

Capital Planning

INTRODUCTION

Mayor Walsh's \$3.0 billion FY21-25 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. 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.

The Capital Plan moves *Imagine Boston 2030* from idea to action. Mayor Walsh has increased planned borrowings by 24.9% over last year's plan, leveraged one-time funding sources, and advanced the City's participation in the Massachusetts School Building Authority's Accelerated Repair Program.

An estimated 90% of the investment in the FY21-25 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 the construction of new schools, 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 \$1.2 billion 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.

- Boston will prepare for climate change by investing at least 10% of all new capital funding to open space, infrastructure, and facilities projects that are climate resilient or contribute to making the City more environmentally friendly. In FY21, a Climate Resilience Reserve will be established to support this goal.
- 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, 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.

FY21-FY25 EXPENDITURES

The City is responsible for maintaining a large inventory of capital assets, including roads, bridges, schools, parks, libraries, public safety equipment, 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 FY21-25 Capital Plan are categorized within the *Imagine Boston 2030* initiatives below.

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 City's capital spending on BPS facilities from FY18 to FY27. The FY21-25 capital plan will invest \$438 million in BPS projects, as part of an overall commitment to provide \$730 million over the ten year life of BuildBPS.

Boston has leveraged MSBA Accelerated Repair Program (ARP) dollars to provide much needed improvements to its schools. This summer boilers at four schools and windows at two schools will be replaced. Altogether, these projects represent an investment totaling \$12.7 million with \$7.4 million supported by a grant from the MSBA.

This Capital Plan enables the City to invest in BPS projects already in the pipeline:

- Construction is underway on the new \$137.4 million Boston Arts Academy project. The MSBA has committed a

maximum project grant totaling \$48.9 million.

- The Josiah Quincy Upper School (JQUS) and Carter School projects are currently in the process for MSBA funding.
- 29 schools will be enhanced this summer with kitchen renovations that support the delivery of fresh, nutritious food. This is the third phase of "My Way Café", a multi-year kitchen renovation program. The investment will close food security gaps that prevent many children from learning to their full potential.
- In line with the goals of BuildBPS, BPS will study school conversions for grades K-6 and 7-12 to minimize school transitions for students.
- The City will upgrade bathrooms at various schools, including fixtures, flooring, partitions, lighting, and paint, and invest in plumbing and fixture upgrades to expand the availability of drinking water across the district.

Transportation

Drawing on City, State and Federal sources, invests \$1.2 billion implementing the core initiatives outlined in *Go Boston 2030*.

Boston strives for streets that are safe for all users of our roads, bridges, and sidewalks, particularly pedestrians and cyclists; travel that is more reliable and predictable; expanded quality transportation choices that improve access by interconnecting our neighborhoods for all modes of travel; and upgraded capital assets that make travel more reliable and predictable. Driven by these core goals of safety, access, and reliability, the Capital Plan focuses on several key investments.

The Capital Plan makes critical investments to improve safety and accessibility for Boston's most vulnerable street users with a focus on pedestrian ramps and safety

interventions on residential streets and in small business districts. In FY21, the City will increase funding for the Pedestrian Ramp program by \$9 million, as part of a commitment to make all pedestrian ramps ADA-compliant by 2030. The capital plan also invests \$2 million to pilot a new Safety Intervention Program for Neighborhood Streets, which will help the City evaluate and quickly respond to all resident 311 safety requests. This complements the existing Vision Zero program, which focuses on proactively redesigning and reconstructing our most dangerous intersections and corridors. In FY21, Vision Zero program will invest \$8.85 million, making targeted safety improvements at corridors and intersections with known safety challenges. The Neighborhood Slow Streets (NSS) program, which implements traffic-calming measures on residential streets, funds construction projects at 9 locations this year including zones in Highland Park, Chinatown, Mt. Hope, West of Washington, and Grove Hall. In total, the capital plan supports the completion of 15 Neighborhood Slow Streets through the end of 2021, with additional zones to be selected and designed in FY21. As Boston works to expand access and make neighborhoods interconnected for all modes of travel, this Capital Plan invests in the reconstruction of Ruggles Street, Cummins Highway, Boylston Street, Dudley Street Phase 2, and the transformation of the Northern Avenue Bridge. All of these streets will be designed and reconstructed with the Complete Streets approach to include new sidewalks, lighting, storm water infrastructure, and upgraded facilities for pedestrians and cyclists.

