

CAPITAL IMPROVEMENTS PROGRAM

Capital planning and budgeting is a critical undertaking for any government and is "central to economic development, transportation, communication, delivery of other essential services, and environmental management and quality of life", as stated in ICMA's *Capital Budgeting: A Guide for Local Governments*. In fact, without a sound plan for long-term investment in infrastructure, facilities, and equipment, a local government's ability to accomplish its goals is greatly hindered. Developing a financing plan for capital investments that fits within the overall financial framework of a community is of equal importance, as poor decisions regarding the use of debt can negatively impact a community's financial condition for many years.

In Massachusetts, the preparation of the annual Capital Improvements Program (CIP) is mandated by State statute. Massachusetts General Law Chapter 41 provides that the Planning Board shall annually prepare and submit a CIP. In Brookline's case, Chapter 270 of the Acts of 1985, special legislation known as the "Town Administrator Act", directs the Town Administrator to prepare and recommend an annual financial plan that includes a CIP. The Deputy Town Administrator and the Director of Planning and Community Development co-chair a working group of department heads that reviews and evaluates all project requests. A number of these requests arise from public input received by boards and commissions. A more detailed description of the CIP process can be found starting on page VII-3.

The Town has a set of formal CIP policies that define what a capital improvement project is, how projects are evaluated and prioritized, and how the CIP is financed. The complete text of these policies can be found in the Appendix of this Financial Plan. The table on the following page presents the indicators that are to be monitored per the Debt Management Policies portion of the CIP Financing Policies, along with other standard debt measurement variables.

INTRODUCTION

The financial underpinning of the Town's CIP is the policy that states an amount equivalent to 6% of the prior year's net revenue shall be dedicated to the CIP. This key policy places both a floor and a ceiling on the amount of debt supported by the tax levy that can be authorized, thereby limiting the impact on the Operating Budget. The goal is to have the 6% consist of both a debt-financed component and a revenue (or "pay-as-you-go") component, with 4.5% for debt-financed CIP and 1.5% for pay-as-you-go CIP.

In addition to the 6% policy, there is a Free Cash Policy, also included in the Appendix of this Financial Plan, that dedicates an amount of this revenue source to the CIP so that total CIP funding reaches 7.5% of prior year net revenue. In summary, the policy prioritizes the use of Free Cash so that (1) an annual Operating Budget Reserve is supported, (2) overall Fund Balance levels are maintained, (3) the Catastrophe and Liability Fund is maintained at recommended funding levels, and (4) the CIP reaches the 7.5% level*. This important funding source allows for the expansion of the pay-as-you-go component of the CIP. Without Free Cash, the Town would be unable to fund many of the projects being recommended. Lastly, from time to time, one-time revenues will be used to augment the CIP, such as the re-appropriation of surpluses from prior year CIP appropriations.

* The Free Cash policy also calls for a.) supporting the Affordable Housing Trust Fund under certain circumstances and b.) supporting other trust funds related to fringe benefits and unfunded liabilities related to employee benefits, if available.

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MEASUREMENT OF CIP FINANCING POLICIES & OTHER COMMON DEBT INDICATORS

VARIABLE	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Legal Limit for Outstanding Debt = 5% of Equalized Valuation (EQV) EQV for 1/1/16 = \$20.945 billion. Assume 2.5% annual growth. (In billions)	\$24.548	\$25.162	\$25.791	\$26.435	\$27.096	\$27.774	\$28.468
Outstanding Debt as a % of EQV	1.5%	1.4%	1.4%	1.3%	1.2%	1.1%	1.1%
General Fund Outstanding Debt as a % of EQV	1.5%	1.4%	1.3%	1.3%	1.2%	1.1%	1.1%
Net General Fund Outstanding Debt as a % of EQV	1.5%	1.4%	1.3%	1.3%	1.2%	1.1%	1.1%
Total Outstanding Debt (in millions)	\$371.2	\$362.1	\$353.8	\$340.1	\$326.8	\$313.7	\$303.3
General Fund Outstanding Debt (in millions)	\$363.1	\$354.4	\$345.9	\$334.2	\$321.8	\$309.6	\$303.3
Net General Fund Outstanding Debt (in millions)	\$362.3	\$353.8	\$345.6	\$334.2	\$321.8	\$309.6	\$303.3
Total Debt Service (in millions)	\$17.3	\$21.1	\$25.0	\$30.0	\$32.5	\$32.0	\$31.6
General Fund Debt Service (in millions)	\$15.5	\$19.3	\$23.1	\$28.2	\$30.7	\$30.1	\$29.9
Net General Fund Debt Service (in millions)	\$14.9	\$18.9	\$22.7	\$27.8	\$30.7	\$30.1	\$29.9
Total Debt Service Per Capita	\$294	\$360	\$425	\$510	\$553	\$544	\$537
General Fund Debt Service Per Capita	\$264	\$329	\$394	\$481	\$522	\$512	\$508
Net General Fund Debt Service Per Capita	\$255	\$322	\$386	\$473	\$522	\$512	\$508
Total Debt Service as a % of Revenue	6.0%	6.9%	7.9%	9.1%	9.6%	9.2%	8.9%
General Fund Debt Service as a % of General Fund Revenue	5.4%	6.4%	7.3%	8.6%	9.1%	8.7%	8.4%
Net General Fund Debt Service as a % of General Fund Revenue	5.2%	6.2%	7.2%	8.5%	9.1%	8.7%	8.4%
A. Total Outstanding Debt Per Capita as a % of Per Capita Income	9.7%	9.5%	9.2%	8.9%	8.5%	8.2%	7.9%
General Fund Outstanding Debt Per Capita as a % of Per Capita Income	9.5%	9.3%	9.0%	8.7%	8.4%	8.1%	7.9%
General Fund Outstanding Debt Per Capita as a % of Per Capita Income (non-debt exclusion)	3.7%	3.5%	3.4%	3.2%	3.1%	2.9%	2.9%
Net General Fund Outstanding Debt Per Capita as a % of Per Capita Income	9.5%	9.2%	9.0%	8.7%	8.4%	8.1%	7.9%
B. Total Outstanding Debt Per Capita	\$6,319	\$6,165	\$6,024	\$5,791	\$5,564	\$5,342	\$5,165
General Fund Outstanding Debt Per Capita	\$6,183	\$6,033	\$5,890	\$5,690	\$5,479	\$5,272	\$5,165
General Fund Outstanding Debt Per Capita (non-debt exclusion)	\$2,401	\$2,299	\$2,230	\$2,115	\$1,994	\$1,879	\$1,871
Net General Fund Outstanding Debt Per Capita	\$6,168	\$6,024	\$5,885	\$5,690	\$5,479	\$5,272	\$5,165
C. Total Outstanding Debt as a % of Assessed Value (AV)	1.5%	1.4%	1.4%	1.4%	1.3%	1.2%	1.2%
General Fund Outstanding Debt as a % of Assessed Value (AV)	1.4%	1.4%	1.4%	1.3%	1.3%	1.2%	1.2%
Net General Fund Outstanding Debt as a % of Assessed Value (AV)	1.4%	1.4%	1.4%	1.3%	1.3%	1.2%	1.2%
D. Total Net Direct Debt Maturing Within 10 Years (non-debt exclusion)	70%	74%	77%	80%	83%	84%	84%
E. CIP Financing as a % of Prior Year's Net Revenue	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Debt-Financed CIP as a % of Prior Year's Net Revenue	4.80%	4.87%	4.50%	4.51%	5.19%	4.86%	4.64%
Revenue-Financed CIP as a % of Prior Year's Net Revenue	1.20%	1.13%	1.50%	1.49%	0.81%	1.14%	1.36%

Town Policies

- A. Total Outstanding Debt Per Capita = shall not exceed 6% of Per Capita Income.
- B. Total Outstanding Debt Per Capita = shall not exceed \$2,663 (for FY19).
- C. Total Outstanding Debt = shall not exceed 2.5% of Assessed Value (AV).
- D. Bond Maturities = 60% of Net Direct General Fund principal shall mature within 10 years.
- E. CIP Financing = 6% of Prior Year's Net Revenue, with a goal of 4.5% from Debt-Financed and 1.5% from Revenue-Financed.

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Another key CIP financing policy is that both the Water and Sewer Enterprise Fund and the Golf Course Enterprise Fund cover 100% of their debt service. When additional capital work to the water and sewer infrastructure or to the golf course is requested, the impact debt service has on those enterprise funds is taken into consideration. Since they are both 100% cost recovery funds, any growth in debt service may well necessitate increases in fees. Therefore, the decision to authorize additional debt is made carefully.

The table below details how much funding is made available for the CIP, exclusive of enterprise fund-supported debt and projects funded from non-Town sources (e.g., grants):

	2020	2021	2022	2023	2024	2025
Total General Fund Revenue	304,491,468	314,765,008	328,486,250	337,248,557	346,691,682	356,426,830
LESS:						
Non Appropriations	8,670,685	8,876,310	9,087,075	9,303,110	9,524,545	9,751,517
Debt Exclusions	6,321,995	10,283,555	14,896,465	14,895,215	14,891,715	14,895,965
Free Cash	9,281,257	5,000,000	4,775,000	4,925,000	5,075,000	5,275,000
Capital Project Surplus	0	0	0	0	0	0
Net Revenue	280,217,531	290,605,143	299,727,710	308,125,232	317,200,422	326,504,348
Prior Year Net Revenue	268,449,371	280,217,531	290,605,143	299,727,710	308,125,232	317,200,422
6% CIP FUNDING POLICY						
Net Debt Financed ¹	13,068,091	12,606,473	13,098,902	15,541,290	14,970,945	14,723,186
Net Debt Financed as a % of Prior Yr Net Rev	4.87%	4.50%	4.51%	5.19%	4.86%	4.64%
Revenue Financed	3,038,871	4,206,579	4,337,406	2,442,373	3,516,569	4,308,839
Revenue Financed as a % of Prior Yr Net Rev	1.13%	1.50%	1.49%	0.81%	1.14%	1.36%
SUB-TOTAL 6% Dedicated to CIP	16,106,962	16,813,052	17,436,309	17,983,663	18,487,514	19,032,025
Free Cash for CIP	6,721,449	3,410,129	3,386,508	3,284,766	3,273,391	3,143,354
Capital Project Surplus -- Re-approp. of Funds	0	0	0	0	0	0
Other Funds	161,040	322,080	200,000	100,000	100,000	20,000
FUNDS AVAILABLE FOR CIP THROUGH GEN. FUND WITHIN TAX LEVY	22,989,451	20,545,261	21,022,817	21,368,429	21,860,905	22,195,379
As % of Prior Yr Net Rev	8.6%	7.3%	7.2%	7.1%	7.1%	7.0%
Debt Exclusions	6,321,995	10,283,555	14,896,465	14,895,215	14,891,715	14,895,965
TOTAL FUNDS AVAILABLE FOR CIP THROUGH GEN. FUND	29,311,447	30,828,816	35,919,282	36,263,644	36,752,620	37,091,344
As % of Prior Yr Net Rev	10.9%	11.0%	12.4%	12.1%	11.9%	11.7%

¹ As defined in the CIP Policies, "Net Debt" is total debt service exclusive of debt service related to a Debt Exclusion and debt service funded by enterprise fund revenues.

BROOKLINE'S CIP PROCESS

The preparation of the annual CIP is mandated by statute: MGL Chapter 41 provides that the Planning Board shall prepare and submit a CIP. In Brookline's case, Chapter 270 of the Acts of 1985, special legislation known as the "Town Administrator Act", directs the Town Administrator to prepare and recommend an annual financial plan that includes a CIP. The annual process for Brookline begins with the submission of project requests by departments, which in many cases are the result of various board/commission (Park and Recreation Commission, Library Trustees, etc.) public hearings.

The requests are then reviewed by a working group that is co-chaired by the Deputy Town Administrator and the Director of the Department of Planning and Community Development and is comprised of all department heads that have requested projects. After reviewing all project requests, a Preliminary CIP is recommended to the Town Administrator, who then presents it to the Select Board as part of a public hearing on the Town's Operating and Capital budgets, normally held in December. The Town Administrator's Preliminary CIP is then reviewed by the Capital Sub-Committee of the Advisory Committee. Any changes to the first year of the CIP are factored into the budget that is presented to Town Meeting by the Advisory Committee.

PROPOSED FY2020 – FY2025 CIP

The recommended FY2020 – FY2025 CIP calls for an investment of \$267.6 million, for an average of approximately \$44.6 million per year, and follows the Town's CIP and Free Cash policies for projects inside the levy limit. This continues the Town's commitment to prevent the decline of its infrastructure, upgrade its facilities, improve its physical appearance, and invest in opportunities that positively impact the Operating Budget. Over the last 10 years (FY10 - FY19), the Town has authorized expenditures of \$541 million, for an average of \$54 million per year. These efforts, which have been supported by the Select Board, the Advisory Committee, Town Meeting, and, ultimately, the taxpayers of Brookline, have helped address a backlog of capital projects. This has allowed for the creation of additional classroom spaces necessitated by the surge in enrollment, dramatically improved the Town's physical assets, and have helped yield savings in the Operating Budget through investments in technology and energy efficiency.

On June 13th, the Town completed its third study since 2013 on selecting a site for a new school. The Select Board and School Committee approved moving forward with expanding the Baldwin School, expanding and renovating the Driscoll School, and renovating and possibly expanding the Pierce School. As presented, this proposed \$267.6 million six-year CIP includes estimates for the Baldwin School and Driscoll School projects, but does not include an estimate for the Pierce School project beyond the feasibility/schematic design phase. A Debt Exclusion Override is assumed for all three projects.

It was a challenge to develop a balanced CIP that continues to reflect the various priorities of the Town, while simultaneously addressing the overcrowding issue in the schools. The overcrowding issue in the schools continues to be the most urgent CIP need, consuming more of the CIP and necessitating additional Debt Exclusion Overrides. The K-8 elementary schools have grown by 40% going from 3,904 students in 2006 to 5,482 students in 2017. These larger elementary grades will soon begin to enter the high school. Brookline High School is currently experiencing the initial wave of rapid enrollment growth that will increase the student body from 1,800 students in 2015, to at least 2,600 or more students by 2023.

As a result the Town is in the midst of schematic design for the High School renovation and expansion project as well as schematic design for the Baldwin and Driscoll School projects. The Town was informed in December that the MSBA invited the Pierce School into the eligibility period. The Classroom Capacity item in FY2020 continues to cover the leases at the temples, 62 Harvard, and 24 Webster Place (\$1,450,000) with very limited funding to modify smaller spaces in existing buildings.

The upgrading of the Radio Infrastructure for the Police and Fire radio channels will need to be addressed. The majority of our radio infrastructure, is considered by Motorola to be, "end of life" and "end of service," since parts do not readily exist for this equipment. The Departments were waiting for FCC action on T-band frequencies under the assumption that the FCC was going to auction off the T-Band frequencies to private carriers and use the proceeds to replace and pay for the radio systems that operated in the T- Band spectrum. With no interested bidders, Congress will have to rule within the next year to eliminate the auction of T- Band, so public safety agencies can move forward with their systems.

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Working with Motorola the estimated cost to build out these 3 radio channels infrastructure along with the subscriber costs is \$3,944,577. In order to minimize the disruption of such a large cost in the CIP plan is to lease-finance the cost of this project over a 5-year period with an estimated lease payment of \$900,000 per year.

While the CIP does not have the capacity to fund a major building project, the CIP shows the Renovation of the Main Library in “future years” in order to begin discussions on this project. A fundraising effort will take several years, and listing the project in the CIP will allow for the Library’s vision for the project to be discussed among a broader audience.

Even with the pressure placed on the CIP by the School overcrowding issue; this Preliminary CIP continues the Town’s commitment to upgrading its parks, playgrounds, and other open spaces. There is \$28M of specific park projects included, as shown in the table below:

	Total	Prior Year (FY19)	FY 2020		FY 2021		FY 2022		FY 2023		FY 2024		FY 2025		Future Years	
			Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC
Parks and Playgrounds																
Amory tennis courts, Parking and Halls	1,700,000												1,700,000	B		
Cypress Playground/Athl. Field	240,000	240,000														
Fisher Hill Gatehouse Safety and Struct	175,000															175,000
Harry Downes Field & Playground/Kra	2,450,000	2,450,000														
Larz Anderson Park	12,400,000	2,700,000			2,200,000	B					2,500,000	B				5,000,000
Larz Anderson Park cash	1,025,000	425,000	600,000	A												
Murphy Playground	915,000						915,000	B								
Riverway Park	625,000															625,000
Robinson Playground	1,250,000		100,000	A	1,150,000	B										
Schick Playground	1,125,000				100,000	A	1,025,000	B								
Boylston St. Playground	1,350,000						110,000	A	1,240,000	B						
Griggs Park	1,120,000												1,120,000	A		
Soule Athletic Fields	1,900,000															1,900,000
Skyline Park Turf replacement and Par	1,980,000												1,190,000	B		

There is also funding allocated in FY2019 for a Traffic Calming/Safety Improvement project that calls will address intersection realignment on Woodland Road at the intersection with Laurel Road, intersection realignment on Woodland Road at the intersection with Heath Street (Pine Manor side), a new crosswalk with Rectangular Rapid Flash Beacon on Heath Street at Woodland Road, three raised speed humps on Woodland Road (Pine Manor side), a 20 mph Safety Speed Zone on the Beaver Country Day side, and other elements approved by the Transportation Board.

Current Funding for Street Rehabilitation account resumes the funding plan set prior to the infusion of one-time funds from the Parking Meter account. Ultimately the remaining balance in the Fund (\$1.3M) will be devoted to this account, but further appropriation is on hold pending progression of the Gateway East project as there may be unknown costs the Town may need to absorb as the project enters construction.

A few years ago, a study was made of the conditions of the fire stations and what was needed to maintain the integrity of the floors and building in regard to the newer, larger fire equipment. Fire Station Renovation work outlined in the report included flooring, shoring, beams, columns, and structural work. The report also included recommendations for the HVAC systems, generators, lighting, life safety, and mechanical, electrical, plumbing (MEP), along with other peripheral systems. In FY2012, \$650K was appropriated to undertake the Structural component. The next phase for implementation was the Life Safety component, which was funded between FY2013 – FY2015 (\$890K). Given the work planned for Station 6 the funding schedule for Station 6 MEP work was moved from FY2021 to FY2017 in order to allow efficiencies with bids and project schedules.

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In addition, the Fire Chief has requested additional funding for industrial cleaning and reconfiguration of spaces to mitigate potential hazards in the stations. The project would include industrial cleaning of all non-porous surfaces and all duct work, painting of all walls and ceilings (hard surfaces), replacement of all acoustic/porous ceiling tiles, replacement of all window treatments, replacement of all (soft) furniture in living areas, replacement of all beds and mattresses and the replacement of any fabric partitions. The Town and Fire Department are committed to implementing all reasonable actions necessary to reduce and/or mitigate those exposures within our span of control.

This type of project has been implemented in Boston, and requires further study to develop a plan that takes into consideration the limitations of our current station configurations. The Town will spend FY2019 funds to conduct a study, which will provide MEP/FP systems, Architectural, Cost Estimating, Code Consulting and HAZMAT guidelines for the Fire Department. The CIP will need to be adjusted after the Town gets the results from the study.

The CIP as presented includes estimates for work at each for HVAC and lighting/communication system improvements as follows:

Sta 4 (Rt. 9/Reservoir Rd)	\$50,000(FY20)
Sta 1 (Brookline Village)	\$550,000 (FY20)
Sta 7 (Washington Sq)	\$670,000 (FY21)
TOTAL	\$1,270,000

The Town has an excellent fire apparatus rehab/replacement schedule that calls for rehabbing engines every 10 years and ladders every 12 years and for replacing front line engines every 17 years and front line ladder trucks every 20 years. Engine #1 is scheduled for replacement in FY2023. Quint #4 is scheduled for Rehabilitation in FY2020, but the Fire Chief has recommended deferral in order to conduct an assessment that will allow the department to definitively establish the type and quantity of apparatus and personnel necessary for safe and efficient operations. Maintenance staff advised the Chief that given the current condition of the piece deferral would not significantly increase any future cost for maintenance. Rescue #1 is scheduled for rehabilitation in FY2024 and Engine #3 is scheduled for FY2025.

The Town Rehab/Upgrade program continues at \$55,000 to help the Building Department respond to minor rehab/repair requests that fall outside of a major renovation schedule.

In addition to the 6% financing policy, Free Cash, CDBG, and State/Federal grants are the other key components of the overall financing strategy of the CIP. The Town's certified Free Cash for the fiscal year ending June 30, 2018 was \$11.8 million. The proposed allocation of Free Cash used throughout this Financial Plan follows the Town's formal Free Cash policy, which results in the following use of these funds:

Certification	\$11,881,257
1. Operating Budget Reserve (25% of Operating Budget Reserve)	\$672,373
2. Fund Balance	\$2,600,000
a. Unreserved Fund Balance (left unappropriated)	\$2,600,000
b. Stabilization Fund (appropriated)	\$0
3. Liability Reserve (to get fund to 1% of Prior Yr Net Revenue)	\$389,700
4. Capital Improvements (to get to 7.5% of Prior Yr Net Revenue)	\$4,026,741
5. Affordable Housing Trust Fund (since Fund Balance below \$5M)	\$0
Sub-Total	\$7,688,814
Amount available for Special Use (#6)	\$4,192,443
<u>6. Special Use:</u>	
Additional CIP	\$2,692,443
OPEB's	\$600,000
Driscoll School Schematic partial funding 12/13/18 STM	\$200,000
Pension Fund	\$300,000
Worker's Comp Trust Fund	\$200,000
Affordable Housing Trust Fund	\$200,000

By following these policies, \$4,026,741 of Free Cash is used to get from 6% of prior year net revenue to 7.5%. Then an additional \$2,692,443 is allocated to the CIP to help balance it. In total, \$6,719,184 of Free Cash goes toward the CIP, as recommended.

