



Welcome
to
Newton
The Garden City

City of Newton, Massachusetts

Mayor Ruthanne Fuller's

Capital Improvement Plan

FY2021-FY2025

October 21, 2019



FY2021–FY2025 Capital Improvement Plan

October 21, 2019

Accelerated Roads Program



Newton Early Childhood Program



West Newton Square



Webster Woods



Water, Sewer, and Stormwater Infrastructure



City of Newton, Massachusetts

Mayor Ruthanne Fuller

MAYOR'S COVER LETTER

EXECUTIVE SUMMARY

Mayor Fuller's \$352 million of proposed capital investments in the next five years are both broad and deep. They will sustain our schools, help our seniors, improve our streets, and add to the vitality of our villages. Water and sewer systems and public safety assets will be reliable and up-to-date. Quality of life for both current and future generations will be improved with investments in capital assets that address needs in the environment, our cultural life, our City services, and our open spaces, parks and recreational facilities.

The City of Newton FY2021-2025 Capital Improvement Plan (CIP) is a mission and risk-based prioritized list of investments in the capital assets of the City of Newton. The prioritization plan reflects a thorough analysis of the City's capital needs, the vision and goals of each department along with the services they will provide over the coming years, and Mayor Ruthanne Fuller's twelve overarching goals:

- Ensuring academic excellence and educational equity
- Keeping Newton safe
- Making Newton more "all age" friendly with a focus on seniors
- Improving streets, sidewalks, and mobility & public buildings and infrastructure
- Preserving neighborhoods, increasing affordable housing, and diversifying housing options
- Promoting vibrant, walkable and financially robust village centers & commercial corridors
- Addressing climate change and sustaining our environment
- Protecting woods and open spaces & caring for our parks and recreation spaces
- Fostering art, culture, and community life
- Facilitating a healthy, accessible and supportive Newton
- Providing excellent and responsive City services
- Assuring the City's financial health and spending wisely

The capital assets of the City of Newton are both massive and varied. They include:

- Buildings: 83 Total - 24 school buildings, 13 public safety, 15 Public Works, 19 Parks and Recreation, and 12 municipal. Buildings total 2.96 million square feet and sit on 535 acres of land (about 4.6% of City total).
- Roads, Sidewalks, and Traffic Signals: 276 miles of roads - 1,241 public streets and 196 private ways, 450 miles of sidewalks, 106 Signalized Intersections, 4800 accessible sidewalk ramps
- Water, Sewer, and Storm Water Infrastructure: 319 miles of water mains, 286 miles of sewer and ≈280 miles of storm drains, along the valves, manholes, culverts, catch basins pump stations, storage facilities and other associated features
- Parks and Recreational Facilities: 51 Parks, 19 Sports Fields, 45 Playgrounds, 68 Tennis Courts; 1 Outdoor Pool Complex and 1 Lake facility, 21,000 Street Trees, 7 off-leash dog parks
- Motorized Vehicles & Equipment: 331 vehicles/major equipment for City operations and 81 police vehicles.
- Information Technology: Wired/wireless communications hardware/software, sound & projection systems, and fiber optic cable to support 3,500 persons

The Capital Improvement Plan includes 217 new and continuing projects, with an estimated investment of \$352 million during the FY2021 - FY2025 five-year period (included \$63 million to be docketed this fiscal year).

Substantive changes were made across the CIP compared to the FY2020 capital plan, with 14 projects deleted, 26 added, and hundreds of other changes to project descriptions, funding, time schedules and priorities. Based on the overall projected capital spending, debt service as a percent of General Fund revenues will be in the 5.5% to 6% range in the next five years. We expect the specific projects and the overall costs to continue to be refined as we move forward.

Purpose

Capital improvement planning allows the leaders of the City of Newton to identify and prioritize capital needs, funding capacity and sources, and the impact of these investments on the operating budget. Capital assets - buildings, streets and sidewalks, water, sewer & stormwater infrastructure, technology, and major equipment - are the essential physical foundation for providing services to our residents, businesses and non-profits. Preparing and adopting a comprehensive, multi-year and fiscally sustainable capital plan allows us to meet both the current and long-term needs of the City. It forces us to prioritize capital requests and develop a long-term, viable financial plan in a transparent manner as the capital needs and operating goals will always exceed our financial capacity.

Funding

Capital assets with a life expectancy of 10 or more years that cost more than \$150,000 are typically paid for through bond sales by the City of Newton. Massachusetts municipal finance law limits the total amount of long term debt that the City can incur for most purposes to not more than 5% of the City's equalized valuation (i.e., the taxable value of the real estate tax base). The City's current (October 2019) equalized valuation is approximately \$30 billion, which means that the current statutory debt limit is approximately \$1.52 billion. Current outstanding principal of bonded debt is significantly lower and approximates \$350 million or 24% of the City's debt capacity.

In conjunction with the state statutory debt limit, the City of Newton has developed its own financial policy of limiting debt service on long term bonded debt to between 4.0% and 7.5% of the annual General Fund budget. Debt service, which includes both principal and interest, totals 5.72% of the Fiscal Year 2020 Municipal Budget.

We have made significant investments in capital assets in the last decade and need to continue to do so. A conscious decision was made to increase funding for capital assets as the deteriorated conditions was impacting service delivery and quality of life. Debt payments for principle and interest on our bonds have grown from \$8.3 million or 3% of revenues in FY2009 to \$24.6 million or 5.72% in FY2020 and will grow by about \$5 million to approximately \$30 million or 6.0% by FY2025.

In addition to the bonded debt in the City's operating budget, significant capital investments are needed in the water, sewer and stormwater infrastructure systems. The water, sewer and

stormwater systems are in separate enterprise accounts rather than part of the City's General Fund because fees, rather than taxes, pay for these services. Capital investments in these systems are also often bonded and are paid by the enterprise accounts.

Further, the City includes appropriations within the operating budget, the Community Preservation Act, as well as the use of Free Cash to accomplish infrastructure improvements.

The City also leverages funding from the State and Federal government to pay for capital improvements. Funding sources range from the Massachusetts School Building Authority and the State Chapter 90 infrastructure funds to the Massachusetts Transportation Improvement Program (TIP) and the federal Community Development Block Grant (CDBG) program. Private developers also provide mitigation funds that help with such areas as street, sidewalk and traffic signal improvements, undergrounding of utilities, and water and sewer upgrades.

The Fuller Administration will continue to utilize these different funding sources to further improve the City's infrastructure.

Methodology

The City significantly advanced the Capital Improvement Plan prioritization methodology in FY2013. The CIP became more holistic, thorough, systematic and transparent. It used a risk-based approach, incorporating two essential elements: probability of failure of the capital asset and the consequence of failure.

As with any planning process, there are opportunities to re-assess and make adjustments to the methodology. Several major changes were made last year in the FY2020 - FY2024 CIP. Most importantly, the concept of linking the importance of the capital asset to the mission of the City and the department's work was incorporated. In addition, when considering the impact on mission, we added two new categories: the impact of the capital asset on (1) Newton's economic health and vibrancy and on (2) equity (e.g. socio-economic, geographic, age considerations) and accessibility. We broadened the "Energy consumption/conservation" category to "Energy Consumption, Conservation and Environmental Sustainability." We folded the category of "Property Damage" into the category of "Future Costs and/or Savings or Revenues" rather than have it be a standalone criterion. Those changes were continued for this FY2021-FY2025 CIP. The mathematical formula and the prioritization methodology can be found in the appendix.

Overview of FY2021 - FY2025 Capital Investments

▪ Ensuring Academic Excellence and Educational Equity

Achieving the goals of academic excellence and educational equity for our students requires good teaching and learning environments. The renovation and additions to Cabot Elementary School were completed on time and under budget, with the school re-opening in September 2019. The move from the former Horace Mann to the 225 Nevada Street at the former Carr School is still a work in progress with additional facility needs to be addressed. A working group and school building committee were formed in 2018 for the Lincoln-Eliot Elementary School to move to an updated building at 150 Jackson Street and for the Newton Early Childhood Program (NECP) (our

pre-school) to move to an updated building at 687 Watertown Street (the former Horace Mann school). The City Council approved Site Plan Approval for the NECP project, the design process continues and the \$13 million project is currently slated to be completed in mid-2021. Study and design work on the Lincoln-Eliot project will begin again in early 2020, after a pause in effort for the design team to focus on NECP and line up the project schedules (NECP needs to move out of 150 Jackson before construction work for Lincoln-Eliot can begin).

Near-term projects are planned at the current Lincoln-Eliot Elementary School to improve heating, ventilation and window systems for both the current students and educators and the future ones when it becomes a swing space school. At the new Horace Mann Elementary School, the current plan includes adding sinks to second floor classrooms and upgrading the playground in 2020 while other improvements are under consideration. The City has been awarded Accelerated Repair Program funds by the Massachusetts School Building Authority (MSBA) to replace old boilers at Bigelow and Day Middle Schools in 2019-2020.

Even as we move forward with new homes for the Newton Early Childhood Program and Lincoln-Eliot Elementary School, there are large projects in the early planning stages by the City and School Administration at Countryside, Franklin and Ward Elementary Schools. Funding for these large projects may be in conjunction with the state MSBA.

Countryside and Franklin are now ranked side by side in the CIP prioritization list. Countryside has significant existing condition issues, poor siting near a wetland, and a very high number of old modular classrooms. Franklin's challenging conditions and inadequate facilities have also led Newton Public Schools to begin drafting a Statement of Interest (SOI) for submittal to the MSBA this coming January along with the resubmittal of an SOI for Countryside. These projects are now estimated at \$50 million each based on recent inflation in school construction costs.

Ward Elementary School is a third school side by side with Countryside and Franklin in the CIP prioritization list. It, too, needs renovation work and accessibility improvements. The amount of funding necessary to address this 1928 building with a relatively smaller (sub-300) student enrollment needs to be studied by NPS and the Public Buildings Department with input from elected officials, educators and parents.

Both the Countryside and Franklin projects are anticipated to need complete renovations and/or new buildings and the cost of each are currently estimated at \$50 million in this Capital Improvement Plan, for a total of \$100 million. The cost for the Ward School still needs to be determined and is also expected to be quite substantial. The current debt capacity of the City does not allow such substantial and costly projects to move forward. To fund these projects the City will need to consider in more detail the feasibility, the timing, the cost and the funding mechanisms to make these investments possible.

The Oak Hill Middle School space challenge is significant and soon. The enrollment increase is projected to continue for many years given its elementary school feeder patterns (especially Zervas) and their enrollments. A \$3 million investment is now planned to build a 3-classroom permanent exterior addition along with the addition of one additional interior classroom. Several lower priority school improvements (mechanical upgrades and roof replacements) have been moved out a year to make room for this higher priority project at Oak Hill.

- **Keeping Newton Safe**

Keeping Newton safe requires excellence in police, fire, building inspections, public health and emergency medical services. These in turn require capital investments in specialized equipment, vehicles, communications technology and buildings. Newton has consistently been ranked as one of the safest cities in the country and is one of very few municipalities in Massachusetts with a Class 1 insurance rating for fire safety and services; our goal is to continue to have excellence in public safety.

Key investments are well underway including replacement of the Fire Department's Fire Pumper Truck #2 in December 2020 to keep fire equipment in line with National Fire Protection Association (NFPA) standards. Also, interior renovations are underway at Fire Stations #1 and #2 to isolate living quarters from apparatus bays and improve air quality. A replacement Emergency Response Unit van to carry haz-mat, trench rescue and Tech Rescue equipment is planned in FY2021 for \$300,000. Replacements for Engine #7 and Ladder #3 are planned in FY23 and FY25 respectively. Regular replacement of police vehicles is continuing with funding through the operating budget. Communications system improvements for both fire and police departments to reduce dead spots and radio system issues inside buildings are in the planning stages.

Building repairs, safety improvements and renovations are planned for both police and fire buildings in the FY2021 - FY2025 time frame. Police Headquarters will undergo a series of improvements each year beginning with \$1 million in HVAC upgrades in FY2021, and \$720,000 for site security, parking lot reconstruction and accessibility improvements in FY2021-FY2022. Police Headquarters roof replacement for \$227,500 in FY2023 is next, followed by plumbing improvements for \$200,000 in FY2024. Additional projects are planned for the FY2025+ period.

- **Making Newton More "All Age" Friendly with a Focus on Seniors**

The City's Department of Senior Services, headquartered at the Senior Center in Newtonville, focuses on optimizing the quality of life for older adults and those who support them through welcoming, respectful and meaningful opportunities that empower older people to remaining independent and vital. Due to the woefully inadequate facilities at the Senior Center, the FY2021 - FY2025 CIP includes the Newton Center for Active Living (NewCAL) feasibility study, design and construction. The NewCAL project mission calls for a large, well-equipped, comfortable Center to meet the unique interests and needs of older adults, both those currently using the Senior Center and many others who are not. When NewCAL building spaces are not programmed for older adults, the goal is to offer well-managed, quality and enriching community and multigenerational experiences for all residents of Newton.

With the help from Senior Services, Public Buildings, and the Parks, Recreation & Culture Departments, a project consultant team has been assembled with an Owners Project Manager (NV5), Design Firm (BH+A Architects) and a senior-focused working group. After approximately 70 public NewCAL meetings, hundreds of public comments, and dozens of working group meetings that helped develop a building program and a site selection criteria matrix, 145 sites have narrowed down. Two sites - Albemarle and Newton Centre Triangle Parking Lot - are currently being analyzed and other sites will continue to be considered.

- **Improving Streets, Sidewalks, and Mobility & Public Buildings and Infrastructure**

Capital improvements to the City's vast system of roads and sidewalks, water, sewer and stormwater systems, and public buildings will positively impact public safety, economic development, environmental sustainability, public accessibility and Newton residents' quality of life.

The ten year Accelerated Pavement Management Program enters its fourth year in FY2021 with a continued \$9.5 million investment to improve Newton's aging road network using a data-driven prioritization system. This program includes an effort to address intersection safety improvements at unsignalized locations, as well as rehabilitation of City-owned parking lots. The accelerated street repair work has raised the average Pavement Condition Index (PCI) from 62.5 to 67.8, a significant increase over a short period of time. Over the next few years, DPW plans to eliminate that currently have a PCI below 25, and then continue to both raise that "none below" target and the Citywide average PCI. Approximately 41% of Newton streets still need either major or minor rehabilitation, with another 35% needing preventative maintenance.

Major Complete Streets projects in West Newton Square and the Newtonville village center that include improvements to roads, traffic signals, crosswalks, sidewalks, stormwater systems, bike lanes, benches, lighting, and trees will be constructed in 2020 and 2021. The Oak & Christina Street intersection improvements, funded by both the City of Newton and MassDOT, will be completed this fall and are timed to compliment MassDOT's large \$26.8 million Needham Street upgrade project. The Needham Street project will stretch over five years; we are waiting to hear if MassDOT is starting the construction in Needham or Newton.

The next major intersection work is planned at Wells Avenue & Nahanton Street during the FY2022 - FY2024 period. The Wells Avenue office park and the JCC outlets onto Nahanton Street both face heavy congestion and there is limited safe passage for pedestrians and bicyclists at this heavily used roadway.

Two new Complete Streets projects were approved in the spring of 2019. The first is the 25% Conceptual Design (i.e., the first chunk of the design in which a wide range of options are considered and evaluated) for Washington Street between West Newton Square and Newton Corner. In 2020, the project will include the design and construction of a pilot for drivers, pedestrians, and bicycles along one segment of Washington Street between West Newton Square and Newtonville which will help with the development of the 25% conceptual design. (This design level is required for the City to apply for state construction funding.) The second project is the Commonwealth Avenue Carriageway improvements. This Auburndale project will compliment MassDOT's work on the Charles River bridge. The segment along Comm Ave will be a shared-use path for pedestrians and bicycles on the Charles River Trail from Lyons Field to the Auburn Street intersection then connecting to walkable streets over Pigeon Hill to trails along the river.

This CIP also includes a new \$1.5 million program to update and modernize the aging City parking meter infrastructure. 339 of our 1,100 meters are not operable right now so this investment will greatly improve reliability, customer convenience and parking meter revenues. DPW will also continue to install multi-space parking meter kiosks in the 11 metered municipal parking lots. Along with the new parking meters, the new infrastructure will provide a more efficient and convenient experience for residents and visitors, while allowing for more efficient management by DPW Transportation Division staff. DPW continues to use CIP funds to keep the fleet of larger

equipment safe and operational at all times for their many uses including all-important snow operations in the winter.

The Public Buildings Department is responsible for the care and maintenance of 84 municipal and school buildings across the city, totaling nearly 3 million square feet. Besides managing the large school projects (e.g., NECP, NewCAL, Lincoln-Eliot, Library renovations, and Fire and Police building improvements in the next five years), the department is also undertaking renovations at City Hall, multiple roof repairs at both municipal and school buildings, and HVAC upgrades at the Newton Free Library. At City Hall, several bathroom renovations are planned over the next five years. A renovation/addition is planned for the Newton Commonwealth Golf Course maintenance facility using separate golf course funding.

Using water, sewer, and stormwater funds from fees, DPW Utilities is continuing the aggressive long-term program to improve the conditions of all three systems. A 20-Year Water System Capital Improvement Program will enter its fifth year, targeting replacement of leak-prone, aging pipelines and coordinating the work with scheduled street repairs. Leak repair will help lower the “unaccounted-for water” percentage for the system and decrease the City’s Massachusetts Water Resource Authority (MWRA) assessments. Improvements to Newton’s major water storage facility, Waban Hill Covered Reservoir in Chestnut Hill built in 1891, are planned during FY2021.

The 10-Year Sewer System Capital Improvement Program continues into its seventh year, systematically working across the City’s sewer system to address aging pipes, reduce inflow and infiltration (I&I), and decrease the growth in MWRA’s sewer-based charges and assessments. Reductions in the three-year average and max month flows during CY2016-2018 have greatly helped Newton minimize MWRA assessments. In the now completed Project Areas 1-5, over 74 miles of sewer have been rehabilitated, 2900 manholes lined and 800 underdrain access points sealed. Project Area 6 is ongoing and Area 7 will be started this winter. All 11 Project Areas will be completed in 2025 at which time the City will reassess the asset priorities, maintenance needs and set further targets for I&I reduction, perhaps focusing on service laterals to homes.

The stormwater program will significantly ramp up over the next five years to improve the stormwater system and make sure Newton addresses federal and state regulatory requirements contained in the Federal Clean Water Act’s “MS4” Program. The MS4 Program targets urban areas within impaired river basins such as the Charles River. Stormwater projects include culvert replacements, the stabilization of Cheesecake Brook in several segments, Edmunds Brook spillway improvements, DPW yard drainage work, and sediment removal in the City Hall Pond. Also, repairs will be made to the Bullough’s Pond Dam to meet the state’s Dam Safety requirements. All these projects and program needs are funded by the separate stormwater fee.

- **Preserving Neighborhoods, Increasing Affordable Housing, and Diversifying Housing Options**

The City continues efforts to advance affordable housing and these efforts don’t typically involve CIP funding. The City uses CDBG, HOME and Community Preservation Act (CPA) dollars to leverage other affordable housing dollars. The proposed zoning for both Washington Street and across the City increases the opportunity for affordable housing and a more diverse housing stock. This work will be accomplished through the judicious use of federal, state and CPA dollars, rather than funding from the CIP. Notably, the percentage requirement under the City’s new Inclusionary Zoning Ordinance increased from 15% to 17.5% which impacts the finances of developers.

The state's disposition of the West Newton Armory provides a unique opportunity for the City to create 100% affordable housing in a village location. The Real Property Reuse Committee is in the process of establishing a 9-member Joint Advisory Planning Group to assess the site for affordable housing or a municipal use and providing the Committee with a written report. The Reuse Committee is responsible for making a recommendation to the full City Council regarding the future use of the Armory and the minimum financial terms for lease of the property. Concurrently, the City is also working with state housing agencies to fund the analysis of possible affordable housing reuses of the building, and we expect to soon hire an affordable housing development consultant team to assist us with this effort. Were affordable housing to be pursued, funding for the project is likely to involve CDBG, HOME, CPA, and other federal and state resources.

Recent examples of affordable housing efforts that received CDBG, HOME, Community Preservation Act funding or significant City staff assistance include Austin Street (23 to be occupied this fall), Auburn Street (8 to be occupied this fall), Newton Housing Authority's Haywood House (55 senior units pending State support), and 2Life Communities Golda Meir Expansion (68 senior pending State support). Along with other smaller projects with required affordable units, there are efforts to support accessory apartments and help seniors on fixed and limited incomes to stay in Newton through improved senior property tax deferrals.

- **Promoting Vibrant, Walkable and Financially Robust Village Centers and Commercial Corridors**

Promoting vibrant village centers and commercial corridors that are both walkable and financially robust is an important goal with City-wide consequences. The City's investments in these areas come in a variety of forms from zoning reforms, physical improvements to roads, traffic signals, sidewalks, pedestrian and bicycle friendly streetscapes and beautification projects. Investments often also include those made by the state government (particularly MassDOT) and the private sector.

The CIP includes the Walnut Street project for improvements streets, sidewalks, lighting and fixtures in Newtonville, is a key village center investment. It is timed to coincide with the completion of the Austin Street Parking Lot development project and the Walnut at Washington intersection improvements being made as part of the Washington Place development project. Construction is expected to begin in the summer of 2020 and will be completed by mid-2021.

The CIP includes funding for the West Newton Square improvement project which will begin construction in the spring of 2020 as well as trial and conceptual design funds for Washington Street improvements east of West Newton with an eye toward state TIP design/construction funding beyond that.

The Wells Avenue - Nahanton Street improvement project will help address traffic challenges at the entrance to the City's one and only office park. The CIP also includes future village center improvement projects for Newton Highlands (starting with the section of Centre Street from Rt. 9 to Walnut Street) and Newton Centre.

The Department of Public Works maintains 100 traffic signal locations throughout the City that include fully-actuated, semi-actuated and pedestrian activated traffic signals. The signal infrastructure is complex and includes many types of signal equipment and technology. City parking lots, an important component of many village centers, are planned for improvements at a rate of one or two per year to address poor conditions and accessibility needs. The lot at Pearl

Street in Newton Corner is the next one to be addressed, and the Library parking lot will be reconfigured and repaved to add parking spaces, improve accessibility and drainage, and be coordinated with the solar canopy project.

DPW's sidewalk improvement projects continue with about 2 miles of new sidewalks added and 2 miles of existing sidewalk rehabilitated annually. FY2020 work focused on Washington Street from Beacon Street east to the MassPike entrance in West Newton. FY2021 work will focus on the City Hall campus and Wells Avenue office park area. Traffic calming projects, prioritized using an analysis of factors reviewed by a interdepartmental committee, are funded in DPW's operating budget. DPW is also making significant progress on making all curb ramps ADA accessible with hundreds completed each year.

- **Addressing Climate Change and Sustaining our Environment**

In the City's first Climate Action Plan, a five-year plan to be finalized in late 2019, the City has set a carbon-neutral Newton goal for 2050. The title of the Plan is "Use Less and Green the Rest." The Plan set six areas of action: A) Implementing the plan by adapting internal operations and working with partners; B) promoting clean and renewable power; C) greening Newton's transportation and streetscapes; D) improving new construction and major renovations; E) improving existing buildings; and F) reducing emissions associated with consumption and disposal. While much of the focus of the Climate Action Plan is on private development and vehicles (where the vast majority of greenhouse gases are generated), there are several areas involving municipal resources that the Plan calls for new City investment using either the operating or capital budget.

The City has already incorporated sustainable design principles into all new building projects, including school and municipal facilities and Complete Street projects. The three new schools Angier, Zervas, and Cabot, are all highly sustainable facilities. The renovations of 687 Watertown Street (former Horace Mann) to become the NECP facility will remove all fossil fuel sources for heating and cooling, a first in Newton. The Public Buildings Department has set sustainable design principles for all projects in collaboration with the Design Review Committee.

Newton has become a regional leader on solar electricity production. The City's solar arrays at the Rumford landfill and on municipal building roofs and parking lots generated 4.4 million kilowatt hours (kwh) of electricity last fiscal year, saving the City \$757,000 in that one year alone. Phase 3 solar projects coming online in 2020 will save \$3.3 million (net present value) over the next 20 years. Thanks to the contractual arrangements allowed under state law, Newton works with private sector partners to make financial investments in solar facilities.

The City has committed to replacing all passenger vehicles in the municipal fleet with electric cars by 2020 and is installing electric car charging stations at both municipal buildings and in city and school parking lots. As part of the Climate Action Plan implementation, this CIP includes \$400,000 to install 100 public charger points in 11 village center, 5 municipal, and 23 school parking lots over two to three years. Newton will use Eversource's Make-Ready Program to finance and install the electrical connections necessary for these chargers while the City will pay for the charging stations in part with help from state grants.

The City will also continue its aggressive efforts to create efficiencies in school and municipal buildings. The Bigelow and Day Middle School boiler replacement projects, with funding from the MSBA, will greatly reduce natural gas use. For a fifth straight year Newton, has received Green

Communities Program grant funding, this time to convert lighting at the Newton South fieldhouse and tennis courts to LED lighting that will save large amounts of electricity.

Climate change has already brought stormwater impacts to the metro Boston area, with intensification of severe events creating flooding, water quality problems, and droughts. Several stormwater projects included in the CIP will help the City address water quality conditions in the Charles River Watershed. The new MS4 municipal stormwater permits will lead to new City projects to improve water quality.

- **Protecting Woods and Open Spaces & Caring for our Parks and Recreational Spaces**

The major open space project in the CIP is the permanent protection of approximately 17 acres of woods behind the former Temple Mishkan Tafila property off Hammond Pond Parkway. Known as Webster Woods, this \$15.9 million project (\$15.2 million to be paid to Boston College for the forest and \$740,000 in initial legal and associated costs) will be funded within the CPA Program budget, and the land will be managed by Newton's Conservation Commission. Preserving Webster Woods for Newton in perpetuity is essential. It will protect this diverse eco-system and the habitat it provides for birds, mammals, amphibians and insects. It will also ensure City residents have access to the trails, the woods, the rocky ledges and the vernal pool on these 17+ acres and can connect to the 88+ acres of protected woodland to either side cared for by the City of Newton and the Massachusetts Department of Conservation and Recreation. The woods will also mitigate impacts of climate change, and by saving this forest, we can reduce the impact of heat, storms and carbon emissions.

Newton has a substantial number of conservation areas, parks, sports fields, tennis courts, open spaces, a lake swim beach and an outdoor pool complex that require upkeep, maintenance and ongoing renovations. Many of the renovation projects are funded through the Parks, Recreation and Culture Department's operating budget. Accelerating athletic turf field maintenance, baseball and softball field renovations, playground upgrades, Beautification Program projects, and dog park improvements are all actively in progress.

In the near-term, the FY2021 - FY2025 CIP includes completing the Manet Road Recreational Facility improvements (the former MWRA reservoir in Chestnut Hill), shoreline improvements at Crystal Lake's Levingston Cove, Albemarle/Halloran Field light upgrades, Lyons Field drainage and field improvements, and the Crescent Street - Ford Park rehabilitation project.

New Parks & Recreation CIP projects include Nahanton Park - Nature Center accessibility improvements and the renovation of aging Newton South athletic fields. A large spray park is also planned in the proposed Northland development project along the Newton Upper Falls Greenway.

- **Fostering Arts, Culture and Community Life**

Newton's vibrant community life, including substantial arts and cultural programs done in partnership with numerous organizations, brings our community together and enriches us. The City government plays a significant role in hosting these programs in public buildings and parks, supporting arts and culture throughout the City and in our schools, and fostering collaboration between organizations.

To strengthen and grow arts and cultural opportunities in Newton, the City established the CDAC (Community Design for Arts & Culture) working group in November 2018. The group is working with a consultant to identify our arts and cultural assets - from our buildings and non-profits, to the

events and festivals we host, to the local traditions and initiatives in our villages and neighborhoods. The plan will explore how arts and cultural goals and interests are aligned with our businesses, recreational opportunities, and commercial districts, and identify goals, set out recommendations, and seek opportunities to collaborate and expand our pool of funding.

In addition to the establishment of the CDAC group, in March 2019, the Mayor expanded the title of the Parks and Recreation Department to include arts and culture—the Department of Parks, Recreation and Culture. A full-time Director of Cultural Development reports to the Commissioner of Parks, Recreation and Culture, as well as a full-time administrative assistant reporting to the Director. The Director position is fully funded in the City’s operating budget and the administrative assistant’s position will be largely funded by the City (rather than through the revolving fund) with some financial support from Newton Community Pride.

We are actively designing and siting a city facility for older adults to replace the existing Senior Center, which is woefully undersized and inadequate for programs and services. The CIP includes funds for the design and construction of a Newton Center for Active Living (NewCAL).

The Newton Free Library is an active center for community life and is the second-highest highest circulation library in the state. Now thirty years old, the building needs substantial maintenance plus renovations to address changing activities, needs and facility wear and tear. Immediate improvements focusing on new carpeting in high-traffic locations were completed in FY2020 with an investment of \$500,000. The \$1.5 million project to expand and improve the undersized Children’s Room is on schedule for FY2021 construction.

The City purchased the former Aquinas Junior College at 150 Jackson Street which includes a large 850 seat auditorium. Significant renovations are needed for this facility, which are planned to take place concurrently with the school-side renovation work for the Lincoln-Eliot School. The auditorium upgrades are currently estimated at \$2.5 million and would provide a large performance arts space not only for the Lincoln-Eliot community but also for many different Newton-centric organizations.

- **Facilitating a Healthy, Accessible and Supportive Newton**

Facilitating a healthy, accessible and supportive community includes a wide range of programs from the Health and Human Services Department (e.g., school nurses, community social workers) to Parks and Recreation’s programs and physical accessibility improvements.

In FY2016, the City created the full-time position of an ADA Coordinator to work with the Council on Disabilities, City departments and outside agencies to improve accessibility in Newton. The coordinator has worked on a City evaluation and Mayor Fuller has added an Accessibility section to the CIP to highlight and prioritize capital investments in accessibility. A new three-year project started in FY2019 to install pedestrian push button APS signals at 50 intersections in order to reach 100% coverage by FY2021.

- **Providing Excellent and Responsive City Services**

Providing excellent and responsive City services is a core managerial task and technology is one of the key tools for ensuring its implementation. Hardware and software investments allow us to run our City’s 311 System, road pavement condition analysis, and field inspections by multiple City departments. The Information Technology Department is focused on fully implementing the

City's conversion to the MUNIS system for all financial and Human Resources functions. The City is also preparing a bid for a new permitting software system that will integrate, streamline and automate the multiple systems that City residents and businesses, as well as City staff, currently use. The CIP includes funding for the new permitting system, as well as other necessary IT programs, to increase City government effectiveness and responsiveness. An upgrade to the City website is also underway.

The CIP also includes funding for the City Clerk's Office to purchase new voting equipment.

- **Assuring the City's Financial Health and Spending Wisely**

The FY2021 Financial Forecast is a comprehensive strategy to ensure the City of Newton's fiscal health and to prioritize spending not just on capital assets but also City operations. This CIP prioritizes capital spending on over 200 projects to match the City's financial capabilities and make the City a better place for our residents and businesses.

CIP by Priority FY2021-FY2025

								Total	Total	Total	Total	Total	Total	Total
								\$ 92,024,600	\$ 62,904,217	\$ 38,737,000	\$ 57,546,000	\$ 140,639,500	\$ 27,428,000	\$ 24,440,000
Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Priority Factor	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
1	DPW	Complete Streets	Complete Streets Improvements - Dedham @ Nahanton; Dedham @ Brookline	Upgrade traffic signal equipment, improve intersection alignment geometry, improve multimodal safety and operations and implement signal coordination	\$ 1,875,000	80.3	Bonding	\$ 1,875,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	DPW	Complete Streets	Needham Street Upgrades	TIP Project to Pave and Improve Needham Street - Funded by Commonwealth	\$ 26,800,000	74.8	TIP Funding	\$ 26,800,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	Schools	Building	Lincoln-Eliot School - Heating System	Upgrades to the heating system & ventilation	\$ 650,000	73.2	Capital Stabilization Fund	\$ 650,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	DPW/ Water	Water	Replace Water Pipelines - Year 7	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project was for Year 7 of 20 year program.	\$ 4,546,200	68.5	Water Funds	\$ 4,546,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	DPW	Complete Streets	Newton Corner ADA Traffic Signal and Sidewalk Improvements	Install APS (Accessible Pedestrian Signals) at 10+ traffic signal locations, install ADA compliant ramps, upgrade sidewalk, landscaping	\$ 921,960	67.5	CDBG/Free Cash	\$ 921,960	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	DPW	Complete Streets	Complete Streets Improvements - Oak & Christina	Upgrade traffic signal equipment, improve intersection alignment geometry, improve multimodal safety and operations	\$ 2,375,000	67.4	Mass Works Grant/Free Cash	\$ 2,375,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Parks & Rec	Parks / Open Space	Manet Rd. Recreational Reservoir	Improve recreational space 5 acre parcel purchased from MWRA	\$ 375,000	65.3	CPA Funds	\$ 375,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Planning	Parks / Open Space	Webster Woods	Acquire Webster Woods	\$ 16,040,000	63.5	CPA Eligible/Other Funds	\$ 100,000	\$ 15,940,000	\$ -	\$ -	\$ -	\$ -	\$ -
9	DPW/ Storm	Storm	Hammond Brook Pipe Replacement	Replace 24" storm drain due to deteriorated structure	\$ 541,600	63.0	Storm Funds	\$ 541,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	IT	Software	Citywide Financial System	Move Financial System to MUNIS	\$ 1,537,000	61.5	Bonding	\$ 1,537,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	DPW/ Water	Water	Winchester Storage Tanks	Demo and de-commissioning of the elevated storage tanks for fire flow that are no longer needed.	\$ 407,000	60.9	Water Funds	\$ 407,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	DPW/ Storm	Storm	Rehabilitation of the Forest Grove Pump Station	Replace electrical controls, level sensors, replace trash grate & fencing, include structural repairs to building structure in Auburndale on Charles River	\$ 409,800	60.6	Storm Funds	\$ 409,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	DPW/ Sewer	Sewer	Sewer Inflow/ Infiltration Project - Area 5 - Newton Centre, Newtonville & Chestnut Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Project was for year 4 of City-Wide Sewer Initiative.	\$ 4,167,572	60.4	Sewer Funds	\$ 4,167,572	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	DPW/ Sewer	Sewer	Sewer Inflow /Infiltration Project - Area 6 - Newton Centre, Newtonville, Chesnut Hill, & Nonantum	Part of 10 year program to remove excess inflow and infiltration into sewer system. Currently in year 5 of City-Wide Sewer Initiative.	\$ 6,011,859	60.2	Sewer Funds	\$ 6,011,859	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	Fire Dept	Building	System Upgrades at Station 1 & 2	Interior building system upgrades to isolate the apparatus bays from the living quarters.	\$ 300,000	59.9	Free Cash	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	Library	Building	Library Interior Improvements	Replace worn out carpeting, flooring, and other immediate needs	\$ 500,000	59.8	Bonding	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	Public Buildings	Building	Craft Street Garage Roof	Replace failed 30+ year old roof membrane	\$ 625,000	59.7	Bonding	\$ 625,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Public Buildings	Building	Wash Bay Refurbishment	Refurbish Crafts Street vehicle wash bay with automated vehicle wash system, including capture/recycle wash water.	\$ 500,000	59.2	Storm Funds	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	DPW	Complete Streets	Complete Streets Improvements - West Newton (Washington Street @Chestnut, Watertown, Cherry, Elm)	Upgrade traffic signal equipment, improve multimodal safety and operations, enhance streetscape, implement signal coordination	\$ 6,271,998	58.9	Bonding	\$ 6,271,998	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20	Schools	Building	Lincoln-Eliot School - Building upgrades	Upgrades including window replacement and accessibility improvements to the Lincoln-Eliot School	\$ 1,500,000	58.6	Bonding	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Priority Factor	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
21	DPW/ Water	Water	Replace Water Pipelines - Year 8	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project is currently Year 8 of 20 year program.	\$ 4,560,200	58.4	Water Funds	\$ 4,560,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	Fire Dept	Large Vehicle / Equipment	Replace Fire Pumper Truck (Engine 2)	Replace Engine 2 pumper truck. Engine 2 will become a spare.	\$ 800,000	58.3	Bonding	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	DPW	Complete Streets	Accelerated Roads Program - Paving/Sidewalks/Accessibility	10 year Paving Initiative - Repair and Pave Scheduled Streets, Sidewalks and Parking Lots throughout the City.	\$ 95,000,000	58.2	Chapt 90/Free Cash/2013 Override	\$ 9,500,000	\$ 6,000,000	\$ 9,500,000	\$ 9,500,000	\$ 9,500,000	\$ 9,500,000	\$ 9,500,000
24	DPW/ Sewer	Sewer	Sewer Inflow /Infiltration Project - Area 7 - Upper Falls, Highlands, Thompsonville	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 6 of City-Wide Sewer Initiative.	\$ 9,057,000	58.1	MWRA Grant/Loan	\$ 4,157,000	\$ 4,900,000	\$ -	\$ -	\$ -	\$ -	\$ -
25	DPW	Large Vehicle / Equipment	City-wide Municipal Vehicles and Equipment	Vehicle and Equipment Replacement Program for Construction and other city operations (not including public safety vehicles)	\$ 30,000,000	58.0	Bonding/Other Funds	\$ 2,772,000	\$ 120,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000
26	DPW	Complete Streets	Complete Streets Improvements -Newtonville Traffic Signal/Corridor - Walnut Street (Walnut @ Cabot)	Improve safety and pedestrian accomodations, upgrade traffic signal equipment, enchance streetscape, improve multimodal safety and operations	\$ 6,297,411	57.7	Bonding/Mitigation Fund	\$ 547,411	\$ 5,750,000	\$ -	\$ -	\$ -	\$ -	\$ -
27	DPW	Complete Streets	Newton Free Library Parking Space Expansion, Repaving, and Drainage Improvements	In conjunction with installation of solar canopies, the library park lot will be reconfigured and reconstructed to add parking spaces and improve accessibility and drainage	\$ 1,239,000	57.5	Bonding	\$ 489,000	\$ -	\$ 750,000	\$ -	\$ -	\$ -	\$ -
28	Parks & Rec	Parks / Open Space	Newton Highlands Playground - Phase II Design & Construction	Part of 2008 Master Plan for park renovation in 2 phases. Phase II is for construction	\$ 3,245,000	57.3	CPA/Bonding/ Other Funds/State Contract	\$ 2,900,000	\$ -	\$ 345,000	\$ -	\$ -	\$ -	\$ -
29	DPW/ Storm	Storm	Bullough's Pond Dam	Complete State-Required repair work by January 16, 2020	\$ 890,000	56.6	Storm Funds	\$ 90,000	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ -
30	DPW	Complete Streets	Accessible Pedestrian Signal (APS) Installations	Replacing existing pedestrian push buttons with APS buttons at signalized intersections throughout City.	\$ 300,000	55.9	Free Cash/Grant	\$ 225,000	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -
31	Schools	Building	Newton Early Childhood Program	Address long term facility needs of the NECP at 687 Watertown Street	\$ 13,000,000	55.0	Bonding	\$ 750,000	\$ 12,250,000	\$ -	\$ -	\$ -	\$ -	\$ -
32	DPW/ Storm	Storm	South Meadow Brook Culvert under Needham Street	Year 1 - Inspection & assessment of box culvert prior to the reconstruction of Needham Street. Year 2 Design & Rehabilitation of Box Culvert prior to the Reconstruction of Needham Street	\$ 780,000	54.6	Storm Funds	\$ 280,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -
33	Schools	Building	Horace Mann School Improvements	Install sinks in second floor classrooms, make improvements to playground facilities, and other school upgrades	TBD	54.4	Free Cash/Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
34	DPW/ Storm	Storm	Edmunds Brook Spillway	Repair concrete spillway/brook walls and trash grate downstream of Edmunds Pond.	\$ 504,000	54.4	Storm Funds	\$ 104,000	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -
35	Senior Center	Building	Newton Center for Active Living - NewCAL	Plan, site, design and build a new community and senior center, the Newton Center for Active Living.	\$ 16,650,000	53.6	Bonding	\$ 350,000	\$ 250,000	\$ -	\$ -	\$ 16,050,000	\$ -	\$ -
36	Public Safety	Emergency Comms	Radio System Infrastructure	Install continuous power, repeaters & receivers, and other radio system infrastructure improvements	\$ 2,960,000	52.2	Bonding	\$ 2,210,000	\$ -	\$ -	\$ 750,000	\$ -	\$ -	\$ -
37	Schools	Building	Lincoln-Eliot at 150 Jackson Road	Elementary school at 150 Jackson Road, including site improvements, needed playground, and field space.	\$ 24,750,000	51.9	Bonding	\$ 750,000	\$ 500,000	\$ -	\$ 23,500,000	\$ -	\$ -	\$ -
38	Public Buildings	Building	Auditorium Renovation at 150 Jackson Road	Renovate the auditorium for city-wide use.	\$ 2,500,000	51.9	Bonding/Alternate Funding	\$ -	\$ -	\$ -	\$ 2,500,000	\$ -	\$ -	\$ -
39	DPW	Complete Streets	25% Conceptual Design for Washington Street Corridor	Conceptual Design to improve safety and pedestrian accomodations, Improve traffic flow, ADA compliance	\$ 2,650,000	51.3	Bonding/Free Cash	\$ 250,000	\$ 400,000	\$ 2,000,000	\$ -	\$ -	\$ -	\$ -
40	Parks & Rec	Parks / Open Space	Levingston Cove, Shoreline improvements at Cyrstal Lake	Repair walkways, add rain gardens, remediate erosion, replace amenities.	\$ 450,000	50.6	CPA Eligible	\$ 50,000	\$ -	\$ 700,000	\$ -	\$ -	\$ -	\$ -
41	Schools	Building	FA Day School - Replace Boilers	Replace two 60 year old boilers and variable air volume (VAV) coil work.	\$ 1,610,000	50.3	MSBA-ARP/Bonding	\$ 50,000	\$ 1,160,000	\$ -	\$ -	\$ -	\$ 400,000	\$ -

Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Priority Factor	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
42	IT	Software	Replacement of City Hall Storage Area Network (SAN)	Replace Storage Area Network at end of life span.	\$ 384,000	49.9	Free Cash	\$ -	\$ 384,000	\$ -	\$ -	\$ -	\$ -	\$ -
43	DPW	Complete Streets	Parking Meter Replacement	Update and modernize parking meter infrastructure to improve reliability and convenience	\$ 1,500,000	46.6	Bonding	\$ -	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -
44	Library	Building	Library Children's Room Expansion	Expand the undersized but heavily used Children's Room from 7100 sf to approximately 11,000. Expand restrooms, paint, carpet, re-furnish	\$ 1,500,000	46.5	Bonding	\$ -	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -
45	IT	Software	Permitting software	Implement new city-wide Permitting Software	\$ 750,000	46.4	Bonding	\$ -	\$ 750,000	\$ -	\$ -	\$ -	\$ -	\$ -
46	Schools	Building	Oak Hill Middle School Space Solution	3 classroom permanent exterior addition to the site due to rising enrollment from feeder schools	\$ 3,000,000	45.9	Bonding/Schools	\$ -	\$ 2,500,000	\$ -	\$ -	\$ -	\$ -	\$ -
47	DPW/ Water	Water	Replace Water Pipelines - Year 9	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in year 9 of 20 year program.	\$ 4,750,000	45.6	Water Funds	\$ -	\$ 4,750,000	\$ -	\$ -	\$ -	\$ -	\$ -
48	DPW/ Water	Water	Waban Hill Covered Reservoir	Rehabilitation of pipes, valves, all appurtenances and roof replacement. Includes cleaning, inspection, design, construction, and services.	\$ 600,000	45.4	Water Funds	\$ -	\$ 600,000	\$ -	\$ -	\$ -	\$ -	\$ -
49	DPW/ Storm	Storm	City Hall Ponds	Removal of sediment from 3 ponds adjacent to City Hall, 1000 Commonwealth Avenue	\$ 500,000	44.9	Storm Funds	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -
50	DPW/ Storm	Storm	Union Street Drainage	The extension of storm drains on Union Street to alleviate flooding and icing issues in the area of Herrick Road	\$ 625,000	44.3	Storm Funds	\$ -	\$ 625,000	\$ -	\$ -	\$ -	\$ -	\$ -
51	Parks & Rec	Parks / Open Space	Newton South Tennis Court Lights & Field House Lighting Upgrades	Lighting improvements for twelve courts and field house at Newton South High School.	\$ 111,217	44.0	State Grant	\$ -	\$ 111,217	\$ -	\$ -	\$ -	\$ -	\$ -
52	Parks & Rec	Parks / Open Space	Lyons Field Drainage Improvements	Complete renovation of the natural grass area including, installing trench sub-drainage, connecting to the park storm drainage system, and sodding the field.	\$ 400,000	43.8	Stormwater Funds/State Grant/Other Funds	\$ -	\$ -	\$ 400,000	\$ -	\$ -	\$ -	\$ -
53	DPW	Complete Streets	Comm Ave Carriageway Improvements and Charles River Trail Connection	Connect trails and transform the Commonwealth Avenue Carriageway between Lyons Field and the Charles River	\$ 400,000	43.3	Free Cash	\$ -	\$ 100,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -
54	Police	Building	Police Headquarters - Mechanical Upgrades	Replace Roof Top Mechanical equipment that is beyond its useful life. Currently requires a lot of maintenance and service calls. Install VRF to supply heating and air conditioning.	\$ 1,000,000	43.2	Bonding	\$ -	\$ 60,000	\$ 940,000	\$ -	\$ -	\$ -	\$ -
55	DPW/ Water	Water	Large Water Meter Changeout Program	Removal & Replacement of 125 commercial electromagnetic water meters sized 2"-8" diameter.	\$ 1,050,000	42.7	Water Funds	\$ -	\$ 350,000	\$ 350,000	\$ 350,000	\$ -	\$ -	\$ -
56	Schools	Building	Newton North Pool Air Handling Unit (AHU)	The unit is deteriorating and needs replacing and heating capability.	\$ 350,000	42.5	Free Cash	\$ -	\$ -	\$ 350,000	\$ -	\$ -	\$ -	\$ -
57	DPW	Complete Streets	Complete Streets Improvements - Wells Ave @ Nahanton	Upgrade traffic signal equipment, install ADA compliant ramps, improve multimodal safety and operations	\$ 4,000,000	42.1	Bonding/Other Funds	\$ 105,000	\$ 129,000	\$ 129,000	\$ 200,000	\$ 3,437,000	\$ -	\$ -
58	Parks & Rec	Parks / Open Space	Halloran Field Lights (at Albemarle)	Replace sports lighting at Halloran (Albermarle)	\$ 360,000	42.1	Bonding/Energy Stabilization	\$ -	\$ -	\$ 360,000	\$ -	\$ -	\$ -	\$ -
59	DPW/ Sewer	Sewer	Sewer Inflow/Infiltration Project - Area 8 - Upper Falls, Highlands, Thomspoville & Oak Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in Year 7 of City-Wide Sewer Initiative.	\$ 9,100,000	41.8	MWRA Grant/Loan/Sewer Funds	\$ -	\$ -	\$ 9,100,000	\$ -	\$ -	\$ -	\$ -
60	DPW/ Storm	Storm	Evaluation, design and construction of Cheesecake Brook-Commonweath Av. to the rear of 1600 Washington Street	Replace culvert headwall, remove remaining fieldstone channel walls to restore natural brook channel and provide buffer for nutrient removal (water quality).	\$ 550,000	41.7	Storm Funds	\$ -	\$ -	\$ 550,000	\$ -	\$ -	\$ -	\$ -
61	DPW/ Sewer	Sewer	Quinobequin Road Sewer Pump Station - Replace Pump	Sewerage pumped to higher point and gravity fed to MWRA pipes for treatment. Replace pump 1 and motors at life expectancy.	\$ 150,000	41.6	Sewer Funds	\$ -	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
62	DPW/ Water	Water	Replace Water Pipelines - Year 10	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in Year 10 of 20 year program.	\$ 4,750,000	41.5	Water Funds	\$ -	\$ -	\$ 4,750,000	\$ -	\$ -	\$ -	\$ -

Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Priority Factor	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
63	Public Buildings	Building	Newton Commonwealth Golf Course Maintenance Facility Project	Renovation and Addition to the Golf Course Maintenance Facility	\$ 1,200,000	40.8	Golf Course Funding	\$ -	\$ -	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -
64	Clerk	Equipment	New Voting Equipment	Replace current equipment with new state-approved voting equipment.	\$ 150,000	40.8	Bonding	\$ -	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
65	Public Buildings	Building	Elliot Street Sand Salt Shed - Replacement	Replace salt shed	\$ 500,000	40.1	Bonding	\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -
66	Public Buildings	Building	War Memorial Accessibility/Historic Improvements	Repair and repoint stone cornice. Rebuild/reset main entry stairs and install code-compliant railings. Implement recommendations from 2007 Study of the Memorial Stairs.	\$ 2,332,000	39.9	Requested CPA	\$ -	\$ -	\$ 1,166,000	\$ 1,166,000	\$ -	\$ -	\$ -
67	Police	Building	Police Headquarters - Site Security, Parking Lot, Accessibility	Site security upgrades including fencing, automated gates, controls, lighting, etc. Full depth repair and reconstruction of the parking lot. Reconstruct exterior ramp to code compliant slope. Provide accessible parking & signage.	\$ 720,000	39.8	Bonding	\$ -	\$ -	\$ 120,000	\$ 600,000	\$ -	\$ -	\$ -
68	DPW/ Storm	Storm	Elliot & Crafts Street DPW Operations Yard	Modifications to existing storm water infrastructure to meet NPDES MS4 General Permits BMP's	\$ 1,000,000	39.7	Storm Funds	\$ -	\$ -	\$ 200,000	\$ 800,000	\$ -	\$ -	\$ -
69	DPW/ Sewer	Sewer	Pump Station Assessment Upgrades	Develop CIP for three water booster and ten wastewater pump stations throughout the city	\$ 200,000	39.7	Sewer Funds	\$ -	\$ -	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
70	DPW	Climate Action	Municipal EV Chargers	Purchase and install EV chargers at municipal and school parking lots throughout the city (electrical connections provided by Eversource grants)	\$ 400,000	39.7	Bonding/School Funds/Grant	\$ -	\$ -	\$ 150,000	\$ 150,000	\$ 100,000	\$ -	\$ -
71	Schools	Building	Countryside School- Renovation/Addition	Feasibility Study/Design and Construction	\$ 50,000,000	39.7	Alternate Funding/MSBA Eligible/Bonding	\$ -	\$ -	\$ 750,000	\$ 2,000,000	\$ 47,250,000	\$ -	\$ -
72	Schools	Building	Franklin - Renovation/Addition	Feasibility Study/Design and Construction	\$ 50,000,000	39.5	Alternate Funding/MSBA Eligible/Bonding	\$ -	\$ -	\$ 750,000	\$ 2,000,000	\$ 47,250,000	\$ -	\$ -
73	Schools	Building	Ward School - Renovation/Replacement	Ward School facilities project	TBD	39.5	Alternate Funding/MSBA Eligible/Bonding	\$ -	\$ -	\$ -	\$ -	\$ 500,000	\$ 1,000,000	\$ -
74	DPW	Complete Streets	Complete Streets Improvements - Centre Street (Rte. 9 - Walnut)	Upgrade traffic signal equipment, improve multimodal safety and operations, enhance streetscape, implement signal coordination, and paving	\$ 1,600,000	39.4	Bonding	\$ -	\$ -	\$ -	\$ 250,000	\$ 1,350,000	\$ -	\$ -
75	DPW/ Sewer	Sewer	Sewer Inflow/Infiltration Project - Area 9 - Waban, Upper Falls & Oak Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 8 of City-Wide Sewer Initiative.	\$ 4,630,000	39.2	Sewer Funds	\$ 670,000	\$ -	\$ 207,000	\$ 3,753,000	\$ -	\$ -	\$ -
76	DPW/ Sewer	Sewer	Sewer Inflow/Infiltration Project - Area 10 - Waban, Newton Highlands, Newton Centre, & Newton Corner	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 9 of City-Wide Sewer Initiative.	\$ 4,600,000	39.2	Sewer Funds	\$ -	\$ -	\$ 670,000	\$ 207,000	\$ 3,693,000	\$ -	\$ -
77	Parks & Rec	Parks / Open Space	Crescent Street Project - Rehab Ford Park	Rehabilitation of Ford Park	\$ 1,300,000	38.9	CPA Eligible	\$ -	\$ -	\$ -	\$ 1,300,000	\$ -	\$ -	\$ -
78	DPW/ Water	Water	Replace Water Pipelines - Year 11	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in year 11 of 20 year program.	\$ 4,750,000	38.2	Water Funds	\$ -	\$ -	\$ -	\$ 4,750,000	\$ -	\$ -	\$ -
79	Fire Dept	Large Vehicle / Equipment	Replace Emergency Response Van (ERU)	Purchase a new ERU van. It carries haz-mat equipment such as booms, speedi-dry, Level 3 haz-mat suits etc. The replacement unit would also allow us to carry Tech Rescue equipment that cannot fit on the HDR. Shoring material for trench rescue, tri-pods and high angle rescue tools as well as equipment for building collapse.	\$ 300,000	38.1	Bonding	\$ -	\$ -	\$ -	\$ 300,000	\$ -	\$ -	\$ -
80	Schools	Building	Newton South High School - Mechanical Upgrades - Library	Replace air handlers, roof top equipment, and hydronic/ACCU system due to burner failures and outdated controls.	\$ 300,000	38.1	Bonding	\$ -	\$ -	\$ -	\$ 300,000	\$ -	\$ -	\$ -
81	Public Buildings	Building	City Hall Restroom Upgrades	Phased project -Upgrade City Hall Restrooms	\$ 200,000	37.9	CDBG/Other Funds/Bonding	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000	\$ -

Priority	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Priority Factor	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
213	DPW/ Storm	Storm	Pellegrini Park Drain Replacement	Storm drain between Jenison and Hawthorne needs to be replaced due to structural failure, causing flooding at Jenison @ Judkins.	\$ 200,000	15.1	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
214	DPW/ Storm	Storm	Hammond Brook-Glen Ave. to Centre St.	Cleaning, Inspection, Structural Evaluation, Design, Rehabilitation and Construction of Hammond Brook Culvert.	\$ 600,000	10.6	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
215	Schools	Building	Bigelow School - Replace Windows and Doors	Replace aging windows and exterior doors to improve comfort, operation, and energy efficiency.	\$ 1,400,000	10.6	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
216	Public Buildings	Building	Elliot St. Operations Building - Interior and Finish Upgrades	Repaint steel framing in attic. Repair deteriorated concrete and CMU. Upgrade lighting and install new acoustical ceilings.	\$ 147,000	9.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
217	Schools	Building	Oak Hill School - Mechanical Upgrades - Roof Top Units and Distribution System	Replace Roof top air handling units and distribution system	\$ 250,000	9.7	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Need:					\$ 661,884,817			\$ 92,024,600	\$ 62,904,217	\$ 38,737,000	\$ 57,546,000	\$ 140,639,500	\$ 27,428,000	\$ 24,440,000

CIP by Asset Category FY2021-FY2025

						Total	Total	Total	Total	Total	Total	Total
						\$ 92,024,600	\$ 62,904,217	\$ 38,737,000	\$ 57,546,000	\$ 140,639,500	\$ 27,428,000	\$ 24,440,000
Asset Category	Dept	Project Title	Project Description / Justification	Est Cost in FY2020	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Bridge	DPW	Concord St Bridge over Charles River	Repair bridge in collaborative effort with the Town of	\$ 1,000,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Schools	Lincoln-Eliot School - Heating System	Upgrades to the heating system & ventilation	\$ 650,000	Capital Stabilization Fund	\$ 650,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Fire Dept	System Upgrades at Station 1 & 2	Interior building system upgrades to isolate the apparatus bays from the living quarters.	\$ 300,000	Free Cash	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Library	Library Interior Improvements	Replace worn out carpeting, flooring, and other immediate needs	\$ 500,000	Bonding	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Public Buildings	Craft Street Garage Roof	Replace failed 30+ year old roof membrane	\$ 625,000	Bonding	\$ 625,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Public Buildings	Wash Bay Refurbishment	Refurbish Crafts Street vehicle wash bay with automated vehicle wash system, including	\$ 500,000	Storm Funds	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Schools	Lincoln-Eliot School - Building upgrades	Upgrades including window replacement and accessibility improvements to the Lincoln-Eliot School	\$ 1,500,000	Bonding	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Schools	Newton Early Childhood Program	Address long term facility needs of the NECP at 687 Watertown Street	\$ 13,000,000	Bonding	\$ 750,000	\$ 12,250,000	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Schools	Horace Mann School Improvements	Install sinks in second floor classrooms, make improvements to playground facilities, and other	TBD	Free Cash/Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Senior Center	Newton Center for Active Living - NewCAL	Plan, site, design and build a new community and senior center, the Newton Center for Active Living.	\$ 16,650,000	Bonding	\$ 350,000	\$ 250,000	\$ -	\$ -	\$ 16,050,000	\$ -	\$ -
Building	Schools	Lincoln-Eliot at 150 Jackson Road	Elementary school at 150 Jackson Road, including site improvements, needed playground, and field space.	\$ 24,750,000	Bonding	\$ 750,000	\$ 500,000	\$ -	\$ 23,500,000	\$ -	\$ -	\$ -
Building	Public Buildings	Auditorium Renovation at 150 Jackson Road	Renovate the auditorium for city-wide use.	\$ 2,500,000	Bonding/Alternate Funding	\$ -	\$ -	\$ -	\$ 2,500,000	\$ -	\$ -	\$ -
Building	Schools	FA Day School - Replace Boilers	Replace two 60 year old boilers and variable air volume (VAV) coil work.	\$ 1,610,000	MSBA-ARP/Bonding	\$ 50,000	\$ 1,160,000	\$ -	\$ -	\$ -	\$ 400,000	\$ -
Building	Library	Library Children's Room Expansion	Expand the undersized but heavily used Children's Room from 7100 sf to approximately 11,000. Expand	\$ 1,500,000	Bonding	\$ -	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Schools	Oak Hill Middle School Space Solution	3 classroom permanent exterior addition to the site due to rising enrollment from feeder schools	\$ 3,000,000	Bonding/Schools	\$ -	\$ 2,500,000	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Police	Police Headquarters - Mechanical Upgrades	Replace Roof Top Mechanical equipment that is beyond its useful life. Currently requires a lot of maintenance	\$ 1,000,000	Bonding	\$ -	\$ 60,000	\$ 940,000	\$ -	\$ -	\$ -	\$ -
Building	Schools	Newton North Pool Air Handling Unit (AHU)	The unit is deteriorating and needs replacing and heating capability.	\$ 350,000	Free Cash	\$ -	\$ -	\$ 350,000	\$ -	\$ -	\$ -	\$ -
Building	Public Buildings	Newton Commonwealth Golf Course Maintenance Facility Project	Renovation and Addition to the Golf Course Maintenance Facility	\$ 1,200,000	Golf Course Funding	\$ -	\$ -	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -
Building	Public Buildings	Elliot Street Sand Salt Shed - Replacement	Replace salt shed	\$ 500,000	Bonding	\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -
Building	Public Buildings	War Memorial Accessibility/Historic Improvements	Repair and repoint stone cornice. Rebuild/reset main entry stairs and install code-compliant railings.	\$ 2,332,000	Requested CPA	\$ -	\$ -	\$ 1,166,000	\$ 1,166,000	\$ -	\$ -	\$ -
Building	Police	Police Headquarters - Site Security, Parking Lot, Accessibility	Site security upgrades including fencing, automated gates, controls, lighting, etc. Full depth repair and reconstruction of the parking lot. Reconstruct exterior ramp to code compliant slope. Provide accessible	\$ 720,000	Bonding	\$ -	\$ -	\$ 120,000	\$ 600,000	\$ -	\$ -	\$ -

Asset Category	Dept	Project Title	Project Description / Justification	Est Cost in FY2020	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Building	Public Buildings	City Hall - Mechanical Upgrades	Replace condensing units, ductwork and fans. Add mini-split A/C units in conjunction with window restoration/replacement.	\$ 500,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Jackson Homestead	Jackson Homestead - Exterior Windows & Doors	Restore existing windows, storm windows, shutters, and doors as historically appropriate.	\$ 192,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Library	Newton Free Library - Generator Replacement	Library used as cooling station for residents. Existing energy agreement mandates peak usage on auxillary	\$ 250,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Schools	Mason Rice School - Electrical Upgrades	Replace emergency generator, electrical panels and sub-panels.	\$ 325,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Public Buildings	City Hall - Exterior Windows & Doors	Restore/replace windows in phases to improve energy efficiency, functionality and comfort, and to preserve	\$ 3,000,000	Potential for partial CPA Eligibility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Public Buildings	Planning Department Renovation Project	Interior renovations to the Planning Department offices in the basement of City Hall to include upgrades to the HVAC, Plumbing, Electrical, and finishes	\$ 500,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Jackson Homestead	Jackson Homestead - Basement	Finish basement galleries: New flooring; envelope treatment, gallery walls, (keep water and condensation out; achieve proper temperature humidity controls)	\$ 150,000	CPA Eligible/Other Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Public Buildings	Waban Community Library-Exterior Windows & Doors	Restore exterior wood door and install panic hardware. Replace areaway and rear door. Restore windows.	\$ 118,500	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Public Buildings	City Hall - Roof Repair/Replacement	Install new membrane roof on flat roofs. Repair/replace gutters on balcony roofs. Replace metal roofing/flashing as required. Repair Cupola.	\$ 300,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Public Buildings	Elliot St. Garage - Roof Repair/Replacement	Replace/repair EPDM roof. Replace damaged roof panels.	\$ 435,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Public Buildings	Auburndale Community Library - Building Envelope and Roof	Repair broken roof slates. Reflash where leaks are occurring. Repair/replace gutters and downspouts.	\$ 128,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Schools	Williams School - Mechanical Upgrades	HVAC distribution upgrades in the boiler room and throughout the school	\$ 200,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Schools	Bigelow School - Replace Windows and Doors	Replace aging windows and exterior doors to improve comfort, operation, and energy efficiency.	\$ 1,400,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Public Buildings	Elliot St. Operations Building - Interior and Finish Upgrades	Repaint steel framing in attic. Repair deteriorated concrete and CMU. Upgrade lighting and install new	\$ 147,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building	Schools	Oak Hill School - Mechanical Upgrades - Roof Top Units and Distribution System	Replace Roof top air handling units and distribution system	\$ 250,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Climate Action	DPW	Municipal EV Chargers	Purchase and install EV chargers at municipal and school parking lots throughout the city (electrical connections)	\$ 400,000	Bonding/School Funds/Grant	\$ -	\$ -	\$ 150,000	\$ 150,000	\$ 100,000	\$ -	\$ -
Complete Streets	DPW	Complete Streets Improvements - Dedham @ Nahanton; Dedham @ Brookline	Upgrade traffic signal equipment, improve intersection alignment geometry, improve multimodal safety and operations and implement signal coordination	\$ 1,875,000	Bonding	\$ 1,875,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Complete Streets	DPW	Needham Street Upgrades	TIP Project to Pave and Improve Needham Street - Funded by Commonwealth	\$ 26,800,000	TIP Funding	\$ 26,800,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Complete Streets	DPW	Newton Corner ADA Traffic Signal and Sidewalk Improvements	Install APS (Accessible Pedestrian Signals) at 10+ traffic signal locations, install ADA compliant ramps, upgrade	\$ 921,960	CDBG/Free Cash	\$ 921,960	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Asset Category	Dept	Project Title	Project Description / Justification	Est Cost in FY2020	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Parks / Open Space	Parks & Rec	Forte Park (Nonantum)	Synthetic Turf field to include softball field, natural turf soccer field, lights and accessibility.	\$ 2,000,000	Bonding/Other Funds/Potential for partial CPA Eligibility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks / Open Space	Parks & Rec	Old Cold Spring Field	Renovation of existing field space to include crowning, drairage, irrigation and accessibility improvements.	\$ 350,000	Bonding/CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks / Open Space	Parks & Rec	Halloran Sports Complex at Albemarle	Synthetic Turf field to include baseball and football/soccer field	\$ 4,600,000	Bonding/Other funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks / Open Space	Parks & Rec	Newton Upper Falls/ Braceland Playground - Design & Construction	Master Plan for park renovation - Construction will include new athletic fields, new play structure and site	\$ 1,675,000	Bonding/CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks / Open Space	Parks & Rec	Pellegrini Field Lights	Replace sports lighting at Pellegrini	\$ 100,000	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks / Open Space	Parks & Rec	City Hall and War Memorial Historic Landscape Preservation	Restoration and preservation of City Hall grounds	\$ 1,500,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks / Open Space	Parks & Rec	Chaffin Park Wall	Replacement of existing wall along perimeter of Chaffin Park (Vernon and Centre Streets)	\$ 200,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks / Open Space	Jackson Homestead	Restoration of Historic East Burying Grounds	Tree work. Tomb restoration, gravestone repair, and other restoration. Repair stone gate posts. Install	\$ 85,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks / Open Space	Parks & Rec	Newton South High School Athletic Field Renovation	Replacement of synthetic turf at Brandeis Road and Stadium fields. Current field was installed in 2007	\$ 1,400,000	Other Funds/Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks / Open Space	Parks & Rec	Newton North High School Turf Field Replacement	Replace the turf field at Newton North High School. Current field was installed in 2010	\$ 700,000	Other Funds/Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks / Open Space	Jackson Homestead	Restoration of Historic West Burying Grounds	Preservation of gravestones. Repair stone wall boundary. Install educational signage.	\$ 75,000	CPA Eligible/Other Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks / Open Space	Parks & Rec	Nahanton Park - Nature Center Accessibility	Renovation of two existing parking areas and upgrades to pedestrian connection to Nature Center - Canoe and	\$ 150,000		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks / Open Space	Jackson Homestead	Restoration of Historic South Burying Grounds	Preservation of gravestones. Treework. Repair stone wall boundary. Install educational signage.	\$ 75,000	CPA Eligible/Other Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sewer	DPW/ Sewer	Sewer Inflow/ Infiltration Project - Area 5 - Newton Centre, Newtonville & Chestnut Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Project was for year 4 of	\$ 4,167,572	Sewer Funds	\$ 4,167,572	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sewer	DPW/ Sewer	Sewer Inflow /Infiltration Project - Area 6 - Newton Centre, Newtonville, Chesnut Hill, & Nonantum	Part of 10 year program to remove excess inflow and infiltration into sewer system. Currently in year 5 of City-Wide Sewer Initiative.	\$ 6,011,859	Sewer Funds	\$ 6,011,859	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sewer	DPW/ Sewer	Sewer Inflow /Infiltration Project - Area 7 - Upper Falls, Highlands, Thompsonville	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 6 of City-Wide Sewer Initiative.	\$ 9,057,000	MWRA Grant/Loan	\$ 4,157,000	\$ 4,900,000	\$ -	\$ -	\$ -	\$ -	\$ -
Sewer	DPW/ Sewer	Sewer Inflow/Infiltration Project - Area 8 - Upper Falls, Highlands, Thomspsonville & Oak Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in Year 7 of City-Wide Sewer Initiative.	\$ 9,100,000	MWRA Grant/Loan/Sewer Funds	\$ -	\$ -	\$ 9,100,000	\$ -	\$ -	\$ -	\$ -
Sewer	DPW/ Sewer	Quinobequin Road Sewer Pump Station - Replace Pump	Sewerage pumped to higher point and gravity fed to MWRA pipes for treatment. Replace pump 1 and motors at life expectancy.	\$ 150,000	Sewer Funds	\$ -	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
Sewer	DPW/ Sewer	Pump Station Assessment Upgrades	Develop CIP for three water booster and ten wastewater pump stations throughout the city	\$ 200,000	Sewer Funds	\$ -	\$ -	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Sewer	DPW/ Sewer	Sewer Inflow/Infiltration Project - Area 9 - Waban, Upper Falls & Oak Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 8 of City-	\$ 4,630,000	Sewer Funds	\$ 670,000	\$ -	\$ 207,000	\$ 3,753,000	\$ -	\$ -	\$ -
Sewer	DPW/ Sewer	Sewer Inflow/Infiltration Project - Area 10 - Waban, Newton Highlands, Newton Centre, & Newton Corner	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 9 of City-Wide Sewer Initiative.	\$ 4,600,000	Sewer Funds	\$ -	\$ -	\$ 670,000	\$ 207,000	\$ 3,693,000	\$ -	\$ -
Sewer	DPW/ Sewer	Sewer Inflow/Infiltration Project - Area 11 - Chestnut Hill, Newton Corner, Oak Hill, & Thompsonville	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 10 of City-Wide Sewer Initiative.	\$ 4,600,000	Sewer Funds	\$ -	\$ -	\$ -	\$ 670,000	\$ 207,000	\$ 3,693,000	\$ -

Asset Category	Dept	Project Title	Project Description / Justification	Est Cost in FY2020	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Sewer	DPW/ Sewer	Sewer Inflow/Infiltration	Investigation, Design & Construction of sewer laterals & manholes along interceptor sewers within Cheesecake and Laundry Brook Drainage Basins	\$ 2,000,000	Sewer Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Software	IT	Citywide Financial System	Move Financial System to MUNIS	\$ 1,537,000	Bonding	\$ 1,537,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Software	IT	Replacement of City Hall Storage Area Network (SAN)	Replace Storage Area Network at end of life span.	\$ 384,000	Free Cash	\$ -	\$ 384,000	\$ -	\$ -	\$ -	\$ -	\$ -
Software	IT	Permitting software	Implement new city-wide Permitting Software	\$ 750,000	Bonding	\$ -	\$ 750,000	\$ -	\$ -	\$ -	\$ -	\$ -
Storm	DPW/ Storm	Hammond Brook Pipe Replacement	Replace 24" storm drain due to deteriorated structure	\$ 541,600	Storm Funds	\$ 541,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storm	DPW/ Storm	Rehabilitation of the Forest Grove Pump Station	Replace electrical controls, level sensors, replace trash grate & fencing, include structural repairs to building structure in Auburndale on Charles River	\$ 409,800	Storm Funds	\$ 409,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storm	DPW/ Storm	Bullough's Pond Dam	Complete State-Required repair work by January 16, 2020	\$ 890,000	Storm Funds	\$ 90,000	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ -
Storm	DPW/ Storm	South Meadow Brook Culvert under Needham Street	Year 1 - Inspection & assessment of box culvert prior to the reconstruction of Needham Street. Year 2 Design & Rehabilitation of Box Culvert prior to the Reconstruction of Needham Street	\$ 780,000	Storm Funds	\$ 280,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -
Storm	DPW/ Storm	Edmunds Brook Spillway	Repair concrete spillway/brook walls and trash grate downstream of Edmunds Pond.	\$ 504,000	Storm Funds	\$ 104,000	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -
Storm	DPW/ Storm	City Hall Ponds	Removal of sediment from 3 ponds adjacent to City Hall, 1000 Commonwealth Avenue	\$ 500,000	Storm Funds	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -
Storm	DPW/ Storm	Union Street Drainage	The extension of storm drains on Union Street to alleviate flooding and icing issues in the area of Herrick Road	\$ 625,000	Storm Funds	\$ -	\$ 625,000	\$ -	\$ -	\$ -	\$ -	\$ -
Storm	DPW/ Storm	Evaluation, design and construction of Cheesecake Brook-Commonweath Av. to the rear of 1600 Washington Street	Replace culvert headwall, remove remaining fieldstone channel walls to restore natural brook channel and provide buffer for nutrient removal (water quality).	\$ 550,000	Storm Funds	\$ -	\$ -	\$ 550,000	\$ -	\$ -	\$ -	\$ -
Storm	DPW/ Storm	Elliot & Crafts Street DPW Operations Yard	Modifications to existing storm water infrastructure to meet NPDES MS4 General Permits BMP's	\$ 1,000,000	Storm Funds	\$ -	\$ -	\$ 200,000	\$ 800,000	\$ -	\$ -	\$ -
Storm	DPW/ Storm	Cheesecake Brook -1660 Washington St. to Watertown St.	Inspection & Assessment, Design and Rehabilitation Of +/-6000 LF of Box Culvert	\$ 900,000	Storm Funds	\$ -	\$ -	\$ -	\$ 200,000	\$ 700,000	\$ -	\$ -
Storm	DPW/ Storm	Laundry Brook Culvert-Hull street to Bridges Avenue	Design and construction of culvert rehabilitation from Hull St to Bridges Ave.	\$ 750,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ 750,000	\$ -	\$ -
Storm	DPW/ Storm	Cheesecake Brook-Watertown St. to Charles River	Inspection & Assessment, Design and Rehabilitation of Fieldstone Channel walls and floor	\$ 1,450,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ 725,000	\$ 725,000	\$ -
Storm	DPW/ Storm	Laundry Brook Culvert-Parkview to Mass Pike	Rehabilitation +/-1000 LF Box Culvert based on FY 18 evaluation.	\$ 650,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 650,000
Storm	DPW/ Storm	Cheesecake Brook Roadway Culvert Crossings	Design & Construction of culvert improvements at Parsons, Cross and Eddy Street	\$ 750,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750,000
Storm	DPW/ Storm	Reduce Impervious Area	Reduce Impervious Area to 5 Municipal Properties per NPDES MS4 Requirements	\$ 650,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 650,000
Storm	DPW/ Storm	Pellegrini Park Drain Replacement	Storm drain between Jenison and Hawthorne needs to be replaced due to structural failure, causing flooding at Jenison @ Judkins.	\$ 200,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storm	DPW/ Storm	Hammond Brook-Glen Ave. to Centre St.	Cleaning, Inspection, Structural Evaluation, Design, Rehabilitation and Construction of Hammond Brook Culvert.	\$ 600,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water	DPW/ Water	Replace Water Pipelines - Year 7	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project was for Year 7 of 20 year program.	\$ 4,546,200	Water Funds	\$ 4,546,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Asset Category	Dept	Project Title	Project Description / Justification	Est Cost in FY2020	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Water	DPW/ Water	Winchester Storage Tanks	Demo and de-commissioning of the elevated storage tanks for fire flow that are no longer needed.	\$ 407,000	Water Funds	\$ 407,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water	DPW/ Water	Replace Water Pipelines - Year 8	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project is currently Year 8 of 20 year program.	\$ 4,560,200	Water Funds	\$ 4,560,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water	DPW/ Water	Replace Water Pipelines - Year 9	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in year 9 of 20 year program.	\$ 4,750,000	Water Funds	\$ -	\$ 4,750,000	\$ -	\$ -	\$ -	\$ -	\$ -
Water	DPW/ Water	Waban Hill Covered Reservoir	Rehabilitation of pipes, valves, all appurtenances and roof replacement. Includes cleaning, inspection, design, construction, and services.	\$ 600,000	Water Funds	\$ -	\$ 600,000	\$ -	\$ -	\$ -	\$ -	\$ -
Water	DPW/ Water	Large Water Meter Changeout Program	Removal & Replacement of 125 commercial electromagnetic water meters sized 2"-8" diameter.	\$ 1,050,000	Water Funds	\$ -	\$ 350,000	\$ 350,000	\$ 350,000	\$ -	\$ -	\$ -
Water	DPW/ Water	Replace Water Pipelines - Year 10	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in Year 10 of 20 year program.	\$ 4,750,000	Water Funds	\$ -	\$ -	\$ 4,750,000	\$ -	\$ -	\$ -	\$ -
Water	DPW/ Water	Replace Water Pipelines - Year 11	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in year 11 of 20 year program.	\$ 4,750,000	Water Funds	\$ -	\$ -	\$ -	\$ 4,750,000	\$ -	\$ -	\$ -
Water	DPW/ Water	Replace Water Pipelines - Year 12	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in year 12 of 20 year program.	\$ 4,750,000	Water Funds	\$ -	\$ -	\$ -	\$ -	\$ 4,750,000	\$ -	\$ -
Water	DPW/ Water	Replace Water Pipelines - Year 13	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in year 13 of 20 year program.	\$ 4,750,000	Water Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,750,000	\$ -
Water	DPW/ Water	Replace Water Pipelines - Year 14	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in year 14 of 20 year program.	\$ 4,750,000	Water Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,750,000
Total Need:				\$ 661,884,817		\$ 92,024,600	\$ 62,904,217	\$ 38,737,000	\$ 57,546,000	\$ 140,639,500	\$ 27,428,000	\$ 24,440,000

CIP by Funding Source FY2021-FY2025

						Total	Total	Total	Total	Total	Total	Total
						\$ 92,024,600	\$ 62,904,217	\$ 38,737,000	\$ 57,546,000	\$ 140,639,500	\$ 27,428,000	\$ 24,440,000
Funding Source	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Alternate Funding	Fire Dept	Building	Fire Station #2, West Newton - Renovation	Fire Station work includes mechanical, electrical, plumbing, code compliance and accessibility upgrades.	\$ 12,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Alternate Funding/MSBA Eligible/Bonding	Schools	Building	Countryside School- Renovation/Addition	Feasibility Study/Design and Construction	\$ 50,000,000	\$ -	\$ -	\$ 750,000	\$ 2,000,000	\$ 47,250,000	\$ -	\$ -
Alternate Funding/MSBA Eligible/Bonding	Schools	Building	Franklin - Renovation/Addition	Feasibility Study/Design and Construction	\$ 50,000,000	\$ -	\$ -	\$ 750,000	\$ 2,000,000	\$ 47,250,000	\$ -	\$ -
Alternate Funding/MSBA Eligible/Bonding	Schools	Building	Ward School - Renovation/Replacement	Ward School facilities project	TBD	\$ -	\$ -	\$ -	\$ -	\$ 500,000	\$ 1,000,000	\$ -
Bonding	IT	Software	Citywide Financial System	Move Financial System to MUNIS	\$ 1,537,000	\$ 1,537,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	DPW	Bridge	Concord St Bridge over Charles River	Repair bridge in collaborative effort with the Town of Weston	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Library	Building	Library Interior Improvements	Replace worn out carpeting, flooring, and other immediate needs	\$ 500,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Public Buildings	Building	Craft Street Garage Roof	Replace failed 30+ year old roof membrane	\$ 625,000	\$ 625,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Schools	Building	Lincoln-Eliot School - Building upgrades	Upgrades including window replacement and accessibility improvements to the Lincoln-Eliot School	\$ 1,500,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Schools	Building	Newton Early Childhood Program	Address long term facility needs of the NECP at 687 Watertown Street	\$ 13,000,000	\$ 750,000	\$ 12,250,000	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Senior Center	Building	Newton Center for Active Living - NewCAL	Plan, site, design and build a new community and senior center, the Newton Center for Active Living.	\$ 16,650,000	\$ 350,000	\$ 250,000	\$ -	\$ -	\$ 16,050,000	\$ -	\$ -
Bonding	Schools	Building	Lincoln-Eliot at 150 Jackson Road	Elementary school at 150 Jackson Road, including site improvements, needed playground, and field space.	\$ 24,750,000	\$ 750,000	\$ 500,000	\$ -	\$ 23,500,000	\$ -	\$ -	\$ -
Bonding	Library	Building	Library Children's Room Expansion	Expand the undersized but heavily used Children's Room from 7100 sf to approximately 11,000. Expand restrooms, paint, carpet, re-furnish	\$ 1,500,000	\$ -	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Police	Building	Police Headquarters - Mechanical Upgrades	Replace Roof Top Mechanical equipment that is beyond its useful life. Currently requires a lot of maintenance and service calls. Install VRF to supply heating and air conditioning.	\$ 1,000,000	\$ -	\$ 60,000	\$ 940,000	\$ -	\$ -	\$ -	\$ -
Bonding	Public Buildings	Building	Elliot Street Sand Salt Shed - Replacement	Replace salt shed	\$ 500,000	\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -
Bonding	Police	Building	Police Headquarters - Site Security, Parking Lot, Accessibility	Site security upgrades including fencing, automated gates, controls, lighting, etc. Full depth repair and reconstruction of the parking lot. Reconstruct exterior ramp to code compliant slope. Provide accessible parking & signage.	\$ 720,000	\$ -	\$ -	\$ 120,000	\$ 600,000	\$ -	\$ -	\$ -
Bonding	Schools	Building	Newton South High School - Mechanical Upgrades - Library	Replace air handlers, roof top equipment, and hydronic/ACCU system due to burner failures and outdated controls.	\$ 300,000	\$ -	\$ -	\$ -	\$ 300,000	\$ -	\$ -	\$ -
Bonding	Police	Building	Police Headquarters -Roof	Replace roof with new PVC system, including the firing range. Appx 9000sf.	\$ 227,500	\$ -	\$ -	\$ -	\$ -	\$ 227,500	\$ -	\$ -
Bonding	Library	Building	Library HVAC Improvements	Replacement of chiller, boiler and AHU system	\$ 750,000	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ 250,000	\$ 250,000
Bonding	Parks & Rec	Building	Jeanette Curtis West Rec Ctr (The Hut) Renovation	Address facility needs for multiple programs.	\$ 2,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500,000	\$ -
Bonding	Police	Building	Police Headquarters - Plumbing and Finishes	Restroom, Locker Room, and Kitchen Renovations.	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ -

Funding Source	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Bonding	Public Buildings	Building	City Hall - Envelope - Masonry Repairs	On-going program to repair and repoint exterior masonry to preserve building envelope. Address worst areas first.	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Library	Building	Library Roof Membrane	Replace 22,000 sf of ballasted rubber membrane roof installed ca1990.	\$ 528,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Schools	Building	Bigelow School - Mechanical Distribution Upgrades	Project to replace unit ventilators, valves, controls, and distribution system components that are beyond their useful life.	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Public Buildings	Building	City Hall - Mechanical Upgrades	Replace condensing units, ductwork and fans. Add mini-split A/C units in conjunction with window restoration/replacement.	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Library	Building	Newton Free Library - Generator Replacement	Library used as cooling station for residents. Existing energy agreement mandates peak usage on auxillary power when regional demand is high extreme.	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Schools	Building	Mason Rice School - Electrical Upgrades	Replace emergency generator, electrical panels and sub-panels.	\$ 325,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Public Buildings	Building	Planning Department Renovation Project	Interior renovations to the Planning Department offices in the basement of City Hall to include upgrades to the HVAC, Plumbing, Electrical, and finishes	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Public Buildings	Building	City Hall - Roof Repair/Replacement	Install new membrane roof on flat roofs. Repair/replace gutters on balcony roofs. Replace metal roofing/flashing as required. Repair Cupola.	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Public Buildings	Building	Elliot St. Garage - Roof Repair/Replacement	Replace/repair EPDM roof. Replace damaged roof panels.	\$ 435,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Schools	Building	Williams School - Mechanical Upgrades	HVAC distribution upgrades in the boiler room and throughout the school	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Schools	Building	Bigelow School - Replace Windows and Doors	Replace aging windows and exterior doors to improve comfort, operation, and energy efficiency.	\$ 1,400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Public Buildings	Building	Elliot St. Operations Building - Interior and Finish Upgrades	Repaint steel framing in attic. Repair deteriorated concrete and CMU. Upgrade lighting and install new acoustical ceilings.	\$ 147,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	Schools	Building	Oak Hill School - Mechanical Upgrades - Roof Top Units and Distribution System	Replace Roof top air handling units and distribution system	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	DPW	Complete Streets	Complete Streets Improvements - Dedham @ Nahanton; Dedham @ Brookline	Upgrade traffic signal equipment, improve intersection alignment geometry, improve multimodal safety and operations and implement signal coordination	\$ 1,875,000	\$ 1,875,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	DPW	Complete Streets	Complete Streets Improvements - West Newton (Washington Street @Chestnut, Watertown, Cherry, Elm)	Upgrade traffic signal equipment, improve multimodal safety and operations, enhance streetscape, implement signal coordination	\$ 6,271,998	\$ 6,271,998	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	DPW	Complete Streets	Newton Free Library Parking Space Expansion, Repaving, and Drainage Improvements	In conjunction with installation of solar canopies, the library park lot will be reconfigured and reconstructed to add parking spaces and improve accessibility and drainage	\$ 1,239,000	\$ 489,000	\$ -	\$ 750,000	\$ -	\$ -	\$ -	\$ -
Bonding	DPW	Complete Streets	Parking Meter Replacement	Update and modernize parking meter infrastructure to improve reliability and convenience	\$ 1,500,000	\$ -	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -
Bonding	DPW	Complete Streets	Complete Streets Improvements - Centre Street (Rte. 9 - Walnut)	Upgrade traffic signal equipment, improve multimodal safety and operations, enhance streetscape, implement signal coordination, and paving	\$ 1,600,000	\$ -	\$ -	\$ -	\$ 250,000	\$ 1,350,000	\$ -	\$ -
Bonding	Parks & Rec	Complete Streets	Replace Gath/Albemarle Foot Bridge	Footbridge structure (steel and abutment) is in poor condition and is not accessible.	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ 400,000	\$ -	\$ -
Bonding	DPW	Complete Streets	Complete Streets Improvements - Cherry @ Webster, Cherry @ Derby	Upgrade traffic signal equipment, improve multimodal safety and operations at these two intersections	\$ 1,400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 160,000	\$ 1,240,000

Funding Source	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
CPA Eligible	Public Buildings	Building	Waban Community Library-Building Envelope and Entrance	Replace main entry walk and foundation walls and install railing. Rebuild side stairs at main entry. Rebuild stairs at rear entry. Install hand rail on one side of rear entry wall. Repair flashing of parapet walls.	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPA Eligible	Jackson Homestead	Building	Jackson Homestead - Exterior Windows & Doors	Restore existing windows, storm windows, shutters, and doors as historically appropriate.	\$ 192,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPA Eligible	Public Buildings	Building	Waban Community Library-Exterior Windows & Doors	Restore exterior wood door and install panic hardware. Replace areaway and rear door. Restore windows.	\$ 118,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPA Eligible	Public Buildings	Building	Auburndale Community Library - Building Envelope and Roof	Repair broken roof slates. Reflash where leaks are occurring. Repair/replace gutters and downspouts. Pitch rain leaders away from building. Repair concrete ramp.	\$ 128,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPA Eligible	Parks & Rec	Parks / Open Space	Levingston Cove, Shoreline improvements at Cystal Lake	Repair walkways, add rain gardens, remediate erosion, replace amenities.	\$ 450,000	\$ 50,000	\$ -	\$ 700,000	\$ -	\$ -	\$ -	\$ -
CPA Eligible	Parks & Rec	Parks / Open Space	Crescent Street Project - Rehab Ford Park	Rehabilitation of Ford Park	\$ 1,300,000	\$ -	\$ -	\$ -	\$ 1,300,000	\$ -	\$ -	\$ -
CPA Eligible	Parks & Rec	Parks / Open Space	City Hall and War Memorial Historic Landscape Preservation Project	Restoration and preservation of City Hall grounds Historic Landscape	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPA Eligible	Parks & Rec	Parks / Open Space	Chaffin Park Wall	Replacement of existing wall along perimeter of Chaffin Park (Vernon and Centre Streets)	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPA Eligible	Jackson Homestead	Parks / Open Space	Restoration of Historic East Burying Grounds	Tree work. Tomb restoration, gravestone repair, and other restoration. Repair stone gate posts. Install educational signage.	\$ 85,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPA Eligible/Bonding	Police	Building	Police Annex - Exterior Windows & Doors & Building Envelope	Restore/replace windows and doors with historically appropriate energy efficient units. Repoint exterior brick and entry ramp. Repair stone lintels.	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPA Eligible/Other Funds	Jackson Homestead	Building	Jackson Homestead - Basement	Finish basement galleries: New flooring; envelope treatment, gallery walls, (keep water and condensation out; achieve proper temperature humidity controls)	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPA Eligible/Other Funds	Planning	Parks / Open Space	Webster Woods	Acquire Webster Woods	\$ 16,040,000	\$ 100,000	\$ 15,940,000	\$ -	\$ -	\$ -	\$ -	\$ -
CPA Eligible/Other Funds	Jackson Homestead	Parks / Open Space	Restoration of Historic West Burying Grounds	Preservation of gravestones. Repair stone wall boundary. Install educational signage.	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPA Eligible/Other Funds	Jackson Homestead	Parks / Open Space	Restoration of Historic South Burying Grounds	Preservation of gravestones. Treework. Repair stone wall boundary. Install educational signage.	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPA Funds	Parks & Rec	Parks / Open Space	Manet Rd. Recreational Reservoir	Improve recreational space 5 acre parcel purchased from MWRA	\$ 375,000	\$ 375,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPA/Bonding/ Other Funds/State Contract	Parks & Rec	Parks / Open Space	Newton Highlands Playground - Phase II Design & Construction	Part of 2008 Master Plan for park renovation in 2 phases. Phase II is for construction	\$ 3,245,000	\$ 2,900,000	\$ -	\$ 345,000	\$ -	\$ -	\$ -	\$ -
Free Cash	Fire Dept	Building	System Upgrades at Station 1 & 2	Interior building system upgrades to isolate the apparatus bays from the living quarters.	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Free Cash	Schools	Building	Newton North Pool Air Handling Unit (AHU)	The unit is deteriorating and needs replacing and heating capability.	\$ 350,000	\$ -	\$ -	\$ 350,000	\$ -	\$ -	\$ -	\$ -
Free Cash	DPW	Complete Streets	Comm Ave Carriageway Improvements and Charles River Trail Connection	Connect trails and transform the Commonwealth Avenue Carriageway between Lyons Field and the Charles River	\$ 400,000	\$ -	\$ 100,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -
Free Cash	IT	Software	Replacement of City Hall Storage Area Network (SAN)	Replace Storage Area Network at end of life span.	\$ 384,000	\$ -	\$ 384,000	\$ -	\$ -	\$ -	\$ -	\$ -
Free Cash/Bonding	Schools	Building	Horace Mann School Improvements	Install sinks in second floor classrooms, make improvements to playground facilities, and other school upgrades	TBD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Free Cash/Grant	DPW	Complete Streets	Accessible Pedestrian Signal (APS) Installations	Replacing existing pedestrian push buttons with APS buttons at signalized intersections throughout City.	\$ 300,000	\$ 225,000	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -

Funding Source	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Golf Course Funding	Public Buildings	Building	Newton Commonwealth Golf Course Maintenance Facility Project	Renovation and Addition to the Golf Course Maintenance Facility	\$ 1,200,000	\$ -	\$ -	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -
Mass Works Grant/Free Cash	DPW	Complete Streets	Complete Streets Improvements - Oak & Christina	Upgrade traffic signal equipment, improve intersection alignment geometry, improve multimodal safety and operations	\$ 2,375,000	\$ 2,375,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MSBA-ARP/Bonding	Schools	Building	FA Day School - Replace Boilers	Replace two 60 year old boilers and variable air volume (VAV) coil work.	\$ 1,610,000	\$ 50,000	\$ 1,160,000	\$ -	\$ -	\$ -	\$ 400,000	\$ -
MSBA-ARP/Bonding	Schools	Building	Bowen School - Roof Replacement	Replace 1950's portion of the building's roofing system as it has reached its life expectancy.	\$ 450,000	\$ -	\$ -	\$ -	\$ -	\$ 450,000	\$ -	\$ -
MSBA-ARP/Bonding	Schools	Building	Memorial Spaulding School - Replace Roof	Replace 1980's Built up roof area. It has reached its life expectancy.	\$ 350,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 350,000	\$ -
MWRA Grant/Loan	DPW/ Sewer	Sewer	Sewer Inflow /Infiltration Project - Area 7 - Upper Falls, Highlands, Thompsonville	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 6 of City-Wide Sewer Initiative.	\$ 9,057,000	\$ 4,157,000	\$ 4,900,000	\$ -	\$ -	\$ -	\$ -	\$ -
MWRA Grant/Loan/Sewer Funds	DPW/ Sewer	Sewer	Sewer Inflow/Infiltration Project - Area 8 - Upper Falls, Highlands, Thomspsonville & Oak Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in Year 7 of City-Wide Sewer Initiative.	\$ 9,100,000	\$ -	\$ -	\$ 9,100,000	\$ -	\$ -	\$ -	\$ -
NPS Charter Maintenance	Schools	Complete Streets	Schools - Repave Parking Areas	Repave parking areas and sidewalks in poor condition at Ward, Brown, Mason Rice, Oak Hill, Williams and Peirce.	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Funds/Bonding	Parks & Rec	Parks / Open Space	Newton South High School Athletic Field Renovation	Replacement of synthetic turf at Brandeis Road and Stadium fields. Current field was installed in 2007	\$ 1,400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Funds/Bonding	Parks & Rec	Parks / Open Space	Newton North High School Turf Field Replacement	Replace the turf field at Newton North High School. Current field was installed in 2010	\$ 700,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Potential for partial CPA Eligibility	Public Buildings	Building	City Hall - Exterior Windows & Doors	Restore/replace windows in phases to improve energy efficiency, functionality and comfort, and to preserve exterior wall.	\$ 3,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Requested CPA	Public Buildings	Building	War Memorial Accessibility/Historic Improvements	Repair and repoint stone cornice. Rebuild/reset main entry stairs and install code-compliant railings. Implement recommendations from 2007 Study of the Memorial Stairs.	\$ 2,332,000	\$ -	\$ -	\$ 1,166,000	\$ 1,166,000	\$ -	\$ -	\$ -
Sewer Funds	DPW/ Sewer	Sewer	Sewer Inflow/ Infiltration Project - Area 5 - Newton Centre, Newtonville & Chestnut Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Project was for year 4 of City-Wide Sewer Initiative.	\$ 4,167,572	\$ 4,167,572	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sewer Funds	DPW/ Sewer	Sewer	Sewer Inflow /Infiltration Project - Area 6 - Newton Centre, Newtonville, Chesnut Hill, & Nonantum	Part of 10 year program to remove excess inflow and infiltration into sewer system. Currently in year 5 of City-Wide Sewer Initiative.	\$ 6,011,859	\$ 6,011,859	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sewer Funds	DPW/ Sewer	Sewer	Quinobequin Road Sewer Pump Station - Replace Pump	Sewerage pumped to higher point and gravity fed to MWRA pipes for treatment. Replace pump 1 and motors at life expectancy.	\$ 150,000	\$ -	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
Sewer Funds	DPW/ Sewer	Sewer	Pump Station Assessment Upgrades	Develop CIP for three water booster and ten wastewater pump stations throughout the city	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Sewer Funds	DPW/ Sewer	Sewer	Sewer Inflow/Infiltration Project - Area 9 - Waban, Upper Falls & Oak Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 8 of City-Wide Sewer Initiative.	\$ 4,630,000	\$ 670,000	\$ -	\$ 207,000	\$ 3,753,000	\$ -	\$ -	\$ -
Sewer Funds	DPW/ Sewer	Sewer	Sewer Inflow/Infiltration Project - Area 10 - Waban, Newton Highlands, Newton Centre, & Newton Corner	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 9 of City-Wide Sewer Initiative.	\$ 4,600,000	\$ -	\$ -	\$ 670,000	\$ 207,000	\$ 3,693,000	\$ -	\$ -
Sewer Funds	DPW/ Sewer	Sewer	Sewer Inflow/Infiltration Project - Area 11 - Chestnut Hill, Newton Corner, Oak Hill, & Thompsonville	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 10 of City-Wide Sewer Initiative.	\$ 4,600,000	\$ -	\$ -	\$ -	\$ 670,000	\$ 207,000	\$ 3,693,000	\$ -
Sewer Funds	DPW/ Sewer	Sewer	Sewer Inflow/Infiltration	Investigation, Design & Construction of sewer laterals & manholes along interceptor sewers within Cheesecake and Laundry Brook Drainage Basins	\$ 2,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
State Grant	Parks & Rec	Parks / Open Space	Newton South Tennis Court Lights & Field House Lighting Upgrades	Lighting improvements for twelve courts and field house at Newton South High School.	\$ 111,217	\$ -	\$ 111,217	\$ -	\$ -	\$ -	\$ -	\$ -

