each consequence to represent their relative importance to each other. The weights used are:

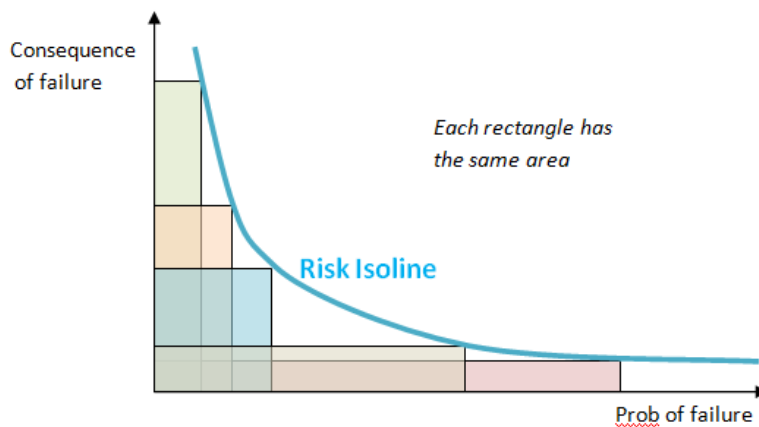
<u>Category of Consequence</u>	<u>% of Weight</u>	<u>Weight value</u>
Health and Safety	17.6%	10.0
City Operations	15.8%	9.0
Cost Savings Ratio	14.0%	8.0
Quality of Life	12.3%	7.0
Department Mission/City Vision	10.5%	6.0
Energy	10.5%	6.0
Programs and Services	10.5%	6.0
Property Damage	<u>8.8%</u>	<u>5.0</u>
TOTALS:	100.0%	57.0

Obviously, each Administration may view the relative importance of each consequence differently. Changing the weighting factors in any given year does not invalidate the mathematical model; it just will change the prioritized outcome for each project.

As mentioned earlier, Risk factor (R) is calculated as the product of the consequence factor times the probability of failure and converted to a 1-100 scale:

$$R = PF \times Q$$

Graphing the product of *Probability of Failure* and *Consequence of Failure*, risk can be interpreted as an area, illustrating how various projects with different ratings can have the same risk. Figure 2. illustrates the resultant graph. An asset with a high probability of failure but low consequence of failure can have the same risk score as another with lower probability of failure and a higher consequence of failure. This is a key concept when comparing risk scores between homogenous assets types and even across diverse asset portfolios.



**Figure 2. Isoline identifying how different projects can have the same risk factor**

## II. CAPITAL IMPROVEMENT PROGRAM FUNDING SOURCES

In order to be a meaningful and useful management tool, the Capital Improvement Program must be based upon a realistic financing plan. The financing plan for the Capital Improvement Plan continues the City of Newton's established policy of pay-as-you-go financing, combined with prudent use of available debt financing capacity that is managed in conjunction with the Long Term Capital Fund that was established at the beginning of the high school renovation and construction projects. This policy has allowed the City to obtain and maintain a AAA credit rating since 1974. Financing sources included in the Capital Improvement Plan are divided into two categories Tax-Supported and Non-Tax-Supported.

### Tax-Supported Funding Sources

- **General Obligation Bonds** - The City sells tax exempt bonds, usually in March each year. The annual debt service is included in the Operating Budget and is offset by resources in the Long Term Capital Fund. This allows the impact on the operating budget to be managed evenly over time and not be subject to dramatic fluctuations in the debt service.
- **Free Cash** - Unreserved fund balance, certified by the Massachusetts Department of Revenue, as of the end of the previous fiscal year.
- **Operating Budget (General Fund)** - Annual departmental budgets, supported primarily by property taxes, local revenue, and state aid.
- **Community Preservation Act (CPA)** – One percent local property tax surcharge, with partial or

full state matching funds, which may be spent for affordable housing, historic resources, open space, or recreation land. The Act has recently been amended and the CPC Draft Funding Guidelines are attached in Appendix 7.

