

Capital Planning

INTRODUCTION

Mayor Walsh's \$2.4 billion FY19-23 Capital Plan will make critical investments in the City's infrastructure in every Boston neighborhood, guided by *Imagine Boston 2030* and the schools, streets, arts, climate and resilience plans under its umbrella. More than 14,000 residents helped shape *Imagine Boston 2030* by articulating the challenges Boston faces, setting goals for the city in 2030, and generating ideas about policies and investments to help achieve these goals. An ambitious set of initiatives form the foundation of the *Imagine Boston 2030* plan. Taken together, these initiatives will support Boston's dynamic economy and improve quality of life for residents by encouraging affordability, increasing access to opportunity, promoting a healthy environment, and guiding investment in the public realm. In order to address the City's investment aspirations, Mayor Walsh has increased planned borrowings by 6.8% over last year's plan, leveraged one-time funding sources including Winthrop Square Garage sale proceeds and the Parking Meter Fund surplus balance, and advanced the City's usage of the Massachusetts School Building Authority Accelerated Repair Program.

Last year, Mayor Walsh launched the Imagine Boston Capital Plan to move Boston residents' priorities from idea to action, and invest in creating the city Bostonians imagine for the future.

This year, under the *Imagine Boston 2030* umbrella, the City is investing deeply in the core goals of *BuildBPS*, *Go Boston 2030*, *Boston Creates*, and *Climate Ready Boston*. An estimated 84% of the investment in the FY19-23 Capital Plan is aligned with the City's planning efforts:

- Mayor Walsh committed \$1 billion over ten years to bring Boston's school buildings

into the 21st century, and this Capital Plan supports that investment with funding for 21st century classrooms, MSBA Accelerated Repair Program partnerships, completion of projects in the pipeline, school kitchen renovations that support the delivery of fresh, nutritious food, and reserves for future projects identified by *BuildBPS* community engagement.

- Boston, in collaboration with State and Federal sources, will invest \$967 million implementing the core initiatives outlined in *Go Boston 2030*: streets that are safer for all users of our roads and sidewalks, particularly pedestrians and cyclists; travel that is more reliable and predictable; and quality transportation choices that improve access to interconnect our neighborhoods for all modes of travel.
- Through the use of Winthrop Square proceeds, City capital dollars, and leveraging external funds, Mayor Walsh plans to carry out early actions to implement *Imagine Boston 2030*'s Open Space goals, including investing in Franklin Park as a keystone park for the city, completing the Emerald Necklace, and restoring Boston Common to its full vibrancy.
- Boston will prepare for climate change by investing City capital dollars and external funding to develop more detailed climate plans and implement early action items called out by those plans for Boston neighborhoods, especially those most at risk for coastal flooding, as recommended in *Climate Ready Boston*.
- Setting the stage for planning the comprehensive, long-term recovery campus on Long Island to tackle the opioid crisis.

- To support that goal, the City will move forward with the construction of a new bridge to Long Island.
- The Percent for Art Program, funded for the first time in this Capital Plan, demonstrates the City's leadership and commitment to sustainable funding for the arts by setting aside one percent of the City's annual capital borrowing for the commissioning of public art.

FY19-FY23 EXPENDITURES

The City is responsible for maintaining a large inventory of capital assets, including roads, bridges, schools, parks, libraries, public safety equipment, city buildings and more. The City's capital investments enhance our neighborhoods, improve mobility, support the academic agenda of our schools and reinforce public safety with quality emergency response tools.

With *Imagine Boston 2030* and other City Planning efforts guiding many of the investments in this plan, projects in the FY19-23 Capital Plan are categorized within the *Imagine Boston 2030* initiatives below.

These capital investments are planned and funded through the City's Capital Plan, which is separate and distinct from the annual operating budget. The Capital Plan is primarily funded by borrowing through the issuance of bonds within the City's fiscally responsible debt affordability limits.

Education

Mayor Walsh announced a \$1 billion investment to modernize Boston's public school infrastructure, and the BuildBPS plan will guide that process. Through a dedication of City capital funds and a strong working relationship with the Massachusetts School Building Authority (MSBA), the plan will more than double the capital spending on BPS facilities over the next decade. The FY19-23 capital plan will invest \$415 million in City Capital funds in BPS projects, as part of an overall commitment to provide \$730 million over the ten year life of BuildBPS. Mayor Walsh's FY19-23 Capital Plan

implements early action BuildBPS initiatives and reserves funding for projects identified by the BuildBPS engagement process.

The \$13 million BuildBPS 21st Century Schools Fund will provide schools with 21st century tools, including new technology and comfortable, movable furniture. This initiative promotes learner-centric programs, benefits professional development, and provides greater flexibility in both current and future learning spaces. BPS created a menu of 21st century packages that schools selected from, based on their specific needs. BPS will work with school leaders to complete these upgrades by the time school opens in September.

Boston has also successfully ramped up its efforts to leverage MSBA Accelerated Repair Program (ARP) dollars to provide much needed improvements to its schools. This summer, construction will be underway at five schools to replace four boilers and install one new roof. An additional school will have new windows installed during summer 2019. Altogether, these projects represent an investment totaling \$13.8 million with \$9.0 million supported by a grant from the MSBA. The Mayor's Capital Plan sets aside an additional \$26.7 million over five years to position Boston to further leverage MSBA ARP dollars in the future.

This Capital Plan allows Boston to invest in BPS projects already in the pipeline:

- The \$73 million Dearborn STEM Academy will open for students in September 2018. The project, which leverages a projected \$37 million match from the MSBA, is designed based upon a project-based learning curriculum, with an emphasis on STEM education.
- Over the next year, the \$18.5 million renovation of the Eliot School at 585 Commercial Street will be completed.
- BPS is partnering with the Shah Family Foundation to provide 25 new schools with full-service kitchens. This is the first phase in a multi-year kitchen renovation program. The investment will close food

security gaps that prevent many children from learning to their full potential.

- Construction will begin this fall on the new \$124.8 million Boston Arts Academy project. The MSBA has committed a maximum project grant totaling \$48.9 million.
- The capital plan provides for Boston's matching investment in the Josiah Quincy Upper School (JQUS) and the Carter School. Programming and planning on both projects continues in FY19.
- BPS will increase its investment in school security to a total of \$5 million. The project includes upgrades to external and internal doors, locks and key cards, and cameras.

Transportation

Mayor Walsh's FY19-23 Capital Plan, drawing on City, State and Federal sources, will invest \$967 million implementing the core initiatives outlined in *Go Boston 2030*. Pursuant to *Go Boston 2030*, Boston will strive for streets that are safer for all users of our roads, bridges, and sidewalks, particularly pedestrians and cyclists; travel that is more reliable and predictable, and quality transportation choices that improve access, to interconnect our neighborhoods for all modes of travel. Driven by these core goals of safety, reliability, and access, the Capital Plan focuses on key investments.

