



CITY OF
MARLBOROUGH
MASSACHUSETTS



Capital Improvement Plan (CIP) FY2018 – FY2022



THIS PAGE IS INTENTIONALLY BLANK

*Draft prepared for the City of Marlborough by the
Edward J. Collins, Jr. Center for Public Management
at the University of Massachusetts, Boston
April 2017*

Table of Contents

Introduction	5
CIP Overview	6
About the City of Marlborough	7
City Facilities (excluding schools)	7
Information Technology	8
Parks and Open Space	9
Roadways and Sidewalks	10
School Facilities	11
Water System	12
Sewer System	13
Stormwater System	13
Vehicles and Equipment	14
Possible Funding Sources	15
Local Resources	15
Federal, State, and Private Grants and Loans	16
Marlborough Capital Planning Process (FY2018-FY2022)	19
Project Requests	19
Resources Available	20
General Fund Debt and Pay-as-You-Go	20
Water and Sewer Debt and Pay-as-You-Go	22
Grants and Other Funds	24
Capital Planning Evaluation Criteria	25
FY2018-FY2022 Capital Plan Detail	28
Plan Overview	28
Projects by Department	31
Projects by Fiscal Year	36
Project Funding Detail	38
Appendices	42
Appendix 1: Marlborough at a Glance	42
Appendix 2: New Growth History	46
Appendix 3: Free Cash and Stabilization Fund History	47
Appendix 4: Tax Levy History	48
Appendix 5: General Fund Non-Exempt Debt Service	49

Appendix 6: Water/Sewer Debt Service	50
Appendix 7: Existing General Fund Debt Service	51
Appendix 8: Existing Water Debt Service	52
Appendix 9: Existing Sewer Debt Service	53
Appendix 10: Estimated Previously Authorized/Unissued Debt Service	54
Appendix 11: Comparison of Selected Communities' Average Single Family Tax Bill	55
Appendix 12: Select DLS Financial Glossary	56

INTRODUCTION

The City of Marlborough's \$142.3 million all-funds, five-year capital improvement plan (CIP) for FY2018-FY2022 will make major inroads into addressing significant infrastructure needs that exist in Marlborough today and will start the City on a path of making regular and sizeable investments in the maintenance and improvement of its capital assets. Across the City, residents and businesses will begin to feel the positive impact of the CIP through highly visible projects such as: a new public library facility, replacement of the Richer Elementary School, a new West End fire station, and significant investment in the City's roadways. Less visible – but also with great impact – are projects such as regularly replacing public works vehicles, upgrading IT across all City and school offices, and making energy efficiency upgrades throughout City facilities that will be noticed by users of the buildings, realize reductions in energy costs, and support good stewardship of the environment.

By looking out across multiple years, City officials will be able to carefully schedule projects to capture declines in existing debt service and use those same dollars to fund new investments. At the same time, department directors will be able 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, knowing that their efforts will be tracked as part of regular updates to the CIP.

In this rolling five-year plan, funding for first year will be included in the City's FY2018 budget, while years two through five will provide a plan for the future that takes into account the best information currently available. During FY2018, another plan — building upon this one— will be developed for the subsequent five years e.g., FY2019-FY2023. Should more funding become available than is 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 resulting in a tangible asset, such as construction of a new building or acquisition of a new dump truck, whereas an operating budget includes expenses that occur each year, such as salaries and 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. Chapter 30, Article 1 of the Marlborough City Code defines capital project and improvements as "major nonrecurring tangible assets and projects which are purchased or undertaken at intervals of not less than five years, have a useful life of at least five years and cost over \$10,000."

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;
- any 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.”

The group goes on to indicate that, “typically capital projects do not include:

- equipment such as furniture or police or public works vehicles which are replaced annually in approximately the same quantity;
- equipment with a useful life of five years or less.”

What is a capital plan?

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 FY2018-FY2022 Capital Improvement Plan, the City of Marlborough will undertake 57 capital projects totaling \$142.3 million. Projects range in size from \$40,000 to replace the Police Department’s electronic control weapons to \$34 million to replace Richer Elementary School (slightly more than 54% of which will likely be funded by the Commonwealth through the Massachusetts School Building Authority (MSBA)).

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

- just over \$57.7 million in general fund debt;
- just over \$9.8 million in pay-as-you-go projects funded by the general fund; and,
- approximately \$18.3 million funded by water and sewer department debt;

The City also anticipates receiving approximately \$56.3 million in other funds for capital projects. This includes the annual Chapter 90 roadway allocation, which is projected to total nearly \$5.6 million over the course of the next five years, \$21.8 million from the MSBA, and approximately \$29 million in funding from various other Federal, State, and private sources or dedicated City funds. While these figures are substantial, grant funding is expected to increase in upcoming years as new grant opportunities are pursued and secured.

ABOUT THE CITY OF MARLBOROUGH

Marlborough was established in 1660 but was not incorporated as a City until 1890. As population, business, and travel grew in the American colonies, Marlborough became a favorite stop on the Boston Post Road. In 1836, Samuel Boyd, known as the “father of the City,” opened the City’s first shoe manufacturing business. By 1890, Marlborough was a major shoe manufacturing center, producing footwear for Union soldiers and local citizens, which continued into the 1970s with the founding of Frye Boot Company and The Rockport Company. The population more than doubled between 1900 and 1970 as a result of the manufacturing boom. Manufacturing gave way to high technology and other specialized industries with the construction of major transportation routes, allowing easy access from all over New England. Today, the population stands at approximately 40,000.

As the population grew, the local government built necessary infrastructure such as water and sewer systems, roads, and school facilities. Today, the City of Marlborough is responsible for maintaining these longstanding infrastructure systems and more, including City and school buildings, information technology (IT) systems, parks and open space, bikeways, roadways, and sidewalks, and extensive water, sewer, and stormwater conveyance systems. In addition, the many vehicles and pieces of equipment used by City and School staff to perform their mission must also be maintained and replaced over time. City officials face a significant challenge as they strive to keep these systems and equipment in good working condition while using limited public resources available to them wisely, while seeking the greatest impact for each dollar spent.

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

City Facilities (excluding schools)

Today, the City of Marlborough occupies and manages a series of buildings and building complexes that serve a multitude of purposes from City Hall to the Public Library to the Public Works building. Each of these facilities must be maintained on a regular basis to ensure the safety and comfort of City employees and the general public. All told, the replacement value of the facilities listed below is more than \$45 million according to the City’s insurance company¹.

MARLBOROUGH CITY FACILITIES	
Name	Address
Cemetery Garage	135 Wilson Street
City Hall	140 Main Street
Dept. of Public Works building	135 Neil Street
Walker Building	255 Main Street
Fire Station 1 - Headquarters	215 Maple Street
Fire Station 2	98 Pleasant Street
Fire Station 3	260 Boston Post Road
Parking Garages (2)	Newton Street, Weed Street
Police Station	355 Bolton Street
Public Library	35 West Main Street

¹ “Statement of Values,” MIAA Property and Casualty Group, Inc., obtained from the City of Marlborough, Department of Public Works

MARLBOROUGH CITY FACILITIES	
Recreation Center	496 Brigham Street
Recreation Office and associated structures	239 Concord Road
Senior Center	40 New Street

The Walker Building was built in the late 1890s and originally served as the City's high school. Currently the building is partially vacant. In March 2016, the City Council authorized a feasibility study by an independent organization to examine future potential uses for the building. While the City would maintain the building's historical exterior, the interior may be reimagined. This project may impact future years of the Capital Improvement Plan (CIP).



Walker Building

Information Technology

The City's core information technology (IT) infrastructure includes a citywide fiber optic network, physical and virtualized servers, network area storage, network switches, routers, wireless access points, firewalls and content filters, VPN equipment, internet connections, redundant power supplies, data center environmental controls, VoIP (voice over Internet Protocol) and PoE (power over Ethernet) equipment and surveillance equipment. The City's primary data center is located in City Hall with failover and redundancy located locally in other facilities and in the Azure-based government cloud.

MARLBOROUGH SOFTWARE APPLICATIONS	
Department	Software
All Users	Office 365 - Azure
Assessor	Vision
Auditor	DocuShare
City Clerk	Business Licensing System or BLS
Department of Public Work (DPW)	AutoCAD, Street Trek, Asset Mgmt, ESRI - GIS
Finance and Treasury	Tyler Technologies - MUNIS
Fire Department	FireFiles
Inspectional and Health Services	Accela Civic Cloud
Public Safety	Tritech - IMC

The IT department recently migrated from an on-premises e-mail solution to fully cloud-based Office 365 system, which includes the full Microsoft Office productivity suite, SharePoint, and OneDrive for Business. A new, modern firewall was recently brought online that handles all citywide internet traffic to enhance network safety and protect users.

Future projects include expanding the City's fiber optic network while adding redundancy and continuing the lifecycle system of purchasing and replacing technology assets including computing and network equipment as

necessary to meet the demands of the ever-increasing amount of services being placed on the network. Considering the rapid pace at which technology evolves, the City must also be ready to adopt and implement new changes in technology where necessary to improve efficiency and/or productivity.

Parks and Open Space

The City owns and manages more than 2,700 acres of open space for active and passive recreation and environmental and watershed protection. Hundreds of acres are also owned, maintained, and protected by the State and private entities.

Residents and visitors have access to sports fields and courts, playgrounds, beaches, boat ramps, bike and walking trails, plus other passive recreation sites. Through the Department of Recreation and the Conservation Commission, the City maintains a wide array of open spaces ranging in size from Veterans Park (0.077 acres) to Cider Knoll Conservation Area (103.71 acres).

CITY OWNED PARKS AND OPEN SPACE (PARTIAL LIST)			
Name	Acres	Uses	Location
Assabet River Rail Trail	8.36	Bike and pedestrian trail (2.3 mi)	Lincoln Street - Rte 85
Byrne Field	7.9	Playing fields	Hawkins Lane
Centennial Park		Open space	Granger Blvd/South Bolton Street
Cider Knoll Conservation Area	103.7	Trails	Stow Road
Desert Conservation Area	84.6	Trails	Concord Road
Farrell Field	7.6	Playing fields, wading pool	Sawin Street
Fort Meadow Playground	0.3	Playground	Second Road
Freeman School	1.7	Playground	Bolton Street
Ghiloni Park	80.3	Playing fields, skate park, playground, volleyball court, trails	Concord Road
High School	62.1	Playing fields, courts	Bolton Street
Hixson Boat Ramp	1.3	Boat House	Reservoir Street
Holt's Grove	27.3	Fishing, Ice skating, Trails	Stevens Street
Howe Pond Conservation Area	53.4	Open space	Bigelow Street
Jaworek School	13.3	Playing fields, playground, courts	Hosmer Street
Jericho Hill Recreation Area	19.2	Playground, trails, sledding hill	Brigham Street
Kane Elementary School	9.4	Playing fields, playground	Farm Road
Kelleher Field & Ward 6 Play Area	4.3	Playing fields, Playground	Hudson & Jefferson Street
Korean Veterans Field	6.3	Playing fields	Millham Street
Memorial Beach	7.1	Swimming, Picnicking	Hosmer Street
Middle School	25.8	Playing fields	Union Street
Mount Ward	81.1	Trails	Boston Post Road
Old Steven's Estate	6.1		Stevens Street
Pappacosmos/John St Playground	0.9	Playground, basketball court	John Street
Richer Elementary School	12.5	Playing fields, playground	Foley Road
Simpson Road Playgrounds	2.4	Playground	Simpson Road
Stevens Howe Playground	7.1	Playfields, tennis courts	Martin Street
The Grove	16.6	Canoe launch, fishing, trails	Bolton Street
Veterans Park	0.1	Urban park, benches	Maple Street
Ward Park	13.2	Playfields, courts, playground, skate park, wading pool	New Street

Maintenance activities include mowing, removal of garbage, signage and maps, and ensuring the safety of playground equipment.

In addition to the open space listed above, the City owns:

- Eight cemeteries on just over 10 acres
- Other conservation land totaling just under 234 acres
- Over 480 acres of municipal watershed land, mostly around the Millham Reservoir and Lake Williams, which provide 30% of the City's public drinking water

Almost 1,300 acres of Marlborough is owed by the State as open space. Additional land is protected as open space but held by private owners. Major sites include:

- Callahan State Park: With nearly 390 acres in Marlborough providing extensive wooded hiking trails.
- Desert Conservation Area: With sections owed by the State, City, and Sudbury Valley Trustees, this unique geological and ecological area totals more than 235 acres with trails.
- Marlborough State Forest: This forest includes parcels that are connected to Ghiloni Park and the Desert Conservation Area.
- Sudbury Reservoir: This 655-acre site has limited public access as it serves as the backup water supply for the Massachusetts Water Resources Authority (MWRA).

Marlborough has extensive surface water. In addition to the Sudbury Reservoir, which provides drinking water for the region, and the Millham Reservoir and Lake Williams, which provide drinking water just to the City, the Fort Meadow Reservoir serves as a recreational lake for both Marlborough and Hudson and is popular for swimming, fishing, and boating.

Roadways and Sidewalks

A network of approximately 166 miles of roadway crisscrosses Marlborough. This includes approximately 135 miles of City roadway, 14 miles of State roadway managed by MassDOT, and 17 miles of unaccepted or private roadway. State roads crossing through the City include Interstates 495 and 290 and Routes 20 and 85.

Roads are typically classified into three categories:

- *Local streets* comprise approximately 56% of the roads in Marlborough. These roads provide access to residential properties and generally have lower speed limits.
- *Collector streets* make up about 29% of the City's network. These roads primarily collect traffic from local streets and funnel it to arterial streets and vice versa. Examples of collector streets include Stevens Street and Concord Road.
- *Arterial roadways* comprise around 11% of roads in the City. These roads are designed for mobility, carrying traffic at greater speeds over longer distance than other roads. These streets are typically numbered. Examples in Marlborough include Maple Street and Boston Post Road – East and West. These roadways may be maintained by the State and function as part of a regional highway system². In Marlborough, MassDOT maintains Boston Post Road – East and West; East Main Street from Stevens Street to Boston Post Road – East; Lakeside Avenue; Fitchburg Street; and Pleasant Street from Berlin Road to Fitchburg Street.