- **Other** - Funds such as Overlay Surplus, Capital Stabilization, and Sale of Municipal Buildings.

### **Non-Tax-Supported Funding Sources**

- **State and Federal Grants** - Project specific or block grants from federal, state, or other governmental agencies (Massachusetts School Building Authority Funds, **Chapter 90** Funds for road construction, preservation and improvement projects).
- **Parking Meter Receipts** - Curb and parking lot parking meter fees.
- **Enterprise Funds - Water and Sewer Revenue** - Fees and charges paid by water/sewer customers, which are used to support the Operating Budget (Special Revenue Fund) and generate a Water/Sewer Fund Balance (surplus available for water/sewer purposes).
- **Stormwater Fund (Enterprise Fund)** – Stormwater fees, used to fund operating costs related to stormwater management and control.
- **Community Development Block Grant (CDBG)** - Federal aid received to aid low and moderate income families and other targeted persons. Under federal guidelines, spending must be targeted to project types or neighborhoods.
- **Other** - City trust or other funds designated for specific purposes by law, charter or ordinance. Includes donations and gifts.

### **III. CIP FINANCIAL REQUIREMENTS AND POLICIES**

Debt service to support capital investments and goals must be financially sustainable and responsible in order to maintain the City's favorable Aaa Bond Rating which keeps interest rates low.

On March 30, 2013, the City of Newton once again earned a "Aaa – Stable" rating (the highest possible) from Moody's Investor Services for its General Obligation Municipal Purpose Loan of 2013 Bonds. Concurrently, Moody's reaffirmed the Aaa rating assigned to the \$188 million of previously-rated long-term general obligation debt.

*Per the official statement issued by Moody's – The Aaa rating incorporates the city's wealthy and diverse tax base within a strong regional economy, manageable debt profile with moderate future borrowing plans, and the city's historically well-managed, but narrow, financial position with growing rainy day stabilization reserves, which will offset planned depletion of capital reserves. The stable outlook recognizes the city's improving financial position, conservative forecasting in five-year operating and capital plans and implementation of comprehensive financial policies.*

Moody's statement continued to opine on the financial condition of the City of Newton by stating: *The stable outlook reflects Newton's improving financial position with growing stabilization reserves,*

*conservative long-range projections, implementation of the city's financial guidelines, and the stability of the regional economy.*

Strengths continued to be cited as follows:

- Sizeable wealthy and diverse tax base with favorable location and institutional presence,
- Low direct debt burden and manageable future capital needs, and
- Strengthened financial policies and conservative budgeting approach.

Conversely, challenges were cited as follows:

- Slim financial position,
- Limited ability to raise property taxes under Proposition 2 ½,
- High liabilities for OPEB and pension, and
- Reliance on annual free cash appropriations for operations.

The City is very pleased to have maintained the Moody's Aaa Bond Rating issued in March 2013 and has worked diligently to establish and follow refined, responsible, and forward-looking financial management guidelines.



# FINANCIAL MANAGEMENT GUIDELINES

On April 20, 2011 the Honorable Board of Aldermen adopted a revised Financial Management Guidelines. Several guiding principles are incorporated into those guidelines which were included as part of the Fiscal Year 2014 Budget. These guiding principles are also an integral part of the Capital Improvement Plan.