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Some of the major projects proposed in the CIP include:

- Pierce School- 2M for Feasibility / Schematic Design
- Radio Infrastructure - \$4.5M (FY20-24)
- Larz Anderson - \$13.4M (FY20-25, Future Years)
- Classroom Capacity - \$9.8M (FY20-FY25)
- Skyline Park \$1.98M (FY25)
- Fire Station Renovations - \$1.7M (FY20-22)
- Public Building Fire Alarm upgrades - \$1.7M (FY19-24)
- HVAC equipment - \$1.3M (FY19-24)
- Fire Department's Engine #1 Replacement - \$725K (FY23)
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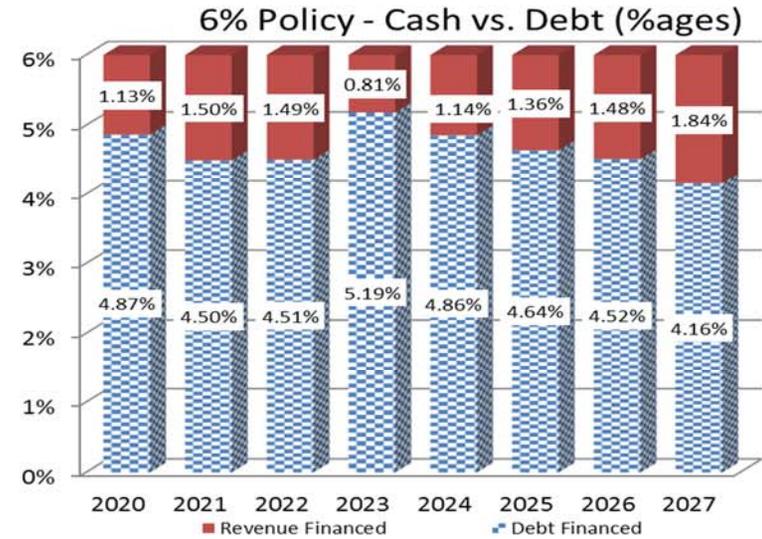
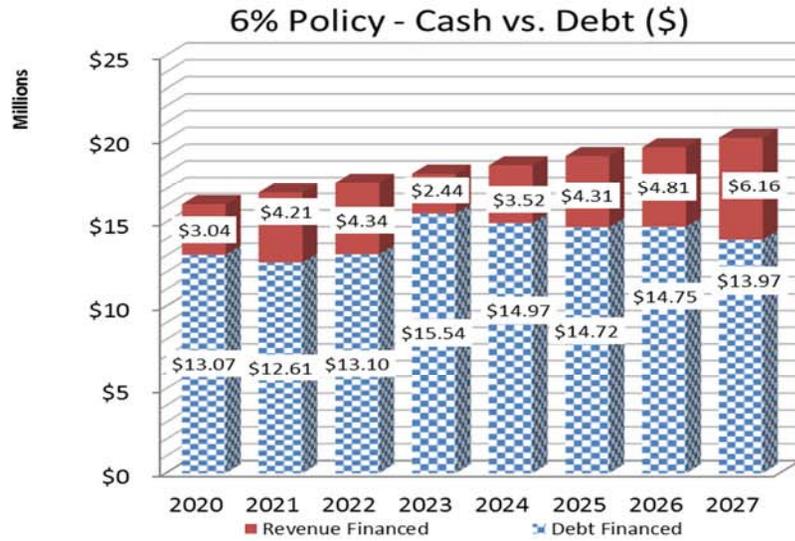
Continued major investments include:

- Street and Sidewalk Rehab - \$25 million
- Town/School Bldg Envelope/Fenestration Repairs - \$6.4 million
- Water & Sewer Infrastructure - \$8.2 million -- enterprise fund
- Information Technology - \$1.1 million
- Parks and Open Space - \$21.4 million
- Town/School Roofs - \$1.6 million
- Town/School Energy Mgmt/Conservation - \$1.4 million
- Tree Replacement - \$1.9 million

Prior Financial Plans spoke to the “tightness” of the CIP, resulting primarily from the costs associated with addressing the increasing school enrollment and the debt service for the Coolidge Corner School and High School projects. This CIP also adjusts the plan for the Baldwin School to reflect the recent Town Meeting action authorizing the Board to acquire 15-17 Oak street, three condos near the Baldwin School, by eminent domain. The debt plan for this project assumes that debt exclusion funding source will provide funding for the acquisition of these properties as part of the project. The graphs below show the split between revenue-financed and debt-financed CIP based on the plan outlined above. As the graphs show, the split between cash and debt becomes tight when debt service for the High School sets in during FY2023. This will continue to be a challenge as we address the School building issues within the CIP, and it potentially places some of the regular programs funded in the CIP at risk.

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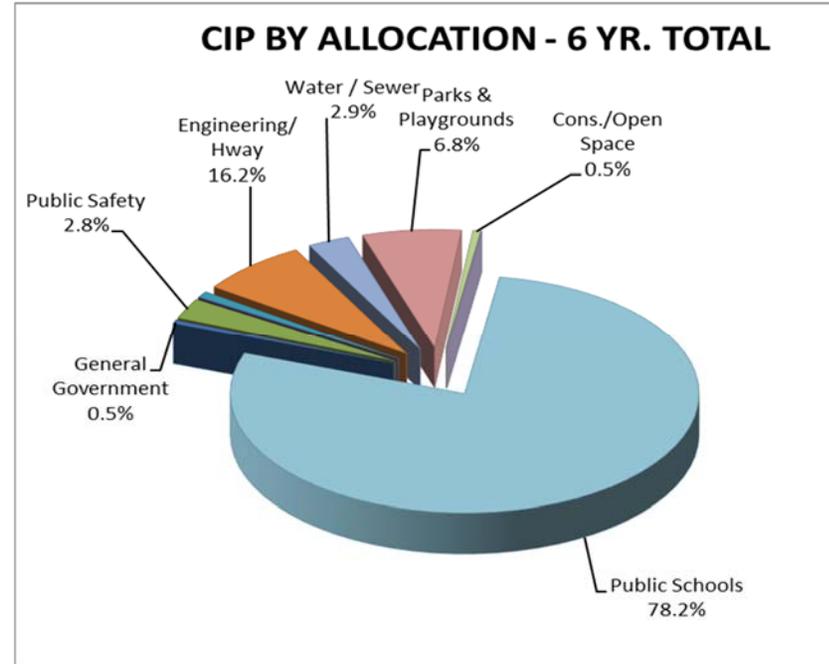
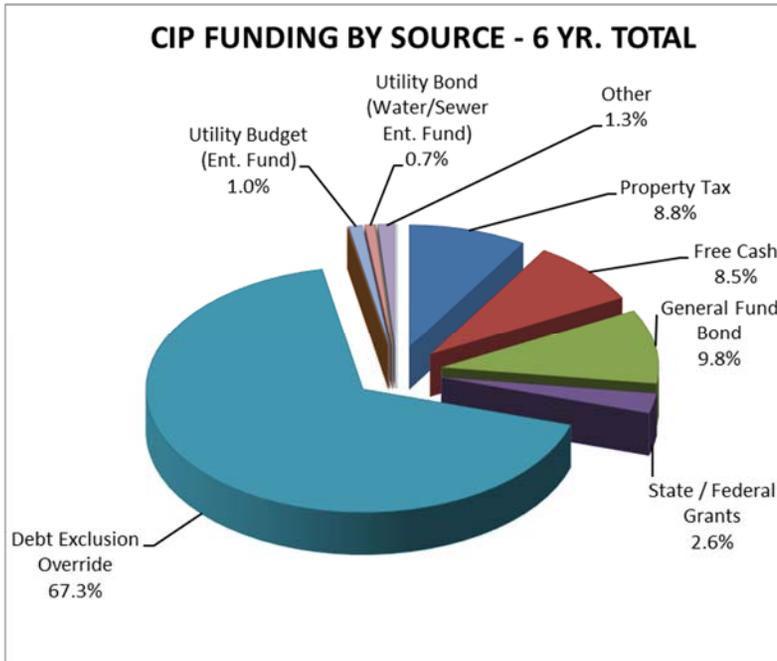
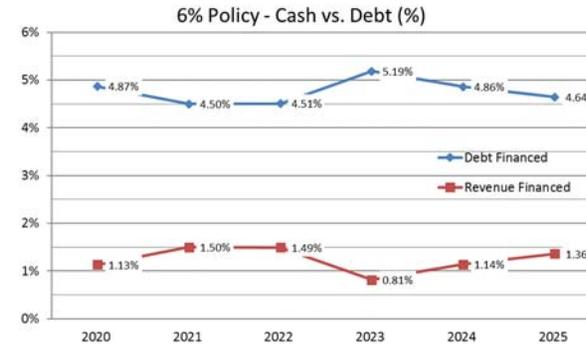
The table below details the funding sources for each year of the Proposed CIP.

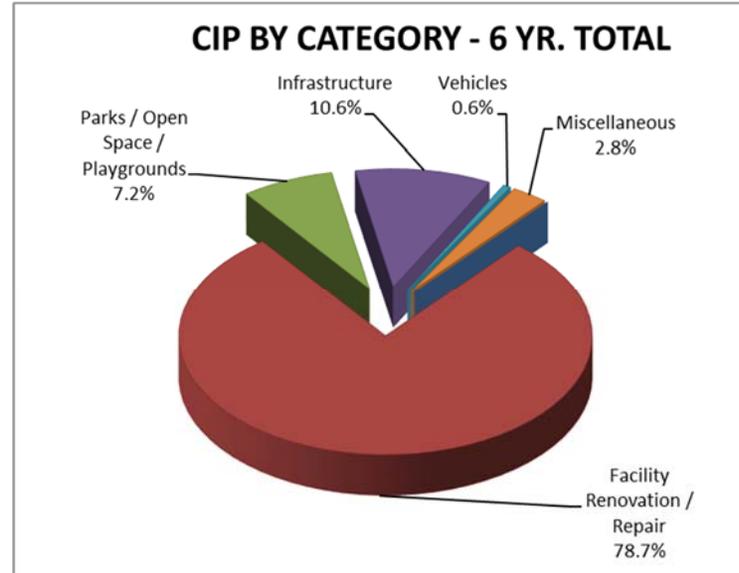
GRAND TOTAL BY SOURCE (in millions)

	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL	% OF TOTAL
Property Tax	\$3.16	\$4.48	\$4.78	\$2.77	\$3.74	\$4.58	\$23.51	8.8%
Free Cash	\$6.72	\$3.31	\$3.29	\$3.18	\$3.17	\$3.04	\$22.72	8.5%
General Fund Bond	\$3.50	\$6.45	\$2.69	\$2.62	\$4.00	\$7.05	\$26.31	9.8%
State / Federal Grants	\$1.16	\$1.16	\$1.16	\$1.16	\$1.16	\$1.16	\$6.96	2.6%
Debt Exclusion Override	\$180.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$180.00	67.3%
Golf Bond (Ent. Fund)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0%
Utility Budget (Ent. Fund)	\$0.72	\$1.07	\$0.58	\$0.30	\$0.00	\$0.00	\$2.67	1.0%
Utility Bond (Water/Sewer Ent. Fund)	\$2.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.00	0.7%
CDBG	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0%
Other	\$3.00	\$0.32	\$0.00	\$0.00	\$0.10	\$0.00	\$3.42	1.3%
Re-Appropriation of Funds	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0%
TOTAL	\$200.26	\$16.79	\$12.50	\$10.03	\$12.17	\$15.83	\$267.59	100%

Given the reliance on more than \$26 million of bonds supported by the General Fund within the tax levy there is an impact on the Town’s operating budget. However, because the CIP complies with the Town’s CIP Financing Policies, the impact on the debt service budget is offset by a decrease in the tax-financed component. As the portion of the 6% that is utilized for borrowing increases or decreases, the portion supported by the tax-financed monies moves in the opposite direction. The graph to the right shows how the 6% is apportioned between debt-financed and pay-as-you-go for each of the six years of the Proposed CIP.

The graphs below and on the following page summarize the FY20 – FY25 CIP by revenue source, by category, and by allocation group. As shown in the graph on the left side, 67.3% of the six-year CIP is funded from a Debt Exclusion Override, 8.5% is funded by free cash, and 8.8% is funded via property tax. The graph on the right breaks out the six-year CIP by allocation group and shows that 78.2% is for Schools, 6.8% is for Parks / Playgrounds, and 16.2% is for Engineering / Highway. The final graph (on the following page) breaks out the CIP by category: 78.7% of the CIP goes toward facility renovations / repairs, 10.6% for infrastructure repairs (streets, sidewalks, water and sewer system), and 7.2% for Parks / Open Space / Playgrounds.





It is important to note that the recommendations contained in this CIP are based upon current best estimates of future revenues, future project costs, and future outside funding assistance. The amount of Free Cash available for the CIP can fluctuate dramatically from year to year. Also, budget reductions at the Federal and State levels could require cutbacks in the recommended program for future years. The CIP recommendations would have to be revisited should the actual amount of available funding be less than anticipated and / or the project costs are greater than anticipated.

DEBT & DEBT SERVICE

This portion of Section VII is dedicated to the role debt plays in the CIP and its relationship to the Operating Budget. For all entities, both public and private, debt financing is a primary method of financing large capital projects, as it enables projects to be undertaken now with the costs spread out over a period of years. However, if used in an imprudent and / or poorly constructed manner, debt can have a disastrous impact on the Operating Budget and negatively impact the level and quality of services a municipality can deliver. This is why the Town's CIP Financing Policies are a vital component of the Town's overall Financial Planning guidelines. A well planned and properly devised debt management plan is critical to maintaining the Town's positive financial condition and to maintaining the Town's much-valued Aaa bond rating.

The bond authorization process is laid out in Massachusetts General Laws (MGL), specifically Chapter 44, Sections 7 and 8. General Obligation (GO) Bonds are secured by a pledge of revenues through property taxes and are authorized by Town Meeting via a 2/3's vote. Bond Anticipation Notes (BANs) can be utilized prior to the permanent issuance of bonds and are included as part of the Town's 6% funding policy. The Town's credit was most recently reviewed on March 5, 2018 by Moody's and the Town maintained its Aaa rating. Among the reasons stated by Moody's for the Aaa rating were "the history of balanced operations, maintenance of adequate reserve levels, and commitment to addressing capital needs and long-term liabilities."

Chapter 44, Section 10 limits the authorized indebtedness to 5% of the Town's equalized valuation (EQV). The Town's most recent EQV, approved by

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the State as of 1/1/2014, is \$24.548 billion. Therefore, the Town's debt limit is \$1.227 billion. Obviously, the Town has no plans to come near this limit.

Debt can be broken into "exempt debt" and "non-exempt debt". Exempt debt is paid for outside of the property tax levy limit of Proposition 2 1/2. Stated another way, it is paid for with taxes raised outside of the property tax limit. In order to have exempt debt, a Debt Exclusion Override is required, and that can only be approved by the local electorate. Non-Exempt debt, or "within-levy debt", must be raised and paid for within the property tax levy. In Brookline, three projects are funded with exempt debt: the old High School Renovation (\$43.8 million), a portion of the Coolidge Corner School (\$49.6 million estimated pending final MSBA reimbursement) and the 2018 High School expansion/renovation project (\$168.2 million). The last debt service payment for the old High School project is in FY20

Debt is issued on behalf of the Water and Sewer Enterprise Fund and the Golf Course Enterprise Fund. The tax levy does not fund any enterprise fund debt. As previously mentioned, they are 100% cost recovery funds, so they pay for their debt service through their own revenue streams. The table below breaks out outstanding debt by fund, with exempt and non-exempt debt of the General Fund separated, for each of the past six years. Looking at FY18, this shows that the Town's total outstanding debt was \$196.3 million, of which \$11.2 million (9.2%) was owed by either the State (\$1.16 million) or enterprise funds (\$10.1 million), leaving \$185 million of outstanding debt.

OUTSTANDING DEBT

DESCRIPTION	FY13	FY14	FY15	FY16	FY17	FY18
Total General Fund Outstanding Debt	64,145,426	63,539,088	60,077,544	67,179,500	97,935,250	186,202,696
a.) Exempt (Debt Exclusion) ¹	6,430,000	5,510,000	4,590,000	3,670,000	2,750,000	67,806,000
b.) Non-Exempt	57,715,426	58,029,088	55,487,544	63,509,500	95,185,250	118,396,696
Minus State (SBA) Reimbursed Debt ²	2,849,005	2,452,505	2,056,310	1,756,800	1,457,900	1,162,050
Net General Fund Outstanding Debt	61,296,421	61,086,583	58,021,234	65,422,700	96,477,350	185,040,646
Water & Sewer Enterprise Fund Outstanding Debt	10,028,654	10,382,110	9,050,072	7,920,156	6,961,446	7,961,446
Golf Course Enterprise Fund Outstanding Debt	899,000	1,099,000	1,149,000	995,000	1,325,000	2,110,000
Enterprise Fund Outstanding Debt	10,927,654	11,481,110	10,199,072	8,915,156	8,286,446	10,071,446
TOTAL Outstanding Debt	75,073,080	75,020,198	70,276,616	76,094,656	106,221,696	196,274,142

¹ The Lincoln School and High School projects were financed via a Debt Exclusion.

² The following school projects were reimbursed by the State: Baker, and Heath.

The projected level of outstanding debt based upon the Proposed CIP is shown in the table on the following page. The increase in FY19 is due to the High School project. Also, there is a graph on page VII-27 that shows both a history and a projection of outstanding debt.

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For illustrative purposes, projected debt related to the Driscoll and Baldwin School projects has been included in the table below, but not included in the calculation of total projected outstanding debt. Since the funding source for these projects is a debt exclusion override, the projects will be formally incorporated into the projection once voters approve the projects. Funding would be raised through increased taxes necessary to pay the principal and interest on a 25-year bond to finance the cost of the projects. The projects are currently in the schematic design phase. Ranges used in the projection came from the feasibility phase of the projects. The Pierce School has not been included in the potential debt exclusion projection. As evidenced on page VII-2 the debt exclusion projects push Brookline beyond the bounds of the Town's fiscal debt management targets. Projects funded within the levy limit comply with the Town's fiscal policies.

OUTSTANDING DEBT (PROJECTED)							
DESCRIPTION	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Total General Fund Outstanding Debt	363,140,697	354,350,877	345,906,868	334,165,511	321,803,762	309,609,222	303,333,004
a.) Exempt (Debt Exclusion) ¹	222,115,030	219,325,877	214,951,868	209,958,845	204,719,429	199,223,722	193,461,337
b.) Non-Exempt	141,025,667	135,025,000	130,955,000	124,206,667	117,084,333	110,385,500	109,871,667
Minus State (SBA) Reimbursed Debt ²	866,200	576,450	286,700	0	0	0	0
Net General Fund Outstanding Debt	362,274,497	353,774,427	345,620,168	334,165,511	321,803,762	309,609,222	303,333,004
Potential Debt Exclusion		179,391,836	178,868,025	176,851,351	172,952,884	168,859,494	164,561,435
Potential Total Debt	363,140,697	533,742,714	524,774,893	511,016,862	494,756,646	478,468,716	467,894,438
Water & Sewer Enterprise Fund Outstanding Debt	7,230,756	8,734,378	8,538,000	8,472,000	8,516,000	7,230,000	5,994,000
Golf Course Enterprise Fund Outstanding Debt	2,000,000	1,905,000	1,802,500	1,700,500	1,581,000	1,449,000	1,317,000
Enterprise Fund Outstanding Debt	9,230,756	10,639,378	10,340,500	10,172,500	10,097,000	8,679,000	7,311,000
TOTAL Outstanding Debt ³	372,371,453	364,990,255	356,247,368	344,338,011	331,900,762	318,288,222	310,644,004

¹ The High School and Coolidge Corner School projects were financed via a Debt Exclusion.

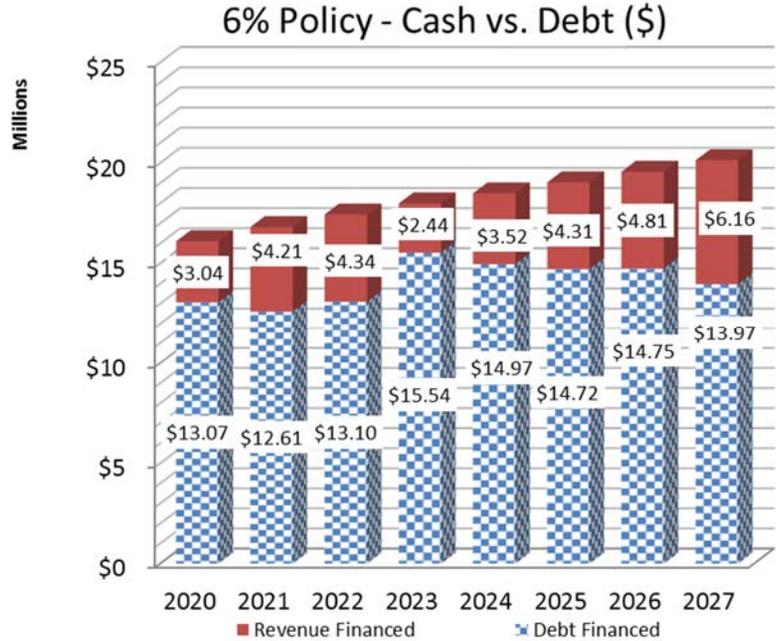
² The Baker (through FY22) and Heath (through FY19) school projects are being reimbursed by the State.

³ Total Outstanding Debt does not include Potential Debt Exclusion which is shown for information only.

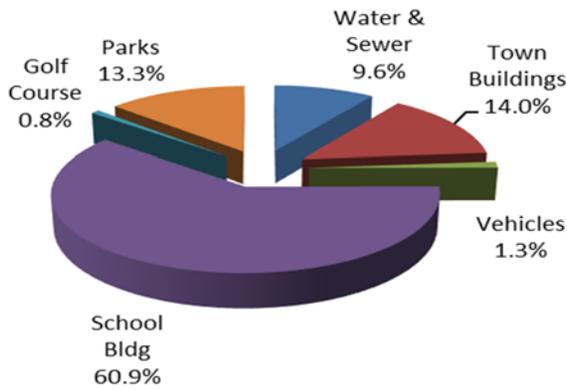
Once debt is incurred, an amount must be set aside annually to fund the principal and interest payments, known as Debt Service. As previously noted, if debt is used in an imprudent and / or poorly constructed manner, it can have a negative impact on the Operating Budget. This is because of debt service: debt service takes away funding that would otherwise be available for other areas of the Operating Budget. If decision makers are not made aware of the impact debt service has on the Operating Budget (via long-range forecasting), then the authorization of debt is being made in a vacuum. Governmental bodies can cripple their finances if bonds are authorized and issued without a full understanding of the impact they have on the overall finances of the entity.

In Brookline, both the Long Range Financial Plan and the planning process for the CIP clearly show decision makers the impact debt service has on the Operating Budget. Since the Town's CIP Financing Policies set a limit on the overall amount of debt that can be issued -- basically the 6% policy plus the other debt management variables that are to be measured -- the impact on the Operating Budget is both known and within an expected range.

