



# City of Woburn Massachusetts

City Hall  
10 Common Street  
Woburn, MA 01801

Tel: 781-897-5901  
[www.Cityofwoburn.com](http://www.Cityofwoburn.com)

**Scott D. Galvin**  
*Mayor*

**July 21, 2016**

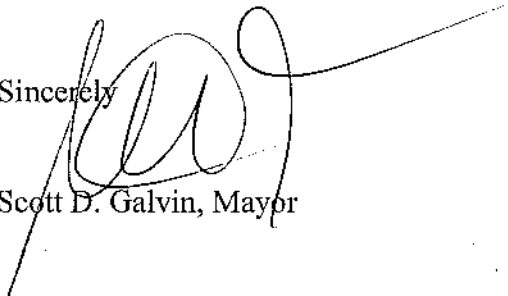
Sean Cronin  
Division of Local Services  
Commonwealth of Massachusetts  
PO Box 9569  
Boston, MA 02114

The City of Woburn has updated its five year CIP with the assistance of The Collins Center. The capital plan was funded by a community compact agreement between the city of Woburn and The Baker Administration. The document was submitted to The City Council on July 19, 2016. I have included a copy of the CIP for your records

The CIP will serve as a blue print for capital expenditures over the next five years and set a responsible annual target for necessary capital expenditures.

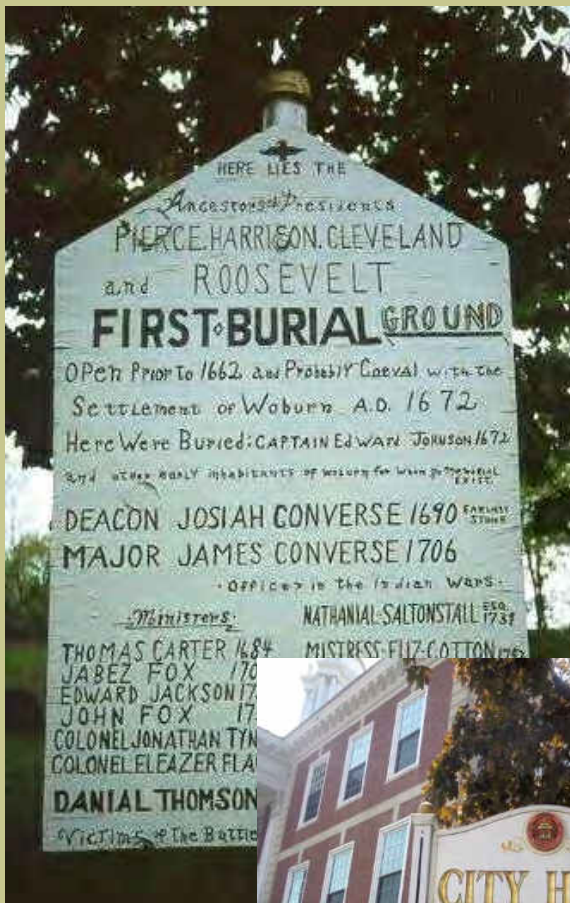
We are grateful for Governor Baker's continued support of important local issues. If you have any questions please feel free to contact my office.

Sincerely

  
Scott D. Galvin, Mayor



## CAPITAL IMPROVEMENT PLAN (FY2017-FY2021)



### City of Woburn



Draft for Submission July 19, 2016



*Prepared for the City of Woburn by the  
Edward J. Collins, Jr. Center for Public Management  
at the University of Massachusetts, Boston  
July 2016*

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## INTRODUCTION

The City of Woburn's nearly \$70 million all funds five-year capital improvement plan (CIP) for FY2017-FY2021 will make much needed investments in Woburn's infrastructure, including city and school facilities parks and open space, roadways and sidewalks, information technology, vehicles and equipment, and water and sewer infrastructure. The majority of the \$70 million capital plan, will be funded from sources other than the City's general fund, including \$28.4 million (40.6%) from State and Federal grants, \$13.4 million (19.1%) funded by the Water/Sewer Enterprise Fund, and \$1.7 million from other sources such as fundraising (2.5%), leaving the balance of \$26.3 million (37.7%) to be supported by the City's General Fund.

In recent years, the City Council has authorized two ambitious, multi-year projects, including the renovation and expansion of the Woburn Public Library and the design and construction of the new Hurld-Wyman Elementary School. As a result, the City's annual debt service payments are scheduled to increase in the near term suggesting that caution be used in allocating new debt in this *FY2017-FY2021 Capital Improvement Plan*. Instead, \$9.7 million of the capital projects supported by the General Fund will be paid for in their year of completion (known as "pay-as-you-go" projects). For projects funded by the Water/Sewer Enterprise Fund, the City is expected to take full advantage of available state low or no interest loan programs, allowing it to make needed capital improvements at the least cost to ratepayers. In the not too distant future, local residents and business persons will see improved roadways and water/sewer infrastructure, a new fire station, upgraded technology for public school students, and improved parks and recreational facilities to better serve the community.

By looking forward across multiple years in this capital improvement plan, City officials will be able to carefully schedule projects to capture the declines in debt service and use those same dollars to fund new investments. At the same time, department directors will be able to plan in advance for upgrades of equipment and infrastructure so as to reduce emergency repairs and purchases, which inevitably drive up costs. Departments will also be able to plan for multi-year projects such as the design and construction of a major roadway project or a new building, while being kept on task by being included in the CIP.

In this rolling five-year plan, funding for first year will be requested as a supplement to the City's FY2017 budget, while years two to five will provide a plan for the future that takes into account the best information currently available. During the next year, another plan – building upon this one - will be developed for the subsequent five years e.g., FY2018-FY2022. Should more funding become available than currently anticipated, projects could be moved forward in time and/or additional projects could be added. Should finances be more constrained than currently anticipated, projects could be moved back in time or taken off the list. Further, other projects not yet conceived of can be added if they advance the City's goals better than those included in the current version of the plan.

### **What is a capital budget? What is a capital project?**

A capital budget is distinct from an operating budget in that the items included in a capital budget are typically large or infrequent expenses, such as construction of a new building or acquisition of a new dump truck, whereas an operating budget includes recurring expenses or are modest in magnitude, such as supplies or vehicle maintenance. A capital budget identifies the array of resources to be used to fund a series of capital projects. In many instances, municipalities establish minimum dollar thresholds for projects to be included in a



CIP. In the case of Woburn, projects authorized in the FY2017-FY2021 plan range from \$8,000 to \$16.9 million, across all funding sources.

The Massachusetts Association of Town Finance Committees defines capital projects as “major, non-recurring expenditures, for one of the following purposes:

- acquisition of land for a public purpose;
- construction of a new facility or external expansion or major rehabilitation of an existing one. Examples of such town facilities include public buildings, water and sewer lines, roads and playing fields;
- purchase of vehicles or major equipment items;
- planning, feasibility, engineering or design study related to a capital project or to a capital improvement program consisting of individual projects.
- equipment for public improvements when they are first constructed such as furniture, office equipment, or playground equipment;
- major equipment which is expensive and has a relatively long life such as a fire apparatus, garbage trucks, and construction equipment.”

### **What is a capital plan? Why prepare one?**

According to the Massachusetts Department of Revenue (DOR), a capital plan is a blueprint for planning a community’s capital expenditure and “one of most important responsibilities of local government officials.” Putting together multiple years of capital spending into a plan, instead of looking at each year in isolation, has multiple benefits including:

- impacts on the operating budget can be minimized through thoughtful debt management;
- high-cost repairs and emergency acquisitions can be reduced by implementing regular vehicle and equipment replacement schedules, and by undertaking major facilities improvements, such as replacing roofs, before a problem becomes chronic and damage occurs;
- large scale, ambitious public improvements can be phased over multiple years;
- critical parcels of land can be purchased before costs increase;
- costly mistakes created by lack of coordination - such as paving a street one year and then cutting into it the next year to install a sewer line – can be avoided; and,
- methodical progress can be made toward meeting community goals.

### **CIP Overview**

In the FY2017-FY2021 Capital Improvement Plan, the City of Woburn will expend approximately \$70 million in funds for 76 capital projects ranging in size from \$8,000 for a new leaf blower for the Recreation Department to \$16.9 million for the reconstruction of the New Boston Street Bridge (of which \$16.5 million will be funded by the Commonwealth through MassDOT).

Funding for the CIP will be provided from an array of sources, including, but not limited to:

- \$16.6 million in general fund debt funded projects;
- \$9.7 million in Pay as You Go projects funded by the general fund;
- \$13.4 million in projects funded by water and sewer revenues; and,
- \$1.72 million in “other” funds including special revenues and fundraising.

In addition, nearly \$28.4 million in grant funds for capital projects are anticipated including the annual City's Chapter 90 roadway allocation, which is projected to total \$6.3 million over the course of the next five years, funding for Montvale Avenue widening and the New Boston Street Bridge, and an estimated \$500,000 from the Massachusetts School Building Authority (MSBA) to reimburse the City for a portion of the preliminary design costs for a new elementary school. While the figures in this plan are substantial, grant funding will certainly increase in upcoming years as new grant opportunities are identified and secured.

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## ABOUT THE CITY OF WOBURN

Within the City of Woburn's 12.9 square miles of land area can be found many significant infrastructure systems that must be maintained each year, including city and school facilities, information technology (IT) systems, parks and open space, roadways and sidewalks, the sewer system, storm drainage system, and the water system. In addition, the many vehicles and pieces of equipment used by City and School staff to perform their duties must also be maintained and replaced over time.

The maintenance of the City's infrastructure systems is critically important to the health and safety of Woburn's approximately 38,276 residents (U.S. Census, 2010) and the vitality of the 2,063 businesses in the city (County Business Patterns, 2014). City officials face a significant challenge as they strive to keep these systems and equipment in good working condition while using the public resources available to them wisely and with the greatest impact.

Infrastructure components for which the City of Woburn is responsible include:

### ***City Facilities***

The City manages a series of buildings and building complexes that serve a multitude of purposes from City Hall and the Woburn Public Library to the Police Station and DPW facility. Each of these facilities must be maintained on a regular basis to ensure the safety and effectiveness of the working environment, while new initiatives such as land acquisitions or building replacements may also be necessary or advantageous.

WOBURN CITY FACILITIES	
City Facility	Location
City Hall	Common Street
Clapp School	Hudson Street (Leased to Boys Club)
DPW facility	50 North Warren Street
Fire Station #1 – HQ	Main Street
Fire Station #2	Main Street
Fire Station #3 - Dispatch	Main Street
Fire Station #4	Central Street
Fire Station #5	Lexington Street
First Burial Ground	Park Street
O'Brien Rink	Locust Street
Police Department	Harrison Avenue
Plympton School	Plympton Street (used by DPW and City Hall)
Second Burial Ground	Montvale Avenue
Senior Center/Council on Aging	School Street
Water Treatment Plant	Cove Street
Woburn Public Library	Pleasant Street

Altogether, the City's insurance provider has placed a replacement value on the buildings (including public schools) and the equipment within them, at \$271 million (July 2015).<sup>1</sup>

Recent maintenance and improvement projects include replacing the roof at the Police Station and completing a new, state-of-the-art dispatch center. The Mayor is committed to environmental sustainability and has worked with City Councilors and City Departments to work toward a 20% energy reduction across all City-owned infrastructure. Thus far, completed initiatives include energy-efficient lighting at the Police Station and Kennedy Middle School, and the upgrade of all streetlights to LED, throughout the city. Where possible, state funding from the Massachusetts Department of Energy Resources has funded upgrades.

Several significant capital projects are currently underway, having been initiated prior to the *FY2017-FY2021 Capital Improvement Plan*. These include the renovation and expansion of the Woburn Public Library that will provide a much needed increase in available space for housing the library's growing collection, for young adults and children to explore, collaborate and learn, and for adults and seniors to engage in community programs and learn new technologies, as well as updated systems and a technology overhaul. Funding comes from a \$9.9 million construction grant from the Massachusetts Board of Library Commissioners, donations, and \$31.5 million bond authorization to be repaid by the City's general fund. In addition, a new Hurlb-Wyman elementary school located at Spence Farm will break ground in 2016. Total project cost is estimated at approximately \$35million, with the MSBA reimbursing the City for 54% of eligible building costs. The new school will house 410 students in K through 5<sup>th</sup> grade.

### ***Information Technology***

The City's information technology infrastructure supports approximately 180 users across City, School, Public Works, Public Safety and Library departments, using a wide-area network that connects all City-owned buildings. Software applications used citywide include the MUNIS financial system and the Microsoft Exchange email system.

The data center supporting the City's network is located on the lower level of City Hall. It has its own alarm system including heat sensors, and is monitored by American Alarm Co. The city has a gas generator to service the facility in the event there is a power outage. The data center is outfitted with Dell R720 servers, a Dell EqualLogic PS6100X storage array and two Dell N2024 switches. A Dell R720XD AppAssure backup solution is in place for backing up all virtual Windows servers residing in the VMware Infrastructure. One other datacenter resides at the Woburn Police Department and includes four servers, including a backup server. This datacenter maintains the Police and Fire dispatch system and State 9-1-1 system and was put in service beginning in 2014.

A wireless network can be found within City Hall. There are (2) Cisco access points on each floor of the building to provide the coverage required. Two networks are supported: a guest network that allows access to the Internet and a private network which allows access to the Internet as well as internal file storage, network applications and network services. The Woburn Police Department also maintains wireless capabilities which is encrypted to comply with state regulations.

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<sup>1</sup> Note that this figure includes water treatment facilities and related structures such as wells, and structural features in City parks and schools, such as the bath house at Horn Pond and High School football stadium.

IT HARDWARE SUMMARY	
Internet	Internet service is provided by Verizon through their FIOS offering. Any user on the City's WAN has access to this connection which typically will provide throughput of over 20 Mbps. To protect City assets and secure the network, there are two Dell NSA3600 appliances on the network edge. These devices filter traffic and also allow for the configuration of a DMZ and provide remote access via VPN technology. These devices were put in service in 2014.
VMware Infrastructure	A vCenter Server version 5.5 is installed on a Dell R720 server. This device manages the (3) Dell R702 servers that are ESXi 5.5 hosts in the "CityHall" vCenter Cluster. All virtual servers are installed on the (3) ESXi hosts.
Storage Infrastructure	A Dell EqualLogic PS6100X is configured as a dedicated resource for the VMware Infrastructure. All virtual machines reside on the Dell storage. There are two storage controllers with four iSCSI ports on each controller. The chassis houses (24) 1.2TB 10K drives. The device is configured for alerting sending email to IT if necessary.
AppAssure Backup	A physical Dell R720XD AppAssure Core server is configured for backups. The server is provisioned with Windows Server 2012 R2 on two 146Gb 10K local drives. AppAssure Core Server 5.x is installed and (8) onboard 3TB drives are configured as a RAID 6 volume for the repository.
VMware Switching	Two Dell N2024 switches handle five VLANs: iSCSI(50), Management (51), vMotion (52), DMZ (98) and VM Network (100). There are also four 1Gb trucked connections to the core switch the route VLANs (51, 98 and 100).
Core Switch	The City has a Cisco 6509 as its core switch. This switch handles traffic generated on the local LAN as well as routing traffic generated by the WAN. All fiber connections throughout the city are routed through the data center. There are about 50 VLANs configure to secure traffic and manage connections. The City has applied for a grant to replace this switch. Due to its age and configuration, Cisco no longer offers SmartNet service for it.
Telephony	The City's phone service is managed through a Cisco BE6000 server. This is a physical server which is virtualized for call management, voicemail and emergency responding. Auto attendant features, call handling and pickup groups are configured based upon individual department requirements. The phones are IP based and act as switches for employee desktop computers. There are about 140 IP phones and 25 FAX lines managed by this device. This system serves City Hall, DPW, Water Treatment, Senior Center and all Fire Department locations. The BE6000 was placed in service in 2015 though the IP phones and voice gateways are about 8 years old.
DSX Access Control	This system of software and hardware manages the physical access to City Hall. Three entries to the building are controlled with automated scheduling which allows for the opening and securing of doors during regular work schedules. The system allows for holiday schedules and the manual override of scheduled opening and closings times if necessary. During off hours, users present a proximity access card to one of two readers which, if valid, opens the door. All activity is captured in a database which is searchable by date/time, card number or user. The DSX software installed is version 3.7.

IT SOFTWARE SUMMARY	
MUNIS (Citywide)	The City's financial management system is MUNIS. This is a critical application supporting the General Ledger, Accounts Receivable, Auto Excise, Fixed Assets, RE Tax Billing, Tax Title, Purchase Orders, Requisitions, Utility Billing Interface, Utility Billing, HR Management, Payroll, Role Tailored Dashboard, Employee Self Service, MUNIS Office. The City has used MUNIS modules beginning in 1996.
Exchange Online (city-wide)	The City moved from an on-premises Microsoft Exchange environment to Microsoft's Exchange Online email application. The City has licensing for Exchange Online (Plan 1) for Government and Exchange Online Archiving (EOA) for Government. This allows the City to satisfy compliance management requirements specific to government. Each email, inbound or outbound, is captured and archived and is provisioned for 50 Gb of storage. According to Microsoft, the data stored in the cloud is maintained within the continental United States.
Vision (Assessors)	This application is used by the Assessors' Office for maintaining property inventory, ownership, statutory exemptions and parcel data for real property. This system allows for the mass appraisal of all taxable properties on an annual basis. Assessments and billing data are ported to MUNIS for the quarterly billing program. The software version in place is version 6.5 and the City has used this application since 1999. An upgrade is likely to occur within 2 years.

RRC (Assessors)	This application is used by the Assessors' Office for the valuation and maintenance of personal property accounts. Accounts are listed and valued annually and the data is ported to MUNIS for the quarterly billing program. The Assessors' Office has relied on the RRC application since fiscal 2011.
ArcGIS (Engineering)	This software supports the city's GIS applications. The version used by the department is 10.4 with an annual cost of \$3,000.
PeopleGIS Maps Online (Engineering)	This is an online application that allows for the publishing of GIS data on the Internet available to employees and the public. Information relative to parcel data and property characteristics can be searched and displayed. An abutters' list can be generated readily by this system. In addition, the application allows for the customizing of form based database applications which can be shared with other municipal users here as well as throughout the PeopleGIS user community. The annual cost for this application is \$10,000.
PeopleGIS Stormwater (Engineering)	This is an online application that allows for the modeling of stormwater runoff. The annual cost for this application is \$4,000.
AutoCad 14 and 19 (Engineering)	Used by the department for all cad purposes. The version is over 10 years old but is still functional.
Dog License (Clerk)	This is an online application which allows for the management of dog licenses. It is a subscription service with an annual cost of \$1,200. The developer of the application is Stellar Corp. of Lexington, MA.
Neptune R450 Neptune R900 (DPW)	These two systems allow for the collection of water usage data and the export of this data to MUNIS for utility billing. Water meters for all properties connect remotely (wireless meters) to (8) collectors dispersed throughout the city. These collectors in turn connect to the city via the Internet and report meter readings.
Permitting and Tracking (Inspectional Services)	This department uses a Microsoft Access template designed in-house by staff to manage and track building, plumbing and electrical permits. The software is patched and/or enhanced about every 3 months.

### ***Parks and Open Space***

City residents and visitors have access to hundreds of acres of recreational areas including parks, playgrounds, swimming pools, ponds and woods, fields, passive recreation areas, walking and biking trails and even a City-owned skating rink. As reported in the City's 2015 Open Space and Recreation Plan (OSRP), Woburn is home to 682 acres of conservation land, approximately 540 acres of City-owned land, and 107 acres managed by the School Department. Facilities range in size from the 335-acre Horn Pond Recreational Area offering a 2.5-mile walking/biking path and 102-acre pond, to Goodyear Green, a small several hundred square foot pocket park with planters and a commemorative stone.