- **Long Range Financial Planning:** The City will follow financial planning processes that assess the long-term financial implications of current and proposed operating and capital budgets, budget policies, cash management and investment policies and programs.
- **Revenue Budgeting:** General Fund revenue budgets are expected to capture 99% of total expected revenue for the year.
- **Expenditure Budgeting:** Expenditure budget estimates will strive to be sufficient to address not less than 100% of projected operating requirements of the various departments of the City for the next fiscal year.
- **Capital Outlay and Improvements:** It is the practice of the City to issue a minimum of \$3.5 million in bonds for capital improvements annually; financing for the associated debt service will come from the General Fund. A minimum of 5% of the annual General Fund operating budget will be budgeted for capital outlay and improvements.
- **Free Cash:** Free Cash represents the accumulated difference of unrestricted funds between General Fund revenues and expenditures, on a cash basis of accounting. The City expects to generate a limited amount of Free Cash which comes from unanticipated actual revenues in excess of revenue estimates (including overlay surplus), unexpected unspent funds in operating budget line items, and/or unanticipated unexpended free cash from the previous year.
- **Utilization of Free Cash:** It is the intent of the City to use Free Cash in the following manner, understanding that this will take a number of years to implement fully. First, a maximum of \$1.5 million will be used as a general revenue source for the ensuing year's operating budget. Second, Free Cash will be used to replenish Reserve Funds depleted in the previous year. Third, a minimum of forty percent (40%) of the remaining certified Free Cash will be put in the Rainy Day Stabilization Fund until the Rainy Day Stabilization Fund reaches its target level. Fourth, any additional Free Cash will be used for one-time, non-recurring expenditures. In unusual economic circumstances, an additional portion of Free Cash may be used for the ensuing year's school or municipal operating budget.



- **Inclement Weather Stabilization Reserve:** The Administration intends to establish an Inclement Weather Stabilization Reserve Fund which will be used for unusual (but not extraordinary) weather related costs in departments such as Public Works, Parks and Recreation, Police and Fire. For example, such costs may stem from floods, an unusual number of winter storms, or an unusual level of snow or ice. The goal of this reserve fund is to make sure monies are set aside for unusual weather conditions.
- **Rainy Day Stabilization Reserve:** The Rainy Day Stabilization Fund will be used when the City faces a multiple year economic recession or a rare, catastrophic expenditure. These funds may be utilized to assist in addressing cyclical declines in operating revenues, generally resulting from economic factors outside the control of the City, or an unusually large expenditure resulting from a rare legal settlement or catastrophic weather event. The primary reason for the segregation of such monies is to prevent these reserves from being used for unrelated City needs, and to demonstrate that resources are in fact being set aside specifically for extraordinary and unforeseen revenue disruption or catastrophic expenditure need.

**CAPITAL PROJECT ACCOUNTING**  
**AND**  
**CAPITAL STABILIZATION FUND (BD # 485-92)**

1. All capital appropriations are to be made for project purposes, are to be presented in specific line item format (i.e. design, project management, construction, equipment, etc.). An estimated project completion schedule shall also be included with each capital appropriation request.
2. Appropriations for the acquisition, construction, or reconstruction of "major capital facilities" are to be made to a Capital Improvement Fund instead of the General Fund, regardless of the financing source for the capital appropriation. "Major capital facilities" will be defined as any acquisition, construction, or reconstruction project which has an estimated cost of \$500,000 or more and is expected to take more than a single fiscal year to complete. Capital appropriations of less than \$500,000 and those which are expected to be completed within a single year will continue to be appropriated to the General Fund.
3. As capital projects are completed during the course of a fiscal year, the responsible department head shall notify the Comptroller, who shall close unobligated appropriation balances to the Capital Stabilization Fund. All year-end encumbered capital appropriation balances shall be brought forward from one year to the next, without any action of the responsible department head.

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, shall provide the Comptroller with a detailed request to carry the balance forward into the new fiscal year. This request shall contain a detailed description of the work to be performed, including any variations from the original plan, and a projected schedule for completion of the project.

Prior to closing any appropriation for a capital project which has not been completed, the Comptroller shall obtain the concurrence of both the Mayor and Board of Aldermen.

4. A Capital Stabilization Fund shall be established within the Capital Improvement Fund section of the City's books. The Comptroller is hereby authorized to close all completed general revenue and free cash financed capital appropriation balances in both the General and Capital Improvement Funds to this fund.

No expenditures shall be made from the Capital Stabilization Fund. The fund shall serve solely as a source for financing future capital needs.

Unobligated balances in bonded capital project accounts shall be transferred to the Capital Stabilization Fund at the completion of each such capital project. These balances shall be reserved for future appropriation in accordance with the municipal finance laws.