The remaining 3.5% of roads in Marlborough are two interstate roads and are part of the Interstate Highway

² "Road Inventory Year End Report 2014," Massachusetts Department of Transportation – Office of Transportation Planning

System: Interstate 495 and Interstate 290.

According to the State's most recent Transportation Improvement Program, there are plans to resurface and perform related work on Route 20 at a total cost of over \$6.1 million in FY2019³.

School Facilities

The Marlborough Public School District serves students in grades Pre-Kindergarten through 12th grade. According to the Massachusetts Department of Elementary and Secondary Education (DESE), there were 4,525 students enrolled in the district for the 2016-2017 school year. Of the student body, 20.5% were English language learners, a figure that is more than two times the state average (9.5%) and 42.8% reported that English was not their first language, as compared to the state average of 20.1%⁴.

The District operates seven facilities totaling approximately 894,500 square feet with an FY2016 assessed value of more than \$133 million⁵. In 2011, the District received nearly \$4.4 million through the MSBA's Green Repair Program to fund a new roof, windows, and doors at the Marlborough High School and new windows and doors at Francis J. Kane Elementary School⁶. These energy efficiency projects were completed in 2013.

MARLBOROUGH PUBLIC SCHOOL FACILITIES⁷					
Facility	Grades	Location	Year Built	Last Reno	Sq. Ft.
Early Childhood Center	PK	25 Union Street	1916	1969	40,000
Sgt. Charles Jaworek Elementary School	K-4	444 Hosmer Street	1964	2001	90,000
Francis J. Kane Elementary School	K-4	520 Farm Road	1968	1994	72,000
Richer Elementary School	K-4	80 Foley Road	1965	1994	66,000
1LT Charles W. Whitcomb Middle School	5-8	25 Union Street	1961	1999	300,000
Marlborough High School	9-12	431 Bolton Street	1976	2000	297,000
Hildreth High School	9-12	85 Sawin Street	1930	1971	29,500

In addition to the buildings, the athletic fields, parking lots, and roads on the school sites and school vehicles and equipment must be maintained.

Marlborough is home to the Assabet Valley Regional Vocational Technical High School, located at 215 Fitchburg Street. Six other municipalities are members of this regional public school district. They are: Berlin, Hudson, Maynard, Northborough, Southborough, and Westborough. According to DESE, there were 1,103 students attending the school for the 2016-2017 school year⁸.

As a district member, the City of Marlborough is responsible for a proportional share of the school's capital

³ State Transportation Improvement Program – FY2016 – FY2019, Massachusetts Department of Transportation, retrieved from <http://www.massdot.State.ma.us/Portals/17/docs/STIP%202016-2019/Final%202016-2019%20STIPWeb.pdf>, June 14, 16

⁴ Massachusetts Department of Elementary and Secondary Education, School and District Profile for Marlborough, retrieved from <http://profiles.doe.mass.edu/profiles/general.aspx?topNavId=1&orgcode=01700000&orgtypecode=5&>, February 11, 2017

⁵ City of Marlborough, MA, Assessor's Data, retrieved from <http://gis.vgsi.com/marlboroughma/Default.aspx>, June 9, 2016

⁶ "MSBA Announces \$4.3 Million Approval for Two Schools in Marlborough Under the Green Repair Program," Massachusetts School Building Authority, retrieved from http://www.massschoolbuildings.org/news_events/11.16.11Board/Marlborough, June 14, 2016

⁷ Massachusetts School Building Authority, retrieved from <http://www.massschoolbuildings.org/node/40170>, June 9, 2016

⁸ Massachusetts Department of Elementary and Secondary Education, School and District Profile for Assabet Valley Regional Vocational Technical District, retrieved from: <http://www.massschoolbuildings.org/node/40170>, February 11, 2017

expenses. The capital budget is determined by the Assabet Valley School Committee, which has one representative from each member municipality. Currently, the City is paying an assessment for its share of a \$62.4 million capital upgrade at the vocational high school completed in 2016. That project included replacing or upgrading the roof, windows, HVAC system, life safety systems, emergency generator, electrical panels and lighting, and selected plumbing and associated fixtures. In addition, science labs were modernized and ADA accessibility was improved. Approximately \$33 million of the project was reimbursed by the MSBA, however Marlborough's portion of the net cost equaled \$14.4 million based on three-year average enrollment data⁹. In FY2017, the assessment for debt service for this project was just over \$1.35 million. See Appendix 5 for the full debt repayment schedule.

Water System

The City maintains a potable water system that during calendar year 2015 provided 1.62 billion gallons of water to users. In a typical year, approximately 70-80% of this water is purchased wholesale from the Massachusetts Water Resources Authority (MWRA) with the rest coming from the Millham Reservoir. The City also maintains Lake Williams as an emergency water source¹⁰.

Based on the current use of land in the watershed area of the Millham Reservoir, the State considers it to be at high risk for contamination. Factors potentially impacting the reservoir include, for example, the presence of residential properties with septic tanks, home heating oil tanks, a sewage treatment plant, and Interstate 495 and Route 20. Based on these and other factors, the State and City have worked together to create a Source Water Assessment and Protection (SWAP) Plan to protect the water quality in the reservoir¹¹. Water from the Millham Reservoir is treated for corrosion control, particulate removal, and is disinfected with chlorine. Fluoride is added for dental health.

There is one water pump station located at Cedar Hill, which is the main water feed from the MWRA. This pump station has a capacity of 7 million gallons per day. There are 3 water storage tanks, each with a capacity of 2 million gallons. There are 180 miles of water main, ranging in size from 6" to 16" with 700 commercial and 9,000 residential water connections. Over 4,000 valves and 1,900 hydrants complete the water system.

Water pressure and storage capacity are maintained by elevated storage tanks and pumping stations located across the city. The pumping stations lift water to higher elevations in order to fill storage tanks and pressurize separate high-pressure zones.

The most recent drinking water report for calendar year 2015 showed no water quality violations and full compliance with all state and federal sampling standards. The report also noted that the City is undergoing an accelerated water meter replacement program which will replace manually-read meters with Automatic Reading Technology (AMR). This technology will substantially reduce the amount of staff time needed to gauge water use as the system is converted from a house-to-house manual read of water meters to the direct transmission of data to the Water Billing Office. Beyond the efficiency gains in terms of staffing, the new meters are more accurate than the aged meters which has already resulted in a 6% reduction in the City's unaccounted-for-water¹². Unaccounted-for-water is a measure of the difference between production and

⁹ "Assabet Valley Regional Technical High School Repair Project Fast Facts" obtained from the City of Marlborough, Office of the Mayor

¹⁰ "Source Water Assessment and Protection Plan for Marlborough DPW Water Division," Massachusetts Department of Environmental Protection, retrieved from <http://www.mass.gov/eea/docs/dep/water/drinking/swap/cero/2170000.pdf>, June 15, 2016

¹¹ "Source Water Assessment and Protection Plan for Marlborough DPW Water Division," Massachusetts Department of Environmental Protection, retrieved from <http://www.mass.gov/eea/docs/dep/water/drinking/swap/cero/2170000.pdf>, June 15, 2016

¹² "Drinking Water Report," City of Marlborough Water Department, retrieved from <http://www.marlbrough->

measured consumption and is a financial loss to the annual water budget.

The City's water system also includes approximately 1,200 lead service lines which connect the residential property to the water main in the street. Although City water tests have not shown these service lines to contribute to any lead levels above federal Environmental Protection Agency (EPA) allowable standards, as a precaution, the replacement of these lines is included in this CIP under a new loan program offered by the State.

Sewer System

The City of Marlborough has a sewer system consisting of 160 miles of sewer main with access through 4,000 manholes. Historically, the City has used clay, asbestos cement, cast iron, and reinforced concrete materials in its pipes, but modern installations and replacements use polyvinyl chloride (PVC) and ductile iron (DI).

Through a system of pumping stations, sewage is transported to the Easterly or Westerly Wastewater Treatment Plants. In total, there are 28 pumping stations in the system, all of which are equipped with Mission Control.

The Easterly Wastewater Treatment Plant, serving areas of the city east of Route 495, is designed to handle a daily average flow of 5.5 million gallons per day (MGD) and discharges to a tributary of Hop Brook. This facility operates under a National Pollution Discharge Elimination System (NPDES) permit issued by the EPA and Massachusetts DEP. The facility's current permit has been issued by the regulators and includes stringent phosphorus discharge limits of 0.1 milligram per liter (mg/l) during the growing season to combat weed growth in Hop Brook.

The Westerly Wastewater Treatment Plant, serving areas west of Route 495 along with the Town of Northborough, is designed to handle an average daily flow of 2.89 MGD and discharges to the Assabet River. This facility also operates under a NPDES permit issued by the EPA and Massachusetts DEP. As with the Easterly Plant, the permit sets stringent phosphorus discharge limits of 0.1 mg/l during the growing season to combat weed growth in the Assabet River. State-of-the-art technology was installed to reduce phosphorus levels not only at the Westerly Plant, but also in four other wastewater plants in neighboring municipalities that discharge to the River.

Beyond meeting the strict parameters of the NPDES permits, the City's sewer system also faces challenges in its aging infrastructure and increasing capacity demands.

Stormwater System

In order to protect the water quality in the region and comply with federal EPA and Massachusetts Department of Environmental Protection (MassDEP) regulations, the City has developed a stormwater management program. Part of this program is to ensure that well-maintained infrastructure collect and channel runoff appropriately. While the City is only responsible for maintaining infrastructure on public property, there is also stormwater infrastructure on private property throughout the city.

Marlborough's physical stormwater infrastructure consists of curbing, gutters, storm drains, catch basins, pipes, manholes, culverts, outfalls, reservoirs, and other components that function together to collect and convey stormwater to larger bodies of water.

Vehicles and Equipment

City staff use an array of vehicles and equipment to complete their tasks on a daily basis. The Department of Public Works maintains over 150 different rolling stock, ranging from sedans and pickup trucks to street sweepers and tractors. These vehicles are used by multiple City departments, although the greatest number are used by divisions within the Department of Public Works (DPW), such as streets, water/sewer, and parks & recreation. Many other smaller, handheld pieces of equipment (e.g. asphalt compactors, shovels, and other grounds maintenance tools) are used daily by public works staff in the execution of their duties.

Public safety departments—Police, Fire, and Emergency Management—also utilize a significant inventory of vehicles and equipment. The Fire Department has five fire engines, two tower/ladders, one rescue vehicle, and eight support vehicles. The Police Department has numerous cruisers and other vehicles and equipment. The departments also have other small equipment and tools needed for their mission, such as generators and trailers.

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 the 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.¹³
 - **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 (e.g., city council or town meeting) and approval of the 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 may be authorized for any municipal purpose for which the city or town would be authorized

¹³ 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.

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, such as investment in department facilities and equipment. There are numerous State statutes that govern the establishment and use of these separate accounts. Examples in the City include accounts funded through the local-option meals tax revenue and fees collected through the public access cable license agreement.

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.”¹⁴ 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 flow 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, neighborhood centers, and the conversion of school buildings for eligible purposes; activities relating to energy conservation and renewable energy resources.

¹⁴ 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.

- **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%.
- **Massachusetts Department of Environmental Protection's Dam and Seawall Repair and Removal Program:** This program was created in 2013 to provide funding to municipalities to repair and remove dams, levees, seawalls, and other forms of flood control. The Dam and Seawall program offers loans at 2% interest on up to \$1 million per project, with a minimum 25% match to be provided by the municipality.
- **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 repair and construction via a series of programs. In the School Building Program, 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. Through the Accelerated Repair Program, the MSBA will fund roof, window, and boiler projects with an expected 18-month completion date. Funding can be provided for multiple projects in a single district in a year. The Major Repair Program includes roofs, windows, and boilers, but can also include other significant building renovations. Districts are limited to one project per year under the Major Repair Program, but work can be more substantial than the Accelerated Repair Program.

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 the Glossary in the appendices.

THIS PAGE IS INTENTIONALLY BLANK

MARLBOROUGH CAPITAL PLANNING PROCESS (FY2018-FY2022)

The City of Marlborough 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 FY2018-FY2022. The project team met with leadership of all City departments to explain the process to be followed and discuss the 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 department's priority placed on the project, 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 Comptroller/Treasurer to gain 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. Various capital funding alternatives were explored until one was selected, as will be discussed in the "Resources Available" section below.

Project Requests

Altogether, 107 project requests were submitted, totaling nearly \$185 million across all five years of the plan and across all funds. Not all of these requests qualified to be funded in the final plan. Among the most significant requests were:

- \$34 million to replace Richer Elementary School;
- \$23 million to replace the public library; and
- \$20 million for pavement reconstruction

The department with the greatest dollar amount of requests was the DPW. In addition to the investment in the City's roadways, the DPW requested more than \$20 million for the water and sewer systems, more than \$11 million for parks and open space, and numerous other projects for fleet, facilities, etc.

When analyzing project requests by fund, it is clear that significant resources can be made available through funding sources other than the general fund. These sources include the water and sewer enterprise funds, the City's annual allocation of roadway funds from the State (i.e. Chapter 90 funds), special-purpose funds, and other State or Federal loan or grant programs. In addition, a number of requests appear to be eligible for partial reimbursement from the MSBA (after a competitive application process).