In FY21, bicycle and pedestrian safety improvements are planned for construction on Tremont Street in the South End, Massachusetts Avenue, north and south of Melnea Cass Boulevard, permanent protected lanes on Cambridge Street in Allston, Beacon Street in Fenway, and the extension of the Southwest Corridor from

Columbus Avenue to the Massachusetts General Hospital area. \$1 million will be invested for an expansion of the City's bike share network into Hyde Park, Mattapan, and Dorchester.

This Capital Plan also takes the lead on prioritizing reliable bus transit for all commuters. In coordination with the MBTA, this Plan will transform several corridors Citywide to facilitate rapid bus transit, including the construction of dedicated bus lanes on Summer Street, Columbus Avenue and Warren Street, among others. To complement the forthcoming Blue Hill Avenue Action Plan, \$5.5 million is dedicated to resurfacing and installing new markings and pedestrian ramps along the entire 4.5 mile Blue Hill Avenue corridor. The City continues to develop plans and designs to widen sidewalks, realign the median, install new crosswalks, and make traffic signal improvements in Egleston Square and redesign Mattapan Square to enable pedestrians to cross Blue Hill Avenue directly from the Mattapan MBTA station and River Street/Cummins Highway.

The Capital Plan invests in design and provides matching funds to unlock Federal and State investment to transform key corridors in the City. The designs focus primarily on stress-free walking, protected bicycling, and 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 and the planned new gateway at Arboretum Road, that will create new entrances to the Arnold Arboretum and extend the Blackwell Path south to Roslindale Square. These connective investments are complemented by a \$2.6 million FY21 investment in the Strategic Bicycle Network, which will fund the design and construction of 9 miles of new protected bike lanes over the next two years, part of the City's four-year target of 15 new miles of high-quality protected bike infrastructure.

Through the FY21-25 Capital Plan, the City will also increase asset reliability through investments in bridges, roads, sidewalks, off-street paths, street lighting, traffic signals and building facilities that are essential to the high-quality delivery of services. In FY21, the City proposes investing \$30 million in its annual road resurfacing, reconstruction, and sidewalk ramp programs. In addition to the transformation of the Northern Avenue Bridge, this Capital Plan invests in upgrades to other bridges including the North Washington Street Bridge, Dalton Street Bridge and a new Long Island Bridge in an effort to bring all bridges to a state of good repair by 2030. By investing in asset management programs for our bridges, street lights, ramps, and pavement markings, among other assets, Boston will continue targeting a state of good repair that ensures the safe and reliable movement of people across the City.

Technology

The City is dedicated to delivering exceptional City services by leveraging investments in technology. In FY21, the City will continue its focus on supporting and developing innovative technology initiatives and projects across departments while also strengthening its cybersecurity strategy. It will enhance its security strategy by adopting industry best practices and a multi-layered approach to managing risk which includes people, process, and technology. The City will also invest in its

five focus areas including: Core Infrastructure, Enterprise Applications, Digital Engagement and Service Delivery, Data and Analytics, and Broadband and Digital Equity.

In FY21, the City will continue investing in the Boston Fiber Network (BoNet) to improve Boston's fiber backbone and infrastructure. The BoNet expansion is a \$13 million investment in the City network's fiber backbone and switching infrastructure. This network build-out will connect the remaining Boston Public Schools with city fiber, as well as public safety locations, elderly housing developments and other sites. Altogether, the project aims to connect ~ 170 City buildings, providing broadband service to the City's public schools, public works and public housing, and strengthening public safety communications.

In FY21, the Department of Innovation and Technology will partner with other City departments, including Age Strong, Assessing, Inspectional Services, Neighborhood Development, Transportation, Parks, and Youth Engagement and Employment, to support and develop innovative technology initiatives and projects.

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 completed 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. Mayor Walsh has also committed \$23 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.

The FY21-25 Capital Plan continues investments in the City's parks to ensure Boston's open spaces are among the Nation's most accessible and equitable. The City will invest \$7.5 million rehabilitating the pathways and improving accessibility in the Back Bay Fens, a unique mix of formal and community gardens, ball fields, and historic structures that together offer a range of experiences to Boston residents and visitors.