Funding Source	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Storm Funds	Public Buildings	Building	Wash Bay Refurbishment	Refurbish Crafts Street vehicle wash bay with automated vehicle wash system, including capture/recycle wash water.	\$ 500,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storm Funds	DPW/ Storm	Storm	Hammond Brook Pipe Replacement	Replace 24" storm drain due to deteriorated structure	\$ 541,600	\$ 541,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storm Funds	DPW/ Storm	Storm	Rehabilitation of the Forest Grove Pump Station	Replace electrical controls, level sensors, replace trash grate & fencing, include structural repairs to building structure in Auburndale on Charles River	\$ 409,800	\$ 409,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storm Funds	DPW/ Storm	Storm	Bullough's Pond Dam	Complete State-Required repair work by January 16, 2020	\$ 890,000	\$ 90,000	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ -
Storm Funds	DPW/ Storm	Storm	South Meadow Brook Culvert under Needham Street	Year 1 - Inspection & assessment of box culvert prior to the reconstruction of Needham Street. Year 2 Design & Rehabilitation of Box Culvert prior to the Reconstruction of Needham Street	\$ 780,000	\$ 280,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -
Storm Funds	DPW/ Storm	Storm	Edmunds Brook Spillway	Repair concrete spillway/brook walls and trash grate downstream of Edmunds Pond.	\$ 504,000	\$ 104,000	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -
Storm Funds	DPW/ Storm	Storm	City Hall Ponds	Removal of sediment from 3 ponds adjacent to City Hall, 1000 Commonwealth Avenue	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -
Storm Funds	DPW/ Storm	Storm	Union Street Drainage	The extension of storm drains on Union Street to alleviate flooding and icing issues in the area of Herrick Road	\$ 625,000	\$ -	\$ 625,000	\$ -	\$ -	\$ -	\$ -	\$ -
Storm Funds	DPW/ Storm	Storm	Evaluation, design and construction of Cheesecake Brook-Commonwealth Av. to the rear of 1600 Washington Street	Replace culvert headwall, remove remaining fieldstone channel walls to restore natural brook channel and provide buffer for nutrient removal (water quality).	\$ 550,000	\$ -	\$ -	\$ 550,000	\$ -	\$ -	\$ -	\$ -
Storm Funds	DPW/ Storm	Storm	Elliot & Crafts Street DPW Operations Yard	Modifications to existing storm water infrastructure to meet NPDES MS4 General Permits BMP's	\$ 1,000,000	\$ -	\$ -	\$ 200,000	\$ 800,000	\$ -	\$ -	\$ -
Storm Funds	DPW/ Storm	Storm	Cheesecake Brook -1660 Washington St. to Watertown St.	Inspection & Assessment, Design and Rehabilitation Of +/-6000 LF of Box Culvert	\$ 900,000	\$ -	\$ -	\$ -	\$ 200,000	\$ 700,000	\$ -	\$ -
Storm Funds	DPW/ Storm	Storm	Laundry Brook Culvert-Hull street to Bridges Avenue	Design and construction of culvert rehabilitation from Hull St to Bridges Ave.	\$ 750,000	\$ -	\$ -	\$ -	\$ -	\$ 750,000	\$ -	\$ -
Storm Funds	DPW/ Storm	Storm	Cheesecake Brook-Watertown St. to Charles River	Inspection & Assessment, Design and Rehabilitation of Fieldstone Channel walls and floor	\$ 1,450,000	\$ -	\$ -	\$ -	\$ -	\$ 725,000	\$ 725,000	\$ -
Storm Funds	DPW/ Storm	Storm	Laundry Brook Culvert-Parkview to Mass Pike	Rehabilitation +/-1000 LF Box Culvert based on FY 18 evaluation.	\$ 650,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 650,000
Storm Funds	DPW/ Storm	Storm	Cheesecake Brook Roadway Culvert Crossings	Design & Construction of culvert improvements at Parsons, Cross and Eddy Street	\$ 750,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750,000
Storm Funds	DPW/ Storm	Storm	Reduce Impervious Area	Reduce Impervious Area to 5 Municipal Properties per NPDES MS4 Requirements	\$ 650,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 650,000
Storm Funds	DPW/ Storm	Storm	Pellegrini Park Drain Replacement	Storm drain between Jenison and Hawthorne needs to be replaced due to structural failure, causing flooding at Jenison @ Judkins.	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storm Funds	DPW/ Storm	Storm	Hammond Brook-Glen Ave. to Centre St.	Cleaning, Inspection, Structural Evaluation, Design, Rehabilitation and Construction of Hammond Brook Culvert.	\$ 600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stormwater Funds/State Grant/Other Funds	Parks & Rec	Parks / Open Space	Lyons Field Drainage Improvements	Complete renovation of the natural grass area including, installing trench sub-drainage, connecting to the park storm drainage system, and sodding the field.	\$ 400,000	\$ -	\$ -	\$ 400,000	\$ -	\$ -	\$ -	\$ -
TIP Funding	DPW	Complete Streets	Needham Street Upgrades	TIP Project to Pave and Improve Needham Street - Funded by Commonwealth	\$ 26,800,000	\$ 26,800,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Funds	DPW/ Water	Water	Replace Water Pipelines - Year 7	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project was for Year 7 of 20 year program.	\$ 4,546,200	\$ 4,546,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Funding Source	Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Water Funds	DPW/ Water	Water	Replace Water Pipelines - Year 8	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project is currently Year 8 of 20 year program.	\$ 4,560,200	\$ 4,560,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Funds	DPW/ Water	Water	Replace Water Pipelines - Year 9	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in year 9 of 20 year program.	\$ 4,750,000	\$ -	\$ 4,750,000	\$ -	\$ -	\$ -	\$ -	\$ -
Water Funds	DPW/ Water	Water	Waban Hill Covered Reservoir	Rehabilitation of pipes, valves, all appurtenances and roof replacement. Includes cleaning, inspection, design, construction, and services.	\$ 600,000	\$ -	\$ 600,000	\$ -	\$ -	\$ -	\$ -	\$ -
Water Funds	DPW/ Water	Water	Large Water Meter Changeout Program	Removal & Replacement of 125 commercial electromagnetic water meters sized 2"-8" diameter.	\$ 1,050,000	\$ -	\$ 350,000	\$ 350,000	\$ 350,000	\$ -	\$ -	\$ -
Water Funds	DPW/ Water	Water	Replace Water Pipelines - Year 10	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in Year 10 of 20 year program.	\$ 4,750,000	\$ -	\$ -	\$ 4,750,000	\$ -	\$ -	\$ -	\$ -
Water Funds	DPW/ Water	Water	Replace Water Pipelines - Year 11	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in year 11 of 20 year program.	\$ 4,750,000	\$ -	\$ -	\$ -	\$ 4,750,000	\$ -	\$ -	\$ -
Water Funds	DPW/ Water	Water	Replace Water Pipelines - Year 12	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in year 12 of 20 year program.	\$ 4,750,000	\$ -	\$ -	\$ -	\$ -	\$ 4,750,000	\$ -	\$ -
Water Funds	DPW/ Water	Water	Replace Water Pipelines - Year 13	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in year 13 of 20 year program.	\$ 4,750,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,750,000	\$ -
Water Funds	DPW/ Water	Water	Replace Water Pipelines - Year 14	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in year 14 of 20 year program.	\$ 4,750,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,750,000
Water Funds	DPW/ Water	Water	Winchester Storage Tanks	Demo and de-commissioning of the elevated storage tanks for fire flow that are no longer needed.	\$ 407,000	\$ 407,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Parks & Rec	Parks / Open Space	Nahanton Park - Nature Center Accessibility	Renovation of two existing parking areas and upgrades to pedestrian connection to Nature Center - Canoe and Kayak Rental Building	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Need:					\$ 661,884,817	\$ 92,024,600	\$ 62,904,217	\$ 38,737,000	\$ 57,546,000	\$ 140,639,500	\$ 27,428,000	\$ 24,440,000

CIP by Department FY2021-FY2025

						Total	Total	Total	Total	Total	Total	Total
						\$ 92,024,600	\$ 62,904,217	\$ 38,737,000	\$ 57,546,000	\$ 140,639,500	\$ 27,428,000	\$ 24,440,000
Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Clerk	Building	City Hall - Increase City Clerk Archive Storage	Develop plans to expand archival storage to accommodate and preserve archival collections and to comply with MGL mandated record storage requirements.	\$ 100,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Clerk	Equipment	New Voting Equipment	Replace current equipment with new state-approved voting equipment.	\$ 150,000	Bonding	\$ -	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
DPW	Bridge	Concord St Bridge over Charles River	Repair bridge in collaborative effort with the Town of Weston	\$ 1,000,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW	Climate Action	Municipal EV Chargers	Purchase and install EV chargers at municipal and school parking lots throughout the city (electrical connections provided by Eversource grants)	\$ 400,000	Bonding/School Funds/Grant	\$ -	\$ -	\$ 150,000	\$ 150,000	\$ 100,000	\$ -	\$ -
DPW	Complete Streets	Complete Streets Improvements - Dedham @ Nahanton; Dedham @ Brookline	Upgrade traffic signal equipment, improve intersection alignment geometry, improve multimodal safety and operations and implement signal coordination	\$ 1,875,000	Bonding	\$ 1,875,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	Needham Street Upgrades	TIP Project to Pave and Improve Needham Street - Funded by Commonwealth	\$ 26,800,000	TIP Funding	\$ 26,800,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	Newton Corner ADA Traffic Signal and Sidewalk Improvements	Install APS (Accessible Pedestrian Signals) at 10+ traffic signal locations, install ADA compliant ramps, upgrade sidewalk, landscaping	\$ 921,960	CDBG/Free Cash	\$ 921,960	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	Complete Streets Improvements - Oak & Christina	Upgrade traffic signal equipment, improve intersection alignment geometry, improve multimodal safety and operations	\$ 2,375,000	Mass Works Grant/Free Cash	\$ 2,375,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	Complete Streets Improvements - West Newton (Washington Street @Chestnut, Watertown, Cherry, Elm)	Upgrade traffic signal equipment, improve multimodal safety and operations, enhance streetscape, implement signal coordination	\$ 6,271,998	Bonding	\$ 6,271,998	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	Accelerated Roads Program - Paving/Sidewalks/Accessibility	10 year Paving Initiative - Repair and Pave Scheduled Streets, Sidewalks and Parking Lots throughout the City.	\$ 95,000,000	Chapt 90/Free Cash/2013 Override	\$ 9,500,000	\$ 6,000,000	\$ 9,500,000	\$ 9,500,000	\$ 9,500,000	\$ 9,500,000	\$ 9,500,000
DPW	Complete Streets	Complete Streets Improvements -Newtonville Traffic Signal/Corridor - Walnut Street (Walnut @ Cabot)	Improve safety and pedestrian accommodations, upgrade traffic signal equipment, enhance streetscape, improve multimodal safety and operations	\$ 6,297,411	Bonding/Mitigation Fund	\$ 547,411	\$ 5,750,000	\$ -	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	Newton Free Library Parking Space Expansion, Repaving, and Drainage Improvements	In conjunction with installation of solar canopies, the library park lot will be reconfigured and reconstructed to add parking spaces and improve accessibility and drainage	\$ 1,239,000	Bonding	\$ 489,000	\$ -	\$ 750,000	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	Accessible Pedestrian Signal (APS) Installations	Replacing existing pedestrian push buttons with APS buttons at signalized intersections throughout City.	\$ 300,000	Free Cash/Grant	\$ 225,000	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	25% Conceptual Design for Washington Street Corridor	Conceptual Design to improve safety and pedestrian accommodations, Improve traffic flow, ADA compliance	\$ 2,650,000	Bonding/Free Cash	\$ 250,000	\$ 400,000	\$ 2,000,000	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	Parking Meter Replacement	Update and modernize parking meter infrastructure to improve reliability and convenience	\$ 1,500,000	Bonding	\$ -	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	Comm Ave Carriageway Improvements and Charles River Trail Connection	Connect trails and transform the Commonwealth Avenue Carriageway between Lyons Field and the Charles River	\$ 400,000	Free Cash	\$ -	\$ 100,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	Complete Streets Improvements - Wells Ave @ Nahanton	Upgrade traffic signal equipment, install ADA compliant ramps, improve multimodal safety and operations	\$ 4,000,000	Bonding/Other Funds	\$ 105,000	\$ 129,000	\$ 129,000	\$ 200,000	\$ 3,437,000	\$ -	\$ -

Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
DPW	Complete Streets	Complete Streets Improvements - Centre Street (Rte. 9 - Walnut)	Upgrade traffic signal equipment, improve multimodal safety and operations, enhance streetscape, implement signal coordination, and paving	\$ 1,600,000	Bonding	\$ -	\$ -	\$ -	\$ 250,000	\$ 1,350,000	\$ -	\$ -
DPW	Complete Streets	Complete Streets Improvements - Beacon @ Walnut (4 Corners)	Upgrade traffic signal equipment, improve multimodal safety and operations, install ADA compliant ramps	\$ 1,150,000	Bonding/Other Funds	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ 1,000,000	\$ -
DPW	Complete Streets	Complete Streets Improvements - Cherry @ Webster, Cherry @ Derby	Upgrade traffic signal equipment, improve multimodal safety and operations at these two intersections	\$ 1,400,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 160,000	\$ 1,240,000
DPW	Complete Streets	Complete Streets Improvements - Washington Street - West Newton to Newton Corner - Construction	Construction to improve safety and pedestrian accomodations, Improve traffic flow, ADA compliance	\$ 30,000,000	Bonding/Other Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500,000
DPW	Complete Streets	Complete Streets Improvements - Intersection at Auburn Street/Grove Street/Central Street	Upgrade traffic signal equipment and make ADA improvements	\$ 850,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	Complete Streets Improvements - Commonwealth Ave. at Chestnut Street	Upgrade traffic signal equipment and make ADA improvements	\$ 600,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	Complete Streets Improvements - Beacon @ Chestnut	Upgrade traffic signal equipment, improve multimodal safety and operations	\$ 1,245,000	Bonding/Free Cash	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW	Complete Streets	Complete Streets Improvements - Newton Centre	Upgrade traffic signal equipment, improve multimodal safety and operations, enhance streetscape, implement signal coordination	\$ 7,500,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW	Large Vehicle / Equipment	City-wide Municipal Vehicles and Equipment	Vehicle and Equipment Replacement Program for Construction and other city operations (not including public safety vehicles)	\$ 30,000,000	Bonding/Other Funds	\$ 2,772,000	\$ 120,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000
DPW/ Sewer	Sewer	Sewer Inflow/ Infiltration Project - Area 5 - Newton Centre, Newtonville & Chestnut Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Project was for year 4 of City-Wide Sewer Initiative.	\$ 4,167,572	Sewer Funds	\$ 4,167,572	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Sewer	Sewer	Sewer Inflow /Infiltration Project - Area 6 - Newton Centre, Newtonville, Chesnut Hill, & Nonantum	Part of 10 year program to remove excess inflow and infiltration into sewer system. Currently in year 5 of City-Wide Sewer Initiative.	\$ 6,011,859	Sewer Funds	\$ 6,011,859	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Sewer	Sewer	Sewer Inflow /Infiltration Project - Area 7 - Upper Falls, Highlands, Thompsonville	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 6 of City-Wide Sewer Initiative.	\$ 9,057,000	MWRA Grant/Loan	\$ 4,157,000	\$ 4,900,000	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Sewer	Sewer	Sewer Inflow/Infiltration Project - Area 8 - Upper Falls, Highlands, Thomsponville & Oak Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in Year 7 of City-Wide Sewer Initiative.	\$ 9,100,000	MWRA Grant/Loan/Sewer Funds	\$ -	\$ -	\$ 9,100,000	\$ -	\$ -	\$ -	\$ -
DPW/ Sewer	Sewer	Quinobequin Road Sewer Pump Station - Replace Pump	Sewerage pumped to higher point and gravity fed to MWRA pipes for treatment. Replace pump 1 and motors at life expectancy.	\$ 150,000	Sewer Funds	\$ -	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
DPW/ Sewer	Sewer	Pump Station Assessment Upgrades	Develop CIP for three water booster and ten wastewater pump stations throughout the city	\$ 200,000	Sewer Funds	\$ -	\$ -	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
DPW/ Sewer	Sewer	Sewer Inflow/Infiltration Project - Area 9 - Waban, Upper Falls & Oak Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 8 of City-Wide Sewer Initiative.	\$ 4,630,000	Sewer Funds	\$ 670,000	\$ -	\$ 207,000	\$ 3,753,000	\$ -	\$ -	\$ -
DPW/ Sewer	Sewer	Sewer Inflow/Infiltration Project - Area 10 - Waban, Newton Highlands, Newton Centre, & Newton Corner	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 9 of City-Wide Sewer Initiative.	\$ 4,600,000	Sewer Funds	\$ -	\$ -	\$ 670,000	\$ 207,000	\$ 3,693,000	\$ -	\$ -
DPW/ Sewer	Sewer	Sewer Inflow/Infiltration Project - Area 11 - Chestnut Hill, Newton Corner, Oak Hill, & Thompsonville	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 10 of City-Wide Sewer Initiative.	\$ 4,600,000	Sewer Funds	\$ -	\$ -	\$ -	\$ 670,000	\$ 207,000	\$ 3,693,000	\$ -
DPW/ Sewer	Sewer	Sewer Inflow/Infiltration	Investigation, Design & Construction of sewer laterals & manholes along interceptor sewers within Cheesecake and Laundry Brook Drainage Basins	\$ 2,000,000	Sewer Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Storm	Storm	Hammond Brook Pipe Replacement	Replace 24" storm drain due to deteriorated structure	\$ 541,600	Storm Funds	\$ 541,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
DPW/ Storm	Storm	Rehabilitation of the Forest Grove Pump Station	Replace electrical controls, level sensors, replace trash grate & fencing, include structural repairs to building structure in Auburndale on Charles River	\$ 409,800	Storm Funds	\$ 409,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Storm	Storm	Bullough's Pond Dam	Complete State-Required repair work by January 16, 2020	\$ 890,000	Storm Funds	\$ 90,000	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Storm	Storm	South Meadow Brook Culvert under Needham Street	Year 1 - Inspection & assessment of box culvert prior to the reconstruction of Needham Street. Year 2 Design & Rehabilitation of Box Culvert prior to the Reconstruction of Needham Street	\$ 780,000	Storm Funds	\$ 280,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Storm	Storm	Edmunds Brook Spillway	Repair concrete spillway/brook walls and trash grate downstream of Edmunds Pond.	\$ 504,000	Storm Funds	\$ 104,000	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Storm	Storm	City Hall Ponds	Removal of sediment from 3 ponds adjacent to City Hall, 1000 Commonwealth Avenue	\$ 500,000	Storm Funds	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Storm	Storm	Union Street Drainage	The extension of storm drains on Union Street to alleviate flooding and icing issues in the area of Herrick Road	\$ 625,000	Storm Funds	\$ -	\$ 625,000	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Storm	Storm	Evaluation, design and construction of Cheesecake Brook-Commonwealth Av. to the rear of 1600 Washington Street	Replace culvert headwall, remove remaining fieldstone channel walls to restore natural brook channel and provide buffer for nutrient removal (water quality).	\$ 550,000	Storm Funds	\$ -	\$ -	\$ 550,000	\$ -	\$ -	\$ -	\$ -
DPW/ Storm	Storm	Elliot & Crafts Street DPW Operations Yard	Modifications to existing storm water infrastructure to meet NPDES MS4 General Permits BMP's	\$ 1,000,000	Storm Funds	\$ -	\$ -	\$ 200,000	\$ 800,000	\$ -	\$ -	\$ -
DPW/ Storm	Storm	Cheesecake Brook -1660 Washington St. to Watertown St.	Inspection & Assessment, Design and Rehabilitation Of +/-6000 LF of Box Culvert	\$ 900,000	Storm Funds	\$ -	\$ -	\$ -	\$ 200,000	\$ 700,000	\$ -	\$ -
DPW/ Storm	Storm	Laundry Brook Culvert-Hull street to Bridges Avenue	Design and construction of culvert rehabilitation from Hull St to Bridges Ave.	\$ 750,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ 750,000	\$ -	\$ -
DPW/ Storm	Storm	Cheesecake Brook-Watertown St. to Charles River	Inspection & Assessment, Design and Rehabilitation of Fieldstone Channel walls and floor	\$ 1,450,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ 725,000	\$ 725,000	\$ -
DPW/ Storm	Storm	Laundry Brook Culvert-Parkview to Mass Pike	Rehabilitation +/-1000 LF Box Culvert based on FY 18 evaluation.	\$ 650,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 650,000
DPW/ Storm	Storm	Cheesecake Brook Roadway Culvert Crossings	Design & Construction of culvert improvements at Parsons, Cross and Eddy Street	\$ 750,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750,000
DPW/ Storm	Storm	Reduce Impervious Area	Reduce Impervious Area to 5 Municipal Properties per NPDES MS4 Requirements	\$ 650,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 650,000
DPW/ Storm	Storm	Pellegrini Park Drain Replacement	Storm drain between Jenison and Hawthorne needs to be replaced due to structural failure, causing flooding at Jenison @ Judkins.	\$ 200,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Storm	Storm	Hammond Brook-Glen Ave. to Centre St.	Cleaning, Inspection, Structural Evaluation, Design, Rehabilitation and Construction of Hammond Brook Culvert.	\$ 600,000	Storm Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Water	Water	Replace Water Pipelines - Year 7	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project was for Year 7 of 20 year program.	\$ 4,546,200	Water Funds	\$ 4,546,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Water	Water	Winchester Storage Tanks	Demo and de-commissioning of the elevated storage tanks for fire flow that are no longer needed.	\$ 407,000	Water Funds	\$ 407,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Water	Water	Replace Water Pipelines - Year 8	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project is currently Year 8 of 20 year program.	\$ 4,560,200	Water Funds	\$ 4,560,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DPW/ Water	Water	Replace Water Pipelines - Year 9	Cleaning and lining of water pipes to improve water quality, reduce water leakage and ensure pipe integrity and capacity. Precedes scheduled roadway paving. Project will be in year 9 of 20 year program.	\$ 4,750,000	Water Funds	\$ -	\$ 4,750,000	\$ -	\$ -	\$ -	\$ -	\$ -

Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Parks & Rec	Building	Pelligrini Park Field House - Electrical Upgrades	Upgrade lighting and power distribution for energy efficiency. Provide protective cages over gym fixtures. Replace electric panels.	\$ 176,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Complete Streets	Replace Gath/Albemarle Foot Bridge	Footbridge structure (steel and abutement) is in poor condition and is not accessible.	\$ 400,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ 400,000	\$ -	\$ -
Parks & Rec	Parks / Open Space	Manet Rd. Recreational Reservoir	Improve recreational space 5 acre parcel purchased from MWRA	\$ 375,000	CPA Funds	\$ 375,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Newton Highlands Playground - Phase II Design & Construction	Part of 2008 Master Plan for park renovation in 2 phases. Phase II is for construction	\$ 3,245,000	CPA/Bonding/ Other Funds/State Contract	\$ 2,900,000	\$ -	\$ 345,000	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Levingston Cove, Shoreline improvements at Cystal Lake	Repair walkways, add rain gardens, remediate erosion, replace amenities.	\$ 450,000	CPA Eligible	\$ 50,000	\$ -	\$ 700,000	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Newton South Tennis Court Lights & Field House Lighting Upgrades	Lighting improvements for twelve courts and field house at Newton South High School.	\$ 111,217	State Grant	\$ -	\$ 111,217	\$ -	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Lyons Field Drainage Improvements	Complete renovation of the natural grass area including, installing trench sub-drainage, connecting to the park storm drainage system, and sodding the field.	\$ 400,000	Stormwater Funds/State Grant/Other Funds	\$ -	\$ -	\$ 400,000	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Halloran Field Lights (at Albemarle)	Replace sports lighting at Halloran (Albermarle)	\$ 360,000	Bonding/Energy Stabilization	\$ -	\$ -	\$ 360,000	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Crescent Street Project - Rehab Ford Park	Rehabilitation of Ford Park	\$ 1,300,000	CPA Eligible	\$ -	\$ -	\$ -	\$ 1,300,000	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Tennis Courts - Replace Burr Park Tennis Courts	Redesign & construct existing tennis courts at Burr Park (Waverly Park). Additional work includes repair of retaining wall	\$ 600,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600,000	\$ -
Parks & Rec	Parks / Open Space	Gath Pool	Replacement of Gath Pool Facility	\$ 9,200,000	Bonding/Potenital for partial CPA Eligibility/Alternate Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Forte Park (Nonantum)	Synthetic Turf field to include softball field, natural turf soccer field, lights and accessibility.	\$ 2,000,000	Bonding/Other Funds/Potential for partial CPA Eligibility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Old Cold Spring Field	Renovation of existing field space to include crowning, drainge, irrigation and accessibility improvements.	\$ 350,000	Bonding/CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Halloran Sports Complex at Albemarle	Synthetic Turf field to include baseball and football/soccer field	\$ 4,600,000	Bonding/Other funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Newton Upper Falls/ Braceland Playground - Design & Construction	Master Plan for park renovation - Construction will include new athletic fields, new play structure and site work and improvements.	\$ 1,675,000	Bonding/CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Pellegrini Field Lights	Replace sports lighting at Pellegrini	\$ 100,000	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	City Hall and War Memorial Historic Landscape Preservation Project	Restoration and preservation of City Hall grounds Historic Landscape	\$ 1,500,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Chaffin Park Wall	Replacement of existing wall along perimeter of Chaffin Park (Vernon and Centre Streets)	\$ 200,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Newton South High School Athletic Field Renovation	Replacement of synthetic turf at Brandeis Road and Stadium fields. Current field was installed in 2007	\$ 1,400,000	Other Funds/Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Newton North High School Turf Field Replacement	Replace the turf field at Newton North High School. Current field was installed in 2010	\$ 700,000	Other Funds/Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parks & Rec	Parks / Open Space	Nahanton Park - Nature Center Accessibility	Renovation of two existing parking areas and upgrades to pedestrian connection to Nature Center - Canoe and Kayak Rental Building	\$ 150,000		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	Parks / Open Space	Webster Woods	Acquire Webster Woods	\$ 16,040,000	CPA Eligible/Other Funds	\$ 100,000	\$ 15,940,000	\$ -	\$ -	\$ -	\$ -	\$ -
Police	Building	Police Headquarters - Mechanical Upgrades	Replace Roof Top Mechanical equipment that is beyond its useful life. Currently requires a lot of maintenance and service calls. Install VRF to supply heating and air conditioning.	\$ 1,000,000	Bonding	\$ -	\$ 60,000	\$ 940,000	\$ -	\$ -	\$ -	\$ -

Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Police	Building	Police Headquarters - Site Security, Parking Lot, Accessibility	Site security upgrades including fencing, automated gates, controls, lighting, etc. Full depth repair and reconstruction of the parking lot. Reconstruct exterior ramp to code compliant slope. Provide accessible parking & signage.	\$ 720,000	Bonding	\$ -	\$ -	\$ 120,000	\$ 600,000	\$ -	\$ -	\$ -
Police	Building	Police Headquarters -Roof	Replace roof with new PVC system, including the firing range. Appx 9000sf.	\$ 227,500	Bonding	\$ -	\$ -	\$ -	\$ -	\$ 227,500	\$ -	\$ -
Police	Building	Police Headquarters - Plumbing and Finishes	Restroom, Locker Room, and Kitchen Renovations.	\$ 200,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ -
Police	Building	Police Headquarters - Interior	Interior spacial reconfiguration and renovations to improve programmatic functions and finish conditions.	\$ 500,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000
Police	Building	Police Headquarters - Emergency Electrical	Replace Emegerency Generator and tie in Police Garage.	\$ 250,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Police	Building	Police Annex - Emergency Generator	Replace generator with emergency battery back-up system, and install emergy electrical distribution throughout the building. Update system for ADA compliance. Upgrade exterior lighting & occupancy sensors.	\$ 200,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Police	Building	Police Garage - Roof Replacement	Replace PVC roof installed in the 1990's and overlaid in 2019 as required. It has reached life expectancy. Repair water divertor above support service door.	\$ 193,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Police	Building	Police Annex - Exterior Windows & Doors & Building Envelope	Restore/replace windows and doors with historically appropriate energy efficient units. Repoint exterior brick and entry ramp. Repair stone lintels.	\$ 200,000	CPA Eligible/Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Police	Building	Police Annex - Mechanical Upgrades	Install VRF heating and cooling to replace the aging boiler.	\$ 200,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Police	Building	Police Annex - Roof Restoration/ Replacement	Remove and replace slate roofing, gutters and downspouts. Install new EPDM Roof. Reattach downspouts.	\$ 250,500	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Police	Building	Police Garage - Mechanical Upgrades	Replace ceiling hung unit heaters. Provide bathroom exhaust fan and split air conditioning system. Remove abandoned steam piping to prevent possibility of freezing.	\$ 164,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Police	Building	Police Garage - Electrical Upgrades	Upgrade interior and exterior lighting for energy. Replace conduit, wiring, distribution panel. Upgrade smoke/fire detection system.	\$ 150,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Police	Building	Police Headquarters - Repair Concrete	Repair concrete at the fire range ceiling. Rebuild tunnel ceiling, waterproof, etc. Repair Interior CMU and concrete walls. Tuckpoint mortar joints. Cornice Restoration. Repoint chimney and restore parapet cap.	\$ 250,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Police	Building	Police Annex - Accessibility Upgrades	Provide accessible toilet rooms, door hardware, signage and drinking fountain. Provide a lower transaction counter.	\$ 200,000	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Police	Building	Police Garage - Accessibility/Site Upgrades	Provide accessible door hardware, signage and code-compliant lower counters. Install accessible employee toilet room.	\$ 150,000	CDBG Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Police	Building	Police Garage - Windows & Doors and Building Envelope	Replace overhead doors and glass block windows. Replace door to planning/research and glass block wall. Repair masonry veneer exterior. Repair step cracking in CMU walls.	\$ 140,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	Craft Street Garage Roof	Replace failed 30+ year old roof membrane	\$ 625,000	Bonding	\$ 625,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Public Buildings	Building	Elliot St. Operations Building - Building Envelope	Repair foundation walls and rebuild ramp foundation walls. Repair/replace areaway retaining wall. Repair cracks; repoint mortar joints.	\$ 123,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	Kennard Estate-Building Envelope, Windows and Doors	Replace shingles and flashings. Repair foundation walls. Replace wood windows and shutters with historic, appropriate units.	\$ 240,000	Bonding/CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	Nonantum Library-Accessibility/Site	Reconfigure entry vestibules and reconstruct ADA compliant ramp. Upgrades for toilet rooms and drinking fountain.	\$ 204,000	CDBG Eligible/CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	Crafts St DPW Operations (Stable) - Restore Building Envelope, Windows & Roof	Preserve/repair historic significance, lintels, sills, brick veneer, windows, doors, roof and cupola as historically appropriate.	\$ 2,000,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	City Hall - Envelope - Masonry Repairs	On-going program to repair and repoint exterior masonry to preserve building envelope. Address worst areas first.	\$ 150,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	Waban Community Library-Building Envelope and Entrance	Replace main entry walk and foundation walls and install railing. Rebuild side stairs at main entry. Rebuild stairs at rear entry. Install hand rail on one side of rear entry wall. Repair flashing of parapet walls.	\$ 200,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	City Hall - Mechanical Upgrades	Replace condensing units, ductwork and fans. Add mini-split A/C units in conjunction with window restoration/replacement.	\$ 500,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	City Hall - Exterior Windows & Doors	Restore/replace windows in phases to improve energy efficiency, functionality and comfort, and to preserve exterior wall.	\$ 3,000,000	Potential for partial CPA Eligibility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	Planning Department Renovation Project	Interior renovations to the Planning Department offices in the basement of City Hall to include upgrades to the HVAC, Plumbing, Electrical, and finishes	\$ 500,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	Waban Community Library-Exterior Windows & Doors	Restore exterior wood door and install panic hardware. Replace areaway and rear door. Restore windows.	\$ 118,500	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	City Hall - Roof Repair/Replacement	Install new membrane roof on flat roofs. Repair/replace gutters on balcony roofs. Replace metal roofing/flushing as required. Repair Cupola.	\$ 300,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	Elliot St. Garage - Roof Repair/Replacement	Replace/repair EPDM roof. Replace damaged roof panels.	\$ 435,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	Auburndale Community Library - Building Envelope and Roof	Repair broken roof slates. Reflash where leaks are occurring. Repair/replace gutters and downspouts. Pitch rain leaders away from building. Repair concrete ramp.	\$ 128,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Buildings	Building	Elliot St. Operations Building - Interior and Finish Upgrades	Repaint steel framing in attic. Repair deteriorated concrete and CMU. Upgrade lighting and install new acoustical ceilings.	\$ 147,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Safety	Emergency Comms	Radio System Infrastructure	Install continuous power, repeaters & receivers, and other radio system infrastructure improvements	\$ 2,960,000	Bonding	\$ 2,210,000	\$ -	\$ -	\$ 750,000	\$ -	\$ -	\$ -
Schools	Building	Lincoln-Eliot School - Heating System	Upgrades to the heating system & ventilation	\$ 650,000	Capital Stabilization Fund	\$ 650,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Building	Lincoln-Eliot School - Building upgrades	Upgrades including window replacement and accessibility improvements to the Lincoln-Eliot School	\$ 1,500,000	Bonding	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Building	Newton Early Childhood Program	Address long term facility needs of the NECP at 687 Watertown Street	\$ 13,000,000	Bonding	\$ 750,000	\$ 12,250,000	\$ -	\$ -	\$ -	\$ -	\$ -

Dept	Asset Category	Project Title	Project Description / Justification	Est Cost in FY2020	Funding Source	Approved Funding	FY2020 to be Docketed/ Approved	FY2021	FY2022	FY2023	FY2024	FY2025
Schools	Building	Burr School - Replace Roof	Replace the total building roofing system installed in the 1980's.	\$ 450,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Building	Peirce/Williams Feasibility/Addition	Feasibility Study/Design and Construction to add Capacity	\$ 30,000,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Building	Bigelow School - Roof Replacement	Replace entire building roof system. Roof is beyond its useful life.	\$ 750,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Building	Underwood School - Electrical Upgrades	Upgrades to electrical panels and sub-panels and emergency generator	\$ 100,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Building	Brown School - Accessibility Upgrades	Upgrade existing elevator for code compliance, signage, hardware, and reconfigure locker rooms for accessibility.	\$ 600,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Building	Ed Center - Mechanical Upgrades	Replace boiler, second boiler and hot water conversion in out years. Boilers are over 35 years old.	\$ 450,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Building	Mason-Rice School - Mid-Range Renovation/Addition	Feasibility Study/Design and Construction	\$ 15,000,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Building	Bigelow School - Mechanical Distribution Upgrades	Project to replace unit ventilators, valves, controls, and distribution system components that are beyond their useful life.	\$ 500,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Building	Mason Rice School - Electrical Upgrades	Replace emergency generator, electrical panels and sub-panels.	\$ 325,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Building	Williams School - Mechanical Upgrades	HVAC distribution upgrades in the boiler room and throughout the school	\$ 200,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Building	Bigelow School - Replace Windows and Doors	Replace aging windows and exterior doors to improve comfort, operation, and energy efficiency.	\$ 1,400,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Building	Oak Hill School - Mechanical Upgrades - Roof Top Units and Distribution System	Replace Roof top air handling units and distribution system	\$ 250,000	Bonding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	Complete Streets	Schools - Repave Parking Areas	Repave parking areas and sidewalks in poor condition at Ward, Brown, Mason Rice, Oak Hill, Williams and Peirce.	\$ 400,000	NPS Charter Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Senior Center	Building	Newton Center for Active Living - NewCAL	Plan, site, design and build a new community and senior center, the Newton Center for Active Living.	\$ 16,650,000	Bonding	\$ 350,000	\$ 250,000	\$ -	\$ -	\$ 16,050,000	\$ -	\$ -
Senior Center	Building	Senior Center - Exterior Windows & Doors	Restore/Replace wood windows and aluminum storm windows as historically appropriate.	\$ 125,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Senior Center	Building	Senior Center - Sprinklers and Fire Alarm Upgrades	Install code-compliant sprinkler system in building in conjunction with any major building upgrade or addition.	\$ 170,000	Bonding / Potential for partial CPA Eligibility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Senior Center	Building	Senior Center - Building Envelope	Repoint exterior masonry walls as required. Repair, reset and regout main granite front stairs. Paint exterior surfaces. Repair stone veneer at main entry.	\$ 150,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Senior Center	Building	Senior Center - Roof Restoration/ Replacement	Restore/replace existing slate roof, gutters, and downspouts. Replace existing flat roof with new membrane roof and provide proper roof drains.	\$ 244,000	CPA Eligible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Need:				\$ 661,884,817		\$ 92,024,600	\$ 62,904,217	\$ 38,737,000	\$ 57,546,000	\$ 140,639,500	\$ 27,428,000	\$ 24,440,000

ACCESSIBILITY

The City of Newton is committed to act vigorously toward implementation of the requirements of the Americans with Disabilities Act and will work to assure that each service, program, and activity of the City will be conducted so that, when viewed in its entirety, it is readily accessible to and usable by individuals with disabilities.

The Americans with Disabilities Act (ADA), enacted July 26, 1990, prohibits discrimination and ensures equal opportunity for persons with disabilities. Equal opportunities include employment, state and local government services, public accommodations, commercial facilities, and transportation. Under the ADA, the City of Newton was required to and developed a Transition Plan in April 1991 which would ensure that no qualified individuals would be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any programs. The ADA was intended to be much more than a set of architectural barrier removal guidelines. Cities and towns are required to take all necessary steps in order to treat residents with disabilities with the same respect accorded non-disabled residents; the City of Newton is committed to that core principle.

The City of Newton hired its first ever full time ADA Coordinator in May 2015. Since that time the ADA Coordinator has conducted an Accessibility Self-Evaluation of the City's infrastructure with DPW, Public Buildings/Schools, and Parks & Recreation departments, has conducted public meetings, has worked on the coordination of the update of the City's Transition Plan, and has worked in consultation with the Commission on Disability, City senior management, and the Mayor's Office to identify, prioritize, and implement required improvements.

It is this energized commitment to accessibility that has prompted Mayor Fuller to add this section to the Capital Improvement Plan. Topics to be covered in this section include accessibility ratings of the following:

- Public Buildings and School Buildings;
- Parks and Playgrounds;
- Traffic Signals;
- Curb ramps; and
- Public Parking Lot Improvements.

The Accessibility Self-Evaluation has informed the City's updating of the ADA/504 Transition Plan, a multi-year plan to make structural facility changes. Next is the Accessibility 5-Year Plan to define the timeline and funding schedule for implementation. It includes projects in DPW, Public Buildings, Parks & Recreation to improve a range of facilities including buildings, playgrounds, sidewalks, intersection crossings, parking lots, and the City's website. Funding comes from capital, operating, CDBG, CPA, and the Commission on Disability sources. Some accessibility improvements are made during larger projects such as a school renovation while others are specifically targeted. Targeted projects include a 3-year project to eliminate the backlog of installing Accessible Pedestrian Signals (APS) at all signalized intersections, playground improvements, installation of a new accessible restroom at City Hall, and curb ramps at hundreds of locations.

Accessibility Upgrades

5 Year CIP, FY2021-FY2025

BUDGET DISTRIBUTION

Priority	Project Title	Project Description	FY2021	FY2022	FY2023	FY2024	FY2025
1	Traffic Signal Improvements - Accessible Pedestrian Signals (APS)	Upgrade traffic signal equipment to include APS at all remaining signalized intersections (approx 50) where none or outdated exist.	\$ -	\$ -	\$ -	\$ -	\$ -
2	ADA Ramps	Annual DPW	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000
3	Sidewalks	Annual DPW	\$ 265,000	\$ 265,000	\$ 265,000	\$ 265,000	\$ 265,000
4	CDBG Accessibility	Annual Appropriation designation for accessibility improvements	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000
5	Accelerated Roads Program - Sidewalk & ADA Ramp Work	Program work on roads across the city each year including sidewalk & ADA ramp work	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000
6	Public Parking Lots	1-2 parking Lots per Year with line and accessibility improvements	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000
7	Playground Renovations	1-2 structures per Year and retrofit 1-2 existing playgrounds with new accessible routes to play structures	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000
8	Lincoln-Eliot/NECP	Major school projects which will make both schools fully accessible.	\$ -	\$ -	\$ -	\$ -	\$ -
9	Waban Library-Accessibility Upgrades	Upgrade toilet rooms, signage and replace door hardware; Modify door at stairwell or install automatic door opener.	\$ 110,000	\$ -	\$ -	\$ -	\$ -
10	War Memorial Accessibility/Historic Improvements	Repair and repoint stone cornice. Rebuild/reset main entry stairs and install code-compliant railings. Implement recommendations from 2007 Study of the Memorial Stairs.	\$ 1,166,000	\$ 1,166,000	\$ -	\$ -	\$ -
11	Countryside School	Major school project that will make the school fully accessible.	\$ 750,000	\$ 2,000,000	\$ 47,250,000	\$ -	\$ -
12	Franklin - Renovation/Addition	Major school project that will make the school fully accessible.	\$ 750,000	\$ 2,000,000	\$ 47,250,000	\$ -	\$ -

Accessibility Upgrades 5 Year CIP, FY2021-FY2025			BUDGET DISTRIBUTION				
Priority	Project Title	Project Description	FY2021	FY2022	FY2023	FY2024	FY2025
13	Ward School - Renovation/Replacement	Major school project that will make the school fully accessible.	\$ -	\$ -	\$ 500,000	\$ 1,000,000	\$ -
14	Ed Center Elevator & Accessibility Upgrades	Upgrade elevator, restrooms, door hardware, and signage for accessibility	\$ -	\$ -	\$ -	\$ -	\$ -
15	FA Day School - Accessibility Upgrades / Replace Elevator	Upgrades for ADA Compliant elevator, restrooms, door hardware and signage	\$ -	\$ -	\$ -	\$ -	\$ -
16	Bigelow School - Accessibility Upgrades	Upgrade restrooms, elevator, door hardware and signage for accessibility	\$ -	\$ -	\$ -	\$ -	\$ -
17	Bowen School - Accessibility Upgrades	Upgrades to restrooms and signage	\$ -	\$ -	\$ -	\$ -	\$ -
18	Mason Rice School - Accessibility Upgrades	Upgrade restrooms, elevator, door hardware and signage for accessibility	\$ -	\$ -	\$ -	\$ -	\$ -
			\$ 5,508,000	\$ 7,898,000	\$ 97,732,000	\$ 3,732,000	\$ 2,732,000

NEWTON CLIMATE ACTION PLAN

The City of Newton is finalizing its first-ever Climate Action Plan, a five-year plan for 2020-2025 that also sets a long-term goal of a carbon-neutral Newton by 2050.

This plan focuses on points of municipal leverage: where municipal regulation, leadership, investment, and advocacy can have the greatest impact. Newton's Climate Action Plan builds on the City's recent efforts and outlines new steps that the City will take during the next five years (2020-2024) to significantly reduce greenhouse gas (GHG) emissions across the community and meet the long-term goal of carbon-neutrality. Climate change is an increasingly urgent crisis and will continue to worsen unless we make significant changes. The longer we delay taking ambitious action to reduce GHG emissions, the greater the environmental, public health, and economic problems will be and the harder it will be to achieve our goal.

With this Plan, the City is committing to implement significant GHG emission reduction strategies in the next five years, with goals to reduce - and ultimately eliminate - the City's GHG emissions. In the Plan, the City seeks to equip its residents and businesses with the tools and support needed to make climate-conscious choices that reduce the community's GHG emissions while also leading by example.

The Plan addresses six areas of action:

- A. Implementing Newton's Climate Action Plan: The City is committed to ensuring the success of this Climate Action Plan by adapting internal operations and working with dedicated partners.
- B. Promoting Clean and Renewable Energy: "Greening" the sources supplying electricity to the City is vital to the pathway to carbon neutrality. The City will promote and expand Newton Power Choice, increase local renewable energy production through the installation of municipal solar arrays and the promotion of private solar installations, and offset its own GHG emissions with the purchase of renewable electricity supply.
- C. Greening Newton's Transportation and Streetscapes: The second largest source of GHG emissions in Newton comes from on-road transportation. The City will support Newton's residents, workforce, and visitors in switching to battery electric and plug-in hybrid vehicles; reducing single-occupancy vehicle trips; and increasing biking, walking, telecommuting, public transportation, and shared trips.
- D. Improving New Construction and Major Renovations: Energy use reduction and electrification are the backbones of any GHG emissions reduction plan. As new developments are built and renovations are undertaken, the choices made by developers and architects will have a significant impact on the City's GHG emissions profile. To the extent legally permissible, the City will take steps to ensure that construction meets standards necessary to achieve carbon neutrality by 2050.
- E. Improving Existing Buildings: Existing residential and commercial buildings in Newton are responsible for a majority of the City's GHG emissions. The City will work with homeowners to increase energy efficiency and reduce reliance on natural gas and heating oil in the City's existing building stock. Moving the needle for existing buildings will require the City to put in place "carrots and sticks" to incentivize significant action by the private sector.
- F. Reducing Emissions associated with Consumption and Disposal: We will work to protect and enhance the City's natural resource base and help Newtonians limit their consumption and disposal of goods and services.

The Plan lays out general strategies and specific actions in each of these areas. Note that most of the actions would be undertaken by existing staff with no new capital investment, as they are recommendations for improved coordination, refocusing of existing assets, or enhancement of existing efforts.

The recommended actions that would entail new capital investment can be summarized as follows.

1. Municipal Implementation - Operating Budget investment, and/or grant support, would be required for a new contract or staff position to facilitate education and outreach and for implementing sustainable building practices in new and renovated municipal buildings.
2. Transportation - Capital investment would be required for the installation of EV chargers on City land (see section below), for continued replacement of city fleet with EVs, and for Complete Streets projects and the creation of safe bicycle and pedestrian facilities.
3. Promoting Clean Energy -- Capital investment might be required if the City were to increase the percentage of MA Class 1 RECS in the City's next Newton Power Choice contract.

EV Charger Installation in Municipal and School Parking Lots

Promoting electric vehicles (EVs) is crucial for achieving the goals of our Climate Action Plan. A phased plan is proposed for installing EV chargers and, as a related matter, for designating preferential parking in municipal parking lots. The objectives are both to respond to existing demand and to drive demand for EVs. The proposal is to focus on installations a) in village centers, b) in select municipal locations, and c) at schools. There will be a separate proposal to incentivize, and/or possibly require, the installation of EV chargers in certain large private developments.

For non-school sites, EV chargers are recommended and/or preferential parking in village centers and other select municipal locations, put in place over a *two-year* period. For school locations the recommended implementation is over a *three-year* period.

The proposal includes 14 chargers installed in village centers, 14 in other non-school municipal locations, and 26 in school locations. Of these, six will be Greenspot car-share chargers, which are free for the City, as is the associated infrastructure.

The installation of EV chargers involves two types of costs: a) for the infrastructure, and b) for the chargers themselves. The *infrastructure costs* are the lion's share, at about \$50,000 per location. *Infrastructure funding* is available now through Make Ready (i.e., Eversource). While there are no guarantees, it is expected that Eversource will make this funding available to the City. In order for Make Ready to proceed with installation the City is required to have purchase orders in hand for the related chargers.

As for *charger costs*, Charge Point Level 2 chargers cost approximately \$9,200 each, although the City is exploring costs with other vendors. There are state DEP grants that the City will try to access, for \$3,200 per charger, reducing the cost per charger to \$6,000.

This CIP proposal for EVs makes the most optimistic assumption for infrastructure (i.e., Make Ready funding for all locations), and the assumption that we will not get the DEP/VW grants. On

this basis, the estimated minimum cost is approximately \$377,200. Some of this may be funded by the School Administration and School Committee.