DEPARTMENT REQUESTS BY FUND (ALL YEARS)								
Department	GF Debt	GF PayGo	WEF/SEF	Chap90	MSBA	State/Fed Program	Other	Total
COA/Senior Ctr		85,000						85,000
DPW	27,825,000	7,090,000	24,050,000	7,943,000		9,300,000	13,277,500	89,485,500
Emergency Mgmt		956,700					340,000	1,296,700
Fire Department	11,500,000	745,000						12,245,000
Info Tech	3,375,575	1,120,000						4,495,575
Library	26,250,000	52,500						26,302,500
MCDA						2,190,000	1,000,000	3,190,000
Police Dept		631,000						631,000
School Dept	21,045,000	3,587,000			23,754,000		160,000	48,546,000
Total	89,995,575	14,267,200	24,050,000	7,943,000	23,754,000	11,490,000	14,777,500	186,277,275

Resources Available

Funding for the \$142.3 million in projects included in the *FY2018-FY2022 CIP* comes from three broad categories, each of which will be discussed below:

- General fund debt and pay-as-you-go
- Water/sewer debt and pay-as-you go
- Grants and other funds

General Fund Debt and Pay-as-You-Go

Over the past 10 years, increases in revenues in Marlborough coupled with cautious spending have placed the City in a very healthy financial position, and this, coupled with declining debt service from prior capital projects, provide a timely opportunity for the City to make a regular investment in capital improvements, without adversely impacting the operating budget.

Under Proposition 2½, local tax levy revenues can only be increased by 2½ % overall, regardless of changes in costs. The only exception to this is “new growth” which is growth in property values generated by improvements being made to the property (e.g., construction of a new building or renovation). Over the past 10 years, Marlborough has experienced new growth ranging from approximately \$1.9 million (FY2014) to nearly \$4 million (FY2016) per year, with a 10-year average of just over \$2.5 million in growth. This is in stark contrast with other cities in

NEW GROWTH HISTORY			
Year	Residential	Comm Ind Pers Prop	TOTAL
2008	788,905	1,823,390	2,612,295
2009	344,203	2,611,735	2,955,938
2010	130,567	1,873,752	2,004,319
2011	113,798	1,916,448	2,030,246
2012	64,393	2,232,213	2,296,606
2013	194,217	2,202,072	2,396,289
2014	282,186	1,589,919	1,872,105
2015	375,497	2,097,208	2,472,705
2016	1,145,880	2,835,754	3,981,634
2017	674,794	2,126,596	2,801,390
10 Yr Avg	411,444	2,130,909	2,542,353

Massachusetts with the same residential population, but a smaller commercial tax base and less investment activity.

Of significance is the fact that commercial, industrial, and personal property growth has exceeded residential new growth year-after-year, by an average factor of over \$5 in commercial new growth for every \$1 in residential new growth. This provides the City with a strong tax base where in 2016, the residential taxpayer contributed 54.8% of the tax levy and the commercial taxpayer contributed 45.2%. In many Massachusetts communities, residential property tax can constitute up to 90% of local tax revenues.

The combination of significant increases in tax levy revenues, coupled with careful budgeting has allowed the City to offer considerable tax relief to the local taxpayer. In fact, since 2007, the amount of unused tax levy capacity (i.e., amount that could lawfully be charged to the taxpayer under Proposition 2½, but not used to balance the annual budget) has grown consistently from 6.7% of the total allowable tax levy to 24.5% in FY2017.

UNUSED TAX LEVY CAPACITY				
Year	Actual Tax Levy (excluding any Debt Exclusion)	Excess Tax Levy Capacity	Total Tax Levy Limit (excl Debt Exclusion)	Excess as % of Total
2007	79,018,938	5,636,980	84,655,918	6.7%
2008	79,753,097	9,631,514	89,384,611	10.8%
2009	81,935,337	12,639,827	94,575,164	13.4%
2010	80,996,050	17,947,812	98,943,862	18.1%
2011	83,511,878	19,935,827	103,447,705	19.3%
2012	85,845,867	22,484,637	108,330,504	20.8%
2013	86,361,360	25,139,346	111,500,706	22.5%
2014	88,052,213	21,148,065	109,200,278	19.4%
2015	88,678,940	24,474,330	113,153,270	21.6%
2016	91,331,454	28,632,282	119,963,736	23.9%
2017	94,119,595	30,590,855	124,710,450	24.5%

Despite offering significant relief to taxpayers each year, the City's revenues have exceeded its expenditures providing for substantial balances of free cash at the end of each fiscal year. Some of the free cash has been deposited into the City's general stabilization fund to be available in event of emergency or other unexpected circumstance while other funds have been used to support capital projects (see Appendix 3).

In recent years, the City has funded single year projects called "pay-as-you-go" projects that do not require debt exclusively from free cash. This has offered significant funding for capital, ranging from \$500,000 (FY2013) to up to \$3 million (FY2017 projected), but in a manner that is variable and has not challenged departments to truly engage in long term planning to address capital needs.

In the *FY2018-FY2022 CIP*, the City will begin the process of gradually increasing its annual contribution to capital funding from annual general fund revenues while decreasing the use of free cash for that purpose, doing so in a manner that will not adversely impact the

FREE CASH FOR CAPITAL PURPOSES			
Year	Free Cash	Amount of Free Cash for Capital	% of Free Cash for Capital
2011	4,906,090	0	0%
2012	3,840,266	2,672,282	70%
2013	7,766,863	500,000	6%
2014	8,285,429	1,771,120	21%
2015	8,800,061	1,356,628	15%
2016	6,721,252	2,825,000	42%
2017 (proj.)	12,176,290	3,000,000	25%
AVERAGE	7,499,464	1,732,147	23%

operating budget. This will enhance departments' ability to engage in long term planning as is needed for large scale improvements such as major park or building renovations and will allow them to strive to maximize the use of vehicles in the fleet inventory (by knowing that a vehicle will be replaced in a few years, departments will be encouraged to maintain them in working condition as long as possible, instead of a practice where they wait until vehicles are inoperable to request funding.)

As can be seen from the table below, the City's total resources available for capital projects, including existing and authorized/unissued debt, will gradually rise from an estimated \$9.35 million in the current fiscal year (FY2017) to over \$10.2 million in FY2022, at the same time that the use of free cash for capital will decline from \$3 million to \$1 million. This is made possible in part because debt service for existing bonded projects will fall by over \$2.1 million per year between FY2017 (\$6.035 million) to FY2022 (\$3.879 million).

ANNUAL GENERAL FUND CAPITAL INVESTMENT FY2018-FY2022 CIP						
Year	Net Existing GF Debt Svce	Auth/ Uniss Est Debt Svce	PayGo Tax Levy	Available for FY2018-FY2022 CIP		Annual Capital Invest
				PayGo Free Cash	Debt Service or PayGo	
2017	6,035,744	190,584	124,500	3,000,000	n/a	9,350,828
2018	5,141,790	766,835		3,000,000	500,000	9,408,625
2019	5,027,925	938,200		1,750,000	1,674,518	9,390,643
2020	4,909,382	913,200		1,500,000	2,349,780	9,672,362
2021	4,205,889	888,200		1,250,000	3,618,444	9,962,533
2022	3,879,910	843,200		1,000,000	4,538,299	10,261,409

Another way to consider the capital spending plan is as a percent of the annual operating budget. From this, it can be seen that the FY2017 anticipated spending is equivalent to 7.4% of the annual operating budget, including debt service and pay as you go capital projects. Over the course of the capital plan, this commitment will be maintained in the 7% range of the operating budget, a figure that is ambitious yet manageable. By establishing a percentage figure, the amount of spending on capital in dollars will increase (or decrease) as the budget does, but in a way that offers long term stability in investments. Of course, should the City's revenue picture change dramatically in any one year, the capital plan could be revisited and projects could be added, modified, delayed or eliminated.

ANNUAL GF CAPITAL INVESTMENT AS % OF GF OPERATING BUDGET (FY2018-FY2022)			
Year	GF Op Budget Est @3%/yr inc (less W/S)	Annual Capital Invest (Exist-Auth-Avail)	Capital Inv as % of GF Op Budget
2017	126,396,958	9,350,828	7.4%
2018	130,188,867	9,408,625	7.2%
2019	134,094,533	9,390,643	7.0%
2020	138,117,369	9,672,362	7.0%
2021	142,260,890	9,962,533	7.0%
2022	146,528,716	10,261,409	7.0%

The spending plan for the FY2018-FY2022 CIP will make funding available for approximately \$142.3 million in capital projects over that time period (see FY2018-FY2022 Capital Plan Details below for specific projects).

Water and Sewer Debt and Pay-as-You-Go

Marlborough operates its water and sewer departments on a self-supporting basis, that is, expenditures are covered by revenues from residents and businesses generally in the form of user fees and charges. However,

although the operations are accounted for separately, they are not officially included in an enterprise fund. As such, if expenditures exceed revenues in any given year, the City's general fund must be used to fund the overage.

The *FY2018-FY2022 CIP* does not attempt to calculate any changes in user rates as a result of new projects or investments requested by departments. Instead, projections of debt service costs are included in the CIP for water and sewer projects. All of the water and sewer projects in the *FY2018-FY2022 CIP* are debt-funded. (See Appendix 6 for long term water and sewer debt service projections).

ANNUAL WATER/SEWER CAPITAL INVESTMENT FY2018-FY2022 CIP						
Year	Existing Debt Service		Auth/Unissued Est Debt Svc	Total Exist & Auth	FY18-22 CIP Debt Svc	Total W/S Capital Invest
	Water	Sewer				
2018	582,845	4,508,180	1,158,310	6,249,335	200,000	6,449,335
2019	529,685	4,485,359	1,751,371	6,766,415	200,000	6,966,415
2020	519,525	4,441,828	1,990,738	6,952,091	573,372	7,525,463
2021	471,425	4,210,227	1,965,493	6,647,145	810,165	7,457,310
2022	462,525	4,182,087	1,935,270	6,579,882	1,083,643	7,663,525

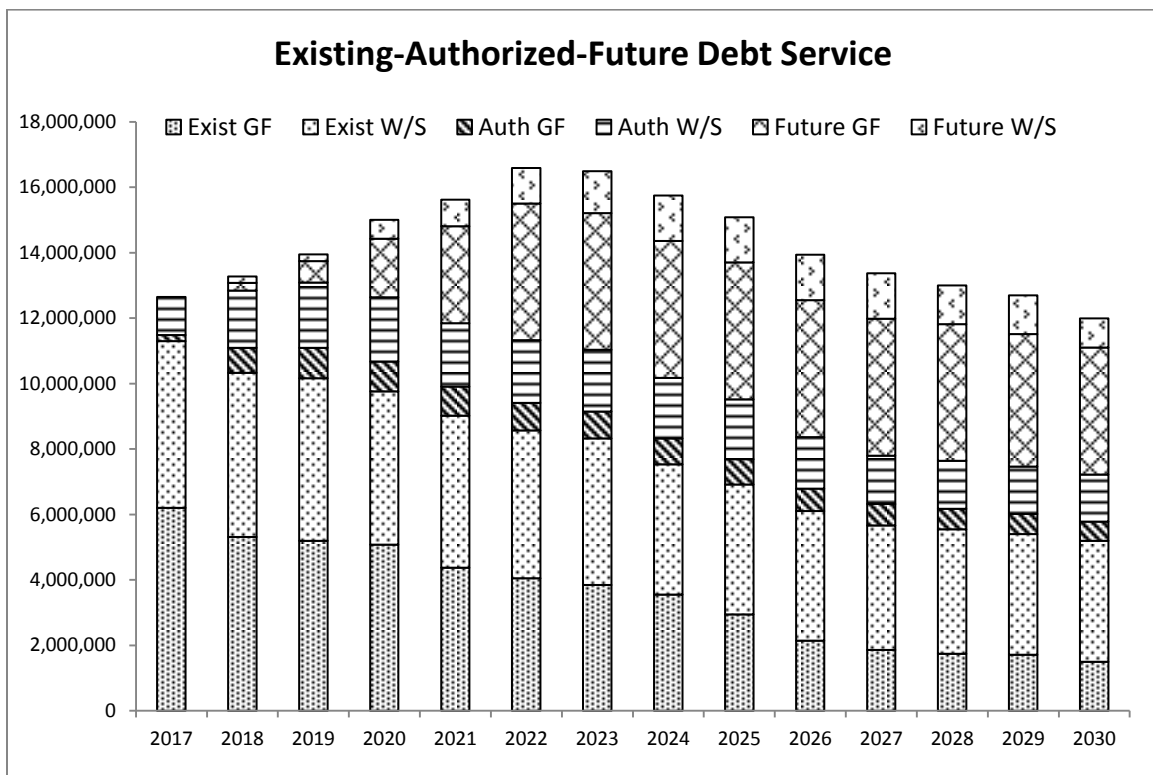
The spending plan for the *FY2018-FY2022 CIP* will make funding available for approximately \$18.3 million in water- and sewer-related capital projects over the five period (see FY2018-FY2022 Capital Plan Details below for specific projects).

Impact on Annual Debt Service

If the City operated a separate water and sewer enterprise fund and adopted policies indicating that the enterprise would be self-funding, bonding agencies would consider general fund debt to be distinct from water/sewer debt. However, since no enterprise exists, it is necessary to consider the combined debt. In terms of the general fund, existing City debt is scheduled to decline from \$4.85 million in FY2017 to \$3.1 million in FY2022, and Marlborough's share of Assabet Valley debt service is scheduled to fall from \$1.36 million to approximately \$944,000, based upon current enrollment (see Appendix 5 for details). However, a portion of this \$2.16 million 5-year decline will be recaptured for projects that have been authorized by the City Council, but not yet bonded such as \$9.5 million for building renovations and construction, recreation facilities, roads.

Over the same time period, existing water and sewer debt service will also decline (from \$5.09 million in FY2017 to \$4.5 million in FY2022), but authorized yet unissued debt, (\$11 million for Water and \$17.8 million for Sewer) will be added for water and sewer main replacement and improvements to the wastewater treatment plant (see Appendix 6 for details). The new debt will rise from \$1.16 million to \$1.9 million in FY2022. The water/sewer work will take advantage of the low-interest deferred-payment loan programs offered by the Commonwealth, in addition to a new, interest-free loan program through the Massachusetts Water Resources Authority (MWRA) that offers funding to address lead water service lines.