The Capital Plan makes critical investments to improve safety for Boston's most vulnerable street users with a focus on roadway corridors, safe crossings, and traffic calming on residential streets and in small-business districts. In FY19, the City will increase planned expenditures for the Walkable Streets program by \$750,000 making a total investment of \$1,750,000. The Vision Zero program, funded for FY19 at \$3.9 million, will make targeted safety improvements at corridors and intersections with known safety challenges, and to traffic-calm residential streets. This Capital Plan notably invests in the transformation of North Square, Quincy Street, New England Avenue, Boylston Street, and the five neighborhoods selected last year for the

Neighborhood Slow Streets initiative and supports the completion of 15 Neighborhood Slow Streets over the next four years. The Plan also sets aside funding for long-term investment in other Main Street business districts across the city.

To improve safety and expand access to Boston's streets, Boston launched a citywide, multi-year campaign to bring all crosswalks, lane markings, and bike lanes into a state of good repair, using a combination of operating and capital resources. As Boston works to expand access to make neighborhoods interconnected for all modes of travel, including driving, cycling, and walking, it is important to ensure that our roadways are designed to maximize the safety of such modes of travel. Clear lane markings including crosswalks, "Don't Block the Box" markings at key intersections, and well-marked bike lanes with appropriate insignia, all help reduce collisions, making our roadways safer for all users.

The Capital Plan invests in design and provides matching funds to unlock hundreds of millions of additional Federal and State investment to transform key corridors in the city. The designs will focus primarily on stress-free walking, protected bicycling, and better accommodating public transportation. It also puts an additional emphasis on improving the street infrastructure in parallel with new housing investment in some of our neighborhoods. Key corridors include Melnea Cass Boulevard, Commonwealth Avenue, Boylston Street, Columbia Road, the Sullivan Square - Rutherford Avenue - North Washington Street corridor, and street designs for the Boston Planning and Development Agency's PLAN initiatives in Jamaica Plain/Roxbury and on Dorchester Avenue. The Capital Plan focuses on adding protected bicycle lanes on every "Great Streets" project, and on off-street Green Links pathways such as the Fenway-Roxbury Connector, South Bay Harbor Trail, and Connect Historic Boston, all complemented by a FY19 \$1.25 million investment in the Strategic Bicycle Network which will help support 15 miles of new protected bike lanes over the next four years.

Through the FY19-23 Capital Plan, the City will also increase investments in bridges, roads, sidewalks, off-street paths, street lighting, and building facilities that are essential to the high-quality delivery of services. In FY19, the City proposes investing an additional \$3.0 million in its annual road resurfacing and sidewalk programs. In addition to the transformation of the North Washington Street Bridge, this Capital Plan invests in upgrades to other bridges including the Dana Avenue Bridge in Hyde Park, the Northern Avenue Bridge, and a new Long Island Bridge in an effort to bring all bridges to a state of good repair by 2030. Using City Capital and Chapter 90 funding from the Commonwealth, Boston will continue necessary road and sidewalk resurfacing and reconstruction projects. Finally, Boston will continue to invest in ADA ramps and signals, and well-lit streets. All told this will allow Boston to make improvements to 15 of the most challenging intersections across the City.

Technology

Consistent with *Imagine Boston 2030* and *Go Boston 2030*, Boston will invest in intelligent traffic signals to improve safety and reduce congestion. Through funding in the Capital Plan, the City will begin a transformation to the next generation of traffic signal technology, with an initial focus on some of the City's busiest corridors and bus routes. This innovation will minimize delay and maximize coordination across signals. The Capital Plan also funds a multi-year program to create improved and - in many cases - signalized intersections in some of the more challenging locations in the City. This includes the Father Hart Bridge area in Hyde Park, where the City aims to install new traffic signals at each end of the bridge as well as at the interconnected signals in Wolcott Square.

The City will continue investing in the Boston Fiber Network (BoNet) to improve Boston's fiber backbone and infrastructure. The goal is to provide broadband services to 73 additional Boston Public Schools, 24 family public housing developments and more than 100 City buildings, while also strengthening public safety

communications. Expanding Boston's Fiber Optic Network to these schools will deliver gigabit (1 Gbps) bandwidth capacity for online testing, learning, administrative and video services, and in-campus Wi-Fi. Additionally, this investment will help the City to expand and improve public safety services across the City and present opportunities to deploy Wicked Free Wi-Fi to a broader geography.

To continue to make City services responsive to real time data, the Capital Plan also allows for the investment in Boston311 to deliver a more personalized experience for many services and better understand how customers interact with the City across departments. Boston will continue to bring new services online, update existing services to improve user experience, and adapt to evolving technology trends and customer expectations.

Open Space

Imagine Boston 2030 calls for the City to strengthen Boston's existing park system and invest in new open spaces. Through the use of Winthrop Square proceeds, City capital dollars, and leveraging external funds, Mayor Walsh plans to carry out early actions to implement *Imagine Boston 2030's* Open Space goals, including investing in Franklin Park as a keystone park for the city, completing the Emerald Necklace, and restoring Boston Common to its full vibrancy.

Franklin Park renovations are already underway with investments in its pathways and a commitment to caring for its tree canopy. Mayor Walsh has also committed to a \$28 million investment funded by the sale of the Winthrop Square garage to renovate Boston's largest park, which borders multiple neighborhoods. These improvements, combined with the master planning of Moakley Park, serve as anchor projects to launch the City's efforts to complete the Emerald Necklace. Originally envisioned by the Olmsted Corporation in the 1890s, the completion will be a community-led and modern interpretation of a green street, which increases connections in underserved areas of our city. Mayor Walsh has also committed \$28 million

from the Winthrop garage sale to augment the current historic levels of investment in Boston Common to fully renovate America's First Park. This investment will ensure future generations will enjoy the park in its full vibrancy.

In addition to the major initiatives outlined in *Imagine Boston 2030*, Mayor Walsh's FY19-23 Capital Plan continues investments to ensure Boston's open spaces are among the Nation's most accessible and equitable. In an extension of the City's commitment to the usage and safety of the Emerald Necklace, the Parks and Recreation Department is designing a \$4.8 million project for pathway improvements around Jamaica Pond. From the annual lantern parade, to the thousands of children who learn boating, to the walkers and joggers enjoying the 1.5 mile loop for recreation, Jamaica Pond is a singular urban park experience. Across town, a renovation of Paul Revere Mall in the North End will soon be underway and will ensure this historic park is a welcoming and inviting place for residents and visitors. The Paul Revere monument, along the Freedom Trail, is one of the most photographed sculptures in Boston. This renovation project, funded in part by the City's George Robert White Fund, will include restoration of the fountain and monument, accessible pathways, landscaping, and utility work.

Ninety-seven percent of Bostonians live within a ten-minute walk of a park, but those spaces are only truly equitable if they serve the diverse needs of all our residents. Mayor Walsh recognizes the need for inclusive design and has created robust budgets for park renovation projects at Martin's Park in the Seaport, Smith Playground in Allston, McConnell Playground, Garvey Playground, and Harambee Park in Dorchester. In addition, the FY19-23 plan proposes new investments in athletic field lighting and playground improvements in more than a half dozen locations. The Capital Plan also supports an increased investment totaling \$950,000 in the renovation and renewal of playing courts (basketball, tennis, and street hockey).