There will be separate recommendations for preferential parking going to the Traffic Council and City Council that are not discussed here because there are no capital costs involved.

NEWTON PUBLIC SCHOOLS

One of the highest priorities for Mayor Fuller, the Newton Public Schools, and the Public Buildings Department is to continue to ensure that the Newton Public Schools are able to provide an excellent education in modern facilities that enhance the students' ability to receive the highest quality learning experience; enables faculty and staff to perform at their highest ability in a secure, comfortable environment, conducive to teaching and learning; and allows the City's youngest residents to reach their full potential. Therefore, the Mayor's Office and the School Administration meet regularly throughout the year to assess school projects and to prioritize school facility needs.

The citizens of the City of Newton made their commitment to public education clear with the passage of the override questions in March of 2013, which included the replacement and/or addition to three of the City's elementary schools: Angier, Zervas and Cabot. There are many more capital requirements in a district the size of the Newton Public School system with over 13,000 students which must be addressed. These are reflected in Newton Public School's Long-Range Facilities Planning Timeline that goes out 25 years and touches all elementary and middle schools. Recognizing that major school replacements and/or large renovations may require a lengthy timeline, the School Administration has developed a list of major project needs in addition to required preventive maintenance. The project timeline for major school building projects is updated annually to reflect current building conditions and enrollment needs.

Major School Building Projects

The following projects were requested by the School Committee and will be included in the FY2021 - FY2025 funding requests for feasibility studies and investments for mid-range renovation/addition projects:

- Lincoln-Eliot School (current building) - \$1.5 million to replace windows and doors general accessibility updates. This work is planned to be phased during the summers prior to the completion of the major school building project, to provide for enhanced facility conditions for the current students sooner and to provide a seamless transition to the building's future use as swing space for the remainder of the long-range plan as schools go through planned renovation projects.
- 687 Watertown Street / Newton Early Childhood Program - \$13,000,000 has been established as the total project budget in the CIP. The project team has completed feasibility and schematic design. The team is currently finalizing design plans for the 687 Watertown Street site (former Horace Mann building) to accommodate the city-wide integrated Pre-K program with an estimated completion in 2021. The renovated building will offer 17 classrooms, a new van loop and air-conditioning and will not consume fossil fuels at the school.

- Lincoln-Eliot at 150 Jackson Road - \$25,000,000 for the renovation of the 150 Jackson Road property which currently houses NECP. The project team has commenced preliminary design concepts and will proceed with schematic design this fall.
- Oak Hill Middle School - \$750,000 is currently shown in the CIP for two interior classrooms. However, the school department and City are exploring options for a 3 classroom permanent exterior addition to the site. The future enrollment growth at Oak Hill coupled with additional Special Education programming is projected to put tremendous pressure on the building. Future enrollment numbers show more than 700 students going forward. This enrollment trend is supported by the feeder pattern schools despite the district seeing a slow-down in our overall growth.
- Countryside Elementary School - \$50,000,000 is now in the CIP for a major building project. Countryside lacks sufficient special education and general education support spaces which has resulted in the use of hallway and modular spaces beyond their useful life. This lack of support space has a direct negative impact on the teaching and learning in this building. This will require a feasibility study and design to determine project scope and site plan. The facility conditions at Countryside have been evaluated and led to it being one of the highest need school building project. The Countryside Elementary School is located at 191 Dedham Street on the south side of Route 9. The 35,910 gross square foot school was constructed in 1953 as a small neighborhood school consisting of 13 classrooms, a gym, library, auditorium, main office, two sets of girls and boys restrooms, and a pair of staff bathrooms. A 6-classroom annex addition was constructed in 1958 to address the rising school enrollment. A single bathroom with one fixture was added as part of this project. In 1986, two additional annex classrooms were constructed on the north end of the annex. In 1991, 1999, and 2000 a total of four modular classrooms and two offices were constructed. In total, the number of classrooms doubled while existing support spaces in the main building continued to serve a significantly larger student population (e.g., cafeteria, library/media, bathroom facilities, nurse, and administration). A Statement of Interest (SOI) has been submitted twice to the MSBA (Massachusetts School Building Authority) and we anticipate applying again this year. A project of this size and scope will likely take five to six years to complete once funding has been established.
- Franklin School - Similar to Countryside, this 1938 building with 62,746 buildings has changed significantly from its original 13 classroom design and is at the end of its useful life. Major building systems including roof, exterior masonry, windows and boiler needs to be replaced. Franklin lacks sufficient special education and general education support spaces which has resulted in the use of basement spaces which were not designed or intended to be occupied. This lack of support space has a direct negative impact on the teaching and learning in this building. It has been determined that a new building or substantial renovation is required to address these multiple deficiencies within the building. This will require a feasibility study and design to determine project scope and site plan. The School Department and City have worked collaboratively to address some issues in and around the building. This includes the storm water remediation projected initiated by the Mayor to address flooding around the kindergarten wing in the summer of 2018. Additionally, mini-split air-conditioning units have been installed in the kindergarten wing adding comfort. In conjunction with the City, the school department

plans some further work around the building to address deferred maintenance while the school awaits a major building project.

- Ward Elementary School - The amount of funding for school improvements will be determined to address the needs of this 1928 outdated facility with poor accessibility while the school awaits a major school building project. This summer work is scheduled for 2019 and 2020.

Maintenance Capital Projects

Roof replacements, generators, boilers, air handlers, windows, masonry and other systems are integrated into the CIP based on an assessment of need over the next five years and beyond.

1. **Bigelow School:** Upgrades are nearly complete for the replacement of an outdated boilers, storage, and an improved circulation system. Funding is \$1,364,000 and MSBA Accelerated Repair Program funding is expected.
2. **F.A. Day School:** Replacement of two 60-year old boilers. Funding is \$1,610,000 and MSBA Accelerated Repair Program funding is expected for the boiler replacement. Timing of the this work is expected to be completed in summer of 2020.
3. **North Pool Air Handling Unit:** Replacement of air handling systems at high risk of failure at the North pool that serves high schools, community groups and the general public. Funding is \$350,000 and work is expected in 2020.
4. **South Library HVAC System:** HVAC system equipment and controls are outdated. Funding is \$300,000 in FY2022.
5. **Memorial-Spaulding Roof Replacement and Mechanical Upgrades:** Funding is \$350,000 in FY24, respectively
6. **Bowen School Roof Replacement:** \$450,000 for roof replacement in FY23.

PUBLIC BUILDINGS

The Public Buildings Department is responsible for the care and maintenance of 84 municipal and school buildings in the City of Newton. These buildings total 2,966,136 square feet and are sited on 535 acres of municipal property. These properties make up almost 5% of the land mass of Newton. Over the last decade, we have invested over \$400 million on hundreds of capital building projects on these assets. These buildings are staffed by approximately 3,000 employees and receive over 20,000 visitors or users daily.

These assets yield a net present value of approximately \$4 billion.

Comprehensive building assessments were previously completed on all the municipal and school buildings, and these assessments are updated and maintained annually. These assessments are a vital tool in establishing and maintaining the building projects listed and evaluated in the Capital Improvement Plan.

The Public Buildings Department has recently completed building three new elementary schools, a new fire station and a complete renovation of Fire Headquarters:

- Angier School (2016)
- Zervas School (2017)
- Cabot School (2019)
- Fire Station #3 and Fire Headquarters (2017)
- Crafts Street Garage Roof (2019)
- Carr School AC Installation (2019)
- Main Library Interior Renovations (2019)
- Lincoln Eliot HVAC Improvements (2019)

The Public Buildings Department has also completed 8 Solar Projects which have produced over 3.5 million kilowatt hours and saved the City \$684,712 in FY 2019:

- Solar Canopies at Newton South High School and Eliot Street DPW Yard (2017)
- Solar Rooftop Installations at Newton South High School, Bowen School, Angier School, Oak Hill School, Lower Falls Community Center and Fire Station 10 (2017)
- Solar Farm at Rumford Landfill (2017)

The Public Buildings Department is currently working on the following large capital projects:

- Lincoln-Eliot Facility Project
- Newton Early Childhood Program (PreK) Facility Project
- Newton Center for Active Living Project
- Commonwealth Golf Course Project
- Library Children's Room Renovation
- Lincoln-Eliot School Window Replacement
- Bigelow School Boiler Replacement

In addition to the large building construction projects, over the past ten years we have completed over 60,000 work orders for projects ranging from small maintenance to mid-sized construction projects valued at as much as \$500,000 through School Charter Maintenance and the Public Buildings Maintenance accounts. Additionally, we have completed approximately 25 projects through our “<\$75K account” over the last four years. These projects include accessibility improvements, security upgrades, energy investments, painting and preservation, programmatic spatial improvements, roofing system major repairs and/or replacements and weatherization projects.

The following is a summary report of 61 municipal buildings, followed by the latest building inventory of our 84 school and municipal buildings.

MUNICIPAL BUILDINGS (NON-SCHOOL) REPORT

City Hall

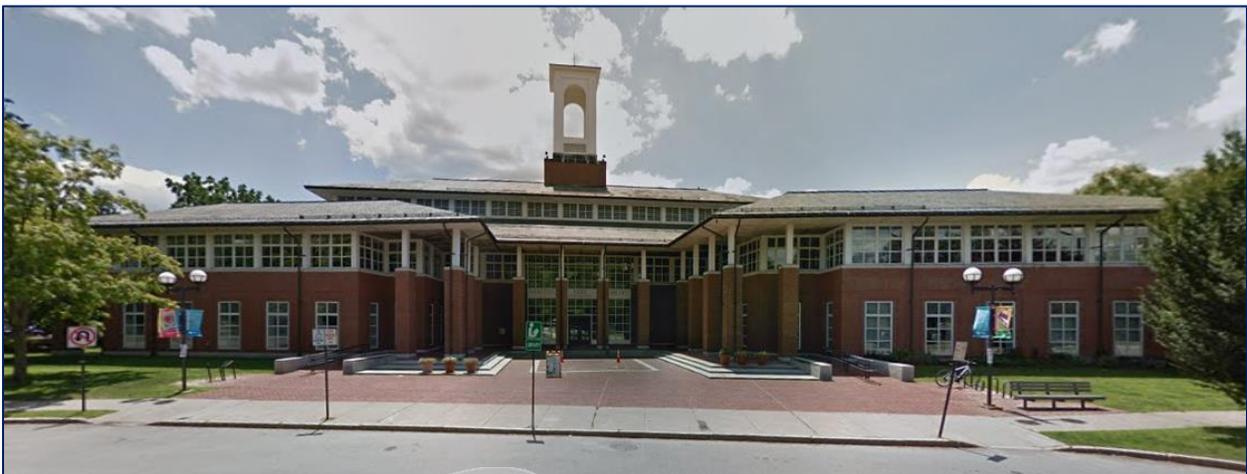
1000 Commonwealth Avenue



Built in 1932, this is an 81,000 square foot civic building that is individually listed on the National Registry of Historic Places, and houses most of the City departments. Beyond normal municipal operations, City Hall is used for children's programs, art exhibits, open studios, festivals, musical performances, theatrical performances, public meetings, and a variety of other community and cultural programming.

Newton Free Library

330 Homer Street



Built in 1991, this is a 93,000 square foot public library. In addition to traditional library activities, the building is used for children's programs, art exhibits, open studios, musical performances, community educational events, public meetings, and a variety of other community and cultural programming.

Auburndale Branch Library

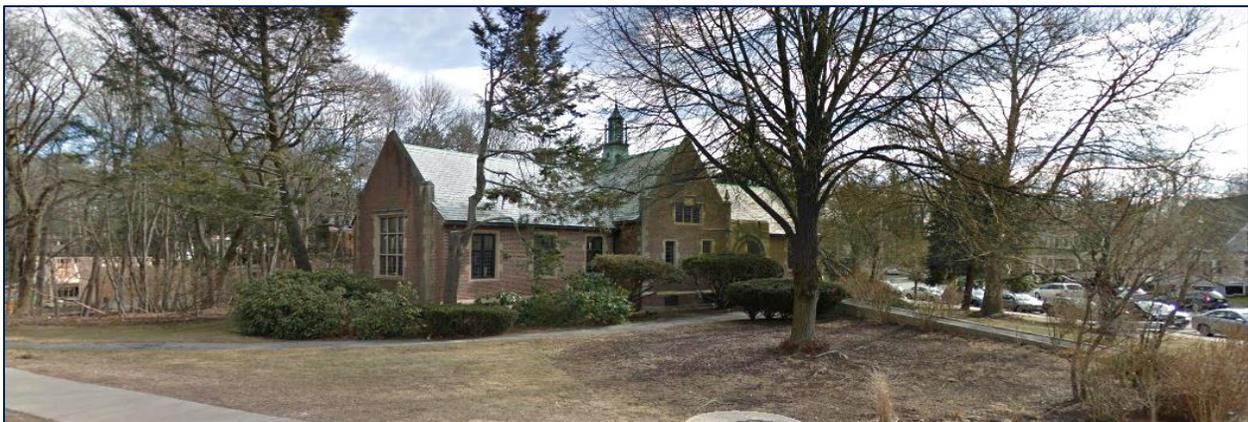
371 Auburn Street



Built in 1927, this is a 4,830 square foot building. Up until 2008, it was publically staffed and operated as a branch library. Since 2009, it has operated as a volunteer run community library. The building is also frequently used for public meetings and a variety of community programs. The Friends of the Newton Library operate a book donation and sale shop out of the basement of the building.

Waban Branch Library

1608 Beacon Street



Built in 1929, this is a 6,378 square foot building. Up until 2008, it was publically staffed and operated as a branch library. Since 2009, it has operated as a volunteer run community library. The building is also frequently used for public meetings and a variety of community programs. The Public Buildings Department uses the basement area as a wood shop and repair facility. The facility is also used as a polling center by the Newton Elections Department.

Nonantum Branch Library

114 Bridge Street



Built in 1957, this is a 7,364 square foot building. Up until 2008, it was publically staffed and operated as a branch library. Since 2009, it has operated as a social club. The building is occasionally used for public meetings and a variety of community programs.

Newton Corner Branch Library (Chaffin House)

124 Vernon Street



Built in 1848, this is a 10,032 square foot Greek Revival style building. This property was acquired by the City in 1930 for the purposes of conversion to a children's library. Up until 2008, it was publically staffed and operated as a branch library. Since 2008, it went through periods of vacancy, use as Parks and Recreation Headquarters, and its current use as the Newton Innovation Center. The building is also occasionally used for community meeting space.

1294 Centre Street



Built in 1927, this is a 6,050 square foot building that is individually listed on the National Registry of Historic Places. It was closed as a branch library in 1991 and was then used as the Health Department Headquarters until 2013 when they moved to City Hall. Since 2013, the building has been vacant. In 2018, small investments were made to the roof, masonry, windows, and interior spaces so that the building can be reactivated for city and public use.

Senior Center

345 Walnut Street



Built in 1938, this is a 9,850 square foot Classical Revival building that is individually listed on the National Registry of Historic Places. Operating exclusively as a branch library up until 1981, the “Senior Drop-In Center” then moved into the building. In 1991, the branch library was closed, and in 1993 the building was renovated into a Senior Center. It currently serves as the center for senior activities and programs for the City. It is also used frequently by people of all ages for a variety of programs, meetings, and events.

Crystal Lake Bathhouse

30 Rogers Street



Built in 1931, this is a 9,581 square foot seasonal building that provides restrooms and changing facilities for use of the Crystal Lake Public Beach for approximately two months during the summer.

Hawthorne Field House (Pelligrini)

17 Hawthorne Street



Built in 1950, this is a 5,752 square foot building that consists of a gym, bathrooms, kitchen, and storage. This facility provides space for after school and summer programs, basketball, volleyball, and pickleball recreational leagues, and support for the adjacent playground and fields.

70 Crescent Street (Former Parks & Recreation HQ)



Built in 1930, this is a 3,208 square foot residential property that has been used for private purposes, a State Police Facility, and then ultimately acquired by the City and used as the Parks and Recreation Headquarters until 2011. Since then the property has been vacant with the exception of the basement, where Parks and Recreation Maintenance has a break room and restroom. This building has been surplused and plans call for it to be demolished.

Parks and Recreation Maintenance Garage

70 Crescent Street (Rear)



Built in 1940, this is a 4,600 square foot block maintenance and storage building. It is currently used by the Parks and Recreation Maintenance Division for equipment storage and repair. This building has been surplused and plans call for it to be demolished.

Lower Falls Community Center (Hamilton)

545 Grove Street



Built in 1958, this is a 10,519 square foot facility that was once part of the former Hamilton School. It is currently used for daycare, afterschool, and summer programs. The facility is heavily used for summer camps, rentals, volleyball, badminton, basketball, pickleball, dance, yoga, Pilates, Girl Scouts, catch ball, voting and other municipal activities. It contains a gym, kitchen, classrooms, and offices. The remainder of the physically attached former Hamilton School is owned and operated as the Hamilton Grove Apartments by the Newton Housing Authority.

Upper Falls Community Center (Emerson)

45 Pettee Street



Built in 1904, this is a 13,418 square foot facility that was once part of the former Emerson School. It is currently used for daycare, afterschool, senior activities and summer programs. The facility is heavily used for rentals, basketball leagues, and other municipal activities. It contains a gym, kitchen, classrooms, and offices. The remainder of the physically attached former Emerson School is owned and operated by the Falls Ridge Condo Association.

Albemarle Field House

250 Albemarle Road



Built in 1956, this is a 2,072 square foot facility used for senior programming and summer camps. The senior programming includes yoga, painting sessions, and other social activities. It also provides restrooms for the adjacent fields, and is the source of electrical power for the field complex.

Forte Park Field House

233 California Street



Built in 1960, this is a 750 square foot building which houses restrooms, storage, and electrical power for the adjacent field.

Auburndale Cove Field House

West Pine Street



Built in 1967, this is a 1,329 square foot building which houses restrooms and storage for the adjacent field, and is primarily used as a warming center when the cove is open for skating and for rentals during the warmer seasons.

Burr Park Field House

142 Park Street



Built in 1919, this is a 5,200 square foot building which is used as a daycare and learning center for preschoolers. This building is also used for a summer camp.

Cabot Park Field House

101 East Side Parkway



Built in 1926, this is a 1,264 square foot building which is used as a daycare facility and summer science programming.

Lyons Field House



Built in 2013, this is a 1,050 square foot building consisting of bathrooms and a concession stand to support the adjacent field in Auburndale.

Newton Centre Field House (Hut) (Jeanette Curtis West Recreation Center)

69 Tyler Terrace



Built in 1892, this is a 5,250 square foot building consisting of a small gym, restrooms, kitchen, storage, and small multipurpose rooms. It was built in 1892 as the Trinity Parish Church, and was acquired by the City in 1898 and moved to its current location. It is used for afterschool, summer programs, vacation camps, zumba, judo, karate, cricket, tap dance, yoga, rentals, and a variety of other programs.

Newton Centre Metal Storage Building

Built in 1980, this is a 1,200 square foot untreated metal storage building used by Parks and Recreation. This building is adjacent to Tyler Terrace across from the Mason Rice School Playground.

Bobby Braceland Field House

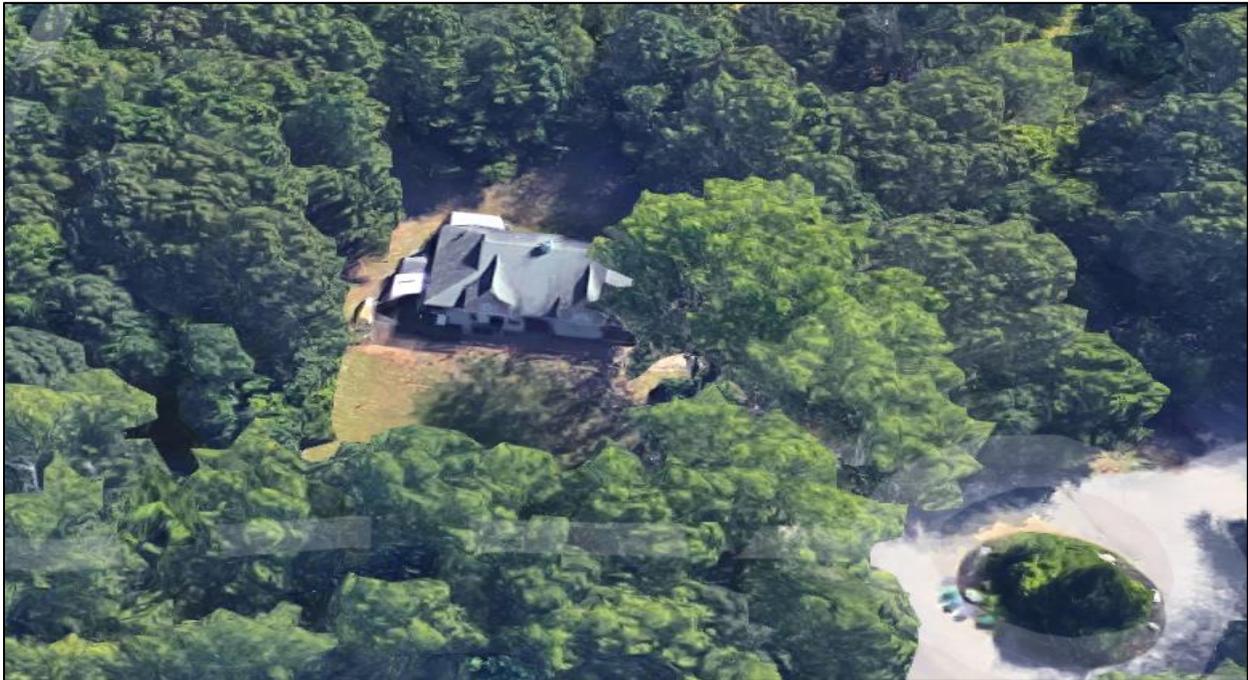
98 Pennsylvania Avenue



Built in 1965, this is an 800 square foot building consisting of restrooms and storage. The restrooms are no longer in use, and the building is actively used for park maintenance equipment.

Nahanton Park Field House

455 Nahanton Street



Built in 1996, this is a 2,090 square foot building consisting of restrooms, an office, and a multipurpose room. This building is used for summer programs, boat rentals, Eagle Scouts, preschool programs, and public meeting space.

Gath Pool Facility

256 Albemarle Road



Built in 1965, this is a 10,350 square foot facility which consists of restrooms, changing rooms, offices, storage, and a large pool support system area. This building is seasonal, and is used for approximately two months during the summer.

Quinobequin Pump Station Building

136 Quinobequin Road



Built in 1980, this is a 4,596 square foot sewer pump station building.

Elliot Street Pump Station Building

391 Elliot Street



Built in 1990, this is a 1,500 square foot sewer pump station building.

Elliot Street Department of Public Works (DPW) Stable

74 Elliot Street



Built in 1927, this 15,858 square foot building is individually listed on the National Registry of Historic Places. The Stable and Garage building was constructed at a time when the municipality was transitioning from the use of horses to the use of trucks. The design makes use of site grading to allow this transition to happen. The lower floor, with its wide bays opening to the south, was designed for use as a truck garage. The upper floor, accessed by ramps at the east and west, originally housed 26 horse stalls. It was designed for conversion to a garage once the horses were no longer needed. Currently the stable has 71 employees assigned to it. This includes 8 members of the Forestry Division, and 63 members of the Highway Division.

Elliot Street Department of Public Works (DPW) Garage

70 Elliot Street



Built in 1959, this is a 10,500 square foot garage consisting of four bays used for vehicle storage and staging, and two mechanics bays used for repair and maintenance.

Elliot Street Department of Public Works (DPW) Salt Shed

Elliot Street DPW Yard



Built in 1994, this is a 7,800 square foot wood framed open-air structure which houses a large amount of the road salt used by DPW.

Department of Public Works (DPW) Utilities Building

60 Elliot Street



Built in 1935 as a refuse incinerator building, this 21,664 square foot building was renovated in 1997 for the current use as the Utilities Division Facility. Added to the rear of the 1935 building, is a six garage bay metal prefab addition used for Utilities Division vehicle storage. The original building consists of parts storage on the first floor, a large break room, water meter storage room, and a small office on the second floor, and a handful of offices and a large conference room on the third floor. There are 66 employees assigned to this building, with only 6 of them routinely using office space scattered throughout the three floors. The other 60 Utility employees assigned to this building use it for timeclock and breakroom access.

Public Buildings Department

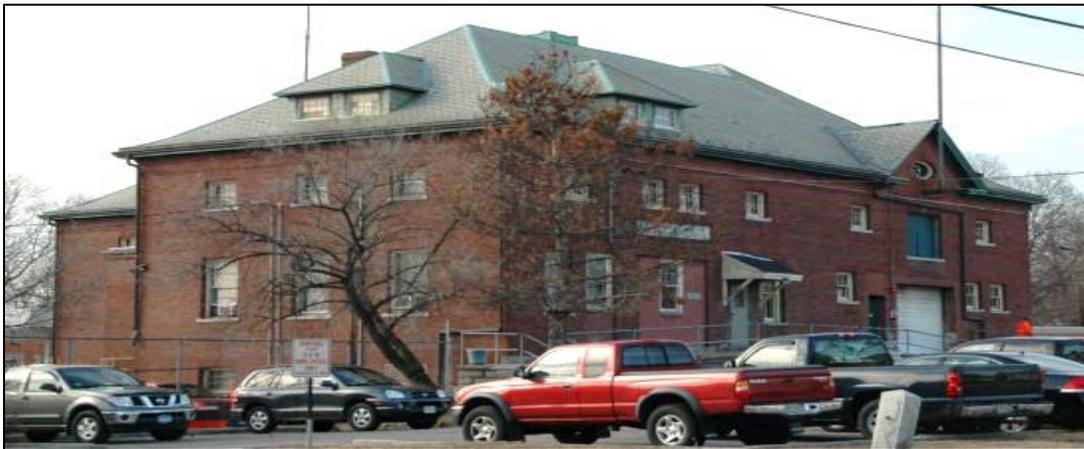
52 Elliot Street



This building is 7,640 square feet. The building is comprised of a 3,780 square foot concrete block garage built in 1968, a 1,700 square foot metal prefab garage added in 1976, and a 2,160 square foot wood framed modular section added in 1980. This facility has 25 employees assigned to it, 12 of which have assigned offices that are heavily occupied. The other 13 employees are trades craftsmen who use the facility for work assignments and bathrooms.

Crafts Street Stable

90 Crafts Street



This is an 18,900 square foot building that was built in 1894. The Crafts Street City Stable is a two and a half story brick L-shaped structure with a steep hipped roof designed in the Colonial Revival Style by the architect William F. Goodwin. The building is the second of two stables constructed by the City of Newton in the mid-1890s to house the horses, wagons and other equipment owned by Newton's Highway Department. This building consists of three floors. The first floor is predominantly cold storage. The second floor is split between heated storage, offices, bathrooms, and a large breakroom. The attic is cold storage. This building is used by 7 beautification employees who work for the Parks and Recreation Department.

Crafts Street Department of Public Works (DPW) Garage

110 Crafts Street



This is a 21,000 square foot garage, with a 5,775 square foot attached building to the north. This structure was built in 1919, renovated 1936, and then again in 1986. This garage building consists of 15 bays for the repair and maintenance of the municipal fleet, which consists of approximately 350 vehicles and apparatus. Additionally, the garage contains a repair parts stockroom, as well as a central office. Connected to the north side of the garage in 1936, the Transportation and Environmental Division building contains a single garage bay, the sign shop, and office space, supporting 7 office staff and 14 field employees. The Fleet Division operates out of the garage, and consists of 2 office staff, and 12 fleet service employees.

Crafts Street Department of Public Works (DPW) Salt Shed

Crafts Street DPW Yard



Constructed in 2014, this facility is 6,305 square feet and houses road salt for the north side of the City. The building is a fabric membrane, stretched over a steel structure, with a v-block concrete foundation.

Crafts Street Department of Public Works (DPW) Equipment Storage Shed

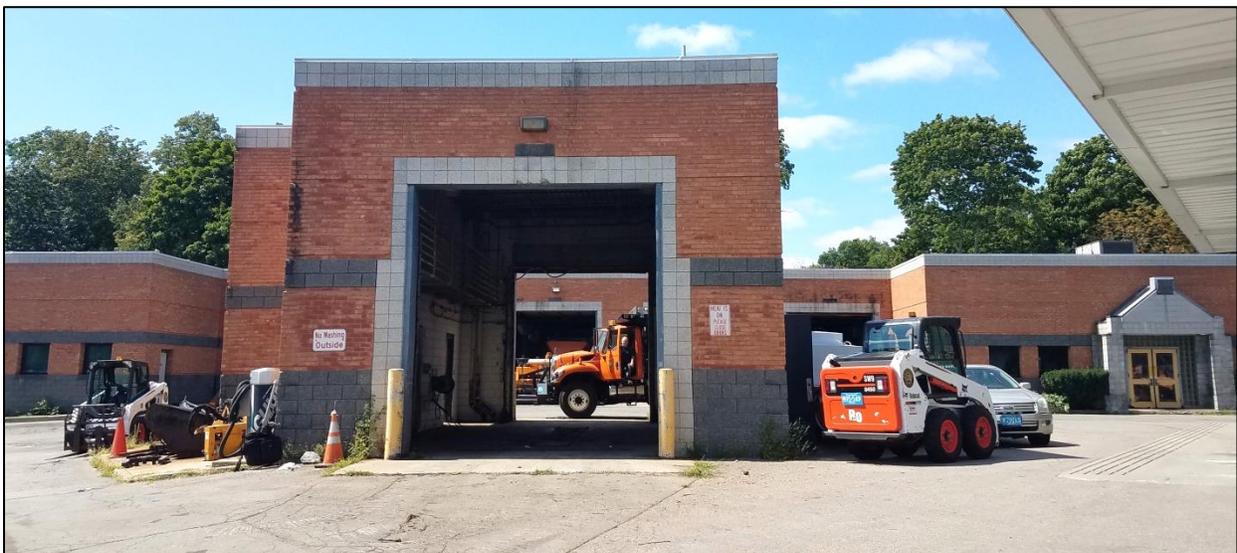
90 Crafts Street



Constructed in 2014, this facility is 3,570 square feet and is used for equipment and vehicle storage. The building is a fabric membrane, stretched over a steel structure, with a v-block concrete foundation.

Crafts Street Department of Public Works (DPW) Wash Building

90 Crafts Street



Constructed in 1986, this building is 1,056 square feet and consists of a single wash bay, with a small room to the south which contains the support systems.

Crafts Street Department of Public Works (DPW) Sweeper Shed

Crafts Street DPW Yard



Constructed in the 1980's, this 900 square foot prefab metal storage building is used to house sweeper brushes and repair parts for the street sweepers.

Rumford Avenue Landfill Office

115 Rumford Avenue, Auburndale



Built in 1950, this 400 square foot building is an office and warming area for the DPW employees who staff the recycling and processing center.

Manet Road (Waban Hill) Reservoir Gatehouse Building

2 Manet Road Rear



Built in 1925, this is a 1,507 square foot building which supports the City's Waban Hill Reservoir.

Old Waban Reservoir Gatehouse Building

Ward Street



Built in 1875, this is a 214 square foot Waban Reservoir Gatehouse; the property was purchased by the City from MWRA in 2014 through a surplus process. The reservoir is no longer used for water supply purposes and Parks & Rec is in the process of developing a park with public access.

Fire Station #1

241 Church Street, Newton Corner



Built in 1965, this is a 14,808 square foot fire station with 3 apparatus bays.

Fire Station #2

1750 Commonwealth Avenue, Auburndale/West Newton



Built in 1964, this is a 24,700 square foot fire station with 4 apparatus bays.

Fire Station #3

31 Willow Street, Newton Centre



Built in 2017, this is a 23,973 square foot fire station with 5 apparatus bays, training facilities, an emergency operations center, emergency communications equipment and tower, and the Newton fire museum.

Fire Station #4

195 Crafts Street, Newtonville/Nonantum



Built in 1955 and renovated in 2010, this is a 14,780 square foot fire station with 4 apparatus bays, and a training room.

Fire Station #7

144 Elliot Street, Newton Upper Falls



Built in 1955 and renovated in 2012, this is a 16,100 square foot fire station with 3 apparatus bays fronting Elliot Street, and 3 mechanics bays down back. This building contains the Fire Mechanics Division which handles the light maintenance and repair of the fire apparatus and equipment.

Fire Station #10

755 Dedham Street, Oak Hill



Built in 2015, this is a 6,731 square foot fire station with 2 apparatus bays. A confined space rescue training facility and drafting tank are located behind this facility.

Fire Headquarters

1164 Centre Street, Newton Centre



Built in 1928 and renovated in 2017, this is a 6,130 square foot Fire Headquarters building which houses the Fire Prevention Division, Newton Fire central administration, and the Chief's Office.

Fire Department Wires Division Building

755 Dedham Street Rear, Oak Hill



Built in 2015, this is a 4,036 Fire and Wires Division building. It consists of 2 maintenance bays, wire spool storage, offices, a conference room, and a breakroom.

Manet Road Communications Building

2 Manet Road, Chestnut Hill



Built in 2016, this 836 square foot prefab concrete building houses communications equipment.

Ober Road Communications Building

Ober Road, Oak Hill



Built in 2018, this 160 square foot prefab wood framed shed houses communications equipment.

Police Headquarters

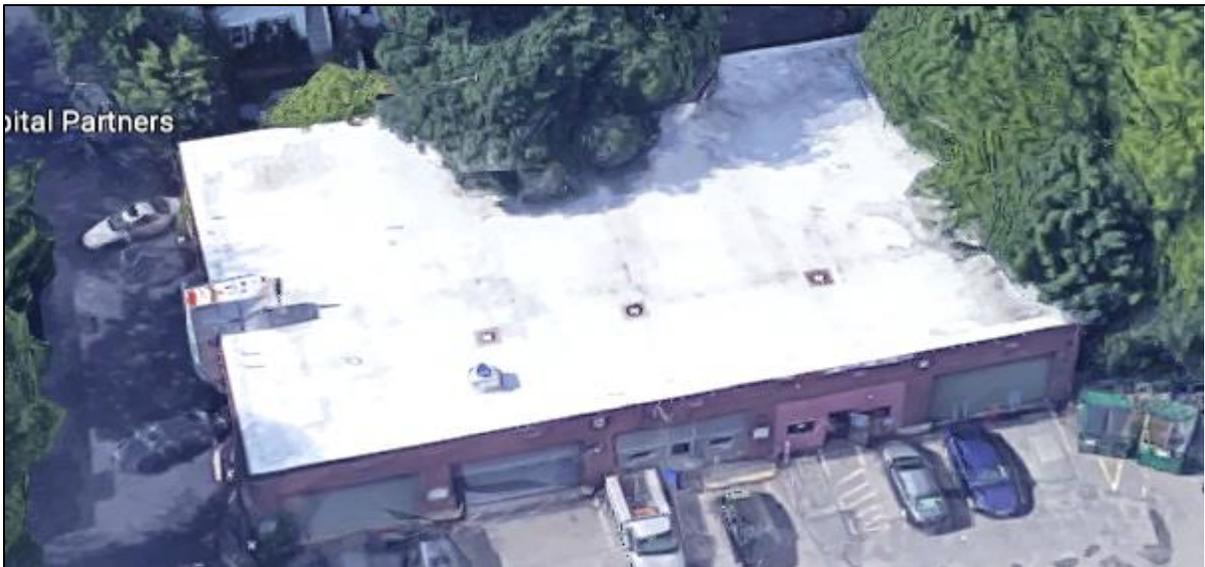
1321 Washington Street, West Newton



Built in 1932, and renovated in 1993, this 20,676 square foot building houses Dispatch, Patrol, Detectives Bureau, Special Operations, Information Technology, Details, and the Chief's Office. Headquarters also houses the small training room, fingerprint lab, cell blocks, sally port, gym and locker rooms, firing range and armory, server room, and museum displays. The building operates 24/7/365, with varying staff levels throughout the day and night.

Police Garage

1321 Washington Street Rear, West Newton



Built in 1959, and partially renovated in 1993, this 7,548 square foot cinder block slab on grade building houses mechanical repairs, storage, property and evidence, and support services.

Police Annex

25 Chestnut Street, West Newton



Built in 1925 as a branch library, this is a 4,528 square foot building. It was closed as a branch library in 1984 and is currently used as an annex to Police Headquarters. It houses the Detectives Division on the main floor, and Animal Control, Community Services, and a number of other police functions and offices in the basement.

Jackson Homestead

527 Washington Street, Nonantum



Built in 1809, this 7,212 square foot Federal Style field stoned foundation residential building is individually listed on the National Registry of Historic Places, as well as the National Park Service's National Underground Railroad Network to Freedom. This property was acquired by the City of Newton in 1949 and opened to the public in 1950 as the City Museum. In 2015, a large capital project renovated the archives sections of the building, made significant accessibility

improvements to the entrance and main floor and installed fire suppression and detection systems throughout the building. It houses museum staff and patrons.

Kennard Estate

246 Dudley Road, Newton Centre/Oak Hill



Built in 1907, this 15,715 square foot Shingle-style field stoned foundation residential property was acquired by the City in 1978. It currently houses the Parks and Recreation administrative and program offices.

Brigham House

20 Hartford Street, Newton Highlands



Built in 1883, this 5,081 square foot Queen Anne style residential property was acquired by the City in 1951 for use as a branch library. The building did not open to the public until after a renovation/addition in 1958. In 2001, the City leased the building for the purposes of a teen center and social services. The building was renovated in 2009.

150 Jackson Road Complex

150 Jackson Road, Nonantum



Built in 1965, this 102,264 square foot building was the former Aquinas Junior College. The convent and chapel make up 26,264 square feet, while the other 76,500 square feet are the academic spaces. The City acquired this property in 2015 and replaced the windows in 2016. It is currently occupied by the Newton Early Childhood Program, also known as the Preschool Program, and they are using the first and second floors of the academic core. The convent and chapel are vacant. The auditorium and cafeteria are periodically used for programming and rentals.

Angino Farm

303 Nahanton Street



Built in 1855, this 5,028 square foot residential property was acquired by the City in 2004 and it has been occupied by the Angino Farmer since 2006.

Angino Farm Barn

303 Nahanton Street Rear



Built in 1886, this 2,888 square foot barn was acquired by the City in 2004 and was renovated in 2008. It contains a community kitchen, large multipurpose room, restrooms, and storage.

Municipal Building Inventory

FY2021-FY2025

Municipal (Non-School) Buildings

#	Building	Year	Square Feet	Department	Use/Program	Address	Site Area (sf)
1	City Hall	1932	81,000	Public Buildings	Multiple city departments utilize City Hall for a wide variety of functions. Spaces are rented, and programs are held there frequently.	1000 Commonwealth Avenue	432,308
2	Main Library	1991	93,000	Library	Library, rentals, programs, etc	330 Homer Street	200,635
3	Auburndale Branch Library	1927	4,830	Library	Auburndale Improvement Society operates the main floor as a community library. Friends of the Library use the basement for books donations and periodic book sales.	371 Auburn Street	18,926
4	Waban Branch Library	1929	6,378	Library	Waban Improvement Society operates the main floor as a community library. Public Buildings Department uses the basement as a wood shop.	1608 Beacon Street	45,833
5	Nonantum Branch Library	1957	7,364	Library	Ciociaro Social Club rents and operates out of the main floor.	144 Bridge Street	11,517
6	Newton Corner Library	1848	10,032	Parks and Rec	Newton Innovation Center	124 Vernon Street	239,818
7	1294 Centre Street	1927	6,050	Public Buildings	Under Renovation.	1294 Centre Street	16,160
8	Senior Center	1938	9,850	Senior Services	Senior Services and Programs	345 Walnut Street	25,909
9	Crystal Lake Bath House	1931	9,581	Parks and Rec	Recreation Swimming Summer Only	16 Rogers Street	106,999
10	Hawthorne Field House	1950	5,752	Parks and Rec	After School and Summer Programs, leagues, rentals	17 Hawthorne Street	183,577
11	70 Crescent Street	1930	3,208	Parks and Rec	Rec Maintenance and currently in re-use process.	70 Crescent Street	98,088
12	Recreation Garage Crescent	1940	4,600	Parks and Rec	Rec Maintenance and currently in re-use process.	70 Crescent Street	Inc Abv

#	Building	Year	Square Feet	Department	Use/Program	Address	Site Area (sf)
13	Lower Falls Community Center	1958	10,519	Parks and Rec	Daycare, After School and Summer Programs, leagues, rentals	545 Grove Street	371,358
14	Upper Falls Community Center	1955	13,418	Parks and Rec	Daycare, Summer Programs, leagues, rentals	45 Pettee Street	125,000
15	Albemarle Field House	1956	2,072	Parks and Rec	Senior Programs and Summer Camps	250 Albemarle Road	735,508
16	Forte Park Field House	1960	750	Parks and Rec	Bathrooms for the Field	229 California Street	262,102
17	Auburndale Cove Field House	1967	1,329	Parks and Rec	Ice Skating Warming Center and Rentals	West Pine Street	1,647,688
18	Burr Park Field House	1919	5,200	Parks and Rec	Daycare and Summer Programs	142 Park Street	223,000
19	Cabot Park Field House	1926	1,264	Parks and Rec	Daycare and Summer Programs	101 East Side Parkway	504,260
20	Lyons Field House	2013	1,050	Parks and Rec	Bathrooms for the Field	Lyons Field	Inc Abv
21	Newton Center Field House	1892	5,250	Parks and Rec	After School and Summer Programs, leagues, rentals	69 Tyler Terrace	779,790
22	Newton Center Metal Storage Building	1980	1,200	Parks and Rec	Untreated Storage	Tyler Terrace	Inc Abv
23	Bobby Braceland Field House	1965	800	Parks and Rec	Untreated Storage	98 Pennsylvania Avenue	381,980
24	Nahanton Park Field House	1996	2,090	Parks and Rec	Summer Programs	Nahanton Park	2,470,563
25	Gath Pool Facility	1965	10,350	Parks and Rec	Recreation Swimming Summer Only	256 Albemarle	Inc Abv
26	Quinobequin Pump Station Building	1980	4,596	DPW	Sewer Pump Station	136 Quinobequin	67,350
27	Elliot Street Pump Station Building	1990	1,500	DPW	Sewer Pump Station	391 Elliot Street	26,130
28	Elliot Street DPW Stable	1927	15,858	DPW	DPW Operations Center, Foremen/Supervisors, Dispatch, employee lockers, break room,	74 Elliot Street	480,443
29	Elliot Street DPW Garage	1959	10,500	DPW	Repair and Maintenance of fleet and equipment	70 Elliot Street	Inc Abv
30	Elliot Street Salt Shed	1994	7,800	DPW	Salt Storage	70 Elliot Street	Inc Abv
31	DPW Utilities Building	1935	21,664	DPW	Utilities Dept operations center, parts and equipment supply center.	60 Elliot Street	Inc Abv
32	Public Buildings	1968	7,640	Public Buildings	Public Buildings Operations Center	52 Elliot Street	52,557

#	Building	Year	Square Feet	Department	Use/Program	Address	Site Area (sf)
33	Craft Street Stable-DPW OPS Center	1894	18,900	DPW	DPW Operations Center, Foremen/Supervisors, Dispatch, employee lockers, break room,	90 Craft Street	179,301
34	Craft Street Garage	1919	26,775	DPW	Repair and Maintenance of fleet and equipment. Traffic Division and Environmental Affairs Division.	110 Craft Street	Inc Abv
35	Craft Street Salt Shed	2013	6,305	DPW	Salt Storage	110 Craft Street	Inc Abv
36	Craft Street Storage Building	2013	3,570	DPW	Untreated Storage of street sweepers, trucks, etc	110 Craft Street	Inc Abv
37	Craft Street Wash Building	1987	1,056	DPW	Wash bay used to wash fleet equipment	110 Craft Street	Inc Abv
38	Craft Street Sweeper Shed	1980	900	DPW	Sweeper brush storage	110 Craft Street	Inc Abv
39	Rumford Avenue Landfill Office	1950	400	DPW	Staff Office	Rumford Avenue	2,127,597
40	Manet Road Reservoir Gatehouse Building	1925	1,507	DPW	Reservoir Gatehouse	2 Manet Road Rear	372,379
41	Waban Hill Reservoir Gatehouse	1875	214	DPW/P&R	Reservoir Gatehouse	Ward Street	220,450
42	Fire Station #1	1965	14,808	Fire	Fire Station	241 Church Street	27,650
43	Fire Station #2	1964	24,700	Fire	Fire Station	1750 Commonwealth Avenue	24,275
44	Fire Station #3	2017	23,973	Fire	Fire Station	31 Willow Street	60,850
45	Fire Station #4	1955	14,780	Fire	Fire Station	195 Craft Street	30,838
46	Fire Station #7	1955	16,100	Fire	Fire Station	144 Elliot Street	60,352
47	Fire Station #10	2015	6,731	Fire	Fire Station	755 Dedham Street	42,500
48	Fire Headquarters	1928	6,130	Fire	Fire Prevention and Chief's Offices	1164 Centre Street	Inc Abv
49	Fire Wires Building	2015	4,036	Fire	Fire and Wires Division bays, storage, and offices.	755 Dedham Street Rear	Inc Abv
50	Manet Road Communications Building	2016	836	Police/Fire	Emergency Communications	2 Manet Road	Inc Abv
51	Ober Road Communications Building	2018	160	Police/Fire	Emergency Communications	Ober Road	10,545
52	Police Headquarters	1932	20,676	Police	All Police Functions except for Detectives Division and Community Services	1321 Washington Street	79,724
53	Police Garage	1959	7,548	Police	Police fleet maintenance and evidence secure storage.	1321 Washington Street Rear	Inc Abv

#	Building	Year	Square Feet	Department	Use/Program	Address	Site Area (sf)
54	Police Annex	1925	4,528	Police	Detectives Division and Community Services	25 Chestnut Street	28,528
55	Jackson Homestead	1809	7,212	Newton History	Historical museum and archives	527 Washington Street	41,422
56	Kennard Estate	1907	15,715	Public Buildings	Parks and Recreation Headquarters	246 Dudley Road	2,091,035
57	Brigham House	1883	5,081	99 Year Lease	Private Community Center 15+ years into the 99 year lease	20 Hartford Street	28,622
58	150 Jackson Road	1965	102,264	Public Buildings	Occupied by NECP/NPS	150 Jackson Road	248,844
59	Angino Farm	1855	5,028	Public Buildings	Newton Community Farm operate the farm under a 20 year llicense from the City	303 Nahanton Street	98,406
60	Angino Farm Barn	1886	2,888	Public Buildings	Newton Community Farm operate the farm under a 20 year llicense from the City	303 Nahanton Street Rear	Inc Abv
		Total	709,316			Total	15,280,817

Newton Public Schools Buildings							
#	Building	Year	Square Feet	Department	Use/Program	Address	Site Area (sf)
1	Angier School	2015	76,500	Newton Public Schools	Elementary School	1697 Beacon Street	291,730
2	Bowen School	1952	69,535	Newton Public Schools	Elementary School	280 Cypress Street	502,500
3	Burr School	1967	55,399	Newton Public Schools	Elementary School	171 Pine Street	376,730
4	Cabot School	1929	84,186	Newton Public Schools	Elementary School	229 Cabot Street	99,822
5	Carr School	1936	53,532	Newton Public Schools	Elementary School	225 Nevada Street	340,560
6	Countryside School	1953	49,612	Newton Public Schools	Elementary School	191 Dedham Street	322,065
7	Franklin School	1939	62,746	Newton Public Schools	Elementary School	125 Derby Street	237,611
8	Lincoln-Eliot School	1939	51,074	Newton Public Schools	Elementary School	191 Pearl Street	162,069
9	Horace-Mann School	1965	40,600	Newton Public Schools	Elementary School	687 Watertown Street	69,433
10	Pierce School	1951	36,050	Newton Public Schools	Elementary School	170 Temple Street	160,122

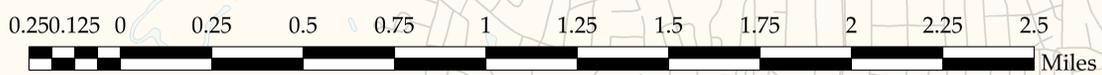
#	Building	Year	Square Feet	Department	Use/Program	Address	Site Area (sf)
11	Memorial-Spaulding	1954	68,775	Newton Public Schools	Elementary School	250 Brookline Street	243,333
12	Mason Rice	1959	43,000	Newton Public Schools	Elementary School	149 Pleasant Street	174,000
13	Underwood School	1924	43,300	Newton Public Schools	Elementary School	101 Vernon Street	43,856
14	Ward School	1928	38,000	Newton Public Schools	Elementary School	10 Dolphin Road	587,900
15	Williams School	1950	41,700	Newton Public Schools	Elementary School	141 Grove Street	134,887
16	Zervas School	2017	78,800	Newton Public Schools	Elementary School	30 Beethoven Avenue	283,916
17	Bigelow Middle School	1967	92,500	Newton Public Schools	Middle School	42 Vernon Street	122,350
18	Brown Middle School	1956	153,020	Newton Public Schools	Middle School	125 Meadowbrook Road	360,183
19	Day Middle School	1971	151,301	Newton Public Schools	Middle School	21 Minot Place	373,413
20	Oak Hill Middle School	1936	96,200	Newton Public Schools	Middle School	130 Wheeler Road	456,280
21	Education Center	1928	70,000	Newton Public Schools	Central Administration and Alt Ed Programs	100 Walnut Street	164,663
22	Newton North High School	2010	410,000	Newton Public Schools	High School	457 Walnut Street	1,045,658
23	Newton South High School	1959	389,550	Newton Public Schools	High School	140 Brandeis Road	1,458,270
		Total	2,255,380			Total	8,011,351

City Owned Buildings

City of Newton, Massachusetts

Legend

- City Buildings
- Surface Water



Map Scale: 1 inch = 1000 Feet

The information on this map is from the Newton Geographic Information System (GIS). The City of Newton cannot guarantee the accuracy of this information. Each user of this map is responsible for determining its suitability for his or her intended purpose. City departments will not necessarily approve applications based solely on GIS data. Applicants for city permits must inquire of the relevant city department for applicable requirements. City staff correct errors as they are identified. Newton's GIS Administrator maintains records regarding the source materials and methods used to create the digital data and will disclose this information upon request.