Combined, debt service for existing and authorized issues and FY18-FY22 CIP general fund and water/sewer projects will rise from the \$12.65 million budgeted in FY2017 to just under \$16.6 million in FY2022 before beginning to decline again.



Grants and Other Funds

In addition to the State and Federal grants described above (see Possible Funding Sources), Marlborough has access to several additional resources outside of the general fund and water and sewer revenues. These include:

- City of Marlborough Public, Educational, and Government (PEG) Access TV Channel Special Revenue Fund:** The City, as an issuing authority for the cable television license pursuant to State law¹⁵, receives certain revenues from the licensee, a portion of which is restricted for cable-related expenditures.
- City of Marlborough Parks and Fields Development Special Revenue Fund:** In 2013, the City adopted the local option meals excise tax and created the special revenue fund, which is funded in part by a portion of the meals tax received annually by the City. The fund is used to “promote and to sustain the development of sports tourism through the development of parks and fields in the city.”
- Federal Land & Water Conservation Fund administered by the Massachusetts Department of Conservation Services (DCS):** The Land & Water Conservation Fund “provides up to 50% of the total project cost for the acquisition, development and renovation of park, recreation or conservation areas.” Municipalities are eligible to apply, but must have a current Open Space and Recreation Plan. In the federal fiscal year 2016, \$450 million was available, and Massachusetts received \$2 million. In the most recent round, the maximum award was \$300,000 and 50% of the total project.

¹⁵ Massachusetts General Law, Chapter 166A

- **Massachusetts Board of Library Commissioners Massachusetts Public Library Construction Program (MPLCP):** The Massachusetts Public Library Construction Program provides grants for “construction of new library buildings, addition/renovations, special projects and the preliminary planning activities essential to building projects.” There are two types of grants: planning and design grants are used to prepare to apply for construction grants. These grants are capped at \$50,000 and must be matched with \$25,000 in local funding. Construction grants “assist libraries with major capital improvement projects that involve building new facilities, expanding and renovating an existing library building, or adapting and reusing another building for use as a library. Funds pay for a portion of eligible project costs. These costs include the purchase of real property, design and engineering services, project management services, site preparation, construction, and fixed capital equipment. Grant funds do not pay for furniture, computers, or landscaping and paving. The average grant award is 50% of the eligible costs. A local financial commitment of no less than 25% of the project's eligible costs is required.
- **Massachusetts Historical Commission Massachusetts Preservation Projects Fund:** The Massachusetts Preservation Projects Fund “is a state-funded 50% reimbursable matching grant program established in 1984 to support the preservation of properties, landscapes, and sites (cultural resources) listed in the State Register of Historic Places.” The amount of funding in the current grant-making round is expected to be similar to the previous round (\$780,000). Pre-development projects (e.g. a feasibility study) can range from \$5,000 to \$30,000 while development or acquisition projects can range from \$7,500 to \$100,000.
- **Massachusetts Department of Housing and Community Development (DHCD) High Leverage Asset Preservation Program (HILAPP):** The High Leverage Asset Preservation Program (HILAPP) “provides grants to local housing authorities that are able to secure matching funds from local and/or other non-DHCD sources to support the modernization and redevelopment of state-aided public housing. HILAPP is a complement to the Formula Funding Program which was launched in 2010. Whereas Formula Funding predictably disburses capital bond funds across the entire state-aided public housing portfolio according to a needs-based formula, HILAPP grants funding awards via a competitive process.” DHCD plans to distribute \$75 million in grants through FY2018.

See FY2018-FY2022 Capital Plan Details below for specific projects.

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?

- 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 107 project requests, it should be noted that they were not used rigidly in developing the FY2018-FY2022 CIP. At times, projects that received modest scores, predominantly because they did not contribute to the policy areas, but were critical needs of the department – such as purchasing repaving equipment- were elevated for consideration in the plan based upon need and resource availability.

THIS PAGE IS INTENTIONALLY BLANK

FY2018-FY2022 CAPITAL PLAN DETAIL

Plan Overview

The proposed *FY2018-FY2022 CIP* makes substantial investments in the City's infrastructure and capital assets that will have a direct, positive impact on Marlborough residents, students, businesses, and visitors. The plan prioritizes public education, economic development, and regular investment for maintenance and asset life preservation. Projects will ensure road infrastructure is safe and reliable, improve teacher effectiveness and student learning, increase recreational opportunities for residents, upgrade and maintain public safety facilities, and improve the safety of staff and the residents they serve.

Strategic decisions were made to balance projects costs with the City's projected available resources each fiscal year. The timing or scope of some projects was changed to accommodate the City's financial position. In addition, the plan leverages grants and other funding sources available from the Federal and State governments and other private sources. The plan reflects the City administration's priorities, but also balances the needs and priorities of the various departments within the available resource scheme.

INVESTMENT BY DEPARTMENT All Projects, All Funding Sources FY2018-FY2022		
Department/Division	# of Projects	Total
Council on Aging	1	85,000
Department of Public Works	18	39,425,000
Emergency Management	3	1,296,700
Fire Department	6	12,100,000
Information Technology	3	3,534,000
Public Library	1	23,000,000
Marlborough Community Development Authority	1	2,190,000
Police Department	2	240,000
School Department	14	43,071,000
Sewer (Division of DPW)	1	4,000,000
Water (Division of DPW)	7	13,350,000
Total	57	142,291,700

Projects by Asset Type

As shown in the table below, across all asset types, the most significant spending (approximately 30%) is on school projects, driven largely by the \$34 million replacement of the Richer Elementary School, which accounts for nearly 80% of the total cost of school projects¹⁶. Investments in the City's roads and sidewalks represent

¹⁶ Several school department projects include renovation or repair work at Richer Elementary School. These projects will

the next most significant category at \$30 million (approximately 21%). Projects for public facilities represent approximately 25% of total spending and include a new public library and west end fire station.

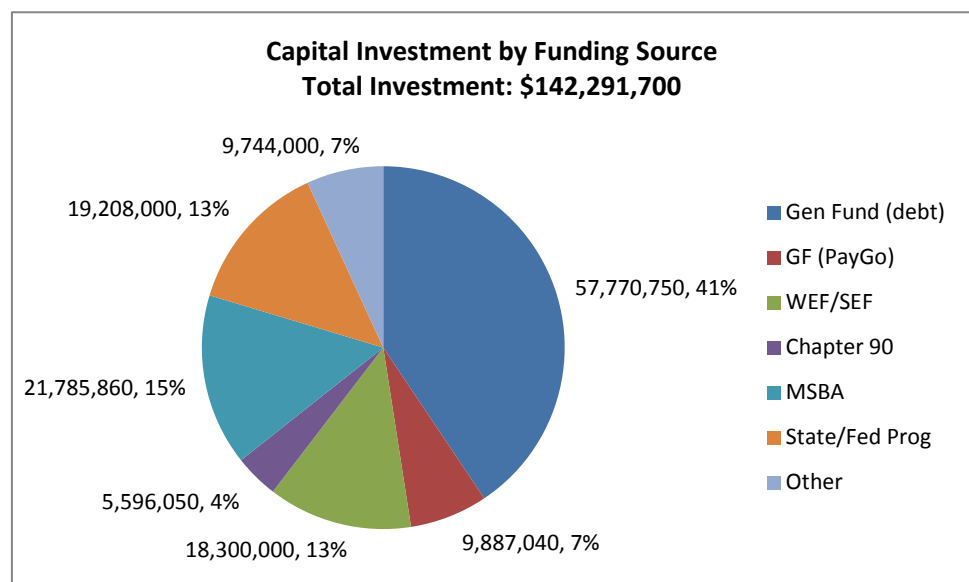
INVESTMENT BY ASSET TYPE FY2018-FY2022		
Asset Type	Total Investment	% of Total
Facilities	35,390,000	24.87%
Information Tech	3,534,000	2.48%
Parks & Open Space	4,410,000	3.10%
Roads/Sidewalks	30,000,000	21.08%
Schools	43,071,000	30.27%
Sewer	4,000,000	2.81%
Stormwater	1,750,000	1.23%
Vehicles/Equipment	6,786,700	4.77%
Water	13,350,000	9.38%
Total	142,291,700	100.0%

The plan makes significant investments in all fiscal years, although fiscal years 2020 through 2022 represent more than three-quarters of total spending. This is largely due to the fact that three major facilities projects (i.e., new elementary school, public library, and fire station) occur in these years.

Projects by Funding Source

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. Approximately 48% of the total value of all projects will be paid for through the City's general fund, whether as a result of borrowing or as a pay-as-you-go project and 13% will be funded by the City's water/sewer enterprise fund.

The balance of projects (39% of total) will be funded from non-local sources. Altogether State, Federal, and other sources will contribute more than \$56 million of funding for projects in the capital plan.



be reevaluated depending on the City's final plan and schedule for replacement of Richer. Some of these projects may be reduced in scope and cost.

Comparison of General Fund Resources Available and Committed

As discussed above, the City has substantial resources available for capital investment because of increasing revenues, conservative spending practices, and declining debt service. By setting general fund capital spending at a target of 7% of the general fund operating budget, the City would be poised for an aggressive yet achievable capital program marked by steady, predictable investments.

The *FY2018-FY2022 CIP* does not commit all of the City's projected available general fund resources. The surpluses will allow the City to address unforeseen needs or absorb unforeseen costs (e.g. if interest rates rise or a grant is not received). The deficit in FY2022 will have to be addressed in the future, assuming it remains after adjusting project costs with more up-to-date information.

GENERAL FUND RESOURCES COMMITTED AND AVAILABLE FY2018-FY2022				
Fiscal Year	FY18-FY22 CIP GF PayGo	FY18-FY22 CIP GF Debt	Available Resources	Surplus (Deficit)
2018	2,412,760	229,432	3,500,000	857,808
2019	2,440,000	656,558	3,424,518	327,960
2020	1,754,000	1,789,643	3,849,780	306,137
2021	1,645,000	2,969,833	4,868,444	253,611
2022	1,635,280	4,184,074	5,538,299	(281,055)
5 Yr Total	9,887,040	9,829,540	21,181,040	1,464,461

Projects by Department

Project #	Project Title	Project Description	Total Project Cost
Council on Aging			
COA1	Purchase new 14-passenger van/minibus with lift	The project is the purchase of a new 14-passenger van/minibus with lift. The COA currently provides transportation daily to designated locations such as grocery stores, shopping malls, and the Senior Center, as well as personal appointments. The COA has an 8-passenger minibus, and ridership has been increasing.	85,000
Department of Public Works			
DPW2	Replacement two 4-wheel drive F-550 dump trucks	The project is the replacement of two 4-wheel drive 1-ton dump trucks with plow and sander. These vehicles are 17+ years old, have high mileage, and are in fair to poor condition.	110,000
DPW3	Replace 3 cubic yard front end loader	The project is the replacement of a 3 cubic yard front end loader with a 12 foot PA plow.	165,000
DPW4	Replacement of three 4-wheel drive pickup trucks	The project is the replacement of three 4-wheel drive pickup trucks with plows. These vehicles are in fair to poor condition and maintenance costs are rising.	150,000
DPW5	Upgrade fuel depot components	The project is to upgrade the fuel depot components. The existing 10,000-gallon underground storage tank will be removed and replaced with a new aboveground tank of the same size. A new dispenser will be added. The existing aboveground diesel tank will be relocated. In addition, a fuel management system will be installed. The system will be brought into regulatory compliance, and the new system will be easier and less expensive to maintain.	340,000
DPW6	Replacement of tracked sidewalk plow with attachments	The project is the replacement of the tracked sidewalk plow with a snow blower and sander.	150,000
DPW12	Replace forestry bucket truck	The project is to replace a 60 foot bucket truck for forestry division.	200,000
DPW18	Rehabilitation of the Maplewood and Rocklawn Cemeteries Holding Tombs	The project is the rehabilitation of the Maplewood and Rocklawn cemeteries holding tombs. The tombs are historic features and have deteriorated over time.	400,000
DPW19	Rehabilitation of Women Veterans Park	The project is to address issues at Women Veterans Park, namely: repair heaved pavers, replace oversized plantings, upgrade lighting, and install a new irrigation system. Currently, the park is overgrown and in general disrepair. The park is located at a gateway location entering into the city.	80,000
DPW20	Ghiloni Park restoration project	Ghiloni Park is the City's largest park facility with various amenities, many of which are in poor condition. Since the time it was built, the population has grown about 25%. Renovations, upgrades, and changes are needed to meet resident demands. ADA-improvements are needed. The parking lot will also be expanded.	4,250,000
DPW21	Repairs to City Hall	The project includes repointing the bell tower, associated metal work and interior masonry work, replacing flat roof and skylights, upgrading lighting to LED, and replacing the fire alarm system. The technology is outdated, and capital investment is needed.	600,000
DPW22	Upgrades to existing DPW building	The project is repairing the concrete building structure, replacing about 20-30 windows, and upgrading lighting to LED. The repairs will address any structural issues and increase the building's energy efficiency.	500,000
DPW24	Energy efficiency upgrades to all municipal buildings	The project is a multi-year investment in energy efficiency upgrades, including HVAC, lighting, windows, insulation, roofs, solar, variable frequency drives (VFDs), and energy valves upgrades. These upgrades will help control ongoing costs and protect the environment.	500,000
DPW25	Replace overhead and exterior doors at Central Fire Station	The project is the replacement of the 8 single pane glass overhead doors and 6 exterior man doors. The doors are inefficient and heat loss is an issue.	150,000