To the extent that the Mayor and Board of Aldermen have not voted to designate Capital Stabilization funds for a specific future project, the Unreserved Fund Balance in the Capital Stabilization Fund shall be available for appropriation for additional capital needs.

5. To the extent that undesigned and unreserved funds are available in the Capital Stabilization Fund at the time that the Capital Budget is submitted to the Board of Aldermen, this fund shall be used as the priority source for capital appropriations. Free Cash shall not be used as a financing source for a capital appropriation while equal funding is available in the Capital Stabilization Fund.
6. The Comptroller shall provide the Mayor and Board of Aldermen with a quarterly and annual detailed report on the status of all capital appropriations, including a summary of all activity into and out of the Capital Stabilization Fund.

# **CIP LEGAL REQUIREMENTS and POLICIES**

## **Definition of Capital Projects**

A capital project in general is defined 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. However, for purposes of using the City's debt service capacity to fund those projects supporting the General Fund operations, only those projects valued at greater than \$75,000 were considered. It is anticipated that capital line accounts in the department operational budgets will include consideration of capital needs less than \$75,000. Some projects which may be valued at less than \$75,000 individually could be more effectively done concurrently and were bundled for purpose of management. Detailed breakouts of the component costs of the projects can be found in the electronic back-up spreadsheets posted on the City's website. Typical items classified as capital projects include:

- new public buildings (including equipment needed to furnish such buildings);
- significant alterations, additions or improvements to existing public buildings;
- land improvements, acquisition, and development;
- large equipment replacement and/or refurbishing;
- street reconstruction and major resurfacing;
- pedestrian walkway construction and major rehabilitation;
- water main construction and rehabilitation;
- sanitary sewer and storm drain construction and rehabilitation; and
- long-range planning studies.

## **Capital Improvement Plan Policies and Goals**

The Capital Improvement Program (CIP) shall be updated annually based upon changes in the City's capital needs and financing availability in order to: identify needed improvements and/or additions to the City's equipment and infrastructure; schedule projects in priority order over the ensuing five-year period; and ensure adherence to City financial policy and City Charter requirements.

Capital projects shall be undertaken in order to satisfy documented needs and demands of the City of Newton. The Capital Improvement Program shall be a realistic multi-year plan of capital spending, based upon revenues and other financial resources that may reasonably be anticipated over the term of the plan. All capital project proposals shall be thoroughly evaluated in terms of their estimated impact upon the annual operating budget of the City of Newton. The City will maintain its existing capital investments to minimize future maintenance and replacement costs. Capital improvements shall meet one of the following criteria:

- Enhance protection of public health and/or safety.
- Ensure compliance with state and/or federal law or administrative regulations.
- Reduce and/or stabilize operating budget costs.
- Prolong the functional life of a capital asset of the City by 10 years or more.
- Encourage further expansion of the City's real estate tax base, employment or housing.
- Improve the ability of the City to deliver services.

# **CAPITAL IMPROVEMENT CHARTER REQUIREMENTS**

## **ARTICLE 5, SECTION 3**

- (a) **Submission** - The Mayor shall prepare and submit to the Board of Aldermen a five-year Capital Improvement Program at least six months prior to receipt of the next fiscal year's operating budget.
- (b) **Contents** - The Capital Improvement Program shall include: (1) a clear summary of its contents; (2) a list of all capital improvements proposed to be undertaken during the next five fiscal years with supporting data; (3) cost estimates, method of financing, and recommended time schedules; and (4) the estimated annual cost of operating and maintaining the facilities included. The above information shall be revised and extended each year.
- (c) **Public Hearing** - The Board of Aldermen shall publish in one or more newspapers of general circulation in the City the general summary of the Capital Improvement Program and a notice stating: (1) the times and places where copies of the Capital Improvement Program 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 said program will be held by the Board of Aldermen.
- (d) **Adoption** - After the public hearing, concurrently with the passage of the next fiscal year's budget, the Board of Aldermen shall by resolution adopt the Capital Improvement Program with or without amendment (Referendum of 11-4-75).