Energy and Environment

As part of Boston's implementation of *Imagine Boston 2030*, Mayor Walsh's FY19-23 Capital Plan includes investments to support a healthy environment, reduce energy consumption and greenhouse gas emissions, and prepare for climate change. Leveraging outside funding, the Capital Plan allows for development of more detailed climate plans for Boston neighborhoods, especially those most at risk for coastal flooding, as recommended in *Climate Ready Boston*. These plans and follow-up early actions such as the purchase of a moveable flood wall for the East Boston Greenway are essential for protecting the safety and vitality of existing residents, businesses, and institutions, and for ensuring the implementation of continued growth and development, as envisioned in *Imagine Boston 2030*.

Renew Boston Trust launched during the Walsh Administration has systematically identified energy projects in the City's 315 buildings to both lower energy bills and reduce emissions. The City finances the program through general obligation bonds, paid for in part from reduced energy consumption at City departments.

A \$12 million Phase 1 is set to begin construction this year, and the FY19-23 capital plan will nearly triple the size of the program to \$35 million in Phase 2.

The City will implement the program through contracts with Energy Service Companies (ESCOs) that guarantee the energy savings generated by the projects sufficiently offset anticipated debt service costs.

Health

To encourage a healthy environment, including safe streets and communities, Boston is renovating several neighborhood community centers to better serve residents' needs. The BCYF Vine Street Community Center in Roxbury and the BCYF Gallivan Community Center in Mattapan are undergoing renovations. Design activity is underway for a major renovation at the BCYF Curley Community Center, an asset of the South Boston community. The heavily used

building, which spans nearly a quarter mile on the South Boston beach front, will be completely refurbished. In East Boston, an \$8.9 million renovation to the BCYF Paris Street Pool will create new family changing rooms, refresh the existing locker rooms, create a new front entrance, and upgrade all building and pool systems. Construction is expected to begin late in FY19.

The City intends to replace the former Long Island Bridge with a new structure that will utilize the piers of the former bridge to span the harbor. The \$92 million project is in design and the City expects to bid the work before winter of 2019. Restoration of the bridge will allow City to locate recovery services on Long Island.

Funding is proposed in the FY19-23 Capital Plan for a study that will evaluate facility conditions on Long Island and develop cost estimates for repairs.

Housing

In 2014, Mayor Walsh released *Housing a Changing City: Boston 2030*, the Administration's comprehensive plan to accommodate Boston's rapid growth and stabilize the housing market over the next 15 years. Through the strategies outlined in the plan, more than 26,000 new housing units have already been completed or are currently in construction, and another 26,000 are under review. This represents 98% of the City's 53,000-unit target for 2030. The City combines General Fund dollars with Federal grants, State grants, and developer fees to leverage a wide variety of sources to invest in the creation and preservation of affordable housing citywide.

Municipal finance law does not allow the City to use city capital dollars to support private housing, but public infrastructure projects can enable housing development. Investments in this Capital Plan serve as critical component to several public and private residential projects. Mayor Walsh's Capital Plan invests \$1 million in the reconstruction of roads and sidewalks in the Whittier Street housing development in conjunction with a \$30 million Housing and Urban Development grant to revitalize the

development and surrounding neighborhood. Known as Whittier Choice, the project will ultimately create a total of 387 mixed-income rental units.

The City will begin the reconstruction of various streets in the Madison Park Village of Roxbury, bound by Melnea Cass Boulevard and Tremont Street, to enhance the area ahead of new housing development along Melnea Cass in Lower Roxbury. The Madison Park infill project will be comprised of a four-story building with 16 units and a five-story building with 60 units located near the Ruggles MBTA Orange Line station.

The second floor renovation of the Woods Mullen Shelter will be completed this year. The project will increase the programming space, including housing search services and front door triage that enables shelter staff to meet with every new guest entering the shelters to conduct an in-depth assessment. This assessment leads to the development of a client-centered plan to exit the shelter system into safe, supported, and stable housing as quickly as possible. A new project proposed for the Woods Mullen Shelter in the capital plan will create a new entryway and improve elevator access to the upper floors.

Arts and Culture

The Mayor's Office of Arts and Culture released the City's first cultural plan, *Boston Creates*, in 2016, which calls for increased support to Boston's arts and culture ecosystem. The Percent for Art Program is a critical policy outcome of this planning process. The City projects to borrow \$170 million in FY19 to support the Capital Plan, and will invest one percent, or \$1.7 million, in public art projects in FY19. This is in addition to the FY18 commitment of \$1.7 million.

In advance of the implementation of this program, the City has included funding for public art installations in a few infrastructure projects including the reconstruction of Hyde Square at the intersection of Centre Street, Perkins Street, and Day Street and at the Jamaica Plain Branch Library.

The FY19-23 Capital Plan continues to demonstrate Mayor Walsh's strong commitment to revitalizing library branches throughout Boston's neighborhoods.

Construction is underway at the Dudley Branch, a \$17.2 million project that will reorient the entrance to reconnect it with the heart of Dudley Square. Construction is also expected to begin in FY19 on a major renovation of the Roslindale Branch and a new Adams Street Branch. The new library will have a larger footprint, add new meeting rooms, provide an enhanced teen space, and create redesigned outdoor spaces.

In FY19, design activity will begin on a renovation and addition to the Faneuil Branch library in Brighton. A study for a new Fields Corner Branch library will also begin, to develop a facility program that supports the needs of the community. Funding authorized in FY18 for smaller scale facility improvements will enable the BPL to complete four projects, including interior updates at the South End, Lower Mills, and West Roxbury branches, as well as landscaping and exterior space upgrades at the South Boston Branch.

In FY19 renovations will begin on a \$15.7 million project to preserve the Library's valuable and historic special collections in rare books and manuscripts. An inventory of the Central Library in Copley Square's Rare Books & Manuscripts Department's nearly 250,000 rare books and one million manuscripts is currently underway. Over the course of the next two years, the Rare Books Department will receive major environmental and mechanical improvements to better regulate temperature and humidity control of the department's collection storage areas, staff spaces, conservation lab, and public reading room. Ultimately, the project will increase accessibility to the Library's rare books and manuscripts and ensure the collections will be preserved for future generations. The project continues the City's and the Library's renewed commitment to improve intellectual control, custodianship, and security of its special collections.

Economy

As a \$2.4 billion investment in the City's assets, the Capital Plan supports economic growth in Boston by creating construction jobs and investing in infrastructure that unlocks economic activity. The Capital Plan also supports targeted investments to strengthen Boston's core and small businesses, as called for in *Imagine Boston 2030*. For example, roadway improvements in the Dudley Square Main Street district, with geometric changes, new traffic signal equipment and timing, bike lanes, and streetscape improvements, will improve access and safety. This project also begins implementation of the *Go Boston 2030* goal to make public realm improvements in every Main Streets district in Boston by 2030.

The City will also collaborate with developers to improve roads and sidewalks along Harrison Avenue between East Berkeley Street and Herald Street. These infrastructure improvements are critical to economic development activity along the corridor with the recent development of Ink Block, which includes 471 housing units.