Project #	Project Title	Project Description	Total Project Cost
DPW29	Centennial Park Rehabilitation	The project is to replace trees and plants at Centennial Park and add irrigation. Excavation of the entire area will be done to remove unwanted material (Stumps, asphalt and other debris) and place new plantings and site drainage. The project would contribute to the overall revitalization of the downtown business district.	80,000
DPW32	Annual culvert repair and replacement	The project provides funding for annual culvert repair and/or replacement. The DPW maintains a list of priority culverts. Currently on the list are culverts located on Hemenway St Ext, Vega Rd, and Causeway St Ext, although priorities may change due to changing circumstances. Culverts may need to be replaced because the pipe is failing, which may impact the roadway above.	1,750,000
DPW33	Pavement maintenance and reconstruction	The project is annual funding for pavement maintenance and reconstruction. Pavement segments will be prioritized based on objective data with the goal of maintaining the City's pavement network at an acceptable level and maximizing pavement life as well as funding.	20,000,000
DPW36	Apex Center project	Marlborough will use \$3,050,000 in MassWorks funds to make infrastructure improvements along Route 20, including new turn lanes and upgraded signals, in support of the Apex Center of New England. The Apex Center will feature two new hotels, 200,000 square feet of entertainment and retail space, 110,000 square feet of new office space, and six new restaurants, bringing new amenities to the region's residents and employers.	4,000,000
DPW39	Reconstruction of Donald Lynch Boulevard	The project is the reconstruction of Donald Lynch Boulevard where water utilities have or will be installed. Donald Lynch Boulevard is a main commercial thoroughfare.	6,000,000
Emergency Management			
EM1	Replace mobile and portable radios for fire and police departments	The project is to replace all Fire and Police mobile and portable radios, including chargers and conditioners. The equipment has reached the end of its lifespan and is no longer supported by the manufacturer. New technology is more effective for public safety departments.	840,000
EM2	Upgrade Police and Fire radio receivers	The project is the replacement of 32 receivers at eight sites. The existing equipment is outdated.	337,000
EM3	Bi-directional amplifiers at 5 schools	The project is the addition of bi-directional amplifiers at 5 school locations. A bi-directional amplifier is an antenna system in a building that re-transmits the radio frequency in non-reception areas in the building for public safety communication purposes. This technology is required under the updated life-safety building codes and necessary for public safety agencies to do their jobs.	119,700
Fire Department			
FD1	New West End Fire Station	The project is the construction of a new fire station in the West End based on population and commercial activity growth. The project will be broken out into phases. Phase I is funding for a study to assess need and explore options for location of a new station in the West End. Phase II is funding for land acquisition and site preparation. Phase III is funding for engineering and design services. Phase IV is funding for construction of the building.	8,050,000
FD2	Replace Rescue 1	The project is to replace Rescue 1, a 2004 Freightliner with about 110,000 miles on the frame that runs out of Fire Station 1-Headquarters. It has reached the end of its useful life, and maintenance and repair costs are mounting. The replacement truck will be a heavy-duty truck that will have a longer expected lifespan.	650,000
FD3	Replace Engine 5	The project is to replace Engine 5. A frontline engine that will be cycled down to reserve status. A new engine will replace it on the frontline, running out of Fire Station 1- Headquarters.	675,000
FD4	Replace Engine 4	The project is to replace Engine 4. It is currently used as a reserve piece. A frontline engine will be cycled down and a new engine would replace it on the frontline, running out of Fire Station 1- Headquarters. The new engine will be very similar to the existing apparatus.	625,000

Project #	Project Title	Project Description	Total Project Cost
FD5	Replace Ladder 2	The project is the replacement of Ladder 2 with a Quint. The ladder will have exceeded its standard useful life at the time of its replacement. A Quint will be a more versatile apparatus for the department.	1,500,000
FD8	Replace self-contained breathing apparatus (SCBAs)	The project is to replace the department's self-contained breathing apparatus (SCBAs). The entire supply has reached the end of service life. Newer SCBAs provide enhanced safety features to protect firefighters.	600,000
Information Technology			
IT1	Replace/upgrade City IT infrastructure and hardware	The project is the ongoing replacement and upgrade of City IT infrastructure and hardware. This includes desktop computers, laptop computers, wireless access points, security cameras, BigTouch interactive screens, servers, and backend infrastructure such as switches, routers, and firewalls. This technology allows City staff to do their jobs efficiently and meet customer expectations.	930,000
IT2	Replace/Upgrade School Learning Tech	The project is the ongoing replacement and upgrade of learning technology in the schools, including computers for teachers, students, computer labs, and administrators and associated accessories such as carts, as well as BigTouch screens and projectors for classrooms.	2,000,000
IT3	Replace/Upgrade School IT Network Infrastructure and Security Systems	The project is the ongoing replacement and upgrade of network infrastructure and security systems in the school buildings. Upgrades to the network infrastructure are necessary so that technology can be used in the schools and to allow for upgrades and expansions of the security systems to function properly.	604,000
Public Library			
LIB1	New Public Library Facility	The project is to add on to or relocate the public library facility to enhance/expand program, collection, services and community meeting space, along with parking. Demand for services has increased, and demographic trends indicated future increases as well. The current facility is outdated, undersized, and unable to meet demand.	23,000,000
Marlborough Community Development Authority			
MCDA1	Modernization of apartments at 29 Pleasant St	The project is the modernization of the interiors of the senior apartments at 29 Pleasant St. The 2-story building houses 44 units. The electrical systems, kitchens, and baths will be upgraded, and other safety-related improvements may be made. In addition, certain units will be made accessible.	2,190,000
Police Department			
PD1	Five year replacement schedule for unmarked/administrative police vehicles	The project is the scheduled replacement of unmarked and administrative police vehicles. The useful life of unmarked/administrative police vehicles is typically 10 years or less.	200,000
PD2	Replace electronic control weapons	The project is the replacement of the department's Electronic Control Weapons (ECWs), commonly called Tasers®. ECWs are critical tools for officers in the field to help diffuse violent and potentially dangerous situations with less than lethal force.	40,000
Marlborough Public Schools			
SCH1	Update fire alarm panels and detection units district-wide	The project is to update the fire alarm panels and detection units in all school buildings except the high school. The project is needed for school safety and security. Existing systems are between 10 and 20 years old and are now obsolete.	1,060,000
SCH2	Replace Emergency Lighting	The project is to replace emergency lighting systems at Richer School and High School. The project is needed for school safety and security.	360,000
SCH4	Fix or replace HVAC Controls at MHS	The project is the replacement or repair of the HVAC controls at the High School. The controls do not work	275,000

Project #	Project Title	Project Description	Total Project Cost
		properly, sometimes negatively impacting the learning environment for students.	
SCH5	Generator Repair and Replacement	The project is to replace the generators at Richer, Jaworek, and Hildreth Schools and repair the generator at the District Education Center. The generators currently do not work and therefore the sites cannot be used as emergency locations.	491,000
SCH7	Replace Windows at District facilities	The project is to replace the windows at Richer, Whitcomb, and Hildreth Schools, as well as the District Education Center. The windows are inefficient and some are dangerous because they are single pane.	3,250,000
SCH8	Replace Lockers at MHS	The project is the replacement of lockers at the High School over the course of four years, beginning with the hallway of lockers in the worst condition. The lockers are from the mid-1970s and do not serve the needs of students.	300,000
SCH11	Replace Roof at Whitcomb	The project is the replacement of the flat rubber membrane roof at the Whitcomb School. The roof has reached the end of its life and has leaked.	2,250,000
SCH13	Replace Richer and Whitcomb Schools restroom partitions	The project is the replacement of the restroom partitions with ADA-accessible partitions. Updating the partitions is required for equal access.	150,000
SCH14	Repair Concrete Sidewalks at High School	The project is the repair of the sidewalks at the high school. The sidewalks are in disrepair and are starting to become a safety hazard for students and staff.	85,000
SCH17	DEC Masonry Repairs	The project is masonry repairs at the District Education Center. The building is from the 19th century and periodic capital improvement is required.	150,000
SCH18	Replace Hildreth Gym Floor	The project is the replacement of the gym floor at Hildreth School. The floor is from the 1970s and many sections have had to be replaced.	125,000
SCH19	Replace Roof at Hildreth School	The project is to replace the flat rubber membrane roof at Hildreth School. The roof has surpassed its useful life, and there are leaks.	450,000
SCH20	Replace Whitcomb Intercom and Clocks	The project is the replacement of the intercom system and clocks at Whitcomb School. The systems are outdated. The clocks do not keep time, and the intercom system has been requiring significant annual maintenance.	125,000
SCH23	New elementary school to replace Richer Elementary School	The project is to build a new elementary school to replace Richer Elementary School. There are severe space constraints at Richer, and the facility is outdated and in need of significant repair. In particular, the mechanical, electrical, and plumbing systems would need to be updated if the school was to continue to operate and a new automated fire suppression system would need to be added. A detailed description of the school's deficiencies was submitted to the MSBA and is available from the Mayor's office. The City has already appropriated \$1 million for a feasibility study. The MSBA will reimburse the City approximately 55 percent for this project.	34,000,000
Sewer Department			
SEW2	Sewer Pump Station Rehab Projects	The project is the overhaul of 7 sewer pump stations and updated SCADA and radio antennae at the remaining 21 sewer pump stations. Failure at a sewer pump station could result in raw sewage flowing out, presenting a number of potential public health issues and resulting in fines.	4,000,000
WAT/ SEW1	Sudbury Street Area Water and Sewer Project, Phase 3	The project is the installation of new gravity sewer and replacement of the existing asbestos cement water mains on Sudbury Street. This is the final phase of a 3-phase project to upgrade the water and sewer systems in this area.	4,000,000
Water Department			
WAT3	Russel Street Water Main Replacement	The project is the replacement of 700 feet of 6 inch water main on Russel Street from Pleasant Street to	500,000

Project #	Project Title	Project Description	Total Project Cost
		Mechanic Street with a 16 inch ductile iron pipe. The water main is currently undersized for demand.	
WAT4	Spoon Hill Water Tank Rehabilitation	The project is the internal and external rehabilitation of the Spoon Hill water storage tank including installing an active mixing system to ensure water quality. Upgrades were recommended in a 2010 inspection.	1,000,000
WAT6	Water Gate Valve Replacement Program	The project is the replacement of approximately 150 water gate valves that do not turn off the water to the water mains. During a break, gate valves are used to isolate the flow of water. Faulty valves can degrade customer service and cause staff time to be used inefficiently.	500,000
WAT7	Bigelow Street Water Main Replacement	The project is the replacement of the existing 6" water main under the brook with a new 8 inch" main to reconnect or loop water main. The dead end water main has resulted in water quality issues and inadequate fire protection in the vicinity.	350,000
WAT9	Lead Water Service Line Replacement Program	The project is the replacement of all 1,240 lead water service lines throughout the City.	5,000,000
WAT10	Boston Post Road East Water Main Replacement	The project is the replacement of 7,000 feet of 8 inch asbestos water main on Boston Post Road East with 8 inch ductile iron pipe. This is the main water feed for the East side of the city. This main has failed several times due to its brittle nature. Asbestos is a hazardous material that requires special disposal by trained professionals. Beyond the negative health effects, failure of this main could negatively impact businesses that would be without water until a repair can be made.	2,000,000

Projects by Fiscal Year

Project #	Project Title	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total Project Cost
TOTAL BY FISCAL YEAR		10,391,700	19,926,000	36,043,000	40,496,000	35,435,000	142,291,700
DPW33	Pavement maintenance and reconstruction	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	20,000,000
WAT9	Lead Water Service Line Replacement Program	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
SEW2	Sewer Pump Station Rehab Projects	1,000,000	1,000,000	1,000,000	500,000	500,000	4,000,000
IT3	Replace/Upgrade School IT Network Infrastructure and Security Systems	604,000					604,000
IT2	Replace/Upgrade School Learning Tech	400,000	400,000	400,000	400,000	400,000	2,000,000
DPW32	Annual culvert repair and replacement	350,000	350,000	350,000	350,000	350,000	1,750,000
DPW5	Upgrade fuel depot components	340,000					340,000
EM2	Upgrade Police and Fire radio receivers	337,000					337,000
SCH4	Fix or replace HVAC Controls at MHS	275,000					275,000
SCH7	Replace Windows at District facilities	250,000	750,000	750,000	750,000	750,000	3,250,000
DPW20	Ghiloni Park restoration project	250,000				4,000,000	4,250,000
MCDA1	Modernization of apartments at 29 Pleasant St	190,000	2,000,000				2,190,000
IT1	Replace/upgrade City IT infrastructure and hardware	186,000	186,000	186,000	186,000	186,000	930,000
DPW3	Replace 3 cubic yard front end loader	165,000					165,000
DPW25	Replace overhead and exterior doors at Central Fire Station	150,000					150,000
DPW6	Replacement of tracked sidewalk plow w/attachments	150,000					150,000
DPW4	Replacement of three 4-wheel drive pickup trucks	150,000					150,000
EM3	Bi-directional amplifiers at 5 schools	119,700					119,700
DPW2	Replacement two 4-wheel drive F-550 dump trucks	110,000					110,000
DPW22	Upgrades to existing DPW building	100,000	100,000	100,000	100,000	100,000	500,000
DPW24	Energy efficiency upgrades to all municipal buildings	100,000	100,000	100,000	100,000	100,000	500,000
WAT6	Water Gate Valve Replacement Program	100,000	100,000	100,000	100,000	100,000	500,000
SCH5	Generator Repair and Replacement	65,000		142,000		284,000	491,000
DPW39	Reconstruction of Donald Lynch Boulevard		3,000,000	3,000,000			6,000,000
DPW36	Apex Center project		3,000,000	1,000,000			4,000,000
WAT/SEW1	Sudbury Street Area Water and Sewer Project, Phase 3		1,000,000	1,000,000	1,000,000	1,000,000	4,000,000
EM1	Replace mobile and portable radios for fire and police depts		840,000				840,000
FD2	Replace Rescue 1		650,000				650,000