In the FY21 Capital Plan, the Parks and Recreation Department takes important steps to increase Boston's climate readiness, as guided by Climate Ready Boston. This includes \$2 million to continue engineering and design studies to support the transformation of Moakley Park into a more vital recreation space and at the same time designing it to protect the City from the effects of sea level rise. A \$15.3 million construction project currently underway in Langone Park/Puopolo Playground in the North End will elevate the ball fields and the Harborwalk, install new lighting, refurbish pathways, and improve courts, playground, and passive recreation areas. The field elevation will help to protect the North End from flooding caused by sea level rise. To combat the urban heat island effect, the department is caring and restoring Boston's urban tree canopy. In the FY21 Capital Plan, the department is committing an additional \$1 million to plant and maintain street trees, and \$500,000 to

commission a comprehensive urban forestry study.

One hundred 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. The City recognizes the need for inclusive design and has created robust budgets for park renovation projects at Smith Playground in Allston, Garvey Playground, Harambee Park, and McConnell Playground in Dorchester, Jeep Jones Park in Roxbury, and for renovating play lots across the City including Beauford, Holborn, Lambert Ave., McGann, Clarendon Street, and Walnut Park. In addition, the FY21-25 plan proposes new investments in athletic field lighting and playground improvements in more than a half dozen locations. The Capital Plan also supports investments in the renovation and renewal of playing courts (basketball, tennis, and street hockey) and playground safety surfacing in various parks.

Energy and Environment

As part of Boston's implementation of *Imagine Boston 2030*, the FY21-25 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 long-term plans early actions are essential for protecting the safety and vitality of existing residents, businesses, and institutions, and for ensuring the implementation of continued growth and development.

The Mayor has committed 10% of new capital funding to climate resilience projects. In FY21, a \$3 million Climate Resilience Reserve project will be created. Many projects in the capital plan, such as

the Langone Park/Puopolo Playground and the BCYF Curley Community Center projects already include funding for climate resilience improvements. Other projects in the plan may benefit from adding resilience-related scope. The Reserve is intended to be a resource so that other projects can have climate resilience features added to existing project scopes without requiring a project to reduce previously planned improvements. For example, a play lot renovation project could become more resilient through the addition of a storm water retention system. If the project budget cannot accommodate the additional scope, the Resilience Reserve can be used to fund the improvements without sacrificing the project's original goals.

The City commits \$10 million for the development of a new linear park along Fort Point Channel. This new park will protect the surrounding properties from expected sea level rise through the year 2070. The City has applied for a FEMA mitigation grant.

Renew Boston Trust has systematically identified energy projects in the City's 300+ 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.

By utilizing contracts with Energy Service Companies (ESCOs) that guarantee the energy savings generated by the projects, the City will sufficiently offset anticipated debt service costs. A \$10.7 million Phase 1 construction project began in February, 2019 and is close to completion. Leveraging the experience gained from this pilot project, the City is preparing to begin construction on Phase 2. The design process of Phase 3 is expected to begin by July 2020, and will include projects in Boston Public Schools.

Health

To encourage a healthy environment, including safe streets and communities, Boston is renovating several neighborhood community centers to serve residents' needs. Major renovation work will begin at the BCYF Curley Community Center, in South Boston. 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. The pool is expected to reopen by summer 2021. Funding for improvements to the pool at BCYF Marshall Community Center are also included.

Additionally, a \$2.5 million investment will be made at BCYF Mattahunt for interior renovations to the lobby, gymnasium, community room and computer lab, \$250,000 at BCYF Quincy to replace auditorium seating, \$1 million at BCYF Roslindale to upgrade interior and mechanical systems in light of a flood during FY20, \$750,000 for improvements to technology infrastructure and security systems and continuation of the annual Youth Budget.

The Capital Plan includes \$23.5 million to implement upgrades to the Emergency Medical Services (EMS) radio system. The City will renovate a facility in West Roxbury as a new EMS training academy.