Public Safety

As part of the *Imagine Boston 2030* initiative to reduce cancer risks for firefighters, the Capital Plan includes health and safety improvements to firehouse projects. The Fire Department, in conjunction with the Public Facilities Department, studied best practices for firehouse design and will now utilize an enhanced set of building programs for new and renovated firehouses. Key changes include separating areas of the firehouse to prevent contamination of living areas, and improves personal and gear cleaning facilities. The new stations for Engine 42 and Engine 17 will be among the first firehouses in the nation to reflect these enhancements. The City is also renovating neighborhood existing fire and police stations. In East Boston, construction is expected to begin on a new police station, a \$29.9 million project that will replace the existing A-7 station.

In 2016, the City launched an accelerated fire apparatus replacement plan, which will replace nearly 50 percent of the fleet by the end of 2019. In FY17, the department purchased 16 new fire trucks to replace a series of apparatus with known mechanical issues and improve public safety by increasing the number of apparatus in the reserve fleet. In FY18, the Fire Department purchased nine pumper trucks, three ladders, and one tower ladder. The plan will continue with the purchase of three pumpers and three ladder trucks in FY19.

The Police Department is upgrading and replacing its radio system to support our police officers. The project will include \$56 million in operating and capital investments over four years. To research future radio needs for other public safety and civilian departments, DoIT will continue a feasibility study to determine the most cost effective and efficient way to expand and sustain the infrastructure that supports the radio systems of multiple City departments.

Government Effectiveness

Mayor Walsh launched the City Hall Master Plan to allow Boston to rethink the way the public interacts with government in City Hall and to enliven the plaza. The City has successfully launched pilot projects, including “Boston Winter” on the plaza and the exterior lighting installation to enhance the building's original design while livening up City Hall plaza. The City has also completed lobby renovations to provide a new visitor entrance, information desk and signage, and coffee kiosk to make the building more user-friendly. With funding in the FY19-FY23 Capital Plan, the City will renovate the plaza to provide a more inviting space to the public while making needed infrastructure and accessibility improvements. The City will improve transactional spaces in City Hall to enhance interactions between residents and City departments, and address deferred capital maintenance.

Mayor Walsh's Capital Plan continues to include funding for Youth Lead the Change, a participatory budgeting process where young

Bostonians make decisions about how to spend the \$1 million each year. Projects funded to date include providing laptops in schools, park renovations, adding trash cans and recycling bins, and installing Wi-Fi in schools and community centers.

FY18-23 PROJECT HIGHLIGHTS AND SEQUENCING

| Project | Budget | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|--|----------------|------|------|------|------|------|------|
| Community Spaces | | | | | | | |
| BCYF Gallivan Community Center | \$ 2,960,000 | | | | | | |
| Parker Hill Library | \$ 2,400,000 | | | | | | |
| Dudley Branch Library Renovation | \$ 17,200,000 | | | | | | |
| BCYF Vine Street Community Center | \$ 5,340,000 | | | | | | |
| Central Library: Rare Books and Manuscripts Department | \$ 15,725,000 | | | | | | |
| Roslindale Branch Library Renovation | \$ 10,200,000 | | | | | | |
| BCYF Paris Street Pool | \$ 8,900,000 | | | | | | |
| Adams Street Branch Library | \$ 18,300,000 | | | | | | |
| Fields Corner Branch Library | \$ 12,100,000 | | | | | | |
| Faneuil Branch Library | \$ 12,625,000 | | | | | | |
| BCYF Curley Community Center | \$ 15,000,000 | | | | | | |
| City Hall and City Hall Plaza | \$ 60,300,000 | | | | | | |
| Schools | | | | | | | |
| Dearborn 6-12 STEM / Early College Academy | \$ 73,498,295 | | | | | | |
| Eliot School at 585 Commercial Street | \$ 34,300,000 | | | | | | |
| Madison Park Complex Building #4 Locker Rooms | \$ 6,300,450 | | | | | | |
| <i>Brighton High School Locker Rooms</i> | \$ 2,800,000 | | | | | | |
| Boston Arts Academy | \$ 124,755,412 | | | | | | |
| Carter School | \$ 1,600,000 | | | | | | |
| <i>Josiah Quincy Upper School</i> | \$ 1,200,000 | | | | | | |
| Public Safety | | | | | | | |
| Engine 50 | \$ 3,810,000 | | | | | | |
| Engine 42 | \$ 23,560,000 | | | | | | |
| East Boston Police Station | \$ 29,900,000 | | | | | | |
| Engine 17 | \$ 24,700,000 | | | | | | |
| Parks | | | | | | | |
| Ramsay Park | \$ 2,395,500 | | | | | | |
| Martin's Park | \$ 7,000,000 | | | | | | |
| Smith Playground | \$ 6,285,000 | | | | | | |
| Harambee Park Master Plan Implementation | \$ 2,700,000 | | | | | | |
| Franklin Park Pathway Improvements | \$ 5,000,000 | | | | | | |
| Reservation Road Park | \$ 4,260,000 | | | | | | |
| Noyes Park | \$ 3,910,000 | | | | | | |
| McConnell Playground | \$ 3,790,000 | | | | | | |
| Jamaica Pond Pathways and Perimeter Improvements | \$ 4,770,000 | | | | | | |
| Garvey Playground | \$ 5,000,000 | | | | | | |
| Cassidy Field | \$ 4,415,000 | | | | | | |
| <i>Harambee Park Phase 2</i> | \$ 3,500,000 | | | | | | |
| <i>Boston Common Master Plan</i> | \$ 500,000 | | | | | | |
| <i>Franklin Park Master Plan</i> | \$ 800,000 | | | | | | |
| Streets | | | | | | | |
| North Square | \$ 2,500,000 | | | | | | |
| <i>New England Avenue</i> | \$ 1,500,000 | | | | | | |
| <i>Emerald Necklace</i> | \$ 300,000 | | | | | | |
| Long Island Bridge Replacement | \$ 108,758,144 | | | | | | |
| <i>State Street</i> | \$ 1,500,000 | | | | | | |
| <i>Cummins Highway</i> | \$ 4,000,000 | | | | | | |
| <i>Northern Avenue Bridge</i> | \$ 100,000,000 | | | | | | |
| North Washington Street Bridge | \$ 218,957,519 | | | | | | |
| Commonwealth Avenue Phase 3 and 4 | \$ 2,900,000 | | | | | | |

*Indicates new project in FY19

Study
Design
Construction



FY19 Expenditure Allocation

The City estimates FY19 capital expenditures from all sources will total \$334.8 million (see Figure 2).

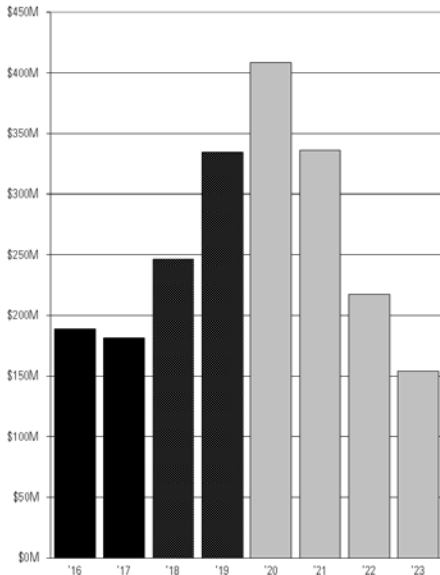


Figure 2 – Capital Expenditures
FY16-FY23

All projects in the Capital Plan are categorized as Upkeep, Upgrade, New/Major Renovation, Planning or Matching Funds. The City tracks the overall distribution of these categories to maintain a balance between the upkeep of existing assets and the expansion or introduction of new ones.