The graph to the right illustrates how the Town's 6% policy works. In each year, the amount available for the CIP is 6% of the prior year's net revenue. This amount represents the total impact on the Operating Budget. For FY20, \$16.1 million is dedicated to the CIP (\$13.1 million for net debt service and \$3 million for pay-as-you-go), and, therefore, unavailable for the operating budget. The graph also shows the balance between pay-as-you-go-CIP and debt-financed CIP: as debt service increases, pay-as-you go capacity decreases, and vice versa. This is clearly shown in FY23, when the large increase in debt service (resulting from the BHS project coming on-line) reduces the pay-as-you-go portion of the CIP.



FY19 Debt Service by Expenditure Type



The graph to the left breaks out existing (FY19) debt service by expenditure type. As it shows, the largest component of debt service is for school buildings, followed by town buildings and parks.

As was previously mentioned, debt is issued on behalf of the Water and Sewer Enterprise Fund and the Golf Course Enterprise Fund. Those debt service costs are budgeted for within both enterprise funds and are covered by enterprise fund revenues. As a result, the tax levy does not fund any enterprise fund debt service. The table on the following page breaks out debt service by fund, with exempt and non-exempt debt of the General Fund separated, for each of the past six years. Looking at FY19, it shows that the Town's total debt service was \$17.3 million, of which \$2.3 million (13.5%) was reimbursed by either the State (\$556,757) or Enterprise funds (\$1.8 million), leaving \$14.9 million of debt service.

DEBT SERVICE

DESCRIPTION	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total General Fund Supported Debt Service	9,804,995	9,297,870	9,389,799	9,270,546	10,240,902	12,621,350	15,505,111
a.) Exempt (Debt Exclusion) ¹	1,630,808	1,112,800	1,094,400	1,076,000	1,048,400	1,020,800	3,408,089
b.) Non-Exempt	8,174,187	8,185,070	8,295,399	8,194,546	9,192,502	11,600,550	12,097,022
Minus State (SBA) Reimbursed Debt ²	587,125	556,757	556,757	556,757	556,757	556,757	556,757
Net General Fund Debt Service	9,217,870	8,741,113	8,833,042	8,713,789	9,684,145	12,064,593	14,948,354
Water & Sewer Enterprise Fund Supported Debt Svc.	2,375,403	2,365,461	2,133,405	2,377,747	2,180,990	1,951,733	1,633,460
Golf Course Enterprise Fund Supported Debt Svc.	191,499	179,374	186,476	191,355	183,475	159,422	140,888
Enterprise Fund Debt Service	2,566,902	2,544,835	2,319,881	2,569,102	2,364,465	2,111,155	1,774,348
TOTAL Debt Service	12,371,897	11,842,705	11,709,680	11,839,648	12,605,366	14,732,505	17,279,459

¹ The Lincoln School and High School projects were financed via a Debt Exclusion.

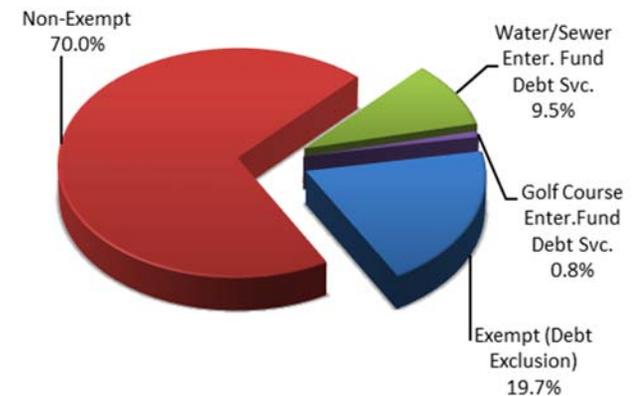
² The following school projects were reimbursed by the State: High School (through FY09), Lincoln (through FY12), Heath (through FY19), Baker.

The graph to the right depicts FY19 debt service by source. As it shows, 70% of the Town's debt service is covered within the levy while 9.5% is covered outside the levy via Debt Exclusion Overrides. The remaining 20.5% is covered by enterprise fund revenues.

The projected level of debt service based upon the Proposed CIP is shown in the table on the following page. Also, there is a graph on page VII-27 that shows both a history and a projection of debt service.

Great care has gone into the crafting of the Debt Management Plan for the FY20 – FY25 CIP and is detailed on the following pages. As mentioned at the beginning of this Section VII, this debt management plan results in the Town complying with all of its CIP Financing Policies for projects funded within the levy. The table shows the amount of authorization, the amount to be borrowed, and the number of years planned for paying off the principal (term). The Town hopes to not have to borrow the \$1 million for the Carlton St. Footbridge. The Town is working toward a grant for the project and if it is received, the Town will not have to issue a bond for the project. Town Meeting would then be asked to rescind the bond authorization.

FY19 DEBT SERVICE BY SOURCE



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DEBT SERVICE (PROJECTED)

DESCRIPTION	FY20	FY21	FY22	FY23	FY24	FY25	FY26
Total General Fund Supported Debt Service	19,348,837	23,123,505	28,228,844	30,669,981	30,096,136	29,852,627	29,875,775
a.) Exempt (Debt Exclusion) ¹	6,380,745	10,617,032	15,229,942	15,228,692	15,225,192	15,229,442	15,225,942
b.) Non-Exempt	12,968,091	12,506,473	12,998,902	15,441,290	14,870,945	14,623,186	14,649,833
Minus State (SBA) Reimbursed Debt ²	434,662	434,662	434,662	0	0	0	0
Net General Fund Debt Service	18,914,175	22,688,843	27,794,182	30,669,981	30,096,136	29,852,627	29,875,775
Water & Sewer Enterprise Fund Supported Debt Svc.	1,644,347	1,658,575	1,551,950	1,589,150	1,675,325	1,522,725	1,423,125
Golf Course Enterprise Fund Supported Debt Svc.	147,501	199,869	199,585	194,051	188,843	183,609	178,319
Enterprise Fund Debt Service	1,791,848	1,858,444	1,751,535	1,783,201	1,864,168	1,706,334	1,601,444
TOTAL Debt Service	21,140,684	24,981,949	29,980,379	32,453,182	31,960,304	31,558,961	31,477,219

¹ The High School project was financed via a Debt Exclusion. Current funding plans for the Coolidge Corner School project assumes \$49.5M of that project is funded by the a Debt Exclusion.

² The Baker (through FY22) school project is being reimbursed by the State.

DEBT MANAGEMENT PLAN

PROJECT	BOND AUTH.	BOND AMT	BOND TERM	2020	2021	2022	2023	2024	2025	2026	2027
Funded Within 6% CIP Policy											
High School Schematic Design (previously authorized)	\$1.850	\$1.850	10	\$0.259	\$0.252	\$0.244	\$0.237	\$0.229	\$0.222	\$0.215	\$0.207
Carlton St. Footbridge (previously authorized)	\$1.400	\$1.000	10	\$0.143	\$0.138	\$0.134	\$0.130	\$0.126	\$0.121	\$0.117	\$0.113
Harry Downes/Kraft Athletic Facility (future authorization)	\$2.450	\$2.450	10	\$0.349	\$0.339	\$0.328	\$0.318	\$0.307	\$0.297	\$0.287	\$0.276
Larz Anderson Park (future authorization)	\$2.700	\$2.700	10	\$0.385	\$0.373	\$0.362	\$0.350	\$0.339	\$0.327	\$0.316	\$0.304
Driscoll School (future authorization)	\$4.000	\$4.000	10	\$0.447	\$0.435	\$0.423	\$0.411	\$0.399	\$0.387	\$0.375	\$0.363
Envelope/Fenestration Repairs (future authorization)	\$1.500	\$1.500	10		\$0.214	\$0.207	\$0.201	\$0.195	\$0.188	\$0.182	\$0.176
Pierce School Feas. / Schematic Design	\$2.000	\$2.000	10		\$0.285	\$0.277	\$0.268	\$0.260	\$0.251	\$0.243	\$0.234
Roof Repairs/Replacements (previously authorized)	\$1.200	\$0.350	10			\$0.050	\$0.048	\$0.047	\$0.045	\$0.044	\$0.042

**TOWN OF BROOKLINE
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CAPITAL IMPROVEMENTS PROGRAM

PROJECT	BOND AUTH.	BOND AMT	TERM	2020	2021	2022	2023	2024	2025	2026	2027
Roof Repairs/Replacements (future authorization)	\$3.100	\$3.100	15			\$0.346	\$0.337	\$0.328	\$0.318	\$0.309	\$0.300
Robinson Playground (future authorization)	\$1.150	\$1.150	10			\$0.164	\$0.159	\$0.154	\$0.149	\$0.144	\$0.139
Larz Anderson Park (future authorization)	\$2.200	\$2.200	10			\$0.314	\$0.304	\$0.295	\$0.285	\$0.276	\$0.267
Schick Park (future authorization)	\$1.025	\$1.025	10				\$0.146	\$0.142	\$0.137	\$0.133	\$0.129
Murphy Playground (future authorization)	\$0.915	\$0.915	10				\$0.130	\$0.126	\$0.123	\$0.119	\$0.115
High School Addition (future authorization)	\$35.000	\$35.000	25				\$3.150	\$3.080	\$3.010	\$2.940	\$2.870
Envelope/Fenestration Repairs (future authorization)	\$0.750	\$0.750	10				\$0.107	\$0.104	\$0.101	\$0.097	\$0.094
Roof Repairs/Replacements (future authorization)	\$0.650	\$0.650	10					\$0.093	\$0.090	\$0.087	\$0.084
Engine #1 Replacement (future authorization)	\$0.725	\$0.725	10					\$0.103	\$0.100	\$0.097	\$0.094
Boylston St Playground (future authorization)	\$1.240	\$1.240	10					\$0.177	\$0.171	\$0.166	\$0.161
Larz Anderson Park (future authorization)	\$2.500	\$2.500	10						\$0.356	\$0.346	\$0.335
Envelope/Fenestration Repairs (future authorization)	\$1.500	\$1.500	10						\$0.214	\$0.207	\$0.201
Larz Anderson Park (future authorization)	\$1.000	\$1.000	10							\$0.143	\$0.138
Amory Tennis courts, Parking and Halls Pond (future authorization)	\$1.700	\$1.700	10							\$0.242	\$0.235
Envelope/Fenestration Repairs (future authorization)	\$1.850	\$1.850	10							\$0.264	\$0.256
Roof Repairs/Replacements (future authorization)	\$1.700	\$1.700	10							\$0.242	\$0.235
Skyline Park (future authorization)	\$1.980	\$1.980	10							\$0.282	\$0.274
Larz Anderson Park (future authorization)	\$2.500	\$2.500	10								\$0.206

NEW GEN FUND DEBT SERVICE (cumulative)

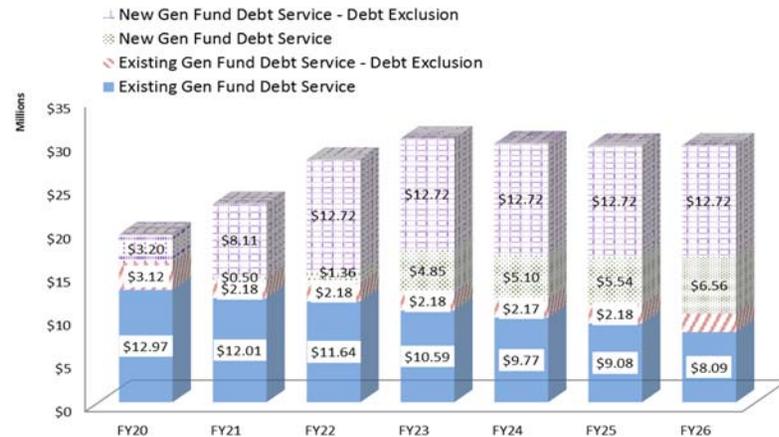
\$1.582 \$2.035 \$2.848 \$6.296 \$6.502 \$6.894 \$7.872 \$7.848

**TOWN OF BROOKLINE
FY2020 PROGRAM BUDGET**

CAPITAL IMPROVEMENTS PROGRAM

PROJECT	BOND AUTH.	BOND AMT	TERM	2020	2021	2022	2023	2024	2025	2026	2027
Debt Exclusions											
Coolidge Corner School - Design/Constr. (future authorization)	\$49.576	\$12.676	25	\$0.899	\$0.899	\$0.899	\$0.899	\$0.899	\$0.899	\$0.899	\$0.899
High School - 111 Cypress Acquisition (previously authorized)	\$16.400	\$16.400	25	\$1.050	\$1.050	\$1.050	\$1.050	\$1.050	\$1.050	\$1.050	\$1.050
High School - 111 Cypress Acquisition (previously authorized)	\$151.800	\$17.600	25	\$1.249	\$1.249	\$1.249	\$1.249	\$1.249	\$1.249	\$1.249	\$1.249
High School - 111 Cypress Acquisition (previously authorized)	\$151.800	\$69.200	25		\$4.910	\$4.910	\$4.910	\$4.910	\$4.910	\$4.910	\$4.910
High School - 111 Cypress Acquisition (previously authorized)	\$151.800	\$65.000	25			\$4.612	\$4.612	\$4.612	\$4.612	\$4.612	\$4.612
NEW DEBT EXCLUSION DEBT SERVICE (cumulative)				\$3.198	\$8.108	\$12.720	\$12.720	\$12.720	\$12.720	\$12.720	\$12.720
Enterprise Funds											
Stormwater (previously authorized)	\$0.300	\$0.300	10	\$0.043	\$0.041	\$0.040	\$0.039	\$0.038	\$0.036	\$0.035	\$0.034
Wastewater (previously authorized)	\$3.000	\$1.000	10	\$0.143	\$0.138	\$0.134	\$0.130	\$0.126	\$0.121	\$0.117	\$0.113
Water System Improvements (future Authorization)	\$2.000	\$2.000	10		\$0.285	\$0.277	\$0.268	\$0.260	\$0.251	\$0.243	\$0.234
Stormwater (future authorization)	\$0.300	\$0.300	10			\$0.043	\$0.041	\$0.040	\$0.039	\$0.038	\$0.036
Stormwater (future authorization)	\$0.300	\$0.300	10				\$0.043	\$0.041	\$0.040	\$0.039	\$0.038
Stormwater (future authorization)	\$0.300	\$0.300	10					\$0.043	\$0.041	\$0.040	\$0.039
Wastewater (future authorization)	\$3.000	\$1.000	10			\$0.143	\$0.138	\$0.134	\$0.130	\$0.126	\$0.121
Wastewater (future authorization)	\$3.000	\$1.000	10				\$0.143	\$0.138	\$0.134	\$0.130	\$0.126
Wastewater (future authorization)	\$3.000	\$1.000	10					\$0.143	\$0.138	\$0.134	\$0.130
Golf Course (previously authorized)	\$1.000	\$0.075	0	\$0.010	\$0.010	\$0.010	\$0.009	\$0.009	\$0.009	\$0.009	\$0.008
Golf Course (previously authorized)	\$1.000	\$0.190	20		\$0.018	\$0.018	\$0.017	\$0.017	\$0.016	\$0.016	\$0.015
Golf Course (previously authorized)	\$1.000	\$0.250	20			\$0.024	\$0.023	\$0.023	\$0.022	\$0.022	\$0.021
NEW ENTERPRISE FUND DEBT SERVICE (cumulative)				\$0.196	\$0.493	\$0.663	\$0.828	\$0.988	\$0.956	\$0.925	\$0.894

Ratings agencies have noted Brookline’s above average amortization rate. That is an important factor in being able to take on additional debt: as old debt runs off, new debt can be taken on. The graph to the right shows the amortization of existing debt and the proposed new debt for the General Fund.



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CAPITAL IMPROVEMENTS PROGRAM

A common indicator used to measure debt service levels is comparing it to revenue, since it is those revenues that are needed to pay the principal and interest payments. For general funds, ratings agencies tend to consider ratios of between 5% - 10% as being prudent. The table below shows debt service as a percent of revenue for the General Fund, Water and Sewer Enterprise Fund, and the Golf Course Enterprise Fund. As it shows, total debt service is projected at 5.4% in FY19 but will increase to 8.7% in FY23 when the majority of debt service associated with the High School project commences.

DEBT SERVICE AS A PERCENTAGE OF REVENUE

DESCRIPTION	FY17 (Act.)	FY18 (Act.)	FY19 (Proj.)	FY20 (Proj.)	FY21 (Proj.)	FY22 (Proj.)	FY23 (Proj.)	FY24 (Proj.)	FY25 (Proj.)	FY26 (Proj.)
Total General Fund Supported Debt Service	10,240,902	12,621,350	15,505,111	19,348,837	23,123,505	28,228,844	30,669,981	30,096,136	29,852,627	29,875,775
a.) Exempt (Debt Exclusion) ¹	1,048,400	1,020,800	3,408,089	6,380,745	10,617,032	15,229,942	15,228,692	15,225,192	15,229,442	15,225,942
b.) Non-Exempt	9,192,502	11,600,550	12,097,022	12,968,091	12,506,473	12,998,902	15,441,290	14,870,945	14,623,186	14,649,833
Minus SBA Reimbursements	556,757	556,758	556,757	434,662	434,662	434,662	0	0	0	0
Net General Fund Debt Service	9,684,145	12,064,592	14,948,354	18,914,175	22,688,843	27,794,182	30,669,981	30,096,136	29,852,627	29,875,775
Water & Sewer Enterprise Fund Supported Debt Svc.	2,180,990	1,951,733	1,633,460	1,644,347	1,658,575	1,551,950	1,589,150	1,675,325	1,522,725	1,423,125
Golf Course Enterprise Fund Supported Debt Svc.	183,475	159,422	140,888	147,501	199,869	199,585	194,051	188,843	183,609	178,319
TOTAL Debt Service	12,605,366	14,732,505	17,279,459	21,140,684	24,981,949	29,980,379	32,453,182	31,960,304	31,558,961	31,477,219
General Fund Revenue	260,709,753	273,019,198	289,770,791	304,491,468	314,765,008	328,486,250	337,248,557	346,691,682	356,426,830	366,107,417
General Fund Revenue Without SBA Reimbursement	260,152,996	272,462,440	289,214,034	304,056,806	314,330,346	328,051,588	337,248,557	346,691,682	356,426,830	366,107,417
Water & Sewer Enterprise Fund Revenue	29,590,019	27,076,701	28,554,309	28,561,053	29,787,290	30,942,854	32,305,381	33,782,196	35,085,956	36,514,808
Golf Course Enterprise Fund Revenue	1,460,701	1,568,551	1,772,700	1,884,446	1,783,314	1,801,070	1,819,061	1,837,289	1,855,758	1,874,473
TOTAL Revenue of Funds Supporting Debt Svc.	291,760,473	301,664,450	320,097,800	334,936,967	346,335,612	361,230,174	371,372,999	382,311,167	393,368,543	404,496,698
General Fund Debt Service as a % of General Fund Revenue	3.9%	4.6%	5.4%	6.4%	7.3%	8.6%	9.1%	8.7%	8.4%	8.2%
Net General Fund Debt Service as a % of General Fund Revenue ²	3.7%	4.4%	5.2%	6.2%	7.2%	8.5%	9.1%	8.7%	8.4%	8.2%
Water & Sewer Enterprise Fund Debt Service as a % of Revenue	7.4%	7.2%	5.7%	5.8%	5.6%	5.0%	4.9%	5.0%	4.3%	3.9%
Golf Course Enterprise Fund Debt Service as a % of Revenue	12.6%	10.2%	7.9%	7.8%	11.2%	11.1%	10.7%	10.3%	9.9%	9.5%
TOTAL Debt Service as a % of Total Rev. Supporting Debt Svc.	4.3%	4.9%	5.4%	6.3%	7.2%	8.3%	8.7%	8.4%	8.0%	7.8%

¹ The Coolidge Corner School and High School projects were financed via a Debt Exclusion. Current funding plans for the Baldwin and Driscoll School projects assume a Debt Exclusion.

² Excludes both the debt service (expense) reimbursed by the State for school projects and the reimbursement from the State (revenue).

IMPACT ON OPERATING BUDGET

The "Debt and Debt Service" section discussed the impact of debt service on the Operating Budget. Another potential impact of a CIP on a community's Operating Budget is an increase or decrease in operating expenses. For example, adding another facility in the community will add costs for utilities and building operation / maintenance. Conversely, undertaking energy conservation projects will help reduce costs in the Operating Budget. The proposed CIP contains a number of projects that will impact the Operating Budget, both positively and negatively. They are listed below:

- Technology Applications – projects undertaken by the Information Technology Department (ITD) are focused on improving efficiencies in numerous departments. While it is difficult to put a dollar figure on savings, past applications have proven to yield savings in the Operating Budget, including a reduction in headcount. On the other hand, new technologies often come with increased maintenance contracts.
- Parking Meters- The DPW budget increases \$63,176 to accommodate gateway/communication/data management fees for the new meters.
- Fire Apparatus Rehab/Replacement – rehabilitating fire apparatus extends the life of the vehicles and also helps reduce repair and maintenance costs. Also, once replaced with a new vehicle, repair and maintenance costs are reduced.
- Wastewater System Improvements - these projects will help prevent costly system failures, lower MWRA wholesale costs by reducing extraneous flows, and make more efficient use of annual operating funds.
- Playground Projects - as playgrounds are renovated and new or improved water play features are included as part of the project, water/sewer costs will increase.
- Golf Course – the proposed improvements to the course and facilities will help improve its playability and make it a more sought-after course, thereby increasing revenue.
- Driscoll/ Baldwin/ Pierce and / High School projects – these projects are certain to increase the size of the facilities, so additional utility costs are to be expected. However, increases will be minimized to the greatest extent possible by including energy efficient systems and “green” components. Insurance costs for the Coolidge Corner School increased the General Insurance budget by \$87,122.
- Town / School Energy Management Systems and Energy Conservation - these on-going items are meant to yield savings in the operating budget. With large increases in utility prices over the past few years, it is imperative that monies be invested to decrease energy consumption in buildings. Programs would include, but are not limited to, lighting retrofit and controls, energy efficient motors, insulation, and temperature equipment. This program would augment existing gas and electric utility conservation programs. Monies would also go toward more efficient heating and cooling equipment.
- Town / School Emergency Generator Replacement, Elevator Replacement, Roof Replacement, Masonry Repairs, and Fenestrian - these items represent an approach to systematically replace various core facility needs that only become more expensive to maintain if not replaced in a timely manner. They also help eliminate the need for larger expenditures that might arise if allowed to deteriorate.