Woburn is home to a number of waterways including seven brooks (Sucker Brook, Shaker Glen Brook, Fowle Brook, Little Brook, Cummings Brook, Halls Brook, and Horn Pond Brook), the Aberjona River, several named ponds (Horn, Whittemore, Burbank, Philips, Baltic), several smaller, unnamed ponds, and a remnant of the Middlesex Canal which still holds water.

<b>EXAMPLES OF LOCALLY OWNED/MANAGED OPEN SPACE FACILITIES IN WOBURN</b>			
<b>City Facility</b>	<b>Location</b>	<b>Size</b>	<b>Description</b>
Altavesta	Altavesta School	3.1 acres	Soccer field, lacrosse field, playground equipment
Battle Road Conservation Area	parallel to Russell Street into Lexington	22.8 acres	Carriage road for hiking, cross country skiing; small open meadows
Ferullo Field	880 Main Street	12.3 acres	1 major league field (lighted), swimming pool, playground equip; tennis court, basketball court
Fleming Field	Clapp School	8.1 acres	Future field possibly will have open space field, basketball court, playground equipment
Gillis Field	Lexington Street at Reeves School	2.1 acres	1 little league field, playground equipment

**EXAMPLES OF LOCALLY OWNED/MANAGED  
OPEN SPACE FACILITIES IN WOBURN**

City Facility	Location	Size	Description
Gonsalves Park	South Bedford Street at Willow Street	6.3 acres	2 softball fields, 1 basketball court, 1 tennis court
Gelly Square (formerly Goodyear Green)	Corner of Montvale, Central and Orange Streets	0.15 acres	Small plot of land with planters and a stone marker
Green Street	60 Green Street	8.1 acres	Swimming and wading pool, playground, 2 basketball courts
Higgins Park	36 Bow Street	0.88 acres	1 little league field
Horn Pond	Arlington Street and Lake Avenue	335 acre (est.)	Heavily used 2+ mile recreational walking and biking path, fishing and photography-nature spot.
Joyce Middle School Park	55 Locust Street	40.1 acres	Soccer fields
Kennedy Middle School	Middle Street	22.4 acres	Open space area
Leland Park	Central Street	10.5 acres	1 major & little league field; basketball court, swimming pool, playground, street hockey rink
Library Park	Harrison Avenue	9.5 acres	2 softball fields (lighted), 2 tennis courts, basketball court, open space area, gazebo, new playground across street
Spence Farm	Wyman Street	3 acres	Open community space, farm building
Whispering Hill	Cambridge Road	75 acres	Athletic fields, walking and nature trails

Construction of a Tri-Community Bikeway/Greenway is slated to start later in 2016. The Tri-Community Bikeway/Greenway will be a 6.63-mile multi-use trail that will wind its way through Stoneham, Woburn, and Winchester. The  $\frac{3}{4}$  mile Woburn portion of the Bikeway/Greenway will enter Woburn from Stoneham along an abandoned rail bed, traverse Washington Street then turn south behind the Calvary Cemetery toward Davidson Park and continue into the Town of Winchester. The State has allocated and reserved approximately \$6 million in construction funding for this project.

Recently-completed initiatives to preserve and enhance open space in Woburn include the purchase of 75 acres of land at Whispering Hill and the acquisition of several acres at Spence Farm. Both projects resulted in the City expanding its outdoor recreation opportunities and community gathering spaces and implementing drainage improvements that benefited the surrounding neighborhoods. Other recent open space and recreation-related work included upgrades and replacement of obsolete and unsafe public play equipment at Ferullo Field, Library Field, Leland Park, Gonsalves Park, and Weafer Park, and the dedication of 11 acres of land at the Hurl School as permanent open space pursuant to MGL Article 97.

### ***Roadways and Sidewalks***

Just to the east of Woburn can be found an interchange of two major regional highways, including Route 93, which is part of Interstate highway system, and Route 128, a regional section of Route 95. Both of these are maintained by MassHighway. State roads Route 38 and Route 3 provide north-south access throughout the city while east-west access is provided by several urban principal arterial roads, including Lexington Street, Pleasant Street, and Montvale Avenue, and several urban connector streets including Bedford Street, Salem Street, Green Street, and Russell Street. The majority of these roadways are under local jurisdiction; however, the following State roads are maintained by MassHighway:

- Cambridge Road;
- Lexington Street;
- Main Street from Altavesta Circle to the Wilmington line; and,

- Mishawum Road from Commerce Way to Washington Street;
- Montvale Ave from Ranin Road to the Stoneham Line;
- Salem Street from the Salem Street Bridge to Washington Street; and,
- Washington Street from Salem Street to the Reading line.

Roads are typically classified into three categories:

- Local streets provide direct access to residential properties and serve the transportation needs within a particular neighborhood. Nashua Street is an example of a local street.
- Collector streets primarily collect traffic off of local streets and lead such traffic to and from arterial roadways. Salem Street is an example of a collector street.
- Arterial roadways are typically numbered and serve regional as well as local automobile and truck traffic. Route 38 is one example of an arterial roadway in Woburn. These roadways are often owned and maintained by the state, and function as part of regional highway system.

Of the 152 centerline miles of roadway in Woburn, the City has accepted and maintains 125.5 miles of local and collector streets. A total of 12.2 miles of roads are private and have not been accepted by the City, and just over 14 miles of roadway are maintained by MassHighway.<sup>2</sup> The 19 bridges found in Woburn are all owned and maintained by MassHighway.

As of 2005, Woburn owned 29 traffic signals and 3 flashing beacons, while another 5 traffic signals were State-owned. Significant traffic signal improvements planned between FY2014 and FY2018 total \$745,000 in cost, all of which are Chapter 90 eligible. The project list, some of which have already been completed, includes:

- Main Street at Clinton Street
- Main Street at Eaton Avenue
- Main Street at Fowle Street - *Completed*
- Main Street at Kilby Street - *Completed*
- Main Street at Middlesex Canal Park
- Main Street at Mishawam Road
- Main Street at Montvale Avenue - *Completed*
- Main Street at Salem Street - *Completed*

Other notable State-funded roadway improvements (not listed in this CIP) include a \$4.7 million investment in the widening of Montvale Avenue beginning near the intersection with Route 93 and moving west to Central Street, including improvements to the Washington Street intersection, and an additional \$5 million project to replace the bridge on Salem Street over the MBTA right of way.

### ***School Facilities***

The Woburn Public School District (WPSD) operates eleven school facilities including eight elementary schools (K-5), two middle schools, and one high school, and serves approximately 4,700 students<sup>3</sup>. WPSD also runs a

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<sup>2</sup> Massachusetts Department of Transportation Office of Transportation Planning, 2014 Massachusetts Road Inventory Year End Report, March 2015, p. 61/97.

<sup>3</sup> DESE District Profiles. Woburn public school district served 4,712 students in the 2015-2016 academic year.



preschool program at two of its elementary school facilities. School administration is located at 55 Locust Street. Each school facility has associated play equipment and/or fields.

<b>WOBURN PUBLIC SCHOOL FACILITIES</b>	
<b>School Facility</b>	<b>Location</b>
Altavesta Elementary School (K-5)	Main Street
Goodyear Elementary School (K-5)	Central Street
Joyce Middle School (6-8)	Locust Street
Kennedy Middle School (6-8)	Middle Street
Linscott/Rumford Elementary School (K-5)	Elm Street
Memorial High School (9-12)	Montvale Avenue
Reeves Elementary School (K-5) and Preschool	Lexington Street
Shamrock Elementary School (K-5) and Preschool	Green Street
Malcolm White Elementary School (K-5)	Bow Street

The City is making significant progress in rebuilding its aging elementary schools. In September 2011, a new Goodyear Elementary School opened, with the support of and funding from the Massachusetts School Building Authority (MSBA) and the City of Woburn. Most recently, in the summer of 2016, the City will break ground on the new Hurd-Wyman elementary school to be located at Spence Farm. This new school will replace the previously separate Hurd and Wyman elementary schools which will close their doors once the new school is completed. Funding for the (estimated) \$35 million project is being provided by the MSBA (approximately \$14.4 million, or 54.74% of eligible<sup>4</sup> costs) and the City of Woburn. This brand new facility will serve approximately 410 students from Kindergarten to 5<sup>th</sup> grade and is expected to be ready for occupancy in September 2018.

### ***Sewer and Storm Water Collection***

Woburn has a separate sanitary sewer and storm water system. The city has approximately 130 miles of common sewer main excluding building service connections. The sewer system was begun in 1879, with a majority of sewer lines being installed in the late 1960's. Sewage is collected through an extensive underground piping network and ultimately discharges into MWRA sewer lines which bring the wastewater to Deer Island. Approximately 95% of Woburn is serviced by the MWRA sewer system, which has sewer interceptors along portions of Water Street, Sturgis Street, and Arlington Road adjacent to the north and east sides of Horn Pond. There about 350 properties that utilize septic systems or cesspools.

The City of Woburn has undertaken the significant task of removing storm water that was previously entering the sewer system (known as "I/I" or inflow and infiltration), through a plan to invest approximately \$1,000,000 annually over the next five years. All storm water that enters the sewer system is processed along with sewage at the MWRA Deer Island facility at a cost borne by the Woburn taxpayers (sewage treatment fees totaled approximately \$9 million in FY2016. By reducing I/I, the City will help reduce the amount of stormwater entering the system and the associated treatment costs. Additionally, the City recently completed the rehabilitation of the Dix Road sewage pump station.

<sup>4</sup> The MSBA has determined that \$26.3 million of the \$35 million project is eligible for reimbursement and is providing a 54.74% reimbursement rate, or \$14.4 million.

Part of the Mystic River Watershed, Woburn's storm water drainage system consists of an 8,390-acre land drainage area, 153 miles of pipe with diameters ranging from 8 to 60 inches, and box culverts up to 6 feet by 16 feet. Water is discharged into 13 bodies of water including ponds, canals, brooks and a river.

In 2003, in compliance with the federally mandated Phase II stormwater management program stemming from the 1987 Clean Water Act, Woburn was required to submit a Notice-of-Intent (NOI) to discuss its Stormwater Management Program (SWMP) and Best Management Practices for the stormwater system. The goal of a SWMP is to reduce or prevent harmful pollutants from being washed or dumped into the system. Under the Phase II program, operators of municipal separate storm sewer systems (MS4) are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for the drainage system. NPDES permits are issued on a five-year basis, and Woburn is required under the permit to report annual on its progress of implementing its SWMP.

Woburn's storm water management program includes construction site run-off control, illicit discharge detection and elimination, pollution prevention/good housekeeping for municipal operations, post-construction stormwater management in new development and redevelopment, public education and outreach, and public participation and involvement.

### ***Vehicles and Equipment***

Many City departments, such as the DPW, Fire Department, Police Department, School District and Parks and Recreation Department use small and large vehicles and equipment on a daily basis. City-wide, the auto fleet includes 190 vehicles, trailers, and motorized pieces of equipment (mowers, trailers chippers, etc.). A recent inventory found that the DPW operates approximately 60 on- and off-road vehicles (e.g., dump trucks, box trucks, pickups, backhoes, etc.), trailers and compressors. DPW staff also use countless small and handheld pieces of equipment (e.g., asphalt compactors, shovels, and other grounds maintenance tools as well as hand tools) which typically have short lifespans.

The Fire Department operates a fleet of 24 vehicles including seven fire trucks (five pumpers and two ladders), 3 ambulances, a fire rescue and HAZMAT truck, a number of pick-up trucks and sedans, and several trailers. The oldest piece of fire equipment is a Mack Rescue Truck dating from 1971. The Police Department currently has approximately 50 vehicles, including cruisers, SUVs, and two trailers.

The School District operates 15 vehicles including a skid-steer loader and a trailer, the Parks Department has 8 on and off road vehicles and six mowers/trailers, and the cemetery has 3 pick-up trucks and a backhoe loader. Other departments such as the Assessor's Office, Board of Health, Council on Aging, Inspections, Recreation, and City Hall manage 1-3 vehicles each.

All of these vehicles and equipment must be replaced periodically to prevent negative impacts to operations. The replacement value of fleet operated by the DPW, Police, Parks and City Hall departments is \$9.0 million, not including Fire, Schools and Cemetery.<sup>5</sup>

The following table summarizes Woburn's automotive fleet, as reported on their Auto Fleet Schedule, and includes those vehicles/machines operated by the following City departments: Assessors, Board of Health,

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<sup>5</sup> Provided by Lenny Burnham via email, June 20, 2016.

Cemetery, City Hall, Council on Aging, DPW, Engineering, Fire, Inspections, Parks and Recreation, Police, School, and Animal Control.

Woburn Fleet Inventory Summary							
Description	#	Med Year	Median Age (Years)	Oldest	Description of Oldest	Newest	Description of Newest
Sedan, Van	21	2010	6	2000	Chevy Sedan/ BoH	2016	Ford Fusion/ Assessors; Ford Transit Van/ Schools
Heavy Van, Pick up	44	2007	9	2000	Ford Pick-up/ DPW; Chevy Pick-up/ Parks; Chevy Pick-up/ Schools	2016	Ford250/ Animal Control
Heavy Equipment (includes Pelican sweepers, dump trucks)	27	2006	10	1987	International Dump Truck/ DPW	2016	International Bucke Truck/ DPW
Trailers	17	2008	8	1980	Kubota Tractor/ DPW	2015	Veemer Utility Trailer/ Inspections; Ver Mac Solar Trailer/ DPW
Pumps, Generators, Compressors	2	2012	4	2012	Sulliar Compressor	2012	Sulliar Compressor
Mowers, Tractors, Chippers, Small Engine	4	2011	5	1995	Toro Mower and Kubota Tractor/ Parks	2014	Vermeer Chipper/ DPW
Safety vehicle: sedan, van, SUV	49	2011	5	1998	Ford Van/ Police	2015	Ford Explorer/ Police (3)
Safety vehicle: pick up	9	2008	8	1991	Chevy Pick-up/ Fire	2012	Chevy Tahoe/ Fire
Ambulance	3	2012	4	2007	Ford Ambulance	2014	Ford 450 Ambulance
Fire truck: ladder, pumper, rescue, HAZ MAT	9	2001	15	1971	Mack Rescue Truck	2014	Pierce Dash Pumper Fire Truck
Safety vehicle: trailers	5	2011	5	1985	Homemade Trailer/ Fire	2012	Carry on Trailer/ Fire; Vermac Message Board Trailer/ Police

Major recent fleet replacement vehicles include a 2014 Pierce Dash Pumper Fire Truck (\$570,000) and a 2016 International Bucket Truck (\$188,000). The Mayor's commitment to 'greening' Woburn requires the upgrade of older sedans and SUVs with energy efficient vehicles as they wear out.

## Water

Woburn's water supply system provides approximately two-thirds of the potable water needed by the city's residents and businesses, with the Massachusetts Water Resource Authority (MWRA) providing the remainder. The City's water system is currently comprised of two major service areas - the main service area which sources water from the Horn Pond wellfield and serves about 85% of the city and the Shaker Glen high service area serving the area west of Cambridge Street. Five well pumping stations and three major booster pumping stations facilitate water flow. The City provides up to 4.07 mgd of the approximate average 6.0 mgd daily consumption citywide.<sup>6</sup> The Water Department redevelops each of its five municipal wells on a rotating basis so the every well is redeveloped within a five-year period.

<sup>6</sup> Woburn website, located at <http://cityofwoburn.com/index.aspx?NID=384>

Woburn's water is treated at the Horn Pond Treatment Plant on Cove Street, which recently underwent an upgrade to enhance treatment capabilities. The construction of a 7,000 square foot addition and similarly sized treatment support building allows the treatment plant, which formerly provided only corrosion control and chemical disinfection of the water, to now remove iron and manganese from the water which will prevent discoloration and to carry out ultraviolet disinfection to remove bacteria. The support building provides an area for chemical injection and the storage of Water Department vehicles and equipment. Additional improvements included replacing a water tank that was more than 50 years old (Rag Rock storage tank), upgrading pump stations including Shaker Glen, and cleaning, and relining 15 miles of old cast-iron pipes in a five-year effort. A \$33.5 million bond to be repaid by water revenues supported these improvements. An additional \$6.25 million in system improvements are slated to take place between FY2017 and FY2021, which mainly include relining some of the remaining 50-60 miles of pipes that are aged and unlined.

Woburn's water distribution system includes approximately 200 miles of water mains ranging in diameter from 4" to 24", which require continual maintenance and occasional upgrading. While much of the transmission mains are in relatively good condition, there is a significant length of older, unlined cast iron pipe with limited flow capacities. The Water Department, which operates within the Department of Public Works, is responsible for maintenance that includes repairing water main breaks, replacing broken hydrants and gate valves, winterizing hydrants, yearly flushing, leak detection, maintaining pumping stations, and cleaning and relining pipes. Upgrades include pipe replacement, adding fire hydrants, adding gate valves and installing new water mains. The department also conducts hydrant flow and area pressure tests upon request.

Presently, Woburn is moving towards a water metering program that will more accurately measure water usage, enhance conservation efforts, and help identify potential leaks throughout the system. The installation of more than 10,000 water meters is in compliance with a 2006 administrative consent order from the DEP. A total of \$6 million in debt was authorized in 2012 for this program.

## POSSIBLE FUNDING SOURCES

There are a number of ways to finance municipal capital improvement projects. Some of the most common methods are:

### Local Resources

- **Municipal Indebtedness:** The most commonly used method of financing large capital projects is general obligation bonds (aka, “GO Bonds”). They are issued for a period of time ranging from 5 to 30 years, during which time principal and interest payments are made. Making payments over time has the advantage of allowing the capital expenditures to be amortized over the life of the project. Funding sources used to pay back the debt can include:
  - **Bonds funded within the tax limits of Proposition 2 ½:** Debt service for these bonds must be paid within the tax levy limitations of proposition 2 ½. Funds used for this debt must be carefully planned in order to not impact the annual operating budget.
  - **Bonds funded outside the tax limits of Proposition 2 ½ :** Debt service for these bonds is paid by increasing local property taxes in an amount needed to pay the annual debt service. Known as a Debt Exclusion or Exempt Debt, this type of funding requires approval by 2/3 vote of the local appropriating authority (e.g., city council or town meeting) and approval of majority of voters participating in a ballot vote. Prior to the vote, the impact on the tax rate must be determined so voters can understand the financial implications.<sup>7</sup>
  - **Bonds funded with Enterprise Funds:** Debt service for these bonds is typically paid by user fees, such as water and sewer revenue. Depending upon the type of project, interest costs may be subsidized by the Commonwealth and at times partial grant funds may be available (see below). Enterprise funds do not affect the general operating budget unless general funds are needed to subsidize revenues from the enterprise. Prior to the issuance of debt, the projects must be analyzed for their impact on rates.
- **Capital Outlay / Pay As You Go:** Pay as You Go capital projects are funded with current revenues and the entire cost is paid off within one year so no borrowing takes place. Projects funded with current revenues are customarily lower in cost than those funded by general obligation bonds because there are no interest costs. However, funds to be used for this purpose must be carefully planned in order to not impact the annual operating budget. For this reason, Pay as You Go capital projects are typically lower in value than projects funded by borrowing.
- **Capital Outlay / Expenditure Exclusion:** Expenditure Exclusion projects are similar to Pay as You Go, above, except taxes are raised outside the limits of Proposition 2 ½ and are added to the tax levy only during the year in which the project is being funded. As with a Debt Exclusion, Expenditure Exclusion funding requires approval by 2/3 vote of the local appropriating authority (City Council or Town Meeting) and approval of majority of voters participating in a ballot vote. Prior to the vote, the impact on the tax rate must be determined so voters can understand the financial implications. Capital outlay expenditures

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<sup>7</sup> A debt exclusion is different from a property tax override in that a debt exclusion is only in place until the incurred debt has been paid off. An override becomes a permanent part of the levy limit base.

may be authorized for any municipal purpose for which the city or town would be authorized to borrow money.