Upkeep represents projects that maintain the City’s assets, a fundamental priority of the Capital Plan. In FY19, 22% of projected spending supports Upkeep projects. These include roof and masonry repairs, the replacement of play equipment in parks, HVAC and boiler replacement, and critical repair funds for departments to address relatively small but vital repair projects not covered by routine maintenance. A substantial portion of the Upkeep category supports on-going bridge, street, sidewalk, and street lighting repairs that ensure the City’s roads and sidewalks are safe and in good condition.

Upgrade represents projects that improve existing assets by adding new capacity or innovations. This year’s upgrade allocations

account for 38% of projected spending, and includes projects such as Connect Historic Boston – the redesign of several Downtown streets with support from a Federal grant – and new equipment for the police radio system.

New/Major Renovations represents 34% of FY19 allocations. New facilities and rehabilitation projects for schools, libraries, parks and community centers enable the City’s facilities to adapt to fit the needs of today’s programs, improve the ‘green’ performance of facilities, and extend the useful life of older assets. Highlights in this category include a new fire house at Engine 42 in Roxbury and the BCYF Curley Community Center in South Boston.

| FY19-FY23 Project Highlights | |
|-------------------------------------|---|
| Education | |
| | Boston Arts Academy |
| | My Way Café Kitchen Program |
| | BuildBPS: 21 st Century Schools Fund |
| Transportation | |
| | Boylston Street Sidewalks |
| | Vision Zero |
| | Road and Sidewalk |
| | Long Island Bridge |
| Technology | |
| | Digital Engagement Upgrades |
| Open Space | |
| | Franklin Park Planning |
| | Boston Common Planning |
| | Jamaica Pond Pathways & Perimeter |
| | Martin’s Park |
| Energy and Environment | |
| | Climate Ready Boston |
| | Renew Boston Trust |
| Health | |
| | BCYF Vine Street Pool |

BCYF Curley Community Center
BCYF Gallivan Community Center

Housing

Whittier Street Roadways
Madison Park Village

Arts and Culture

Percent for Arts
Adams Street Branch Library
Roslindale Branch Library

Economy

Harrison Avenue / Washington Street
Dudley Street

Public Safety

New East Boston Police Station
New Engine 17 and 42 Fire Stations

Government Effectiveness

City Hall and Plaza Master Plan
Youth Fund

About 1% of the FY19 budget is assigned to matching fund requirements and planning projects. Comprehensive planning projects, which analyze a group of buildings or program needs, provide the groundwork for targeted investments in the categories of Upgrade and New/Major Renovations. Projects in this category include funds for a master plan of the Frog Pond at Boston Common and a transportation study of the Bowdoin Street/Geneva Avenue area of Dorchester. The Matching fund category includes projects in which the City covers the costs of design and engineering services. These expenditures are able to leverage State and Federal construction funds on projects such as the new North Washington Street Bridge and the South Bay Harbor Trail.

An additional 5% of the FY19 budget is assigned to the City's contributions to MassDOT and MBTA construction projects. Typically, the

City's funding is utilized in the design of these projects.

FINANCING THE FY19-FY23 CAPITAL PLAN

The Capital Plan is financed with general obligation bonds issued by the City, other City funds, State grants, Federal grants, and private grants.

General Obligation (G.O.) Bonds

General obligation bonds represent 61.1% of all project funding. This year's plan assumes \$1.01 billion in new general obligation borrowings over the next five years, a 6.8% increase over last year's plan. This borrowing level remains sustainable within the City's debt affordability policy.

State and Federal Funds

State and Federal financing represent 28.9% of all project funding. Programs, such as the School Building Assistance program, Chapter 90 and the Transportation Improvement Program, provide key resources for Boston's Capital Plan. Funds for capital financing are currently estimated at \$353.2 million from State programs and \$349.8 million from Federal programs.

School Building Assistance Program

The School Building Assistance (SBA) program, administered by the Massachusetts School Building Authority (MSBA), is an important revenue source for school renovation and construction. Annually, the MSBA accepts new project requests from cities, towns, and school districts, and if a project is ultimately approved, the MSBA pays 40% to 80% of eligible project costs.

The MSBA operates two major programs – the Core Program and the Accelerated Repair Program (ARP). Major renovation and new construction projects are funded through the Core Program. The ARP funds roof, boiler, and window replacement projects in school buildings that are otherwise sound.

The City currently has four projects in various phases of the Core Program -- the Dearborn STEM Academy, the Boston Arts Academy, the

Josiah Quincy Upper Pilot School, and the Carter School.

Construction of the new Dearborn STEM Academy is nearly complete. The new school will open for students in September 2018. The MSBA has approved a maximum project grant totaling \$37.4 million, which covers 50.8% of the current \$73.5 million project budget.

The City expects to enter into a Project Funding Agreement with the MSBA for the Boston Arts Academy project before the end of the fiscal year. The MSBA has approved a maximum project grant totaling \$48.9 million, which covers 39.2% of the current \$124.8 million project budget.

The Josiah Quincy Upper School project is currently in the Feasibility Study phase. In December 2017, the MSBA Board authorized an extension of time through December 31, 2020 to the Feasibility Study Agreement so that the City can further consider its site selection and to complete a new preliminary design program, a new preferred schematic report, and a new schematic design.

The City's Eligibility Period for the Carter School begins on July 2, 2018 and ends on March 29, 2019. During this time, the City must complete preliminary requirements established by the MSBA including forming a school building committee, completing an educational profile, agreeing on a planned enrollment level, and entering into a feasibility study agreement.

The City has three projects underway through the Accelerated Repair Program. The City entered into a Project Funding Agreement last year for a window and door replacement project at seven schools. The MSBA's maximum grant totals nearly \$16.4 million. The total project cost is over \$29 million. Construction will begin on the window project in June and is expected to be completed before the end of the calendar year.

The City expects to complete roof and boiler projects at five schools later this year. The MSBA's grant covers up to \$6.4 million of the estimated \$9.8 million project costs.

For the period FY19-23, total payments from the MSBA for legacy projects are estimated at \$7.6 million. The State payments offset debt service costs for school building assistance projects approved by the Department of Education prior to the creation of the MSBA in 2004. The final payment from the MSBA for legacy projects is in FY20.

Chapter 90 Funds

Administered by the Massachusetts Highway Department, Chapter 90 funds are allocated by formula through State bond authorizations and through the State budget to all cities and towns in the Commonwealth. The City uses Chapter 90 funds to support its roadway resurfacing and reconstruction programs as well as its sidewalk reconstruction programs. The City anticipates an allocation of approximately \$14.4 million in FY19.