RECOMMENDED PROJECTS

The following pages contain the FY20 – FY25 CIP as proposed by project. Commencing on page VII-29 is a project description for each project.

**TOWN OF BROOKLINE
FY2020 PROGRAM BUDGET**

CAPITAL IMPROVEMENTS PROGRAM

TOWN OF BROOKLINE CAPITAL IMPROVEMENT PROGRAM: FY2020 - FY2025

CATEGORY CODES (CC):				REVENUE CODES (RC):													
1 = New Facility Construction		4 = Infrastructure		A = Property Tax/Free Cash/Overlay Surplus				D = Golf Budget		G = Utility Bond		J = Re-Appropriation of Funds					
2 = Facility Renovation / Repair		5 = Vehicles		B = General Fund Bond				E = Golf Bond		H = CDBG		K = Debt Exclusion Override					
3 = Parks/Open Space/Playgrounds		6 = Miscellaneous		C = State / Federal Aid				F = Utility Budget		I = Other							
CC	Description	Total	Prior Year (FY19)	FY2020		FY2021		FY2022		FY2023		FY2024		FY2025		Future Years	
				Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC
GENERAL GOVERNMENT																	
2	Larz Anderson Garage	135,000				135,000	A										
6	Town Building Furniture	100,000	50,000											25,000	A	25,000	A
2	Garage Floor Sealants	550,000				200,000	A							200,000	A	150,000	A
2	Public Safety HVAC Modifications	125,000	125,000														
2	Town Rehab/Upgrade	540,000	50,000	55,000	A	60,000	A	65,000	A	70,000	A	75,000	A	80,000	A	85,000	A
6	Technology Applications	450,000				150,000	A							150,000	A	150,000	A
	General Government Total	1,900,000	225,000	55,000		545,000		65,000		70,000		75,000		455,000		410,000	
PLANNING & COMMUNITY DEVELOPMENT																	
4	Gateway East/Village Sq. Construction	250,000	250,000														
4	Gateway East/Village Sq. Site Aquisition - CD	1,020,000	1,020,000														
4	Gateway East/Village Sq. Construction - State	7,107,000	7,107,000														
4	Gateway East/Village Sq. Site Aquisition - Town	-															
4	Gateway East/Village Sq. Circulation Improv. - Town	-															
6	Zoning By-Law Reorganization	200,000	200,000														
	Planning & Community Development Total	8,577,000	8,577,000	-		-		-		-		-		-		-	
PUBLIC SAFETY																	
5	Fire Apparatus Rehab	1,865,000						500,000	A			125,000	A	240,000	A	1,000,000	A/B
5	Engine #1 Replacement	725,000								725,000	B						
6	CAD System Upgrade	200,000	200,000														
2	Fire Station Renovations	1,655,000	385,000	600,000	A	670,000	A										
6	Radio Infrastructure	4,500,000		900,000	A	900,000	A	900,000	A	900,000	A	900,000	A				
6	Refurbish Drafting pit	50,000		50,000	A												
	Public Safety Total	8,995,000	585,000	1,550,000		1,570,000		1,400,000		1,625,000		1,025,000		240,000		1,000,000	

**TOWN OF BROOKLINE
FY2020 PROGRAM BUDGET**

CAPITAL IMPROVEMENTS PROGRAM

TOWN OF BROOKLINE CAPITAL IMPROVEMENT PROGRAM: FY2020 - FY2025

CATEGORY CODES (CC):				REVENUE CODES (RC):													
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3 = Parks/Open Space/Playgrounds		6 = Miscellaneous		C = State / Federal Aid				F = Utility Budget		I = Other							
CC	Description	Total	Prior Year (FY19)	FY2020		FY2021		FY2022		FY2023		FY2024		FY2025		Future Years	
				Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC
LIBRARY																	
2	Putterham Library Bathroom Renovations	150,000	150,000														
2	Renovation of the Main Library	38,500,000														38,500,000	B/C/I
	Library Total	38,650,000	150,000	-		-		-		-		-		-		38,500,000	
PUBLIC WORKS:																	
Transportation																	
4	Traffic Calming / Safety Improvements	650,000	85,000	265,000	A	50,000	A	50,000	A	50,000	A	50,000	A	50,000	A	50,000	A
4	Bicycle Access Improvements	207,775	176,775	31,000	A												
4	Parking Meter Technology Upgrade	483,120		161,040	A	322,080	A										
4	Transportation Network Company Mitigation Projects	1,607,442	207,442	200,000	C	200,000	C	200,000	C	200,000	C	200,000	C	200,000	C	200,000	C
	Public Works - Transportation Sub-Total	2,948,337	469,217	657,040		572,080		250,000		250,000		250,000		250,000		250,000	
Engineering/Highway																	
4	Street Rehab - Town	16,300,000	3,110,000	1,750,000	A	1,790,000	A	1,830,000	A	1,880,000	A	1,930,000	A	1,980,000	A	2,030,000	A
4	Street Rehab - State	7,684,840	960,605	960,605	C	960,605	C	960,605	C	960,605	C	960,605	C	960,605	C	960,605	C
4	Sidewalk Repair	2,794,000	320,000	328,000	A	336,000	A	344,000	A	353,000	A	362,000	A	371,000	A	380,000	A
4	Parking Lot Rehab.	205,000														205,000	A
4	Fire Alarm Call box system	1,125,000		1,125,000	A												
	Public Works - Engineering/Highway Sub-Total	28,108,840	4,390,605	4,163,605		3,086,605		3,134,605		3,193,605		3,252,605		3,311,605		3,575,605	
Water / Sewer																	
4	Singletree Hill Tank Improvements	490,000				490,000	F										
4	Stormwater Improvements	900,000				300,000	F	300,000	F	300,000	F						
4	Water System Improvements	2,000,000		2,000,000	G												
6	Water Meter MTU Replacement	1,090,000	265,000	265,000	F	280,000	F	280,000	F								
4	Wastewater System Improvements	6,000,000	3,000,000	3,000,000	I												
4	Netherlands Road Facility Improvements	605,000	150,000	455,000	F												
	Public Works - Water / Sewer Sub-Total	11,085,000	3,415,000	5,720,000		1,070,000		580,000		300,000		-		-		-	

**TOWN OF BROOKLINE
FY2020 PROGRAM BUDGET**

CAPITAL IMPROVEMENTS PROGRAM

TOWN OF BROOKLINE CAPITAL IMPROVEMENT PROGRAM: FY2020 - FY2025

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CC	Description	Total	Prior Year (FY19)	FY2020		FY2021		FY2022		FY2023		FY2024		FY2025		Future Years	
				Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC
Parks and Playgrounds																	
3	Amory tennis courts, Parking and Halls Pond	1,700,000												1,700,000	B		
3	Cypress Playground/Athl. Field	240,000	240,000														
3	Fisher Hill Gatehouse Safety and Structural Improvemen	175,000														175,000	A
3	Harry Downes Field & Playground/Kraft Family Athl.	2,450,000	2,450,000														
3	Larz Anderson Park	12,400,000	2,700,000			2,200,000	B					2,500,000	B			5,000,000	B
3	Larz Anderson Park cash	1,025,000	425,000	600,000	A												
3	Murphy Playground	915,000						915,000	B								
3	Riverway Park	625,000														625,000	A
3	Robinson Playground	1,250,000		100,000	A	1,150,000	B										
3	Schick Playground	1,125,000				100,000	A	1,025,000	B								
3	Boylston St. Playground	1,350,000						110,000	A	1,240,000	B						
3	Griggs Park	1,120,000											1,120,000	A			
3	Soule Athletic Fields	1,900,000														1,900,000	B
3	Skyline Park Turf replacement and Park Improvemen	1,980,000										180,000	A	1,800,000	B		
3	Parks/Playgrounds Rehab/Upgrade	2,520,000	305,000	310,000	A	310,000	A	315,000	A	315,000	A	320,000	A	320,000	A	325,000	A
3	Town/School Ground Rehab.	1,380,000	155,000	160,000	A	165,000	A	170,000	A	175,000	A	180,000	A	185,000	A	190,000	A
3	Tennis Courts / Basketball Courts	650,000		200,000	A											450,000	A
2	Comfort Stations	400,000		350,000	A											50,000	A
Public Works - Parks and Playground Sub-Total		33,205,000	6,275,000	1,720,000		3,925,000		2,535,000		1,730,000		3,180,000		5,125,000		8,715,000	
Conservation/Open Space																	
3	Tree Removal&Repl/Urban Forestry Mgmt	1,920,000	230,000	235,000	A	235,000	A	240,000	A	240,000	A	245,000	A	245,000	A	250,000	A
3	Old Burial Ground	250,000														250,000	A
3	Walnut Hills Cemetery	770,000														770,000	I
Public Works - Conser /Open Space Sub-Total		2,940,000	230,000	235,000		235,000		240,000		240,000		245,000		245,000		1,270,000	
Public Works Total		78,287,177	14,779,822	12,495,645		8,888,685		6,739,605		5,713,605		6,927,605		8,931,605		13,810,605	
RECREATION																	
2	Aquatics Center Pool Filter Replacement	225,000	225,000														
2	Eliot Rec Restroom Renovation	50,000		50,000	A												
2	Eliot Rec Improvements	775,000														775,000	A
Recreation Total		1,050,000	225,000	50,000		-		-		-		-		-		775,000	

**TOWN OF BROOKLINE
FY2020 PROGRAM BUDGET**

CAPITAL IMPROVEMENTS PROGRAM

TOWN OF BROOKLINE CAPITAL IMPROVEMENT PROGRAM: FY2020 - FY2025

CATEGORY CODES (CC):				REVENUE CODES (RC):													
1 = New Facility Construction		4 = Infrastructure		A = Property Tax/Free Cash/Overlay Surplus				D = Golf Budget		G = Utility Bond		J = Re-Appropriation of Funds					
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CC	Description	Total	Prior Year (FY19)	FY2020		FY2021		FY2022		FY2023		FY2024		FY2025		Future Years	
				Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC
	SCHOOL																
6	Furniture Upgrades	1,080,000	100,000	110,000	A	120,000	A	130,000	A	140,000	A	150,000	A	160,000	A	170,000	A
2	HVAC Equipment	1,250,000	150,000	150,000	A	300,000	A	200,000	A					50,000	A	400,000	A
2	Classroom Climate Control	225,000	225,000														
2	Underground tank removal	450,000				100,000	A	100,000	A			100,000	A	100,000	A	50,000	A
2	Town/School ADA Renovations	680,000	75,000	80,000	A	80,000	A	85,000	A	85,000	A	90,000	A	90,000	A	95,000	A
2	Town/School Elevator Renov. Program	700,000	300,000			100,000	A	100,000	A			100,000	A			100,000	A
2	Town/School Energy Conservation Projects	1,580,000	180,000	185,000	A	190,000	A	195,000	A	200,000	A	205,000	A	210,000	A	215,000	A
2	Town/School Energy Management System	1,145,000	125,000	125,000	A	125,000	A	130,000	A	130,000	A	130,000	A	130,000	A	250,000	A
2	Town/School Bldg Envelope/Fenestration Rep	8,000,000		1,500,000	B			750,000	B			1,500,000	B	1,850,000	B	2,400,000	A/B
3	Town/School Bldg Envelope/Fenestration Rep cash	850,000						850,000	A								
2	Town/School Roof Repair/Repl. Program	9,450,000				3,100,000	B			650,000	B			1,700,000	B	4,000,000	A/B
2	Public Building Fire Alarm upgrades	1,950,000	250,000			300,000	A	400,000	A	50,000	A	300,000	A	300,000	A	350,000	A
2	Town/School Bldg Security / Life Safety Sys	1,430,000	130,000	260,000	A	160,000	A	170,000	A	170,000	A	180,000	A	180,000	A	180,000	A
2	Town/School Compactor Replacements	200,000	100,000	50,000	A											50,000	A
2	School Rehab/Upgrade	1,061,000	230,000	198,000	A	115,000	A	120,000	A	36,000	A	92,000	A	135,000	A	135,000	A
2	High School Addition - Town Share (non-Debt Excl)	35,000,000	35,000,000														
2	High School Addition (Debt Excl)	151,800,000	151,800,000														
2	High School cash	2,400,000	2,400,000														
2	Driscoll School Schematic Design	1,500,000	1,500,000														
2	Driscoll School Construction	105,000,000		105,000,000	K												
2	Driscoll School Rehabilitation	4,000,000	4,000,000														
2	Baldwin School Schematic Design	1,500,000	1,500,000														
2	Baldwin School Construction	75,000,000		75,000,000	K												
2	Pierce School Feas. / Schematic	2,000,000		2,000,000	B												
2	Pierce School Construction	-				TBD	K										
2	Classroom Capacity	9,844,000	1,165,000	1,450,000	A	1,099,000	A	1,065,000	A	1,165,000	A	1,300,000	A	1,300,000	A	1,300,000	A
	School Total	418,095,000	199,230,000	186,108,000		5,789,000		4,295,000		2,626,000		4,147,000		6,205,000		9,695,000	

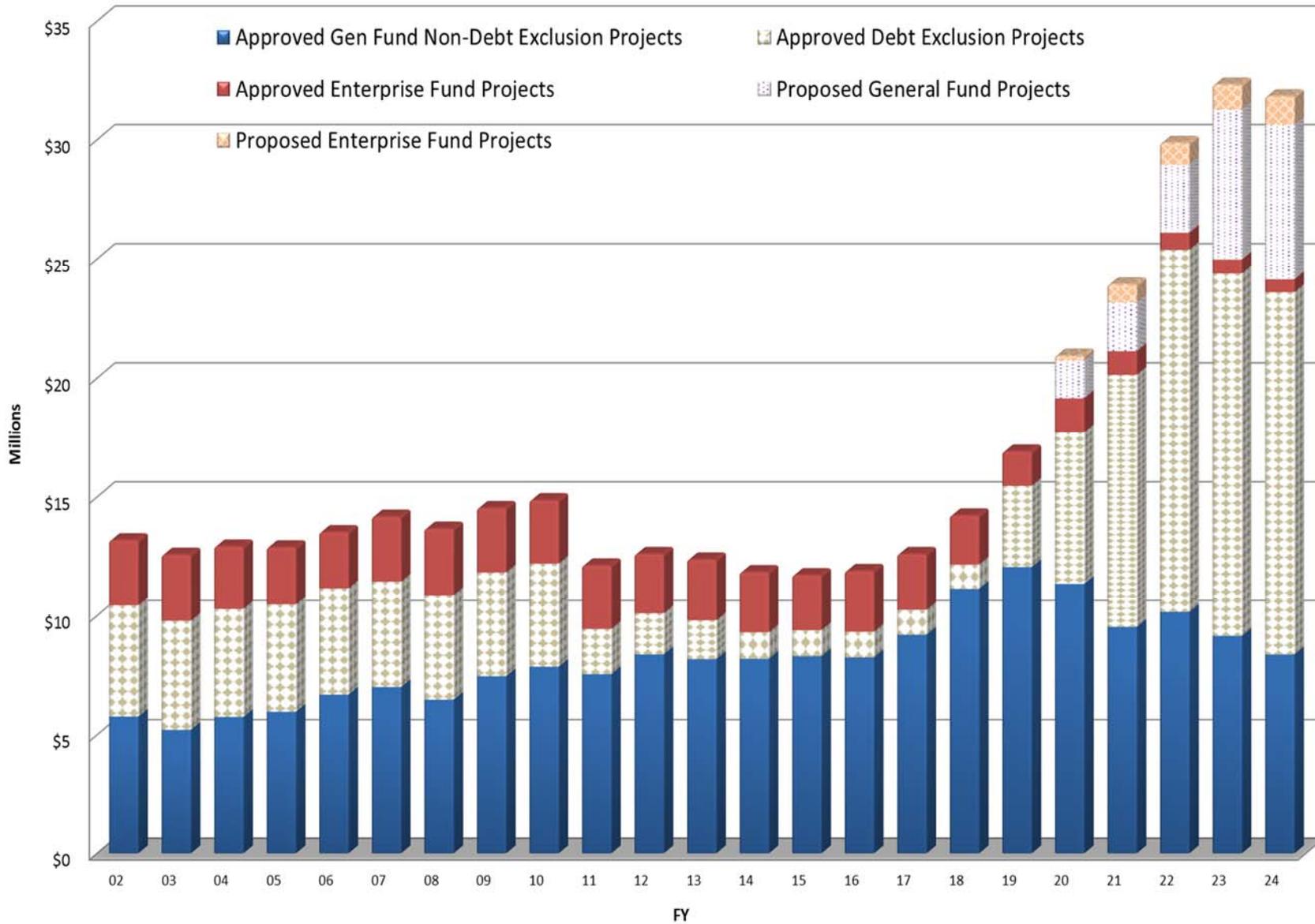
**TOWN OF BROOKLINE
FY2020 PROGRAM BUDGET**

CAPITAL IMPROVEMENTS PROGRAM

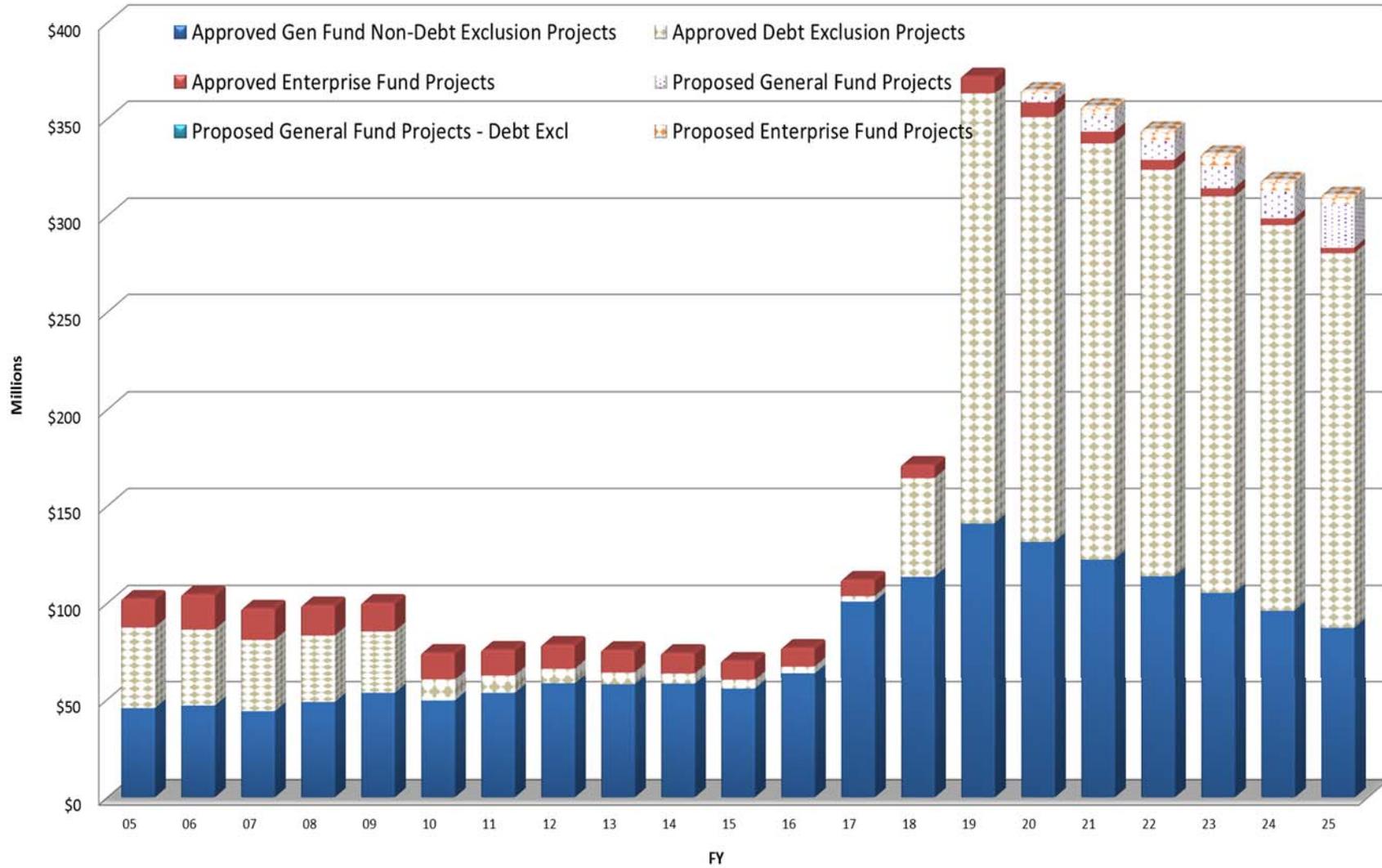
TOWN OF BROOKLINE CAPITAL IMPROVEMENT PROGRAM: FY2020 - FY2025