Project #	Project Title	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total Project Cost
TOTAL BY FISCAL YEAR		10,391,700	19,926,000	36,043,000	40,496,000	35,435,000	142,291,700
FD8	Replace self-contained breathing apparatus or SCBAs		600,000				600,000
WAT3	Russel Street Water Main Replacement		500,000				500,000
DPW12	Replace forestry bucket truck		200,000				200,000
FD1	New West End Fire Station		50,000	1,500,000	500,000	6,000,000	8,050,000
PD1	Five year replacement schedule for unmarked/administrative police vehicles		50,000	50,000	50,000	50,000	200,000
SCH17	DEC Masonry Repairs		50,000	50,000	50,000		150,000
SCH23	New elementary school to replace Richer Elementary School			17,000,000	17,000,000		34,000,000
WAT10	Boston Post Road East Water Main Replacement			2,000,000			2,000,000
SCH1	Update fire alarm panels and detection units district-wide			1,060,000			1,060,000
FD4	Replace Engine 4			625,000			625,000
SCH2	Replace Emergency Lighting			360,000			360,000
SCH8	Replace Lockers at MHS			100,000	100,000	100,000	300,000
COA1	Purchase new 14-passenger van/minibus with lift			85,000			85,000
SCH14	Repair Concrete Sidewalks at HS			85,000			85,000
LIB1	New Public Library Facility				11,500,000	11,500,000	23,000,000
WAT4	Spoon Hill Water Tank Rehabilitation				1,000,000		1,000,000
DPW21	Repairs to City Hall				600,000		600,000
FD3	Replace Engine 5				675,000		675,000
WAT7	Bigelow Street Water Main Replacement				350,000		350,000
SCH20	Replace Whitcomb intercom and clocks				125,000		125,000
DPW19	Rehabilitation of Women Veterans Park				40,000	40,000	80,000
PD2	Replace electronic control weapons				20,000	20,000	40,000
SCH11	Replace Roof at Whitcomb					2,250,000	2,250,000
FD5	Replace Ladder 2					1,500,000	1,500,000
SCH19	Replace Roof at Hildreth School					450,000	450,000
DPW18	Rehabilitation of the Maplewood and Rocklawn Cemeteries Holding Tombs					400,000	400,000
SCH13	Replace Richer and Whitcomb Schools restroom partitions					150,000	150,000
SCH18	Replace Hildreth Gym Floor					125,000	125,000
DPW29	Centennial Park Rehabilitation					80,000	80,000

Project Funding Detail

Project #	Project Title	Gen Fund (debt)	Gen Fund (PayGo)	WEF/SEF	Chapter 90	MSBA	State/Fed Program	Other	Total funding source
	TOTAL	57,770,750	9,887,040	18,300,000	5,596,050	21,785,860	19,208,000	9,744,000	142,291,700
COA1	Purchase new 14-passenger van/minibus with lift		17,000				68,000 ¹⁷		85,000
DPW2	Replacement two 4-wheel drive F-550 dump trucks		110,000						110,000
DPW3	Replace 3 cu. yd. front end loader		165,000						165,000
DPW4	Replacement of three 4-wheel drive F-350 trucks		150,000						150,000
DPW5	Upgrade fuel depot components		340,000						340,000
DPW6	Replacement of tracked sidewalk plow w/attachments		150,000						150,000
DPW12	Replace forestry bucket truck		200,000						200,000
DPW18	Rehabilitation of the Maplewood and Rocklawn Cemeteries Holding Tombs						400,000 ¹⁸		400,000
DPW19	Rehabilitation of Women Veterans Park							80,000 ¹⁹	80,000
DPW20	Ghiloni Park restoration project						250,000 ²⁰	4,000,000 ²¹	4,250,000
DPW21	Repairs to City Hall		600,000						600,000
DPW22	Upgrades to existing DPW building		500,000						500,000
DPW24	Energy efficiency upgrades to all municipal buildings		250,000				250,000 ²²		500,000
DPW25	Replace overhead and exterior doors at Central Fire Station		150,000						150,000
DPW29	Centennial Park Rehabilitation							80,000 ²³	80,000
DPW32	Annual culvert repair and replacement		1,750,000						1,750,000
DPW33	Pavement maintenance and reconstruction	14,653,950			5,346,050				20,000,000
DPW36	Apex Development project			950,000			3,050,000 ²⁴		4,000,000
DPW39	Reconstruction of Donald Lynch Boulevard	2,500,000	250,000		250,000		3,000,000 ²⁵		6,000,000
EM1	Replace mobile and portable radios for fire and police departments.		840,000						840,000

¹⁷ MassDOT Mass Mobility grant (80%)

¹⁸ Mass Historical Commission Massachusetts Preservation Projects Fund grant

¹⁹ Private fundraising

²⁰ Division of Conservation Services Land and Water Conservation Fund grant

²¹ Local meals tax revenue

²² Green Communities grant

²³ Private fundraising

²⁴ MassWorks Infrastructure grant

²⁵ MassWorks Infrastructure grant

Project #	Project Title	Gen Fund (debt)	Gen Fund (PayGo)	WEF/SEF	Chapter 90	MSBA	State/Fed Program	Other	Total funding source
	TOTAL	57,770,750	9,887,040	18,300,000	5,596,050	21,785,860	19,208,000	9,744,000	142,291,700
EM2	Upgrade Police and Fire radio receivers		337,000						337,000
EM3	Bi-directional amplifiers at 5 schools		119,700						119,700
FD1	Build new West End Fire Station	8,000,000						50,000 ²⁶	8,050,000
FD2	Replace Rescue 1	650,000							650,000
FD3	Replace Engine 5	675,000							675,000
FD4	Replace Engine 4	625,000							625,000
FD5	Replace Ladder 2	1,500,000							1,500,000
FD8	Replace self-contained breathing apparatus or SCBAs		600,000						600,000
IT1	Replace/upgrade City IT infrastructure and hardware							930,000 ²⁷	930,000
IT2	Replace/Upgrade School Learning Tech		1,000,000					1,000,000 ²⁸	2,000,000
IT3	Replace/Upgrade School IT Network Infrastructure and Security Systems							604,000 ²⁹	604,000
LIB1	New Public Library Facility	10,000,000					10,000,000 ³⁰	3,000,000 ³¹	23,000,000
MCDA1	Modernization of apartments at 29 Pleasant St						2,190,000 ³²		2,190,000
PD1	Five year replacement schedule for unmarked/administrative police vehicles		200,000						200,000
PD2	Replace electronic control weapons		40,000						40,000
SCH1	Update fire alarm panels and detection units district-wide	1,060,000							1,060,000
SCH2	Replace Emergency Lighting		360,000						360,000
SCH4	Fix or replace HVAC Controls at MHS		126,060			148,940			275,000
SCH5	Generator Repair and Replacement		491,000						491,000
SCH7	Replace Windows at District facilities	1,489,800				1,760,200			3,250,000
SCH8	Replace Lockers at MHS		300,000						300,000
SCH11	Replace Roof at Whitcomb	1,031,400				1,218,600			2,250,000
SCH13	Replace Richer and Whitcomb Schools restroom partitions		150,000						150,000
SCH14	Repair Concrete Sidewalks at HS		85,000						85,000
SCH17	DEC Masonry Repairs		150,000						150,000

²⁶ Donation from Apex Walker

²⁷ PEG Fund; Note: Project will be bundled with other IT projects and bonded and PEG funds will be used to pay debt service.

²⁸ Public, Educational, and Government (PEG) Access TV Channel Fund; Note: Project will be bundled with other IT projects and bonded and PEG funds will be used to pay debt service.

²⁹ PEG Fund; Note: Project will be bundled with other IT projects and bonded and PEG funds will be used to pay debt service.

³⁰ Massachusetts Public Library Construction Program (MPLCP) grant

³¹ Private fundraising

³² DHCD High Leverage Asset Preservation Program (2/3 of project total) and solar net metering revenue (1/3 of project total as a match for DHCD grant)

Project #	Project Title	Gen Fund (debt)	Gen Fund (PayGo)	WEF/SEF	Chapter 90	MSBA	State/Fed Program	Other	Total funding source
	TOTAL	57,770,750	9,887,040	18,300,000	5,596,050	21,785,860	19,208,000	9,744,000	142,291,700
SCH18	Replace Hildreth Gym Floor		125,000						125,000
SCH19	Replace Roof at Hildreth School		206,280			243,720			450,000
SCH20	Replace Whitcomb Intercom and Clocks		125,000						125,000
SCH23	Build a new elementary school to replace Richer Elementary School	15,585,600				18,414,400			34,000,000
SEW2	Sewer Pump Station Rehab Projects			4,000,000					4,000,000
WAT/ SEW1	Sudbury Street Area Water and Sewer Project, Phase 3			4,000,000					4,000,000
WAT3	Russel Street Water Main Replacement			500,000					500,000
WAT4	Spoon Hill Water Tank Rehabilitation			1,000,000					1,000,000
WAT6	Water Gate Valve Replacement Program			500,000					500,000
WAT7	Bigelow Street Water Main Replacement			350,000					350,000
WAT9	Lead Water Service Line Replacement Program			5,000,000					5,000,000
WAT10	Boston Post Road East Water Main Replacement			2,000,000					2,000,000

THIS PAGE IS INTENTIONALLY BLANK

APPENDICES

Appendix 1: Marlborough at a Glance

Appendix 2: New Growth History

Appendix 3: Free Cash and Stabilization Fund History

Appendix 4: Tax Levy History

Appendix 5: General Fund Non-Exempt Debt Service

Appendix 6: Water/Sewer Debt Service

Appendix 7: Existing General Fund Debt Service

Appendix 8: Existing Water Debt Service

Appendix 9: Existing Sewer Debt Service

Appendix 10: Estimated Previously Authorized/Unissued Debt Service

Appendix 11: Comparison of Selected Communities' Average Single Family Tax Bill

Appendix 12: Select DLS Financial Glossary

THIS PAGE IS INTENTIONALLY BLANK

DLS At A Glance Report for Marlborough

Socioeconomic	
County	MIDDLESEX
School Structure	K-12
Form of Government	COUNCIL AND ALDERMAN
2013 Population	39,414
2015 Labor Force	23,624
2015 Unemployment Rate	3.70
2012 DOR Income Per Capita	30,539
2009 Housing Units per Sq Mile	706.64
2013 Road Miles	163.96
EQV Per Capita (2014 EQV/2013 Population)	118,246
Number of Registered Vehicles (2012)	37,098
2012 Number of Registered Voters	21,737

Bond Ratings	
Moody's Bond Ratings as of December 2015*	Aa2
Standard and Poor's Bond Ratings as of December 2015*	AA+

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

Fiscal Year 2016 Estimated Cherry Sheet Aid	
Education Aid	23,877,872
General Government	5,431,476
Total Receipts	29,309,348
Total Assessments	6,777,172
Net State Aid	22,532,176

Fiscal Year 2017 Tax Classification			
Tax Classification	Assessed Values	Tax Levy	Tax Rate
Residential	3,392,653,288	51,975,448	15.32
Open Space	0	0	0
Commercial	925,791,174	24,450,145	26.41
Industrial	418,667,009	11,056,996	26.41
Personal Property	251,306,540	6,637,006	26.41
Total	4,988,418,011	94,119,595	

Fiscal Year 2017 Revenue by Source		
Revenue Source	Amount	% of Total
Tax Levy	94,119,595	56.22
State Aid	31,648,574	18.90
Local Receipts	32,911,000	19.66
Other Available	8,740,175	5.22
Total	167,419,344	

Fiscal Year 2017 Proposition 2 1/2 Levy Capacity	
New Growth	2,801,390
Override	
Debt Exclusion	
Levy Limit	124,710,450
Excess Capacity	30,590,855
Ceiling	124,710,450
Override Capacity	0

Other Available Funds		
2017 Free Cash	FY2015 Stabilization Fund	FY2017 Overlay Reserve
12,176,290	9,926,034	1,966,081

Fiscal Year 2017 Average Single Family Tax Bill**	
Number of Single Family Parcels	7,030
Assessed Value of Single Family	322,503
Average Single Family Tax Bill	4,941
State Average Family Tax Bill	
Fiscal Year 2013	4,846
Fiscal Year 2014	5,020
Fiscal Year 2015	5,214

Marlborough 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 2015 Schedule A - Actual Revenues and Expenditures						
	General Fund	Special Revenue	Capital Projects	Enterprise Funds	Trust Revenue	Total All Funds
Revenues	124,995,301	12,728,029	2,637	16,883,642	9,828,296	164,437,905
Expenditures	115,970,173	11,447,198	30,009,882	17,948,161	22,347,380	197,722,794
Police	7,642,592	0	0	0	0	7,642,592
Fire	7,743,968	0	0	0	0	7,743,968
Education	60,969,205	7,437,798	0	0	0	68,407,003
Public Works	9,023,909	1,812,375	21,933,023	17,948,161	0	50,717,468
Debt Service	3,659,957					3,659,957
Health Ins	0				20,444,996	20,444,996
Pension	6,951,740				0	6,951,740
All Other	19,978,802	2,197,025	8,076,859	0	1,902,384	32,155,070

Total Revenues and Expenditures per Capita						
	General Fund	Special Revenue	Capital Projects	Enterprise Funds	Trust Revenue	Total All Funds
Revenues	3,171.3	322.9	0.1	428.4	249.4	4,172.1
Expenditures	2,942.4	290.4	761.4	455.4	567.0	5,016.6

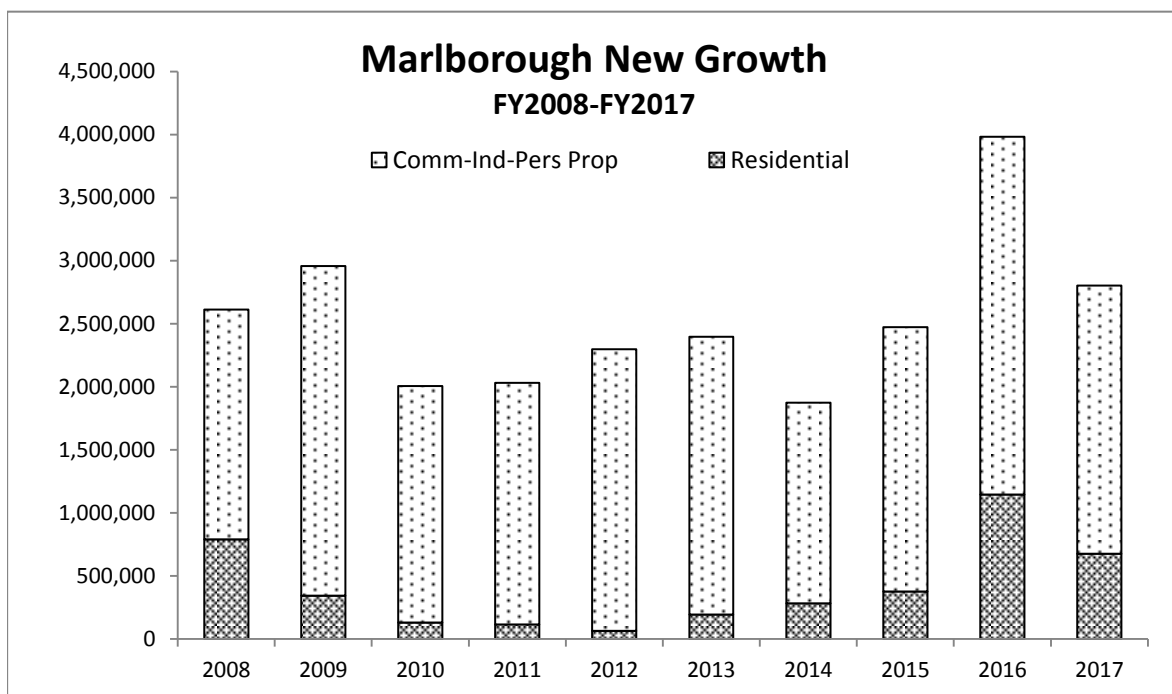
This data only represents the revenues and expenditures occurring in these funds and does not reflect and transfers to or from other funds. Therefore, this data should not be used to calculate an ending fund balance.