DATA SOURCES (Not all necessarily apply to this map):
Parcel Boundaries were compiled on 1979 1:1000 scale orthophoto base maps and are updated continuously.
Building footprints and road edge/pavement originally from Boston Edison (based on 1991 aerial photos); Newton staff have updated buildings from subdivision plans and orthophotography.
Thematic data (eg. Land Use) are from the Assessor's CAMA data base.



Map Date: September 20 2018
CITY OF NEWTON, MASSACHUSETTS
Mayor - Ruthanne Fuller



COMPLETE STREETS

Mayor Fuller's Administration is committed to a "Complete Streets" transportation policy and design approach. Complete Streets means that streets and sidewalks are planned, designed, operated and maintained to a standard that enables safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation. In short, "Complete Streets" allow for safe travel by those walking, bicycling, using a wheelchair, pushing a stroller, driving automobiles, or riding public transportation.

The City's Capital Improvement Plan dedicates a significant amount of funding for the enhancement of its streets and sidewalks to improve mobility for all travelers in Newton. Funding is utilized for enhancements to the City's street and sidewalk networks, construction of new sidewalks, ADA accessibility upgrades, bicycle and pedestrian paths and improvements, traffic calming measures, improvements to traffic flow and signals, and upgrades to bridges.

The Accelerated Pavement Management Program was established as part of a 10-year program to repair and improve City streets, sidewalks, and curb ramps to better serve all of us. This program was established in order to make a significant investment in our 276 mile roadway infrastructure.

The City prioritizes street improvements using our Pavement Management database. Each roadway segment has a Pavement Condition Index (PCI) which is a 0-100 rating system (100 being a roadway in new condition, and 0 being a roadway in extremely poor condition). The City continues to update these ratings every few years using the latest in automated pavement inspection technology. We completed the most recent road inspections in September 2018.

With this information, the City is aggressively investing in our roadway infrastructure network. The focus of the capital plan is:

- Use prioritization strategies such as Cost Benefit Value (CBV) analysis to assist with the roadway repair selection process
- Focus on repairing roadways in extremely poor condition (under a 25 PCI) over the next two (2) construction seasons
- Maintain roadways that are in good condition by strategically conducting preservation techniques designed to prolong the life of the roadways
- Incorporate Complete Streets concepts aimed at benefiting multiple modes of transportation.

Coordination of our street work with repairs of underground utilities by NGrid and the City's Water, Sewer and Stormwater Utilities Division is a critical component to the success of the road program. The City is in constant contact with underground utility companies and will continue coordinating on a monthly basis.

This document contains the roadways scheduled for improvements over the next five years. We have found that the repair schedule for a given street can change significantly for a variety of reasons. Changes are made, for example, when we learn new information about when water,

sewer, stormwater or NGrid repairs will be done. Please check online at www.NewtonMA.gov/DPW for the most current listing for the next five years.

The choice of the repair treatment is driven, primarily, by the condition and type of street. We anticipate the following roadway treatments will be completed during this five-year timeframe:

Crack Sealing

Crack sealing is the placement of a sealant material into cracks of an existing pavement surface to prevent excess water and moisture from penetrating the asphalt. This is a preventative measure to keep the road from deteriorating further. Crack Sealing can be done as a stand-alone treatment or in conjunction with other treatments listed below.



Fog Seal

A fog seal is a thin liquid layer applied to the surface of a paved road in relatively good condition. The intent of this treatment is to seal the pavement, rejuvenate, restore the wearing surface and provide resistance to deterioration due to the weather and sun. Subsequent to a Fog Seal the cracks are sealed with a liquid asphalt sealer. This treatment will extend the life of the pavement. This is classified as preventative maintenance.



Microsurfacing

A Microsurfacing is a thin layer (3/8") applied to an existing paved surface. Two layers can be applied also. This treatment adds a tough wearing coat to existing pavement. The intent of this treatment is to seal and protect the existing pavement as well as provide a new wearing course. This treatment does not add strength to the pavement structure. Crack sealing is applied to the pavement prior to Microsurfacing. For Microsurfacing, some of the cast iron structures in the street will be adjusted to final grade prior to application if deemed necessary. Minor pothole patching and other pavement repairs are done prior to installation of this treatment. This is classified as preventative maintenance



Overlay

The intent of this treatment is to leave the existing pavement structure intact. Cast iron structures (manholes, catch basins water and gas gates) will be reset to meet the new pavement elevation (if required). A bonding agent may be sprayed on the pavement and approximately 1.5 to 2 inches of new pavement installed. Minor pothole patching and other pavement repairs are done prior to installation of this treatment. This treatment adds strength to the road surface.



Cape Seal

A complete Cape seal application is done in several steps. After roads are leveled with a thin coat of asphalt (if necessary) a full width coating of rubberized chip seal material is applied. The chip seal has a surface that can be driven on for a short time and it is rougher than standard asphalt. It has some loose chips. About a week after chip seal, the roads will receive a microsurface coating. The finished microsurfaced road will be very similar to a standard paved surface. The "Cape seal" term describes the complete multi-layer treatment.



Bonded Wearing Course

Bonded Wearing Course is a high performance thin (5/8" to 3/4") hot mix overlay that consists of a single-step placement of spray applied polymer modified asphalt emulsion immediately ahead of gap-graded hot mix asphalt. The treatment provides a new paved wearing surface that seals the existing pavement, preserves curb reveal, and creates a high skid resistant surface that will not de-laminate.



Hot In-Place Recycling

Hot In-Place Asphalt Recycling is the process of rehabilitating deteriorated pavement. Existing asphalt is heated and scarified and mixed with a recycling agent. This new mix is then paved over the existing surface to correct surface distresses not caused by structural inadequacy. The new in-place product will then require a top course of microsurfacing, chip seal or Hot Mix Asphalt. We have learned to use it only in the late fall because it temporarily cause leaves to turn brown.



Cold In-Place Recycling

Cold In-Place (CIP) Asphalt Recycling is a pavement rehabilitation process that involves grinding, pulverizing, and mixing 3-5" of an existing poor-quality pavement. The material is then mixed with an asphalt emulsion binder, placed back on the pavement and compacted. The new surface may be fog sealed prior to the final top course of microsurfacing, chip seal or Hot Mix Asphalt.



Mill and Overlay

The existing pavement has 0.5 to 2 inches of the surface ground off. This treatment removes the existing deteriorated wearing surface and leaves the substructure intact. Then the installation of new pavement follows the Overlay description above. It is not uncommon for two layers to be installed after milling of the pavement.



Reclamation

This treatment is intended for a roadway that has outlived its useful life. It is considered to be the most aggressive resurfacing treatment. The entire pavement structure is completely pulverized to a depth of 14" to 20". Most of the pulverized material is reused as a subbase for the asphalt paving. Additional material may be required to be blended in the subbase to meet specifications. After the subbase is installed, a minimum of 4" of asphalt is installed in multiple layers.



Maintenance Overlay

To address residential roads in poor condition with low traffic volume, the city will overlay the road with pavement. The intent of this treatment is to leave the existing pavement structure intact. Cast iron structures (manholes, catch basins, water and gas gates) will be reset to meet the new pavement elevation (if required). A bonding agent may be sprayed on the pavement and approximately 1.5 to 2 inches of new pavement installed. Minor pothole patching and other pavement repairs are done prior to installation of this treatment. This treatment adds strength to the road surface and will provide a new safe surface until major reconstruction is performed in the future.



Roads Program

5 YEAR CIP, FY2021-FY2025

Street	From	To	Length (Feet)	Operation
FY20				
Parker Street	Dedham Street	Boyleston Street	4000	Bonded Wearing Course
Arlington Street	Waverly Avenue	Nonantum Street	1,500	Mill and Overlay
California Street	Bridge Street	Town Line	3,050	Mill and Overlay
Central Avenue	Washington Street	Crafts Street	1,750	Mill and Overlay
Commonwealth Avenue	Chestnut Street	Lowell Street	3,500	Mill and Overlay
Crafts Street	Waltham Street	North Street	1,600	Mill and Overlay
Walnut Street	Beacon Street	Homer Street	2,000	Mill and Overlay
Walnut Street	Forest Street	Beacon Street	2,900	Mill and Overlay
Willow Street	Sumner Street	Centre Street	700	Mill and Overlay
Pershing Road	Adams Avenue	Dead End	600	Mill and Overlay
Belmont Street	Tremont Street	Arlington Street	550	Maintenance Overlay
Waban Park	Walnut Park	Waban Street	450	Maintenance Overlay
Waban Street	Pearl Street	Thorton Street	1,860	Maintenance Overlay
Claflin Place	Walnut Street	Dead End	260	Maintenance Overlay
Leonard Avenue	Highland Street	Greylock Road	570	Maintenance Overlay
Atwood Avenue	Gay Street	Harvard Circle	565	Maintenance Overlay
Jenison Street	Judkins Street	Lothrop Street	360	Maintenance Overlay
Sherbrooke Road	Park Avenue	Waverly Avenue	850	Maintenance Overlay
Allston Street	Highland Avenue	Austin Street	600	Maintenance Overlay
Lockwood Road	Highland Street	Prince Street	530	Maintenance Overlay
Arbor Road	Waltham CL	Cherry Street	190	Maintenance Overlay

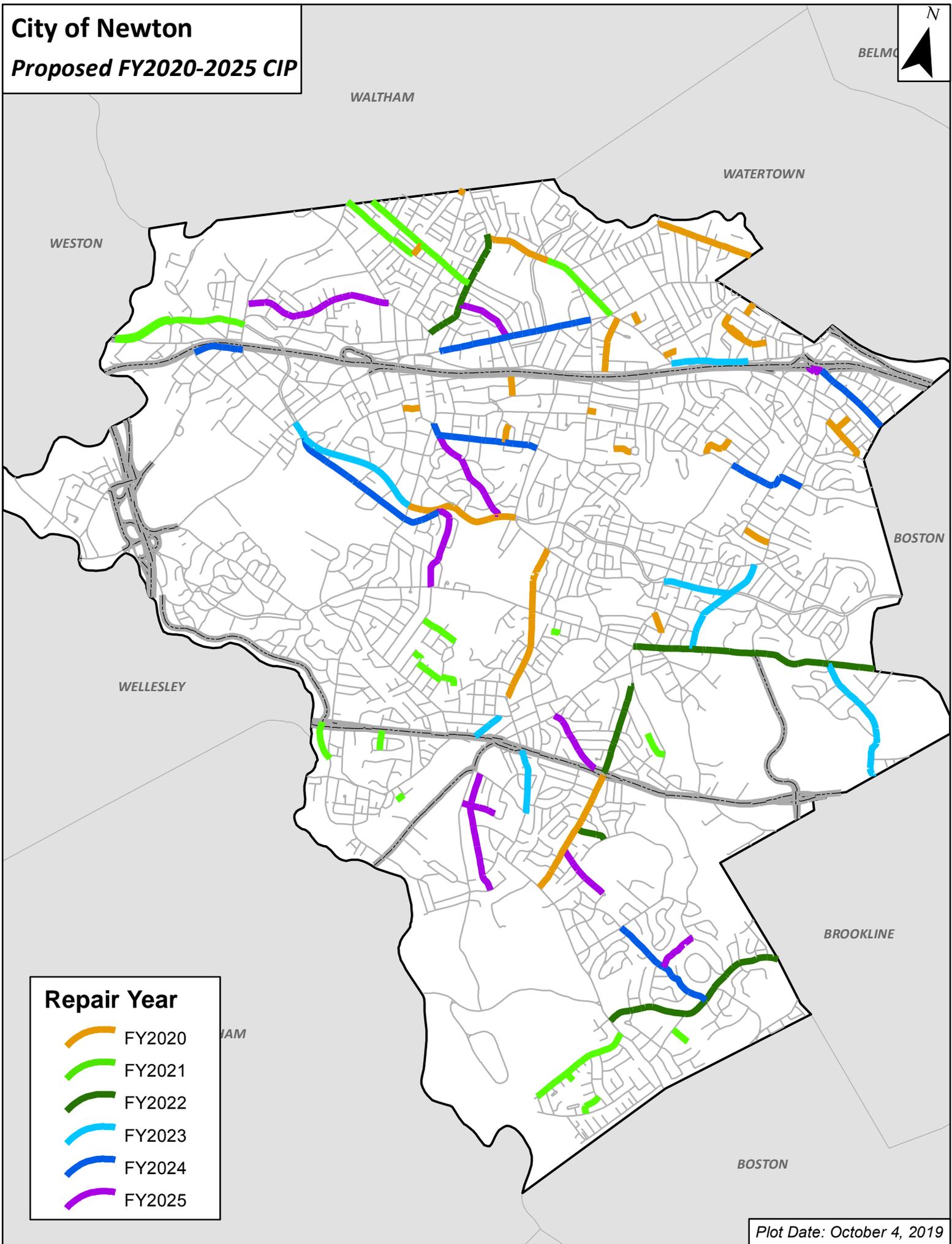
Street	From	To	Length (Feet)	Operation
Concolor Avenue	Cabot Street	Lombard Street	1,050	Maintenance Overlay
Fayette Street	Gardner Street	Watertown TL	420	Maintenance Overlay
Lenglen Road	Crafts Street	Lenglen Road (Pvt)	410	Maintenance Overlay
		FY2020 Mileage	5.73	
FY21				
Adams Avenue	Perishing Road	Sheridan Street	1,300	Mill and Overlay
Adams Avenue	Sheridan Street	Waltham City Line	1,300	Mill and Overlay
Commonwealth Avenue	Weston TL	Lexington Street	6,400	Mill and Overlay
Crafts Street	North Street	Watertown Street	2,600	Mill and Overlay
Derby Street	Town Line	Sheridan Street	1,300	Mill and Overlay
Derby Street	Sheridan Street	Waltham Street	2,700	Mill and Overlay
Ellis Street	Chestnut Street	Route 9	1,250	Mill and Overlay
Wiswall Road	Walsh Street	Dedham Street	3,800	Mill and Overlay
Columbine Road	Oak Hill Street	Cul De Sac	600	Maintenance Overlay
Bow Road	Cypress Street	Dead End	902	Maintenance Overlay
Endicott Street	Plymouth Road	Hinckley Road	870	Maintenance Overlay
Cochituate Road	Plymouth Road	Cul De Sac	560	Maintenance Overlay
Selden Street	Hinckley Road	Winslow Road	290	Maintenance Overlay
Puritan Road	Plymouth Road	Beethoven Avenue	1,180	Maintenance Overlay
Albion Place	Newbury Street	Dead End	260	Maintenance Overlay
N Roadway	Wiswall Road	Cul De Sac	290	Maintenance Overlay
Colella Road	Hanson Road	Saw Mill Brook Roadway	740	Maintenance Overlay
Chandler Place	Elliot Terrace	Dead End	620	Maintenance Overlay
Hickory Cliff Road	Roundwood Road	Boylston Street	620	Maintenance Overlay

Street	From	To	Length (Feet)	Operation
		FY2021 Mileage	5.22	
FY22				
Beacon Street	Centre Street	Town Line	7,550	Mill and Overlay
Brookline Street	Dedham Street	Brookline TL	6,000	Mill and Overlay
Parker Street	Boyleston Street	Cypress Street	3,100	Mill and Overlay
Rosevelette Road	Parker Street	Brandeis Street	950	Mill and Overlay
Waltham Street	Crafts Street	River Street	3,600	Mill and Overlay
Maintenance Overlay Projects			TBD	
		FY2022 Mileage	4.02	
FY23				
Commonwealth Avenue	Centre Street	Grant Avenue	2100	Mill and Overlay
Commonwealth Avenue	Washington Street	Beaumont Avenue	8200	Mill and Overlay
Grant Avenue	Beacon Street	Ward Street	3400	Mill and Overlay
Hammond Street	Beacon Street	Town Line	4100	Mill and Overlay
Hartford Street	Boylston Street	Lincoln Street	1000	Mill and Overlay
Walnut Street	Dedham Street	Route 9	2000	Mill and Overlay
Washington Street	Crafts Street	Church Street	2400	Mill and Overlay
Maintenance Overlay Projects			TBD	
		FY2023 Mileage	4.39	
FY24				
Central Street	Woodland Street	Auburn Street	1520	Mill and Overlay
Fuller Street	Commonwealth Avenue	Evelyn Road	5200	Mill and Overlay

Street	From	To	Length (Feet)	Operation
Hartman Road	Brookline Street	Greenwood Street	3500	Mill and Overlay
Highland Street	Lowell Avenue	Chestnut Street	3550	Mill and Overlay
Sargent Street	Waverly Avenue	Centre Street	2500	Mill and Overlay
Washington Street	St James St	Boston CL	2700	Mill and Overlay
Watertown Street	Eden Avenue	Walnut Street	4800	Mill and Overlay
Maintenance Overlay Projects			TBD	
		FY2024 Mileage	4.50	
FY25				
Auburndale Avenue	Lexington Street	River Street	4600	Mill and Overlay
Clark Street	Parker Street	Centre Street	2100	Mill and Overlay
Drumlin Road	Hartman Road	Dudley Road	1300	Mill and Overlay
Elliot Avenue	Watertown Street	Waltham Street	1900	Mill and Overlay
Evelyn Road	Beacon Street	Commonwealth Avenue	2700	Mill and Overlay
Heatherland Road	Winchester Street	Andrew Street	1050	Mill and Overlay
Upland Avenue	Rachel Road	Dedham Street	3750	Mill and Overlay
Valentine Street	Commonwealth Avenue	Chestnut Street	3150	Mill and Overlay
Wheeler Road	Parker Street	Meadowbrook Road	1850	Mill and Overlay
Maintenance Overlay Projects			TBD	
		FY2025 Mileage	4.24	
Total Milage:			28.11	(does not include FY22-FY25 Maintenance Overlay Projects)

City of Newton

Proposed FY2020-2025 CIP



Repair Year

-  FY2020
-  FY2021
-  FY2022
-  FY2023
-  FY2024
-  FY2025

Plot Date: October 4, 2019

City of Newton
Proposed FY2021 CIP



BELMONT

WALTHAM

WATERTOWN

WESTON

BOSTON

WELLESLEY

BROOKLINE

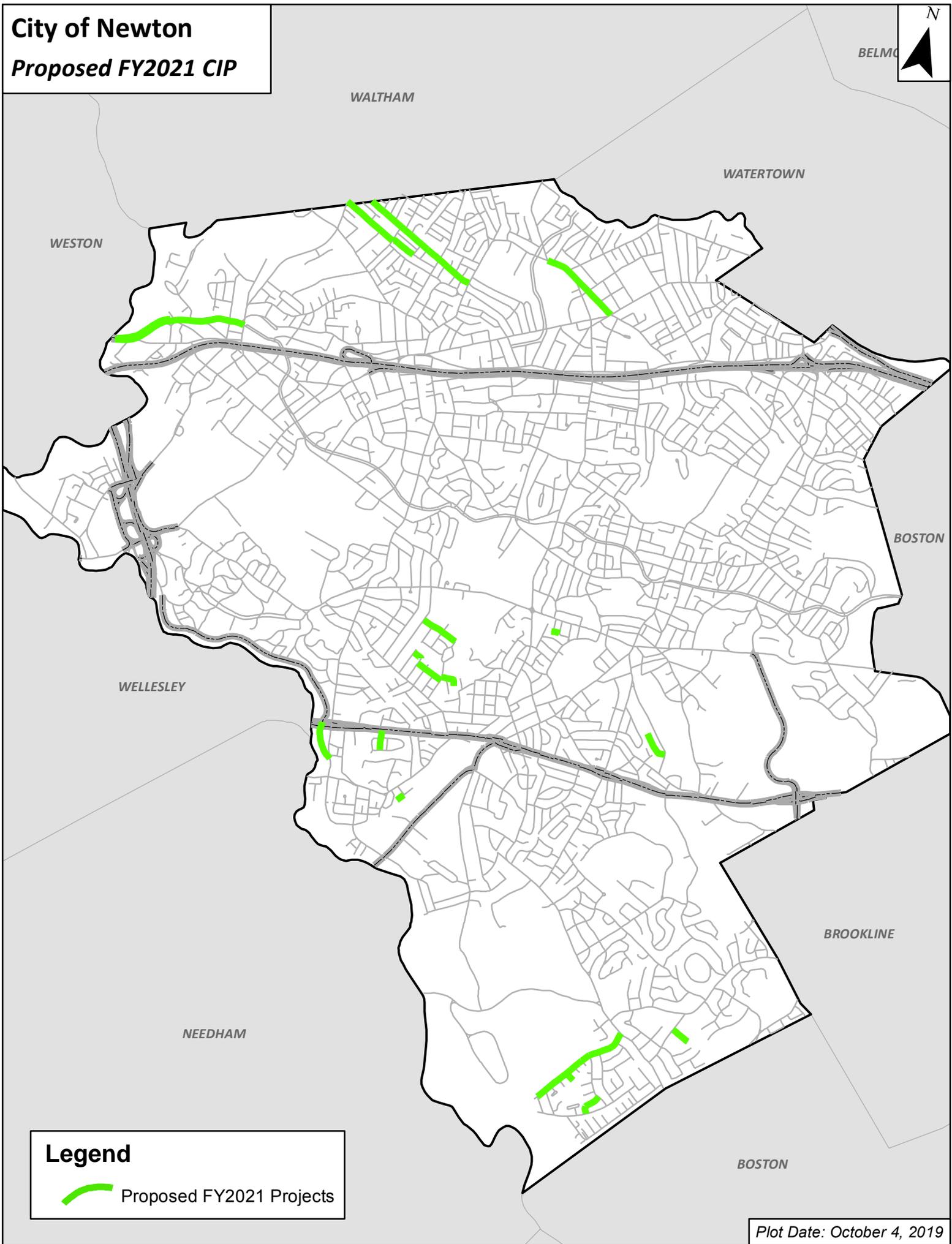
NEEDHAM

BOSTON

Legend

 Proposed FY2021 Projects

Plot Date: October 4, 2019



City of Newton
Proposed FY2022 CIP



WALTHAM

WATERTOWN

WESTON

BOSTON

WELLESLEY

BROOKLINE

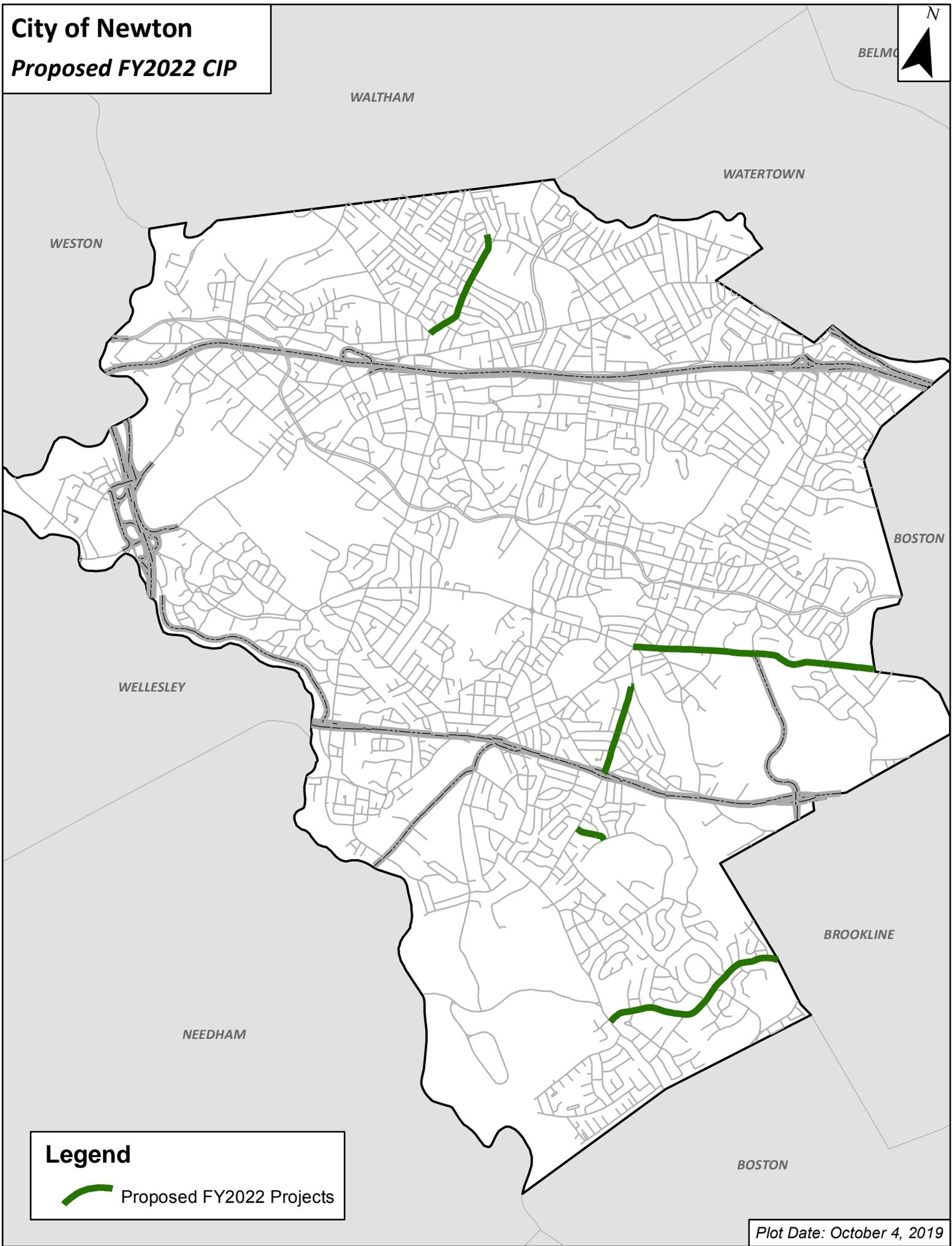
NEEDHAM

BOSTON

Legend

 Proposed FY2022 Projects

Plot Date: October 4, 2019



City of Newton
Proposed FY2023 CIP



BELMONT

WALTHAM

WATERTOWN

WESTON

BOSTON

WELLESLEY

BROOKLINE

NEEDHAM

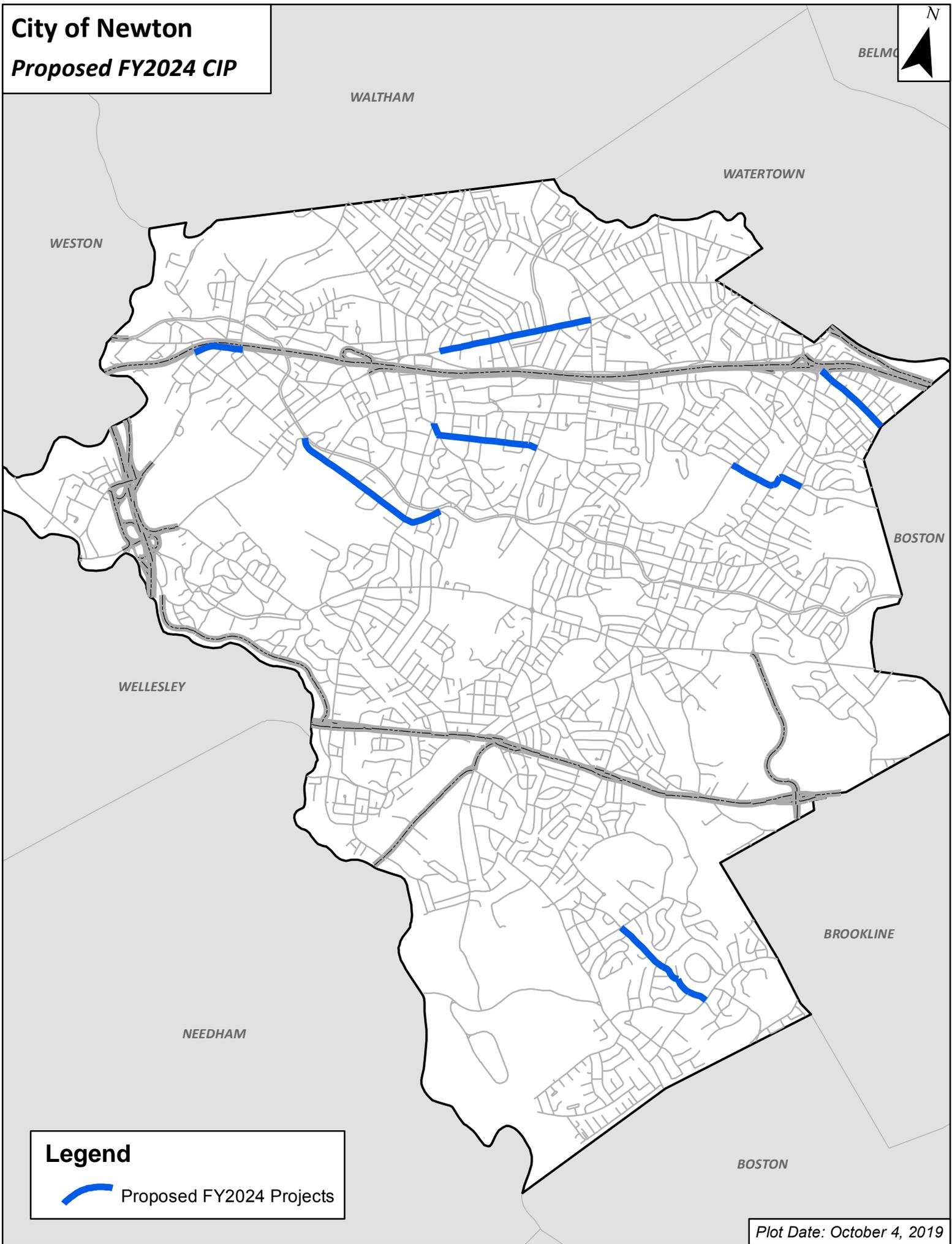
BOSTON

Legend

 Proposed FY2023 Projects



City of Newton
Proposed FY2024 CIP



Legend



Proposed FY2024 Projects

Plot Date: October 4, 2019

City of Newton
Proposed FY2025 CIP



BELMONT

WALTHAM

WATERTOWN

WESTON

BOSTON

WELLESLEY

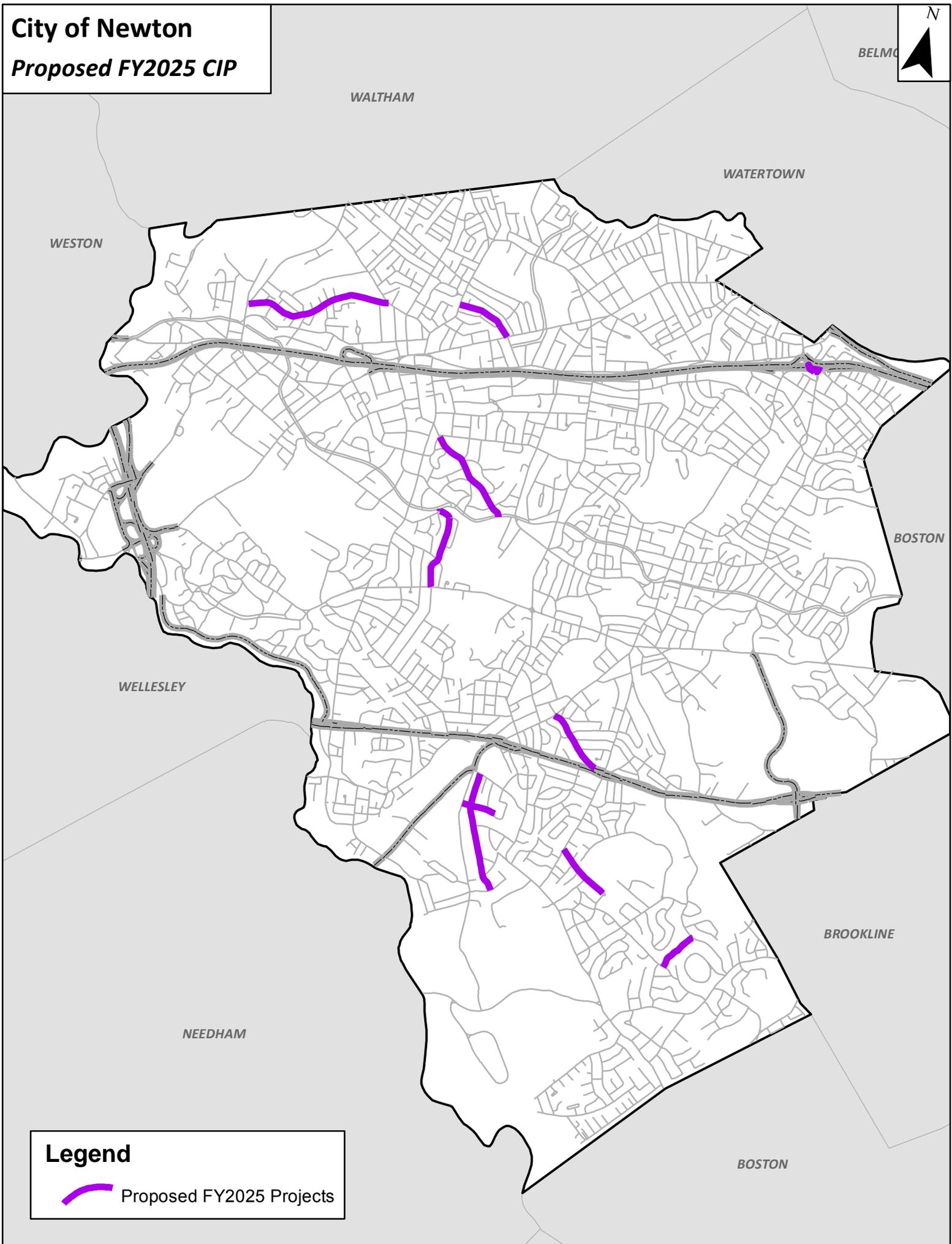
BROOKLINE

NEEDHAM

BOSTON

Legend

 Proposed FY2025 Projects



SIDEWALKS

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

Utilizing construction contractors dedicated to sidewalk repair, as well as in-house staff, the Department of Public Works will add over 2 miles of new sidewalk to the City and repair over 2 miles of existing sidewalks annually. Public Works does numerous sidewalk repairs all across the City both proactively when DPW sees a problem and when a resident alerts us to an issue. In FY 2020, Public Works focused on sidewalk installation and repairs along Washington Street from Beacon Street to Perkins Street. In FY2021, Public Works will focus on installing and repairing sidewalks in the walking routes around City Hall campus and Wells Ave.

FY2021

City Hall Campus
Wells Ave

FY2022

Brown School
Oak Hill School
Newton South High School
Countryside School

FY2023

Ward School
Underwood School
Chestnut Hill area

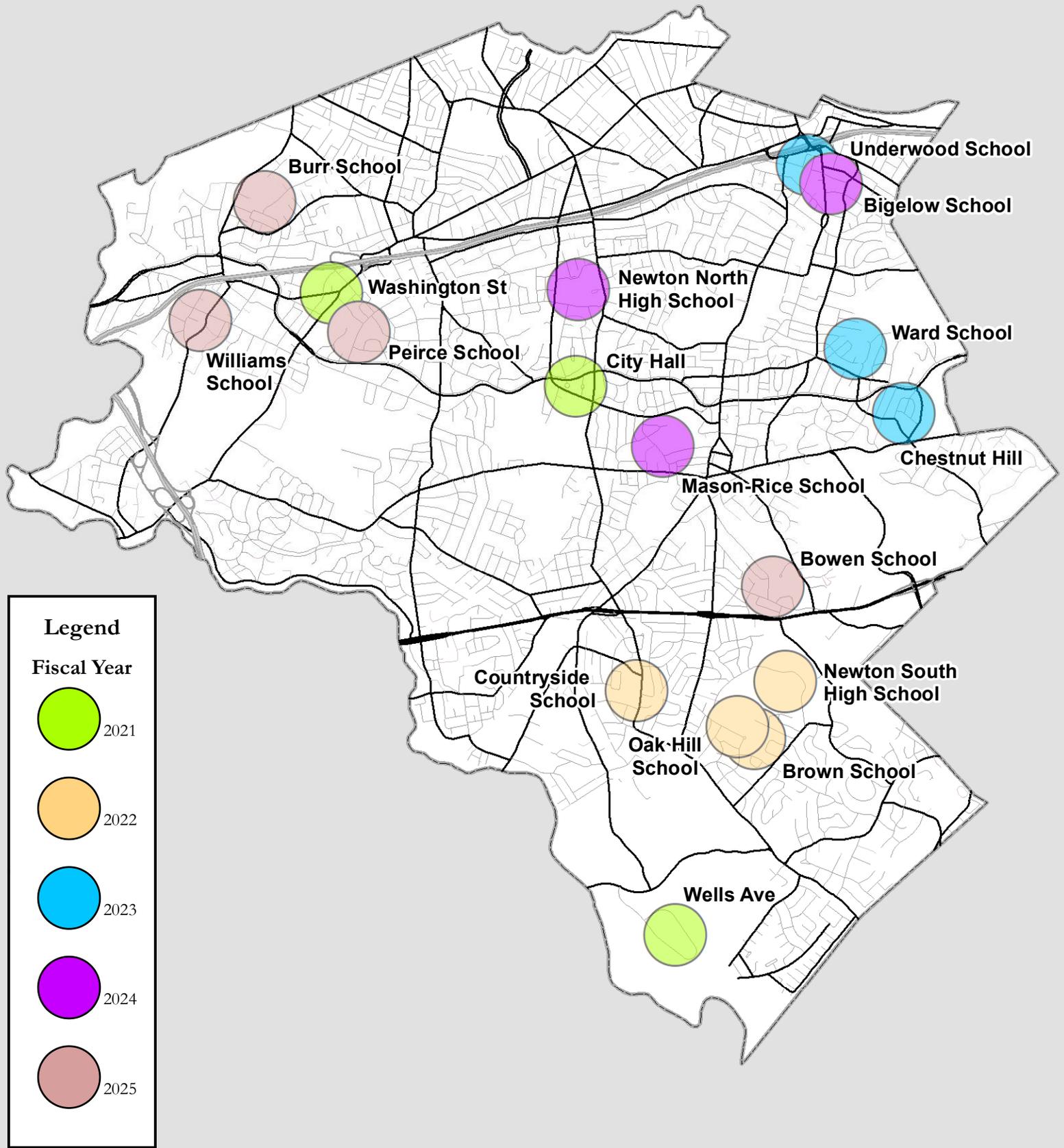
FY2024

Bigelow School
Mason Rice School
Newton North High School

FY2025

Williams School
Pierce School
Bowen School, Burr School





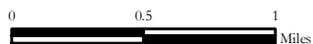
FY21 - FY25 Proposed Sidewalk Locations

City of Newton, Massachusetts

CITY OF NEWTON, MASSACHUSETTS
 Mayor - Ruthanne Fuller



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Map Date: September 03, 2019

TRANSPORTATION

The City of Newton's goal is a safe, smart, accessible, livable and sustainable multimodal transportation system which aspires to eliminate transportation-related fatalities and injuries. In FY2018, the City produced the Newton Street Design Guide to translate its vision into actionable engineering and design guidance based on a Complete Streets approach. The City formally adopted a Complete Streets Policy in 2016 to ensure its street network works for all modes and all people regardless of age, ability or income.

PRIORITIES

Top transportation priorities for FY2020-FY2025 include:

1. Roads Program

Goal: Improve road quality, driver experience, and safety

- »» Invest \$100 million over 10 years to improve pavement quality to an above average standard
- »» Avoid pavement deterioration through preventive maintenance
- »» Incorporate Complete Streets improvements
- »» Upgrade traffic signalization and coordination

2. Village Enhancements

Goal: Enhance safety and visitor experience in business areas and village centers

- »» Undertake safety and streetscape beautification in Newton's village center districts:
 - »» Needham Street - Begin construction by MassDOT, anticipated Summer 2020
 - »» West Newton Square - Begin major construction, spring 2020



West Newton Square Village Enhancement Project. Concept image.

- »» Walnut Street in Newtonville - Begin construction, spring 2020

3. Bike Facilities

Goal: Increase bicycling use and safety

- »» Ensure success of newly launched bike share system in Newton
- »» Expand bike lane network. Add 2.5 miles of new bike facilities
- »» Install 100 bike parking spaces in village centers, at transit facilities and at schools



4. Transit

Goal: Enhance service to Newton residents and businesses

- »» Increase private and public shared transportation opportunities in Newton
- »» Encourage MBTA to advance accessibility projects at Newton Highlands, Newtonville, Auburndale and West Newton stations

5. Smart Parking Management

Goal: Provide convenient available parking and improve EV access for Newton residents and businesses

- »» Implement holistic village center parking plan(s) to free up front-door spaces for customers
- »» Initiate Shared Parking Pilot Program
- »» Expand EV charging opportunities in Newton

6. Traffic Calming

Goal: Implement traffic calming improvements on prioritized roads

- »» Continue data-driven prioritization of traffic calming requests
- »» Implement improvements on highest priority requests from FY18 and FY 19 analyses

- Lowell Avenue, near Highland Avenue and Austin Street
- Elliot Street
- Lowell Avenue at Hull Street
- Waltham Street at Derby Street
- Langley Road
- Waverly Avenue
- Allen Avenue
- Beethoven Avenue

- Pearl Street
- Webster Street
- Lexington Street
- Adams Street
- Walnut Street, Beacon Street to Lincoln Street
- Grant Avenue
- Walnut Street, Route 9 to Dedham Street
- Dedham Street, Winchester Street to Walnut Street
- Florence Street

»» While FY20 funding increased, traffic calming measures will not be able to be implemented at all locations identified as a priority. These locations will remain on the list of priority locations (along with the other Traffic Calming locations that will be added to the list of priority locations, which are evaluated on a continuous basis).

BICYCLE PLAN

Mayor Fuller envisions a City in which people of all ages and abilities can safely travel through Newton by bike, foot, transit or vehicle. The City's transportation system should enable such "mode-agnostic" residents and visitors to choose whatever means of travel are most attractive and fitting for a given individual trip, including biking. This vision has been clearly articulated in the Newton Leads 2040 Transportation Strategy and the City's Complete Streets Policy. In both documents, biking is an important pillar of the City's transportation system.

Newton's bicycle initiative is comprised of three primary areas: The bike network, bike racks, and bike share.

BIKE NETWORK

With the help of hundreds of advocates, city officials, partner agencies, constituents, and consultants, the City developed a bike network plan in 2012 showing a system of interconnecting on and off-road facilities to help people bike around Newton. Each year, the City intends to install new miles of the bike network.

All bike facilities will incorporate state-of-the-practice design principles inspired by industry best practices. Bike network locations are selected and prioritized according to safety, connectivity, demand (current and potential), feasibility and opportunity.

FY2019 and 2020 new installations include:

- Braeland Ave - Langley Rd to Herrick Rd
- Commonwealth Ave - Lowell Ave to Washington Street
- Nahanton Street - Dedham Street to Needham border
- Walnut Street - Elm Street to Commonwealth Avenue
- Waltham Street - Waltham Border to Crafts Street
- Washington Street - Newton Corner to Boston border

In FY2021 - FY2025, the City will pursue adding or upgrading bike facilities on the following roadways:

- Beacon Street - Wellesley border to Centre Street
- Commonwealth Avenue Carriageway
- Crafts Street - Waltham Street to Watertown Street
- Greenway - Easy Street to Floral Street
- Hammond Pond Parkway - Beacon Street to Rt 9 (managed by DCR)
- Needham Street - Winchester Street to Needham border (managed by MassDOT)
- Parker Street - Dedham St to Cypress Street
- Walnut Street - Elm Street to Washington Street
- Watertown Street - Washington Street to Watertown border
- Washington Street - Commonwealth Avenue to Newton Corner
- Washington Street - Newton Corner to Boston City Line
- West Newton Square - Elm Street to Chestnut Street

The growing network will consist of the following facility types:

- *Protected bicycle lanes* - Exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A separated bike lane is physically separated from motor traffic and distinct from the sidewalk. Needham Street will feature the City's first protected bike lane.
- *On-street lanes* - An on-street bike lanes is defined as a portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes enable bicyclists to ride at their preferred speed without interference from prevailing traffic conditions and facilitate predictable behavior and movements between bicyclists and motorists. A bike lane is distinguished from a separated bike lane in that it has no physical barrier (bollards, medians, raised curbs, etc.) that restricts the encroachment of motorized traffic.
- *Shared lane markings* - Shared Lane Markings are designated by striping, signage and pavement markings and indicate that vehicles and bicycles should safely share the same space on the road. The City will pay particular attention to intersection treatments, where crashes occur most commonly. The Walnut Street project in Newtonville will incorporate special green-backed shared lane markings to provide additional emphasis for cyclists. In general, protected bike lanes and on-street bike lanes are preferable to shared lane markings.

BIKE RACKS

In FY2019, the City installed 39 bike racks in village centers throughout the City. In early FY2020 the City focused installation on schools. After consulting with Safe Routes to Schools and school principals, the City installed new racks at 13 schools and covered bike shelters at Newton North High School and Newton South High School. The City will continue to analyze rack needs and install additional racks where needed.

BIKE SHARE

In FY2019 Newton, and more than a dozen neighboring municipalities saw the launch of Lime bike share. In Summer 2019, the system has seen upwards of 900 trips per week on more than 600 bicycles, with more than 100 trips taking place in Newton daily on as many bicycles.

INTERSECTION IMPROVEMENTS

The Public Works Department maintains approximately 100 signalized locations throughout the City that include fully-actuated, semi-actuated, and pedestrian activated traffic signals. The oldest set of signals dates back to 1958 (Comm. Ave/Ash St & Waltham St/Lodge Rd), with the most recent signals installed in 2018 (Dedham Street at Brookline Street and Dedham Street at Nahanton Street). The signal infrastructure is complex and there are many different types of signal equipment. The signal equipment has Americans with Disabilities Act (ADA) compliance features with pushbuttons, hand/person pedestrian signals, audible pushbuttons, and countdown timers. The ADA systems vary in traffic sequence and timing including improved pedestrian accessibility.