- **Capital Stabilization Fund:** Local officials can set aside money in a stabilization fund – outside of the general fund - to pay for all or a portion of future capital projects. A 2/3 vote of city council is required to appropriate money into and out of this fund.
- **Sale of Surplus Real Property:** Pursuant to Massachusetts General Laws, when real estate is sold, the proceeds must first be used to pay any debt incurred in the purchase of the property. If no debt is outstanding, the funds “may be used for any purpose or purposes for which the city, town or district is authorized to incur debt for a period of five years or more...except that the proceeds of a sale in excess of five hundred dollars of any park land by a city, town, or district shall be used only by said city, town, or district for acquisition of land for park purposes or for capital improvements to park land” (MGL Chapter 44, Sec. 63).
- **Enterprise Retained Earnings / Stabilization Fund:** Enterprise operations, such as water and sewer, are able to maintain an operating surplus that can be utilized for future enterprise fund costs. These funds can be used to stabilize the user rates, apply to annual budget needs, and/or invest in capital replacement and expansion.
- **Free Cash:** Free Cash is the difference between annual revenues and expenditures and is certified by the Commonwealth each year. After certification, free cash is available for appropriation for any municipal purpose, including capital projects.
- **Special Purpose Funds:** Communities also have established numerous “Special Purpose Accounts” for which the use is restricted for a specific purpose, some of which may be investment in department facilities and equipment. There are numerous state statutes that govern the establishment and use of these separate accounts. Examples include the sale of cemetery lots and off-street parking fees accounts.

### **Federal, State, and Private Grants and Loans**

Special revenue sources include grants or loans from federal, state, or private sources. Examples include:

- **Federal Community Development Block Grant (CDBG):** The U.S. Department of Housing & Urban Development (HUD) “provides communities with resources to address a wide range of unique community development needs.”<sup>8</sup> Funds are granted directly to “entitlement” communities which are cities with a population of at least 50,000 or counties with a population of at least 200,000. To secure entitlement funds, each city must prepare a Consolidated Plan every five years outlining the city’s goals for use of the funds, and an annual plan must be prepared each year. Funding for smaller communities flows through State administered CDBG programs. As it relates to capital projects, HUD funds can be used for: acquisition of real property; relocation and demolition of housing; rehabilitation of residential and non-residential structures; construction of public facilities and improvements, such as water and sewer facilities, streets,

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<sup>8</sup> U.S. Department of Housing and Urban Development (HUD), “Community Development Block Grant (CDBG) Program”, retrieved December 3, 2015 from [http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/comm\\_planning/communitydevelopment/programs](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs).

neighborhood centers, and the conversion of school buildings for eligible purposes; activities relating to energy conservation and renewable energy resources.

- **Massachusetts Chapter 90 Roadway Funds:** Each year, the Massachusetts Department of Transportation (MassDOT) allocates funds to cities and towns for roadway construction, maintenance, or improvement. Funds may also be used for other work incidental to roadway work, such as the construction of a garage to house related vehicles, or the purchase of related vehicles, equipment, and tools. Chapter 90 is a 100% reimbursable program. Funding is accomplished through the issuance of transportation bonds and apportioned to municipalities based on three factors: 1) accepted road miles, 2) population, and 3) total employment within the municipal borders. Road miles is the most heavily weighted factor at 58.33%; the others are each weighted at 20.83%. A total of \$200 million is available in FY2016.
- **Massachusetts Department of Environmental Protection's State Revolving Loan Funds (SRF):** The Clean Water State Revolving Loan Fund (CWSRF) provides financing for sewer and drainage projects intended to reduce sewer overflows and the Drinking Water State Revolving Loan Fund (DWSRF) provides financing to improve the quality of the drinking water system. The CWSRF and DWSRF programs typically offer a mix of low interest (2%) loans and grant funds. Repayment does not begin until two years after the monies have been borrowed.
- **Massachusetts School Building Authority (MSBA)** – The MSBA provides funding for school feasibility, design, and construction. Projects must be accepted into the process in response to the submission of a Statement of Interest which identifies a facility problem to be solved. Subsequently, the community must appropriate funding for schematic design and later for construction before the MSBA will commit to its share of the project. If accepted, the MSBA determines the amount of reimbursement it will offer based upon community need, with a minimum base rate of 31%. The percent of reimbursement can then be increased based upon three factors: community income factor, community property wealth factor, and community poverty factor.

Many state departments also offer annual grant opportunities that are available to municipalities typically through a competitive application process. State grant programs including, but not limited to: Green Community grants (project to improve sustainability), Parkland Acquisitions and Renovations for Communities grants (PARC), and the MassWorks Infrastructure Program.

For additional definitions, please refer to Glossary in appendices.



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## **CAPITAL PLANNING PROCESS (FY2017-FY2021)**

The City of Woburn hired the Edward J. Collins, Jr. Center for Public Management at the University of Massachusetts Boston to facilitate preparation of the City's five-year Capital Improvement Plan (CIP) for FY2017 to FY2021. The project team met with leadership of all City departments to explain the process to be followed and discuss types of projects that would be eligible for funding in the capital plan. Departments were provided with a Capital Improvement Project Request Form asking them to describe their proposed project(s), the justification for why each project was needed, the priority placed on the project by the department, and the fiscal year or years in which the funds were needed. In addition, departments were asked to indicate if outside funds might be available to support the project and to anticipate the impact of the project on the City's operating budget. In particular, departments were asked if any savings could be realized, for example, if the purchase of new equipment could reduce the cost of annual repairs. Department directors were encouraged to contemplate needs over multiple years and to be ambitious with their proposals. Particular attention was paid to equipment needs with a goal of developing a regular replacement schedule that would reduce, if not eliminate, emergency replacement and costly repairs.

The project team also met with the City Auditor, Chief Appraiser, Treasurer & Collector, and contacted the City's financial advisor and bond counsel to get an understanding of the City's current debt service profile and the revenues available that could be used for capital projects. Information gathered included official financial statements, bond rating agency reports, the debt schedule for existing debt, and present and proposed borrowings, among other sources. First Southwest, the City's financial advisor, was particularly helpful in generating debt service schedules for projects such as the library renovation and expansion and the new Hurd-Wyman Elementary School, and for estimating debt service costs and timing for new projects included in this capital plan.

### **Project Requests**

Overall, 268 project requests were submitted, totaling nearly \$121 million across all funds and all five years of the plan. Project requests ranged in size from \$2,000 for school art room shades at the Goodyear Elementary School, to \$35 million for a new elementary school.

Requests exceeding \$1 million included:

- Construct new elementary school (\$35.4 million)
- Reconstruct New Boston Street Bridge (\$16.9 million)
- Construct new fire station (\$12.5 million)
- Roadway repair and maintenance (\$6.3 million)
- Clean and reline water main, perform valve and hydrant replacement (\$6.3 million)
- Inflow and Infiltration work (I/I) (\$5.0 million)
- Fleming Field improvements and additions (\$1.5 million)
- Replace ladder fire truck (\$1.2 million)
- Repave and repair parking lots (\$1.0 million)

Departments with the highest total dollar value of requests included schools (\$50.45 million), DPW (\$45.5 million), and Fire Department which is not unusual given to the number and cost of their property inventory. The year with greatest dollar value of project requests was FY2021 which includes the construction of a new school (\$29 million). An additional \$6.4 million in design and soft costs is included in FY2019 requests.

<b>CAPITAL REQUESTS BY DEPARTMENT BY YEAR (ALL FUNDS)</b>							
	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Total Project Cost</b>	<b>% of Total</b>
BOH	30,489					<b>30,489</b>	0.03%
City Clerk	153,500					<b>153,500</b>	0.13%
COA	119,400	60,000				<b>179,400</b>	0.15%
Con Comm	85,000	50,000	105,000		5,000	<b>245,000</b>	0.20%
DPW	5,981,000	10,664,000	4,676,000	20,716,000	4,460,000	<b>46,497,000</b>	38.50%
Engineering		20,000				<b>20,000</b>	0.02%
Fire	982,600	13,438,900	220,000	825,000	20,000	<b>15,486,500</b>	12.82%
HDCPD Comm	12,500					<b>12,500</b>	0.01%
ISD		35,000		35,000	35,000	<b>105,000</b>	0.09%
Info Tech	273,045	65,000	65,000	65,000	65,000	<b>533,045</b>	0.44%
Library	27,475	478,086			0	<b>505,561</b>	0.42%
Parks & Rec	1,065,800	1,591,825	989,825	231,000	148,000	<b>4,026,450</b>	3.33%
Planning/WRA	125,000					<b>125,000</b>	0.10%
Police	723,000	367,235	538,747	363,784	325,374	<b>2,331,105</b>	1.93%
Purchasing	1,400					<b>1,400</b>	0.00%
Schools	5,000,000	2,216,500	8,353,000	2,034,000	32,847,000	<b>50,450,500</b>	41.78%
Treas/Coll	55,000	6,000				<b>61,000</b>	0.05%
<b>Grand Total</b>	<b>14,635,209</b>	<b>28,992,546</b>	<b>14,947,572</b>	<b>24,269,784</b>	<b>37,905,374</b>	<b>120,763,450</b>	

Funding sources outside of the general fund were identified for a total of \$55.71 million in project requests. These sources include water and sewer enterprise funds, Chapter 90 highway funds, other State or Federal programs<sup>9</sup>, the MSBA<sup>10</sup>, and “other” funds, such as fund raising. This left a balance of approximately \$63.84 million for consideration from general fund sources, whether this be from general fund debt or pay as you go capital.

It should be noted that some projects may be funded by more than one source, most commonly when a grant-funded project also requires a local match.

<sup>9</sup> The State/Federal Program’s \$21.1 million was generated by two projects – the Montvale Avenue widening project (\$4.85 million total, of which \$4.6 million is from state transportation funds) and the Boston Street Bridge reconstruction (\$16.9 million total, of which \$16.5 million is from state transportation funds).

<sup>10</sup> The figures for potential MSBA reimbursement were estimated by the Collins Center based largely upon the Hurd-Wyman Elementary School project underway. However, should the City pursue construction of a new school, the total costs and reimbursement rate would be based upon the project’s unique design.

<b>CAPITAL REQUESTS BY DEPARTMENT BY FUND (ALL YEARS)</b>								
	<b>Gen Fund (debt)</b>	<b>GF (Pay as You Go)</b>	<b>Water / Sewer Enterprise</b>	<b>Chapter 90</b>	<b>State / Federal Program</b>	<b>MSBA</b>	<b>Other Funds</b>	<b>Total funding source</b>
BOH		30,489						<b>30,489</b>
City Clerk		153,500						<b>153,500</b>
COA		179,400						<b>179,400</b>
Con Comm	200,000	45,000						<b>245,000</b>
DPW	4,060,000	1,176,000	13,841,000	6,320,000	21,100,000			<b>46,497,000</b>
Engineering		20,000						<b>20,000</b>
Fire	14,700,000	376,500					410,000	<b>15,486,500</b>
HDCPD Comm		12,500						<b>12,500</b>
ISD		105,000						<b>105,000</b>
IT		533,045						<b>533,045</b>
Library	505,561							<b>505,561</b>
Parks & Rec	2,892,650	683,800					450,000	<b>4,026,450</b>
Planning/WRA		125,000						<b>125,000</b>
Police	135,000	2,196,105						<b>2,331,105</b>
Purchasing		1,400						<b>1,400</b>
Schools	30,456,000	5,194,500				14,800,000		<b>50,450,500</b>
Treas/Coll		61,000						<b>61,000</b>
<b>Grand Total</b>	<b>52,949,211</b>	<b>10,893,239</b>	<b>13,841,000</b>	<b>6,320,000</b>	<b>21,100,000</b>	<b>14,800,000</b>	<b>860,000</b>	<b>120,763,450</b>
<b>% of Total</b>	<b>43.8%</b>	<b>9.0%</b>	<b>11.5%</b>	<b>5.2%</b>	<b>17.5%</b>	<b>12.3%</b>	<b>0.7%</b>	

When considering project requests by asset type, it is clear that the single greatest category of requests is for school facilities (41% of total requests). This includes a \$39 million request for the design and construction of a new school. An additional \$13.6 million (16.2% of total requests) of requests from the School District are for improvements to existing schools and fields. Roads and Sidewalk requests are also substantial due to the two large projects mentioned above (e.g., Montvale Avenue widening and New Boston Street Bridge reconstruction) in addition to the five year total of Chapter 90 funding allocation (approximately \$6.3 million)

<b>CAPITAL REQUESTS BY ASSET TYPE BY YEAR (ALL FUNDS)</b>							
	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Total Project Cost</b>	<b>% of Total</b>
Facilities	794,400	13,173,825	528,825	5,000	5,000	14,507,050	<b>12.0%</b>
Info Tech	541,920	653,086	380,000	170,000	160,000	1,917,971	<b>1.6%</b>
Parks & OS	888,400	1,005,000	618,000	157,000	65,000	2,733,400	<b>2.3%</b>
Roads/Sidewalks	2,474,000	5,864,000	1,264,000	17,764,000	1,264,000	28,630,000	<b>23.7%</b>
School Facs	4,598,000	1,696,500	8,028,000	2,034,000	32,667,000	49,023,500	<b>40.6%</b>
School IT	372,000	520,000	295,000		180,000	1,367,000	<b>1.1%</b>
Sewer	1,000,000	2,200,000	1,000,000	1,014,500	1,014,500	6,229,000	<b>5.2%</b>
Storm Water	135,000	135,000	135,000	135,000	135,000	675,000	<b>0.6%</b>

<b>CAPITAL REQUESTS BY ASSET TYPE BY YEAR (ALL FUNDS)</b>							
	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Total Project Cost</b>	<b>% of Total</b>
Veh/Equip	2,411,489	2,175,135	1,378,747	1,657,784	1,082,374	8,705,529	<b>7.2%</b>
Water	1,420,000	1,570,000	1,320,000	1,332,500	1,332,500	6,975,000	<b>5.8%</b>
<b>Grand Total</b>	<b>14,635,209</b>	<b>28,992,546</b>	<b>14,947,572</b>	<b>24,269,784</b>	<b>37,905,374</b>	<b>120,763,450</b>	<b>100%</b>

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## **Capital Planning Evaluation Criteria**

After reviewing each project request to determine if it was complete and CIP-eligible, the project team then evaluated the proposed projects based upon a series of criteria. The categories included:

- Preserve or enhance City assets – Does the proposed project maintain or improve an existing facility? What is the anticipated useful life of the investment? Does the proposed project replace a piece of equipment needed to provide public services? Is the vehicle beyond its reasonable life? Is the acquisition part of a scheduled replacement plan that will keep vehicles operational and preclude major repair costs?
- Increase efficiency and effectiveness of government – Does the project reduce operating costs (e.g., eliminate costly repairs) or increase the effectiveness of government? Does the project reduce potential legal liability (e.g. repair of a broken sidewalk) or threats to operations (e.g., replacement of a needed street sweeper before it breaks down completely)? Does it improve customer service or provide a new, needed service?
- Be a good steward of public resources – Does the project increase revenues? Are outside grant funds available to cover a portion or all of the cost?
- Specific impacts on operating budget – What types of ongoing savings might be realized from the project? Does the project increase operating costs?

In addition, each project was evaluated to see how it would influence a series of key policy areas. These included:

- Aesthetics / Historic Preservation
- Cultural and Recreational Opportunities
- Economic Growth
- Education
- Environmental Sustainability
- Public Health
- Public Safety

While these criteria were used to differentiate between the merits of the 87 projects, it should be noted that they were not used rigidly in developing the FY2017-FY2021 CIP. At times, projects that received modest scores, predominantly because they did not contribute to the policy areas, but were critically needed – such as purchasing a camera and vehicle that can look inside City sewers - were elevated for consideration in the plan based upon need and resource availability.

## **Resources Available**

The local funding sources will predominantly be used by the City of Woburn to fund the *FY2017-FY2021 Capital Improvement Plan*. Each of these will be discussed in detail below:

- General fund debt and pay-as-you-go
- Water/Sewer enterprise fund debt and pay-as-you go

### ***General Fund Debt and Pay-as-You-Go***

Woburn is well-positioned to significantly increase its annual investment in capital improvements. In fact, over the course of the *FY2017-FY2021 Capital Improvement Plan*, the City will be increasing its general fund capital investment from 3.8% of its general fund operating budget<sup>11</sup> (FY2016) to 5% (FY2021), utilizing its existing and growing revenue base. With this 5% target, as the City's revenues continue to grow in the future, its dollar investment in capital improvements will grow as well.

The planned capital investments are feasible because over a number of years, Woburn has experienced healthy increases in annual revenues – largely due to new growth (e.g., “additional tax revenue generated by new construction, renovations and other increases in the property tax base during a calendar year”<sup>12</sup>). As a result of the City's conservative use of its growing revenue base, it has successfully developed large balances in its free cash and stabilization funds, kept the residential tax rate unchanged and lower than comparison communities, and built up a very large unused tax capacity.

NEW GROWTH HISTORY			
Year	Residential	Comm Ind Personal Prop	Total
2007	600,680	704,387	1,305,067
2008	285,276	936,441	1,221,717
2009	611,141	1,458,362	2,069,503
2010	97,710	700,030	797,740
2011	172,698	1,830,069	2,002,767
2012	158,487	1,839,375	1,997,862
2013	185,263	1,631,999	1,817,262
2014	287,881	1,764,393	2,052,274
2015	524,624	1,900,652	2,425,276
2016	469,811	1,920,111	2,389,922
Average	339,357	1,468,582	1,807,939

In the past 10 years, new growth in Woburn has been in excess of \$1.2 million per year, with the exception of FY2010, when new growth was \$800,000. Even during the height of the great recession, Woburn experienced significant new growth - \$1.2 million in FY2008 and \$2.0 million in FY2009. In FY2014, new growth topped \$2 million and it has stayed there since. The 10 year average for new growth in Woburn is +\$339,000 in the residential property levy and +\$1.47 million in commercial, industrial, and personal property for a combined average of \$1.8 million. Cumulatively, over the 10 year period, the Woburn tax levy has increased by just over \$18 million due to new growth alone.

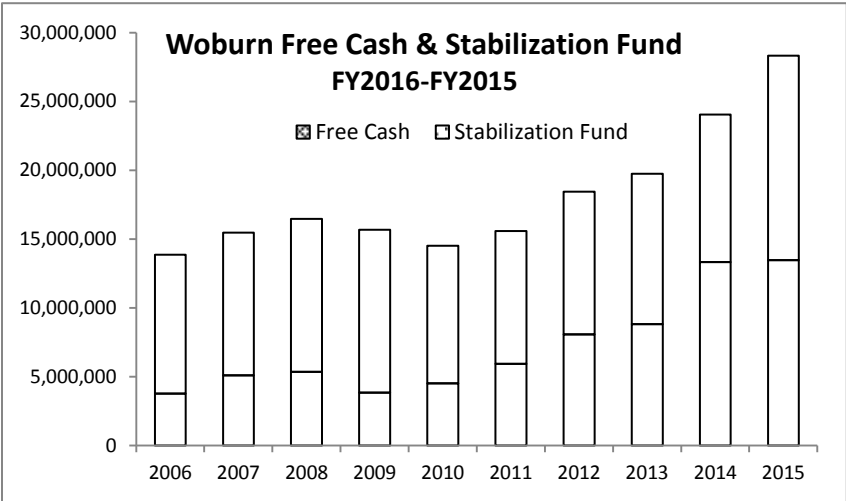
Instead of increasing spending in the operating budget equivalent to the growth in revenues, Woburn has decided to add to its reserve funds. In fact, over the 10 year period from FY 2006 to FY2015, Woburn has nearly doubled its free cash and stabilization fund reserves, with the exception of FY2010 when the stabilization fund was accessed during the immediate aftermath of the Great Recession. However, the economic turnaround in

<sup>11</sup> For the purpose of this calculation, general fund operating budget is the annual budget less enterprise costs.