Transportation Improvement Program (TIP)

The Transportation Improvement Program is a statewide road and bridge construction advertisement program developed under the management of the Massachusetts Department of Transportation (MassDOT). It includes both local and State owned roads and bridges. The TIP's funding sources include State-issued general obligation bonds and Federal funds made available through the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

Other Funds

Other Funds is a revenue category that includes both City and non-City sources.

City sources of Other Funds include the Street Opening Account which funds the permanent repair of utility cuts and pavement restoration. Transfers from the Surplus Property Fund, Parking Meter Fund, and the General Fund are also categorized as Other Funds.

Other Funds Summary

| Transfers from: | <u>\$ Amount</u> |
|------------------------|------------------|
| General Fund | \$8.00M |
| Surplus Property Fund | \$18.60M |
| Parking Meter Fund | \$115.19M |
| Utility Company Grants | \$18.63M |
| Fund for Parks | \$5.84M |
| BPDA | \$4.06M |
| Other Non-City | <u>\$73.22M</u> |
| Total | \$243.54M |

In FY19, the City proposes transferring \$53.8 million from the Parking Meter Fund to the Capital Grants Fund and appropriating it for 10 projects including Long Island Bridge, Boylston Street Sidewalks, Ruggles Street, and the Crosswalk and Lane Marking Revitalization initiative.. Using the Parking Meter Fund revenue in this way allows the City to make increased investments in infrastructure while increased investment in the BuildBPS program is supported by additional debt issuance. Through this appropriation, the City will address important transportation capital needs.

Non-City sources of Other Funds include grants from the Boston Planning and Development Agency for roadway construction or other capital projects, as is the case with Harrison Avenue and Connect Historic Boston. Other Funds also include incentive rebates provided by utilities to carry out energy efficiency projects. Altogether, these City and non-City sources of capital funds are estimated at \$243.5 million.

CAPITAL PLANNING PROCESS

Capital needs and resource availability are assessed annually through a capital planning process that results in a five-year Capital Plan. The first year of the spending plan constitutes the City's capital budget. Expenditures against this budget are closely monitored throughout the year. To emphasize the balance between needs and resource availability, the budget document (in Volumes 2 and 3) includes both

capital authorizations and expenditure projections for each project.

The annual capital planning process begins with a capital improvement project request period during which all departments have an opportunity to identify their facility, equipment, infrastructure, and planning needs in a systematic manner, and to submit their proposals for funding consideration. The development of department project requests may involve both internal assessments of current needs and a review of external constituent requests.

All capital improvement projects requesting funding consideration must meet at least one of the following minimum criteria:

- Complies with Americans with Disabilities Act;
- Improves health and safety;
- Supports economic development;
- Enhances general government effectiveness;
- Mitigates an environmental hazard;
- Responds to a legal, legislative or administrative mandate; or
- Preserves existing municipal facilities.

A project request includes a cost estimate, a description of the proposed scope of work, and additional descriptive information to help OBM evaluate it.

Proposed projects must account for short-term and long-term effects on the City's operating budget. Accordingly, project requests that OBM determines may impact the City's operating budget are subject to additional review to determine the anticipated effect on personnel, utilities, maintenance, and supply costs, as well as expected changes in service demand or delivery of departmental programs. As a practical matter, it is assumed that certain types of projects such as energy conservation and energy efficiency projects (e.g. heating system upgrades or roof and window replacements) provide operating budget

savings. OBM works with departments to measure these savings.

OBM reviews project proposals to determine the extent to which private purposes or benefits may exist; this review allows the City of Boston to maintain its tax-exempt financing status.

New capital requests that are recommended for funding are placed into a multi-year spending plan along with previously authorized projects. The Mayor submits the Capital Plan to the City Council each year. The City Council, in turn, holds public hearings to consider project authorizations. This year's Capital Plan identifies 276 new and continuing projects and proposes \$288.4 million in new bond authorization, a \$53.8 million appropriation supported by the Parking Meter Fund, and a \$1.6 million appropriation from the Surplus Property Fund.

Descriptions of all 276 projects can be found in Volumes 2 and 3 of the Budget. Project descriptions include authorizations and funding sources, projected expenditures, scope of work summary, and an indication of whether or not the project generates a near-term operating budget impact.

Operating Budget Impacts

Determining the impact that proposed capital investments will have on the City's operating budget (personnel, contracted services, equipment and utilities) is essential to the capital budgeting process. Many capital projects, such as those that replace mechanical equipment with modern, more efficient versions, save the City money in future operating costs; others, such as those that allow the City to expand programming or establish a stronger presence in different neighborhoods, may entail future operating costs.

Understanding the balance between future savings and future costs resulting from these capital projects is vital to maintaining the City's long-term financial health.

In Volumes 2 and 3 of this document, each capital project summary indicates whether or

not there is an operating impact associated with the project.

While most capital projects can be assumed to have a marginal impact on energy savings or personnel demands, only those projects that will likely result in an increase or decrease in a budget appropriation are included here.

Savings

The Capital Plan supports investments that will decrease operating expenses by reducing costs associated with emergency repairs, maintenance of old systems, and energy inefficiency. A substantial portion of the Capital Plan is focused on these types of basic facility improvements.

Through an Executive Order relative to climate action, the City has committed to designing new buildings and selected major renovations to the standards required to attain U.S. Green Building Council LEED (Leadership in Energy and Environmental Design) certification.

By far the largest operational savings comes from the conversion of street lights to newer fixtures using Light Emitting Diode (LED) technology. Since 2014, the City has performed 18,551 streetlight LED retrofits. The FY18 Budget reflects an avoidance of 33.6 mWh, or \$5.8 million in energy costs, directly attributable to this work.

Renew Boston Trust launched during the Walsh Administration has systematically identified energy projects in the City's 315 buildings to both lower energy bills and reduce emissions. The City finances the program through general obligation bonds, paid for in part from reduced energy consumption at City departments.

A \$12 million Phase 1 is set to begin construction this year, and the FY19-23 capital plan will nearly triple the size of the program to \$35 million in Phase 2. The City will implement the program through contracts with Energy Service Companies (ESCOs) that will provide financial guarantees that the energy savings generated by the projects will be sufficient to cover anticipated debt service costs

The Property Management Department is updating the City Hall heating system. An assessment is underway that will determine the most cost effective and energy efficient solution. The Boston Public Schools and Fire Department are both pursuing capital projects to save energy and reduce operating costs, primarily by replacing boilers and updating HVAC and associated systems.

Costs

Increases in operating expenses expected as a result of capital projects are primarily driven by two areas: an expansion of the City's IT infrastructure and the addition of buildings to the City's portfolio.

In FY19, license costs will increase by \$897,944. This increase is due to investments made to replace enterprise applications such as the City's 311 and tax collecting systems as well as the core infrastructure project to establish a back-up data center.

Many of the projects identified in the Department of Innovation and Technology (DoIT)'s capital budget replace legacy systems, and in some cases they include an expansion of infrastructure, as well. Annual licensing fees to support the ongoing maintenance and upgrades of new software is typically required, along with the addition of personnel to support the customizations and integrations that ensure the new software meets the City's needs. For FY19, the Office of Budget Management partnered closely with DoIT to perform detailed cost-benefit analysis; a key outcome of which was 5-year return on investment (ROI) calculations for all new technology proposals. A weighted scoring system was developed to prioritize funding for proposals with positive ROI calculations, among other factors.