CATEGORY CODES (CC):				REVENUE CODES (RC):												
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CC	Total	Prior Year (FY19)	FY2020		FY2021		FY2022		FY2023		FY2024		FY2025		Future Years	
			Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC	Amount	RC
GRAND TOTAL	555,554,177	223,771,822	200,258,645		16,792,685		12,499,605		10,034,605		12,174,605		15,831,605		64,190,605	
GRAND TOTAL BY SOURCE																
A = Property Tax / Free Cash / Overlay Surplus	70,474,895	14,361,775	9,878,040	59%	8,112,080	65%	8,069,000	80%	5,959,000	49%	7,014,000	44%	7,621,000	A	9,460,000	A
B = General Fund Bond	104,390,000	44,150,000	3,500,000	21%	6,450,000	52%	2,690,000	27%	2,615,000	21%	4,000,000	25%	7,050,000	11%	33,935,000	53%
C = State / Federal Grants	28,334,282	8,275,047	1,160,605	7%	1,160,605	9%	1,160,605	12%	1,160,605	10%	1,160,605	7%	1,160,605	2%	13,095,605	20%
D = Golf Budget	-	-	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%
E = Golf Bond	-	-	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%
F = Utility Budget	3,085,000	415,000	720,000	4%	1,070,000	9%	580,000	6%	300,000	2%	-	0%	-	0%	-	0%
G = Utility Bond	5,000,000	3,000,000	2,000,000	12%	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%
H = CDBG	1,270,000	1,270,000	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%
I = Other	10,700,000	-	3,000,000	18%	-	0%	-	0%	-	0%	-	0%	-	0%	7,700,000	12%
J = Re-Approp. of Existing Funds	500,000	500,000	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%
K = Debt Exclusion Override	331,800,000	151,800,000	180,000,000	90%	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%
Grand Total	555,554,177	223,771,822	200,258,645		16,792,685		12,499,605		10,034,605		12,174,605		15,831,605		64,190,605	
GRAND TOTAL BY ALLOCATION																
General Government	1,900,000	225,000	55,000	0%	545,000	3%	65,000	1%	70,000	1%	75,000	1%	455,000	3%	410,000	1%
Planning and Community Development	8,577,000	8,577,000	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%
Public Safety	8,995,000	585,000	1,550,000	1%	1,570,000	9%	1,400,000	11%	1,625,000	16%	1,025,000	8%	240,000	2%	1,000,000	2%
Library	38,650,000	150,000	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%	38,500,000	60%
DPW - Transportation	2,948,337	469,217	657,040	0%	572,080	3%	250,000	2%	250,000	2%	250,000	2%	250,000	2%	250,000	0%
Engineering/Highway	28,108,840	4,390,605	4,163,605	2%	3,086,605	18%	3,134,605	25%	3,193,605	32%	3,252,605	27%	3,311,605	21%	3,575,605	6%
Water / Sewer	11,085,000	3,415,000	5,720,000	3%	1,070,000	6%	580,000	5%	300,000	3%	-	0%	-	0%	-	0%
Parks & Playgrounds	33,205,000	6,275,000	1,720,000	1%	3,925,000	23%	2,535,000	20%	1,730,000	17%	3,180,000	26%	5,125,000	32%	8,715,000	14%
Conservation/Open Space	2,940,000	230,000	235,000	0%	235,000	1%	240,000	2%	240,000	2%	245,000	2%	245,000	2%	1,270,000	2%
Recreation	1,050,000	225,000	50,000	0%	-	0%	-	0%	-	0%	-	0%	-	0%	775,000	1%
Public Schools	418,095,000	199,230,000	186,108,000	93%	5,789,000	34%	4,295,000	34%	2,626,000	26%	4,147,000	34%	6,205,000	39%	9,695,000	15%
Grand Total	555,554,177	223,771,822	200,258,645		16,792,685		12,499,605		10,034,605		12,174,605		15,831,605		64,190,605	
GRAND TOTAL BY CATEGORY																
1 New Facility Construction	-	-	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%
2 Facility Renovation / Repair	459,290,000	200,215,000	187,508,000	94%	6,474,000	39%	4,165,000	33%	2,486,000	25%	3,997,000	33%	6,045,000	38%	48,400,000	75%
3 Parks / Open Space / Playgrounds	35,745,000	6,505,000	1,605,000	1%	4,160,000	25%	2,775,000	22%	1,970,000	20%	3,425,000	28%	5,370,000	34%	9,935,000	15%
4 Infrastructure	48,789,177	16,501,822	8,960,645	4%	4,728,685	28%	3,964,605	32%	3,743,605	37%	3,502,605	29%	3,561,605	22%	3,825,605	6%
5 Vehicles	2,590,000	-	-	0%	-	0%	500,000	4%	725,000	7%	125,000	1%	240,000	2%	1,000,000	2%
6 Miscellaneous	9,140,000	550,000	2,185,000	1%	1,430,000	9%	1,095,000	9%	1,110,000	11%	1,125,000	9%	615,000	4%	1,030,000	2%
Grand Total	555,554,177	223,771,822	200,258,645		16,792,685		12,499,605		10,034,605		12,174,605		15,831,605		64,190,605	
6-Year Total	267,591,750															

DEBT SERVICE BASED ON EXISTING AUTHORIZATIONS AND PROJECTS IN FY20 - FY25 CIP



**TOTAL OUTSTANDING DEBT (as of June 30 each year) BASED ON EXISTING AUTHORIZATIONS AND PROJECTS IN
FY20 - FY25 CIP**



FY 2020-2025 CIP PROJECT DESCRIPTIONS

NOTE: The figures included in this report are based on the best available cost estimates at the time of the development of the CIP and are subject to change due to revised estimates and bids.

GENERAL GOVERNMENT

1. GARAGES AT LARZ ANDERSON

The fuel tank located on site is not used anymore and should be removed, along with the gas pumps, in order to avoid a possible leak in the future.

Estimated Cost: \$130,000

Time Schedule: FY 2021 -- \$130,000 Property Tax / Free Cash

2. TOWN BUILDING FURNITURE

This item allows for the replacement of aging furniture at Town Hall and other non-school buildings.

Estimated Cost: \$75,000

Time Schedule: Prior Year -- \$50,000 Property Tax / Free Cash
Future Years -- \$25,000 Property Tax / Free Cash

3. GARAGE FLOOR SEALANTS

Sealants are required for concrete suspended floors every 7 years. If the floor is not properly sealed to prevent corrosion of the concrete and rebar, the floor will deteriorate rapidly. This will lead to premature failure and costly involved repairs including new concrete and possibly structural repairs.

Those floors include:

Municipal Garage	Fire Station No 4
Main Library	Fire Station No 6
Fire Station No 1	Fire Station No 7

Estimated Cost: \$550,000

Time Schedule:	FY 2021 -- \$200,000	Property Tax / Free Cash
	FY 2025 -- \$200,000	Property Tax / Free Cash
	Future Years -- \$150,000	Property Tax / Free Cash

4. PUBLIC SAFETY HVAC MODIFICATIONS

The Public Safety Department continues to invest and expands its communications (E911/radios) and data information systems. There are two rooms at Public Safety that house this equipment. The spaces are sized adequately but the infrastructure needs to be expanded to meet the needs of the equipment loads. This would be for power and cooling. These spaces presently have HVAC systems, with back up capacity that is presently undersized and needs to be increased. In addition, the equipment has exceeded its useful life. Power is limited in these spaces and was originally sized for the equipment that was installed when the building was renovated many years ago. Also the layout of the equipment with new, different racks stifles air flow and cooling capabilities. A study was conducted that reviewed the MDF spaces at the High School, Town Hall and Public Safety buildings. This study recommended a number of improvements for these critical areas at Public Safety. As part of a 24/7 operation the equipment is extremely important and essential for the operation of the department and safety of the community. The support systems including e911 must be reliable and dependable. The request of \$125,000 is broken out as follows: \$12,000 for design services, \$18,000 for electrical upgrades and modifications to the emergency generator circuits and \$95,000 for the HVAC upgrades and modifications.

Estimated Cost: \$125,000

Time Schedule:	Prior Year -- \$125,000	Property Tax / Free Cash
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5. TOWN REHAB/UPGRADES

This is an on-going town-wide program for the repair and upgrade of Town facilities in between major renovation projects. Items funded under this program include large scale painting programs, new flooring, ceilings, window treatments and toilet upgrades. This program avoids more expensive rehabilitation that would be necessary if these items were left to deteriorate.

Estimated Cost: \$540,000

Time Schedule:	Prior Year -- \$50,000	Property Tax / Free Cash
	FY 2020 -- \$55,000	Property Tax / Free Cash
	FY 2021 -- \$60,000	Property Tax / Free Cash
	FY 2022 -- \$65,000	Property Tax / Free Cash
	FY 2023 -- \$70,000	Property Tax / Free Cash
	FY 2024 -- \$75,000	Property Tax / Free Cash
	FY 2025 -- \$80,000	Property Tax / Free Cash
	Future Years -- \$85,000	Property Tax / Free Cash

6. TECHNOLOGY APPLICATIONS

This annual appropriation is for funding the projects included in the Information Technology Department's Long-Term Strategic Plan, which serves as the framework for the selection and management of technology expenditures and is updated periodically by the Chief Information Officer (CIO). Moreover, additional projects that meet the short-term objectives set by the CIO and appropriate committees provide the guidance for the Town's approach to technology management. Primary focus areas for IT investments include Infrastructure lifecycle replacement, Enterprise Applications/Better Government initiatives, School Technology, and Public Safety enhancements. Special consideration is given to projects that reduce operating expenses and / or create efficiencies.

Estimated Cost: \$450,000

Time Schedule:	FY 2021 -- \$150,000	Property Tax / Free Cash
	FY 2025 -- \$150,000	Property Tax / Free Cash
	Future Years -- \$150,000	Property Tax / Free Cash

PLANNING & COMMUNITY DEVELOPMENT

7. GATEWAY EAST / VILLAGE SQUARE CIRCULATION IMPROVEMENTS

This significant public works project involves reconfiguration of the existing circulation system in Brookline Village at Washington Street, Route 9, Walnut Street, High Street, and Pearl Street. The existing jughandle, currently used to provide access to Washington Street from Route 9 eastbound, will be removed and replaced with a new four-way intersection at Pearl Street. Signals will be relocated and upgraded and a new ADA-compliant surface-level pedestrian crosswalk with walk signal will cross Route 9 just west of Pearl Street as part of a new four-way intersection, replacing the demolished pedestrian bridge that had once provided a protected crossing on Route 9. In addition, the project will include enhanced bicycle accommodation via protected bicycle lanes, and lighting and landscaping improvements. The project will improve the overall safety and aesthetics of this portion of Route 9 and Brookline Village.

Estimated Cost: \$8,377,000

Time Schedule: Prior Year --\$8,377,000 Federal Grant (via State TIP)/CDBG/Parking Meter Fund

8. ZONING BY-LAW REORGANIZATION

The Town of Brookline Zoning By-Law was first adopted by Annual Town Meeting in May 1962. Since its adoption, the Zoning By-Law has been amended more than 70 times. These amendments were recommended to address various concerns within the Town for residential and commercial land use and development. In addition, there have been a number of amendments adopted to promote redevelopment in specific areas in Town.

The proposed revisions to the Zoning By-Law over the years were recommended to resolve neighborhood issues regarding setbacks, density or other concerns. There have also been many revisions to promote good development and redevelopment within a specific zoning district in Town. The Zoning By-Law, in its current version, is the culmination of numerous amendments reacting to onetime events or concerns resulting in a reactionary document. This approach has been done for years without examining the impact of other provisions of the by-law creating unintended consequences including inherent inconsistencies. The current version of the by-law is not user friendly, difficult for the public to comprehend, difficult for the Town to interpret and enforce, and creates a strain on economic development in the areas where economic development should be considered. The end result would be a document that is clearer, more understandable, and easier for the public to follow and use.

This funding would be used to engage the services of a consultant, or consultants for the purpose of the performing a comprehensive review of the Zoning By-Law. The Zoning By-Law will be reviewed/rewritten to identify and then correct contradictions and inconsistencies that inadvertently resulted from the adoption of such amendments and otherwise; to address specific issues that have come before the Planning

Board and Zoning Board of Appeals; to account for changed circumstances in land use patterns and other conditions in the Town; to recognize recent judicial decisions and statutory amendments; and to clarify language and improve organization.

A consistent and well-written Zoning By-Law will provide a solid foundation for regulatory decisions and a clearer set of rules for applicants, Town staff, and regulatory agencies. It will also provide consistency with the laws of the Commonwealth of Massachusetts. The product of their work is anticipated to provide a better land use guide that reflects the policies and procedures of the Town and the Commonwealth.

Estimated Cost: \$200,000

Time Schedule: Prior Year-- \$200,000 Property Tax / Free Cash

PUBLIC SAFETY

9. FIRE APPARATUS REHAB

The Town’s policy is to replace front-line fire engines every 17 years and front-line ladder trucks every 20 years. While this replacement schedule serves the Town very well, funding needs to be appropriated every 10 years to rehab engines and every 12 years to rehab ladder trucks. The breakout of the proposed funding is as follows:

- Quint #4 = \$500,000 (FY22)
- Rescue #1 = \$125,000 (FY24)
- Engine #3 = \$240,000 (FY25)

Quint 4 was purchased in 2010. In keeping with the Town’s policy of refurbishing fire engines at 10 years the quint is scheduled to be refurbished in 2020. While the Quint has an aerial ladder on it, we typically operate it as an engine company and therefor fall under the 10 year guideline. However, the refurbishment costs will be higher than a traditional fire engine due to its dual design. The department has requested deferral of this piece until the Chief has concluded a long-range strategic plan, which will help the department ascertain the long-term viability of this non-traditional apparatus for the Town of Brookline. Department mechanics have determined that a 1-2 year deferral of this rehabilitation will not significantly increase any future cost for maintenance.

Estimated Cost: \$1,865,000

Time Schedule: FY 2022 -- \$500,000 Property Tax / Free Cash
 FY 2024 -- \$125,000 Property Tax / Free Cash
 FY 2025 -- \$240,000 Property Tax / Free Cash

10. ENGINE #1 REPLACEMENT

Using the Town's replacement schedule, Engine No. 1 will be due for replacement in FY 2023. Considering the Town just bought a pump for \$625,000 (Engine 6) and using the 3% inflation estimate per year, the projected cost is estimated at \$725,000

Estimated Cost: \$725,000

Time Schedule: FY2023 -- \$725,000 General Fund Bond

11. CAD SYSTEM UPGRADE

The Police Department is looking to update our (Larimore) Public Safety programs, to the new programming language in C# (C-Sharp Programming Language). The Town's current CAD (Computer Aided Dispatch) system has been dispatching Police/Fire/EMS calls for over 10 years.

The new system will have the ability and functionality to support multi-jurisdictional multi-agency dispatching for Police, Fire, and EMS. This flexible system will allow dispatchers to be assigned geographical areas, individual agencies, or both. Unit recommendations based on call location via unit's AVL (Automated Vehicle Locators), and the ability to dispatch resources to any location by premise name. Premise information will have previous call history, hazardous material information, SOP's (Standard Operating Procedures) and patrol file information; all will be available by location as the call is being managed.

The system will have a CAD alert feature allowing time sensitive information to be entered as an alert, stored as a call transaction, and given to dispatchers as a visual notification of crucial information. The system will have Embedded Map on the dispatch and call taking screen, which allows dispatchers to assign units directly from the mapping component, as well as the call list. The new CAD system will have built-in interfaces for mapping, E-911, mobile data and tablet based systems, State NCIC, D-CJIS , and external digitizer fire alarm systems. The CAD system will interface with the Records Management and Scheduling System .The system will have the ability to interface into the department's camera network(s) by a direct address link to a camera, if a camera is in the location of a E-911 call the camera will PTZ (Pan-Tilt-Zoom) into the area of the call, giving the dispatcher the ability to view that camera.

The upgraded CAD system will be fully compatible with Phase 2 wireless E-911 providers. The system will have a certified interface to Pro/QA Medical application and will be set up for Next Generation 911 which is an IP based system that allows and captures digital information, such as, voice, photos, videos and text messaging from the 911 network to the CAD system.

The State has stated Brookline can expect to cut over on the Next Gen 911 System, sometime this upcoming spring (2017), which makes the upgraded CAD system a top priority in order to accept the new Next Gen 911 standards and data flow. Within the next 3 to 6 months Brookline will be receiving wireless 911 calls to our dispatch center, currently these wireless calls are routed to the Mass State Police, with Brookline accepting these calls directly, the CAD system needs to be upgraded to accept the new wireless information, such as latitude, longitude and height to pinpoint the exact location of the call. It is imperative that we have a upgraded CAD system in place, to be able to interface to the new State wireless 911 calls and most importantly for the Next Generation 911 system.

Other applications that have to be upgraded (re-written) to the new C# environment are:

Scheduling System \ Training System \ Records Management System \ Intelligence System \ Detective Case Management \ Arrest-Booking System \ National Incident Based Reporting Systems (NIBRS) \ False Burglar Alarm Tracking and Billing System \ Detail Assignment and Billing System \ Total Overtime tracking System \ Evidence Tracking System \ Field Interview System \ Situation Tracking and Analysis System \ Parking Ticket System and RMV Data Exchange Systems \ Towed Vehicle System \ Internal Affairs System \ Liquor Law and Lodging House Tracking System \ Department Property Tracking System, Vehicle Inspection-Equipment System, and Hackney System . Over the last few years we have updated the foundation of the operating system to C# (C-Sharp) and new applications such as Traffic Case Management System and Crisis Intervention System have been written in the C# environment.

The new Larimore System also has developed Apps for smart phones and tablets, both for IOS and Android operating systems. These modules will connect to the CAD system and the Records Management system and will be part of the new installation. The Total cost is estimated at \$485,000.00. Because of the need to upgrade the CAD portion during this fiscal year, funds in the amount of approximately \$65,000.00 have been appropriated and the upgrade of the CAD will proceed during the current fiscal year. Therefore, we are seeking funding in the amount of \$420,000.00 to complete the entire project.

Estimated Cost: \$200,000

Time Schedule: Prior Year -- \$200,000 Property Tax / Free Cash

12. FIRE STATION RENOVATIONS

A study was made of the conditions of the fire stations and what was needed to maintain the integrity of the floors and building in regard to the newer, larger fire equipment. The work outlined in the report includes flooring, shoring, beams, columns, and structural work. The report also includes recommendations for the HVAC systems, generators, lighting, life safety, and mechanical, electrical, plumbing (MEP), along with other peripheral systems.

The report broke the work into three categories: (1) structural, (2) life safety systems, and (3) MEP. The recommended approach was to fund all required structural work in the first year (\$625,000 was approved in FY12), then fund life safety systems by stations as prioritized by the Fire Chief (FY13 – FY15), and then undertake the MEP work (starting in FY17). Given the work planned for Station 6 the funding schedule for Station 6 MEP work was moved from FY2021 to FY2017 in order to allow efficiencies with bids and project schedules. Additional structural work needed at this site is also included.

In addition, the Fire Chief has requested additional funding for industrial cleaning and reconfiguration of spaces to mitigate potential hazards in the stations. The project would include industrial cleaning of all non-porous surfaces and all duct work, painting of all walls and ceilings (hard surfaces), replacement of all acoustic/porous ceiling tiles, replacement of all window treatments, replacement of all (soft) furniture in living areas , replacement of all beds and mattresses and the replacement of any fabric partitions. The Town and Fire Department are committed to implementing all reasonable actions necessary to reduce and/or mitigate those exposures within our span of control.

This type of project has been implemented in Boston, and requires further study to develop a plan that takes into consideration the limitations of our current station configurations. The Town will spend FY2019 funds to conduct a study, which will provide MEP/FP systems, Architectural, Cost Estimating, Code Consulting and HAZMAT guidelines for the Fire Department. The CIP will need to be adjusted after the Town gets the results from the study.

The CIP as presented includes estimates for work at each for HVAC and lighting/communication system improvements as follows:

Sta 4 (Rt. 9/Reservoir Rd)	\$50,000(FY20)
Sta 1 (Brookline Village)	\$550,000 (FY20)
Sta 7 (Washington Sq)	\$670,000 (FY21)
TOTAL	\$1,270,000

Estimated Cost: \$1,655,000

Time Schedule:	Prior Year -- \$385,000	Property Tax / Free Cash
	FY 2020 -- \$600,000	Property Tax / Free Cash
	FY 2021 -- \$670,000	Property Tax / Free Cash

13. RADIO INFRASTRUCTURE

The upgrading of the radio infrastructure for the police and fire radio channels will need to be addressed, including the radio copper circuits connections as they will no longer be supported by Verizon. Police channel 1, and Fire channel 1 have not been upgraded for the last 20 to 25 years, Police channel 2 was built out about 13 years ago. According to the Federal Communications Commission (FCC) the typical life of radio equipment is 7 to 10 years; in reality radio systems are good for 12 to 15 years. Either way, we are overdue for infrastructure upgrade to our radio systems. Currently, the majority of our radio infrastructure, is considered by Motorola to be, "end of life" and "end of service," since parts do not readily exist for this equipment.

We have not been able to do any upgrades or improvements on the core equipment since the FCC has a freeze on T- Band radio frequencies, which Brookline Police and Fire operate on. The T-Band frequencies operate in the 470-512 MHz band. The thought was the FCC was going to auction off the T-Band frequencies to private carriers, then replace and pay for the radio systems that operated in the T-Band spectrum. This has not happened, and the FCC has found that no wireless carrier is interested in bidding on this spectrum. Congress will have to rule within the next year to eliminate the auction of T- Band, so public safety agencies can move forward with their systems.

The project will consist of replacing Police channels 1 and 2, Fire channel 1 along with the subscriber radios (Portable and Mobile radios) for both departments.

Working with Motorola the estimated cost to build out these 3 radio channels infrastructure along with the subscriber costs is \$3,944,577.30

The break down provided by Motorola is:

Police = \$1,690,437.45 (Police Infrastructure- 2 radio channels = \$672,225.75 Police Subscribers = \$1,018,211.70)

Fire = \$937,953.25 (Fire Infrastructure = \$388,486.35 Fire Subscribers = \$549,466.90)

Shared Costs Total = \$1,316,166.60

The Town plans to lease-finance the cost of this project over a 5-year period with an estimated lease payment of \$900,000 per year.

Estimated Cost: \$4,500,000

Time Schedule:	FY 2020 -- \$900,000	Property Tax / Free Cash
	FY 2021 -- \$900,000	Property Tax / Free Cash

FY 2022 -- \$900,000	Property Tax / Free Cash
FY 2023 -- \$900,000	Property Tax / Free Cash
FY 2024 -- \$900,000	Property Tax / Free Cash

14. REFURBISH DRAFTING PIT

The Town of Brookline recently achieved an ISO Class 1 rating which directly effects the insurance rates of all property owners. Part of the process of achieving and maintaining this classification rests on the town's ability to meet certain benchmarks with regard to water supply.

One important aspect of this standard is our ability to maintain our compliment of fire engine's at their peak capacity. Each year, the department is required to perform "pump testing" on our engines. To accomplish this the engine must "draft" water from a static source, and be able to maintain the internal pump pressure necessary to pump at maximum capacity.

Our decades old drafting pit located at Station 6 (Hammond St) used to perform this vital pump testing in the past is currently out of service, and in desperate need of refurbishment. The refurbishment process would entail, removing the stagnant water that is currently in place, pressure cleaning the interior surfaces in order to apply an epoxy waterproofing to the walls and floor; and installation of a new pipe to replace the broken/leaking pipe that is rendering the equipment unusable.

Estimated Cost: \$50,000

Time Schedule:

FY 2020 -- \$50,000	Property Tax / Free Cash
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LIBRARY**15. PUTTERHAM LIBRARY BATHROOM RENOVATIONS**

With the exception of one recently installed ADA compliant bathroom, all 5 bathrooms at the Putterham library are original to the construction of the building in 1961. They are cramped, unattractive, frequent victims of plumbing problems, and are non-compliant with ADA laws.