<sup>12</sup> Massachusetts Department of Revenue, Division of Local Services, Municipal Finance Glossary, May 2008 (see Appendix 8)

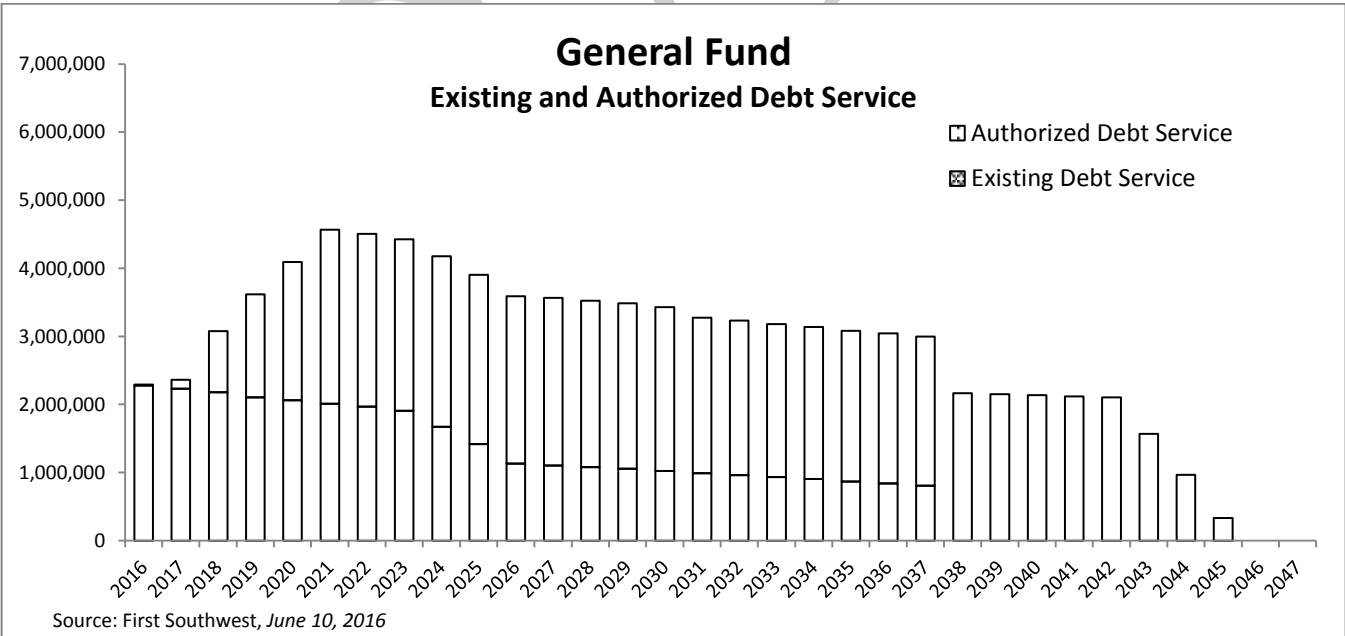


Woburn was quick, and by FY2011, the combined balances were equivalent to those in FY2007 (e.g, approximately \$15.5 million).



Since FY2011, the City Council has added \$5.2 million to the stabilization fund (+54%) and free cash has increased by \$7.5 million (+130%). This is consistent with the City's policy of maintaining a combined stabilization and free cash balance equal to 15% of the current year's budget, a policy that has been well received by the City's bond rating agencies. Projections are that free cash in FY2016 will also be robust. In recent years, in recognition of the strength of Woburn's budget, the City Council has authorized significant

new investments in design and construction of the Hurd-Wyman Elementary School (design authorized in April 2013 and construction in September 2015), the construction of Leland Park (October 2014), and the renovation of and addition to the Woburn Public Library (September 2015). These three projects together represent a \$35 million capital investment that will be repaid over the next thirty years. Beginning primarily in FY2018, the debt service for these new projects will be added to the City's existing long term debt. As can be seen in the graphic below, the existing and authorized estimated debt service payments are anticipated to peak in FY2021 after which they will begin to decline.



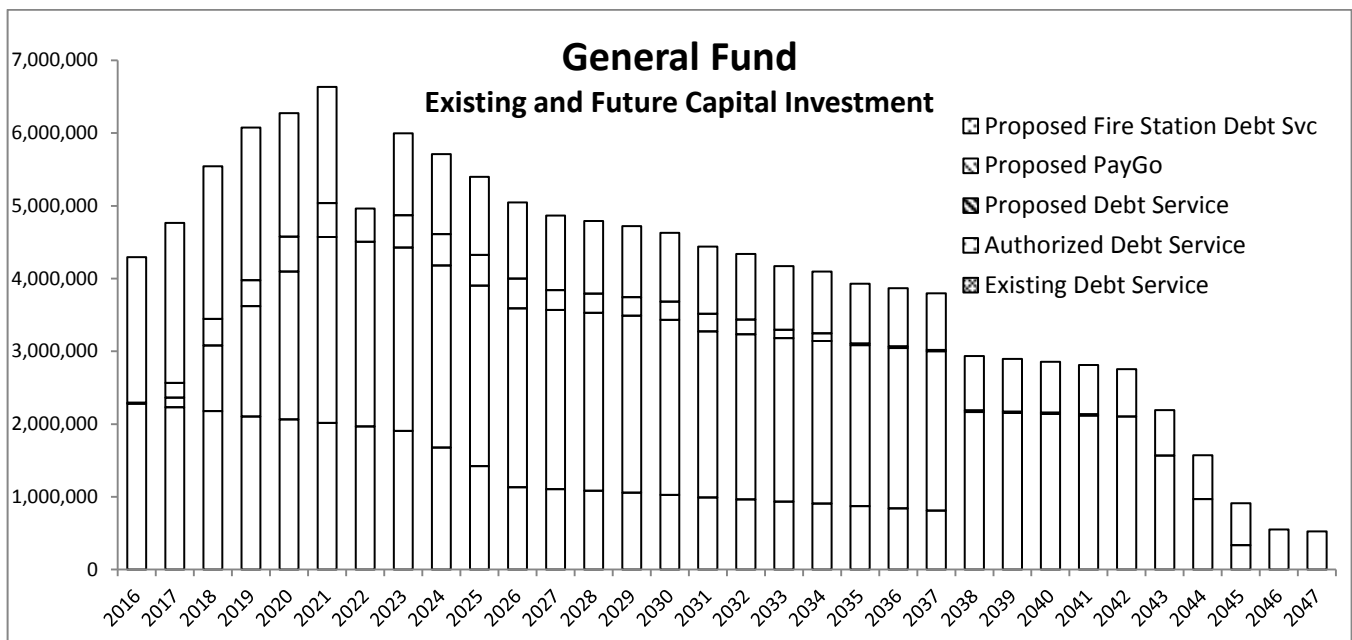
In recognition that the City will be accommodating increases in debt service payments beginning in FY2018, the *FY2017-FY2021 Capital Improvement Plan* focuses on pay as you go capital projects (\$9.7 million over five years) and only incorporates a limited number of projects to be funded by borrowing (\$16.5 million). In addition, debt service for the single largest project in this category - construction of a new fire station in

FY2021 - is not projected to begin until FY2023, thereby keeping the growth in debt service modest between FY2017 and FY2022.

As can be seen below, over the next five years, the City will gradually increase its capital investment from 3.7% of prior year budget (FY2016) to 5% (FY2021). Collectively, this will support \$26.3 million in general fund projects to be funded by a combination of pay as you go capital and borrowing. By establishing a policy for percent of budget to be made available for investment in capital, in future years, when debt service declines the City will be able to redeploy those savings on other needed capital projects. For example, in FY2022, which is outside of this capital plan, if the City maintains its 5% investment, approximately \$1.9 million will be available for pay-as-you-go (this capacity can be seen in the bar chart on the following page where the FY2022 bar drops below FY2021 because that year's pay-as-you-go projects have not yet been identified). Even after debt service on the fire station begins to be paid, between \$1 million and \$2 million will be available for pay as you go capital or other debt service annually if the City maintains its 5% policy.

EXISTING & PROJECTED FUTURE DEBT AS PERCENT OF GENERAL FUND OPERATING BUDGET								
Fiscal Year	Existing +Authorized GF Debt Service	FY2017-FY2021 CIP			GRAND TOTAL	Capital Inv as % of GF Op Budget	\$ Increase from Prior Yr	Proj Incr in New Growth (Avg +\$1.8m/yr)
		Proposed Debt (est)	Proposed Pay Go	New Fire Station (\$12.5m)				
2016	2,293,043		2,000,000		4,293,043	3.7%		0
2017	2,362,624	203,600	2,200,000		4,766,224	4.0%	473,181	1,300,000
2018	3,078,179	367,600	2,100,000		5,545,779	4.5%	779,555	1,300,000
2019	3,620,070	358,200	2,100,000		6,078,270	4.8%	532,491	1,300,000
2020	4,095,695	479,100	1,700,000		6,274,795	4.9%	196,525	1,300,000
2021	4,569,958	467,200	1,600,000		6,637,158	5.0%	362,363	1,300,000
2022	4,507,332	454,750	TBD*		4,962,082	3.6%	-1,675,076	1,300,000
2023	4,427,659	442,850	TBD*	1,125,000	5,995,509	4.2%	1,033,427	1,300,000

\*Amount of pay as you go capital for FY2022 and FY2023 to be determined in future capital plans. However, to remain at 5% goal, \$1.9 million will be available in FY2022 and \$1 million in FY2023.



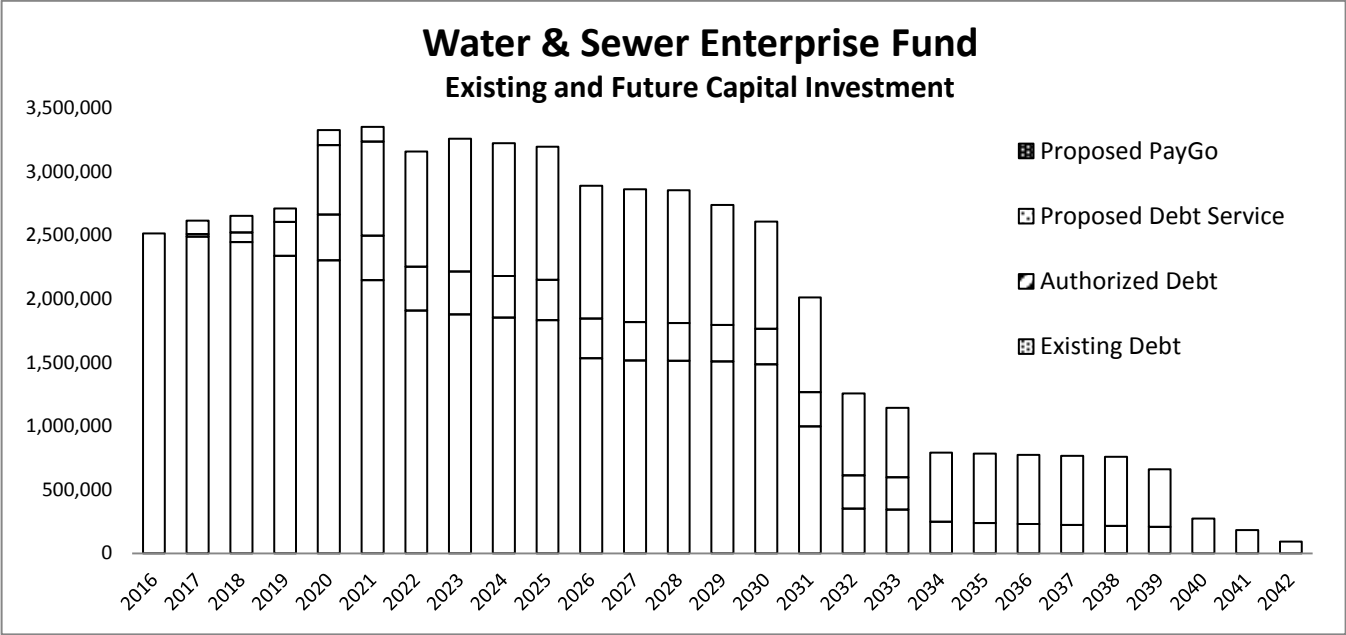
### Water and Sewer Enterprise Fund Debt and Pay-as-You-Go

The City of Woburn charges users fees that are designed to cover annual operating and capital costs needed to provide water and sanitary sewer services; these costs include debt service and pay as you capital. In FY2016, the City was responsible for paying just under \$2.5 million in debt service for a series of improvements to its water distribution system, including water lines and the treatment plant, and approximately \$59,000 for improvements to the sewer system. In addition, the City Council has also approved approximately \$4 million in water improvements that will begin to be paid back in FY2020. Despite these significant figures, continued investments in the water and sewer system are needed, as evidenced by the approximately \$13.4 million in project requests.

In this *FY2017-FY2021 Capital Improvement Plan*, the City of Woburn is scheduled to invest \$13.4 million in water and sewer system improvements, including continuing efforts to replace water lines and address storm water inflow and infiltration into the sewer system (known as “I/I”). This investment includes \$12.8 million debt funded projects, supported predominantly by low or no interest State loans, and \$575,000 in pay-as-you-go capital. The MWRA’s I/I program in particular offers an exceptionally low 0% interest rate and a 10 year term (in FY2015-FY2016, the City benefited from 75% loan forgiveness, but it has used up its allocation under this program. This capital plan projects full repayment over 10 years, as it is not known if MWRA may ever be able to expand its loan forgiveness program.). As noted above, even if repayment is required, rate payers will benefit from this investment by reducing the amount stormwater entering the sewer system - absent I/I efforts, these treatment costs would need to be paid in perpetuity.

The debt service and pay as you go investment schedule can be seen in the graphic below and in Appendix 7<sup>13</sup>. Specific projects can be seen in the Projects by Funding Source and Projects by Department tables below.

<sup>13</sup> The projected debt service schedule assumes that the City will take advantage of the State’s Clean Water and Drinking Water revolving funds which offer interest rates of 2% over a 20 year term and the MWRA’s no interest loan program with a 10 year term for I/I. Should the MWRA extend loan forgiveness, these figures could go down.



## FY2017-FY2021 CIP PROJECT LISTING

Despite healthy general fund resources available to the City of Woburn, difficult choices still needed to be made in the development of the *FY2017-FY2021 Capital Improvement Plan*. Many project requests that had merit could not be included, and others had to be reduced to align with funding availability.

Overall, the CIP allocates funds to 76 projects, totaling almost \$70 million across all five years of the plan and all funds. This represents almost 60% of the total value of the original project requests. With the exception of school facilities, greater than 50% of project requests were approved by dollar amount. The school facility funding rate is so low (10.4%) due to the fact that the construction of the proposed new school has been planned for FY2022, which is outside of the FY2017-FY2021 CIP schedule. However, design of the new school is scheduled for funding in FY2021 (see PS173 below).

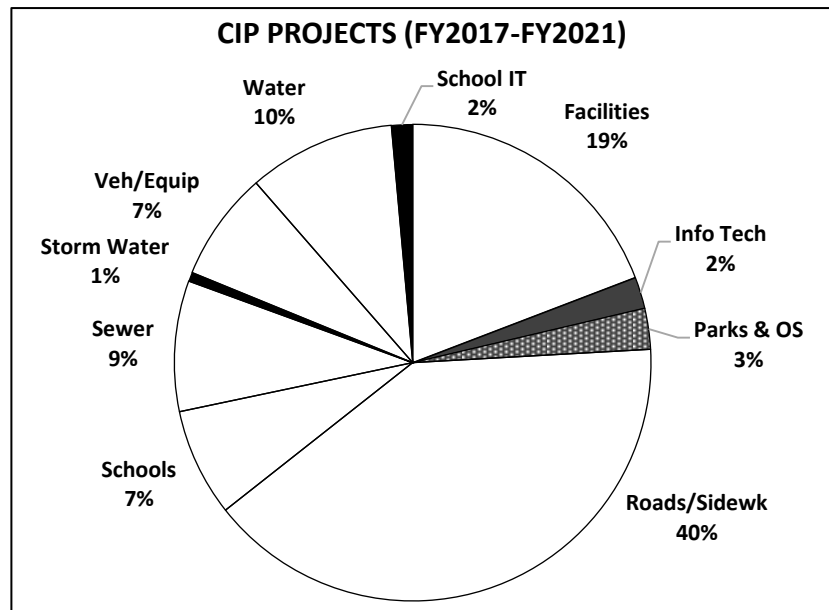
<b>FUNDED VS. REQUESTED AMOUNT BY ASSET TYPE (FY2017-FY2021)</b>				
	<b>Total Requested</b>	<b>Total Funded</b>	<b>% of Requested</b>	<b>Number of Projects Funded</b>
City Facilities	14,507,050	13,409,150	92.4%	6
Info Technology	1,917,971	1,500,062	78.2%	11
Parks & Open Space	2,733,400	1,940,000	71.0%	6
Roads/Sidewalks	28,630,000	28,045,000	98.3%	5
School Facilities	49,023,500	5,115,000	10.4%	12
School IT	1,367,000	1,000,000	73.2%	1
Sewer	6,229,000	6,200,000	99.5%	2
Storm Water	675,000	425,000	63.0%	2
Vehicles/Equipment	8,705,529	5,182,960	59.5%	26
Water	6,975,000	6,975,000	100.0%	5
<b>Grand Total</b>	<b>120,763,450</b>	<b>69,792,172</b>	<b>57.9%</b>	<b>76</b>

A number of sizeable projects are scheduled in the *FY2017-FY2021 Capital Improvement Plan*. Those with a value of at least \$1 million include:

- \$1 million for District-wide school technology upgrades;
- \$1 million to design a new elementary school to replace Altavesta and Linscott/Rumford;
- \$1.2 million to replace the sewer line at Ellis Street;
- \$1.2 million for purchase of a new ladder truck for the Fire Department;
- \$4.85 million to widen Montvale Avenue;
- \$5.89 million for annual roadway repair and maintenance;
- \$6.25 million for water main repair and valve and hydrant replacement;
- \$12.5 million for a new fire station; and,
- \$16.9 million for the New Boston Street Bridge reconstruction.

More modest projects include \$8,000 for a new leaf machine for the Park/Recreation Department (REC14), \$20,000 to replace the auditorium doors at Kennedy Middle School (PS96), and \$20,000 for a light tower at Leland Park (REC7).

These capital investments will have a direct impact on the lives of Woburn residents, students, businesses, and visitors. The plan prioritizes public safety and public health, and many projects will have significant impacts in these areas. Projects will ensure reliable water/sewer infrastructure that is in compliance with health and environmental requirements, improve teacher effectiveness and student learning, increase recreational opportunities for residents, and upgrade and maintain public safety facilities, improve the safety of staff and the residents they serve.



Across all asset types, the most significant spending is on road and sidewalk projects (more than \$28 million), driven by the New Boston Street Bridge reconstruction, annual roadway maintenance and repair, and the widening of Montvale Avenue. These projects represent 40% of the total plan investment across all five years. The vast majority of roadway work is funded by the State, either as the City's Chapter 90 allocation or through the Transportation Improvement Plan (TIP). Investments in facilities represent the next most significant category at \$13.41 million (19%), fueled by the design and construction of a new fire station.