In 2012, the City completed a Traffic Signal Evaluation to document, evaluate and develop recommendations for specific improvements and prioritize the most problematic intersections throughout the City. Additionally, a signal timing policy was developed outlining various signal strategies in order to maximize the efficiency and safety of existing and future traffic signal installations. Then strategies include minimum/maximum green time, passage time, vehicle and pedestrian clearance time, cycle length, exclusive and/or current pedestrian phasing, timing plans, and a number of various signal settings, modes and upgrades.

The prioritized Traffic Signalization Plan was developed utilizing a combination of factors. These include the traffic signal evaluation study, key traffic data, age of the equipment, average daily traffic (ADT), crash ratings, ADA compliance, and other identified and anticipated traffic improvement needs. The needs range from signalized intersections that have extensive traffic delays and queuing of vehicles, to poorly coordinated traffic signals where there are public safety concerns for vehicles, pedestrians and bicyclists in heavily used, but non-signalized, intersections. Many signal controllers need to be replaced in order to allow them to be synchronized with other traffic signals. Others need upgrades to the aging equipment such as signal posts and mast arms for improved visibility; loop/camera detection to allow for vehicle detection and efficient traffic operations, communication between signals; and improved geometry of the roads and sidewalks to address pedestrians and bicyclists safety and ADA compliance.

The original plan has been expanded and now includes entire village centers and main corridors in addition to the original intersections. This CIP focuses on not only completing the remaining original locations, but improving additional intersections which are the most inefficient, frustrating and unsafe within the City. The goal over the next three to five years is to reduce the number of vehicle/bicycle/pedestrian crashes and develop a signal infrastructure that can be maintained in an efficient and proactive manner. The City intends to accomplish these goals through the implementation of improved roadway geometry, ADA compliant systems, state-of-the-art detection, and coordination/timing communication. The major intersections addressed include:

1. Dedham Street at Nahanton & Brookline/Carlson (In-Process)

The previous intersection geometry made it difficult for vehicles to turn left onto Dedham Street from Nahanton Street due to poor sight distance and the high volume of traffic on Dedham Street. The previous geometry and traffic signal layout at the intersection of Dedham/Brookline/Carlson did not allow for efficient or safe traffic circulation. Although the

recently completed Fire Station No. 10 project resulted in minor improvements to the existing traffic signals to allow for fire-preemption operation, a complete upgrade to this corridor and improvements to pedestrian accommodations was required. It is noted that the final paving and pavement markings are still outstanding due to scheduling the final work around utilities completing additional underground work in the area, but that the new intersection geometry and new traffic signal equipment has been operational since December 2018.

Work includes: Geometry modifications at Dedham/Nahanton intersection, lane and signal modifications and upgrades at the intersection of Brookline/Dedham/Carlson, resurfacing, new pavement markings and signage. The project is scheduled to be completed in Autumn 2019.

2. Oak Street at Christina Street (In Construction)

The existing offset nature of the intersection geometry makes it difficult to negotiate turning or through movements. Pedestrian accommodations are lacking and substandard.

Work includes: Geometry modifications at Oak/Christina intersection, signal equipment upgrades, installation of ADA compliant accessible ramp, pavement resurfacing in addition to new markings. The project is scheduled to be completed in Autumn 2019.

3. Newtonville Traffic Signal/Corridor Improvements (In Design)

Walnut Street in Newtonville experiences a range of multimodal transit from vehicles, to bicycles to pedestrians to public transportation. Because of its proximity to local shopping, schools and residential areas, Walnut Street is a vital corridor for many. In order to provide a more inviting and safe experience for those that use the corridor, improvements for multimodal transportation are underway.

Work includes: Increasing sidewalk area, installing ADA compliant ramps, increasing pedestrian street crossing locations, replacing traffic signal equipment at the Walnut Street / Cabot Street intersection. Implementing beautification elements to retail area. The project is scheduled to begin in the Spring 2020.

4. West Newton Square (In Construction)

Washington Street in West Newton Square experiences traffic delays from Chestnut Street to Elm Street with the greatest problems between Chestnut, Watertown & Waltham Streets. In 2014, the City completed Phase I of this project which included repair of pavement loop detectors and the retiming of the traffic signals at Highland/Cherry, Watertown/Waltham and Elm Street. This CIP will provide funding to complete Phase II of the project by focusing on equipment upgrades along Washington Street from Chestnut to Cherry, and improved accommodations for multimodal transit.

Work includes: Implementing new overhead video detection, countdown timers/APS pushbuttons at each signalized location, signal hardware upgrades, upgrading signal controllers, ADA compliance improvements, relocating signal equipment to provide for better visibility and improve efficient operation, and beautification elements. The intersections include:

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

Major construction work on this project is scheduled to begin in the Spring 2020.

5. Wells Avenue @ Nahanton Street (Concept Phase)

The intersection of Nahanton Street and Wells Avenue experiences traffic congestion during peak hours due to the vehicles coming into and out of the Wells Avenue Business Park and the opening of the Kendrick Street Bridge from the 128 add-a-lane project. The intersection had aging signal equipment which was upgraded in FY2017. The equipment enhancements will allow for communication between the Nahanton Street and Winchester Street and the Nahanton Street/Wells Avenue intersection. Additional improvements to address traffic flow and to provide accommodations for pedestrians and bicycles will also be required.

Work includes: Potential roadway and intersection geometry changes to enhance safety, implementing new overhead video detection, upgrading signal controllers, GPS communication device installation to improve efficient operation, and pedestrian and bike safety enhancements. The intersections include:

- Nahanton Street at Wells Avenue
- Nahanton Street at Winchester Street (GPS Device only)

6. Cherry Street at Webster Street and Derby Street (Concept Phase)

This intersection experiences heavy traffic volumes to and from West Newton and Waltham. The existing equipment is outdated, visibility of the existing traffic signal indications is somewhat limited, sight distance is poor, and pedestrian accommodation is inadequate.

Work includes: Installation of new signal mast arms, installation of new vehicle detection equipment, new pavement surface, installation of new ADA compliant ramps, markings and signage.

7. Beacon Street at Walnut Street (4 Corners) (Concept Phase)

This intersection experiences heavy traffic volumes as it provides a direct connection to Newtonville, Newton Centre, Waban and the Highlands. Although the existing geometry accommodates traffic from each direction through the use of 'slip lanes', it does not provide for safe pedestrian accommodation. During the conceptual design phase, several options will be evaluated, including replacement of the signalized intersection with a single-lane modern roundabout. Other alternatives will include changes to the existing intersection geometry to enhance safety while maintaining traffic signal control.

Work includes: Modify geometry, replace existing signal controller/cabinet, install new mast arms and traffic signal equipment, and improve pedestrian and bike access, new pavement, new pavement markings and signage.

8. Newton Corner and Mass Pike Interchange at Exit 17 Off-Ramp (Concept Phase)

This intersection experience an enormous amount of vehicular traffic exiting and entering the Massachusetts Turnpike from the east and west through Newton Corner via Washington Street westbound and Centre Street southbound. In addition, due to the hotel, numerous businesses and schools located along this corridor, there is a significant amount of pedestrian traffic moving through this area. The existing signal equipment is old and damaged from years of wear and tear, the pavement surface is cement concrete and has suffered extensive damage from weather and the amount of traffic it carries on a daily basis, pedestrian crossings are too wide and unsafe, lighting is extremely poor, vehicular speeds are excessive, and the corridor has been modified to accommodate access to the MassPike and no longer looks or functions like a village. MassDOT has initiated a project to conduct traffic counts, complete a topographic survey, and develop conceptual alternatives that will seek to make safety improvement, operational improvements, and consider Complete Streets for all users of the roadway network.

Work includes: Work closely with MassDOT to provide feedback and comments throughout the conceptual design stage to improve safety and traffic operations for all users.

9. Beacon Street at Chestnut Street (Concept Phase)

This intersection serves as a connection between West Newton and Waban via Commonwealth Avenue and Boylston Street (i.e., Route 9). Sight distance is poor; ADA and pedestrian accommodation is sub-standard and the existing geometry results in reduced vehicle capacity and inefficiencies. Future potential housing developments near this intersection will also impact the intersection.

Work includes: Geometry modifications to improve lane capacity and sight distance, installation of new traffic signal equipment, assessment and reconfiguration of Short Street including access from Chestnut Street to Beacon Street, ADA compliant upgrades, sidewalk replacement, new pavement surface, striping and signage.

10. Centre Street at Walnut Street (Concept Phase)

This intersection in Newton Highlands receives a large amount of traffic as it serves as a connection to Boylston Street (i.e., Route 9), the Highlands and Newton Centre. It is a very tight intersection that experiences frequent damage and knockdowns from turning trucks. It also serves a large volume of pedestrian traffic coming to and from the Greenline MBTA station as well as from Needham Street.

Work includes: Installation of traffic signal equipment with pedestrian accommodations, modifying the existing curb line and installing ADA compliant ramps.

11. Washington Street - West Newton to Newton Corner (Concept Phase)

Based on a 2014 CTPS Study of Washington Street, a change in the lane configuration has been evaluated and recommended for the Washington Street corridor from Centre Street to Chestnut Street, a distance of 2.2 miles. The concept design will also build upon the zoning and land use study along Washington Street, to ensure that the roadway corridor will be able to support the future vision for Washington Street. The changes may include traffic calming,

reducing pedestrian and vehicular conflicts, and improving the overall safety for several modes of transportation. It is envisioned that construction of the Washington Street corridor project would be funded through the State Transportation Improvement Program (STIP).

Work includes: Implementing a short-term trial along portions of Washington Street to evaluate and refine the previous recommendations. The project will likely include traffic calming improvements with allowance for left-turn pockets, dedicated bike lanes or protected separated bicycle lanes, and better designed on-street parking. The project will also include improved pedestrian accommodations and improved bus stops. The project will benefit the many vehicular drivers, transit users, pedestrians and bicyclists that travel along Washington Street, a major arterial that connects multiple villages. This project is anticipated to be constructed in phases given its length.

12. Intersection at Auburn Street/Grove Street/Central Street (Concept phase)

This intersection experiences significant intersecting traffic volumes and serves many pedestrians going to and from the Auburndale Commuter Rail Station. The existing equipment is outdated and does not operate efficiently; visibility of the existing traffic signal indications is somewhat limited; sight distance is poor; and pedestrian accommodation is inadequate.

Work includes: Installation of new signal mast arms, installation of new traffic signal control equipment, including vehicle detection equipment, new pavement surface, installation of new ADA compliant ramps, markings and signage.

13. Commonwealth Ave. at Chestnut Street (Concept phase)

This intersection experiences significant intersecting traffic volumes, and many pedestrians and bicyclists along the Commonwealth Ave Carriage Way. The Chestnut Street southbound traffic stops north of the Carriage Way, which results in an atypical intersection configuration with the Carriage Way approach under STOP sign control within an otherwise signalized intersection. The existing equipment is outdated, does not operate efficiently, and is not consistent with current traffic signal design requirements. Furthermore, visibility of the existing traffic signal indications is somewhat limited, the intersections is deficient relative to providing accessible pedestrian accommodations such as sidewalk connections and curb ramps.

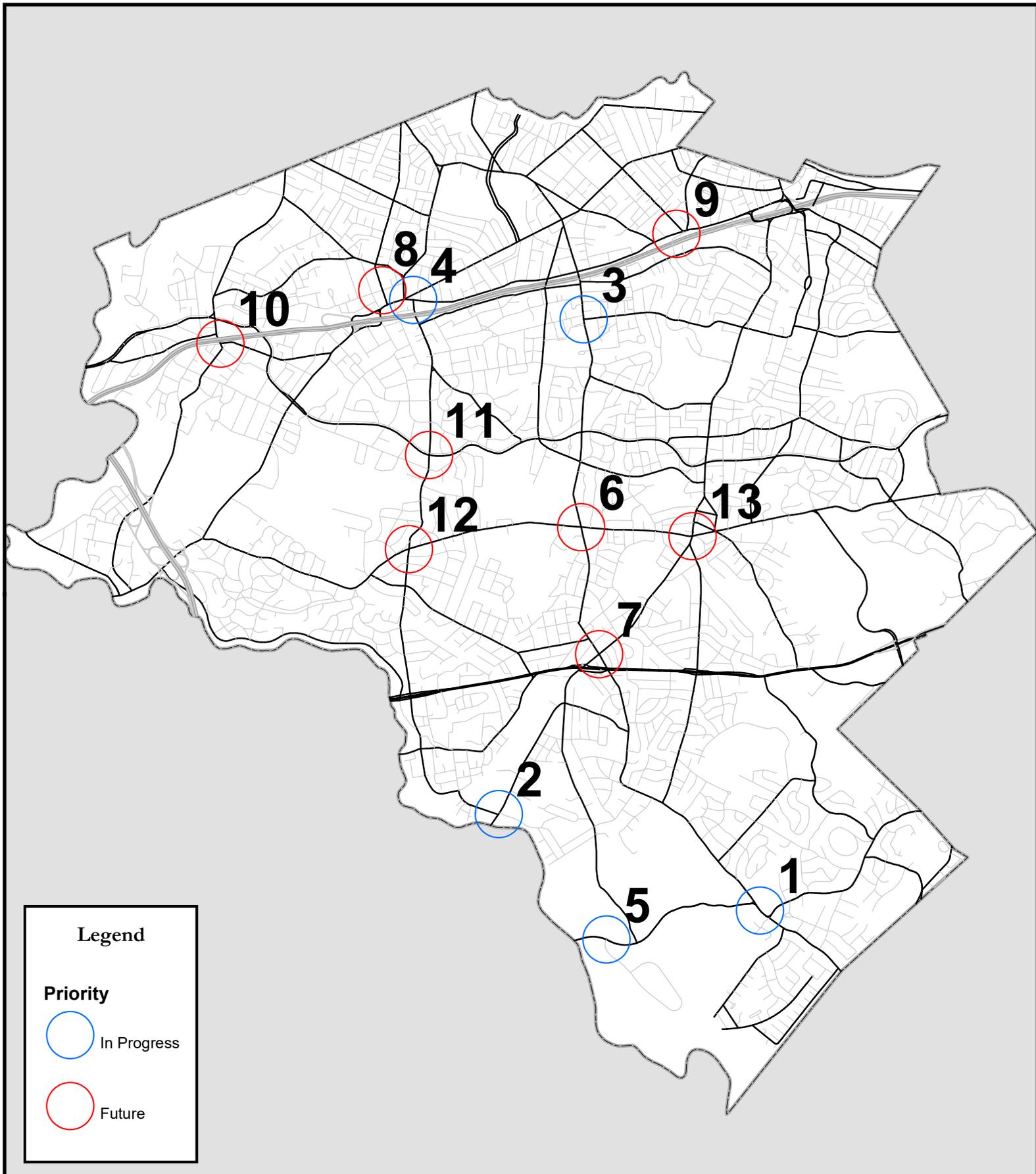
Work includes: Installation of new signal mast arms, installation of new traffic signal control equipment, including vehicle detection equipment, new pavement surface, installation of new sidewalk connections and ADA compliant ramps, pavement markings and signage.

Completed Projects

- Beacon Street / Collins Street / Waban Avenue
- Nahanton Street at Winchester Street
- Watertown Street at Adams Street
- Watertown Street at Pearl Street
- California Street at Bridge Street
- Washington Street at Auburn St., Perkins St. and Prospect St.
- Auburndale Square

- Washington Street @ Harvard Street

Intersection Improvements 5 YEAR CIP, FY2021-FY2025			BUDGET DISTRIBUTION					
Priority	Project Title	Project Description	Prior Year Funding	FY2021	FY2022	FY2023	FY2024	FY2025
1	Complete Streets Improvements - Dedham @ Nahanton; Dedham @ Brookline	Upgrade traffic signal equipment, improve intersection alignment geometry, improve multimodal safety and operations and implement signal coordination	\$ 1,875,000	\$ -	\$ -	\$ -	\$ -	
2	Complete Streets Improvements - Oak & Christina	Upgrade traffic signal equipment, improve intersection alignment geometry, improve multimodal safety and operations	\$ 2,375,000	\$ -	\$ -	\$ -	\$ -	\$ -
3	Complete Streets Improvements - West Newton (Washington Street @Chestnut, Watertown, Cherry, Elm)	Upgrade traffic signal equipment, improve multimodal safety and operations, enhance streetscape, implement signal coordination	\$ 6,271,998	\$ -	\$ -	\$ -	\$ -	\$ -
4	Complete Streets Improvements -Newtonville Traffic Signal/Corridor - Walnut Street (Walnut @ Cabot)	Improve safety and pedestrian accomodations, upgrade traffic signal equipment, enhance streetscape, improve multimodal safety and operations	\$ 6,297,411	\$ -	\$ -	\$ -	\$ -	\$ -
5	Complete Streets Improvements - Wells Ave @ Nahanton	Upgrade traffic signal equipment, install ADA compliant ramps, improve multimodal safety and operations	\$ 234,000	\$ 129,000	\$ 200,000	\$ 3,437,000	\$ -	\$ -
6	Complete Streets Improvements - Centre Street (Rte. 9 - Walnut)	Upgrade traffic signal equipment, improve multimodal safety and operations, enhance streetscape, implement signal coordination, and paving	\$ -	\$ -	\$ 250,000	\$ 1,350,000	\$ -	\$ -
7	Complete Streets Improvements - Beacon @ Walnut (4 Corners)	Upgrade traffic signal equipment, improve multimodal safety and operations, install ADA compliant ramps	\$ -	\$ -	\$ -	\$ 150,000	\$ 1,000,000	\$ -
8	Complete Streets Improvements - Cherry @ Webster, Cherry @ Derby	Upgrade traffic signal equipment, improve multimodal safety and operations at these two intersections	\$ -	\$ -	\$ -	\$ -	\$ 160,000	\$ 1,240,000
9	Complete Streets Improvements - Washington Street - West Newton to Newton Corner - Construction	Construction to improve safety and pedestrian accomodations, Improve traffic flow, ADA compliance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500,000
10	Complete Streets Improvements - Intersection at Auburn Street/Grove Street/Central Street	Upgrade traffic signal equipment and make ADA improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	Complete Streets Improvements - Commonwealth Ave. at Chestnut Street	Upgrade traffic signal equipment and make ADA improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Complete Streets Improvements - Beacon @ Chestnut	Upgrade traffic signal equipment, improve multimodal safety and operations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Complete Streets Improvements - Newton Centre	Upgrade traffic signal equipment, improve multimodal safety and operations, enhance streetscape, implement signal coordination	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Legend

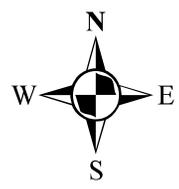
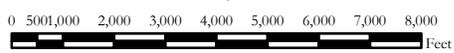
Priority

- In Progress
- Future

Traffic Signal Priorities

City of Newton, Massachusetts

CITY OF NEWTON, MASSACHUSETTS
 Mayor - Ruthanne Fuller
 GIS Assistant Administrator - John Miker



Map Date: October 15, 2019



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

VEHICLE REPLACEMENT SCHEDULE

The City of Newton has made a substantial effort to develop and maintain a complete city-wide vehicle inventory utilizing an asset management system. This system has allowed the City to use updated technologies to track and maintain vehicle information such as age, usage, and condition more efficiently and effectively. Implementing this system has created the opportunity to create a defined vehicle replacement schedule, using a more consolidated, data driven, and updated inventory to track needs for vehicle replacement city wide.

The City's vehicle inventory is managed by the Director of Fleet, who meets with various department heads and utilizes the asset management system to rate various vehicle criteria to determine the optimal timing of a vehicle's replacement in this replacement schedule. As new technologies, efficiencies, or needs arise new vehicles are implemented into the City's inventory. The criteria each department utilizes considers the age of the vehicle, the mileage, the usefulness, wear and tear, the life-saving capability of the vehicle and the industry estimate of service life of the vehicle. It also considers the used vehicle price at different mileage points.

Under the direction of the Director of Fleet, the Commissioner of Public Works and in coordination with the Chief Procurement Officer, the City has developed updated processes to ensure that vehicle purchases follow uniform and proper purchasing procedures. All vehicles purchased must meet the Green Communities Act standards where applicable, must meet the City's replacement standards, and must be approved by the Commissioner of Public Works.

This year, the City was able to fully implement the shared City Motor Pool at City Hall. The Motor Pool was designed to centralize vehicle fleet management to ensure efficient usage and is available to all employees at City Hall and the Library. In order to ensure a successful implementation, the City opted to enter into lease agreements for all City Motor Pool Vehicles. Leasing allowed the City to quickly procure a larger number of sedans at once to ensure that the Motor Pool immediately had enough vehicles to meet demand. Over the coming years the City will monitor the advantages or disadvantages of leasing sedans, and determine if the practice will continue moving forward.

All sedan leases are consistent with, Mayor Fuller's commitment to using electric-powered and hybrid vehicles. All future sedan leases and purchases (not including public safety) will continue to be electric and all SUVs will be hybrid. The City has recently installed several new electric charging stations at City Hall to meet the new demands for the evolving fleet and community needs. As innovative technologies continue to become available in the coming years, the City will keep a close eye on opportunities to improve efficiencies, reduce costs, and reduce carbon emissions.

The following FY2021 - FY2025 Vehicle Schedule is an important tool for the city to ensure that safe and efficient vehicles are available for all City operations. Please note, Police and Fire vehicles have been excluded from this vehicle replacement schedule. Each follow a separate and fully developed replacement plan.

Vehicle Replacement Schedule, FY2021-2025													
Priority #	Year	Make	Model	Replacement Vehicle Type	Current Department	Funding Source	Cost to Replace	FY20	FY21	FY22	FY23	FY24	FY25
1	2008	International	7600	10 Wheel Fan Vactor	Utilities	Sewer Reserve	\$ 500,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -
2	2004	Elgin	Pelican	Cabover Vac Unit	Utilities	Storm Reserve	\$ 310,000	\$ 310,000	\$ -	\$ -	\$ -	\$ -	\$ -
3	2006	International	7600	10 Whl Dump Truck	Utilities	Sewer Funds	\$ 310,000	\$ 310,000	\$ -	\$ -	\$ -	\$ -	\$ -
4	N/A			Kenworth Log Loader	Parks & Rec	Tree Fund	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -
5	N/A			Infarad Trailers	Utilities	Water Funds	\$ 250,000	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -
6	2003	International	7400	HD 6 Whl All-season Body	Public Works	Bonding	\$ 247,000	\$ 247,000	\$ -	\$ -	\$ -	\$ -	\$ -
7	2001	International	4700	HD 6 Whl All-season Body	Public Works	Bonding	\$ 247,000	\$ 247,000	\$ -	\$ -	\$ -	\$ -	\$ -
8	2004	International	7400	HD 6 Whl All-season Body	Public Works	Bonding	\$ 247,000	\$ 247,000	\$ -	\$ -	\$ -	\$ -	\$ -
9	2007	JCB	314	Case Backhoe #327	Utilities	Sewer Funds	\$ 133,000	\$ 133,000	\$ -	\$ -	\$ -	\$ -	\$ -
10	2008	Ford	F150	Cab over	Parks & Rec	Bonding	\$ 120,000	\$ 120,000	\$ -	\$ -	\$ -	\$ -	\$ -
11	2006	Ford	F350	F350 Service truck	Public Works	General Fund	\$ 85,000	\$ 85,000	\$ -	\$ -	\$ -	\$ -	\$ -
12	2005	Ford	F150	F350 Service truck	Public Works	General Fund	\$ 85,000	\$ 85,000	\$ -	\$ -	\$ -	\$ -	\$ -
13	2004	Ford	F350 -> F550	F550	Public Works	Bonding	\$ 75,000	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -
14	2005	Ford	F350 -> F550	F550	Public Works	Bonding	\$ 75,000	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -
15	2009	Ford	F350	Light Duty Utility	Public Works	General Fund	\$ 67,000	\$ 67,000	\$ -	\$ -	\$ -	\$ -	\$ -
16	2007	Ford	E250	Transit 250 Hybrid	Building Dept.	General Fund	\$ 63,000	\$ 63,000	\$ -	\$ -	\$ -	\$ -	\$ -
17	2008	Ford	F150	F250	Parks & Rec	Tree Fund	\$ 48,000	\$ 48,000	\$ -	\$ -	\$ -	\$ -	\$ -
18	N/A	N/A	N/A	Tagalong hotbox	Utilities	Sewer Funds	\$ 30,000	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -
19	2006	International	7600	HD 10 Whl Hooklift	Public Works		\$ 310,000	\$ -	\$ 310,000	\$ -	\$ -	\$ -	\$ -
20	2006	International	7400	HD 6 Whl Swaploader	Public Works		\$ 260,000	\$ -	\$ 260,000	\$ -	\$ -	\$ -	\$ -
21	2005	Volvo	L90E	L110 Loader	Public Works		\$ 250,000	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -
22	2008	Elgin	Pelican	Elgin Pelican	Utilities		\$ 250,000	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -
23	2004	Trackless	MT5	Trackless	Public Works		\$ 175,000	\$ -	\$ 175,000	\$ -	\$ -	\$ -	\$ -
24	2008	Komatsu	WB156-5	Case Backhoe	Utilities		\$ 150,000	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
25	2007	JCB	214 3CX	Case Backhoe	Public Works		\$ 150,000	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
26	1987	Ford	F700	F550 swaploader	Parks & Rec		\$ 110,000	\$ -	\$ 110,000	\$ -	\$ -	\$ -	\$ -
27	2009	Ford	F350		Utilities		\$ 95,000	\$ -	\$ 95,000	\$ -	\$ -	\$ -	\$ -
28	2008	Ford	F350 -> F550	F550	Public Works		\$ 95,000	\$ -	\$ 95,000	\$ -	\$ -	\$ -	\$ -
29	2011	Ford	F350		Utilities		\$ 85,000	\$ -	\$ 85,000	\$ -	\$ -	\$ -	\$ -
30	1989	Gmc	Kodiak	F350 Service/Welding truck	Public Works		\$ 85,000	\$ -	\$ 85,000	\$ -	\$ -	\$ -	\$ -

Priority #	Year	Make	Model	Replacement Vehicle Type	Current Department	Funding Source	Cost to Replace	FY20	FY21	FY22	FY23	FY24	FY25
31	2004	Ford	F350	F350 dump	Parks & Rec		\$ 85,000	\$ -	\$ 85,000	\$ -	\$ -	\$ -	\$ -
32	2008	Ford	F350	Light Duty Utility	Public Works		\$ 70,000	\$ -	\$ 70,000	\$ -	\$ -	\$ -	\$ -
33	2000	Grumman Olson	Box truck		Parks & Rec		\$ 70,000	\$ -	\$ 70,000	\$ -	\$ -	\$ -	\$ -
34	2009	Ford	E350	Van w/side lift	Public Works		\$ 55,000	\$ -	\$ 55,000	\$ -	\$ -	\$ -	\$ -
35	2010	Ford	E250	Transit 250 Hybrid	Building Dept.		\$ 45,000	\$ -	\$ 45,000	\$ -	\$ -	\$ -	\$ -
36	2006	Beuthling	Roller		Public Works		\$ 30,000	\$ -	\$ 30,000	\$ -	\$ -	\$ -	\$ -
37	2006	Beuthling	Roller		Public Works		\$ 30,000	\$ -	\$ 30,000	\$ -	\$ -	\$ -	\$ -
38	1994	TrailKing	TK10U		Public Works		\$ 7,000	\$ -	\$ 7,000	\$ -	\$ -	\$ -	\$ -
39	1994	TrailKing	TK10U		Utilities		\$ 7,000	\$ -	\$ 7,000	\$ -	\$ -	\$ -	\$ -
40	2004	International	7400	HD 6 Whl Swaploader	Public Works		\$ 260,000	\$ -	\$ -	\$ 260,000	\$ -	\$ -	\$ -
41	2005	International	7400	HD 6 Whl Swaploader	Public Works		\$ 260,000	\$ -	\$ -	\$ 260,000	\$ -	\$ -	\$ -
42	2008	Elgin	Pelican	Elgin Pelican #148	Utilities		\$ 250,000	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ -
43	2002	International	4700	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ -
44	2008	Volvo	L70F		Public Works		\$ 250,000	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ -
45	2013	International	7400		Utilities		\$ 210,000	\$ -	\$ -	\$ 210,000	\$ -	\$ -	\$ -
46	2009	Sterling	Acterra	75' Bucket Truck	Parks & Rec		\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ -
47	2005	Trackless	MT5	Trackless	Public Works		\$ 175,000	\$ -	\$ -	\$ 175,000	\$ -	\$ -	\$ -
48	2008	International	4300		Parks & Rec		\$ 150,000	\$ -	\$ -	\$ 150,000	\$ -	\$ -	\$ -
49	2006	Ford	F350 -> F550	F550	Public Works		\$ 95,000	\$ -	\$ -	\$ 95,000	\$ -	\$ -	\$ -
50	2009	Bobcat	S300		Utilities		\$ 75,000	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -
51	2012	Chevy	Silverado	Light Duty Utility	Public Works		\$ 70,000	\$ -	\$ -	\$ 70,000	\$ -	\$ -	\$ -
52	2001	Ford	Econoline		Parks & Rec		\$ 45,000	\$ -	\$ -	\$ 45,000	\$ -	\$ -	\$ -
53	2006	Ford	Econoline		Parks & Rec		\$ 45,000	\$ -	\$ -	\$ 45,000	\$ -	\$ -	\$ -
54	2010	Ford	E250	Transit 250 Hybrid	Building Dept.		\$ 45,000	\$ -	\$ -	\$ 45,000	\$ -	\$ -	\$ -
55	2011	Ford	F150		Public Works		\$ 35,000	\$ -	\$ -	\$ 35,000	\$ -	\$ -	\$ -
56	2009	Stone	Roller	Small Roller	Public Works		\$ 30,000	\$ -	\$ -	\$ 30,000	\$ -	\$ -	\$ -
57	2009	Stone	Roller	Small Roller	Public Works		\$ 30,000	\$ -	\$ -	\$ 30,000	\$ -	\$ -	\$ -
58	2006	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ 250,000	\$ -	\$ -
59	2010	Volvo	L120F	L120	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ 250,000	\$ -	\$ -
60	2013	Elgin	Pelican	Elgin Pelican	Utilities		\$ 250,000	\$ -	\$ -	\$ -	\$ 250,000	\$ -	\$ -
61	2005	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ 250,000	\$ -	\$ -

Priority #	Year	Make	Model	Replacement Vehicle Type	Current Department	Funding Source	Cost to Replace	FY20	FY21	FY22	FY23	FY24	FY25
93	2007	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000
94	2007	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000
95	2007	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000
96	2007	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000
97	2015	Prinoth	SW4S	Trackless	Public Works		\$ 175,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 175,000
98	2012	Volvo	BL70B		Utilities		\$ 155,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 155,000
99	2007	Deere	110		Parks & Rec		\$ 155,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 130,000
100	2006	International	4300	Mack 30 yd Chip Truck	Parks & Rec		\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 120,000
101	2012	Ford	F350 -> F550		Public Works		\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 95,000
102	2011	Ford	F350		Parks & Rec		\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 95,000
103	2015	Ford	Transit 250	Transit 250 Hybrid	Building Dept.		\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45,000
104	2017	Toyota	Rav4	RAV4	Public Works		\$ 33,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
105	2017	Toyota	Rav4	RAV4	Utilities		\$ 33,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
106	2017	Toyota	Rav4	RAV4	Public Works		\$ 33,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
107	2017	Toyota	Rav4	RAV4	Executive		\$ 33,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
108	2008	International	7400	HD 6 Whl All Season Body	Public Works		\$ 260,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
109	2008	International	7400	HD 6 Whl All Season Body	Public Works		\$ 260,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
110	2009	International	7400	HD 6 Whl All Season Body	Public Works		\$ 260,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
111	2017	Elgin	Pelican	Elgin Pelican	Utilities		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
112	2007	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
113	2008	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
114	2008	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
115	2015	Prinoth	SW4S	Trackless	Public Works		\$ 175,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
116	2012	Ford	F350 -> F550		Public Works		\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
117	2012	Ford	F350 -> F550		Public Works		\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
118	2012	Ford	F350 -> F550		Public Works		\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
119	2016	Ford	Transit 250	Transit 250 Hybrid	Building Dept.		\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
120	2016	Ford	F250	F250	Building Dept.		\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
121	2012	Ford	F150		Parks & Rec		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
122	2012	Ford	Econoline		Parks & Rec		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
123	2006	International	7400	HD 6 Whl Swaploader	Utilities	Sewer Funds	\$ 305,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority #	Year	Make	Model	Replacement Vehicle Type	Current Department	Funding Source	Cost to Replace	FY20	FY21	FY22	FY23	FY24	FY25
124	1999	International	4700	Heavy Duty 6 Wheel Dump	Public Works	Bonding	\$ 210,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
125	1998	International	200SER	Heavy Duty 6 Wheel Dump	Public Works	Bonding	\$ 210,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
126	2010	Ford	F350	Light Duty Utility	Utilities	Water Funds	\$ 86,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
127	2009	Ford	F350	Light Duty Stake Body	Public Works	General Fund	\$ 56,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
128	2007	Ford	Econoline	Transit 250	Building Dept.	General Fund	\$ 33,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
129	2010	International	7600	HD 10 Whl All Season Body	Public Works		\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
130	2010	International	7600	HD 10 Whl All Season Body	Public Works		\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
131	2010	International	7600	HD 10 Whl All Season Body	Public Works		\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
132	2017	Elgin	Pelican	Elgin Pelican	Utilities		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
133	2009	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
134	2012	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
135	2015	International	4300		Utilities		\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
136	2012	Volvo	BL70B		Utilities		\$ 155,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
137	2012	Ford	F350 -> F550		Public Works		\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
138	2014	Ford	F350 -> F550		Public Works		\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
139	2014	Ford	F350 -> F550		Public Works		\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
140	2017	Ford	Transit 250	Transit 250 Hybrid	Building Dept.		\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
141	2014	Ford	Transit Connect		Utilities		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
142	2014	Ford	F150		Parks & Rec		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
143	2014	Ford	F150		Parks & Rec		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
144	2014	Ford	F150		Parks & Rec		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
145	2014	Ford	F250		Parks & Rec		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
146	2014	Ford	F250		Utilities		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
147	2012	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
148	2013	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
149	2013	International	7400	HD 6 Whl All Season Body	Public Works		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
150	2015	Ford	F750	75' Rear Mount Bucket Truck	Parks & Rec		\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
151	2016	International	4300		Utilities		\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
152	2014	Freightliner	108SD		Utilities		\$ 160,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
153	2014	JCB	3CX	Case Backhoe	Public Works		\$ 155,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
154	2014	JCB	3CX14	Case Backhoe	Utilities		\$ 155,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority #	Year	Make	Model	Replacement Vehicle Type	Current Department	Funding Source	Cost to Replace	FY20	FY21	FY22	FY23	FY24	FY25
155	2015	Ford	F350 -> F550	F550	Public Works		\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
156	2016	Ford	F350		Utilities		\$ 80,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
157	2016	Ford	F350		Utilities		\$ 80,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
158	2016	Ford	F350	F350 SRW w/Flatbed	Parks & Rec		\$ 80,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
159	2016	Ford	F350		Utilities		\$ 80,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
160	2015	Ford	F450	F550 swaploader	Parks & Rec		\$ 110,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
161	2017	Ford	Transit 250	Transit 250 Hybrid	Building Dept.		\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
162	2016	Ford	F250		Utilities		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
163	2016	Ford	F150		Parks & Rec		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
164	2016	Ford	F250		Parks & Rec		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
165	2016	Ford	F250		Parks & Rec		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
166	2016	Freightliner	M2-106		Public Works		\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
167	2015	Sullivan	D185Q		Utilities		\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
168	2015	Sullivan	D185Q		Utilities		\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
169	2017	Mack	GU432		Utilities		\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
170	2016	International	7600		Utilities		\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
171	2016	Freightliner	114SD	HD 10 Whl All Season Body	Public Works		\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
172	2017	Freightliner	M2	XL3100	Public Works		\$ 280,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
173	2017	International	4300		Utilities		\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
174	2016	Volvo	ECR88D		Utilities		\$ 160,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
175	2018	Brine	Xtrememobile		Public Works		\$ 126,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
176	2018	Ford	F350		Utilities		\$ 60,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
177	2018	Ford	F350		Utilities		\$ 60,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
178	2018	Ford	F350	F350	Public Works		\$ 55,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
179	2018	Ford	F350	F350	Public Works		\$ 55,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
180	2018	Ford	F350	F350	Public Works		\$ 55,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
181	2017	Ford	Transit 250	Transit 250 Hybrid	Building Dept.		\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
182	2017	Ford	Starcrafts Bus		Parks & Rec		\$ 80,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
183	2017	Ford	Transit Connect		IT		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
184	2017	Ford	F150		Parks & Rec		\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
185	2017	Ford	F150		Parks & Rec		\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority #	Year	Make	Model	Replacement Vehicle Type	Current Department	Funding Source	Cost to Replace	FY20	FY21	FY22	FY23	FY24	FY25
186	2018	Ford	Transit Connect	Transit 250	Public Works		\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
187	2019	Volvo	L110	L110 Loader	Public Works		\$ 260,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
188	2019	Elgin	Pelican	Elgin Pelican	Utilities		\$ 232,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
189	2019	Case	590SN	Case Backhoe	Public Works		\$ 143,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
190	2019	Bombardier	MT7	Trackless	Public Works		\$ 135,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
191	2019	Ford	F550	F550	Utilities		\$ 96,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
192	2019	Ford	F250	F250	Parks & Rec		\$ 46,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
193	2019	Ford	F350	F350 Pickup	Public Works		\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
194	2019	Ford	F150	F150	Parks & Rec		\$ 34,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
195	2019	Ford	F150	F150	Parks & Rec		\$ 34,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
196	2018	Toyota	Tacoma	Tacoma Pickup	Health Dept.		\$ 33,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
197	2019	Toyota	Rav4	RAV4	Utilities		\$ 33,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
198	2019	Toyota	Rav4	RAV4	Utilities		\$ 33,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
199	2019	Crafco	Hot Box Trailer	Tagalong hotbox	Public Works		\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
200	2019	Nissan	Leaf	Leaf #703	Inspectional Services		\$ 27,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
201	2019	Nissan	Leaf	Leaf #705	Inspectional Services		\$ 27,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
202	2019	Nissan	Leaf	Leaf #706	Inspectional Services		\$ 27,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
203	2019	Nissan	Leaf	Leaf #710	Inspectional Services		\$ 27,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
204	2015	Bobcat	S450	Lease buyout	Public Works		\$ 17,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
205	2015	Bobcat	S450	Lease buyout	Public Works		\$ 17,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
206	2015	Bobcat	S450	Lease buyout	Public Works		\$ 17,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
207	2015	Bobcat	S450	Lease buyout	Public Works		\$ 17,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
208	2015	Bobcat	S450	Lease buyout	Public Works		\$ 17,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
209	2015	Bobcat	S450	Lease buyout	Public Works		\$ 17,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
210	2015	Bobcat	S450	Lease buyout	Public Works		\$ 17,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
211	2015	Bobcat	S70	Lease buyout	Public Works		\$ 17,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
212	2015	Bobcat	S70	Lease buyout	Public Works		\$ 17,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
213	2015	Bobcat	S70	Lease buyout	Public Works		\$ 17,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
214	2018	Ford	F350		Parks & Rec		\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
215	2018	Ford	Transit 250	Transit 250 Hybrid	Building Dept.		\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
216	2019	International	4300		Utilities		\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority #	Year	Make	Model	Replacement Vehicle Type	Current Department	Funding Source	Cost to Replace	FY20	FY21	FY22	FY23	FY24	FY25
217	2019	Mack	GR42F9		Utilities		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
218	2019	Mack	GR4259		Utilities		\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
219	2019	Ford	F550		Utilities		\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
220	2018	Freightliner	Sprinter		Utilities		\$ 290,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
221	2018	Ford	F350	F350	Building Dept.		\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
222	2018	Freightliner	M2-106	75' Bucket Truck	Parks & Rec		\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
223	2019	Mack	Granite	Mack Chip Truck/Small Loader	Parks & Rec		\$ 270,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
224	1991	Vermeer	665B	Vermeer SC802	Parks & Rec		\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
225	1994	Vermeer	1250 Turbo	Bandit/Vermeer 12" gas powered chipper	Parks & Rec		\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
226	1998	Vermeer	1250	Bandit/Vermeer 12" gas powered chipper	Parks & Rec		\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
227	2012	Carlton	SP4014	Carlton SP5014, small self propelled grinder	Parks & Rec		\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
228	2012	NNT	NNT10	Landscape Trailer	Parks & Rec		\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
229	2012	Carlton	2518	Bandit/Vermeer 18" diesel powered chipper	Parks & Rec		\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
230	2013	Bandit	1000	Woodchip Vac	Parks & Rec		\$ 12,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
231	2015	Magnum	MWT500	Water Trailer	Parks & Rec		\$ 12,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
232	2015	Magnum	MWT500	Water Trailer	Parks & Rec		\$ 12,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
233	2017	Magnum	MWT500	Water Trailer	Parks & Rec		\$ 12,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
234	2017	Magnum	MWT500	Water Trailer	Parks & Rec		\$ 12,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
235	2017	Vermeer	SC802	Vermeer SC802	Parks & Rec		\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
236	2017	Vermeer	SC802	Vermeer SC802	Parks & Rec		\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
237	2017	Vermeer	SC552	Vermeer SC5522	Parks & Rec		\$ 70,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
238	2017	Bravo	ST716TA3	Enclosed Equipment Trailer	Parks & Rec		\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
239	2018	Bandit	200XP	Bandit/Vermeer 12" gas powered chipper	Parks & Rec		\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
240	2019	Ford	F150	F150	Parks & Rec	General Fund	\$ 34,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
241	2019	Ford	Transit 250	Van	Public Works	General Fund	\$ 41,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
242	2018	Ford	F550		Parks & Rec		\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
243	2018	Ford	F550		Parks & Rec		\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
								\$ 3,192,000.00	\$ 2,414,000.00	\$ 2,475,000.00	\$ 2,425,000.00	\$ 2,305,000.00	\$ 2,335,000.00

PLAY STRUCTURES

The assessment of the 64 play structures consisted of reviewing structural integrity, accessibility, condition of the hardware, non-compliance, as well as protrusions and entrapments. Upon completion of the assessment parameters, each structure was ranked as to its current condition. Play structures were then prioritized based on their rankings.

The Parks, Recreation & Culture Department began replacing two structures per year, beginning in FY 2020. The department is committing \$75,000 to each location with the intent to provide a base structure at each site. In early 2018, the US Access Board reported they are proposing updates to play regulations regarding manufactured wood fiber. The proposal calls for accessible routes to play components be on a firm, stable non-slip, rubberized safety surface. Beginning in FY 2019, the department will move forward with replacing one playground a year and using the remaining funds to retrofit the non-compliant playgrounds that were built in or after 2012 with a surface that meets the US Access Boards criteria.

Site	Description	Cost
FY2020 Solomon Schechter 60 Stein Cr., Newton	Replacement of a metal structure that was installed in 1996. This is a pre-school and school age structure.	\$75,000



FY2020
Retrofit

Make play surface compliant with ADA regulations via a viable, cost effective way with a combination of rubberized mats, rubberized surfacing and fibar.

Lower Falls Community Center
545 Grove St. Lower Falls

\$37,500



FY2020
Retrofit

Make play surface compliant with ADA regulations via a viable, cost effective way with a combination of rubberized mats, rubberized surfacing and fibar.

Bowen
280 Cypress St. Newton Centre

\$37,500



FY2021
Richardson Field
Allen Ave., Waban

Replacement of a metal structure that was installed in 1999. This is a pre-school structure.

\$75,000



FY2021
Retrofit

Make play surface compliant with ADA regulations via a viable, cost effective way with a combination of rubberized mats, rubberized surfacing and fibar.

Burr School
171 Pine St. Auburndale

\$75,000



FY2022
River St. Playground
River St., West Newton

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

\$75,000



FY2022
Retrofit

Make play surface compliant with ADA regulations via a viable, cost effective way with a combination of rubberized mats, rubberized surfacing and fibar.

Memorial Spaulding
250 Brookline St. Newton Centre

\$75,000



FY2023
Forte Park
233 California St., Non.

Replacement of a metal structure that was installed in 1997. This is a pre-school structure.

\$75,000



FY2023
Retrofit

Make play surface compliant with ADA regulations via a viable, cost effective way with a combination of rubberized mats, rubberized surfacing and fibar.

Auburndale Cove - School age and Tot lot
West Pine St Auburndale

\$75,000



FY2024
West Newton Common
Elm St., West Newton

Replacement of a metal structure that was installed in 1995. This is a pre-school structure.

\$75,000



FY2024
Retrofit

Make play surface compliant with ADA regulations via a viable, cost effective way with a combination of rubberized mats, rubberized surfacing and fibar.

Franklin Right
125 Derby St. West Newton

\$37,500



FY2024
Retrofit

Make play surface compliant with ADA regulations via a viable, cost effective way with a combination of rubberized mats, rubberized surfacing and fibar.

\$37,500

Farlow Tot Lot
124 Vernon St. Newton Corner



FY2025
Weeks Tot Lot
Hereward Rd.

Replacement of a Wood structure that was installed in 2004. This is a pre-school structure

\$75,000



FY2025
Retrofit

Make play surface compliant with ADA regulations via a viable, cost effective way with a combination of rubberized mats, rubberized surfacing and fibar.

\$75,000

Williams
141 Grove St. Auburndale



PARKS

The Parks, Recreation & Culture Department continues to improve the infrastructure of parks, playgrounds and athletic fields throughout the city. In addition to improvements to active and passive recreation, the department has also made great strides to improve the livability of the city by continuing and maintaining the Adopt-a-Space and Beautification programs. Many of these improvements are partnered efforts with community allies and other departments.

The Parks, Recreation & Culture Department continues to forge and maintain important partnerships with communities across the city. They are currently developing, in conjunction with the Conservation Commission, the Off-Leash Area Working Group and BETA Group, a .6 acre off-leash dog area at Norumbega Park. The concept for the new dog park is due to go through public process in early fall. They have also been working with the neighborhood group Waban Common Inc. on the continued renovation of the Waban Common area across from the Angier School. The department has also made significant headway in redefining the scope of work for the Heartbreak Hill Park at Waban Reservoir so that crews may begin construction in the fall. The decommissioned reservoir will be retrofitted for passive recreational use. Improvements include, code-compliant reconstruction of the stair access, accessible loop path at the top of the reservoir dam, seating amenities and an accessible parking space.

Through the work of the Crystal Lake Conservancy, the city received \$25,000 from the Commonwealth for water quality studies to be conducted at Crystal Lake and will be completed by early Summer 2020. An additional \$88,000 in grant funds are going toward implementing measures to curtail erosion and storm water runoff into the lake along the slope at Levingston Cove. In addition to mitigating environmental issues, enhancements also look to improve accessibility and amenities for fishing. Weston & Sampson presented design options in community meetings in the Spring of 2018. Redesign of Levingston Cove has been revised based on public input during the community meeting and presented during additional community meetings in the Spring of this year. The Parks and Recreation Commission has also voted to move forward with the plan. Currently, the department is awaiting on potential approval on an additional \$50,000 in grants from the Commonwealth to assist with improvements at Crystal Lake.

The City's Beautification Program continues with its aggressive installation of the popular historic BoxART seen on utility boxes, with an average of 5 to 10 added annually. Parks, Recreation & Culture has also increased the number of Bigbelly solar trash compactors throughout the city. Each station delivers real-time data that enables more efficient, cost - effective public waste and recycling management. The department will also be wrapping one unit per village with educational artwork at a rate of 5 to 10 annually thereafter. A separate Dog Waste Program has also been implemented that includes separate barrels with weekly scheduled collection. Rehabilitation of the Pellegrini park wall with an up-to-date wall art wrap of historical Nonantum is also in the works. Improvements to the Newton Corner traffic islands are in process and enhancements will likely be seen in fall of 2019.