DEBT MANAGEMENT POLICIES AND DEBT IMPLICATIONS OF THE PLAN

Effective debt management ensures that the City can meet its capital infrastructure and facility needs. Debt management requires a series of decisions about the amount, timing, purposes and structure of debt issuance. Long-

term debt related to capital investment has two main purposes:

(1) It finances acquisition, construction, repair, and renovation of City-owned buildings and equipment that are necessary to provide public services; and

(2) It finances infrastructure improvements to ensure the City's continued growth and safe roadway conditions.

The Treasury Department manages all borrowings according to the City's debt management policies. These policies address issues such as debt affordability and limitations on the level of variable rate debt the City will use. The City's goals are to rapidly repay debt, maintain a conservative level of outstanding debt, and ensure the City's continued positive financial standing with the bond market.

Key components of the debt management policies ensure that:

- combined net direct debt does not exceed 3% of taxable assessed value;
- at least 40% of the overall debt is repaid within five years and 70% within ten years;
- annual gross debt service costs do not exceed 7% of general fund expenditures;
- variable rate debt does not exceed 20% of the City's total currently outstanding bonded debt (the City has no variable debt).

For further discussion of the City's financial policies and management controls, refer to the chapter on Financial Management.

The City's debt service forecast assumes general obligation borrowing of \$177 million in FY19, \$203 million in FY20, \$220 million in FY21, and \$215 million in FY22, and \$200 million in FY23. The debt tables at the end of this chapter detail the City's outstanding debt service obligations and demonstrate the City's rapid retirement of its debt.

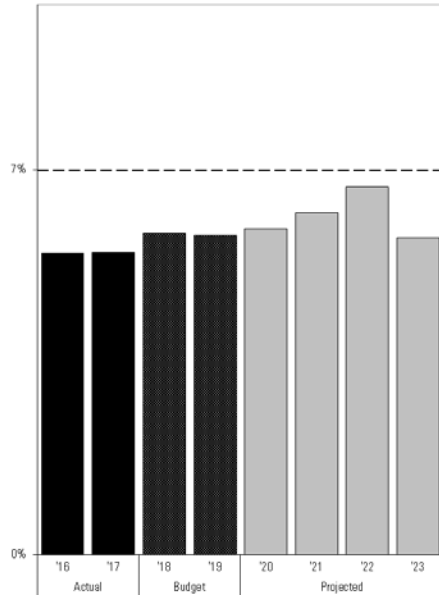


Figure 3 – Gross Debt Service as a Percent of Total General Fund Expenditures
FY16-FY23

The City's gross debt service requirement will remain under 7% of total General Fund expenditures through FY23 (See Figure 3).

The ratio of debt service to the City's primary revenue source, the property tax levy, is projected to increase through FY23 (See Figure 4). Even with the increase, the ratio is not expected to exceed the City's policy ceiling.

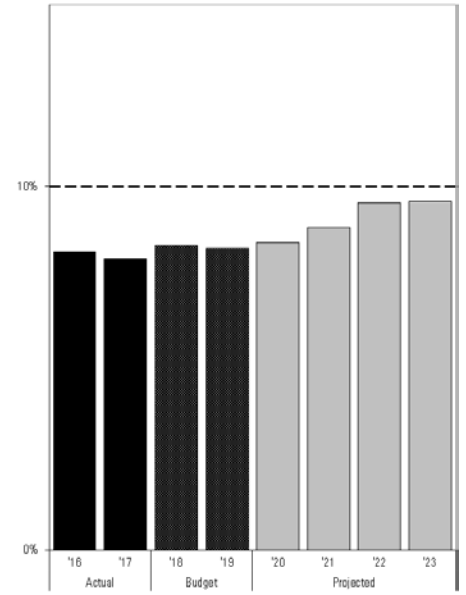


Figure 4 – Gross Debt Service as a Percent of the Net Property Tax Levy
FY16-FY23

The City's current overall debt burden (net direct debt to assessed property value of \$143.58 billion) is approximately 0.84% as of March 1, 2018. The City's net direct debt per capita currently stands at approximately \$1,804 as of March 1, 2018.

Boston has been conservative about assuming long-term debt and aggressive about retiring debt expeditiously. Over 40% of the City's outstanding debt will be retired within the next five years.

In February of 2017, Moody's Investors Service and Standard & Poor's reaffirmed Boston's credit rating at Aaa, and AAA, respectively. A bond rating is a statement of credit quality and is analyzed when determining the interest rate that should be paid for a municipality's bonds. A higher bond rating translates into lower interest rates and real dollar savings for the City.

**Capital Project Financing
Fiscal Years 2019 - 2023**

| | Existing Authorization | FY19 Authorization | FY20-23 Authorization | State | Federal | Other | Trust | Total |
|---|---------------------------|-----------------------|--------------------------|--------------------|--------------------|--------------------|----------|----------------------|
| Boston Centers for Youth and Families | 37,589,033 | 10,240,967 | 2,300,000 | 0 | 0 | 0 | 0 | 50,130,000 |
| Boston Planning and Development Agency | 2,600,000 | 400,000 | 0 | 0 | 0 | 0 | 0 | 3,000,000 |
| Boston Public Library | 49,187,543 | 23,000,000 | 50,750,083 | 5,597,374 | 0 | 0 | 0 | 128,535,000 |
| Boston Public Schools | 229,704,495 | 34,798,142 | 150,428,366 | 157,744,914 | 0 | 18,500,000 | 0 | 591,175,917 |
| Department of Innovation and Technology | 88,779,795 | 4,000,000 | 16,934,292 | 0 | 0 | 0 | 0 | 109,714,087 |
| Emergency Management | 1,500,000 | 0 | 0 | 0 | 0 | 0 | 0 | 1,500,000 |
| Environment Department | 10,898,000 | 36,600,000 | 0 | 1,227,000 | 2,500,000 | 10,400,000 | 0 | 61,625,000 |
| Fire Department | 38,077,856 | 10,634,644 | 29,962,083 | 0 | 0 | 176,856 | 0 | 78,851,439 |
| Inspectional Services Department | 0 | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| Neighborhood Development | 3,990,000 | 1,500,000 | 0 | 0 | 0 | 0 | 0 | 5,490,000 |
| Office of Arts & Culture | 1,900,000 | 1,700,000 | 8,000,000 | 0 | 0 | 0 | 0 | 11,600,000 |
| Office of New Urban Mechanics | 200,000 | 0 | 0 | 0 | 0 | 0 | 0 | 200,000 |
| Parks and Recreation Department | 75,359,968 | 35,388,000 | 5,707,455 | 17,342,173 | 65,230,086 | 29,658,550 | 0 | 228,686,232 |
| Police Department | 58,684,000 | 28,795,000 | 0 | 0 | 0 | 0 | 0 | 87,479,000 |
| Property Management Department | 97,346,058 | 600,000 | 0 | 0 | 0 | 0 | 0 | 97,946,058 |
| Public Health Commission | 3,540,000 | 7,148,300 | 0 | 0 | 0 | 0 | 0 | 10,688,300 |
| Public Works Department | 177,151,925 | 92,440,000 | 1,900,000 | 157,170,677 | 253,233,134 | 169,535,335 | 0 | 851,431,071 |
| Transportation Department | 53,638,252 | 1,100,000 | 2,150,000 | 14,070,542 | 28,847,354 | 15,267,817 | 0 | 115,073,965 |
| Total | 930,146,925 | 288,445,053 | 268,132,279 | 353,152,680 | 349,810,574 | 243,538,558 | 0 | 2,433,226,069 |