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 Marlborough](#)

MARLBOROUGH NEW GROWTH HISTORY

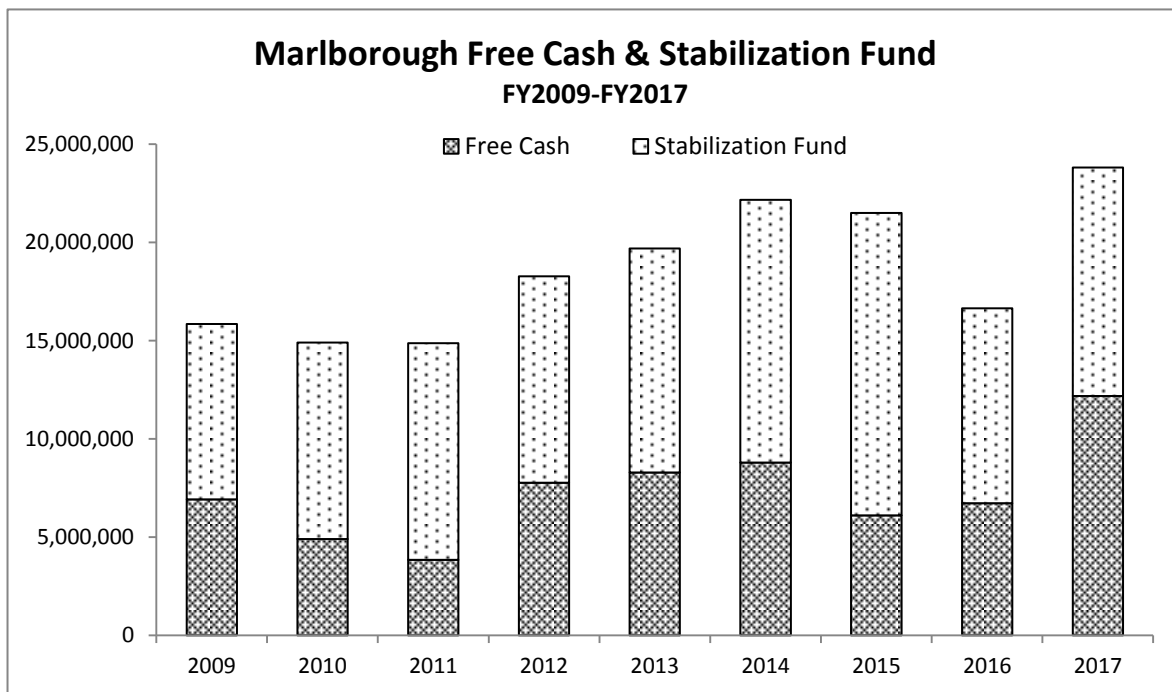
Year	Residential New Growth	Comm Ind Per Prop New Growth	Total New Growth Applied to the Levy Limit
2008	788,905	1,823,390	2,612,295
2009	344,203	2,611,735	2,955,938
2010	130,567	1,873,752	2,004,319
2011	113,798	1,916,448	2,030,246
2012	64,393	2,232,213	2,296,606
2013	194,217	2,202,072	2,396,289
2014	282,186	1,589,919	1,872,105
2015	375,497	2,097,208	2,472,705
2016	1,145,880	2,835,754	3,981,634
2017	674,794	2,126,596	2,801,390
Average	411,444	2,130,909	2,542,353



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

MARLBOROUGH FREE CASH & STABILIZATION FUND HISTORY

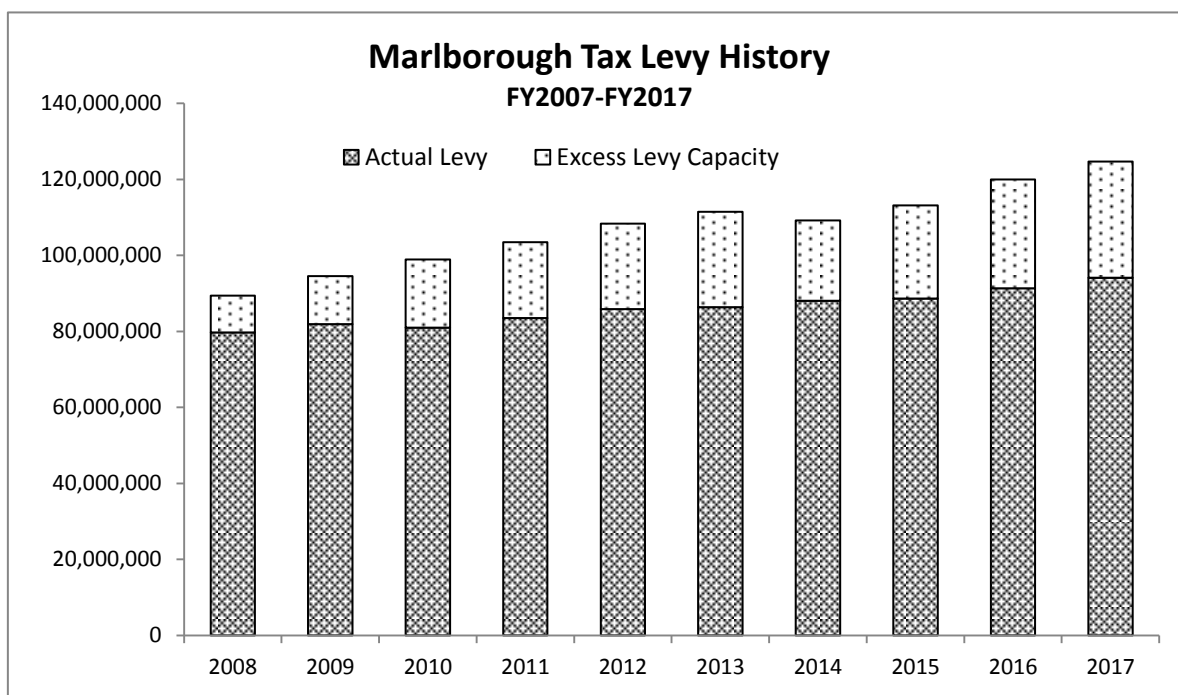
Year	Free Cash	Stabilization Fund	TOTAL
2009	6,925,031	8,916,231	15,841,262
2010	4,906,090	9,991,596	14,897,686
2011	3,840,266	11,031,925	14,872,191
2012	7,766,863	10,513,177	18,280,040
2013	8,285,429	11,412,958	19,698,387
2014	8,800,061	13,372,499	22,172,560
2015	6,103,681	15,392,736	21,496,417
2016	6,721,252	9,926,034	16,647,286
2017	12,176,290	11,631,178	23,807,468



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

MARLBOROUGH TAX LEVY HISTORY

Year	Actual Tax Levy (excluding any Debt Exclusion)	Excess Tax Levy Capacity	Total Tax Levy Limit (excluding Debt Exclusion)
2008	79,753,097	9,631,514	89,384,611
2009	81,935,337	12,639,827	94,575,164
2010	80,996,050	17,947,812	98,943,862
2011	83,511,878	19,935,827	103,447,705
2012	85,845,867	22,484,637	108,330,504
2013	86,361,360	25,139,346	111,500,706
2014	88,052,213	21,148,065	109,200,278
2015	88,678,940	24,474,330	113,153,270
2016	91,331,454	28,632,282	119,963,736
2017	94,119,595	30,590,855	124,710,450



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

MARLBOROUGH GENERAL FUND NON- EXEMPT DEBT SERVICE

Appendix 5

as of June 30, 2016

FISCAL YEAR	Existing General Fund Debt Service	Existing Share Assabet Valley Debt Service	Auth/Unissued Estimated Debt Service	FY18-FY22 CIP Proposed Debt (estimated)	GRAND TOTAL
2017	4,850,065	1,355,988	190,584	0	6,396,637
2018	4,259,519	1,052,580	766,835	229,432	6,308,366
2019	4,172,670	1,025,564	938,200	656,558	6,792,992
2020	4,081,143	998,548	913,200	1,789,643	7,782,534
2021	3,404,666	971,532	888,200	2,969,833	8,234,231
2022	3,105,703	944,516	843,200	4,184,074	9,077,493
2023	2,925,613	917,500	819,000	4,184,074	8,846,187
2024	2,658,863	890,484	794,800	4,184,074	8,528,221
2025	2,084,063	863,468	770,600	4,184,074	7,902,205
2026	1,308,738	836,452	681,400	4,184,074	7,010,664
2027	1,041,650	814,839	654,800	4,184,074	6,695,363
2028	942,338	798,630	633,400	4,170,294	6,544,662
2029	934,550	782,083	607,200	4,050,798	6,374,631
2030	735,631	765,198	586,200	3,882,003	5,969,032
2031	654,594	747,975	565,200	3,840,664	5,808,433
2032	644,394	729,739	396,000	3,675,308	5,445,441
2033	540,800	710,828	382,800	3,675,308	5,309,736
2034	355,350	691,579	369,600	3,675,308	5,091,837
2035		670,979	356,400	3,675,308	4,702,687
2036		649,366	178,200	3,675,308	4,502,874
2037		579,616	171,600	3,675,308	4,426,524
2038		559,968		3,459,656	4,019,624
2039		540,320		3,152,026	3,692,346
2040		520,672		2,798,407	3,319,079
2041		501,024		2,533,087	3,034,111
2042				2,207,062	2,207,062
TOTAL	38,700,350	19,919,448	12,507,419	82,895,754	154,022,971

MARLBOROUGH WATER/SEWER DEBT SERVICE

Appendix 6

as of June 30, 2016

FISCAL YEAR	Existing WATER/SEWER Debt Service	Auth/Unissued WATER/SEWER (estimated)	FY2018-FY2022 CIP Proposed Debt (estimated)	GRAND TOTAL
2017	5,091,025	1,158,310	0	6,249,335
2018	5,015,044	1,751,371	200,000	6,966,415
2019	4,961,353	1,990,738	200,000	7,152,091
2020	4,681,652	1,965,493	573,372	7,220,517
2021	4,644,612	1,935,270	810,165	7,390,047
2022	4,520,954	1,910,272	1,083,643	7,514,869
2023	4,484,215	1,885,298	1,280,415	7,649,928
2024	3,982,237	1,850,349	1,387,138	7,219,724
2025	3,972,731	1,825,827	1,387,138	7,185,696
2026	3,963,643	1,576,330	1,387,138	6,927,111
2027	3,804,989	1,480,860	1,387,138	6,672,987
2028	3,802,459	1,468,618	1,187,138	6,458,215
2029	3,688,671	1,451,405	1,187,138	6,327,214
2030	3,694,857	1,439,420	887,138	6,021,415
2031	3,700,515	1,427,465	887,138	6,015,118
2032	3,633,633	1,405,540	887,138	5,926,311
2033	3,323,508	1,394,047	887,138	5,604,693
2034	3,471,691	1,382,586	887,138	5,741,415
2035	3,541,692	1,371,157	887,138	5,799,987
2036	3,541,106	1,354,762	887,138	5,783,006
2037	3,061,541	1,043,363	887,138	4,992,042
2038	3,065,995	831,788	887,138	4,784,921
2039	3,070,521	713,238	887,138	4,670,897
2040	3,075,122	714,317	813,766	4,603,205
2041	3,079,797	715,422	576,973	4,372,192
2042	3,084,550	716,557	303,495	4,104,602
2043	3,089,382	717,720		3,807,102
2044	1,188,312	718,915		1,907,227
2045	1,190,095	720,139		1,910,234
2046	509,591	721,396		1,230,987
TOTAL	105,935,493	39,637,973	22,636,036	168,209,502

Appendix 7

Date of

[illegible]

Marlborough - Water Existing Debt Service

Appendix 8

as of June 30, 2016 (nearest \$)