Parks, Recreation & Culture has continued to address turf management on athletic fields throughout the city. Turf work on the athletic fields at New Cold Springs, Nahanton Park and Forte Park have been completed this spring. Oak Hill School Field #3 and #4, NNHS Lowell Street side, NSHS Softball Field and Weeks Field are scheduled for this coming fall. Additional funding in our

FY20 operating budget will allow us to accomplish additional turf work throughout this fiscal year. This work consists of aeration, topdressing, fertilizing and slice seeding.

Parks, Recreation & Culture is working with multiple groups on the development and reclamation of athletic spaces throughout the city. The department is proposing to develop an open space area at Old Cold Spring for use as multi-purpose fields. Improvements to this area would include irrigation, soil amendment, regrading and sodding. Drainage would need to be investigated to maximize playability. Additional parking would also need to be considered.

At the Warren House Field complex, the department is looking to enhance field space to house a centralized Lacrosse complex for both women and men. This would include constructing a Lacrosse Wall on site to help enhance players' skills. The wall, composed of prefabricated concrete sections, would be approximately 15' tall and 30' wide. The cost for this type of wall is approximately \$12,000.

In the CIP, Parks, Recreation & Culture has identified a portion of the Russell J. Halloran Sports and Recreation Complex (Albemarle Field) and Forte Park as two sites that could benefit from synthetic turf. Both sites are lit and are heavily used for athletics. Synthetic turf improvements include softball and soccer fields at Forte Park. At Albemarle, the softball, baseball and multi-purpose fields would benefit from synthetic turf. Such improvements to these sites would increase the amount of usable time while decreasing long term maintenance.

The Maintenance Division has been renovating high school baseball and softball fields in the City. The Lincoln Warren baseball field and Davis Park softball field are scheduled to be completed in FY2020. Ballfield work involves edging base paths and the infield edge, rebuilding batter's box, pitcher's mound, adding subsoil and laser grading. Renovations also encompass replacing all bases including home plate and pitcher's mound.

New exercise equipment was installed along the trail in Cold Spring Park. In early 2018, the US Access Board reported they were proposing updates to their regulations regarding manufactured wood fiber. The proposal calls for accessible routes to play components be on a firm, stable non-slip, rubberized safety surface. Beginning in FY2019, the department started moving forward with replacing one playground a year and using the remaining funds to retrofit the non-compliant playgrounds that were built in or after 2012 with a surface that meets the US Access Boards criteria.

BALL FIELDS

As part of the continuing efforts to improve City assets, Parks, Recreation & Culture will renovate baseball and softball infields. For the next five years (FY2020 - FY2025) two ballfields will be renovated each year. The area of focus is home plate, pitcher's mound, base paths, infield turf and immediate outfield turf perimeter. Infields will be laser graded as needed. The funding will come from the Parks, Recreation & Culture Department's operating budget.

FY2020

Lincoln Warren Baseball Field
Cost \$15,000



FY2020

Davis Park Softball Field
Cost \$15,000



FY2021

West Newton Common
Cost \$15,000



FY2021

Forte Park
Cost \$15,000



FY2022
Cabot Park Baseball
Cost \$15,000



FY2022
Bobby Braceland Playground
Cost \$15,000



FY2023
Newton South High School Baseball Field
Cost \$15,000



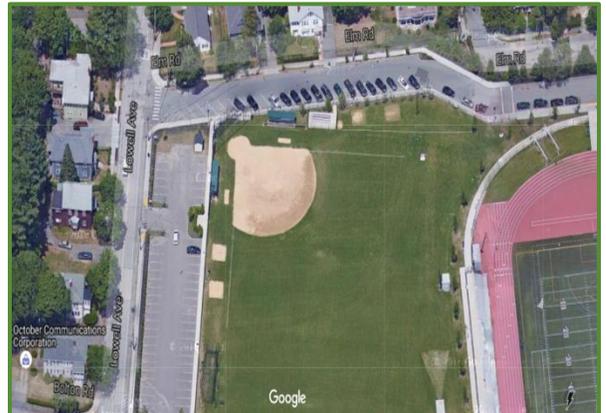
FY2023
Newton South High School Softball Field
Cost \$15,000



FY2024
Newton North High School Baseball Field
Cost \$15,000



FY2024
Newton North High School Softball Field
Cost \$15,000



FY2025

Russ Halloran Baseball Field

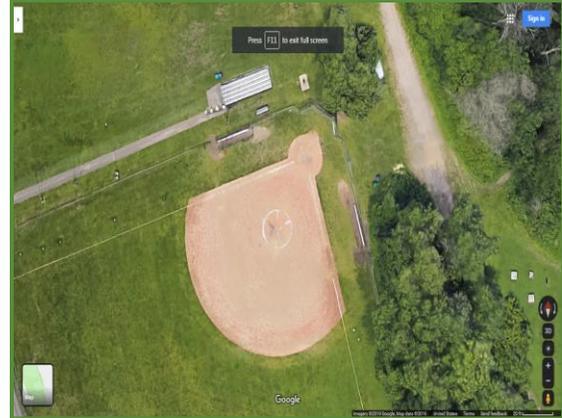
Cost \$15,000



FY2025

Russ Halloran Softball Field (J. Cole)

Cost \$15,000



TENNIS AND BASKETBALL COURTS

The work to be performed on tennis and basketball courts is site specific. In general, a full renovation includes reclamation of existing asphalt paving, all new or additional sub-base as required, asphalt coursing, color coating and striping, new net posts and sleeves, new hoops and poles and new perimeter vinyl coated chain link fence and gates as needed. Drainage issues, if any, are addressed with regrading.

FY2021

Burr Park - Renovation of all four courts and reconstruction and repair of existing perimeter retaining wall, fencing and drainage. The structural integrity of the retaining walls should be conducted to ensure the courts can be safely reclaimed.

Cost: \$750,000

142 Park Street, Newton Corner



FY2022

Solomon Schechter School - Renovation of two tennis courts

Cost: \$140,000

160 Stein Circle, Oak Hill



FY2023

Pellegrini Park - Renovation of two tennis courts

Cost: \$140,000

11 Hawthorne Street, Nonantum



FY2024

New Cold Spring Park - Renovation of three tennis courts

Cost: \$210,000

Beacon Street, Newton Highlands



FY2025

Auburndale Park (The Cove) - Renovation of two tennis courts and one basketball Court

Cost: \$160,000

104 W Pine Street, Auburndale



STREET TREE PLAN

To be truly the “Garden City,” the City of Newton is committed to our street trees. We know trees provide beauty and make Newton more livable, improve air quality, help stormwater runoff, and reduce temperatures in hot weather.

The City’s street tree population had been declining since the late 1970’s with a peak of about 42,000 street trees during the mid-1970s. By the late 1980s, the City no longer planted as many trees as were being removed and by 2010 was only funding contracted tree work for 20 days each year. The resulting net loss reduced the current street tree population to about 21,000.

Beginning in FY2011, the City began to reverse this trend. In the last seven years, the Urban Forestry Division has been restored. In addition to the City’s Tree Warden, the Division employs two dedicated Arborist Inspectors and a full-time crew of six and owns the appropriate equipment including log loaders, bucket trucks, chippers and other trucks and equipment. The City has undertaken a very aggressive “Street Tree Revitalization Plan” which includes:

- Annual identification and removal of all recognizably dangerous trees
- Stump removal and grinding of all newly removed trees
- Strategic planting of up to 850 trees per year

During the past three years, the City removed over 2,800 dangerous trees, ground more than 3,800 stumps, pruned 2,900 mature trees and planted nearly 2,300 new trees as a result of the City’s increased attention to this issue. More work is needed from additional plantings to more pruning and removals.

The development of the Complete Streets program, as well as this renewed focus on the street tree population, is a major step forward in combating the net loss of trees in the City. It has resulted in a comprehensive, three-pronged approach:

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

Complete Streets, Tree Care and Planting

Each year, sidewalks and roads are reconstructed throughout the City. In most cases, these locations have City owned trees. When implementing the Complete Streets approach, the City will not only address the sidewalk and road needs in an area but also address the tree needs as well. To be proactive, Urban Forestry will work with the Department of Public Works to address the tree removal needs of locations where major reconstruction work is being performed and plants trees as well.

Urban Forest Restoration, Tree Planting

In 2013 and 2014, the City did a detailed analysis of the streets in the City where the highest percentage of trees had been removed due to storm damage or condition. Using this data, a 15-year plan has been developed that stabilizes the City’s street tree population. During 2019, this plan will be updated to reflect our most current data. Over the next five years, the City has a goal of planting nearly 2,500 trees as part of this plan.

High Risk Tree Assessment

As part of a proactive approach to maintaining a healthy tree population, we have instituted an annual survey that evaluates the current condition of the street tree population in Newton. By assessing each tree and ranking it based on industry standards using specific criteria to rate a tree from least to greatest risk we have been able to determine the highest risk trees in the city that are in need of removal.

In FY2019, we removed 634 trees that posed a risk to person and property. In FY2020, approximately 800 to 1,000 trees will be removed this fall within the high risk rating system based on the assessment study.

Stump Removal

In FY2017, the City made a considerable investment in equipment and resources to address a backlog of over 2,500 tree stumps. There is no longer a significant backlog of stumps to be removed. Now we will remove and grind all stumps created on an annual basis. In FY2019, a total of 706 stumps were addressed.

Tree Planting

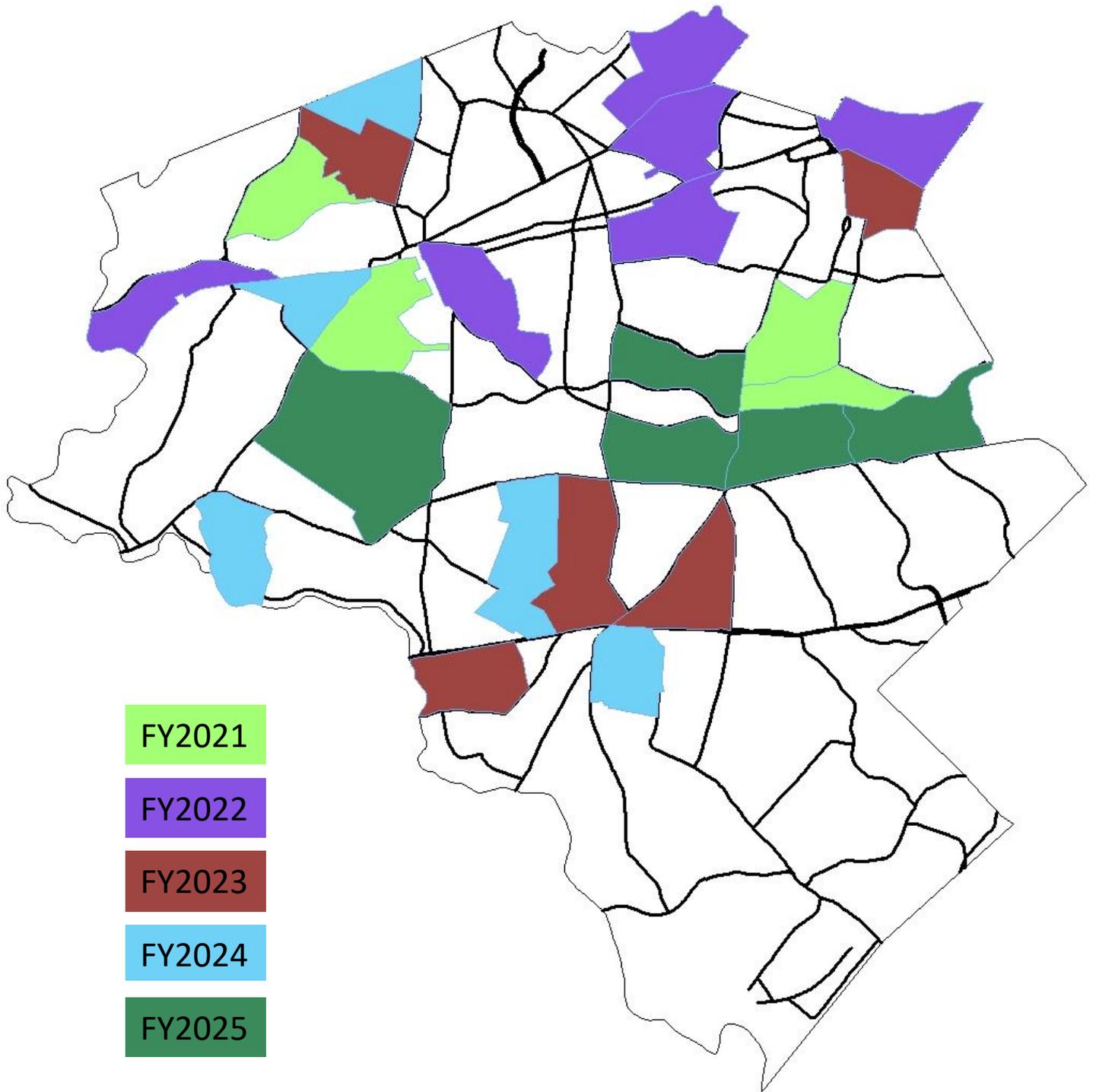
With an eye toward creating a sustainable urban forest, the Executive Office began funding the planting of trees within the operating budget in FY2015. This was the first time that had been done since the early 1990's. In FY2015, the Forestry Division planted 282 trees. Since FY2015, in cooperation with the Newton Tree Conservancy, the City has steadily increased the number of trees planted annually. In FY2020, the City plans to plant over 850 trees.

Customer Request Tree Planting Program

In the last 15 years, the City has received over 1600 requests for new trees to be planted. The City intends to annually plant trees that will address requests received. The City will provide these trees in a number of ways. In addition to a portion of the trees being planted and watered by the City, the Forestry Division will work with volunteers to encourage residents to "adopt" trees and water the trees weekly.

Newton's Urban Forest Restoration Tree Planting

Over the next five years, the City's goal is to plant nearly 2,700 trees as part of its plans to restore the number of trees growing on the City's streets. In 2013 and 2014, the City did a detailed analysis of the streets in the City and determined where the highest percentage of trees that have been removed due to storm damage or condition. The following information depicts the currently intended areas for targeted tree plantings over the next five years.



*In FY2020 an updated planting needs assessment will take place.
This assessment may alter the timing of future years

INFORMATION TECHNOLOGY

The Information Technology vision and accomplishments to date continue to be an integral part of the management, public safety framework, and communication goals of the Fuller Administration. Business practices, customer needs, technology and communications continue to evolve and converge in new areas creating new efficiencies and opportunities; information technology needs to remain flexible in order to be viable and sustainable.

This fiscal year marks the completion of the fifth year that Information Technology has been identified in the Capital Improvement Plan as a separate capital need. Major upgrades to the City's IT infrastructure have made upgraded conference rooms, sound systems, public WiFi in municipal buildings and digital signage in the hallways of City Hall possible. Unseen to the public in all of the city buildings are items such as copper and fiber cabling, and a standardization and implementation of POE (Power over Ethernet) network switches which have allowed the City to expand opportunities, access, security and communications. Wireless access points, security cameras, and network speeds that have increased ten times their previous capacity from five years ago all combine to create a network and IT system that is truly state of the art. Fiber-optic-based opportunities have provided cost-saving solutions for Public Safety, including integration with our radio towers and reduced phone costs in all city buildings.

The Information Technology Department conducts regular department needs analysis. These needs are vetted and initiatives, procurements, network enhancements, and modifications to workflow are developed. The IT Department holds regular technology meetings, bringing in the technology representatives from Police, Fire, Library and the School Department to share their needs, challenges and accomplishments. These sessions are informative and provide great opportunities for the sharing of resources and experience. The IT Department also performs research via the Internet, the State IT listserv, third-party value-added resellers, vendors and consultations in order to protect and enhance the City's technology software, hardware and systems.

The volatility of the technology revolution has changed the face and expectation of the manner in which government does business. From mainframes to smartphones as well as from server farms to cloud applications and storage, Newton is creating a municipal technological paradigm. In the past twenty-five years, the IT Department has evolved from a group of ten programmers and a single network support person to a group of seven network/ applications / financial, GIS and VoIP specialists, a web developer and only one programming support position.

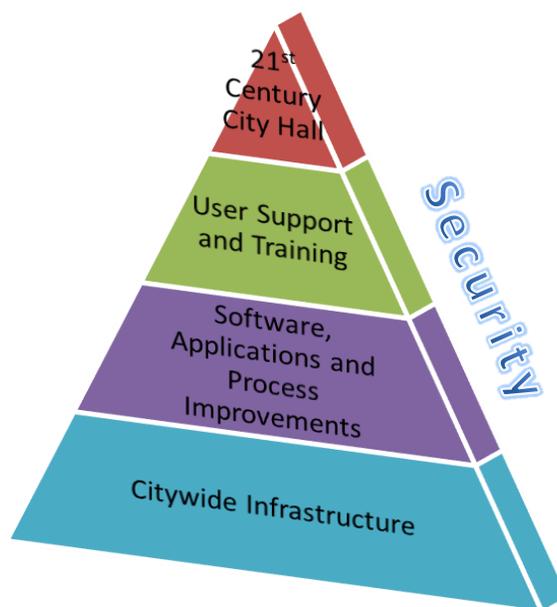
Technology plays a crucial role in every department to help support their constituents. Current trends include moving applications and software from dedicated servers to virtual servers on storage area networks in order to establish a downsized yet more versatile IT infrastructure that reduces the data center footprint, is easier to administer and significantly reduces energy costs. "Cloud computing" shifts technology from internal infrastructure solutions to secure, web-hosted strategies that deliver increased functionality and flexibility using a mix of public and private cloud-based application and platform services. Data security and data privacy will remain paramount requiring automated as well as manual capabilities that detect, assess, and respond immediately to threats.

During the past several years, technology has become more local, social and mobile. Transparency and access to data is expected by employees and the public alike. Mobility is the most requested resource by all departments. The desire for an improved “user experience” will drive the creation of more layered approaches in application design with the emphasis on increasing citizen services and untethering desktop workers by providing wireless devices, thus increasing mobility and improving efficiency for employees and citizens alike.

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

Categorizing Citywide Needs - Overview

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



Citywide Infrastructure

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

Overview: Providing the city with an infrastructure capable of handling current and future technology needs is the foundation upon which all projects, both current and future, relies. It has opened the door to many modern opportunities.

Installation of a modern, redundant fiber network was the primary need. It was paramount to enabling the City to build a mirror-imaged, disaster-prepared system capable of keeping financial systems, public safety, and other critical data available in the event of catastrophe and was also a critical component as the Newton Public Schools move their technology forward. The “loop” design ensures a secondary path to any location and with “spanning tree enabled switches” costs

for multiple paths can be kept in check. Extra fiber strands allow dedicated connections outside of the data network for special projects, security initiatives, one-time interactive projects as well as live feeds to NewTV.

The municipal VoIP (Voice Over Internet Protocol) replacement program has been a success. Building by building, department by department, the IT Department has removed phones, gateways and other equipment while rewiring several departments and eliminating many Centrex and POTs (Plain Old Telephone Service) lines. By cancelling unused phone lines, the IT Department has reduced the City's monthly Verizon landline phone bill by 25% or \$60,000 per year. We have replaced the phone systems in every non-school city building except for the Police Department while building a failover system with the redundancy to keep all sites up even with a partial failure.

Demand for network bandwidth continues to be a challenge for the Newton Public Schools. Support for "Bring Your Own Device" (BOYD) is literally a standard component of education in Newton. Students bring an average of 2 mobile devices to school. All tenth graders are now being provided with a laptop as well. Providing a wireless network and internet access with adequate bandwidth to handle this demand is critical; this requires scalability, management, security and redundancy in front of these wireless endpoints.

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

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

Software, Applications, and Process Improvements

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

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

- Finance Plus - Employee and payroll systems
- Community Plus - Permit, licensing and code enforcement system
- Munis - General Ledger, payables & procurement; receivables system
- GIS - Geographic Information Systems

- PeopleGIS - the keystone application including asset, fleet, time and storm management all rolled into one with direct API connections to other applications such as GIS
- QED - Public Safety system
- Document Indexing
- Laserfiche - Document Scanning and management
- Exchange in the Cloud - The City email and calendar system as well as secondary data storage
- Website - We have begun the site upgrade to Vision from Civica.

The Financial System

The 23-month long conversion to replace all applications that handle accounting, budgeting, procurement, payroll and employee benefits from Finance Plus to Munis is underway. Our conversion on July 1, 2019 for the general ledger, payables-related modules, and anything that revolves around a fiscal year calendar was successful. Challenging and rocky at times, the professionalism, diligence and dedication of the financial departments were the single strongest contributing factor towards this phase of the project.

Human Resources-related items such as employee information, benefits, payroll, and interaction modules for personnel administration are slated for January 1, 2020.

We are working mostly via WebEx with the Tyler payroll specialist 2 to 4 days per week with occasional onsite visits. The School Department, Financial Information Services, Human Resources and IT have spent many hours working on cleaning data prior to importing drafts into the new system.

This transition will provide many opportunities for enhanced workflow, office automation, and a major reduction in paper. Mobile apps will allow us to approve payroll, requisitions, employment modifications and more while away from our desktops. Enhanced paperless workflow will be a game changer.

The eventual implementation of the online Employee Information Center will be a feather in the cap of the HR department.

Purchase of a New City-Wide Permitting System

We have hired a consultant to help study workflow and write an RFP for permitting and licensing that covers the needs of every department. The goal is to have a single, scalable system that will greatly increase inter-departmental efficiencies and public user access. The target is for an integrated system by ISD, Fire, HHS, Public Works, the City Clerk and other departmental use, with an interface for the public.

From ISD to DPW, Engineering, Fire, Police, Health, Parks & Recreation, the City Clerk and more, a consistent system will bring value and efficiency to the city. As with the financial project, the participation of all departments is key to the success of the implementation.

The Website

For the past 9 years, the city has used a content management system that allows each department to maintain their own web pages to host the municipal website. This solution covered every department excluding Schools, Library and Police who each maintain their own website. During this period, we have had upgrades to migrate away from locally hosted and responsive design which allows our web pages to reformat themselves based upon the type of device browsing our site.

We have negotiated a no-cost upgrade to a brand new package recently bought and endorsed by Granicus. With enhanced search ability, direct ties into social media, a complete facelift and reorganization of our data, this 11 month long implementation is expected to address all of the complaints about the current site.

On-Line Payments

The City partners with "City Hall Systems," a third-party vendor to handle credit card transactions from the various City systems. This conversion is being accomplished one application at a time and involves a lot of research, meetings and testing to avoid false starts and mistakes. Some projects may take several months to implement while others are progress swiftly.

Security

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

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

- Protection from attacks via the Internet - our switches, access points, wired and wireless, firewalls and routers need to be up to date; operating systems must remain current with patches and fixes;
- Protection from users - education and awareness will help prevent employees from bringing and using unsecured devices in the workplace.
- Protection from disgruntled or departing staff - an early warning system is used covering all manner of employee departure, initializing standard protective steps to ensure the safety of data and equipment. We are standardizing onboarding and terminations.
- Protection during remote access - Every department has key employees who remotely access systems. Even during catastrophic weather events that leave the city shutdown to all but essential personnel, there are still many people doing City business as usual.
- Protection from specialized attacks such as phishing and other user-specific or position-specific attacks

The protection of the City's data and networks begins on the inside. The City is continually reviewing and upgrading security systems and practices to address new concerns that were historically non-issues. With the installation of new technology and solutions, the City is remaining vigilant in the fight to eliminate potential exploitations to protect the City, its employees and its residents.

Video monitoring done with sensitivity to privacy of schools, public buildings, public spaces, weather forecasts, and traffic to ensure the safety of students and the community are a high priority. Responsibility varies by location and audience. Solutions that work across departments

will provide efficiency, enabling the consolidation of back end equipment to conserve server needs, licensing, and maintenance and support costs.

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

User Support & Training

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

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

Keeping the IT staff knowledgeable in current applications is only one piece of the challenge; training users and documentation of processes must be done. Time and again, functions and processes that are performed infrequently are often the source of mistakes. The best training practices include repetition. Frequent training opportunities are also critical to keeping all staff current and prepared.

Ensuring all employees are aware and informed of changes in policy and how it affects them involves a structure and delivery mechanism from IT that ensures everyone remains knowledgeable.

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

FY2021 - FY2025 Information Technology Needs Analysis by Department

Clerk of the Council, City Council, City Clerk, Elections

Clerk of the Council FY2021 - FY2025 Needs: New staff support, website oversight, Council Chambers enhancements

Clerk of the Council: Technology in the City Council Chamber has been a challenge. We have begun the procurement process to outfit the Council Chambers with a movie theater style projection system that preserves the historic significance of this classic room yet fulfilling modern expectations and needs for the board and the public.

Newton has long been respected for swift web updates and adhering to open meeting laws. The timely posting of agendas, minutes and backup documents has allowed our citizenry to remain well informed. The Council, Clerk and Elections use the Civica website system for displaying agenda, minutes and pertinent files associated with the Full City Council as well as the six standing committees. We are working with Granicus to move over to their Vision Content Management System with technology that is literally a decade newer. While we do not yet have the optimum solution, we continue to push for the optimal convenience to a very complicated challenge.

With the eventual implementation of a new Permitting system and an ability to handle sophisticated requirements across numerous departments, our goal is a centralized method to track Special Permits from inception to permit issuance, detailing all documentation with updates and revisions as well as payments.

We continue to watch Speech to Text technology and look forward to the day when affordable software can differentiate between voices and understand more of the jargon that we use in everyday speech, especially in night meetings. Until then, minutes will continue to be recorded and transcribed.

City Clerk FY2021 - FY2025 Needs: Business Licensing and End to End Online Application and Payment

City Clerk: The business database continues to run as a stand-alone application that does not interact with any other system. It requires the participation and research of several other departments and thus should be a shared system that is viewable by all required parties.

Elections FY2021 - FY2025 Needs: Continued election night support, early voting application.

Elections: The historic responsibilities of the department include voter registration and election administration. The biggest change in voting is the early voting law which allows registered voters to cast their vote on an absentee ballot, automatically updates the voter records, and synchronizes with the Commonwealth VRIS database.

With assistance from the IT department, election night automation and online results reporting is as advanced as any other city or town in Massachusetts. Live intermediate results are posted beginning roughly 15 minutes after the polls close and final, unofficial results are consistently posted within the hour of poll closings on election night.

Census Records FY2021 - FY2025 Needs: Improved Census Collection

Census Records: The historic responsibilities of the department include managing the census database.

While waiting for a state sponsored online secure solution for census collection, the IT Web Developer has written and continues to refine an application that allows respondents to the census to accomplish this formerly manual task online. The savings from manual entry to the volume of mail and to the cost of postage are all positive benefits realized through technology.

Executive Office

Executive FY2021 - FY2025 Needs: Continued support for a new administration and furthering the use of technology in new and meaningful ways

Executive: The Information Technology Department assisted Mayor Fuller and her team in an efficient transition not only with physical technology but with access to data, training, modifications to existing systems, and a greater presence through social media. We have begun writing small apps to reduce paperwork and enhance efficient workflow for tasks such as noise ordinance waiver request forms. We enjoy using the website and audio/visual systems in new and meaningful solutions to enhance communication.

Comptroller's Office & Newton Retirement System

Comptroller FY2021 - FY2025 Needs: Upgrade Financial System to Munis

Comptroller/Financial Reporting: The biggest challenge for the Comptroller and IT will be to guide the migration of our financials into Munis while running the old system in parallel until the milestone cutover dates. The "go live" date of July 1, 2019 for the financial side was a success albeit a rocky road. Tentatively, January 1, 2020 is the cutover for the employee benefits related portion.

Newton Retirement System FY2021 - FY2025 Needs: Ongoing support, as needed.

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

Purchasing

Purchasing FY2021 - FY2025 Needs: Enhanced Office automation using the full power of the new financial system, Munis

Purchasing: Automation of the requisition and purchase order systems and eliminating paper are the goals and expectations of everyone involved in Newton's procurement system, as well as migration to the new Munis software.

Assessing

Assessing FY2021 - FY2025 Needs: Continue to look for an efficient way to interface with CAMA (Computer Assisted Mass Appraisal software) from the field.

Assessing: The Assessing Department uses the Vision database to manage the valuation of property. Data is imported from Vision into Community Plus once a year. We are anticipating opportunities for better collaboration between Vision and our new permitting software. The Vision system is now on a virtual server.

The department maintains a robust set of web pages that allow residents, businesses and realtors to query property information online. Internal systems are slated for migration to our storage area network. Several of the Assessing department specific systems are approaching end of life and should be migrated to the storage area network.

Treasury

Treasury FY2021 - FY2025 Needs: Assistance in continued automation and support of services; continue to offer enhanced online payment systems. We look forward to assisting the new Treasurer in any and all technology initiatives as well as continued support in the Munis conversion.

Treasury: The Treasury Department is outfitted quite well with equipment and software. The department's increased agility utilizing the new phone system and Active Directory makes it easier for employees to retrieve necessary services from any workstation within the department while maintaining a very high level of security. The most significant technology needs for Treasury will be to continue automating online the many different transactional payments to eliminate data entry.

Law

Law FY2021 - FY2025 Needs: More digitization and Optical Character Recognition (OCR). Enhance search services. For the first time the department will be using a case management software system entitled Time Matters. With assistance from IT we interviewed software vendors and support consultants for many months before arriving at the optimal fit for our legal department.

Law: The Law Department is a paper intensive department largely due to the nature of their jobs and the legal system in Massachusetts. Enhanced search capabilities and access to information are perhaps the most important technology needs of this department. The biggest new tool for a resource for the Law Department would be to scan, OCR and index the information on paper in many four drawer file cabinets. The summer of 2017 saw a test case with interns scanning and automatically "OCR-ing" the binders of opinions into searchable data. We learned that, although easy to do, it is extremely labor intensive.

Human Resources

Human Resources FY2021 - FY2025 Needs: The new financial system and the migration of employee data and payroll from Finance Plus into Munis is a colossal challenge. This will involve working with Munis, FIS, Schools and IT to automate HR as much as possible and not merely duplicate old ways in a new system. As with other departments with new heads, we go out of our way to give them the tools and technological resources to hit the ground running and enable their success.

Human Resources Revising and rewriting Standard Operating Procedures, committing to the minimization of paper, and improving applicant and employee portals will create significant opportunities to modernize HR.

Information Technology

Information Technology FY2021 - FY2025 Needs: The department will need to maintain a full complement of staff and sufficient funding to enable the realization of the technology vision.

Information Technology: Between project management and assisting departments in wisely choosing replacement software that fits with the city's requirements moving forward, the IT department's goal is to deliver 21st century technology for employees and residents alike.

Planning & Development

Planning FY2021 - FY2025 Needs: Mobility and training

Planning & Development: This large, mobile department spans two floors and maintains varied working hours that involve two very different audiences; from daytime employees to employee relations and document administration to night meetings and presentations to elected officials and the public, Planning has many disparate needs. We hope that untethering more employees from desktop PCs and raising awareness of all the resources already available will assist the department in efficiently providing the best solutions using the best data. We have outfitted all of the City Hall conference rooms with large flat screen monitors and wall mounted PCs.

Public Buildings

Public Buildings FY2021 - FY2025 Needs: Assistance in the quest for mobile applications and paper reduction

Public Buildings: The department is well-outfitted with equipment and communications capacities. With the advent of Munis, it is expected that paper will be replaced effectively and efficiently.

Financial Information Systems

Financial Info Systems FY2021 - FY2025 Needs: Continue support for the department.

Financial Info Systems: FIS will be integral in the conversion process for the Munis solution. While the IT department oversees user administration, hardware support, and works alongside FIS, the interactions for Payroll, Personnel, Benefits, etc. will be led by FIS and championed and supported by IT.

Newton Police Department

Police Department FY2021 - FY2025 Needs: Support Police network and resources when requested.

Police: IT supports the Police Department when requested. We recommend that all servers be virtualized and mirrored.

Newton Fire Department

Fire Department FY2021 - FY2025 Needs: Support as needed for the Emergency Operations Center (EOC) and applications such as the anticipated shared permitting and inspections system. Support for radio systems on city fiber networks with redundancy and Simple Network Management Protocol (SNMP) notification of issues.

Fire: In the past year, the IT Department has assisted in the implementation of many technology initiatives in the Fire Department. IT continues to assist and remains on call for EOC operations at Fire Headquarters. With assistance from IT, much equipment has been purchased, networks have been built, and processes have been defined. The LUA messaging application has enabled smart phones to take a step forward in assisting emergency operations requirements. The Fire Department will be deeply involved in the selection of a new permitting system.

Inspectional Services

Inspectional Services FY2021 - FY2025 Needs: All-encompassing permitting application, elimination of the paper glut. Increase digitization and OCR. Enhanced search services.

Inspectional Services: All staff in ISD now have tablets with an enhanced Verizon connection that withstands the weak spots that are experienced in some areas of the city. These tablets give inspectors access to the existing Community Plus application, general data, email and the ability to take pictures.

ISD will be deeply involved in the selection of a new permitting system.

Department of Public Works

Public Works FY2021 - FY2025 Needs: IT continues to assist in the implementation of PeopleGIS, the City's Asset Management program that incorporates all streets, sidewalks, water, sewer, and storm water infrastructure. We also support the DPW expansion of mobile devices to increase efficiency and productivity using cloud-based apps.

Department of Public Works: From GIS support to database maintenance and WebQA/311 administration, IT works very closely with Public Works. We have coordinated many office moves over the past year between City Hall, Crafts Street and Elliot Street. Responsibility for phones as well as data and maintaining high speed access regardless of location are our standards for all departments.

DPW will be deeply involved in the selection of a new permitting system.

Health & Human Services

Health & Human Services FY2021 - FY2025 Needs: Anticipate migrating applications into the new permitting system.

Health & Human Services: The Health Department continues to expand their use of Social Media and welcomes new technology. H&HS has been a heavy user of Community Plus for permitting and licensing as well as annual and recurring inspections and liquor-related events.

Health and Human Services will be deeply involved in the selection of a new permitting system.

Senior Services

Senior Services FY2021 - FY2025 Needs: Video surveillance system

Senior Services: The Newton Senior Center on Walnut Street serves as a multipurpose building for seniors over the age of 50, and Veterans of any age. In response to the growing technology demands of the seniors, the Center is outfitted with numerous wireless access points to meet the demand.

The original sound system has been replaced with several smaller, easy to setup systems that serve a wide range of users. We replaced an aging video system with a 75" HD flat screen and soundbar.

IT is working with Senior Center staff to determine how much video surveillance is required.

Veterans' Services

Veterans' Services FY2021 - FY2025 Needs: Continue to support needs and anticipate future projects.

Veterans' Services: IT supports and contributes to all Veterans' initiatives as requested.

Newton Free Library

Newton Free Library FY2021 - FY2025 Needs: Assist in the support and upgrade of the Library wired and wireless networks. Prepare to merge the Library Storage Area Network into the City SAN.

Newton Free Library: The Newton Free Library has made great strides in recent years solidifying their network infrastructure, improving the wireless network available for public use and reducing the number of servers in use by virtualization. The IT team has accomplished great things working hand in hand with the Library technical staff. We pride ourselves in our relationship with other municipal IT entities. Last year we worked together to increase the bandwidth between all wiring closets from 100 mb on copper to 1 GB on multimode. We are now looking to update drops to workstations, assist in wiring for the new children's area and troubleshooting issue as they arise as needed.

Parks & Recreation

Parks & Recreation FY2021 - FY2025 Needs: Re-evaluate "Sportsman," and field permitting to determine whether or not these programs should be part of the permitting and licensing system.

Parks & Recreation: The IT Department continues to support the Parks Department's Dudley Road facility, as well as Crystal Lake, Gath Pool and many other buildings enabling the department to provide and manage the many programs, camps, and lessons as effectively and efficiently as possible.

Parks and Recreation will be deeply involved in the selection of a new permitting system.

Historic Newton

Historic Newton FY2021 - FY2025 Needs: Ongoing, quality support as needed.

Jackson Homestead: Since the renovation, the History Museum has had numerous tech upgrades and is currently in very good shape for their data and access requirements. We will continue to monitor and discuss potential future projects.

PUBLIC SAFETY EMERGENCY COMMUNICATIONS

Introduction

To keep Newton safe in today's ever-changing environment requires a reliable, robust, redundant emergency communications system. In 2016, the City established an Emergency Communications Team (internally referred to as the "Purple Team") consisting of members of the Police Department, Fire Department, Information Technology Department, Public Buildings Department and the Executive Department to ensure that the City's Emergency Communication System meets the needs of the residents, visitors, emergency personnel, and first responders in the City of Newton.

The City's Emergency Communication System is comprised of many components:

- Public Safety Radio System Infrastructure
- Emergency Dispatch Communications
- Emergency Operations Center
- In-Building Communication Capabilities
- Fixed Building Radio Systems
- Radios and Mobile Data Equipment

Radio System Infrastructure

The Radio System Infrastructure is the backbone of the City's Public Safety Emergency Communications System. Components include 9 radio sites, 12 Transmitters, 21 receivers, 2 dispatch centers, an emergency operations center, 300 portable radios, and 80 mobile radios in public safety and other critical City vehicles.

The system is currently non-trunked, UHF in the 470 & 480 Mhz range.

Simulcast Radio System Upgrade

In 2017, the need to expand radio coverage for both Police and Fire was identified as a priority for both departments. Working together with the assistance of a consultant, we are currently formulating a specification to expand the radio system. We will move to a simulcast system which will consist of several transmitters where in the old system there was only one. These transmitters are synchronized across the city to appear as one to a listening radio. Having these transmitters geographically separated will allow for significant improvements not only to on street coverage but also inside buildings. We are expecting to have the system built and online over the next few years. As part of this, we will also be adding two additional radio

Newton Fire Department



Our Mission

"...To maintain a department of fire personnel trained in all aspects of fire suppression, rescue, salvage, fire prevention, hazardous materials and emergency medical response, enabling us to serve and protect, without prejudice or favoritism, the lives and property of the residents of Newton from both natural and man-made disasters."

Newton Police Department



Mission Statement

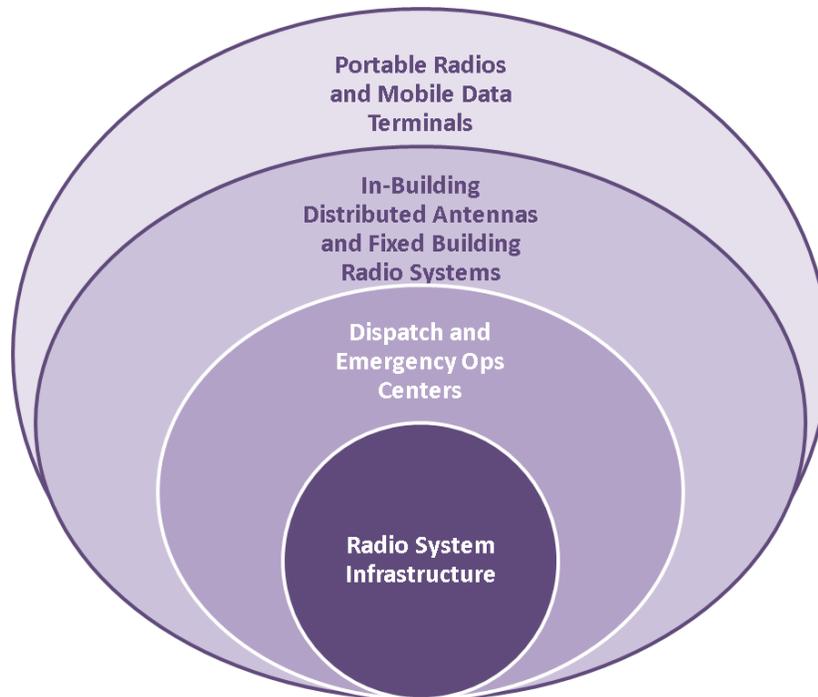
The mission of the Newton Police Department is to work in partnership with our community. We commit to protect and preserve the rights and dignity of every human life, to maintain peace, order, and a secure environment for the community and their

receiving sites at Fire Station 1 and Fire Station 7. The team will also be deploying a new fiber-based IP network to allow the sites to communicate over redundant fiber connections. The system will be monitored at both the Police and Fire headquarters by technicians who can respond to any alerts of potential problems. These alerts will also be emailed out for remote monitoring by responders.

Combined Emergency Dispatch Center

The City of Newton Combined Emergency Dispatch Center is the City's Public Safety Answering Center (PSAP) taking calls for Police, Fire, and Medical emergencies. The Dispatch Center completed a full system upgrade to a Motorola Radio MCC7500 computer-based system in 2017. The City's Dispatch Center receives 27,000 emergency 911 calls each year and is responsible for dispatching appropriate police, fire or medical personnel in response to all calls.

The calls range from simple requests to life and death situations. All Dispatchers are certified 911/EMD, utilizing computer based medical protocol, 911 geo-location of incoming calls, and a computerized Dispatch system. In 2018, the 911 system was upgraded to the latest General Dynamics platform.



Emergency Operations Center

The Emergency Operations Center (EOC) serves as a place to coordinate on-scene operations during low-frequency and high-risk incidents. The EOC mobilizes people and equipment to handle incidents that are outside the ability of any single agency to resolve. The purpose of the EOC is to ensure that departmental response capabilities are maintained and authoritative information is disseminated to the general public. Capturing important incident-related information at an EOC provides officials with the necessary real-time data to set strategic directions; establish priorities;

and allocate resources. This in turn allows field commanders to focus on the incident objectives while the EOC serves as the central hub and an interconnected message center for the city-wide infrastructure (Police, Fire, DPW, Schools and City Hall) as well as the larger State Multi-agency Coordination System (MACS). If a major incident occurs, all components of MACS are activated including MEMA and other State and federal agencies.

In July 2017, the City completed construction of the new Emergency Operations Center which is located at Fire Station 3 and Fire Headquarters in Newton Center. The EOC features a large video wall with the ability to show several real-time data feeds, audio from the radio systems for police and fire, as well as real time video as the city moves to consolidate camera feeds. Since the completion of the EOC, there have been several activations. Between the several winter storms, the Boston Marathon, as well as countless hours of meetings and trainings, the center has met all our expectations and more. Other city departments have also turned to the EOC as a room they can use for teaching their staff.

Along with the EOC, the city has upgraded the backup dispatch center. This center features two dispatch positions. In addition, the fire station alerting system which alerts fire fighters to emergencies is being upgraded to run over fiber optics as part of this project. This will increase the reliability of these systems and ensure that the city has reliable communications in the event of an emergency.

In-Building Communication Capabilities

Many buildings are built with construction materials that do not allow radio signals to penetrate very well between walls and through floors. This causes significant problems for police and fire first responders. In-Building Antenna Systems are designed to accommodate the unique building construction and floor plans and provide solutions that effectively distribute the radio signals in, out and within the building through an interconnected system of antennae placed on each floor.

For each public school, the City of Newton Fire Department is completing a needs assessment to determine if the installation of a Bi-Directional Amplifier (BDA), Radio Site, or other equipment is needed to enhance coverage for the buildings. For new construction within the City of Newton a building owner may be required to purchase, install, and maintain a BDA for public safety. This is determined by Newton Fire Prevention with support from the Fire Technical Services & Wires divisions. Regardless of who installs the equipment, it is required to support both Newton Fire & Police Channels (four channels in total). In the case of the schools, an additional school emergency channel is added to the system. All radio channels currently in use by the City are UHF. The systems installed meet NFPA specifications and are separate from any systems which enhance cellular telephone or other wireless services within the building.

Fixed Location Radio Sites

Fixed Location Radio sites contain equipment which can receive or transmit signals to first responders. These sites are usually at high points around the City or at strategic locations to provide the best possible coverage. There are three major challenges that must be addressed as part of this process:

- Obsolescence of equipment and network connections,
- Transition to fiber connections, and
- Adding or expanding the backup power at each fixed location.

The City has completed a fiber network connecting all radio tower locations, replacing the existing copper lines which resulted in annual savings in excess of \$20,000/year in leased line costs.

In 2017, the City completed the replacement of the main radio transmission antennas and cable at the Waban Reservoir site. The new facility houses all primary location radio equipment for Police, Fire, and the School Department. This building is climate controlled with backup power to insure the highest level of service while we operate our wide area radio system

In 2018, the City took on major upgrades at three radio sites. This includes replacing antennas, transmission line, and preparing for a new simulcast radio system. At one site, a city water tank, we constructed a small building to house new equipment for Police and Fire. This allowed the equipment to come out of cabinets which are not temperature controlled and exposed to the elements. We are expecting to occupy the completed building this fall/winter.

Additionally, we have added battery backup to our critical radio sites to allow the system to run during power outages. As we build the simulcast system, these will also be upgraded to run for additional periods of time and tie in to the radio system to alert the respective team to resolve any alarms received at the radio sites.

Mobile and Portable Radios

In FY19, both the Police and Fire department received money to purchase new portable radios. Between the two departments, we have replaced 265 radios. The old radios will come out of active service and be distributed if the city has a major event which requires people who would not normally communicate via radio to use the equipment.

Mobile Data Equipment

Each Police cruiser is equipped with a computer that provides dispatch information, Criminal History, Registry of Motor Vehicles checks, GPS, and report writing capabilities. The intranet also provides the police officer in the cruiser daily vehicle inspection compliance, missing person's pictures, daily information, floor plans of buildings, and other useful information.

The Fire Department in 2018 completed an upgrade to iPad's. Each fire truck is equipped with an application which receives information directly from dispatch, provides driving directions, and interactive updates as calls progress. In addition, the iPad's have been expanded to allow truck equipment checks to be done, preplan information to be collected, and provide maps of key city buildings to be easily accessed at any time. Fire Department daytime staff, such as fire prevention, also have this application on their City issued phones for better situational awareness.

School Emergency Radio Project

Funded by the school department in August 2016, Fire took the lead on working with a vendor to install a two-way radio in every school in the city. The purpose of each radio is to provide the school with another means to report emergency's which present an immediate threat to life, consequently allowing for a faster response from Public Safety. In September 2017, Fire, Police,

and 911 Dispatch visited each school and commissioned the system as well as provided valuable information and training to the principals and office staff on the use of the system.

Fire Alarm System Upgrades

The construction of Fire Station 3 and the rehabilitation of Fire Headquarters required the move of all fire alarm-signaling equipment. This equipment is used to tie city buildings, commercial buildings, and residential complexes with a direct to dispatch notification of fire alarm activation. The core of this system is in Newton Centre and branches out, not only through Newton but, to surrounding communities through mutual-aid circuits. This system runs separately from street power, this means that in the event of a power or major communications failure, the system can still receive and transmit alarms. The system was upgraded to new monitoring units at both the Police and Fire stations and now runs over fiber optics between the Fire and Police Headquarters buildings. While the technology the system runs on goes back to the mid-1800's, it is still one of the fastest ways to notify first responders of a pending emergency.

Security

As with all Emergency Preparedness Plans, Emergency Communications Plans must by their nature remain secure. Therefore, although this section of the Capital Improvement Plan will identify components of the Emergency Communications System as well as their value and purpose for the City, technical details will not be provided to ensure that the safety of the City's emergency personnel and first responders is not compromised.

WATER SYSTEM

The City of Newton has been identifying, evaluating and improving Newton's water distribution system for many years. Beginning in 2000, the City took full advantage of the MWRA's water loan program to focus on cleaning and lining old (mostly pre-1900) water pipelines to improve water quality. The City then developed a strategic investment plan for our water system in 2013. The first few years of the plan focused on replacing water pipelines to improve fire flows. In fact, the Newton Fire Department was recently rated a Class 1 agency, the highest possible ranking from the Insurance Service Organization. Improvements made over the last few years to the City's Water Distribution System played an integral part in this upgrade.