City of Boston
Outstanding Principal by Statute as of March 1, 2018

| Purpose for Which Issued: | Outstanding @ March 1, 2018 | Percent of Total Outstanding Debt |
|---------------------------|--------------------------------|--|
| General Purpose | 980,860,019 | 80.8% |
| MCWT | 15,309,442 | 1.3% |
| Economic Development | 8,680,241 | 0.7% |
| State Urban Development | 5,991,814 | 0.5% |
| Schools | 6,977,058 | 0.6% |
| Public Buildings | 8,329,956 | 0.7% |
| Public Works | 183,131,784 | 15.1% |
| Cemeteries | 4,857,668 | 0.4% |
| TOTAL: | \$ 1,214,137,981 | 100.0% |

CITY of BOSTON - DEBT SERVICE REQUIREMENTS - FISCAL YEARS 2016 through 2023

| | Actual FY16 | Actual FY17 | Budget FY18 | Budget FY19 | Projected FY20 | Projected FY21 | Projected FY22 | Projected FY23 |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| <u>Gross Debt Service Requirements - Bonded Debt:</u> | | | | | | | | |
| Total Principal: | 110,590,000 | 116,976,541 | 121,490,049 | 129,028,851 | 133,347,953 | 146,432,361 | 167,207,083 | 172,372,124 |
| Total Interest: | 52,323,243 | 53,832,625 | 64,800,158 | 64,301,987 | 70,324,775 | 74,481,929 | 78,206,485 | 81,126,492 |
| (1) Total: | 162,913,243 | 170,809,166 | 186,290,207 | 193,330,838 | 203,672,728 | 220,914,290 | 245,413,568 | 253,498,616 |
| <u>Less: Revenue Deemed Available from Related Sources:</u> | | | | | | | | |
| Boston Medical Center | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Boston Public Health Commission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Water and Sewer Payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (2) Premium, Subsidies, Other | 3,656,500 | 3,598,172 | 3,526,669 | 3,418,863 | 3,308,756 | 2,950,602 | 2,853,141 | 2,369,144 |
| Renew Boston Trust - Energy Savings | 0 | 0 | 0 | 175,000 | 775,000 | 1,482,500 | 3,332,500 | 4,382,500 |
| Accrued Interest | 100,000 | 100,000 | 0 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 |
| (3) Irrigation Project | 199,023 | 190,285 | 116,365 | 9,149 | 0 | 0 | 0 | 0 |
| (4) 1010 Massachusetts Avenue Project | 2,265,029 | 2,220,937 | 2,123,404 | 1,954,914 | 1,924,363 | 2,409,288 | 2,644,951 | 2,089,269 |
| (5) Pension Management System | 1,904,612 | 1,904,553 | 1,903,326 | 1,902,668 | 1,903,312 | 1,904,187 | 893,752 | 640,475 |
| Interest on Loan to BOA Fund and Dudley Fund | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <u>Plus: Interest on Temporary Loan Notes and Additional Items:</u> | | | | | | | | |
| Revenue Anticipation | 0 | 0 | 1,936,000 | 3,000,000 | 3,000,000 | 3,000,000 | 3,000,000 | 3,000,000 |
| Cost if Issuance | 0 | 0 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 |
| Dudley Sq. Site / Sec. 108 | 505,000 | 505,000 | 505,000 | 0 | 0 | 0 | 0 | 0 |
| Lease Payment for Bolling Municipal Building | 943,000 | 551,000 | 551,000 | 551,000 | 248,111 | 0 | 0 | 0 |
| (6) Sinking Fund for Nov., 2009 QSCB | 1,454,545 | 1,454,545 | 1,454,545 | 1,454,545 | 1,454,545 | 1,454,545 | 1,454,545 | 1,454,545 |
| School B.A.N.'s | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Debt Service/Budget Summary: | 157,690,624 | 165,305,765 | 183,566,988 | 191,275,788 | 200,863,954 | 217,022,258 | 240,543,768 | 248,871,774 |
| <u>Less Additional Adjustments:</u> | | | | | | | | |
| School Construction Assistance | 7,344,337 | 6,720,152 | 6,720,147 | 5,107,351 | 2,461,330 | 0 | 0 | 0 |
| Total Net Debt Service Requirements: | 150,346,287 | 158,585,613 | 176,846,841 | 186,168,437 | 198,402,624 | 217,022,258 | 240,543,768 | 248,871,774 |

NOTES:

- FY17 - the City issued: \$150 million in General Obligation Bonds with a 20-year maturity and an average coupon rate of 3.97%; closing date: April 4, 2017
Assumptions:
 FY18 - Assumes General Obligation debt issuance of \$170 million with a 20 year maturity and an interest rate of 4.75%.
 FY19 - Assumes General Obligation debt issuance of \$170 million and \$7 million for the Renew Boston Trust project, each with a 20 year maturity and an interest rate of 5.00%.
 FY20 - Assumes General Obligation debt issuance of \$200 million and \$3 million for the Renew Boston Trust project each with a 20 year maturity and an interest rate of 5.0%.
 FY21 - Assumes General Obligation debt issuance of \$200 million and \$20 million for the Renew Boston Trust project each with a 20 year maturity and an interest rate of 5.0%.
 FY22 - Assumes General Obligation debt issuance of \$200 million and \$15 million for the Renew Boston Trust project each with a 20 year maturity and an interest rate of 5.0%.
 FY23 - Assumes General Obligation debt issuance of \$200 million with a 20 year maturity and an interest rate of 5.0%.
- Under the American Recovery and Reinvestment Act of 2009 (ARRA), in 2010 and 2011, the City issued Tax Benefited Bonds which are entitled to receive subsidy payments from the Federal Government. The IRS has released 5 subsidy reduction notifications since March of 2013, reducing the expected annual subsidy - the projected loss through FY2018 is approximately \$1.4 million. An estimated Subsidy reduction to ARRA-related issuances of 7.3% per year from FY2019 through FY2023 has been applied in response to IRS withholding notifications.
- Debt Service Costs will be offset by the "Fund for Parks and Recreation".
- Debt Service Costs will be offset by charging City departments for the space they occupy.

5. Debt Service Costs will be offset by semi-annual payments from the Retirement Board.
6. Quarterly payments of principal in the amount of \$363,636.36 are currently being made to the paying agent with respect to the City's outstanding \$20 million G.O. Qualified School Construction Bonds, 2009-Series A, which were issued as tax credit bonds that do not earn interest. These funds are kept in escrow until the Bonds mature on September 15, 2024.