Construction will also begin in FY21 on a permanent Engagement Center a new facility that will enhance recovery support services. The construction work will be complete in about one year. Renovation work will also begin at the Woods Mullen Shelter. The scope of work includes the installation of a new elevator, relocating the entryway, and renovating bathrooms.

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 in FY21. Restoration of the bridge will allow City to locate recovery services on Long Island. The Capital Plan also includes \$20 million for initial design work and for the preservation of buildings on Long Island that will be used as part of the future recovery campus.

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 by 2030. Through the strategies outlined in the plan, more than 33,000 new housing units have already been completed or are currently in construction, and another 28,000 are under review. 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.

Recognizing that infrastructure investments are a key to housing development, the capital plan includes \$5 million to establish a new infrastructure fund to support the creation of affordable housing. Mayor Walsh has also committed \$30 million from the capital plan to support necessary public infrastructure improvements in partnership with the Boston Housing Authority (BHA). An additional \$5 million will be used to upgrade elderly/disabled public housing units in several BHA communities, including Patricia White in Brighton, St. Botolph in the South End, and the Doris Bunte Apartments in Egleston Square.

\$1 million will be invested 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.

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 key policy outcome of this planning process. The City projects to borrow \$200 million in FY21 to support the Capital Plan, and will invest one percent, or \$2.0 million, in public art projects in FY21.

The FY21-25 Capital Plan continues support for revitalizing library branches throughout Boston's neighborhoods. In FY21, programming studies for replacing branch libraries in Codman Square and the West End Branch libraries will be in progress.

Construction will continue in FY21 on a major renovation of the Roslindale Branch and the construction of a new Adams Street Branch. The new Adams Street Branch will have a larger footprint, new meeting rooms, provide an enhanced teen space, and create redesigned outdoor spaces.

The design and construction of a major renovation and building addition to the Faneuil Branch Library is expected to begin. The renovation will focus on accessibility and new programming space.

In FY21, design activity will begin on a new building to replace the current Fields Corner Branch Library.

In FY21 renovations will be completed on a \$15.7 million project to preserve the Library's valuable and historic special collections that includes nearly 250,000 rare books and 1 million manuscripts. The Rare Books Department will receive major environmental and mechanical improvements to 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 collection and ensure its preservation for future generations.

Economy

As a \$3.0 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.

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 new stations for Engine 42 and Engine 17 will be among the first firehouses in the nation to reflect these enhancements. Construction is underway for the new Engine 42 firehouse. Planning is underway for a new Engine 17 firehouse. The City is also renovating neighborhood existing fire and police stations. In East Boston, construction is underway on a new police station, a \$29.9 million project that will replace the existing A-7 station.

In FY21, the department will purchase 3 pumper trucks and 2 ladder trucks and 1 rescue truck.

The Police Department is in the final stages of a \$59 million project to upgrade and replace its radio system. The FY21 Capital

Plan includes \$46 million to upgrade the Fire Department's radio system. This project will leverage work done by the Police Department upgrading their system.

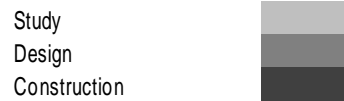
Government Effectiveness

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 making the building friendlier as well as updates to the transaction spaces on the second floor to enhance interactions between residents and City departments. An overhaul of the building HVAC system and elevators is currently underway. With funding in the FY21-FY25 Capital Plan, the City will begin to renovate the plaza to provide a more inviting space to the public while making needed infrastructure and accessibility improvements.