<b>PROJECT VALUE BY FUNDING SOURCE (FY2017-FY2021)</b>		
<b>Funding Type</b>	<b>Amount Funded</b>	<b>% of Total</b>
Gen Fund (debt)	16,650,000	23.9%
GF (Pay as You Go)	9,676,522	13.9%
Water / Sewer Enterprise	13,375,000	19.2%
Chapter 90	6,320,000	9.1%
MSBA	500,000	0.7%
State / Federal Program	21,550,000	30.9%
Other	1,720,650	2.5%
<b>Total</b>	<b>69,792,172</b>	<b>100.0%</b>

As described above, the projects included in the CIP will be funded through a mix of funding sources, including general fund debt and pay-as-you-go, water and sewer enterprise funds, state grants, etc. A total of 37.7% of projects will be paid for through the City's general fund, whether this be as a result of borrowing or as a pay as you go project and 19% of projects will be funded by the City's water/sewer enterprise fund. The balance of projects (43.2% of total) will be funded from non-local sources. This means that state, federal, and other sources will contribute \$30.2 million of funding for projects in the capital plan. The New Boston Street Bridge reconstruction and the Montvale Avenue widening projects are examples where relatively modest City investments are

leveraged many times over – for each \$1 invested by the City in the New Boston Street Bridge project, the State will provide \$41.

The table below shows the projects to be funded by the general fund through borrowing and pay-as-you-go funding for each of the five years of the plan. As can be seen from the table below, the greatest amount of borrowing is expected in FY2021 where the \$12.1 million represents the construction cost for the new fire

station (\$400,000 in design work is budgeted in FY2018). Other than this, the amount to be borrowed is relatively modest. Instead, a large number of projects will be funded through pay as you go capital, thereby saving taxpayer dollars by not incurring interest expenses.

<b>GENERAL FUND PROJECTS (FY2017-FY2021)</b>			
	<b>Debt-Funded</b>	<b>Pay Go</b>	<b>Total</b>
FY2017	1,600,000	2,200,000	3,800,000
FY2018	1,700,000	2,094,522	3,794,522
FY2019	0	2,094,000	2,094,000
FY2020	1,250,000	1,688,000	2,938,000
FY2021	12,100,000	1,600,000	13,700,000
<b>5 Yr Total</b>	<b>16,650,000</b>	<b>9,676,522</b>	<b>26,326,522</b>

Projected annual debt service from the new projects is expected to be relatively low, ranging from an estimated \$203,600 in FY2017 to \$467,200 in FY2021 (see Appendix 6). Depending on when the City authorizes the borrowing and the type of financial vehicle used, actual payments can be lower than presently estimated.



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**PROJECTS BY DEPARTMENT**

**PROJECTS BY FUNDING SOURCE (FY2017-FY2021)-**

<b>GENERAL FUND DEBT FUNDED PROJECTS</b>								
<b>Proj #</b>	<b>Project Name</b>	<b><u>FY2017</u></b>	<b><u>FY2018</u></b>	<b><u>FY2019</u></b>	<b><u>FY2020</u></b>	<b><u>FY2021</u></b>	<b><u>Total</u></b>	<b><u>Notes</u></b>
FD2	Replace Ladder Truck	1,200,000					<b>1,200,000</b>	
FD7	Construct new Fire Station		400,000			12,100,000	<b>12,500,000</b>	
PS38	Construct restrooms for grand stand at High School				500,000		<b>500,000</b>	
PS55	Repair exterior walls gym and rink at Joyce Middle School		800,000				<b>800,000</b>	
PS167	Replace the Aeon roof top units at White Elementary School	400,000					<b>400,000</b>	
REC26	Fleming Field Improvements and Additions		500,000				<b>500,000</b>	See also Other Grants & Funds
REC3	Upgrade Green Street Pool				750,000		<b>750,000</b>	
	<b>Sub-Total</b>	<b>1,600,000</b>	<b>1,700,000</b>	<b>0</b>	<b>1,250,000</b>	<b>12,100,000</b>	<b>16,650,000</b>	

<b>GENERAL FUND PAY AS YOU GO PROJECTS</b>								
<b>Proj #</b>	<b>Project Name</b>	<b><u>FY2017</u></b>	<b><u>FY2018</u></b>	<b><u>FY2019</u></b>	<b><u>FY2020</u></b>	<b><u>FY2021</u></b>	<b><u>Total</u></b>	<b><u>Notes</u></b>
BOH1	Board of Health vehicle	30,460					<b>30,460</b>	
COA5	Replace Senior Center heating system		60,000				<b>60,000</b>	
COA6	Repair/replace Senior Center roof and kitchen Ceiling	53,500					<b>53,500</b>	
DPW1	Replace 2002 International Sewer Vactor	425,000					<b>425,000</b>	
DPW10	Replace two 2006 Chevy Silverado 3/4 ton dumps		45,000		45,000		<b>90,000</b>	
DPW13	Replace 2000 International catch basin truck, with plow				190,000		<b>190,000</b>	
DPW15	Replace 2009 John Deere Back hoe			150,000			<b>150,000</b>	
DPW27	Drainage stream maintenance	50,000	50,000	50,000	50,000	50,000	<b>250,000</b>	
DPW3	Replace (2) 1997 6-wheel dumps			190,000	190,000		<b>380,000</b>	
DPW34	Purchase and install street maintenance software and consulting support	40,000	40,000				<b>80,000</b>	
DPW38	Purchase and install intelligent roadway monitoring system			80,000	40,000		<b>120,000</b>	

## PROJECTS BY DEPARTMENT

GENERAL FUND PAY AS YOU GO PROJECTS								
Proj #	Project Name	FY2017	FY2018	FY2019	FY2020	FY2021	Total	Notes
DPW4	Replace 3 pick-up trucks	45,000		45,000		45,000	135,000	
DPW40	Montvale Avenue widening	250,000					250,000	See also State/Federal Programs
DPW41	New Boston Street Bridge reconstruction			400,000			400,000	See also State/Federal Programs
DPW43	Replace Bobcat mini-excavator		80,000				80,000	
DPW44	Replace 2007 Trackless MTV tractor			170,000			170,000	
DPW51	Replace 2008 Pelican street sweeper				200,000		200,000	
DPW6	Replace 1999 Bobcat Loader skid steer		50,000				50,000	
FD11	Upgrade Self Contained Breathing Apparatus	37,600	32,900				70,500	
FD12	Replace Turnout Gear		20,000	20,000	20,000	20,000	80,000	
IT1	City Hall Cisco Core Switch Replacement		208,045				208,045	
IT2	Scheduled replacement of IT hardware at City Hall, DPW, and PD	50,000	50,000	50,000	50,000	50,000	250,000	
LIB1	Library RFID system	27,475	381,577				409,052	
PD1	Planned replacement of marked cruisers	168,000	168,000	168,000	168,000	168,000	840,000	
PD12	Gun replacement for PD			100,000			100,000	
PD13	Upgrade PD phone system	82,965					82,965	
PD3	Replace Motorola portables	52,000	52,000	52,000	52,000	52,000	260,000	
PD4	Upgrade PD security			20,000	40,000		60,000	
PD6	Replace interview room equipment			30,000			30,000	
PD7	Ballistic vest replacement			10,000	20,000	10,000	40,000	
PD9	Evidence room upgrades	15,000	15,000				30,000	
PS170	Add additional parking, need drop off and pick up lane at White Elementary School				110,000		110,000	
PS173	Construct a new Elementary School to replace Altavesta and Linscott/Rumford.					500,000	500,000	See also State/Federal Programs
PS174	Make safety and security improvements at Woburn public schools	185,000	165,000		50,000		400,000	
PS175	Upgrade technology at Woburn public schools	200,000	200,000	200,000	200,000	200,000	1,000,000	
PS176	Replace intercoms and clock systems at Woburn public schools	150,000					150,000	
PS177	Make heating and cooling improvements at Woburn public schools	70,000	120,000	135,000	130,000	105,000	560,000	
PS42	Replace turf on game field at High School					400,000	400,000	See also Other Grants

## PROJECTS BY DEPARTMENT

GENERAL FUND PAY AS YOU GO PROJECTS								
Proj #	Project Name	FY2017	FY2018	FY2019	FY2020	FY2021	Total	Notes
PS85	Replace single pane steel sash windows at Kennedy Middle School	125,000					125,000	
PS93	Upgrade electrical throughout at Kennedy Middle School		250,000				250,000	
PS96	Replace Auditorium doors at Kennedy Middle School			20,000			20,000	
REC1	Library Park electrical work	30,000					30,000	
REC11	Upgrade playground at Ferullo Park				60,000		60,000	
REC14	Replace Leaf machine	8,000					8,000	
REC15	Upgrade ¾ ton utility body truck with 8 foot plow		44,000				44,000	
REC19	Replace 1 ton dump truck with plow			44,000			44,000	
REC20	Replace two 0 turn rotary mowers			15,000	15,000		30,000	
REC21	Replace 2 high top equipment trailers				30,000		30,000	
REC24	Replace 4-wheel drive utility tractor / bucket loader		28,000		28,000		56,000	
REC27	Replace chiller + upgrade mechanical room at O'Brien Rink	30,000					30,000	
REC4	Upgrade Leland park bathrooms			125,000			125,000	
REC7	Upgrade light towers at Leland Park			20,000			20,000	
REC8	Update pool filter house at North Woburn Pool		35,000				35,000	
WRA2	City-wide Truck Traffic and Truck Exclusion Study	75,000					75,000	
	<b>Sub-Total</b>	<b>2,200,000</b>	<b>2,094,522</b>	<b>2,094,000</b>	<b>1,688,000</b>	<b>1,600,000</b>	<b>9,676,522</b>	

## PROJECTS BY DEPARTMENT

WATER AND SEWER DEBT FUNDED PROJECTS								
Proj #	Project Name	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>Total</u>	<u>Notes</u>
DPW20	Clean and reline water main; valve and hydrant replacement	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	6,250,000	
DPW21	Replace 1930s electrical lines that service wells	100,000	100,000				200,000	
DPW26	Reduce Inflow and Infiltration (I/I) into sewer system	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000	
DPW50	Replace Meter 200		150,000				150,000	
DPW54	Ellis Street Sewer Lines		1,200,000				1,200,000	
	<b>Sub-Total</b>	<b>2,350,000</b>	<b>3,700,000</b>	<b>2,250,000</b>	<b>2,250,000</b>	<b>2,250,000</b>	<b>12,800,000</b>	

WATER AND SEWER PAY AS YOU GO PROJECTS								
Proj #	Project Name	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>Total</u>	
DPW22	Add water meters and backflow devices	70,000	70,000	70,000	70,000	70,000	350,000	
DPW24	DPW SCADA system computer upgrades		25,000				25,000	
DPW25	Roof replacement on (5) municipal wells; HVAC upgrades				12,500	12,500	25,000	
DPW29	Compliance with MS4 Permit requirements	35,000	35,000	35,000	35,000	35,000	175,000	
	<b>Sub-Total</b>	<b>105,000</b>	<b>130,000</b>	<b>105,000</b>	<b>117,500</b>	<b>117,500</b>	<b>575,000</b>	

## PROJECTS BY DEPARTMENT

FEDERAL, STATE, OR OTHER GRANT FUNDED PROJECTS								
Proj #	Project Name	FY2017	FY2018	FY2019	FY2020	FY2021	Total	Notes
DPW35	Perform annual roadway repair and maintenance	1,049,000	1,044,000	1,164,000	1,264,000	1,264,000	5,885,000	Chapter 90
DPW36	Upgrade 4 traffic signals on Main St.	215,000	220,000				435,000	Chapter 90
DPW37	Purchase intelligent traffic system software			100,000			100,000	Chapter 90 funds
DPW40	Montvale Ave widening		4,600,000				4,600,000	TIP, See also GF PayGo
DPW41	New Boston St Bridge reconstruction					16,500,000	16,500,000	TIP, See also GF PayGo
PS173	Design a new elementary school to replace Altavesta & Linscott/Rumford					500,000	500,000	MSBA, See also GF PayGo
REC26	Fleming Field Improvements and Additions		450,000				450,000	PARC Grant. See also GF Debt-Funded Proj
	<b>Sub-Total</b>	<b>1,514,000</b>	<b>6,314,000</b>	<b>1,264,000</b>	<b>1,264,000</b>	<b>18,764,000</b>	<b>28,470,000</b>	

OTHER GRANTS & FUNDS								
Proj #	Project Name	FY2017	FY2018	FY2019	FY2020	FY2021	Total	Notes
FD1	Replace 2-ambulances		205,000		205,000		410,000	Ambulance revenue
PD10	Police Station radio system improvements		135,000				135,000	Drug seizure funds
PD2	Replace unmarked police cruisers.		35,000		35,000		70,000	Drug seizure funds
PS42	Replace turf on game field at High School					400,000	400,000	User fees or School Enterprise Fund; See also GF PayGo
REC27	Replace chiller + upgrade mechanical room at O'Brien Rink		502,825	202,825			705,650	Woburn Youth Hockey. See also GF PayGo
	<b>Sub-Total</b>	<b>0</b>	<b>877,825</b>	<b>202,825</b>	<b>240,000</b>	<b>400,000</b>	<b>1,720,650</b>	

	FY2017	FY2018	FY2019	FY2020	FY2021	Total
<b>GRAND TOTAL</b>	<b>7,519,000</b>	<b>14,816,347</b>	<b>5,915,825</b>	<b>6,809,500</b>	<b>34,731,500</b>	<b>69,892,172</b>

**PROJECTS BY DEPARTMENT**

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**PROJECTS BY DEPARTMENT**

**PROJECTS BY DEPARTMENT (FY2017-FY2021)**

Proj #	Project Name	Project Description	Gen Fund (debt)	GF (Pay as You Go)	Water / Sewer Enterprise	Chapter 90	MSBA	State / Federal Grants	Other	Total Project Cost
<b>BOARD OF HEALTH</b>										
BOH1	Board of Health vehicle	Purchase a new Eco-Friendly Ford F-150XL to replace a 2002 pick-up truck currently used by the Health Agent.		30,460						30,460
<b>COUNCIL ON AGING</b>										
COA5	Replace Senior Center heating system	Repair and/or replace the Senior Center Heating systems for efficiency and reliable comfort.		60,000						60,000
COA6	Repair/replace Senior Center roof and kitchen Ceiling	Repair and/or replace the Senior Center roof and ceiling to prevent further ceiling deterioration due to leaking.		53,500						53,500
<b>DEPARTMENT OF PUBLIC WORKS</b>										
DPW1	Replace 2002 International Sewer Vector	Replace a 2002 Sewer Vector with rodding attachment with a similar new piece of equipment. The sewer vector is a necessary emergency piece of equipment needed to correct sewer backups in the most timely manner, mitigating damage and health risks.		425,000						425,000
DPW3	Replace (2) 1997 6-wheel dumps	Replace 2 1997 6-wheel dump truck used for snow removal and highway work.		380,000						380,000
DPW4	Replace 3 pick-up trucks (2000, 2-2002)	Replace 3 pickup trucks with Chevy ¾ ton pickups with snow packages. These trucks are used every day for the water dept and for trash, and are used in the winter for snow removal.		135,000						135,000
DPW10	Replace two 2006 Chevy Silverado 3/4 ton dump	Replace two 2006 Chevy Silverado 3/4 ton dump trucks with new, including a utility body and cabinet for equipment. These trucks are used by the highway foreman and the tree department, to haul necessary equipment.		90,000						90,000
DPW13	Replace 2000 International catch basin	Replace a 2000 International Catch Basin truck with similar, complete with plow. This truck is used to clean out catch basin		190,000						190,000



**PROJECTS BY DEPARTMENT**

Proj #	Project Name	Project Description	Gen Fund (debt)	GF (Pay as You Go)	Water / Sewer Enterprise	Chapter 90	MSBA	State / Federal Grants	Other	Total Project Cost
	truck, with plow	grates at side of road and prevent flooding.								
DPW15	Replace 2009 John Deere Back hoe	Replace a 2009 Backhoe. This truck is used every day for water/sewer work, tree removal, and snow removal in the winter.		150,000						150,000
DPW20	Clean and reline water main; valve and hydrant replacement	Clean and reline the water main and perform valve and hydrant replacement to offer environmental and public health benefits and an annual cost savings associated with saving conservation.			6,250,000					6,250,000
DPW21	Replace 1930s electrical lines that service wells	Upgrade the above ground electrical lines that service the wells replacing them with diamond fiber to eliminate the risk of weather-related outages.			200,000					200,000
DPW22	Add water meters and backflow devices	Add water meters for approximately 70 municipal irrigability-irrigation points to monitor water levels and conserve water usage. Install rain gauges, and back flow devices that will prevent back syphonage to protect the water quality.			350,000					350,000
DPW24	DPW SCADA system computer upgrades	Replace and upgrade the DPW computer system used to run the supervisory control and data acquisition system (SCADA) that monitors all functions of the city's water and sewer system.			25,000					25,000
DPW25	Roof replacement and HVAC upgrades on (5) municipal wells	Replace the roofs on 5 municipal wells over the course of five years, and perform necessary HVAC upgrades.			25,000					25,000
DPW26	Reduce Inflow and Infiltration (I/I) into sewer system	Complete the required Inflow and Infiltration (I/I) work over the next five years to mitigate flooding and public health risks by reducing sewer system cracks and leaks. A cost-effective analysis prioritizes the East side.			5,000,000					5,000,000
DPW27	Drainage stream maintenance	Clean 13 miles of streams, including 19 different streams, to prevent flooding in areas throughout the city that currently do flood. This is an ongoing necessity, approved by the Department of		250,000						250,000

**PROJECTS BY DEPARTMENT**

Proj #	Project Name	Project Description	Gen Fund (debt)	GF (Pay as You Go)	Water / Sewer Enterprise	Chapter 90	MSBA	State / Federal Grants	Other	Total Project Cost
		Environmental Protection.								
DPW29	Compliance with MS4 Permit requirements	Perform storm water management as mandated by the EPA to maintain the City's storm water permit. This work includes conservation efforts, monitoring water usage, and working to eliminate inflow and infiltration.			175,000					175,000
DPW34	Purchase and install street maintenance software and consulting support	Purchase and install street maintenance software to more efficiently and cost-effectively plan for street and infrastructure maintenance and repairs.		80,000						80,000
DPW35	Perform annual roadway repair and maintenance	Perform annual roadway repair and maintenance as needed, prioritizing roadways at the greatest level of disrepair that affect the most residents. Ongoing repair and maintenance is needed to improve roadways and eliminate the need for costlier repairs at a later date. Coordinate work with water/sewer and utility repairs.				5,785,000				5,785,000
DPW36	Upgrade 4 traffic signals on Main St.	Upgrade 4 obsolete traffic signals on Main St., add new intelligent controls, camera detection and Ethernet capability. This will allow for more reliability and better traffic flow.				435,000				435,000
DPW37	Purchase intelligent traffic system software	Purchase of software that will improve signal timing and traffic flow by gathering information from in-street monitors.				100,000				100,000
DPW38	Purchase and install intelligent roadway monitoring system	Improve traffic flow and decrease wait times by purchasing and installing SPR switches and associated software. SPR switches and software will allow the city to better align traffic signals with traffic patterns by monitoring intersections and traffic counts.		120,000						120,000
DPW40	Montvale Ave widening	Widen Montvale Avenue to better accommodate present level of traffic.		250,000				4,600,000		4,850,000
DPW41	New Boston St Bridge	Reconstruct the New Boston Street Bridge to provide more direct routes to a		400,000				16,500,000		16,900,000