After completing a hydraulic analysis in 2016, the City began aggressively targeting leak-prone pipelines from the World War II Era to reduce the "unaccounted-for water" levels from leakage in the system. The City recognized the need to increase the renewal of the aging water distribution pipe network, much of which dates back to the 1870's and developed a comprehensive capital improvement program. The City is currently in Year 7 of the 20-Year investment plan, spending in the \$4.5 - \$5.0 million a year range.

The City utilized a pipe renewal needs forecasting software program to provide calculation of the pipe replacement quantities required to keep pace with the expected end of useful service life of Newton's water pipes that make up the water distribution system. The City now has a customized pipe replacement program for the City's pipe assets showing how much replacement is required annually. The results of the analysis indicate that the City should be renewing approximately 4 to 5 miles of water main pipe per year, which is supported within this CIP.

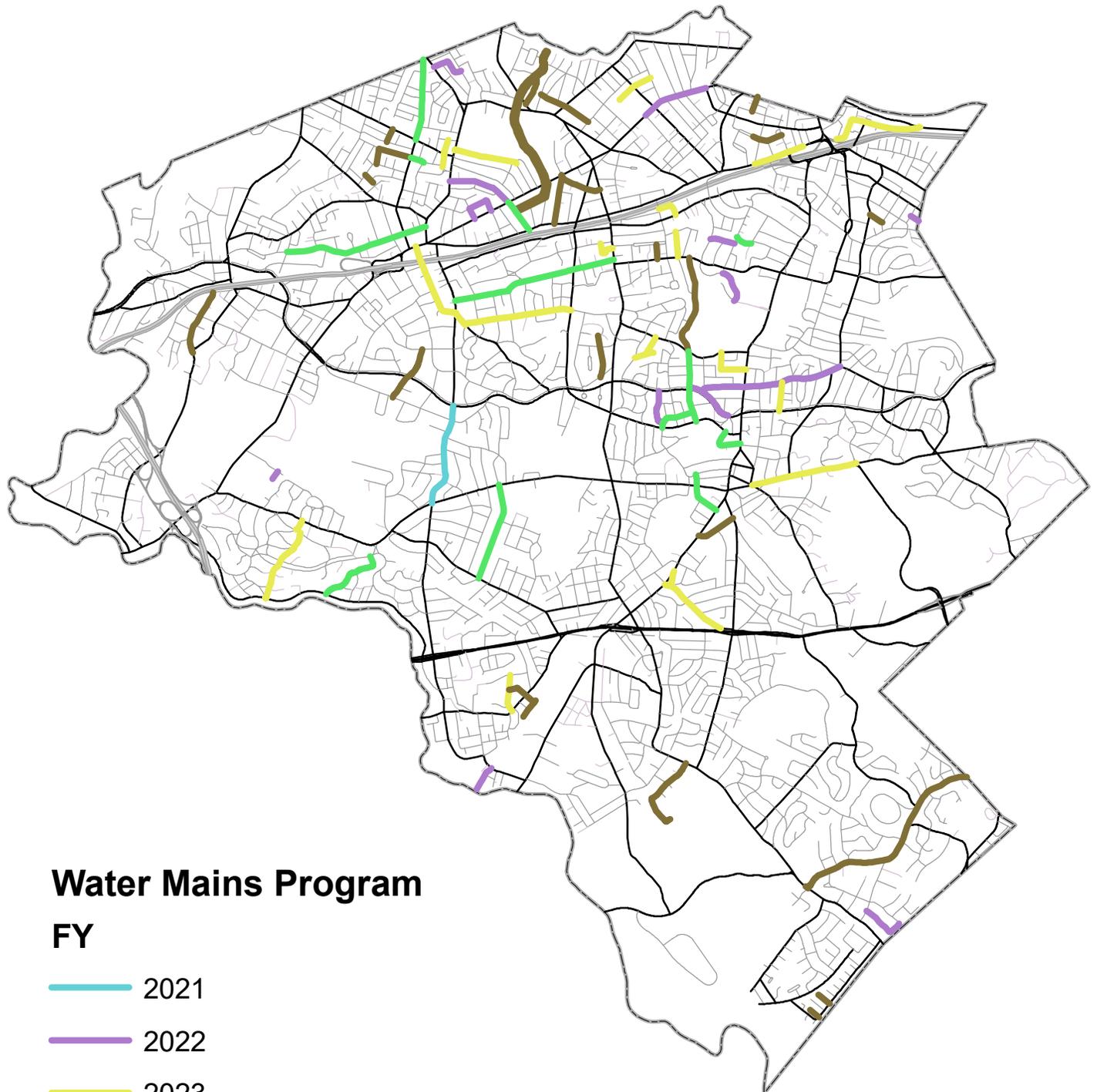
In addition, a risk-based ranking system was developed for integrating and managing the water system pipe asset rankings. The water main assets were then grouped into a risk matrix, by condition and criticality, from low to high priority, with recommended actions that range from immediate pipe replacement to acoustic monitoring, advanced in-pipe inspection, as well as cleaning and cement lining.

Eliminating Lead at Customer Connection

The City is committed to eliminating lead in any part of the water service connection from City water main through the homeowner's service line to their basement. Three years ago, the MWRA made \$100 million in interest-free loans available to member water communities like Newton to fully replace lead service lines to homes. Newton took full advantage of this program. The City has identified and assisted residents with rectifying 291 suspected lead water service connections in homes built prior to 1951. Very few lead service line connections are left, and the City will take advantage of any opportunities (e.g. permits for home renovations) possible to get them removed.

While replacing these service lines will eliminate the largest remaining source of lead in water and is the current priority, the City is also working on identifying and replacing all sources of lead in the water distribution system. Some possible sources of lead include pipe connectors, linings within fixtures, and lead solder. Continued public education will be needed to ensure that water system customers and homeowners understand what they can do to reduce the threat of lead in drinking water.

Water Mains Program FY2021 Through FY2025



Water Mains Program

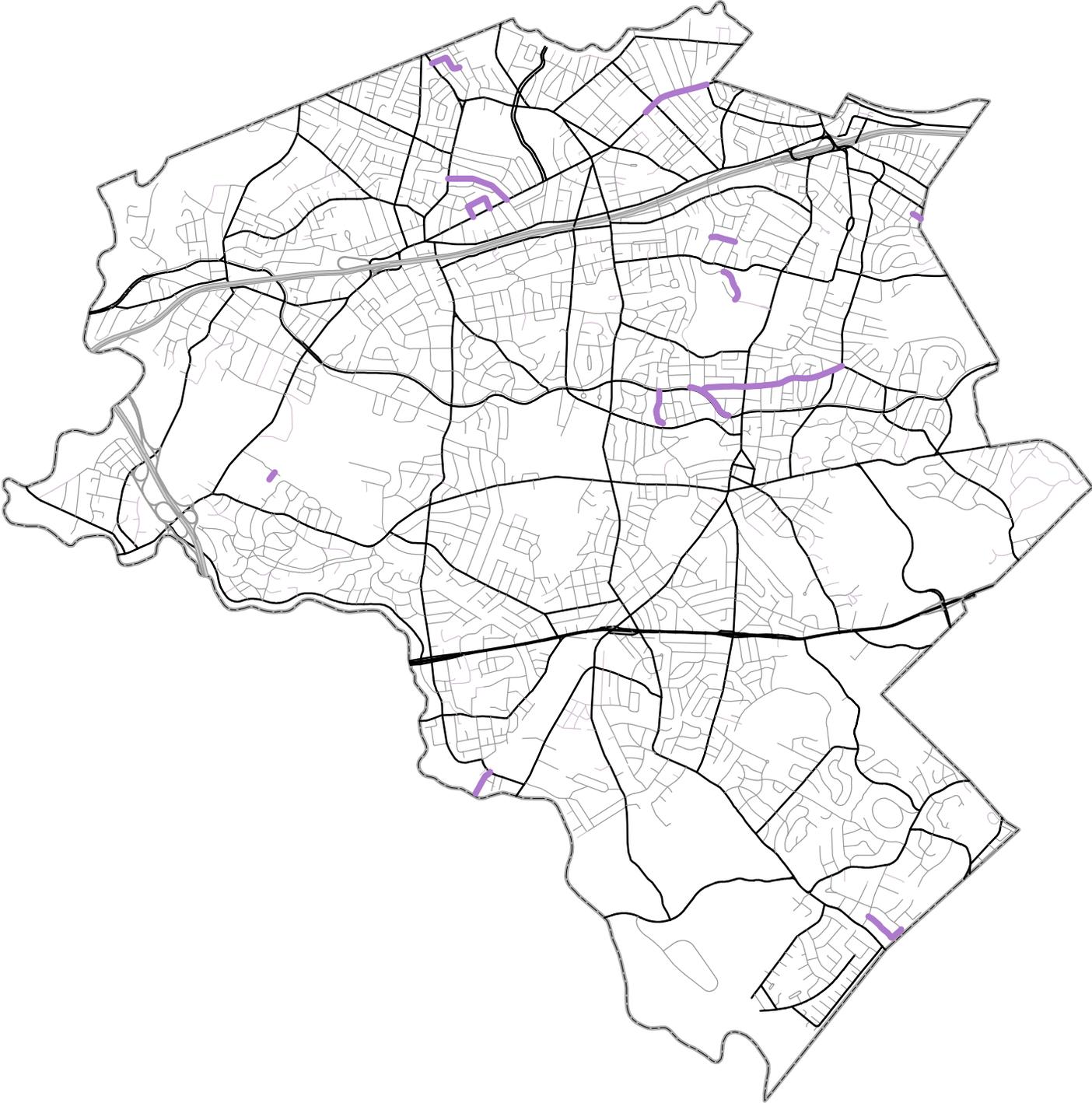
FY

- 2021
- 2022
- 2023
- 2024
- 2025

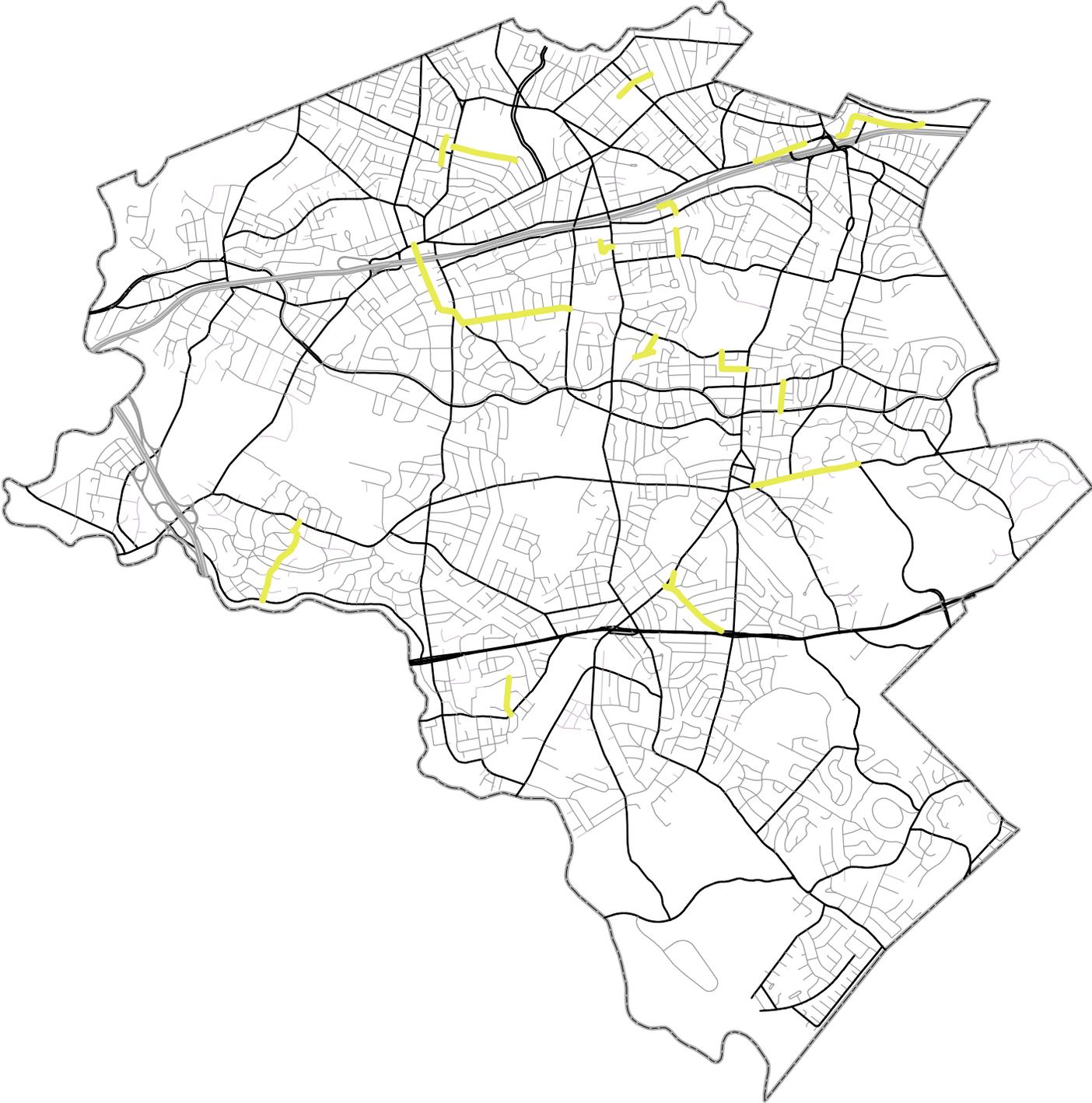
Water Mains Program FY2021



Water Mains Program FY2022



Water Mains Program FY2023



Water Mains Program FY2024



Water Mains Program FY2025



Water

5 YEAR CIP, FY2021-FY2025

Priority	Street Name	Prior Year Funding	FY2021	FY2022	FY2023	FY2024	FY2025
1	Chestnut Street (Boylston St to Beacon St)	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -
2	Ward Street (Manet Rd to Waverley St)	\$ 3,200,000	\$ -	\$ -	\$ -	\$ -	\$ -
3	Chestnut Street (Beacon St to Commonwealth Ave)	\$ -	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -
4	Winchester St & Needham St (Boylston St to Oak St)	\$ -	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -
5	Ward Street (Waverley St to Comm Ave)	\$ -	\$ 1,500,000	\$ 1,500,000	\$ -	\$ -	\$ -
6	Longwell Road	\$ -	\$ -	\$ 66,000	\$ -	\$ -	\$ -
7	Ricker Terrace	\$ -	\$ -	\$ 66,000	\$ -	\$ -	\$ -
8	Saco Street	\$ -	\$ -	\$ 132,000	\$ -	\$ -	\$ -
9	Adella Avenue	\$ -	\$ -	\$ 198,000	\$ -	\$ -	\$ -
10	Comm Ave Carriage Road (Centre St to Cedar St)	\$ -	\$ -	\$ 418,000	\$ -	\$ -	\$ -
11	Eliot Avenue	\$ -	\$ -	\$ 418,000	\$ -	\$ -	\$ -
12	Peregrine Road	\$ -	\$ -	\$ 506,000	\$ -	\$ -	\$ -
13	Watertown Street (Pearl St to Hawthorne St)	\$ -	\$ -	\$ 440,000	\$ -	\$ -	\$ -
14	Westchester Road (Langdon to Colby)	\$ -	\$ -	\$ 220,000	\$ -	\$ -	\$ -
15	Kenwood Avenue	\$ -	\$ -	\$ 220,000	\$ -	\$ -	\$ -
16	Hazlehurst Avenue	\$ -	\$ -	\$ 220,000	\$ -	\$ -	\$ -
17	Washington Street (Jewett St to Peabody St)	\$ -	\$ -	\$ -	\$ 330,000	\$ -	\$ -
18	Cottage Street	\$ -	\$ -	\$ -	\$ 220,000	\$ -	\$ -
19	Beacon Street (Langley Rd to Hammond Pond Pkwy)	\$ -	\$ -	\$ -	\$ 675,000	\$ -	\$ -
20	Clark Street	\$ -	\$ -	\$ -	\$ 440,000	\$ -	\$ -
21	Berkshire Road	\$ -	\$ -	\$ -	\$ 168,000	\$ -	\$ -
22	Clarendon Street	\$ -	\$ -	\$ -	\$ 168,000	\$ -	\$ -
23	Farquhar Road	\$ -	\$ -	\$ -	\$ 168,000	\$ -	\$ -
24	Walnut Place (Highlands)	\$ -	\$ -	\$ -	\$ 168,000	\$ -	\$ -
25	Clinton Place	\$ -	\$ -	\$ -	\$ 192,000	\$ -	\$ -
26	Charlesbank Road	\$ -	\$ -	\$ -	\$ 288,000	\$ -	\$ -

Priority	Street Name	Prior Year Funding	FY2021	FY2022	FY2023	FY2024	FY2025
56	Cherry Place	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 242,000
57	Waban Street	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 121,000
58	Eddy Street	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 242,000
59	Annawan Road	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 484,000
60	Harris Road	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 121,000
61	Marion Street	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 121,000
62	Surrey Road	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 121,000
63	Ashton Avenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 242,000
64	Otis Street	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 605,000
65	Paul Street	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 290,000
66	Cherry Street (Derby St to city line)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 581,000
67	Webster Street	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 170,000
		\$ 4,700,000	\$ 4,500,000	\$ 4,404,000	\$ 4,712,000	\$ 4,694,000	\$ 4,801,000

SEWER SYSTEM

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

In 2013 the City developed a 10-year program to systematically address the approximately 300 miles of sewer mains and related manhole structures. This plan began with those areas known to have significant inflow and infiltration problems, as well as those areas that were experiencing flooding or sewer surcharging problems. The work in each project area is divided into 3 phases: Inspection and Assessment, including heavy cleaning; Design of repair work; and Construction, including post-construction flow assessment. Each project area generally is completed over a two-year period. As a result of the financial benefits of recent MWRA sewer assessment increases that are much lower for Newton than most other MWRA communities, this program has been accelerated.

In FY2021, Public Works expects to complete Post Construction Flow Evaluation in Project Area 6 (Newton Centre/Newtonville, Chestnut Hill & Nonantum), complete Construction in Project Area 7 (Newton Upper Falls, Newton Highlands & Thompsonville), complete Design and start construction in Project Area 8 (Newton Upper falls, Newton Highlands, Thompsonville & Oak Hill), and complete Inspection and Assessment and Design for Project Area 9 (Newton Upper Fall, Waban & Oak Hill).

Sewer 5 Year CIP, FY2021-FY2025

Sewer 5 Year CIP, FY2021-FY2025			BUDGET DISTRIBUTION					
Priority	Project	Area	Prior Year Funding	FY2021	FY2022	FY2023	FY2024	FY2025
1	Sewer Inflow/ Infiltration Project - Area 5 - Newton Centre, Newtonville & Chestnut Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Project was for year 4 of City-Wide Sewer Initiative.	\$ 4,167,572	\$ -	\$ -	\$ -	\$ -	\$ -
2	Sewer Inflow /Infiltration Project - Area 6 - Newton Centre, Newtonville, Chesnut Hill, & Nonantum	Part of 10 year program to remove excess inflow and infiltration into sewer system. Currently in year 5 of City-Wide Sewer Initiative.	\$ 6,011,859	\$ -	\$ -	\$ -	\$ -	\$ -
3	Sewer Inflow /Infiltration Project - Area 7 - Upper Falls, Highlands, Thompsonville	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 6 of City-Wide Sewer Initiative.	\$ 9,057,000	\$ -	\$ -	\$ -	\$ -	\$ -
4	Sewer Inflow/Infiltration Project - Area 8 - Upper Falls, Highlands, Thompsenville & Oak Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in Year 7 of City-Wide Sewer Initiative.	\$ -	\$ 9,100,000	\$ -	\$ -	\$ -	\$ -
5	Quinobequin Road Sewer Pump Station - Replace Pump	Sewerage pumped to higher point and gravity fed to MWRA pipes for treatment. Replace pump 1 and motors at life expectancy.	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
6	Pump Station Assessment Upgrades	Develop CIP for three water booster and ten wastewater pump stations throughout the city	\$ -	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
7	Sewer Inflow/Infiltration Project - Area 9 - Waban, Upper Falls & Oak Hill	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 8 of City-Wide Sewer Initiative.	\$ 670,000	\$ 207,000	\$ 3,753,000	\$ -	\$ -	\$ -
8	Sewer Inflow/Infiltration Project - Area 10 - Waban, Newton Highlands, Newton Centre, & Newton Corner	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 9 of City-Wide Sewer Initiative.	\$ -	\$ 670,000	\$ 207,000	\$ 3,693,000	\$ -	\$ -
9	Sewer Inflow/Infiltration Project - Area 11 - Chestnut Hill, Newton Corner, Oak Hill, & Thompsonville	Part of 10 year program to remove excess inflow and infiltration into sewer system. Will be in year 10 of City-Wide Sewer Initiative.	\$ -	\$ -	\$ 670,000	\$ 207,000	\$ 3,693,000	\$ -
10	Sewer Inflow/Infiltration	Investigation, Design & Construction of sewer laterals & manholes along interceptor sewers within Cheesecake and Laundry Brook Drainage Basins	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
			\$ 15,738,859	\$ 10,327,000	\$ 4,830,000	\$ 4,100,000	\$ 3,893,000	\$ 200,000

NEWTON, MA SEWER SYSTEM CAPITAL IMPROVEMENT PROJECTS SCHEDULE

Updated July 15, 2019

ID	Task Name	Duration	Start	Finish	Predecessors	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
35	CIP Project 6 Inspection and Assessment	280 days	Mon 2/1/16	Fri 2/24/17					2/1		2/24								
36	CIP Project 6 Design	180 days	Mon 9/11/17	Fri 5/18/18	35FS+140 days						9/11	5/18							
37	CIP Project 6 Construction/Construction Services	193 days	Mon 1/7/19	Wed 10/2/19	30,31							1/7	10/2						
38	CIP Project 6 Re-Test and Post Construction Flow Evaluation	120 days	Thu 4/2/20	Wed 9/16/20	37FS+130 days								4/2	9/16					
39																			
40	CIP Project 7	1206 days	Wed 2/1/17	Wed 9/15/21															
41	CIP Project 7 Inspection and Assessment	280 days	Wed 2/1/17	Tue 2/27/18					2/1		2/27								
42	CIP Project 7 Design	240 days	Wed 9/12/18	Tue 8/13/19	41FS+140 days						9/12	8/13							
43	CIP Project 7 Construction/Construction Services	260 days	Thu 10/3/19	Wed 9/30/20	37							10/3	9/30						
44	CIP Project 7 Re-Test and Post Construction Flow Evaluation	120 days	Thu 4/1/21	Wed 9/15/21	43FS+130 days								4/1	9/15					
45																			
46	CIP Project 8	1205 days	Thu 2/1/18	Wed 9/14/22															
47	CIP Project 8 Inspection and Assessment	280 days	Thu 2/1/18	Wed 2/27/19						2/1	2/27								
48	CIP Project 8 Design	200 days	Thu 9/12/19	Wed 6/17/20	47FS+140 days						9/12	6/17							
49	CIP Project 8 Construction/Construction Services	260 days	Thu 10/1/20	Wed 9/29/21	43							10/1	9/29						
50	CIP Project 8 Re-Test and Post Construction Flow Evaluation	120 days	Thu 3/31/22	Wed 9/14/22	49FS+130 days								3/31	9/14					
51																			
52	CIP Project 9	1204 days	Fri 2/1/19	Wed 9/13/23															
53	CIP Project 9 Inspection and Assessment	280 days	Fri 2/1/19	Thu 2/27/20						2/1	2/27								
54	CIP Project 9 Design	200 days	Fri 9/11/20	Thu 6/17/21	53FS+140 days						9/11	6/17							
55	CIP Project 9 Construction/Construction Services	260 days	Thu 9/30/21	Wed 9/28/22	49							9/30	9/28						
56	CIP Project 9 Re-Test and Post Construction Flow Evaluation	120 days	Thu 3/30/23	Wed 9/13/23	55FS+130 days								3/30	9/13					
57																			
58	CIP Project 10	1203 days	Mon 2/3/20	Wed 9/11/24															
59	CIP Project 10 Inspection and Assessment	280 days	Mon 2/3/20	Fri 2/26/21								2/3	2/26						
60	CIP Project 10 Design	200 days	Mon 9/13/21	Fri 6/17/22	59FS+140 days							9/13	6/17						
61	CIP Project 10 Construction/Construction Services	260 days	Thu 9/29/22	Wed 9/27/23	55								9/29	9/27					
62	CIP Project 10 Re-Test and Post Construction Flow Evaluation	120 days	Thu 3/28/24	Wed 9/11/24	61FS+130 days								3/28	9/11					
63																			
64	CIP Project 11	1203 days	Mon 2/1/21	Wed 9/10/25															
65	CIP Project 11 Inspection and Assessment	280 days	Mon 2/1/21	Fri 2/25/22							2/1	2/25							
66	CIP Project 11 Design	200 days	Mon 9/12/22	Fri 6/16/23	65FS+140 days							9/12	6/16						
67	CIP Project 11 Construction/Construction Services	260 days	Thu 9/28/23	Wed 9/25/24	61								9/28	9/25					
68	CIP Project 11 Re-Test and Post Construction Flow Evaluation	120 days	Thu 3/27/25	Wed 9/10/25	67FS+130 days								3/27	9/10					

Notes:
1. Years listed at the top of the schedule denote Fiscal Year. 2. Completed projects are shown in grey.

CHEESECAKE BROOK UNDERDRAIN SYSTEM

HYDE BROOK UNDERDRAIN SYSTEM

LAUNDRY BROOK UNDERDRAIN SYSTEM

SEWER SYSTEM CAPITAL IMPROVEMENT PLAN PROGRESS MAP 7/15/2019

CITY OF NEWTON, MASSACHUSETTS



LEGEND

- Sewer Sub-basins
- - - Interceptor Underdrain Piping
- Cheeseecake Brook Lateral Underdrain Piping
- Hyde Brook Underdrain Piping
- Laundry Brook Lateral Underdrain Piping
- Cochituate Aqueduct
- Rail

KEY:

- Work (inspection and assessment, design, and/or construction) is currently being performed in bolded areas.
- Design or construction is currently being performed in areas designated with a dot pattern.
- Construction is substantially complete in hatched areas.

*Subareas B073, B075, B076 & B077 were moved from Project 11 to Project 7.

MWRA Sewer Meter

Sub Basins Capital Improvement Plan

- Area B – Phase 1
- Project 1 (FY2012) 115,092 Linear Feet
- Project 2 (FY2013) 135,730 Linear Feet
- Project 3 (FY2014) 114,165 Linear Feet
- Project 4 (FY2014) 155,040 Linear Feet
- Project 5 (FY2015) 121,383 Linear Feet
- Project 6 (FY2016) 119,549 Linear Feet
- Project 7 (FY2017) 152,013 Linear Feet
- Project 8 (FY2018) 138,354 Linear Feet
- Project 9 (FY2019) 127,261 Linear Feet
- Project 10 (FY2020) 121,682 Linear Feet
- Project 11 (FY2021) 106,380 Linear Feet

STORM WATER SYSTEM

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

While the City has completed a number of localized drainage repairs, the Department of Public Works recognized the need to develop a comprehensive plan to identify and address all storm water needs throughout the City and to establish a funding plan to accomplish this work. In addition, the National Pollutant Discharge Elimination System (NPDES) MS4 Permit, which is mandated for all communities by the EPA, took effect on July 1, 2018 and will increase requirements for maintaining and improving storm water quality. These needs must also be factored into all storm water planning.

Therefore, the City has undertaken a system-wide assessment to identify its program needs and develop a 20-year Storm Water Infrastructure Improvement Plan. Four primary areas being evaluated are: Stream Improvements, Localized Flooding, Culvert Maintenance and National Pollutant Discharge Elimination System (NPDES) compliance. Recommended projects include removal of debris within the stream bed and on nearby embankments; removal of sediment in stream beds, culverts and ponds; structural and capacity evaluation; rehabilitation and maintenance of pipes and culverts; repair of failing retaining walls and public education.

A methodology and rating criteria will be used to prioritize the list of projects based on probability of failure and consequence of failure. Probability of failure is based on two factors; the age of the asset and the condition of the asset. Consequence of failure will look at the potential impacts related to the potential failure of the asset, including: public health and safety, property damage, cost of deferred maintenance, number of people influenced and City development priorities. Combined with regulatory timelines for implementation of projects associated with the pending NPDES MS4 Permit and the financial impacts for each of the identified projects, the City has prioritized the results for the Storm Water Infrastructure Improvement Plan.

In FY 2021, Public Works expects to remove excessive sedimentation from the three ponds adjacent to City Hall, complete bank stabilization and culvert realignment in the Edmunds Brook drainage basin, complete a Watershed Assessment of the Crystal Lake area and perform a stormwater assessment and upgrades to the Public Works Elliot Street and Crafts Street Maintenance Facilities.

Stormwater 5 Year CIP, FY2021-FY2025

Stormwater 5 Year CIP, FY2021-FY2025			BUDGET DISTRIBUTION					
Priority	Project	Description	Prior Year Funding	FY2021	FY2022	FY2023	FY2024	FY2025
1	Hammond Brook Pipe Replacement	Replace 24" storm drain due to deteriorated structure	\$ 541,600	\$ -	\$ -	\$ -	\$ -	\$ -
2	Rehabilitation of the Forest Grove Pump Station	Replace electrical controls, level sensors, replace trash grate & fencing, include structural repairs to building structure in Auburndale on Charles River	\$ 409,800	\$ -	\$ -	\$ -	\$ -	\$ -
3	Bullough's Pond Dam	Complete State-Required repair work by January 16, 2020	\$ 890,000	\$ -	\$ -	\$ -	\$ -	\$ -
4	South Meadow Brook Culvert under Needham Street	Year 1 - Inspection & assessment of box culvert prior to the reconstruction of Needham Street. Year 2 Design & Rehabilitation of Box Culvert prior to the Reconstruction of Needham Street	\$ 780,000	\$ -	\$ -	\$ -	\$ -	\$ -
5	Edmunds Brook Spillway	Repair concrete spillway/brook walls and trash grate downstream of Edmunds Pond.	\$ 504,000	\$ -	\$ -	\$ -	\$ -	\$ -
6	City Hall Ponds	Removal of sediment from 3 ponds adjacent to City Hall, 1000 Commonwealth Avenue	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -
7	Union Street Drainage	The extension of storm drains on Union Street to alleviate flooding and icing issues in the area of Herrick Road	\$ 625,000	\$ -	\$ -	\$ -	\$ -	\$ -
8	Evaluation, design and construction of Cheesecake Brook-Commonweath Av. to the rear of 1600 Washington Street	Replace culvert headwall, remove remaining fieldstone channel walls to restore natural brook channel and provide buffer for nutrient removal (water quality).	\$ -	\$ 550,000	\$ -	\$ -	\$ -	\$ -
9	Elliot & Crafts Street DPW Operations Yard	Modifications to existing storm water infrastructure to meet NPDES MS4 General Permits BMP's	\$ -	\$ 200,000	\$ 800,000	\$ -	\$ -	\$ -
10	Cheesecake Brook -1660 Washington St. to Watertown St.	Inspection & Assessment, Design and Rehabilitation Of +/-6000 LF of Box Culvert	\$ -	\$ -	\$ 200,000	\$ 700,000	\$ -	\$ -
11	Laundry Brook Culvert-Hull street to Bridges Avenue	Design and construction of culvert rehabilitation from Hull St to Bridges Ave.	\$ -	\$ -	\$ -	\$ 750,000	\$ -	\$ -
12	Cheesecake Brook-Watertown St. to Charles River	Inspection & Assessment, Design and Rehabilitation of Fieldstone Channel walls and floor	\$ -	\$ -	\$ -	\$ 725,000	\$ 725,000	\$ -
13	Laundry Brook Culvert-Parkview to Mass Pike	Rehabilitation +/-1000 LF Box Culvert based on FY 18 evaluation.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 650,000
14	Cheesecake Brook Roadway Culvert Crossings	Design & Construction of culvert improvements at Parsons, Cross and Eddy Street	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750,000
15	Reduce Impervious Area	Reduce Impervious Area to 5 Municipal Properties per NPDES MS4 Requirements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 650,000
16	Pellegrini Park Drain Replacement	Storm drain between Jenison and Hawthorne needs to be replaced due to structural failure, causing flooding at Jenison @ Judkins.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Priority	Project	Description	Prior Year Funding	FY2021	FY2022	FY2023	FY2024	FY2025
17	Hammond Brook-Glen Ave. to Centre St.	Cleaning, Inspection, Structural Evaluation, Design, Rehabilitation and Construction of Hammond Brook Culvert.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
			\$ 4,250,400	\$ 750,000	\$ 1,000,000	\$ 2,175,000	\$ 725,000	\$ 2,050,000

CAPITAL IMPROVEMENT PLAN METHODOLOGY

A Mission and Risk-Based Approach to Capital Investments

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

Overview

In the context of asset management, *Risk* is defined as the probable magnitude of a future loss, and is expressed mathematically as a probability of failure (PF) multiplied by the magnitude of its consequence of failure or its expected impact on Mission (M). This risk-based approach considers that an asset may “fail” due to its age or condition and assess the inherent consequences of that “failure.” Failure here is used to mean that an asset fails to meet its intended purpose or use. Using this methodology, Probability of Failure is multiplied by a weighted Mission score related to consequence (or impact) of asset failure to arrive at an overall Priority score.

Broken into its components, the mathematical formula looks like this:

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

Where:

PF: Probability of Failure

P_{%Life Left}: Probability of failure for the *percent life left* failure mode

P_{Overall Condition}: Probability of failure for the *overall condition* failure mode

Next Mission (M):

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

Where:

i: consequence counter

M_i: i-th consequence rating

W_i: Weight of i-th consequence

W_T: Total weight

Finally, calculating Priority (P):

Priority = Probably of Failure X Mission

$$P = PF \times M$$

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

Mission and Risk-Based Prioritization

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

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

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

Detailing the variables in evaluating Risk and Consequences on Mission

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

A description of the “*Probability of Failure*” and the “*Impact on Mission*” are defined below.

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

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

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

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

% Life Left	
Description	Value
100% (NEW)	0
90%	0.1
80%	0.2
70%	0.3
60%	0.4
50%	0.5
40%	0.6
30%	0.7
20%	0.8
10%	0.9
0% (OLD)	1.0

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

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

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

B. Impact on Mission - Impact the asset has on the City of Newton's mission. The greater the impact on Mission, the larger the consequence of the asset's failure. Mission impacts considered for projects and assets are:

- Impact on Public and Employee **Health and Safety**
- Impact on **City Operations**
- Impact on **Programs or Services** to the public
- Impact on Future **Costs and/or Savings or Revenues**
- Impact on **Quality of Life**
- Impact on **Energy Consumption, Conservation, and Environmental Sustainability**
- Impact on a **Department's Mission, and Vision or Multi-Departmental Strategic Alignment**
- Impact on **Economic Health and Vibrancy**
- Impact on **Equity and Accessibility**

There are several other considerations that could impact a project's weighting including funding availability, operational issues that impact project timing, and responses to legal or administrative requirements.

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

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

*Who is impacted in what way (adults, children)?

*How severe is that impact?

*How many people are impacted?

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

*What is the department's Plan B?

*How many people/employees are impacted by not implementing the project?

*How will degraded assets impact city services?

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

*What specific programs are impacted?

*What percent of the department's mission are these cancellations?

*Who and how many are impacted by the reduction?

(4) ***Impact on Future Costs/Savings or Revenue*** (weight = 8) - Return on investment due to reduced maintenance/operating expenses. New projects may save the City operating expenses, while making a repair may avoid additional costs to maintain or repair more extensive damage later. New projects may also bring new revenue to the City.

*What will be the cost/savings to the City compared to investments if not funded?

*What is the payback period?

*What is the cost of Plan B?

*Are there any potential revenues associated with project?

(5) ***Impact to Quality of Life*** (weight = 7) - The reasons that people want to live in Newton. If these underlying feelings about the quality of life are compromised, the value to the residents living here would be decreased.

*What aspect of the QOL is diminished?

*Would the project's absence diminish the kinds of things that Newton prides itself in?

(6) ***Impact to Energy Consumption, Conservation and Environmental Sustainability*** (weight = 6) - The potential to reduce energy consumption and help the City reach its "Green Community" and "Energy Smart Newton" goals. The potential to improve long-term environmental sustainability. This could also impact costs, quality of life and department/City Mission.

*Would this be a missed opportunity to reduce consumption?

*What is the magnitude of the potential energy reduction?

*How quick is the potential payback in operational savings?

*How does the project contribute to the City's long-term sustainability goals?

(7) ***Impact on a Department Mission, and Vision or Multi-Departmental Strategic Alignment*** (weight = 6) - The impact of accomplishing stated goals of the department. The vision of the Mayor reflecting the will of the residents would not be advanced or would be contrary to those values.

*Would this project greatly advance a department's mission?

*Would the project help multiple departments in a way compatible with the overall City vision?

*Have the residents expressed an expectation of this project directly or indirectly?

(8) ***Impact on Economic Health and Vibrancy*** (weight=6) - The impact of a project to support economic health and vibrancy of the city as a whole, a village or a commercial corridor.

*Would this project assist in supporting Newton's economic development plans, or other village and commercial corridor level projects?

*Would this project enhance the vibrancy of a village center or a commercial corridor or district?

(9) ***Impact on Equity and Accessibility*** (weight=6) - The ability of a project to respond to equity, socio-economic diversity and accessibility considerations.

*Would the project help address accessibility challenges in existing public facilities or create new facilities that meet accessibility needs?

*Does the project respond to equity considerations such as socio-economic, geographic or age-friendly?

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

Consequence on Mission	
Value	Rating
0 - No Impact	0
1-	1
2- Very Little Impact	2
3-	3
4-	4
5 - Moderate Impact	5
6 -	6
7 -	7
8 - High Impact	8
9 -	9
10 - Very High Impact	10

Relative Impact of Weighting on Priority

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

<u>Category of Consequence</u>	<u>% of Weight</u>	<u>Weight value</u>
Health and Safety	15.6%	10.0
City Operations	14.1%	9.0
Cost Savings and Revenue	12.5%	8.0
Quality of Life	10.9%	7.0
Department Mission/City Vision	9.4%	6.0
Energy/Env Sustainability	9.4%	6.0
Programs and Services	9.4%	6.0
Economic Health/Vibrancy	9.4%	6.0
Equity/Accessibility	9.4%	6.0
TOTALs: 100.0%		64.0

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

As mentioned earlier, Priority (P) is calculated as the product of the Mission factor times the Probability of Failure and converted to a 1-100 scale:

$$P = PF \times M$$

Graphing the product of *Probability of Failure* and *Consequence of Failure on Mission*, the Priority can be interpreted as an area, illustrating how various projects with different ratings can have the same priority. Figure 2. illustrates the resultant graph. An asset with a high probability of failure but low consequence (on Mission) of failure can have the same risk score as another with lower

probability of failure and a higher consequence of failure. This is a key concept when comparing risk scores between homogenous assets types and even across diverse asset portfolios.

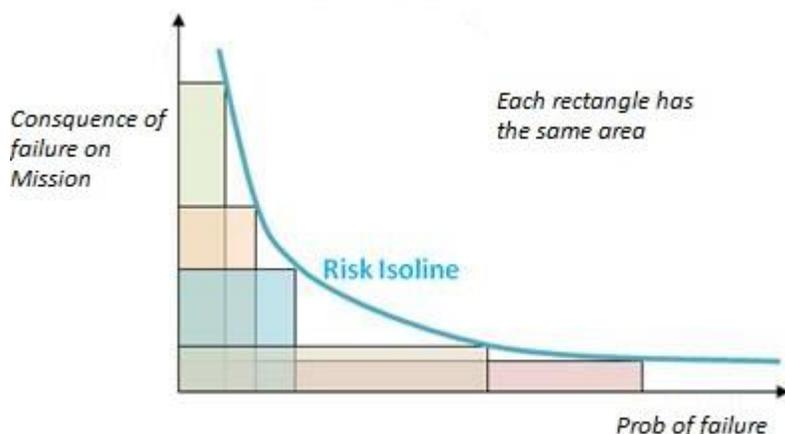


Figure 2. Isoline identifying how different projects can have the same priority (risk above) factor

I. CAPITAL IMPROVEMENT PROGRAM FUNDING SOURCES

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

Tax-Supported Funding Sources

- **General Obligation Bonds** - The City sells tax exempt bonds, usually in March each year. The annual debt service is included in the Operating Budget and is offset by resources in the Long Term Capital Fund. This allows the impact on the operating budget to be managed evenly over time and not be subject to dramatic fluctuations in the debt service.
- **Free Cash** - Unreserved fund balance, certified by the Massachusetts Department of Revenue, as of the end of the previous fiscal year.
- **Operating Budget (General Fund)** - Annual departmental budgets, supported primarily by property taxes, local revenue, and state aid.
- **Community Preservation Act (CPA)** - One percent local property tax surcharge, with partial or full state matching funds, which may be spent for affordable housing, historic resources, open space, or recreation land.
- **Other** - Funds such as Overlay Surplus, Capital Stabilization, and Sale of Municipal Buildings.

Non-Tax-Supported Funding Sources

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

II. CIP FINANCIAL REQUIREMENTS AND POLICIES

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

The City of Newton has long enjoyed a "Aaa" Rating, the highest rating attainable from Moody's Investors Service and not only has earned a AAA from Standard and Poor's twice in the past few years, but received a revised management assessment from S&P who *"revised their assessment of the city's management to "very strong" from "strong" based on the introduction of a debt policy that formalized a historical practice. An assessment of "very strong" indicates that financial practices are strong, well-embedded and likely sustainable."*

The City's position on funding long term liabilities, particularly pensions and OPEB, preserving sound financial policies and developing conservative budgets and forecasts will be key factors in the City's ability to maintain the "Double Triple A Rating" from these two prestigious institutions.

Commitment to fully funding the City's long-term liabilities is critical to maintaining financial sustainability. The Fuller Administration continues to follow a funding schedule designed to eliminate the City's Unfunded Pension Liability by the year 2030, and fully fund the City's OPEB (Other Post-Employment Benefits) Liability by the year 2042. Funding the annual increase to the pension appropriation is the key component of this strategy and will require discipline and commitment.

CITY OF NEWTON

FINANCIAL MANAGEMENT GUIDELINES

Financial Principles

On April 20, 2011 the Honorable City Council adopted a revised set of Financial Management Guidelines. There are several guiding principles that are incorporated into these guidelines which have been included as an integral part of this plan. These guidelines include the following:

Long Range Financial Planning: The City will follow financial planning processes that assess the long-term financial implications of current and proposed operating and capital budgets, budget policies, cash management and investment policies, and programs.

Revenue Budgeting: General Fund revenue budgets are expected to capture 99% of total expected revenue for the year.

Expenditure Budgeting: Expenditure budget estimates will strive to be sufficient to address not less than 100% of projected operating requirements of the various departments of the City for the next fiscal year. It is anticipated that this guideline will continue to take several years to fully implement.

Debt Management Policy: Massachusetts municipal finance law limits the total amount of long term debt that the City can incur for most purposes to not more than 5% of the City's equalized valuation (taxable value of the real estate tax base). The City's current (October 2018) equalized valuation is approximately \$29 billion, which means that the current statutory debt limit is approximately \$1.4 billion. In addition to the statutory debt limit, the City of Newton has a self-imposed policy of limiting debt service on long term bonded debt to between 4.0% and 7.5% of the annual General Fund budget.

Free Cash: Free Cash represents the accumulated difference of unrestricted funds between General Fund revenues and expenditures, on a cash basis of accounting. The City expects to generate a limited amount of Free Cash which comes from unanticipated actual revenues in excess of revenue estimates (including overlay surplus), unexpected unspent funds in operating budget line items, and/or unanticipated unexpended free cash from the previous year.

Utilization of Free Cash: It is the intent of the City to use Free Cash in the following manner, understanding that this will take a number of years to implement fully. First, a maximum of \$1.5 million will be used as a general revenue source for the ensuing year's operating budget. Second, Free Cash may be used to replenish Reserve Funds depleted in the previous year. Third, a minimum of forty percent (40%) of the remaining certified Free Cash will be put in the Rainy Day Stabilization Fund until the Rainy Day Stabilization Fund reaches its target level. Fourth, any additional Free Cash will be used for one-time, non-recurring expenditures.

Inclement Weather Stabilization Reserve: The Administration has established an Inclement Weather Stabilization Reserve Fund which will be used for unusual (but not extraordinary)

weather related costs in departments such as Public Works, Parks and Recreation, Police and Fire. For example, such costs may stem from floods, an unusual number of winter storms, or an unusual level of snow or ice. The goal of this reserve fund is to make sure monies are set aside for unusual weather conditions.

Rainy Day Stabilization Reserve: The Rainy Day Stabilization Fund will be used when the City faces a multiple year economic recession or a rare, catastrophic expenditure. These funds may be utilized to assist in addressing cyclical declines in operating revenues, generally resulting from economic factors outside the control of the City, or an unusually large expenditure resulting from a rare legal settlement or catastrophic weather event. The primary reason for the segregation of such monies is to prevent these reserves from being used for unrelated City needs, and to demonstrate that resources are in fact being set aside specifically for extraordinary and unforeseen revenue disruption or catastrophic expenditure need.

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

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

Not later than July 15 of each fiscal year, each department head having a capital appropriation in either the Capital Improvement or General Fund, for which there is an unexpended and unencumbered balance at June 30, shall provide the Comptroller with a detailed request to carry the balance forward into the new fiscal year. This request shall contain a detailed description of the work to be performed, including any variations from the original plan, and a projected schedule for completion of the project.

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

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

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

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

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

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

CIP LEGAL REQUIREMENTS and POLICIES

Definition of Capital Projects

A capital project in general is defined as a physical public betterment or improvement involving facilities, land, or equipment, with a substantial useful life and a cost of \$10,000 or more. However, for purposes of using the City's debt service capacity to fund those projects supporting the General Fund operations, only those projects valued at greater than \$75,000 were considered. It is anticipated that capital line accounts in the department operational budgets will include consideration of capital needs less than \$75,000. Some projects which may be valued at less than \$75,000 individually could be more effectively done concurrently and were bundled for purpose of management. Detailed breakouts of the component costs of the projects can be found in the electronic back-up spreadsheets posted on the City's website. Typical items classified as capital projects include:

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

Capital Improvement Plan Policies and Goals

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

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

- Enhance protection of public health and/or safety.
- Ensure compliance with state and/or federal law or administrative regulations.
- Reduce and/or stabilize operating budget costs.

- Prolong the functional life of a capital asset of the City by 10 years or more.
- Encourage further expansion of the City's real estate tax base, employment or housing.
- Improve the ability of the City to deliver services.

CAPITAL IMPROVEMENT CHARTER REQUIREMENTS

ARTICLE 5, SECTION 3

- (a) **Submission** - The Mayor shall prepare and submit to the Board of Aldermen a five-year Capital Improvement Program at least six months prior to receipt of the next fiscal year's operating budget.

- (b) **Contents** - The Capital Improvement Program shall include: (1) a clear summary of its contents; (2) a list of all capital improvements proposed to be undertaken during the next five fiscal years with supporting data; (3) cost estimates, method of financing, and recommended time schedules; and (4) the estimated annual cost of operating and maintaining the facilities included. The above information shall be revised and extended each year.

- (c) **Public Hearing** - The Board of Aldermen shall publish in one or more newspapers of general circulation in the City the general summary of the Capital Improvement Program and a notice stating: (1) the times and places where copies of the Capital Improvement Program are available for inspection by the public, and (2) the date, time, and place, not less than two weeks after such publication, when a public hearing on said program will be held by the Board of Aldermen.

- (d) **Adoption** - After the public hearing, concurrently with the passage of the next fiscal year's budget, the Board of Aldermen shall by resolution adopt the Capital Improvement Program with or without amendment (Referendum of 11-4-75).