FY20-25 PROJECT HIGHLIGHTS AND SEQUENCING

Project	Budget	2020	2021	2022	2023	2024	2025
Community Spaces							
Dudley Branch Library Renovation	\$ 17,200,000						
Roslindale Branch Library Renovation	\$ 10,200,000						
Adams Street Branch Library	\$ 18,300,000						
BCYF Paris Street Pool	\$ 8,900,000						
Fields Corner Branch Library	\$ 12,100,000						
Faneuil Branch Library	\$ 12,625,000						
BCYF Curley Community Center	\$ 30,000,000						
City Hall and City Hall Plaza	\$ 120,300,000						
Schools							
Boston Arts Academy	\$ 137,370,916						
Madison Park Complex Building #4 Locker Rooms	\$ 6,300,450						
Carter School	\$ 1,600,000						
Josiah Quincy Upper School	\$ 2,200,000						
Public Safety							
Engine 42	\$ 23,560,000						
East Boston Police Station	\$ 29,900,000						
Engine 17	\$ 24,700,000						
Parks							
Smith Playground Phase II	\$ 5,480,000						
Reservation Road Park	\$ 5,125,000						
McConnell Playground	\$ 3,790,000						
Garvey Playground	\$ 5,000,000						
Cassidy Field	\$ 4,415,000						
Harambee Park Phase 2	\$ 3,900,000						
Boston Common Master Plan	\$ 23,000,000						
Franklin Park Master Plan	\$ 23,000,000						
Moakley Park	\$ 3,307,400						
Fort Point Channel Park	\$ 20,000,000						
Ceylon Park	\$ 4,100,000						
Streets							
New England Avenue	\$ 1,500,000						
Emerald Necklace	\$ 11,000,000						
Blue Hill Avenue Corridor Transportation Action Plan	\$ 300,000						
Long Island Bridge Replacement	\$ 108,758,144						
Egleston Square	\$ 500,000						
Cummins Highway	\$ 4,000,000						
Northern Avenue Bridge	\$ 100,000,000						
North Washington Street Bridge	\$ 218,957,519						

*Indicates new project in FY21



FY21 Expenditure Allocation

The City estimates FY21 capital expenditures from all sources will total \$447.3 million (see Figure 2).

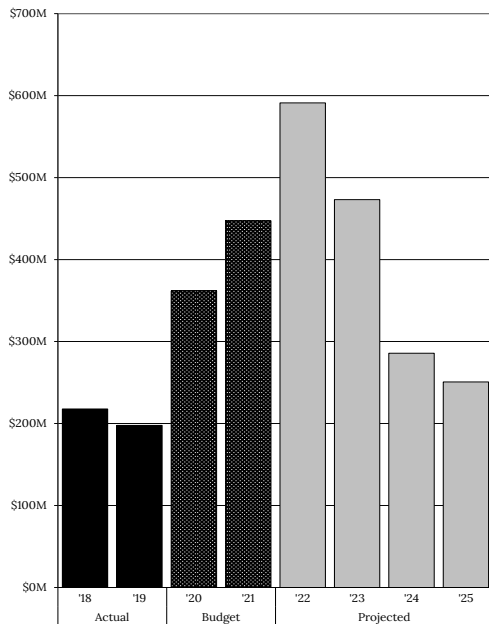


Figure 2 – Capital Expenditures
FY18-FY25

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.

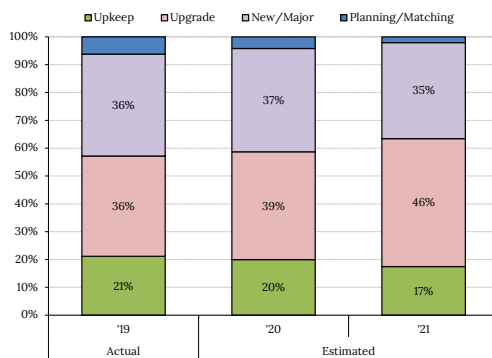


Figure 3 – Capital Expenditure Allocation
FY19-FY21

Upkeep represents projects that maintain the City's assets, a fundamental priority of the Capital Plan. In FY21, 17% 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 46% of projected spending, and includes projects such as equipment upgrades for public safety radio systems.

New/Major Renovations represents 35% of FY21 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 a major renovation of the BCYF Curley Community Center in South Boston.

About 2% of the FY21 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 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.

FINANCING THE FY21-FY25 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 67.6% of all project funding. This year's plan assumes \$1.3 billion in new general obligation borrowings over the next five years, a 5.5% 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 23.2% 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 \$300.8 million from State programs and \$397.2 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 three projects in various phases of the Core Program -- the Boston Arts Academy, the Josiah Quincy Upper Pilot School, and the Carter School.

The MSBA has approved a maximum project grant totaling \$48.9 million for the Boston Arts Academy project, which covers 35.6% of the current \$137.4 million project budget. The project is currently in construction.

The Josiah Quincy Upper School project is currently in the Feasibility Study phase. During the first half of FY21, the City expects to submit a schematic design to the MSBA and enter into a Project Funding Agreement with the MSBA by the end of FY21.