### PROJECTS BY DEPARTMENT

Proj #	Project Name	Project Description	Gen Fund (debt)	GF (Pay as You Go)	Water / Sewer Enterprise	Chapter 90	MSBA	State / Federal Grants	Other	Total Project Cost
	reconstruction	growing commercial district and allow for alternative roadways to major highways.								
DPW43	Replace Bobcat mini-excavator	Replace a 2007 Bobcat mini-excavator with a similar new vehicle. This truck helps with stream maintenance and water/sewer main breaks.		80,000						80,000
DPW44	Replace 2007 Trackless MTV tractor	Replace a 2007 Trackless MTV tractor with a similar new vehicle. This tractor is used year-round as a sidewalk tractor for cleaning and brush maintenance, and plowing and mowing.		170,000						170,000
DPW50	Replace Meter 200	Replace meter 200 at the corner of Washington and Montvale to eliminate leaking.			150,000					150,000
DPW51	Replace 2008 Pelican street sweeper	Replace a 2008 Pelican Street Sweeper with a similar new vehicle. This sweeper is one of a fleet of two that are used to meet the City's storm water requirements by sweeping all City streets twice per year.		200,000						200,000
DPW54	Ellis Street Sewer replacement	Design and rehabilitate the Sylvania Interceptor Sewer Trunk Line on Ellis Street, Pleasant Street and Water Street by removing infiltration from the sanitary sewer system, repairing structural deficiencies, and sealing cross connections between the sewer and drainage systems. This work will eliminate possible structural failure of a major sewer interceptor that services a large portion of the city.			1,200,000					1,200,000
DPW6	Replace 1999 Bobcat Loader skid steer	Replace a 1999 Bobcat Loader skid steer with similar, new.		50,000						50,000
<b>FIRE DEPARTMENT</b>										
FD1	Replace 2-ambulances	Purchase two new ambulances, one at a time, to replace a underpowered 2007 and aging 2012.							410,000	410,000
FD2	Replace Ladder Truck	Buy a new ladder to replace a structurally aging one. Ladders are critical to Woburn,	1,200,000							1,200,000

## PROJECTS BY DEPARTMENT

Proj #	Project Name	Project Description	Gen Fund (debt)	GF (Pay as You Go)	Water / Sewer Enterprise	Chapter 90	MSBA	State / Federal Grants	Other	Total Project Cost
		with many taller apartment buildings.								
FD7	Construct new Fire Station	Design and build a new Central Fire Station to replace (2) older, out-modeled stations; Central Square Station (1880) and the 907 Main Street Station (1960s). The new station will include sufficient drive-through bays, offices for administration and training and space to simulate training rescues, enhanced living quarters, and space necessary for equipment storage and maintenance construction.	12,500,000							12,500,000
FD11	Upgrade Self Contained Breathing Apparatus	Purchase fifteen new SCBAs (breathing apparatus for firefighters). Inventory needs to be increased to adequately supply current firefighter staff, and to update older equipment with safer units. The new units are equipped with an automatic PASS device that initiates an alarm and light beacon in the event a firefighter stops moving.		70,500						70,500
FD12	Replace Turnout Gear	Buy ten sets of turnout gear per year: jacket, pants and boots outerwear, to replace older sets as recommended by the NFPA.		80,000						80,000
<b>INFORMATION TECHNOLOGY</b>										
IT1	City Hall Cisco Core Switch Replacement	Replace existing Cisco switches that are no longer supported, with new to increase throughput to up to 10Gb and maintain manufacturer support. All network services (email, MUNIS, File & Print, Internet) are dependent on these switches for connectivity.		208,045						208,045
IT2	Scheduled replacement of IT hardware at City Hall, DPW, and PD	Annually replace a portion of aging department technology including computers and software, copiers and printers. This equipment has a known life-span and needs to be replaced periodically to allow for departments to perform their necessary functions and		250,000						250,000

## PROJECTS BY DEPARTMENT

Proj #	Project Name	Project Description	Gen Fund (debt)	GF (Pay as You Go)	Water / Sewer Enterprise	Chapter 90	MSBA	State / Federal Grants	Other	Total Project Cost
		service City residents effectively.								
<b>LIBRARY DEPARTMENT</b>										
LIB1	Library RFID system	RFID is radio frequency identification, and, unlike a barcode, an RFID reader can detect a tag that is in range of the reader. Each tag can carry much more information than a barcode as well. RFID tags in library materials greatly reduce wait time for circulation and cataloging of materials. RFID gates, pads, self-checks, and automated sorting machines will be installed, as well as RFID tags being inserted in every item in the collection.	0	409,052						409,052
<b>POLICE DEPARTMENT</b>										
PD1	Planned replacement of marked cruisers	Replace a portion of department's marked cruiser fleet annually, to ensure a fully functioning fleet. The fleet includes 12 marked vehicles, each with a lifespan of 3-4 years. Project calls for replacement of 3 per year.		840,000						840,000
PD2	Replace unmarked police cruisers.	Replace two unmarked police cruisers.							70,000	70,000
PD3	Replace Motorola portables	Replace older Police Department Motorola Portable radios in a staggered cycle to ensure an adequate supply (125) of fully functioning radios, which are essential to the safety of the City and its officers.		260,000						260,000
PD4	Upgrade PD security	Upgrade the PD security system which is 27 years old, adding cameras to the system and keyless entry.		60,000						60,000
PD6	Replace interview room equipment	Replace aging interviewing equipment in Police Station interviewing room, to ensure each suspect interview is recorded as necessary by law.		30,000						30,000
PD7	Ballistic vest replacement	Replace ballistic vests to ensure there is adequate amount and all vest are fully functional. The need is for 60 to be replaced immediately and then stagger at		40,000						40,000

## PROJECTS BY DEPARTMENT

Proj #	Project Name	Project Description	Gen Fund (debt)	GF (Pay as You Go)	Water / Sewer Enterprise	Chapter 90	MSBA	State / Federal Grants	Other	Total Project Cost
		10 each per year. These deteriorate with age.								
PD9	Evidence room upgrades	Improve evidence storage system by installing moveable storage shelves to allow for more proper storage in the limited space provide in the small evidence room.		30,000						30,000
PD10	Police Station radio system improvements	Install five microwave dishes at different sites to eliminate the need for phone lines.	0						135,000	135,000
PD12	Gun replacement for PD	Replace police guns so that they do not exceed expected life of 7-8 years.		100,000						100,000
PD13	Upgrade PD phone system	Upgrade the obsolete PD phone system, adding redial and caller id capabilities. This will allow for build in redundancy with the City Hall system.		82,965						82,965
<b>PUBLIC SCHOOLS</b>										
PS38	Construct restrooms for grand stand at High School	Construct restrooms for the High School grand stand as per State requirements.	500,000							500,000
PS42	Replace turf on game field at High School	Replace the aging turf on the High School game field with similar, new.		400,000					400,000	800,000
PS55	Repair exterior walls gym and rink at Joyce Middle School	Design and construct repairs to the exterior walls in the gym and rink at the Joyce Middle School, facing the block with metal to reinforce blocks that have been structurally compromised by water from roof leaks.	800,000							800,000
PS85	Replace single pane steel sash windows at Kennedy Middle School	Replace the single panel steel sash windows in the common spaces (café and hallways) in the Kennedy Middle School so that a comfortable temperature can be maintained in the school, and heating costs can be reduced.	0	125,000			TBD			125,000
PS93	Upgrade electrical throughout at	Update the aging electrical system throughout the Kennedy Middle School, including new panels to allow for the	0	250,000						250,000

**PROJECTS BY DEPARTMENT**

Proj #	Project Name	Project Description	Gen Fund (debt)	GF (Pay as You Go)	Water / Sewer Enterprise	Chapter 90	MSBA	State / Federal Grants	Other	Total Project Cost
	Kennedy Middle School	utilization of updated technology.								
PS96	Replace Auditorium doors at Kennedy Middle School	Upgrade three remaining sets of auditorium doors at the Kennedy Middle School with a 36" door and 24" door to allow for ADA accessibility.		20,000						20,000
PS167	Replace the Aeon roof top units at White Elementary School	Replace six Aeon roof top heating and cooling units at the White ES, as per recommendation from engineering.	400,000							400,000
PS170	Add additional parking, drop off and pick up lane at White Elementary School	Design and construct additional parking at the White Elementary School, and create a needed drop off and pick up lane.		110,000						110,000
PS173	Construct a new Elementary School to replace the Altavesta and Linscott/Rumford Elementary Schools.	Construct a new school for about 400-450 students to replace the aging Linscott/Rumford and Altavesta elementary schools.	0	500,000			500,000			1,000,000
PS174	Make safety and security improvements at Woburn public schools	Many of Woburn's schools are old and lacking in cameras, lighting, safe lock-down space, and/or doors that properly secure. These things would be common place in newer schools.	0	400,000						400,000
PS175	Upgrade technology at Woburn public schools	Replace student and teacher computers and other hardware and software as necessary to ensure efficient and up-to-date learning capabilities. Install smart boards and white boards.	0	1,000,000						1,000,000
PS176	Replace intercoms and clock systems at Woburn public schools	Replace old and broken intercom and clock systems where necessary to maintain communication as necessary throughout the building and in classrooms.	0	150,000						150,000

### PROJECTS BY DEPARTMENT

Proj #	Project Name	Project Description	Gen Fund (debt)	GF (Pay as You Go)	Water / Sewer Enterprise	Chapter 90	MSBA	State / Federal Grants	Other	Total Project Cost
PS177	Make heating and cooling improvements at Woburn public schools	Replace aged, inefficient and unreliable heating and cooling systems within schools to allow for a comfortable learning environment and greater efficiency.	0	560,000						560,000
<b>RECREATION DEPARTMENT</b>										
REC1	Library Park electrical work	Upgrade the electrical system at Library Park for the bathroom and light towers. This includes installing energy efficient bulbs, running additional power to support community events, replacing internal equipment, lighting basketball courts, and repainting light towers.		30,000						30,000
REC3	Upgrade Green Street Pool	Upgrade the Green Street pool area. Construct a 30x30 block house with 2 entries, separating pool motors and life guard equipment from pool chemicals and other hazardous equipment. Resurface and reline both pools which are 36 years old. Make the wading pool handicap accessible by adding a sloped entry. Renovate the bath house built ~1948 by upgrading fixtures and providing handicap accessibility.	750,000							750,000
REC4	Upgrade Leland park bathrooms	Upgrade the Leland Park bathrooms by installing a pre-fab 3-season bathroom, complete with new fixtures, and demolishing the existing building.	0	125,000						125,000
REC7	Upgrade light towers at Leland Park	Install light towers and underground wiring to replace what is currently less-safe overhead wiring (from telephone poles) at Leland Park. This will allow for extended use of the area. Also, install energy-efficient bulbs to allow for conservation.		20,000						20,000
REC8	Update pool filter house at North Woburn Pool	Build a new 10x12 block filter house at the North Woburn pool to eliminate the safety hazard associated with storing chemicals in close proximity to life guards, pool motors and other equipment, and		35,000						35,000



**PROJECTS BY DEPARTMENT**

Proj #	Project Name	Project Description	Gen Fund (debt)	GF (Pay as You Go)	Water / Sewer Enterprise	Chapter 90	MSBA	State / Federal Grants	Other	Total Project Cost
		create more storage space. Demolish the existing block house.								
REC11	Upgrade playground at Ferullo Park	Upgrade aging playground equipment at Ferullo Park to eliminate safety issues and eliminate rising maintenance costs.		60,000						60,000
REC14	Replace a leaf machine	Replace a 2000 leaf machine with a new SCAG model to reduce maintenance and ensure reliability.		8,000						8,000
REC15	Upgrade ¾ ton utility body truck with 8 foot plow	Replace a 2001 ¾ ton utility body truck with a new one with 8 foot plow.		44,000						44,000
REC19	Replace 1 ton dump truck with plow	Replace a 2002 Ford dump truck, upgrading it to a model with a plow.		44,000						44,000
REC20	Replace (2) 0 turn rotary mowers	Replace a 2002 and 2003 0-turn rotary mower with similar new to decrease maintenance needs and ensure mowing and trim work can be completed in a timely manner.		30,000						30,000
REC21	Replace 2 high top equipment trailers	Replace two high-top equipment trailers, a 1995 and 2000. These are the only trailers available for loading turf equipment and presently require extensive maintenance.		30,000						30,000
REC24	Replace 4-wheel drive utility tractor / bucket loader	Replace a 1995 and 2006 Kubota 4-wheel drive utility tractor/bucket loader.		56,000						56,000
REC26	Fleming Field Improvements and Additions	Build new Recreational facilities and landscaping on the former Clapp School site. This project includes demolition of the school building (slated for 2017), landscaping of area, addition of multi-use courts, a grassy recreation area, benches and picnic sites.	500,000					450,000		950,000
REC27	Replace chiller and upgrade mechanical room at O'Brien Rink	Replace the aging refrigeration system at the O'Brien Rink with a new Bitzer screw chiller package, reducing future utility and maintenance costs. Upgrade the mechanical room to bring it up to code by		30,000					705,650	735,650

### PROJECTS BY DEPARTMENT

Proj #	Project Name	Project Description	Gen Fund (debt)	GF (Pay as You Go)	Water / Sewer Enterprise	Chapter 90	MSBA	State / Federal Grants	Other	Total Project Cost
		building a wall separating the Zamboni from the new refrigeration equipment, upgrading the ventilation and electric service, and adding leak detection.								
<b>WOBURN REDEVELOPMENT AUTHORITY</b>										
WRA2	City-wide Truck Traffic and Truck Exclusion Study	Mitigate heavy vehicle traffic in less conducive areas by hiring a consultant to assess heavy-vehicle traffic levels, identify appropriate truck exclusion routes and traffic slowing measures, and submit a recommendation to MassDOT for approval and action.		75,000						75,000

	Gen Fund (debt)	GF (Pay as You Go)	Water / Sewer Enterprise	Chapter 90	MSBA	State / Federal Grants	Other	Total Project Cost
GRAND TOTAL	16,650,000	9,676,522	13,375,000	6,320,000	500,000	21,550,000	1,720,650	69,792,172

**PROJECTS BY DEPARTMENT**

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## **APPENDICES**

Appendix 1: Woburn At A Glance

Appendix 2: New Growth History

Appendix 3: Free Cash and Stabilization

Appendix 4: Excess Tax Levy Capacity

Appendix 5: Residential Tax rate Comparison

Appendix 6: General Fund Debt and Pay as You Go as Percent of Budget

Appendix 7: Water/Sewer Debt and Pay as You Go Charts

Appendix 8: Select Items from DLS Municipal Finance Glossary

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## DLS At A Glance Report for Woburn

Socioeconomic	
County	MIDDLESEX
School Structure	K-12
Form of Government	COUNCIL AND ALDERMAN
2013 Population	39,083
2015 Labor Force	22,782
2015 Unemployment Rate	3.90
2012 DOR Income Per Capita	33,017
2009 Housing Units per Sq Mile	1214.76
2013 Road Miles	152.29
EQV Per Capita (2014 EQV/2013 Population)	158,358
Number of Registered Vehicles (2012)	40,238
2012 Number of Registered Voters	25,704

Bond Ratings	
Moody's Bond Ratings as of December 2015*	Aa1
Standard and Poor's Bond Ratings as of December 2015*	

\*Blank indicates the community has not been rated by the bond agency

Fiscal Year 2016 Estimated Cherry Sheet Aid	
Education Aid	8,368,986
General Government	6,226,648
Total Receipts	14,595,634
Total Assessments	3,673,029
Net State Aid	10,922,605

Fiscal Year 2016 Tax Classification			
Tax Classification	Assessed Values	Tax Levy	Tax Rate
Residential	4,555,230,687	45,780,068	10.05
Open Space	0	0	0
Commerical	928,411,513	23,943,733	25.79
Industrial	741,755,200	19,129,867	25.79
Personal Property	261,138,860	6,734,771	25.79
<b>Total</b>	<b>6,486,536,260</b>	<b>95,588,439</b>	

Fiscal Year 2016 Revenue by Source		
Revenue Source	Amount	% of Total
Tax Levy	95,588,439	64.46
State Aid	14,595,634	9.84
Local Receipts	32,398,420	21.85
Other Available	5,697,938	3.84
<b>Total</b>	<b>148,280,431</b>	

Fiscal Year 2016 Proposition 2 1/2 Levy Capacity	
New Growth	2,389,922
Override	
Debt Exclusion	1,923,826
Levy Limit	110,167,892
Excess Capacity	14,579,453
Ceiling	162,163,407
Override Capacity	53,919,341

Other Available Funds		
2016 Free Cash	FY2014 Stabilization Fund	FY2016 Overlay Reserve
16,818,741	14,865,637	1,312,823

Fiscal Year 2016 Average Single Family Tax Bill**	
Number of Single Family Parcels	8,040
Assessed Value of Single Family	386,110
Average Single Family Tax Bill	3,880
State Average Family Tax Bill	
Fiscal Year 2013	4,846
Fiscal Year 2014	5,020
Fiscal Year 2015	5,214

**Woburn issues tax bills on a Quarterly basis**

\*\*For the communities granting the residential exemptions, DLS does not collect enough information to calculate an average single family tax bill. In FY15, those communities are Barnstable, Boston, Brookline, Cambridge, Chelsea, Everett, Malden, Nantucket, Somerville, Somerset, Tisbury, Waltham and Watertown. Therefore, the average single family tax bill information in this report will be blank.

Fiscal Year 2014 Schedule A - Actual Revenues and Expenditures						
	General Fund	Special Revenue	Capital Projects	Enterprise Funds	Trust Revenue	Total All Funds
<b>Revenues</b>	117,701,995	11,233,659	1,239,058	19,422,346	1,005,165	150,602,223
<b>Expenditures</b>	117,732,913	10,975,590	3,125,844	18,636,033	381,880	150,852,260
<b>Police</b>	8,573,657	0	0	0	0	8,573,657
<b>Fire</b>	7,281,334	0	0	0	0	7,281,334
<b>Education</b>	52,490,665	6,600,035	176,014	0	0	59,266,714
<b>Public Works</b>	8,738,861	2,156,380	2,925,526	18,636,033	0	32,456,800
<b>Debt Service</b>	4,877,394					4,877,394
<b>Health Ins</b>	15,936,427				0	15,936,427
<b>Pension</b>	5,151,411				0	5,151,411
<b>All Other</b>	14,683,164	2,219,175	24,304	0	381,880	17,308,523

Total Revenues and Expenditures per Capita						
	General Fund	Special Revenue	Capital Projects	Enterprise Funds	Trust Revenue	Total All Funds
<b>Revenues</b>	3,011.6	287.4	31.7	497.0	25.7	3,853.4
<b>Expenditures</b>	3,012.4	280.8	80.0	476.8	9.8	3,859.8

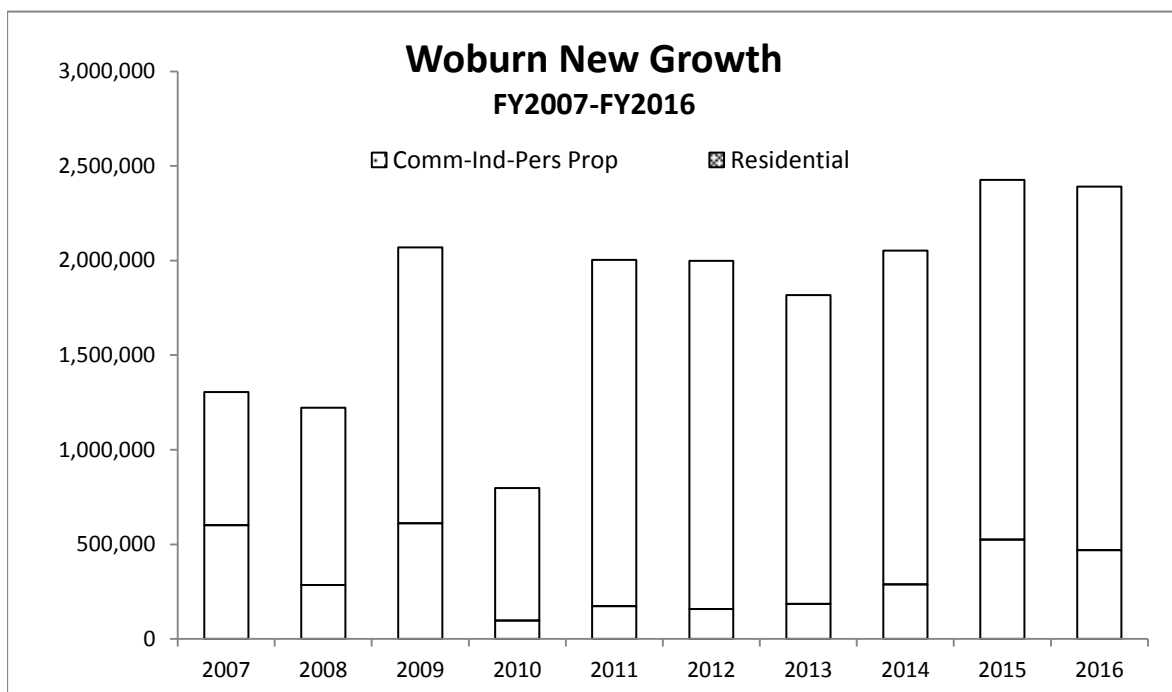
This data only represents the revenues and expenditures occurring in these funds and does not reflect and transfers to or from other funds. Therefore, this data should not be used to calculate an ending fund balance.