Replacement of the two bathrooms outside the program room with one ADA accessible, unisex bathroom, replacement of the two bathrooms at the front of the library near the circulation desk with one ADA accessible, unisex bathroom, and replacement of the staff bathroom in the basement with an ADA accessible, unisex bathroom (\$150,000).

Estimated Cost: \$150,000

Time Schedule: Prior Year -- \$150,000 Property Tax / Free Cash

16. RENOVATION OF THE MAIN LIBRARY

In 1999 the Trustees, the Massachusetts Board of Library Commissioners (MBLC), and the Town of Brookline worked together to undertake a large-scale renovation of the Main Library at 361 Washington St. The renovation took 4 years, and enhanced the already beautiful facility. The library has been vigorously and consistently used since then, and has held up very well.

What could not, perhaps, have been anticipated in 1999 was the explosive change in information delivery methods. The internet itself, social media, online shopping, and online researching were in their infancy. Many people still didn't have home computers, and smart phones had not yet been invented. Libraries were providing some terminals for patrons to access the internet, but the lion's share of the computing that was happening in libraries involved typing letters and papers. In fact, futurists say that libraries will change exponentially faster in the next 20 years than they have in the last 20 years.

As the internet culture has evolved, so have the needs of library patrons. Room reservations are up, people are looking for free study space, group meeting space, and teleconferencing space. Almost everyone who comes to our libraries has a gadget in hand and eventually needs a place to charge it.

When this library was renovated, 20 years ago now, libraries were still quite book centric. While books are still our brand (and our driver, statistically), print circulation is flat. The increases we see across circulation are almost entirely digital with streaming services like Kanopy,

Hoopla, Libby, Lynda.com providing educational and entertainment content. This might suggest that we are seeing less patrons come through our doors, but in fact, it is the opposite. Statistics show that more people are coming to the library, attending more programs, using more internet sessions, taking advantage of classes taught by librarians, and conducting meetings, tutoring, and study groups than ever before. We have made some very low cost adjustments to try to create more workspace and study space in the library by rearranging collections, expanding youth services areas, and creating quiet zones. We have amended policies to be friendlier to the devices patrons rely on daily such as cell phones, and services like Skype.

However, none of this is going to serve to meet the needs of future library patrons. We need to add a number of features that library patrons come to expect, including, but not limited to:

- Small meeting/study rooms
- Teleconferencing facilities
- Better data access
- Flexible spaces
- Makerspace
- Kitchen for instruction
- Conference rooms
- Better electrical access
- Wireless charging
- Craft/Play spaces
- Gender Neutral restrooms
- Updating AV technology for presentations and programming

Back of the house needs loom large as well:

- Climate controlled preservation vault
- Additional offices
- Storage (pianos, chairs, craft/art/program supplies, office supplies, custodial supplies/machines, storage for extra shelving/furniture)
- Meeting space for staff committee/department meetings
- Move Rare Books Room away from HVAC system

And finally, there are some dreams that we would love to consider:

- Rooftop greenspace, story time area
- Digital exhibit hall
- Expanded café space with noise control
- Digital wayfinding technology (smart building tech)

The current facility is 67,300 sq. feet. With an additional 10,000 sq. feet added to accommodate the needs of the public, the estimated cost of the renovation would be \$38,500,000.

Funding could be provided from three primary channels:

MBLC: estimated =\$12,100,000

Town: estimated = \$19,800,000

Private: estimated = \$6,600,000

The Town would assume roughly 51% of the cost of the project, with the remainder potentially funded by the MBLC and private donors.

Estimated Cost: \$38,500,000

Time Schedule: Future Years -- \$38,500,000 General Fund Bond/State Grant/Other

TRANSPORTATION

17. TRAFFIC CALMING / SAFETY IMPROVEMENTS

Woodland Road Traffic Calming Project:

The project is the result of a Traffic Calming Request from neighborhood residents seeking to reduce the safety concerns on Woodland Road caused by large volumes of cut-through traffic bypassing the Route 9 corridor. The project will include intersection realignment on Woodland Road at the intersection with Laurel Road, intersection realignment on Woodland Road at the intersection with Heath Street (Pine Manor side), new crosswalk with Rectangular Rapid Flash Beacon on Heath Street at Woodland Road, 3 raised speed humps on Woodland Road (Pine Manor side), a 20 mph Safety Speed Zone on the Beaver Country Day side, and other elements approved by the Transportation Board. Additional roadway elements, including continuous sidewalks along one side to meet the requirements for ADA were approved and will be constructed at a later date as part of the Town’s pavement management program. Total cost requested for the traffic calming portions of this project are \$265,000.

Estimated Cost: \$650,000

Time Schedule:	Prior Year -- \$85,000	Property Tax / Free Cash
	FY 2020 -- \$265,000	Property Tax / Free Cash
	FY 2021 -- \$50,000	Property Tax / Free Cash
	FY 2022 -- \$50,000	Property Tax / Free Cash

FY 2023 -- \$50,000	Property Tax / Free Cash
FY 2024 -- \$50,000	Property Tax / Free Cash
FY 2025 -- \$50,000	Property Tax / Free Cash
Future Years -- \$50,000	Property Tax / Free Cash

18. BICYCLE ACCESS IMPROVEMENTS

Ivy Street (St. Mary’s Street to Carlton Street) Contra-flow Bicycle Lane Project:

The project will extend the existing contra-flow bicycle lane on Ivy Street to include the street segment between St. Mary’s Street and Carlton Street. This extension will provide a safe link allowing a cyclist to travel legally from St. Mary’s Street to Carlton Street and make a network connection to the existing north/south bicycle accommodations which run between the BU Bridge via Ivy Street and Essex Street and the Longwood Medical Area via Chapel Street. Contra-flow bicycle lanes are bicycle lanes designed to allow bicyclists to ride in the opposite direction of motor vehicle traffic. They convert a one-way traffic street into a two-way street: one direction for motor vehicles and bikes, and the other for bikes only. The proposed design includes industry best standards using a buffered yellow lane line marking between the motor vehicle and the contra-flow bicycle. The Town of Brookline has had several contra-flow bicycle lanes, including on the portion of Ivy Street from Essex Street to Carlton Street, installed for many years without any reported incidents of accidents which mirror’s the experience of Cambridge and other municipalities throughout the United States.

St. Mary’s Street (Mountfort Street to Beacon Street) Shared Lane Markings Project:

The project will provide shared lane markings (commonly known as ‘sharrows’) in both directions on St. Mary’s Street between Mountfort Street and Carlton Street. These markings will provide a regional network connection between the Commonwealth Avenue bike network in the City of Boston and the Beacon Street bike lanes in Brookline as well as, when combined with the Ivy Street Contra-flow Bicycle Lane project, to the Carlton Street route to the Longwood Medical Area. While ‘Sharrows’ are a lesser form of bicycle accommodation, according to the National Association of City Transportation Officials (NACTO) Bike Design Guide sharrows on narrow roadways such as St. Mary’s Street (27 feet curb to curb) are used to raise driver awareness of the need to share the road with cyclists, inform the cyclist on the proper location to ride to avoid right side hazards, especially parked motor vehicle doors, and provide guidance on network connections which are all goals of this project.

Naples Road Project:

This is for the shared lane marking portion of the Naples Road Improvement Project as part of the Babcock Street 2 street Complete Street Plan approved by the Transportation Board and Select Board. The remainder of the project, including intersection realignments, new crosswalks, ADA compliant wheel chair ramps, and miscellaneous signs and markings will be covered under Chapter 90 funds.

Total cost requested for all three Bicycle Access Improvement projects is \$31,000.

Estimated Cost: \$207,775

Time Schedule:	Prior Year -- \$176,775	Property Tax / Free Cash
	FY2020 -- \$31,000	Property Tax / Free Cash

19. PARKING METER TECHNOLOGY UPGRADE

As parking meter rates increase and less people carry coins users of our parking meter system have continuously requested that the Town implement new parking meter technologies to offer alternative forms of payment. In 2013, the Town of Brookline upgraded our metered public parking supply to provide improved customer convenience, ensure a regular turnover of spaces in our high demand areas, and improve municipal maintenance and collection operations. This deployment included the installation of Digital Luke multi-space parking meters in public parking lots and over 500 IPS single space credit card acceptance parking meters on-street in our high use districts along portions of Beacon Street, Harvard Street, Kent Street, and Brookline Avenue. Use of these single space parking meters have been widely accepted and supported by general users, merchants, and others. As parking meter rates increase and less people carry coins, the Brookline Chamber of Commerce and other business and civic leaders have requested that the Town replace the remaining 1,320 POM coin only single head parking meter mechanisms with IPS credit card accepting parking meters over a 5 year period. The per unit price of \$610 per mechanism includes meter mechanism, installation and commissioning, and extended 12 month warranty.

Estimated Cost: \$483,120

Time Schedule:	FY 2020 -- \$161,040	Property Tax / Free Cash
	FY 2021 -- \$322,080	Property Tax / Free Cash

20. TRANSPORTATION NETWORK COMPANY FUNDS

The Town received \$207,442 in funds in FY19 from the State assessment on transportation network companies (TNCs), such as Uber and Lyft. One half of the \$0.20 per ride assessment was distributed to the Town and can be appropriated “to address the impact of transportation network services on municipal roads, bridges and other transportation infrastructure or any other public purpose substantially related to the operation of transportation network services in the city or town including, but not limited to, the complete streets program established in [G.L. c. 90I, § 1] and other programs that support alternative modes of transportation.” St. 2016, c. 187, § 8(c)(i).

As requested during the November 2018 Special Meeting process the Transportation Division staff will prepare projects and receive Transportation Board approval in advance of the anticipated July 2019 announcement of the amount of funds that the Town will receive. While the projects will likely be taken from the Complete Streets Prioritization Plan, the public process will allow for other uses to be explored and considered provided they meet the requirement for appropriation established by MGL. The expectation is that we will approve projects totaling \$200,000 (the July 2018 award amount) and have alternative projects ready if the funding level increases.

Because of the timing of the announcement and availability of funds for the municipality by the state, the budget item will require appropriation annually as part of the November Special Town Meeting.

Estimated Cost: \$1,607,442

Time Schedule:	Prior Year -- \$207,442	State Grant
	FY 2020 -- \$200,000	State Grant
	FY 2021 -- \$200,000	State Grant
	FY 2022 -- \$200,000	State Grant
	FY 2023 -- \$200,000	State Grant
	FY 2024 -- \$200,000	State Grant
	FY 2025 -- \$200,000	State Grant
	Future Years -- \$200,000	State Grant

ENGINEERING/HIGHWAY

21. STREET REHABILITATION - TOWN

In 1992, the Department of Public Works (DPW) undertook a comprehensive study of its roads and implemented a pavement management system. The system was designed to bring Town-owned streets to a sufficient level of repair such that the roads could be maintained without undertaking costly full reconstruction. From 1992 to 1997, the Town made some progress in this regard, but funding was inconsistent. Starting in 1997, the Town began allocating \$1 million per year to streets, in addition to Chapter 90 funding from the State.

Based on the recommendations of the 2007/2008 Override Study Committee (OSC), the 2008 Override approved by the voters included \$750,000 for streets and sidewalks, to be increased annually by 2.5%. In FY19, the appropriation is recommended at \$1.71 million (the original \$1 million base plus the \$300,000 added in FY09 increased annually by 2.5%).

Estimated Cost: \$16,300,000

Time Schedule:	Prior Year -- \$3,110,000	Property Tax / Free Cash
	FY 2020 -- \$1,750,000	Property Tax / Free Cash

Capital Improvements Program, 2020-2025

Town of Brookline, MA

FY 2021 -- \$1,790,000	Property Tax / Free Cash
FY 2022 -- \$1,830,000	Property Tax / Free Cash
FY 2023 -- \$1,880,000	Property Tax / Free Cash
FY 2024 -- \$1,930,000	Property Tax / Free Cash
FY 2025 -- \$1,980,000	Property Tax / Free Cash
Future Years -- \$2,030,000	Property Tax / Free Cash

22. STREET REHABILITATION - STATE

The State provides monies under its Chapter 90 program for improvements to certain streets. About 1/3 of Brookline's streets are eligible for 100% State reimbursement. This money supplements the funding appropriated from Town funds for street rehabilitation. An annual \$300 million statewide Chapter 90 program is assumed.

Estimated Cost: \$7,684,840

Time Schedule:	Prior Year -- \$960,605	State Grant
	FY 2019 -- \$960,605	State Grant
	FY 2020 -- \$960,605	State Grant
	FY 2021 -- \$960,605	State Grant
	FY 2022 -- \$960,605	State Grant
	FY 2023 -- \$960,605	State Grant
	FY 2024 -- \$960,605	State Grant
	Future Years -- \$960,605	State Grant

23. SIDEWALK REPAIR

The Department of Public Works developed a sidewalk management program. Some sidewalks are reconstructed as part of the street reconstruction program; those that are not are funded under this program. Based on the recommendations of the 2007/2008 Override Study Committee (OSC), the 2008 Override approved by the voters included \$750,000 for streets and sidewalks, to be increased annually by 2.5%. Of the FY09 override amount, \$50,000 was appropriated for sidewalks. In FY19, the appropriation is recommended at \$320,000 (the original \$200,000 base plus the \$50,000 added in FY09 increased annually by 2.5%).

Estimated Cost: \$2,794,000

Time Schedule:	Prior Year -- \$320,000	Property Tax / Free Cash
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FY 2020 -- \$328,000	Property Tax / Free Cash
FY 2021 -- \$336,000	Property Tax / Free Cash
FY 2022 -- \$344,000	Property Tax / Free Cash
FY 2023-- \$353,000	Property Tax / Free Cash
FY 2024 -- \$362,000	Property Tax / Free Cash
FY2025 -- \$371,000	Property Tax / Free Cash
Future Years -- \$380,000	Property Tax / Free Cash

24. PARKING LOT REHABILITATION

Since its construction in 1965, the Centre Street parking lot has not had any substantial maintenance work done. Repairs have been more reactive and of the "band-aid" type and significant renovations in terms of curbing, pavement, and associated improvements are necessary. There is a great opportunity for the Town to identify and then integrate other needs confronting Coolidge Corner into planning for the parking lot, thereby promoting an efficient use of the publicly owned parcel. The \$205,000 shown in Future Years is the estimate for the more traditional repaving and resetting of curbing.

Estimated Cost: \$205,000

Time Schedule: Future Years -- \$205,000 Property Tax / Free Cash

25. FIRE ALARM CALL BOX SYSTEM

The Department of Public Works operates and maintains the Town's Fire Alarm Call Box System that consists of 297 street call boxes along the public way, 203 master station call boxes within buildings of which 42 are publicly owned, and a network of underground conduit and cable and overhead cable providing both power to the boxes and communication to central dispatch at the Public Safety Building. The system provides notification to Dispatch for deployment of fire resources and emergency medical response. The DPW's ability to maintain this aging system has been hampered by inaccurate mapping of conduit and cable locations as well as out-of-date equipment. In 2015, the DPW and the Fire Department engaged the services of Environmental Partners Group, Inc. to update the entire system inventory, perform a condition study and recommend options for the upgrade or replacement of the system. Information gathered from central dispatch has also revealed that only 239 pulls were recorded over a 10 year period from 130 street boxes and 167 street boxes had no activity over the same 10 year period. The following options were provided by EPG to upgrade or replace the system:

1. Repair the existing hard-wired system (\$3,800,000)

2. Replace 162 of the 297 street boxes and all 42 public master boxes with solar powered wireless boxes and abandon the hard-wired network (\$2,380,000)

3. Replace all 297 street boxes and all 42 public master boxes with solar powered wireless boxes and abandon the hard-wired network (\$4,100,000)

Revised Recommendation:

Since the completion of the study, the Fire Department has conducted a further review of the system needs and has concluded that only 80 street boxes are required to provide town-wide coverage. As a result, the DPW has recalculated the project recommendation as follows:

- Replace 42 Master Boxes with wireless boxes (\$295,000)
- Replace 80 Street Boxes with solar powered wireless boxes (\$765,000)
- TRX Legacy dispatch system upgrade (\$65,000)

Estimated Cost: \$1,125,000

Time Schedule: FY 2020 --- \$1,125,000 Property Tax / Free Cash

WATER/SEWER

26. SINGLETREE HILL TANK IMPROVEMENTS

The Singletree Hill water storage tank provides the water distribution system with storage and operating reserves. Scheduled maintenance requires that the interior and exterior of the tank be reconditioned every 10 to 15 years. The interior was completely renovated in 2008 while the exterior was last completed in 2003. These funds will provide for the complete restoration of the interior surface in FY20.

Estimated Cost: \$490,000

Time Schedule: FY 2021 -- \$490,000 Water & Sewer Enterprise Fund Budget

27. STORMWATER IMPROVEMENTS & PERMIT COMPLIANCE

The EPA’s Stormwater Phase II Rule establishes an MS4 stormwater management program that is intended to improve the Town’s waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. This project includes consulting services required for compliance with EPA's Phase II MS4 Permit and installation of structural lining in existing drain crossings along the MBTA C Line and D Line.

Estimated Cost: \$900,000

Time Schedule:	FY 2020 -- \$300,000	Water & Sewer Enterprise Fund Budget
	FY 2021 -- \$300,000	Water & Sewer Enterprise Fund Budget
	FY 2022 -- \$300,000	Water & Sewer Enterprise Fund Budget

28. WATER SYSTEM IMPROVEMENTS

Design and construction of proposed water system improvements.

Estimated Cost: \$2,000,000

Time Schedule:	FY 2020 -- \$2,000,000	Water & Sewer Enterprise Fund Bond
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29. WATER METER MOBILE TRANSMISSION UNIT (MTU) REPLACEMENT

The Town's water meters and infrastructure were installed in 2006. The batteries of the MTU's (mobile transmission units), which transfer meter consumption to the collectors for billing are nearing the end of their useful life. This program will propose to replace all 10,000+/- MYU's over a four year period.

Estimated Cost: \$1,090,000

Time Schedule:	Prior Year -- \$265,000	Water & Sewer Enterprise Fund Budget
	FY 2020 -- \$265,000	Water & Sewer Enterprise Fund Budget
	FY 2021 -- \$280,000	Water & Sewer Enterprise Fund Budget
	FY 2022 -- \$280,000	Water & Sewer Enterprise Fund Budget

30. WASTEWATER SYSTEM IMPROVEMENTS

This on-going project provides funding for the rehabilitation of the wastewater collection system (sanitary sewer). Rehabilitation was based on the recommendations of the Wastewater Master Plan completed in 1999. Previously construction projects to correct sewer system deficiencies targeted: 1) structural improvements, 2) sewer and storm drain separation and 3) hydraulic capacity restoration. Moving forward the primary focus will be on the removal of inflow and infiltration sources with the overall goals of eliminating sewerage backups into homes and businesses and lowering MWRA wholesale costs by reducing extraneous flows. Funding for this project should ultimately enhance the efficiency of the wastewater collection system and help to lower MWRA wholesale costs.

Estimated Cost: \$3,000,000

Time Schedule: Prior Year -- \$3,000,000 Water & Sewer Enterprise Fund Bond
FY 2020 -- \$3,000,000 Water & Sewer Enterprise Fund Bond

31. 44 NETHERLANDS ROAD - IMPROVEMENTS

Project includes replacement of crushed floor drain system and concrete floor.

Estimated Cost: \$605,000

Time Schedule: Prior Year -- \$150,000 Water & Sewer Enterprise Fund Budget
FY2020 -- \$455,000 Water & Sewer Enterprise Fund Budget

PARKS/PLAYGROUNDS

32. AMORY TENNIS COURTS, PARKING AND HALLS POND RENOVATION

This item includes the reconstruction of the drainage, subgrade, irrigation and clay tennis courts and associated infrastructure at Amory Park. It also allows for improvement to drainage and reconstruction of the parking lot and entrance to the park, picnic areas and includes rehabilitation of the existing boardwalk structure and pathways at the Halls Pond Conservation Sanctuary. The current board walk structure was installed in 2002 as a component of the overall restoration of the entire Conservation Sanctuary. Heavy use of the area is

causing the decking and railings of the boardwalk to degrade, and the frequency of repairs is increasing. This project will remove the existing decking and railings, leave the piers and substructure in place, and install new pressure treated decking and handrails to ensure visitors will have a safe, and accessible, boardwalk system. This project will impact approximately 600 linear feet of boardwalk with a low bump rail, 140 linear feet with full handrails on both sides, and two overlook platforms.

Estimated Cost: \$1,700,000

Time Schedule: FY 2025 -- \$1,700,000 Property Tax / Free Cash

33. CYPRESS PLAYGROUND & THOMAS P. HENNESSEY ATHLETIC FIELDS

Cypress Playground is a 5.22 acre park located in the heart of Brookline, adjacent to the High School, Tappan Gym and Kirrane Aquatic Center. The park has two softball fields that are shared with a rectangular natural turf field that serve high school sports, adult leagues and year round recreational programming and summer camps. A large seating area and full basketball court are located at the far side of the athletic playing fields. The park has a spray pool, picnic area, play equipment for tots and children and a sledding hill.

This renovation includes new play equipment for 2-5 and 5-12 year-old children, repair of a perimeter retaining wall, new curbing, new water play, pathways, drainage improvements, new basketball court, updated picnic area and seating, plantings, new irrigation, athletic field light improvements/replacement and installation of a full competitive sport level synthetic turf field. The Park and Recreation held three public scoping sessions to discuss the elements of the project and to develop a project budget. The public provided a great deal of input regarding the merits and disadvantages of both synthetic and natural turf. The Commission decided to establish a budget of \$6.65 million, however decided to hold the final decision on the material for the athletic field for the detailed design review process that will commence in 2-3 years. This allows the public and commission time to evaluate the success of the new synthetic turf field at the Devotion School that will have a natural infill material (geofill made with coconut fiber) and the replacement synthetic turf system at Downes Field that will also have an alternative infill system. The Commission felt that it would be beneficial for the community to try these two systems, evaluate new technologies and make the decision regarding the construction specifications for the athletic fields with the latest and most relevant information at the time. \$240,000 in FY2019 will be applied to design services and preparation of the engineering survey. Of the \$6.65 million construction budget, \$2.4 million is part of the Town’s property tax / free cash CIP for the High School project and \$4.25 million was included in the High School Expansion and Renovation debt exclusion.