The City has projects underway at nine schools through the Accelerated Repair Program. Construction will begin in summer 2020 at six locations. The other three school projects will see construction begin during summer 2021.

Transportation Infrastructure Enhancement Fund

An Act was approved in August of 2016 that establishes oversight and regulation by the Department of Public Utilities over transportation network companies. As part of its oversight the Transportation Infrastructure Enhancement Fund was established. Annually each transportation network company is required to submit a per-ride assessment of \$.20 based on number of rides in previous year and half of the assessment will be proportionately distributed to cities and towns based on the number of rides that originated within the city or towns with the funding used to address the impact of the transportation network services on municipal roads,

bridges and other transportation infrastructure. The fee will be discontinued as of January 1, 2027.

The FY21-25 Capital Plan includes \$12.7 million in new revenue from this source.

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 \$14.7 million in FY21.

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 Federal Highway Administration and other Department of Transportation agencies.

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

(in millions)

	<u>\$ Amount</u>
Surplus Property Fund	59.20
Parking Meter Fund	173.54
Utility Company Grants	16.05
Fund for Parks	0.50
BPDA	3.04
Other Non-City	23.81
Total	\$276.14

Figure 4 – Other Funds Summary

FY21-FY25

In FY21, the City proposes transferring \$27.2 million from the Parking Meter Fund to the Capital Grants Fund and appropriating it for 4 projects including Vision Zero: Neighborhood Slow Streets,, Pedestrian ramps, Ruggles Street, and Crosswalk and Lane Marking Revitalization. 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. 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 \$276.1 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.

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.

Proposals with strong alignment to City-wide planning efforts, such as Imagine Boston 2030 and climate resilience are prioritized for near-term investment.

Expertise from the Department of Innovation and Technology is leveraged to evaluate the feasibility, cost, and implementation plan for IT investment proposals City-wide. Investments with strong return-on-investment, alignment to master plans, and support of legal ordinances are prioritized using an automated scoring system that results in metric-based recommendations.

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 329 new and continuing projects and proposes \$411.5 million in new bond authorization and a \$27.2 million appropriation supported by the Parking Meter Fund.

Descriptions of all 329 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 aged or outdated 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 FY21 Budget reflects an avoidance of 33.6 MWh, or \$5.7 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 300+ 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 \$10.7 million Phase 1 construction project completed in FY20 and will result in a

savings of more than \$600,000. The measurement and verification program was also established to ensure these savings offset debt service costs related to the capital expenses. Implementation of a larger, \$24 million Phase 2 is underway and another \$24 million Phase 3 is in development. 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.

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.

The ongoing \$122 million investment in radio system upgrade projects will require the procurement of compatible handheld units and related technology to achieve optimal functionality. The majority of these costs impact the City's lease/purchase program, primarily for public safety departments and the Boston Public Health Department.

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 FY21, 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 \$205 million in FY21, \$280 million in FY22 through FY24, and \$285 million in FY25. 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.

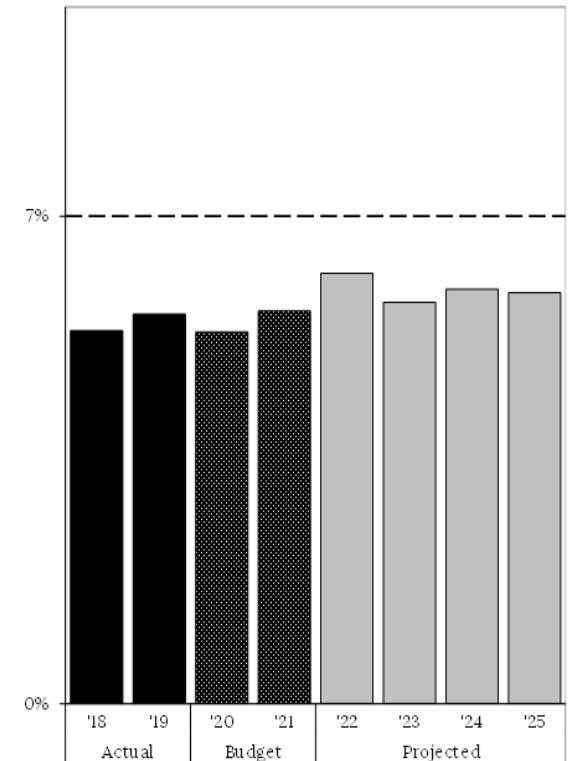


Figure 5 – Gross Debt Service as a Percent of Total General Fund Expenditures
FY18-FY25

The City's gross debt service requirement will remain under 7% of total General Fund expenditures through FY24 (See Figure 5).