If you have questions regarding the data contained in this report, please contact the Municipal Databank/Local Aid Section at (617) 626-2384 or databank@dor.state.ma.us

[Click here to see if the Division of Local Services' Technical Assistance Section has conducted a financial management review or other analysis for Woburn](#)

## WOBURN NEW GROWTH HISTORY

Year	Residential New Growth	Comm Ind Per Prop New Growth	Total New Growth Applied to the Levy Limit
2007	600,680	704,387	1,305,067
2008	285,276	936,441	1,221,717
2009	611,141	1,458,362	2,069,503
2010	97,710	700,030	797,740
2011	172,698	1,830,069	2,002,767
2012	158,487	1,839,375	1,997,862
2013	185,263	1,631,999	1,817,262
2014	287,881	1,764,393	2,052,274
2015	524,624	1,900,652	2,425,276
2016	469,811	1,920,111	2,389,922
<b>Average</b>	<b>339,357</b>	<b>1,468,582</b>	<b>1,807,939</b>

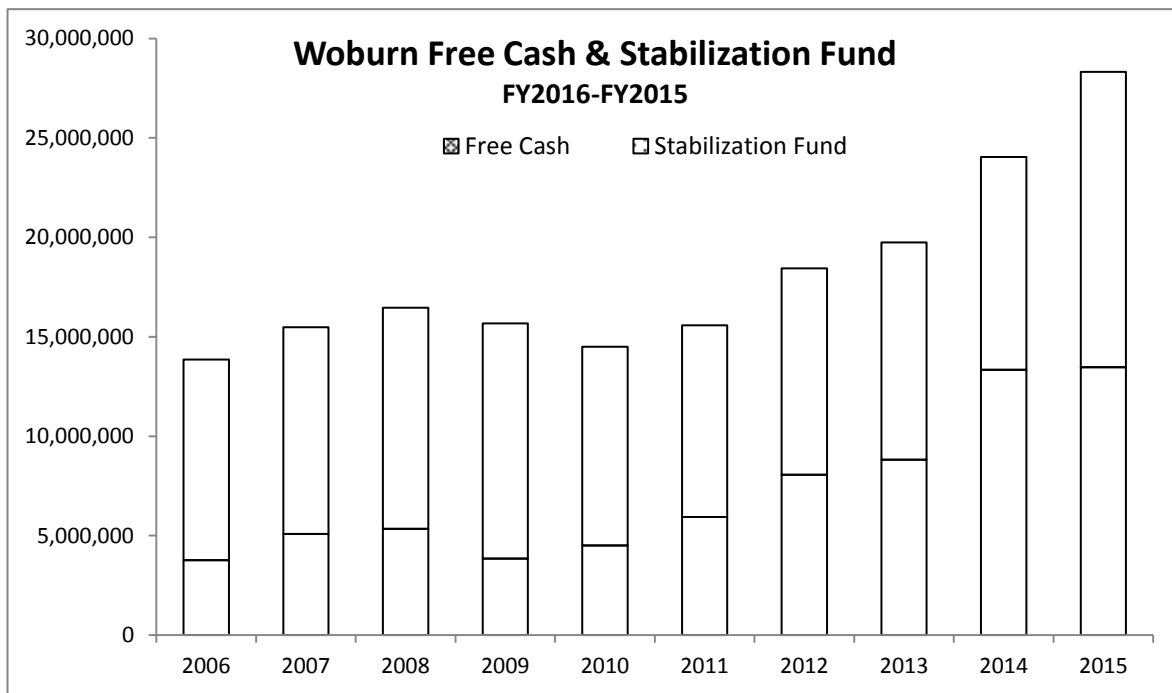


Source: Division of Local Services, MA Department of Revenue, Municipal Databank



**WOBURN**  
**FREE CASH & STABILIZATION FUND HISTORY**

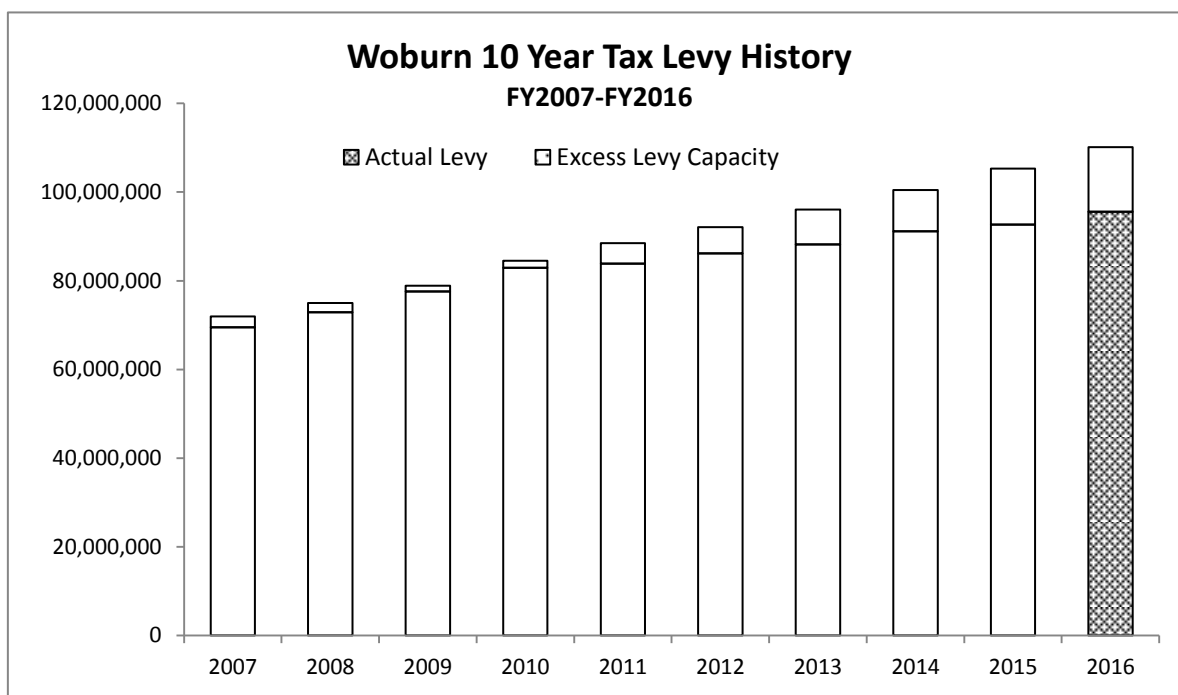
Year	Free Cash	Stabilization Fund	TOTAL
2006	3,762,701	10,087,105	13,849,806
2007	5,091,550	10,380,287	15,471,837
2008	5,347,955	11,120,284	16,468,239
2009	3,842,317	11,822,654	15,664,971
2010	4,510,113	9,994,504	14,504,617
2011	5,930,903	9,648,969	15,579,872
2012	8,065,560	10,378,094	18,443,654
2013	8,817,758	10,922,606	19,740,364
2014	13,332,313	10,706,176	24,038,489
2015	13,460,517	14,865,637	28,326,154



Source: Division of Local Services, MA Department of Revenue, Municipal Databank

## WOBURN TAX LEVY HISTORY

Year	Actual Tax Levy (excluding any Debt Exclusion)	Excess Tax Levy Capacity	Total Tax Levy Limit (excluding Debt Exclusion)
2007	69,509,214	2,443,037	71,952,251
2008	72,892,764	2,080,010	74,972,774
2009	77,598,274	1,318,322	78,916,596
2010	82,929,537	1,587,454	84,516,991
2011	83,883,768	4,612,022	88,495,790
2012	86,150,190	5,920,620	92,070,810
2013	88,211,383	7,883,791	96,095,174
2014	91,151,911	9,303,519	100,455,430
2015	92,699,572	12,570,771	105,270,343
2016	95,588,439	14,579,453	110,167,892



Source: Mass Dept of Revenue/Division of Local Services data bank

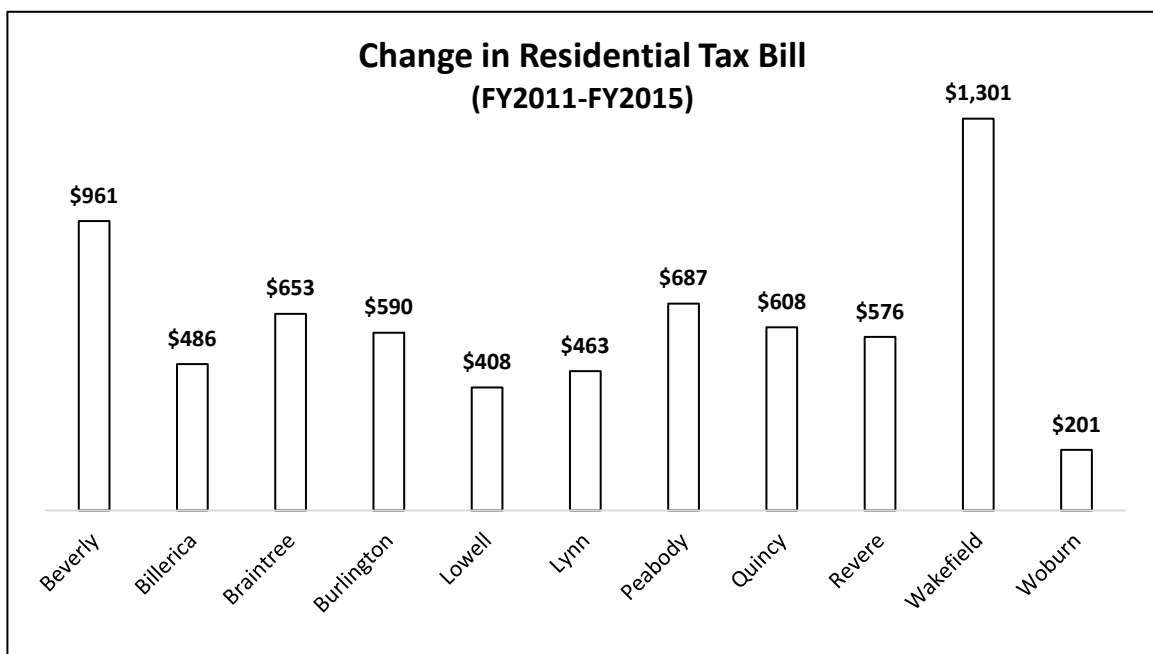
## WOBURN RESIDENTIAL PROPERTY TAX HISTORY

Residential Tax Rate						
	FY2011	FY2012	FY2013	FY2014	FY2015	% Change (FY11-15)
Beverly	12.41	12.97	13.64	14.16	14.11	13.7%
Billerica	13.47	13.92	14.31	14.29	14.04	4.2%
Braintree	10.20	10.45	11.11	11.42	11.07	8.5%
Burlington	11.50	11.55	11.85	12.00	11.35	-1.3%
Lowell	14.27	14.77	15.01	15.14	15.48	8.5%
Lynn	16.22	16.28	16.93	17.13	16.75	3.3%
Peabody	11.58	11.82	11.98	12.40	12.30	6.2%
Quincy	13.42	13.75	14.50	14.86	14.60	8.8%
Revere	14.44	15.07	15.56	15.55	14.80	2.5%
Wakefield	11.46	11.90	12.29	12.78	13.48	17.6%
Woburn	10.30	10.40	10.40	10.44	10.17	-1.3%
Avg Tax Rate	12.66	12.99	13.42	13.65	13.47	6.4%
Diff b/t Woburn and Avg	18.6%	19.9%	22.5%	23.5%	24.5%	NA

Average Single Family Home Value						
	FY2011	FY2012	FY2013	FY2014	FY2015	% Change (FY11-15)
Beverly	\$421,262	\$419,051	\$407,983	\$408,310	\$422,887	0.4%
Billerica	\$315,186	\$313,652	\$312,219	\$319,557	\$325,027	3.1%
Braintree	\$352,009	\$359,688	\$343,271	\$346,739	\$378,077	7.4%
Burlington	\$374,382	\$381,246	\$382,764	\$387,661	\$420,117	12.2%
Lowell	\$224,616	\$219,104	\$218,040	\$216,179	\$224,817	0.1%
Lynn	\$223,882	\$225,414	\$215,635	\$217,936	\$234,567	4.8%
Peabody	\$300,295	\$300,596	\$307,144	\$305,202	\$321,912	7.2%
Quincy	\$325,774	\$325,635	\$317,048	\$320,113	\$341,158	4.7%
Revere	\$233,515	\$237,043	\$234,287	\$238,600	\$265,038	13.5%
Wakefield	\$400,087	\$400,750	\$401,572	\$403,851	\$416,013	4.0%
Woburn	\$341,627	\$341,731	\$341,661	\$342,005	\$366,597	7.3%

Average Single Family Tax Bill						
	FY2011	FY2012	FY2013	FY2014	FY2015	% Change (FY11-15)
Beverly	\$5,228	\$5,435	\$5,565	\$5,782	\$5,967	14.1%
Billerica	\$4,246	\$4,366	\$4,468	\$4,566	\$4,563	7.5%
Braintree	\$3,590	\$3,759	\$3,814	\$3,960	\$4,185	16.6%
Burlington	\$4,305	\$4,403	\$4,536	\$4,652	\$4,768	10.8%
Lowell	\$3,205	\$3,236	\$3,273	\$3,273	\$3,480	8.6%
Lynn	\$3,631	\$3,670	\$3,651	\$3,733	\$3,929	8.2%
Peabody	\$3,477	\$3,553	\$3,680	\$3,785	\$3,960	13.9%
Quincy	\$4,372	\$4,477	\$4,597	\$4,757	\$4,981	13.9%
Revere	\$3,372	\$3,572	\$3,646	\$3,710	\$3,923	16.3%
Wakefield	\$4,585	\$4,769	\$4,935	\$5,161	\$5,608	22.3%
Woburn	\$3,519	\$3,554	\$3,553	\$3,571	\$3,728	5.9%

Change in Residential Tax Bill						
	FY2011	FY2012	FY2013	FY2014	FY2015	% Change (FY11-15)
Beverly	\$222	\$207	\$130	\$217	\$185	\$961
Billerica	\$169	\$120	\$102	\$98	-\$3	\$486
Braintree	\$58	\$169	\$55	\$146	\$225	\$653
Burlington	\$127	\$98	\$133	\$116	\$116	\$590
Lowell	\$133	\$31	\$37	\$0	\$207	\$408
Lynn	\$165	\$39	-\$19	\$82	\$196	\$463
Peabody	\$204	\$76	\$127	\$105	\$175	\$687
Quincy	-\$1	\$105	\$120	\$160	\$224	\$608
Revere	\$25	\$200	\$74	\$64	\$213	\$576
Wakefield	\$278	\$184	\$166	\$226	\$447	\$1,301
Woburn	-\$8	\$35	-\$1	\$18	\$157	\$201



Source: Division of Local Services, MA Department of Revenue, Municipal Databank

This chart is a summary of the City's General Fund Non Prop 2 1/2 Exempt debt service projections												APPENDIX 6
Source: First Southwest update as of June 8 2016												
WOBURN GENERAL FUND NON-EXEMPT DEBT SERVICE												
5% INVESTMENT POLICY												
	Existing	Estimated	FY2017-FY2021 CIP	FY2017-FY2021 CIP	FY2017-FY2021 CIP	GRAND		Est @ 2.6%/yr inc	Capital Inv	\$ Increase	Projected	
FISCAL	General Fund	Author/Unissued	Proposed Debt	Proposed	FIRE STATION	TOTAL		GF Op Budget	as % of	from	New Growth	
YEAR	Debt Service	Debt Service	(estimated)	Pay as You Go	(\$12.5m)			(less Wat/Sew)	GF Op Budget	Prior Yr	Avg +\$1.8m/yr	
2016	2,281,043	12,000		2,000,000		4,293,043						
2017	2,231,198	131,426	203,600	2,200,000		4,766,224		120,555,519	4.0%	473,181	1,300,000	
2018	2,178,929	899,250	367,600	2,100,000		5,545,779		123,689,962	4.5%	779,555	1,300,000	
2019	2,104,882	1,515,188	358,200	2,100,000		6,078,270		126,905,902	4.8%	532,491	1,300,000	
2020	2,064,382	2,031,313	479,100	1,700,000		6,274,795		130,205,455	4.8%	196,525	1,300,000	
2021	2,013,382	2,556,576	467,200	1,600,000		6,637,158		133,590,797	5.0%	362,363	1,300,000	
2022	1,968,057	2,539,275	454,750			4,962,082						
2023	1,907,033	2,520,626	442,850		1,125,000	5,995,509						
2024	1,674,884	2,505,638	430,000		1,100,000	5,710,522						
2025	1,420,733	2,484,088	418,500		1,075,000	5,398,321						
2026	1,131,083	2,461,188	405,650		1,050,000	5,047,921						
2027	1,106,633	2,461,938	273,750		1,025,000	4,867,321						
2028	1,081,978	2,445,226	264,900		1,000,000	4,792,104						
2029	1,056,913	2,431,713	257,800		975,000	4,721,426						
2030	1,026,267	2,406,188	248,550		950,000	4,631,005						
2031	990,106	2,284,088	241,450		925,000	4,440,644						
2032	963,456	2,269,426	205,800		900,000	4,338,682						
2033	935,206	2,247,738	112,800		875,000	4,170,744						
2034	905,706	2,234,226	108,250		850,000	4,098,182						
2035	870,797	2,213,463	21,600		825,000	3,930,860						
2036	840,478	2,205,675	20,800		800,000	3,866,953						
2037	810,159	2,190,188	20,000		775,000	3,795,347						
2038		2,167,213	19,600		750,000	2,936,813						
2039		2,151,975	18,800		725,000	2,895,775						
2040		2,139,038	18,000		700,000	2,857,038						
2041		2,118,163	17,200		675,000	2,810,363						
2042		2,104,588			650,000	2,754,588						
2043		1,567,850			625,000	2,192,850						
2044		970,025			600,000	1,570,025						
2045		336,000			575,000	911,000						
2046					550,000	550,000						
2047					525,000	525,000						
2048						0						
TOTAL	31,563,305	58,601,289	5,876,750	11,700,000	20,625,000	128,366,344						

**WOBURN**  
**AUTHORIZED/UNISSUED GENERAL FUND DEBT**

The below chart lists the bond authorization balances for projects that have previously been authorized by City Council. The estimated issue date, length and interest rate are presented for planning purposes only. The estimated debt service costs are based upon a level principal payment schedule.