Estimated Cost: \$240,000

Time Schedule: FY Prior Year -- \$240,000 Property Tax / Free Cash (Design)

34. FISHER HILL GATEHOUSE SAFETY AND STRUCTURAL IMPROVEMENTS

Built in 1887, the Fisher Hill Reservoir Gatehouse was designed by Arthur H. Vinal, City Architect of Boston from 1884-1887. He is best known for his Richardsonian Romanesque High Service Building at the Chestnut Hill Reservoir, also built in 1887. The Gatehouse regulated the flow of water in and out of the reservoir basin and is emblematic of the immense civic pride in public waterworks at the turn of the last century.

The Fisher Hill Gatehouse is in need of interior structural and safety improvements. This project provides for a below grade utility room, floor inserts in the open chambers to make the space safe and accessible, lighting, interior window treatment, painting and repointing.

Estimated Cost: \$175,000

Time Schedule: Future Years -- \$175,000 Property Tax / Free Cash (Construction)

35. HARRY DOWNES FIELD, PLAYGROUND & SYNTHETIC TURF REPLACEMENT

Harry Downes playground was last renovated in 1993. The playground equipment, picnic area, access and egress points, accessible pathways, park furniture, safety lighting and athletic fields are in need of complete renovation/replacement. At the request of the community this budget item includes a water play/spray amenity for the hot summer months. The athletic fields are used to program lacrosse, soccer, rugby, softball and football, in addition to track and field practice and meets. The natural grass field will be renovated and the synthetic turf surface will be replaced.

The synthetic turf field and track was installed in 2006. The synthetic turf carpet has a warranty of 8 years and an anticipated life cycle of 10-12 years and, depending upon use, may need to be replaced more frequently. In FY19, the field will be 13 years old. The carpet has suffered several tears requiring repair and the field is in need of regrading. The project involves removing the existing carpet and infill material, laser grading the sub base, replacing the synthetic turf, safety pad and installing new infill. The comfort station will be fully rehabilitated to comply with ADA and provide improved storage and maintenance facilities. Funding for construction of the total project is estimated to cost \$2,450,000 in FY19.

Estimated Cost: \$2,450,000

Time Schedule: Prior Year -- \$2,450,000 General Fund Bond (Construction)

36. LARZ ANDERSON PARK

With over 65 acres, Larz Anderson Park is the largest park in Brookline, is listed on the National and State Registers of Historic Places and is the flagship park of the Town with many architecturally significant buildings, structures and fences, athletic fields, play equipment, picnic areas, walking paths, an ice rink, significant trees, a water body, sweeping slopes and magnificent views of the City of Boston.

The FY20 request (\$600,000) is for completion of full depth reclamation/reconstruction of the roadway, associated handicapped accessible paths, parking and safety improvements, upgraded lighting, overall pathway improvements and restoration of the stairs that are currently in poor and deteriorating condition.

The \$2.2 million budget in FY21 and the \$2.5 in FY24 is for the Italianate Garden and the Maintenance Yard. Larz Anderson Park shows many traces of the three major cultural influences on the Anderson's aesthetics and lifestyle: Italy, Japan and England. The Andersons had a vision for their Brookline home that would take them nearly 20 years to realize. They hired the landscape architect and artist Charles A. Platt to design a sunken Italian garden at the top of the hill that would embody their love of Italy. The Italian Garden infrastructure that remains is in poor and unstable condition. The request for improvements is to make structural repairs to the walks, stairs and walls, restore the gazebo on the east side of the garden (to match the restoration of the west side that was completed several years ago), removal of invasive vegetation and replacement with appropriate planting.

Just below the Italian Garden was the Agricultural and Horticultural area for the Anderson Estate. Isabel and Larz had greenhouses, a hen house, a rose garden, garden shed, and maintained extensive agricultural operations to support themselves and their staff. These operations, later to be replaced by the Parks and Open Space Maintenance Garages, were surrounded by significant concrete/stucco walls. The massive walls have shifted significantly and are cracking and deteriorating. The walls and access gate/door are in need of complete replacement (similar to the replacement of the perimeter wall on Goddard Avenue that was completed several years ago).

Estimated Cost: \$13,425,000

Time Schedule:	Prior year -- \$3,125,000	General Fund Bond/ Property Tax/Free Cash
	FY 2020 -- \$600,000	Property Tax/Free Cash
	FY 2021 -- \$2,200,000	General Fund Bond
	FY 2024 -- \$2,500,000	General Fund Bond
	Future Years -- \$5,000,000	General Fund Bond

37. MURPHY PLAYGROUND

Murphy Playground, located between Kent, Bowker and Brook Streets, is a bowl shaped park with a noticeable grade change, retaining walls on three sides, play areas and a sloped open grass area. The park was last renovated in 1992 and is in need of renovation, including new play equipment for tots and older children, new perimeter fencing, improved accessibility, restoration of the field, rehabilitation of pathways, new hard court/basketball area, landscape improvements, review of picnic/passive areas, and new water play/spray pool with associated utilities. The design review process will revisit layout, grading, accessibility, safety, and functionality of the park. Construction for the project is estimated to cost \$915,000.

Estimated Cost: \$915,000

Time Schedule: FY 2022 -- \$915,000 General Fund Bond

38. RIVERWAY PARK

This is a continuing project of the Olmsted Park/Riverway Improvements program. This appropriation is for the reconstruction of the riverbanks that have eroded in some places by as much as 10 feet, replacement of failing or hazard trees, edge planting, lawn restoration, rebuilding the path system, and re-grading to prevent future erosion. The project was originally anticipated to be implemented in FY2003; however, with the Brookline/Boston/Commonwealth of Massachusetts/US Army Corps of Engineers joint restoration of the Muddy River, this phase of restoration will be coordinated with the overall flood mitigation, environmental quality, and historic preservation work that is currently being designed and permitted.

Estimated Cost: \$625,000

Time Schedule: Future Years -- \$625,000 Property Tax / Free Cash

39. ROBINSON PLAYGROUND

Robinson Playground is a 2.38 acre park located between Cypress, High and Franklin Streets in a dense neighborhood. The playground facilities include a youth baseball/softball field, paved basketball court, multi-use court play area, playground equipment, picnic area, and water play.

The renovation includes new playground equipment for older and younger children; water play, new irrigation and field renovation; basketball and multi-use court improvements; pathway and drainage improvements; and fence replacement. The \$100,000 in FY20 is for design while the \$1.15 million in FY21 is for construction.

Estimated Cost: \$1,250,000

Time Schedule: FY 2020 -- \$100,000 Property Tax / Free Cash (Design)
FY 2021 -- \$1,150,000 General Fund Bond (Construction)

40. SCHICK PLAYGROUND

Schick Park, located on Addington Road, is in need of a full site renovation to meet new safety and accessibility requirements. Renovations will include new play equipment for older and younger children, repointing the stone walls, repair of the wooden picnic shelter, field renovation, fencing, paving and site furniture. The estimated project cost is \$100,000 in FY21 for design/construction bid documents and \$1,025,000 in FY22 for construction.

Estimated Cost: \$1,125,000

Time Schedule: FY 2021 -- \$100,000 Property Tax / Free Cash (Design)
FY 2022 -- \$1,025,000 General Fund Bond

41. BOYLSTON STREET PLAYGROUND

Boylston Street Playground is located on Route 9 in Brookline across from the Old Lincoln School. It has a basketball court, play equipment, water play, picnic and seating areas, and a small athletic field most suitable for youth soccer, softball and baseball practices. In addition to a neighborhood playground, the playground serves as a site for recess and gym classes when the Old Lincoln School is occupied as a temporary school site during school renovation projects. The field is also used by the upper grades for athletic practices as necessary due to its proximity to the high school. The playground, basketball court, water play and athletic field are in need of full replacement/refurbishment along with associated utility upgrades. The renovation will include accessibility improvements into and through the site, fencing replacement, perimeter wall repointing, lighting to support evening use of the basketball court and social seating/gathering places to best serve community and school use.

Estimated Cost: \$1,350,000

Time Schedule: FY 2022 --\$110,000 Property Tax / Free Cash
FY 2023 --\$1,240,000 General Fund Bond

42. GRIGGS PARK RENOVATION

Griggs Park is located on a former wetland, in an enclave surrounded by houses and apartment buildings between Washington and Beacon Streets. The pathway is circular, rounding a collection of trees and vegetation, an open lawn area, seating and picnic areas, basketball and a playground. The playground was renovated in 1997. The project is estimated to cost \$90,000 for survey, design review, development and construction bid documents and \$1,120,000 for replacement of the play structures and safety surfacing for the 2-5 year olds and the school aged children. The pathway will be resurfaced, drainage improvements made, basketball and multi-generational/adult exercise area improved/added, lawn and plantings improved and furnishings replaced.

Estimated Cost: \$1,120,000

Time Schedule: FY 2025 --\$1,120,000 Property Tax / Free Cash

43. SOULE ATHLETIC FIELDS & SITE RENOVATION

The Soule Early Education Center is located on Hammond Street. The athletic fields on site serve Town-run daycare programs, multi-age athletic leagues, camps, and residents of all ages and abilities. The circulation and stormwater management of the site are in need of redesign and renovation. Funds will provide for design and construction for increased capacity and improvements to parking areas, pathway connections, storm drainage improvements, picnic areas, and improvement to Robson Athletic Field (Upper Soule). The estimated project cost is \$150,000 for design development, engineering, survey, and construction oversight with \$1,750,000 in construction costs.

Estimated Cost: \$1,900,000

Time Schedule: Future Years -- \$1,900,000 General Fund Bond

44. SKYLINE PARK SYNTHETIC TURF REPLACEMENT AND PARK IMPROVEMENTS

The synthetic turf carpet at Skyline Field is in need of replacement approximately every 10-12 years and potentially sooner depending upon use. The field was installed and opened to the public in June 2008. The existing carpet and infill will be removed and disposed of, the drainage layer/subbase will be laser graded, new carpet and new infill installed. This project also calls for some improvements to the site furnishings, plantings, pathways, improved connection to Lost Pond Sanctuary, renovate/construct comfort station and storage area and site amenities.

Estimated Cost: \$1,980,000

Time Schedule: FY2025 -- \$1,980,000 General Fund Bond

45. PARKS AND PLAYGROUNDS REHABILITATION & UPGRADE

This is an on-going town-wide program for the repair and replacement of unsafe and deteriorating playground, fence, and field facilities or components. Items funded under this program include fences, backstops, retaining walls, picnic furniture, turf restoration, bench replacements, play structures, safety surfacing, and drainage improvements. This program avoids more expensive rehabilitation that would be necessary if these items were left to deteriorate.

Estimated Cost: \$2,520,000

Time Schedule:	Prior Year -- \$305,000	Property Tax / Free Cash
	FY 2020 -- \$310,000	Property Tax / Free Cash
	FY 2021 -- \$310,000	Property Tax / Free Cash
	FY 2022 -- \$315,000	Property Tax / Free Cash
	FY 2023 -- \$315,000	Property Tax / Free Cash
	FY 2024 -- \$320,000	Property Tax / Free Cash
	FY 2025 -- \$320,000	Property Tax / Free Cash
	Future Years -- \$325,000	Property Tax / Free Cash

46. TOWN/SCHOOL GROUNDS REHAB

Town and School grounds require on-going structural improvements and repair. These funds will be applied to create attractive and functional landscapes and hardscape improvements including plant installations, regrading, reseeding, tree work, repair to concrete or asphalt walkways through the site, trash receptacles, bike racks, drainage improvements, retaining walls, and repairs to stairs, treads, railings, benches, or other exterior structures. This funding does not include capital replacement of areas over building structures or directly connected to the buildings, such as entrance stairways and ramps into the building that are under the Building Department's jurisdiction. This program avoids more expensive rehabilitation that would be necessary if these items were left to deteriorate.

Estimated Cost: \$1,380,000

Time Schedule:	Prior Year -- \$155,000	Property Tax / Free Cash
	FY 2020 -- \$160,000	Property Tax / Free Cash
	FY 2021 -- \$165,000	Property Tax / Free Cash

FY 2022 -- \$170,000	Property Tax / Free Cash
FY 2023 -- \$175,000	Property Tax / Free Cash
FY 2024 -- \$180,000	Property Tax / Free Cash
FY 2025 -- \$185,000	Property Tax / Free Cash
Future Years -- \$190,000	Property Tax / Free Cash

47. TENNIS COURTS/BASKETBALL COURTS

The Town has over 19 basketball courts and 36 hard-surface tennis courts. Over time, the court surfaces begin to deteriorate, crack, and weather. In order to maintain the integrity, safety, and playability of the courts, the Town needs to plan for the phased reconstruction/renovation/resurfacing of the courts, lighting and drainage improvements.

Estimated Cost: \$650,000

Time Schedule:	FY 2020 -- \$200,000	Property Tax / Free Cash
	Future Years -- \$450,000	Property Tax / Free Cash

48. COMFORT STATIONS

The Larz Anderson Comfort Station and service area are in need of accessibility, structural and ventilation improvements. The facility has public restroom facilities that are in need of structural upgrades, new doors, landings and facilities to better accommodate all ages and abilities. The project includes ventilation and flooring improvements, doors, fixtures and lighting. This project will also upgrade the service doors and area for the maintenance and office areas of the building as well as the facade. The office area will be upgraded to better serve staff and park visitors. Future year funding includes fixture, drainage, ventilation and access improvements to the comfort stations system wide.

Estimated Cost: \$400,000

Time Schedule:	FY 2020 -- \$350,000	Property Tax / Free Cash
	Future Years -- \$50,000	Property Tax / Free Cash

CONSERVATION/OTHER OPEN SPACE

49. TREE REMOVAL AND REPLACEMENT / URBAN FORESTRY MANAGEMENT

The tree removal and replacement program represents the Town's effort to balance street tree removals with plantings. As trees mature or are impacted by storm damage or disease, it is critical to remove these before they become public safety hazards. New tree plantings are also critical, as they directly impact the tree-lined character of the community, improve stormwater quality, provide oxygen, reduce heat impact in the summer, and improve the overall quality of life in Brookline. In addition, funding is included for on-going management work in the four conservation properties (Hall's Pond Sanctuary, Amory Woods Sanctuary, D. Blakely Hoar Sanctuary, and the Lost Pond Sanctuary) and parks. Storm damage, disease, and old age continue to reduce tree canopies. The funds will be utilized to remove hazard trees and provide structural, health, and safety pruning to prolong the life and viability of our significant trees. New trees will be planted in anticipation of the ultimate loss of existing mature trees.

Included in the requested annual amount is funding for Urban Forest Management to address a range of significant improvements needed, such as: tree removals, crown thinning, soil amendments, woodland canopy gap management, invasive removal, pest management, health and structural pruning, and planting throughout the Town's parks and open spaces. This program will help with resiliency to disease, pests and rapid decline attributed with trees unmanaged in an urban environment. The first phase of work will be performed in collaboration with the Olmsted Tree Society of the Emerald Necklace Conservancy who has worked with the Town of Brookline, City of Boston and Commonwealth of Massachusetts on an Urban Forestry Management Plan for the Emerald Necklace. The work outlined in this plan will be supported with public, private and grant funding. The protocol outlined in the plan shall be used to plan for and address urban forestry management priorities throughout Town.

Estimated Cost: \$1,920,000

Time Schedule:	Prior Year -- \$230,000	Property Tax / Free Cash
	FY 2020 -- \$235,000	Property Tax / Free Cash
	FY 2021 -- \$235,000	Property Tax / Free Cash
	FY 2022 -- \$240,000	Property Tax / Free Cash
	FY 2023 -- \$240,000	Property Tax / Free Cash
	FY 2024 -- \$245,000	Property Tax / Free Cash
	FY 2025 -- \$245,000	Property Tax / Free Cash
	Future Years -- \$250,000	Property Tax / Free Cash

50. OLD BURIAL GROUND

The Old Burying Ground, located on Walnut Street, is Brookline's first cemetery. Although the cemetery dates back to 1717, its appearance today reflects the ideals of the 19th century rural cemetery movement. The cemetery is listed as part of the Town Green National Register Historic District. It has been featured in a publication by the Massachusetts Department of Environmental Management (now Department of Conservation and Recreation) entitled "Preservation Guidelines for Historic Burial Grounds and Cemeteries". Research completed by both landscape architects and specialists in monument conservation indicates that the Town has much work to do in restoring the perimeter walls, markers and footstones, tombs, and monuments, as well as landscape improvements.

Estimated Cost: \$250,000

Time Schedule: Future Years -- \$250,000 Property Tax / Free Cash

51. WALNUT HILLS CEMETERY

The Walnut Hills Cemetery was established by the Town in 1875. Designed to preserve the natural features and effects for the landscape, the Cemetery provides visitors with a place of solace, natural beauty and quiet charm. The Walnut Hills Cemetery was listed in the National and State Registers of Historic Places in 1985.

In 2004, the Town completed a master plan for the Cemetery in order to set the parameters necessary to meet town cemetery needs of the future while maintaining the visual, service, quality and other features that make the Cemetery such a valuable historic cultural resource for the Town.

Current plans for the \$770,000 in Future Years, intended for lot expansion, is to use a combination of Town Tax dollars, cemetery perpetual care fund (SW01) and an expendable cemetery trust fund (TW23). A bond authorization with debt service funded from these accounts is also a possibility. Meetings with the Trustees will continue, and they will include discussions regarding potential changes to how revenues received for the sale of lots is currently split.

Estimated Cost: \$770,000

Time Schedule: Future Years -- \$770,000 Other (Cemetery Funds)

RECREATION

52. AQUATICS CENTER POOL FILTER REPLACEMENT

With over 50,000 patrons visiting the Evelyn Kirrane Aquatics Center annually, the facility is one of the most frequented public spaces in Brookline. The facility is now in need of new systems for filtering water for the three pools. The current systems are over 30 years old and have recently been failing, allowing sand back into the pool. A new system would be more energy efficient, filter water more quickly and effectively, saving the department in time, labor, and materials.

Estimated Cost: \$225,000

Time Schedule: Prior Year -- \$225,000 Property Tax / Free Cash

53. ELIOT PUBLIC RESTROOM RENOVATION

We have a need to update and renovate our public restrooms at Elliot. They get a good bit of use due to our two large playgrounds and access to an extensive field network.

Estimated Cost: \$50,000

Time Schedule: FY 2020 -- \$50,000 Property Tax / Free Cash

54. ELIOT RECREATION CENTER IMPROVEMENTS

The Eliot Recreation Center is home to many of Brookline Recreation's Administrative staff and houses many community programs and services. The center is in need of renovations including an updated HVAC system, as well as utility and network infrastructure upgrades. The project includes an additional 1000 sq ft space build out over the current boiler room to accommodate a badly needed conference room as well as upgrades to the perimeter drains around the building. Historically, there have been drainage issues that have impacted the first floor during significant weather events.

Estimated Cost: \$775,000

Time Schedule: Future Years -- \$775,000 Property Tax / Free Cash

SCHOOL

55. SCHOOL FURNITURE

This is a continuous program to upgrade furniture in all schools, which absorbs significant wear and tear annually. This program will replace the most outdated and worn items.

Estimated Cost: \$1,020,000

Time Schedule:	Prior Year -- \$100,000	Property Tax / Free Cash
	FY 2020 -- \$110,000	Property Tax / Free Cash
	FY 2021 -- \$120,000	Property Tax / Free Cash
	FY 2022 -- \$120,000	Property Tax / Free Cash
	FY 2023 -- \$100,000	Property Tax / Free Cash
	FY 2024 -- \$150,000	Property Tax / Free Cash
	FY 2025 -- \$150,000	Property Tax / Free Cash
	Future Years -- \$170,000	Property Tax / Free Cash

56. HVAC EQUIPMENT

These funds would be used to primarily replace the larger, more expensive parts up to and including the entire unit for air conditioners, HVAC equipment and boilers. A majority of the money would be used for ac compressor replacements. There are presently 199 permanent air conditioning systems in both Town and School buildings. Their sizes range from 2 tons to over 100 tons. The equipment age goes from 1975 up to 2017, with 112 units 10 years or older. Typically, air conditioning compressors last only 5 - 10 years. Depending on the size, costs can range from \$3,500 to \$150,000. Instead of being proactive, there is presently a reactive response when there is a failure, usually in very hot weather. The cost to repair is born out of the operations and maintenance budget (O&M). However, with the large increase in installations of AC equipment over the years, the O&M would not be able to handle a large cost such as this. The plan would be to replace compressors and do upgrades in the off season, based on age and conditions. The same applies for boilers and burners. Typically, a cast iron boiler will last 50-100 years. However, the Town has not been installing these types of boilers, installing efficient condensing boilers instead, which have a much shorter life span - 20-25 years. These monies would replace the boilers before there is a catastrophic failure (in the winter) during the summer months.

Estimated Cost:	\$1,100,000	
Time Schedule:	Prior Year -- \$150,000	Property Tax / Free Cash
	FY 2020 -- \$150,000	Property Tax / Free Cash
	FY 2021 -- \$150,000	Property Tax / Free Cash
	FY 2022 -- \$200,000	Property Tax / Free Cash
	FY 2025 -- \$50,000	Property Tax / Free Cash
	Future Years -- \$400,000	Property Tax / Free Cash

57. CLASSROOM CLIMATE CONTROL

Through FY17 to the present, requests have come to the School Director of Operations to add air conditioning and improve climate control in various buildings and for a variety of spaces. Requests have come from parents, staff and PTO members. Some requests stem from a documented medical need the school department must accommodate, and others stem from maintaining an environment that is conducive to teaching and learning. The buildings are designed and built to hold the heat in, and bring in fresh air per code. The heat rises and then gets contained, even with windows being opened. On days where the outside temperature is in the 80s or 90s top floors that also receive direct sunlight in the afternoons can often have room temperatures in excess of the outside temperatures and that distracts teaching and learning. The request for Lawrence, New Lincoln, Heath and possibly BHS identify existing spaces significantly impacted by the heat retention described above. The \$225,000 estimate will not cover all requests to improve building climate and temperature, but will allow the Building Department to begin addressing the most pressing needs.

Estimated Cost:	\$225,000	
Time Schedule:	FY 2019 -- \$225,000	Property Tax / Free Cash

58. UNDERGROUND OIL TANK REMOVAL

These funds would be used to remove underground fuel oil tanks, some almost 25 years old. The tanks came with a 30 warranty. There are 26 tanks at various school and town sites. New tanks would be installed inside of the buildings (1000 gallon or less) to replace larger (5000-15000 gallon) tanks. Also small 275 (typically) gallon tanks would be replaced with new tanks of the same size. The boilers are set up for dual fuel. There is no reason to remove and replace the boilers or burners as they function well. By installing a small, above ground tank, inside, we can have the backup function of using oil to heat the buildings in case of an emergency or gas shortage.