The ratio of debt service to the City's primary revenue source, the property tax levy, is projected to increase through FY25 (See Figure 6). Even with the increase, the ratio is not expected to exceed the City's policy ceiling.

The City's current overall debt burden (net direct debt to assessed property value of \$179.79 billion) is approximately 0.78% as of March 1, 2020. The City's net direct debt per capita currently stands at approximately \$1,845 as of March 1, 2020.

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.

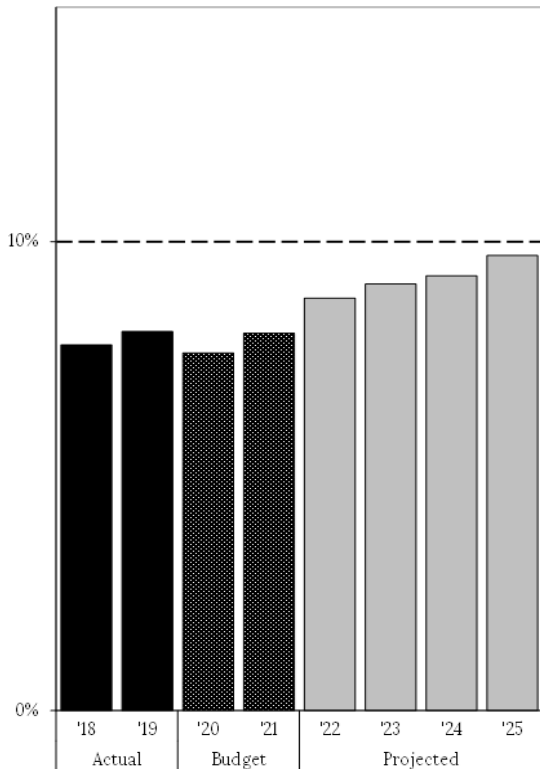


Figure 6 – Gross Debt Service as a Percent of the Net Property Tax Levy
FY18-FY25

In February of 2019, 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 2021 - 2025

	Existing Authorization	FY21 Authorization	FY22-25 Authorization	State	Federal	Other	Trust	Total
Boston Centers for Youth and Families	34,231,000	21,100,000	-	-	-	-	-	55,331,000
Boston Planning and Development Agency	5,475,000	-	-	-	-	-	-	5,475,000
Boston Public Library	71,002,543	13,891,350	38,633,733	5,597,374	-	-	-	129,125,000
Boston Public Schools	203,281,414	85,873,809	231,231,839	95,589,082	-	2,200,000	-	618,176,144
Department of Innovation and Technology	72,298,254	8,500,000	20,757,902	-	-	-	-	101,556,156
Emergency Management	1,500,000	-	-	-	-	-	-	1,500,000
Environment Department	48,748,000	12,000,000	175,000	1,815,080	2,500,000	10,173,800	-	75,411,880
Fire Department	61,775,000	16,000,000	53,731,083	-	-	206,614	-	131,712,697
Neighborhood Development	31,000,000	14,600,000	-	-	-	-	-	45,600,000
Office of Arts & Culture	5,600,000	2,000,000	7,600,000	-	-	-	-	15,200,000
Office of New Urban Mechanics	200,000	-	-	-	-	-	-	200,000
Parks and Recreation Department	128,822,123	36,231,572	17,973,965	18,390,173	76,724,180	54,069,455	-	332,211,468
Police Department	89,025,000	5,590,000	-	-	-	-	-	94,615,000
Property Management Department	168,628,500	27,030,000	-	-	-	23,273	-	195,681,773
Public Health Commission	11,521,000	47,800,000	15,955,000	-	-	-	-	75,276,000
Public Works Department	217,906,000	117,745,000	17,295,000	139,521,648	289,133,418	158,377,138	-	939,978,204
Transportation Department	49,962,219	3,150,000	14,396,720	39,899,235	28,847,354	51,092,262	-	187,347,790
Total	1,200,976,053	411,511,731	417,750,242	300,812,592	397,204,952	276,142,542	-	3,004,398,112