Date Author	7/8/10	4/4/13	10/23/14	9/14/15	9/14/15	
Project	Surface Drains	Wyman School	Leland Park	Library Design	Elementary	
Amt Bonded	rescind	Feasibility	Construction	/Reconstruc	School	
Est Int Rate		500,000	1,100,000	17,000,000	16,450,000	<b>TOTAL EST</b>
		3.25%	3.75%	4.25%	4.25%	<b>DEBT</b>
FY2017		5,000	11,000			16,000
FY2018		117,000	114,000			231,000
FY2019		113,000	112,000	1,411,000		1,636,000
FY2020		110,000	109,000	1,377,000	1,365,000	2,961,000
FY2021		107,000	107,000	1,343,000	1,332,000	2,889,000
FY2022		104,000	103,000	1,309,000	1,300,000	2,816,000
FY2023			101,200	1,292,000	1,267,000	2,660,200
FY2024			97,900	1,258,000	1,250,000	2,605,900
FY2025			95,700	1,224,000	1,217,000	2,536,700
FY2026			92,400	1,207,000	1,184,000	2,483,400
FY2027			90,200	1,173,000	1,168,000	2,431,200
FY2028			86,900	1,139,000	1,135,000	2,360,900
FY2029			84,700	1,122,000	1,102,000	2,308,700
FY2030			81,400	1,088,000	1,086,000	2,255,400
FY2031			79,200	1,054,000	1,053,000	2,186,200
FY2032			75,900	1,020,000	1,020,000	2,115,900
FY2033				1,003,000	987,000	1,990,000
FY2034				969,000	970,000	1,939,000
FY2035				935,000	938,000	1,873,000
FY2036				918,000	905,000	1,823,000
FY2037				884,000	888,000	1,772,000
FY2038				850,000	855,000	1,705,000
FY2039				833,000	823,000	1,656,000
FY2040				799,000	806,000	1,605,000
FY2042				765,000	773,000	1,538,000
FY2043				731,000	740,000	1,471,000
FY2044				714,000	707,000	1,421,000
FY2045					691,000	691,000
<b>TOTAL EST DEBT</b>		551,000	1,430,500	26,418,000	25,562,000	53,977,500

**APPENDIX 7**

The below chart shows a summary of the City's water and sewer debt service.

The City has adopted an enterprise fund for its water and sewer operations.

Source: First Southwest

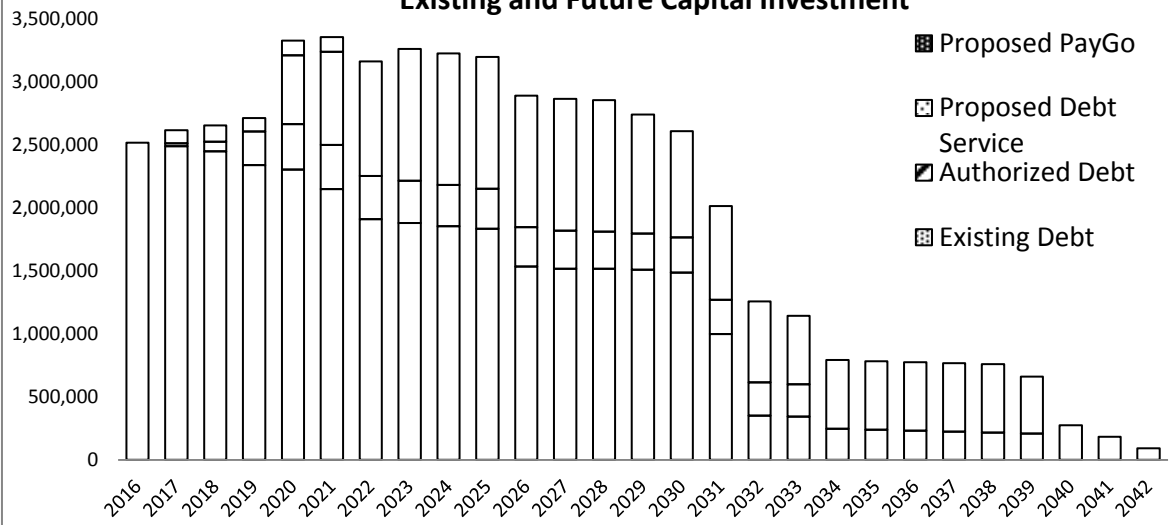
### **WOBURN WATER & SEWER DEBT SERVICE and PAY AS YOU GO**

FISCAL YEAR	Existing Water* and Sewer Debt	Authorized Unissued Est Debt	FY2017-FY2021 Proposed Debt	FY2017-FY2021 Proposed Pay as You Go	GRAND TOTAL Net Investment
2016	2,515,119				2,515,119
2017	2,488,117		21,700	105,000	2,614,817
2018	2,445,631		75,950	130,000	2,651,581
2019	2,337,607		267,200	105,000	2,709,807
2020	2,302,908	359,000	546,050	117,500	3,325,458
2021	2,146,743	351,000	737,300	117,500	3,352,543
2022	1,909,170	343,000	906,850		3,159,020
2023	1,879,074	335,000	1,043,850		3,257,924
2024	1,852,585	327,000	1,043,850		3,223,435
2025	1,831,733	319,000	1,043,850		3,194,583
2026	1,534,149	311,000	1,043,850		2,888,999
2027	1,514,967	303,000	1,043,850		2,861,817
2028	1,514,355	295,000	1,043,850		2,853,205
2029	1,507,742	287,000	943,850		2,738,592
2030	1,484,839	279,000	843,850		2,607,689
2031	996,887	271,000	743,850		2,011,737
2032	350,309	263,000	643,850		1,257,159
2033	343,510	255,000	543,850		1,142,360
2034		247,000	543,850		790,850
2035		239,000	543,850		782,850
2036		231,000	543,850		774,850
2037		223,000	543,850		766,850
2038		215,000	543,850		758,850
2039		207,000	452,600		659,600
2040			273,750		
2041			182,500		
2042			91,250		91,250
<b>TOTAL</b>	<b>30,955,445</b>	<b>5,660,000</b>	<b>16,256,750</b>	<b>575,000</b>	<b>52,990,945</b>

\*after MCWT subsidy

# Water & Sewer Enterprise Fund

## Existing and Future Capital Investment





## WOBURN

### AUTHORIZED/UNISSUED WATER AND SEWER DEBT

The below chart lists the bond authorization balances for projects that have previously been authorized by City Council

The estimated issue date is presented for planning purposes only .

Date Author	4/20/07	6/8/12	3/20/14
Project	Water System Improvements	Water Meters	I and I Reduction
Unissued	3,984,011	6,000,000	6,366,750
FY2017			
FY2018			
FY2019			
FY2020	359,000		
FY2021	351,000		
FY2022	343,000		
FY2023	335,000		
FY2024	327,000		
FY2025	319,000		
FY2026	311,000		
FY2027	303,000		
FY2028	295,000		
FY2029	287,000		
FY2030	279,000		
FY2031	271,000		
FY2032	263,000		
FY2033	255,000		
FY2034	247,000		
FY2035	239,000		
FY2036	231,000		
FY2037	223,000		
FY2038	215,000		
FY2039	207,000		

**SELECTED GLOSSARY OF TERMS ----- CAPITAL IMPROVEMENT PROGRAM**

**Available Funds** – Balances in the various fund types that represent non-recurring revenue sources. As a matter of sound practice, they are frequently appropriated to meet unforeseen expenses, for capital expenditures or other onetime costs. Examples of available funds include free cash, stabilization funds, overlay surplus, water surplus, and enterprise net assets unrestricted (formerly retained earnings).

**Betterments** (Special Assessments) – Whenever part of a community benefits from a public improvement, or betterment (e.g., water, sewer, sidewalks, etc.), special property taxes may be assessed to the property owners of that area to reimburse the governmental entity for all, or part, of the costs it incurred in completing the project. Each property parcel receiving the benefit is assessed a proportionate share of the cost which may be paid in full, or apportioned over a period of up to 20 years. In this case, one year's apportionment along with one year's committed interest computed from October 1 to October 1 is added to the tax bill until the betterment has been paid.

**Block Grant** – A Block Grant is a Federal grant of money awarded by formula under very general guidelines that allow grantees broad latitude in spending activities. Recipients are normally state or local governments.

**Bond** – A means to raise money through the issuance of debt. A bond issuer/borrower promises in writing to repay a specified sum of money, alternately referred to as face value, par value or bond principal, to the buyer of the bond on a specified future date (maturity date), together with periodic interest at a specified rate. The term of a bond is always greater than one year.

**Bond and Interest Schedule Record** (Bond Register) – The permanent and complete record maintained by a treasurer for each bond issue. It shows the amount of interest and principal coming due each date and all other pertinent information concerning the bond issue.

**Bond Anticipation Note (BAN)** – Short-term debt instrument used to generate cash for initial project costs and with the expectation that the debt will be replaced later by permanent bonding. Typically issued for a term of less than one year, BANs may be re-issued for up to five years, provided principal repayment begins after two years (MGL Ch. 44 §17). Principal payments on school related BANs may be deferred up to seven years (increased in 2002 from five years) if the community has an approved project on the Massachusetts School Building Authority (MSBA) priority list. BANs are full faith and credit obligations.

**Bond Authorization** – The action of town meeting or a city council authorizing the executive branch to raise money through the sale of bonds in a specific amount and for a specific purpose. Once authorized, issuance is by the treasurer upon the signature of the mayor, or selectmen. (See Bond Issue)

**Bond Buyer** – A daily trade paper containing current and historical information of interest to the municipal bond business.

**Bond Counsel** – An attorney or law firm engaged to review and submit an opinion on the legal aspects of a municipal bond or note issue.

**Bond Issue** – The actual sale of the entire, or a portion of, the bond amount authorized by a town meeting or city council.

**Bond Rating** (Municipal) – A credit rating assigned to a municipality to help investors assess the future ability, legal obligation, and willingness of the municipality (bond issuer) to make timely debt service payments. Stated otherwise, a rating helps prospective investors determine the level of risk associated with a given fixed-income investment. Rating agencies, such as Moody's and Standard and Poors, use rating systems, which designate a letter or a combination of letters and numerals where AAA is the highest rating and C1 is a very low rating.

**Bonds Authorized and Unissued** – Balance of a bond authorization not yet sold. Upon completion or abandonment of a project, any remaining balance of authorized and unissued bonds may not be used for other purposes, but must be rescinded by town meeting or the city council to be removed from community's books.

**Capital Assets** – All tangible property used in the operation of government, which is not easily converted into cash, and has an initial useful life extending beyond a single financial reporting period. Capital assets include land and land improvements; infrastructure such as roads, bridges, water and sewer lines; easements; buildings and building improvements; vehicles, machinery and equipment. Communities typically define capital assets in terms of a minimum useful life and a minimum initial cost. (See Fixed Asset)

**Capital Budget** – An appropriation or spending plan that uses borrowing or direct outlay for capital or fixed asset improvements. Among other information, a capital budget should identify the method of financing each recommended expenditure, i.e., tax levy or rates, and identify those items that were not recommended. (See Capital Asset, Fixed Asset)

**Capital Improvements Program** – A blueprint for planning a community's capital expenditures that comprises an annual capital budget and a five-year capital program. It coordinates community planning, fiscal capacity and physical development. While all of the community's needs should be identified in the program, there is a set of criteria that prioritizes the expenditures.

**Capital Outlay** – The exchange of one asset (cash) for another (capital asset), with no ultimate effect on net assets. Also known as "pay as you go," it is the appropriation and use of available cash to fund a capital improvement, as opposed to incurring debt to cover the cost.

**Capital Outlay Expenditure Exclusion** – A temporary increase in the tax levy to fund a capital project or make a capital acquisition. Exclusions require two-thirds vote of the selectmen or city council (sometimes with the mayor's approval) and a majority vote in a community-wide referendum. The exclusion is added to the tax levy only during the year in which the project is being funded and may increase the tax levy above the levy ceiling

**Chapter 90 Highway Funds** – State funds derived from periodic transportation bond authorizations and apportioned to communities for highway projects based on a formula under the provisions of MGL Ch. 90 §34. The Chapter 90 formula comprises three variables: local road mileage (58.33 percent) as certified by the Massachusetts Highway Department (MHD), local employment level (20.83 percent) derived from the Department of Employment and Training (DET), and population estimates (20.83 percent) from the US Census Bureau. Local highway projects are approved in advance. Later, on the submission of certified expenditure reports to MHD, communities receive cost reimbursements to the limit of the grant.

**Contingent Appropriation** – An appropriation that authorizes spending for a particular purpose only if subsequently approved in a voter referendum. Under MGL Ch. 59 §21C (m), towns may make appropriations from the tax levy, available funds or borrowing, contingent upon the subsequent passage of a Proposition 2½ override or exclusion question for the same purpose. If initially approved at an annual town meeting, voter approval of the contingent appropriation must occur by September 15. Otherwise, the referendum vote must occur within 90 days after the town meeting dissolves. The question may be placed before the voters at more than one election, but if not approved by the applicable deadline, the appropriation is null and void. If contingent appropriations are funded through property taxes, DOR cannot approve the tax rate until the related override or exclusion question is resolved or the deadline passes, whichever occurs first.

**Debt Authorization** – Formal approval by a two-thirds vote of town meeting or city council to incur debt, in accordance with procedures stated in MGL Ch. 44 §§1, 2, 3, 4a, 6-15.

**Debt Burden** – The amount of debt carried by an issuer usually expressed as a measure of value (i.e., debt as a percentage of assessed value, debt per capita, etc.). Sometimes debt burden refers to debt service costs as a percentage of the total annual budget.

**Debt Exclusion** – An action taken by a community through a referendum vote to raise the funds necessary to pay debt service costs for a particular project from the property tax levy, but outside the limits under Proposition 2½. By approving a debt exclusion, a community calculates its annual levy limit under Proposition 2½, then adds the excluded debt service cost. The amount is added to the levy limit for the life of the debt only and may increase the levy above the levy ceiling.

**Debt Limit** – The maximum amount of debt that a municipality may authorize for qualified purposes under state law. Under MGL Ch. 44 §10, debt limits are set at 5 percent of EQV. By petition to the Municipal Finance Oversight Board, cities and towns can receive approval to increase their debt limit to 10 percent of EQV.

**Debt Policy** – Part of an overall capital financing policy that provides evidence of a commitment to meet infrastructure needs through a planned program of future financing. Debt policies should be submitted to elected officials for consideration and approval.

**Debt Service** – The repayment cost, usually stated in annual terms and based on an amortization schedule, of the principal and interest on any particular bond issue.

**Enterprise Fund** – An enterprise fund, authorized by MGL Ch. 44 §53F½, is a separate accounting and financial reporting mechanism for municipal services for which a fee is charged in exchange for goods or services. It allows a community to demonstrate to the public the portion of total costs of a service that is recovered through user charges and the portion that is subsidized by the tax levy, if any. With an enterprise fund, all costs of service delivery--direct, indirect, and capital costs--are identified. This allows the community to recover total service costs through user fees if it chooses. Enterprise accounting also enables communities to reserve the "surplus" or net assets unrestricted generated by the operation of the enterprise rather than closing it out to the general fund at year-end. Services that may be treated as enterprises include, but are not limited to, water, sewer, hospital, and airport services. See DOR [IGR08-101](#)

**Free Cash** (Also Budgetary Fund Balance) – Remaining, unrestricted funds from operations of the previous fiscal year including unexpended free cash from the previous year, actual receipts in excess of revenue estimates shown on the tax recapitulation sheet, and unspent amounts in budget line-items. Unpaid property taxes and certain deficits reduce the amount that can be certified as free cash. The calculation of free cash is based on the balance sheet as of June 30, which is submitted by the community's auditor, accountant, or comptroller. Important: free cash is not available for appropriation until certified by the Director of Accounts.

**General Obligation Bonds** – Bonds issued by a municipality for purposes allowed by statute that are backed by the full faith and credit of its taxing authority.

**Levy Limit** – A levy limit is one of two types of levy (tax) restrictions imposed by MGL Ch. 59 §21C (Proposition 2½). It states that the real and personal property taxes imposed by a city or town may only grow each year by 2½ percent of the prior year's levy limit, plus new growth and any overrides or

exclusions. The levy limit can exceed the levy ceiling only if the community passes a capital expenditure exclusion, debt exclusion, or special exclusion. (See Levy Ceiling)

### **Massachusetts School Building Authority**

(MSBA) – Administers the state program that reimburses cities, towns, and regional school districts varying percentages of their school construction costs depending on the wealth of the community or district and the category of reimbursement. Projects that received their first reimbursement payment prior to July 26, 2004 will continue to get annual state payments to offset the related annual debt service. Thereafter, cities, towns, and regional school districts will receive a lump sum amount representing the state's share of the eligible project costs.. (See DOR [IGR 06-101](#))

**New Growth** – The additional tax revenue generated by new construction, renovations and other increases in the property tax base during a calendar year. It does not include value increases caused by normal market forces or by revaluations. New growth is calculated by multiplying the assessed value associated with new construction, renovations and other increases by the prior year tax rate. The additional tax revenue is then incorporated into the calculation of the next year's levy limit. For example, new growth for FY07 is based on new construction, etc. that occurred between January and December 2005 (or July 2005 and June 2006 for accelerated new growth communities). In the fall of 2006, when new growth is being determined to set the FY07 levy limit, the FY06 tax rate is used in the calculation.

**Non-Recurring Revenue Source** – A one-time source of money available to a city or town. By its nature, a non-recurring revenue source cannot be relied upon in future years. Therefore, such funds should not be used for operating or other expenses that continue from year-to-year. (See Recurring Revenue Source)

**Principal** – The face amount of a bond, exclusive of accrued interest.

**Receipts Reserved for Appropriation** – Proceeds that are earmarked by law and placed in separate accounts for appropriation for particular purposes. For example, parking meter proceeds may be appropriated to offset certain expenses for parking meters and the regulation of parking and other traffic activities.

**Sale of Cemetery Lots Fund** – A fund established to account for proceeds of the sale of cemetery lots. The proceeds may only be appropriated to pay for the cost of the land, its care and improvement or the enlargement of the cemetery under provisions of MGL Ch. 114 §15.

**Sale of Real Estate Fund** – A fund established to account for the proceeds of the sale of municipal real estate other than proceeds acquired through tax title foreclosure. MGL Ch. 44 §63 states that such proceeds shall be applied first to the retirement of debt on the property sold. In the absence of such debt, funds may generally be used for purposes for which the city or town is authorized to borrow for a period of five years or more

**Short-Term Debt** – Outstanding balance, at any given time, on amounts borrowed with a maturity date of 12 months or less.

**Special Exclusion** – For a few limited capital purposes, a community may exceed its levy limit or levy ceiling without voter approval. Presently, there are two special expenditure exclusions: 1) water and sewer project debt service costs which reduce the water and sewer rates by the same amount; and 2) a program to assist homeowners to repair or replace faulty septic systems, remove underground fuel storage tanks, or remove dangerous levels of lead paint to meet public health and safety code requirements. In the second special exclusion, homeowners repay the municipality for the cost plus interest apportioned over a period of time, not to exceed 20 years

**Special Revenue Fund** – Funds, established by statute only, containing revenues that are earmarked for and restricted to expenditures for specific purposes. Special revenue funds include receipts reserved for appropriation, revolving funds, grants from governmental entities, and gifts from private individuals or organizations.

**Stabilization Fund** – A fund designed to accumulate amounts for capital and other future spending purposes, although it may be

appropriated for any lawful purpose (MGL Ch. 40 §5B). Communities may establish one or more stabilization funds for different purposes and may appropriate into them in any year an amount not to exceed ten percent of the prior year's tax levy. The total of all stabilization fund balances shall not exceed ten percent of the community's equalized value, and any interest shall be added to and become a part of the funds. A two-thirds vote of town meeting or city council is required to establish, amend the purpose of, or appropriate money into or from the stabilization fund.