Date of Issue	Purpose		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
6/15/2006	Water	P	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	0	0	0	0	0	0	605,000
		I	24,406	22,206	20,006	17,806	15,606	13,406	11,206	9,006	6,806	4,538	2,269	0	0	0	0	0	0	147,263
6/15/2006	Water Shed Protection	P	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	0	0	0	0	0	0	55,000
		I	2,219	2,019	1,819	1,619	1,419	1,219	1,019	819	619	413	206	0	0	0	0	0	0	13,388
11/30/2006	MWRA	P	45,000	45,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90,000
		I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/15/2010	Cur Ref of 6 15 99 - Water	P	30,000	30,000	30,000	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	120,000
		I	3,600	2,700	1,800	900	0	0	0	0	0	0	0	0	0	0	0	0	0	9,000
5/15/2010	Cur Ref of 6 15 99 - Water2	P	12,000	12,000	12,000	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	46,000
		I	1,380	1,020	660	300	0	0	0	0	0	0	0	0	0	0	0	0	0	3,360
5/15/2010	Adv Ref of 6 15 01 - Water	P	30,000	30,000	30,000	30,000	30,000	30,000	0	0	0	0	0	0	0	0	0	0	0	180,000
		I	5,400	4,500	3,600	2,700	1,800	900	0	0	0	0	0	0	0	0	0	0	0	18,900
5/15/2010	Adv Ref of 6 15 01 -Watershed Protection	P	24,500	20,000	20,000	20,000	20,000	20,000	0	0	0	0	0	0	0	0	0	0	0	124,500
		I	3,735	3,000	2,400	1,800	1,200	600	0	0	0	0	0	0	0	0	0	0	0	12,735
6/19/2012	Water Meters	P	25,000	20,000	20,000	20,000	20,000	20,000	0	0	0	0	0	0	0	0	0	0	0	125,000
		I	4,550	3,800	3,200	2,600	2,000	1,000	0	0	0	0	0	0	0	0	0	0	0	17,150
6/19/2012	Water	P	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	1,360,000
		I	49,000	46,600	44,200	41,800	39,400	35,400	31,400	27,400	23,400	21,000	18,600	16,200	13,700	11,100	8,500	5,700	2,900	436,300
5/20/2013	MWRA Water	P	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	0	0	0	0	0	0	0	0	0	1,600,000
		I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			600,790	582,845	529,685	519,525	471,425	462,525	383,625	377,225	170,825	165,950	161,075	96,200	93,700	91,100	88,500	85,700	82,900	4,963,595

Marlborough - Sewer Existing Debt Service

Appendix 9

as of June 30, 2016 (nearest \$)

Date of Issue	Purpose	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	Total	
6/15/2013	Sewer I	P	140,000	140,000	135,000	135,000	135,000	135,000	135,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,090,000	
	I		40,985	36,085	31,185	26,325	21,263	16,031	10,800	5,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	188,074	
6/15/2013	Sewer II	P	67,000	67,000	69,000	69,000	69,000	69,000	69,000	70,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	549,000	
	I		20,669	18,324	15,979	13,495	10,908	8,234	5,560	2,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95,968	
6/15/2013	Sewer III	P	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	400,000	
	I		15,050	13,300	11,550	9,750	7,875	5,938	4,000	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69,463	
8/25/2004	MWPAT Sewer 00-22	P	18,969	18,238	21,262	20,250	19,382	18,148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116,249
	(Net of Subsidy)	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8/25/2004	MWPAT Sewer 97-32	P	99,600	100,070	99,103	102,880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	401,652
	(Net of Subsidy)	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6/15/2006	Sewer 1	P	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	385,000	
	I		15,531	14,131	12,731	11,331	9,931	8,531	7,131	5,731	4,331	2,888	1,444	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93,713	
6/15/2006	Sewer 2	P	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110,000
	I		4,438	4,038	3,638	3,238	2,838	2,438	2,038	1,638	1,238	825	413	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26,775	
6/15/2006	Sewer 3	P	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	115,000
	I		4,600	4,000	3,400	2,800	2,200	1,600	1,000	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20,000	
6/15/2006	Sewer 4	P	40,000	40,000	40,000	40,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	405,000
	I		16,331	14,731	13,131	11,531	9,931	8,531	7,131	5,731	4,331	2,888	1,444	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95,713	
6/15/2006	Sewer 5	P	5,000	5,000	5,000	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20,000
	I		800	600	400	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,000	
6/15/2006	Drain	P	5,000	5,000	5,000	5,000	5,000	5,000	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35,000	
	I		1,400	1,200	1,000	800	600	400	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,600	
6/15/2006	Sewer 6	P	15,000	15,000	15,000	15,000	15,000	15,000	15,000	10,000	10,000	10,000	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150,000
	I		6,038	5,438	4,838	4,238	3,638	3,038	2,438	1,838	1,238	825	413	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33,975	
6/15/2006	Drain Construction	P	10,000	10,000	10,000	10,000	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55,000
	I		2,200	1,800	1,400	1,000	600	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,200	
5/15/2008	Sewer Construction	P	120,000	120,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,505,000
	I		59,884	55,084	50,284	45,971	41,371	37,059	32,459	27,859	23,259	18,659	14,059	9,459	4,744	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	420,149	
5/15/2010	Cur Ref of 6 15 99 - Se	P	65,000	55,000	55,000	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210,000
	I		6,300	4,350	2,700	1,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14,400	
5/15/2010	Cur Ref of 6 15 99 - Se	P	40,000	40,000	40,000	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	155,000
	I		4,650	3,450	2,250	1,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,400	
5/15/2010	Cur Ref of 6 15 99 - Se	P	20,000	20,000	20,000	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80,000
	I		2,400	1,800	1,200	600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,000	
5/15/2010	Cur Ref of 6 15 99 - Se	P	7,000	7,000	7,000	7,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28,000
	I		840	630	420	210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,100	
7/8/2010	MWPAT CWS-08-25	P	53,396	54,474	55,575	56,698	57,843	59,011	60,204	61,420	62,661	63,927	65,218	66,536	67,880	69,251	70,650	72,077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	996,821
	I		19,402	18,324	17,223	16,101	14,955	13,787	12,594	11,378	10,137	8,872	7,580	6,263	4,918	3,547	2,148	721	0	0	0	0	0	0	0	0	0	0	0	0	0	0	167,950	
6/19/2012	Sewer	P	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,020,000
	I		36,750	34,950	33,150	31,350	29,550	26,550	23,550	20,550	17,550	15,750	13,950	12,150	10,275	8,325	6,375	4,275	2,175	0	0	0	0	0	0	0	0	0	0	0	0	0	327,225	
6/19/2012	Sewer Treatment Plant	P	175,000	175,000	175,000	175,000	175,000	175,000	175,000	170,000	170,000	170,000	170,000	170,000	170,000	170,000	170,000	170,000	170,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,930,000
	I		105,725	100,475	95,225	89,975	84,725	75,975	67,225	58,475	49,725	44,625	39,525	34,425	29,113	23,588	18,063	12,113	6,163	0	0	0	0	0	0	0	0	0	0	0	0	0	935,138	
5/22/2013	MWPAT CW-11-21	P	473,088	485,307	497,842	510,701	523,892	537,424	551,306	565,545	580,153	595,138	610,510	626,279	642,455	659,080	676,072	693,535	711,448	729,825	748,676	768,013	787,851	808,200	829,075	850,490	872,458	894,993	918,110	941,824	0	0	19,089,260	
	I		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,083,199	
5/30/2014	MWPAT 08-25-A	P	469,649	481,635	493,927	506,533	519,461	532,718	546,313	560,257	574,555	589,219	604,256	619,678	635,493	651,712	668,345	685,402	702,895	720,833	739,230	758,096	777,444	797,286	817,634	838,501	859,901	881,847	904,353	927,434	0	0	18,864,607	
	I		441,526	430,253	418,693	406,837																												

Marlborough Estimated Authorized/Unissued Debt Service

Appendix 10

Source: City of Marlborough Financial Advisor 6 2016

Issue	Purpose		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	Total
2015	Street Construction (part 2)	P	0	73,833	70,000	70,000	70,000	65,000	65,000	65,000	65,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	543,833	
	2 yr BAN - 8 yrs Bonds (\$543,833)	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2015	Building Renovations (part 2)	P	0	60,000	60,000	60,000	60,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	0	0	0	0	0	0	0	0	0	0	1,010,000	
	2 yr BAN - 18 yrs Bonds (\$1,010,000)	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2015	Landfill Repair	P	0	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	0	0	0	0	0	0	0	0	300,000	
	2 yrs BAN - 20 yrs Bonds	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2015	Outdoor Recreational Facilities (part 2)	P	0	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45,000	
	2 yr BAN - 9 yrs Bonds (\$45,000)	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2015	Senior Center Construction (part 2)	P	0	115,000	115,000	115,000	115,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	0	0	0	0	0	0	0	0	0	2,000,000	
	2 yr BAN - 18 yrs Bonds (\$2,000,000)	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2015	Outdoor Recreational Facilities	P	0	51,161	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	45,000	45,000	45,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	636,161	
	2 yr BAN - 13 yrs Bonds	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2015	Whitcomb Middle School Improvements	P	0	155,771	155,000	155,000	155,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	0	0	0	0	0	0	0	0	3,020,771	
	2 yrs BAN - 20 yrs Bonds	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2016	Street Construction	P	0	0	155,000	155,000	155,000	155,000	155,000	155,000	155,000	155,000	155,000	155,000	150,000	150,000	150,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,000,000	
	2 yrs BAN - 13 yrs Bonds	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
UNISSUED GENERAL FUND EST DEBT				0	475,765	625,000	625,000	625,000	605,000	605,000	605,000	540,000	535,000	530,000	525,000	525,000	480,000	330,000	330,000	330,000	330,000	165,000	165,000	0	0	0	0	0	0	0	0	0	9,555,765
UNISSUED WATER EST DEBT																																	
2013	Water Main Construction	P	0	62,600	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	55,000	55,000	55,000	55,000	55,000	55,000	0	0	0	0	0	0	0	0	1,172,600	
	2 yrs BAN - 20 yrs Bonds	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2015	Water Main Construction	P	0	33,876	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	25,000	25,000	0	0	0	0	0	0	0	0	593,876	
	2 yrs BAN - 20 yrs Bonds	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2015	Water Meters	P	0	231,472	230,000	230,000	230,000	230,000	230,000	225,000	225,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,831,472	
	2 yrs BAN - 8 yrs Bonds	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2016	Water Meters	P	0	0	85,000	85,000	80,000	80,000	80,000	80,000	80,000	80,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	650,000	
	2 yrs BAN - 8 yrs Bonds	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2016	Water Main Construction	P	0	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	0	0	0	0	0	0	0	2,000,000	
	2 yrs BAN - 20 yrs Bonds	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2015	Millham Water Trmnt Plant (DW-14-02)	P	166,383	200,418	204,727	209,129	213,625	218,218	222,910	227,702	232,598	237,599	242,707	247,926	253,256	258,701	264,263	269,945	275,748	281,677	287,733	293,919	0	0	0	0	0	0	0	0	0	4,809,184	
	1 yr ILN - 20 yrs MCWT Bonds	I	100,191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100,191	
UNISSUED WATER EST DEBT				266,574	528,366	709,727	714,129	713,625	718,218	722,910	722,702	727,598	507,599	432,707	437,926	443,256	448,701	454,263	454,945	460,748	466,677	472,733	473,919	180,000	100,000	0	0	0	0	0	0	11,157,323	
UNISSUED SEWER DEBT EST																																	
2015	Sewer Construction	P	0	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0	0	0	0	0	0	0	0	200,000	
	2 yrs BAN - 20 yrs Bonds	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2012	Sewer Construction	P	0	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	0	0	0	0	0	0	0	0	600,000
	2 yr BAN - 20 yrs Bonds	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2015	Sewer Construction	P	0	20,287	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	15,000	15,000	15,000	15,000	15,000	15,000	0	0	0	0	0	0	0	0	370,287	
	2 yr BAN - 20 yrs Bonds	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2016	Sewer Construction	P	0	0	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	0	0	0	0	0	0	0	350,000	
	2 yrs BAN - 20 yrs Bonds	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																

Appendix 11

MARLBOROUGH AVERAGE SINGLE FAMILY TAX BILL COMPARISON

				Comparative Average Single Family Tax Bill							
Municipality	2013 Population	FY2016 BUDGET (rnd)	2013 Per Capita Income	2011	2012	2013	2014	2015	2016	\$ INC 2011- 2016	% INC 2011-2016
BEVERLY	40,664	134,759,000	38,632	5,228	5,435	5,565	5,782	5,967	6,107	879	17%
BILLERICA	41,888	159,594,000	33,005	4,246	4,366	4,468	4,566	4,563	4,683	437	10%
BRAINTREE	36,727	147,932,000	36,980	3,590	3,759	3,814	3,960	4,185	4,339	749	21%
FITCHBURG	40,383	135,804,000	17,307	2,820	2,913	2,981	3,078	3,222	3,355	535	19%
HOLYOKE	40,249	154,420,000	15,099	2,915	3,115	3,330	3,403	3,415	3,438	523	18%
LEOMINSTER	41,002	144,575,000	25,693	3,477	3,640	3,771	3,961	4,161	4,391	914	26%
SALEM	42,544	149,989,000	26,662	4,467	4,593	4,666	4,767	4,995	5,154	687	15%
SHREWSBURY	36,309	123,769,000	48,242	3,955	4,139	4,322	4,483	5,030	5,178	1,223	31%
WESTFIELD	41,301	148,640,000	24,387	3,565	3,737	3,924	4,075	4,165	4,410	845	24%
WOBBURN	39,083	148,280,000	34,899	3,519	3,554	3,553	3,571	3,728	3,880	361	10%
AVERAGE	40,015	144,776,200	30,091	3,778	3,925	4,039	4,165	4,343	4,494	715	19%
MARLBOROUGH	39,414	157,546,000	31,176	4,280	4,476	4,540	4,655	4,790	4,820	540	13%

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.