City of Boston Outstanding Principal by Purpose as of March 1, 2020
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<u>Purpose for Which Issued:</u>	Outstanding @ March 1, 2020	Percent of Total Outstanding Debt
General Purpose	883,847,080	68.8%
MCWT	13,079,592	1.0%
Economic Development	8,321,028	0.6%
State Urban Development	4,543,063	0.4%
Schools	3,731,291	0.3%
Public Buildings	192,964,209	15.0%
Public Works	173,029,072	13.5%
Cemeteries	4,493,316	0.3%
TOTAL:	\$ 1,284,008,651	100.0%

	Actual FY18	Actual FY19	Projected FY20	Projected FY21	Projected FY22	Projected FY23	Projected FY24	Projected FY25
Gross Debt Service Requirements - Bonded Debt:								
Total Principal:	121,490,049	125,831,183	125,914,890	140,183,916	161,248,237	172,483,051	182,067,818	217,898,094
Total Interest:	54,182,334	56,281,586	63,125,886	68,978,679	76,703,808	83,585,400	86,612,794	94,877,462
(4) Total:	175,672,383	182,112,769	188,040,776	209,162,595	237,952,045	256,068,451	268,680,612	312,775,556
Less: Revenue Deemed Available from Related Sources:								
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	3,526,669	3,455,602	3,357,855	2,950,602	2,853,141	2,369,144	1,864,633	1,342,571
Renew Boston Trust - Energy Savings	0	0	0	1,125,000	1,975,000	3,687,500	4,350,000	4,237,500
Accrued Interest	0	100,000	0	100,000	100,000	100,000	100,000	100,000
(3) Irrigation Project	116,365	9,149	0	0	0	0	0	0
(4) 1010 Massachusetts Avenue Project	2,123,404	1,954,914	1,934,363	2,409,288	2,644,951	2,089,269	0	0
(5) Pension Management System	1,903,326	1,902,668	1,903,312	1,904,187	893,752	640,475	45,394	45,376
Sinking Fund for November 2009 QSCB	0	0	0	0	0	0	0	20,000,000
Interest on Loan to BOA Fund and Dudley Fund	0	0	0	0	0	0	0	0
Total Debt Service / Budget Summary:	170,912,982	177,282,780	186,447,791	205,628,063	234,439,745	252,136,608	267,275,130	290,913,745
Less Additional Adjustments:								
School Construction Assistance	6,720,147	5,107,351	2,461,330	0	0	0	0	0
Total Net Debt Service Requirements:	164,192,835	172,175,429	183,986,461	205,628,063	234,439,745	252,136,608	267,275,130	290,913,745

NOTES:

(1) FY19 - the City issued:

\$45.10 million in General Obligation Bonds with a 20-year maturity and a true interest cost of 2.749%, sale closed March 2019.

Assumptions:

- FY20 - Assumes General Obligation debt issuance of \$200 million and \$10 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 \$5 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 \$260 million and \$20 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 \$270 million and \$10 million for the Renew Boston Trust project each with a 20 year maturity and an interest rate of 5.0%.
- FY24 - Assumes General Obligation debt issuance of \$280 million with a 20 year maturity and an interest rate of 5.0%.
- FY25 - Assumes General Obligation debt issuance of \$285 million with a 20 year maturity and an interest rate of 5.0%.

(2) Under the American Recovery and Reinvestment Act of 2009 (ARRA), in 2010 and 2011, the City issued Tax Benefitted Bonds which are entitled to receive subsidy payments from the Federal Government.

The IRS has released subsidy reduction notifications since March of 2013, reducing the expected annual subsidy - the projected loss through FY2020 is approximately \$16 million. An estimated Subsidy reduction to ARRA-related issuances of 7.3% per year from FY2020 through FY2025 has been applied in response to IRS withholding notifications.

(3) Debt Service Costs will be offset by the 'Fund for Parks and Recreation.'

(4) 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.