Some funding may come from the UST state fund. It is estimated that 50% of the costs would be reimbursed for the tank removals. Typical costs for tank removals would be in the \$50,000 range. If the tank leaks, the costs could be up to 10 times this amount.

Estimated Cost:	\$450,000	
Time Schedule:	FY 2021 -- \$100,000	Property Tax / Free Cash
	FY 2022 -- \$100,000	Property Tax / Free Cash
	FY 2024 -- \$100,000	Property Tax / Free Cash
	FY 2025 -- \$100,000	Property Tax / Free Cash
	Future Years -- \$50,000	Property Tax / Free Cash

59. TOWN/SCHOOL BUILDING - ADA RENOVATIONS

This annual program of improvements is requested in order to bring Town and School buildings into compliance with the Americans with Disabilities Act (ADA), which requires that the Town make public buildings accessible to all.

Estimated Cost:	\$680,000	
Time Schedule:	Prior Year -- \$75,000	Property Tax / Free Cash
	FY 2020 -- \$80,000	Property Tax / Free Cash
	FY 2021 -- \$80,000	Property Tax / Free Cash
	FY 2022 -- \$85,000	Property Tax / Free Cash
	FY 2023 -- \$85,000	Property Tax / Free Cash
	FY 2024 -- \$90,000	Property Tax / Free Cash
	FY 2025 -- \$90,000	Property Tax / Free Cash
	Future Years -- \$95,000	Property Tax / Free Cash

60. TOWN/SCHOOL BUILDING - ELEVATOR RENOVATIONS

The Town presently has 47 elevators, LULAs, and wheelchair lifts throughout all buildings. When a building is renovated, most elevators are upgraded (new controls, motors, cables, refurbishment of the car, etc.). Some elevators are also partially upgraded to meet the requirements of the existing building codes. The buildings that have not been renovated have elevators that are close to 30 years old. Maintenance is an issue and parts are increasingly difficult to find. The elevator's controller is basically a computer. The controller needs to be upgraded or replaced as technology progresses and older technology is not supported. This project would upgrade those cars and lifts with new equipment.

On schedule and presently fully funded is the modernization of the elevators and the Unified Arts Building (UAB) and the Lynch Rec Center.

Future elevators on the schedule include:

Heath	Pierce (SEC)	Highway Garage	Water Department
Baker School			
Estimated Cost:	\$700,000		
Time Schedule:	Prior Year -- \$300,000	Property Tax / Free Cash	
	FY 2021 -- \$100,000	Property Tax / Free Cash	
	FY 2022 -- \$100,000	Property Tax / Free Cash	
	FY 2024 -- \$100,000	Property Tax / Free Cash	
	Future Years -- \$100,000	Property Tax / Free Cash	

61. TOWN/SCHOOL BUILDING - ENERGY CONSERVATION

It is imperative that monies be invested to decrease energy consumption in Town and School buildings. Programs include, but are not limited to, lighting retrofit and controls, energy efficient motors, insulation, and heating and cooling equipment. In addition, water conservation efforts are explored. This program augments existing gas and electric utility conservation programs. A continued area of focus is building commissioning. Many years ago, a building's HVAC system was set up by multiple contractors and then signed off by the design engineer. Sometimes there would be control issues, leading to complaints or high energy usage. The Building Department, for all new projects, hires a Commissioning Agent. Recommissioning of certain buildings is suggested in order to confirm that the equipment was designed, installed and set up properly.

Estimated Cost:	\$1,580,000	
Time Schedule:	Prior Year -- \$180,000	Property Tax / Free Cash
	FY 2020 -- \$185,000	Property Tax / Free Cash
	FY 2021 -- \$190,000	Property Tax / Free Cash
	FY 2022 -- \$195,000	Property Tax / Free Cash
	FY 2023 -- \$200,000	Property Tax / Free Cash
	FY 2024 -- \$205,000	Property Tax / Free Cash
	FY 2025 -- \$210,000	Property Tax / Free Cash

62. TOWN/SCHOOL BUILDING - ENERGY MANAGEMENT SYSTEM

This project is to upgrade the energy management systems in Town and School buildings. A few of the larger buildings have older (30 years) energy management systems that have exceeded their life expectancy and replacement parts are no longer available. These systems would be replaced and upgraded with new web-based systems integrated into the Town’s existing computer network. Other systems would be upgraded with newer software or firmware. The Building Department will continue to work with the Information Technology Department on these projects. Software upgrades are needed at the High School, Lawrence, Pierce and Baker Schools in the next few years.

Estimated Cost: \$1,145,000

Time Schedule:	Prior Year -- \$125,000	Property Tax / Free Cash
	FY 2020 -- \$125,000	Property Tax / Free Cash
	FY 2021 -- \$125,000	Property Tax / Free Cash
	FY 2022 -- \$130,000	Property Tax / Free Cash
	FY 2023 -- \$130,000	Property Tax / Free Cash
	FY 2024 -- \$130,000	Property Tax / Free Cash
	FY 2025 -- \$130,000	Property Tax / Free Cash
	Future Years -- \$250,000	Property Tax / Free Cash

63. TOWN/SCHOOL BUILDING - ENVELOPE /FENESTRATION REPAIRS

In FY12, \$250,000 was appropriated for costs associated with repairs to the outside envelope of all Town and School buildings, including a visual inspection of the exterior of all buildings that will help prioritize these repairs. The outside envelope of facilities includes masonry, bricks and mortar, flashing, dental work, coping stones, metal shelves, and tower work. Some of these structures are over 100 years old and have never had exterior work done to them. A number of buildings have windows, door entrances, and other wall openings (fenestration) that are in need of repair/replacement. This causes water to penetrate into buildings behind walls and ceilings, causing security and safety problems. Also included in this program is any required chimney inspection and repairs, if appropriate, or the installation of new metal liners to connect to the gas burning equipment in the building.

A master plan was prepared by a consultant and includes a priority list and schedule and that calls for \$27.45 million over a 30-year period. The schedule has been reassessed by the Building Department and accounts for prior year savings with \$6.45 million required within the six-year period of this FY20 – FY25 CIP. Facilities addressed within this time frame include the following:

2020	Baker, Main Library, Public Safety, Soule Rec	2021	No work scheduled
2022	Fire Station 4, Larz Anderson Toilets, Lincoln	2023	Old Lincoln, Lawrence
2024	Health Ctr., Lynch Rec Ctr., Town Hall	2025	Muni Service Center, Phys. Ed Building, Old Lincoln
Estimated Cost:	\$8,800,000		
Time Schedule:	FY 2020 -- \$1,500,000	General Fund Bond	
	FY 2022 -- \$1,550,000	General Fund Bond+ Property Tax / Free Cash	
	FY 2024 -- \$1,500,000	General Fund Bond	
	FY 2025 -- \$1,850,000	General Fund Bond	
	Future Years -- \$2,500,000	General Fund Bond+ Property Tax / Free Cash	

64. TOWN/SCHOOL BUILDING - ROOF REPAIR/REPLACEMENT PROGRAM

A master plan for repair and replacement of roofs on all Town and School buildings was prepared by a consultant. The plan includes a priority list and schedule and calls for \$29.3 million over a 20-year period. Facilities addressed within this time frame include the following:

2020	No work scheduled	2021	Heath, Lawrence, Larz Skate Rink, Lincoln,
2022	Lawrence	2023	Driscoll
2024	No work scheduled	2025	Muni Service Ctr., Phys. Ed. Building

Estimated Cost:	\$9,450,000		
Time Schedule:	FY 2021 -- \$3,100,000	General Fund Bond	
	FY 2023 -- \$650,000	General Fund Bond	
	FY 2025 -- \$1,700,000	General Fund Bond	
	Future Years -- \$4,000,000	General Fund Bond + Property Tax / Free Cash	

65. PUBLIC BUILDING FIRE ALARM UPGRADES

The Town engaged with Garcia, Galuska & Desousa to conduct a study to assess the existing fire alarm and fire protection systems. The funding below will allow the Building Department to address the recommendations in the study to properly maintain and upgrade these systems.

Estimated Cost: \$1,950,000

Time Schedule:	Prior Year -- \$250,000	Property Tax / Free Cash
	FY 2021 -- \$300,000	Property Tax / Free Cash
	FY 2022 -- \$450,000	Property Tax / Free Cash
	FY 2024 -- \$300,000	Property Tax / Free Cash
	FY 2025 -- \$300,000	Property Tax / Free Cash
	Future Years -- \$350,000	Property Tax / Free Cash

66. TOWN/SCHOOL BUILDING - SECURITY/LIFE SAFETY SYSTEMS

Over the last number of years, several large capital projects have been undertaken that included security improvements in Town and School buildings. This program will extend the effort and improve areas where security may be lacking. In general, the plan calls for making all doors around the perimeter of a building more secure by replacing the doors, frames, door handles, and locks with electronic locks that may only be opened with a keypad and/or on a specific schedule. Only the front main entrance of the building would allow for general access. At the front door, a speaker and doorbell will be added to connect to the building's existing intercom or phone system for use by visitors. The lighting around each building will be improved and placed on a timer. A small camera system connected to a computer will be added at the main entrance to monitor access to the building.

School buildings will be a priority. Most schools are reasonably secure, but based on an assessment by the Police Department, security can and should be improved. These funds would also be used to continue the on-going process of replacement and installation of new and upgraded burglar alarms, fire alarm systems, sprinkler systems, emergency lighting, and egress signs.

Estimated Cost: \$1,430,000

Time Schedule:	Prior Year -- \$130,000	Property Tax / Free Cash
	FY 2020 -- \$260,000	Property Tax / Free Cash
	FY 2021 -- \$160,000	Property Tax / Free Cash
	FY 2022 -- \$170,000	Property Tax / Free Cash

FY 2023 -- \$170,000	Property Tax / Free Cash
FY 2024 -- \$180,000	Property Tax / Free Cash
FY 2025 -- \$180,000	Property Tax / Free Cash
Future Years -- \$180,000	Property Tax / Free Cash

67. TOWN/SCHOOL TRASH COMPACTOR REPLACEMENTS

Trash compactors need to be replaced at the following facilities:

Baldwin Baker Driscoll Heath High School UAB Lawrence New Lincoln Pierce Health

Estimated Cost: \$200,000

Time Schedule:	Prior Year -- \$100,000	Property Tax / Free Cash
	FY 2020 -- \$50,000	Property Tax / Free Cash
	Future Years -- \$50,000	Property Tax / Free Cash

68. SCHOOL REHAB/UPGRADES

This is an on-going school-wide program for the repair and upgrade of school facilities in between major renovation projects. Items funded under this program include large scale painting programs, new flooring, ceilings, window treatments and toilet upgrades. This program avoids more expensive rehabilitation that would be necessary if these items were left to deteriorate.

Estimated Cost: \$813,000

Time Schedule:	Prior Year -- \$230,000	Property Tax / Free Cash
	FY 2020 -- \$198,000	Property Tax / Free Cash
	FY 2021 -- \$115,000	Property Tax / Free Cash
	FY 2024 -- \$135,000	Property Tax / Free Cash
	Future Years -- \$135,000	Property Tax / Free Cash

69. HIGH SCHOOL ADDITION

Brookline High School is currently experiencing the initial wave of rapid enrollment growth that will increase the student body from 1,800 students in 2015, to as many as 2,600 students by 2023. Anticipating this growth, the School Committee, School Department, and Select Board have been leading an effort to expand, modernize, and renovate the facility.

In May 2018, Brookline voters supported a debt exclusion override to fund the expansion and renovation of Brookline High School. The project is now in the Design Development phase during which final design, floor plans and architectural drawings will be completed. William Rawn Associates, Skanska Construction and Hill Associates will support the Town and the Building Department from design development through construction to completion. The project will include a new building at the 111 Cypress Street site, a new Science, Technology, Engineering, and Math (STEM) building to replace the building at the corner of Tappan and Greenough Streets, renovations to the 3rd floor of the main building and the Tappan gymnasium, as well as improvements to Cypress Field. Demolition and construction is expected to begin in Summer 2021 and be completed by Summer 2021.

The project has been funded as follows:

Project Budget: \$205,600,000

111 Cypress bond authorization	\$16,400,000	debt exclusion (FY18 authorization)
Design Completion / Construction	\$151,800,000	debt exclusion
Design Completion / Construction	\$2,400,000	bond premium account
Design Completion / Construction	\$35,000,000	existing CIP capacity

Estimated Cost: \$189,200,000

Time Schedule: Prior Year -- \$189,200,000 General Fund Bond / Bond premium account

70. DRISCOLL SCHOOL

Since 2005, Brookline has experienced historic enrollment growth in its public schools. The K-8 elementary schools have grown by 40% going from 3,904 students in 2006 to 5,482 students in 2017, which is equivalent to adding three schools into our existing schools in just over 10 years. For a decade now, the Town and School Department have been addressing the expanding student population by studying potential sites for a new elementary school and by adding classrooms to existing schools by dividing classrooms; converting offices, locker

rooms, and hallways into classrooms; renting private buildings; and building new classrooms or adding modular classes. Despite adding nearly 60 classrooms to our existing schools through this “Expand-in-Place” strategy, the schools continue to be severely overcrowded.

On June 13th, the Town completed its third study since 2013 on selecting a site for a new school. The Select Board and School Committee approved moving forward with expanding the Baldwin School, expanding and renovating the Driscoll School, and renovating and possibly expanding the Pierce School.

Expanding and renovating Baldwin, Driscoll, and Pierce over time allows the town to address the enrollment increases in North Brookline and South Brookline while not overbuilding in either part of town. The Baldwin School will directly address the ongoing and expected student enrollment growth that is projected to add 375 more students within five years. Driscoll and Pierce have both grown by more than 57% since 2006, and neither school has received significant upgrades since the 1970s. The Baldwin and Driscoll projects will now begin what is known as the Design Feasibility Phase. The Town submitted an application earlier in the spring to partner with the Massachusetts School Building Authority to help ease the burden on the town of three significant capital projects.

After working throughout fall, the Driscoll School Building Committee has selected a preferred design options for the Driscoll School Building Project. Identifying these preferred designs is an essential step in the three-school, town-wide solution that will address the overcrowding and sub-standard learning spaces in the Public Schools of Brookline and begin to remedy the historic enrollment increases the Town has experienced for more than 10 years.

On November 15, the Driscoll School Building Committee selected Option H as the preferred design over three other designs. The committee identified Option H, known as the “Modified Star Design,” as the best option for many reasons including that it provides the best and most flexible arrangement of classrooms, increases useable play space by 20,000 square feet, and allows for the most daylighting of all the four options. The new building will be all new construction, replacing the existing building. It will be reoriented onto Washington Street, allowing the site’s open space to be more fully integrated into the residential neighborhood of Westbourne Terrace, Bartlett Street, and Bartlett Crescent and opening up the views of those who live on Westbourne Terrace which are now blocked by the existing building.

Estimated Cost: \$1,500,000

Time Schedule:	Prior Year -- \$1,500,000	Property Tax / Free Cash (Schematic Design)
	FY 2020 -- \$100,000,000	General Fund Bond (Design Completion / Construction)

71. DRISCOLL SCHOOL REHABILITATION

The Driscoll School is in need of a new HVAC system with temperature controls.

The building presently uses steam to heat the building. The steam HVAC system dates back to 1910 in the main section, 1928 and 1953 with the additions.

It is extremely difficult to find parts to maintain the systems. The system as it is now is hard to maintain, sometimes overheats or under heats parts of the building and there is a concern of proper ventilation and cooling air. The boilers were replaced in 1995. They are fully functional and operate well. The plan would be to convert them from a steam to a forced hot water system. This would allow better heating control plus save energy.

A new HVAC system (equipment, piping, ductwork and controls) would be installed to replace the existing equipment. The work would be done over two years (primarily in the summer months). Phasing would allow the building to remain occupied.

This project was proposed and designed before the Driscoll School was chosen as part of the plan to address the enrollment growth in the K-8 elementary schools and therefore plans for construction of the system have been put on hold. Should the new building project described above pass, and the building makes it through the winter, the Town plans to rescind this bond authorization at the May 2019 Town Meeting.

Estimated Cost: \$4,000,000

Time Schedule: Prior Year -- \$4,000,000 Property Tax / Free Cash

72. 9th SCHOOL AT BALDWIN

Since 2005, Brookline has experienced historic enrollment growth in its public schools. The K-8 elementary schools have grown by 40% going from 3,904 students in 2006 to 5,482 students in 2017, which is equivalent to adding three schools into our existing schools in just over 10 years. For a decade now, the Town and School Department have been addressing the expanding student population by studying potential sites for a new elementary school and by adding classrooms to existing schools by dividing classrooms; converting offices, locker rooms, and hallways into classrooms; renting private buildings; and building new classrooms or adding modular classes. Despite adding nearly 60 classrooms to our existing schools through this “Expand-in-Place” strategy, the schools continue to be severely overcrowded.

On June 13th, the Town completed its third study since 2013 on selecting a site for a new school. The Select Board and School Committee approved moving forward with expanding the Baldwin School, expanding and renovating the Driscoll School, and renovating and possibly expanding the Pierce School.

Expanding and renovating Baldwin, Driscoll, and Pierce over time allows the town to address the enrollment increases in North Brookline and South Brookline while not overbuilding in either part of town. The Baldwin School will directly address the ongoing and expected student enrollment growth that is projected to add 375 more students within five years. Driscoll and Pierce have both grown by more than 57% since 2006, and neither school has received significant upgrades since the 1970s. The Baldwin and Driscoll projects will now begin what is known as the Design Feasibility Phase. The Town submitted an application earlier in the spring to partner with the Massachusetts School Building Authority to help ease the burden on the town of three significant capital projects.

After working throughout fall, the Baldwin School Building Committee has selected a preferred design option for the Baldwin School Building Project. Identifying these preferred designs is an essential step in the three-school, town-wide solution that will address the overcrowding and sub-standard learning spaces in the Public Schools of Brookline and begin to remedy the historic enrollment increases the Town has experienced for more than 10 years.

The Baldwin School Building Committee met on November 19 to review all three preliminary design options and unanimously voted to recommend Option B “Solar Harvest” as the preferred design option. The Solar Harvest design allows for more natural light and daylighting, presents a less imposing facade to the residential neighbors to the west of the site, is more energy efficient, will have lower long-term operating costs, and provides collaborative spaces conducive to project-based learning and programming. Rebuilding and expanding the Baldwin School is the most cost effective way for the Town to add classroom capacity on one site.

Estimated Cost: \$1,500,000

Time Schedule:	Prior Year -- \$1,500,000	Property Tax / Free Cash (Schematic Design)
	FY 2020 -- \$82,000,000	General Fund Bond (Design Completion / Construction)

73. PIERCE SCHOOL

Since 2005, Brookline has experienced historic enrollment growth in its public schools. The K-8 elementary schools have grown by 40% going from 3,904 students in 2006 to 5,482 students in 2017, which is equivalent to adding three schools into our existing schools in just over 10 years. For a decade now, the Town and School Department have been addressing the expanding student population by studying

potential sites for a new elementary school and by adding classrooms to existing schools by dividing classrooms; converting offices, locker rooms, and hallways into classrooms; renting private buildings; and building new classrooms or adding modular classes. Despite adding nearly 60 classrooms to our existing schools through this “Expand-in-Place” strategy, the schools continue to be severely overcrowded.

On June 13th, the Town completed its third study since 2013 on selecting a site for a new school. The Select Board and School Committee approved moving forward with expanding the Baldwin School, expanding and renovating the Driscoll School, and renovating and possibly expanding the Pierce School.

Expanding and renovating Baldwin, Driscoll, and Pierce over time allows the town to address the enrollment increases in North Brookline and South Brookline while not overbuilding in either part of town. The Baldwin School will directly address the ongoing and expected student enrollment growth that is projected to add 375 more students within five years. Driscoll and Pierce have both grown by more than 57% since 2006, and neither school has received significant upgrades since the 1970s. The Baldwin and Driscoll projects will now begin what is known as the Design Feasibility Phase. The Town submitted an application earlier in the spring to partner with the Massachusetts School Building Authority to help ease the burden on the town of three significant capital projects.

On December 12, 2018 the Massachusetts School Building Authority (MSBA) Board of Directors met and voted to invite twelve communities including Brookline into the next stage of partnership, called the “Eligibility Period.”

Estimated Cost: \$2,000,000

Time Schedule:	FY 2020 -- \$2,000,000	General Fund Bond (Feasibility / Schematic Design)
	FY 2021 -- TBD	General Fund Bond (Design Completion / Construction)

74. CLASSROOM CAPACITY

The Public Schools of Brookline PreK-12 student population has grown by 29% since FY 2006 from 6,014 students to 7,777 in FY 2017. In FY17 (October 1), there are now 5,445 PreK-8 students compared with less than 4,095 in FY05, an increase of 33%.

While the increase in size of Brookline’s kindergarten enrollment has driven the majority of the growth, these larger elementary grades have moved up, consistent with the district’s decades-long pattern of near 100% cohort retention. They have already started arriving at the high school which has grown by 200 students since FY14 (1,802) to FY17 (2,001). Brookline High School has grown 4.1% in the last ten years, with a five-year growth of 12.7%. In the past five years, student enrollment at the high school has increased from 1,726 students to 2,001. The maximum capacity of the existing high school is between 2,000 and 2,200 without expansion. Our current 1st

through 4th Grades total 2,621 students and that cohort will be attending Brookline High School in grades 9-12 during the 2024-2025 school year. Our current 8th grade enrollment of 531 students is the lowest enrollment of the current K-8 grades, and will be replacing a 2017 graduating class of 481 students.

In order to create the classroom space necessary to accommodate this PreK-8 enrollment increase, a long series of well-planned larger-scale renovation projects and smaller-scale space conversion projects have been completed over the past decade. A total of 55 PreK-8 Classrooms were added through the use of an “Expand-in-Place” strategy since 2008 including but not limited to:

- 6 classrooms built at Heath;
- 4 classrooms built at Lawrence;
- 2 modular classrooms added at Baker;
- 11 BEEP classes moved out of K-8 buildings into leased commercial space;
- 4 classrooms in leased commercial space for Pierce;
- Gym and Fitness Room Rental for Pierce;
- 1 brand new school will be built at Devotion to add 12 classrooms; and
- Expanded use of the buffer zones to maintain class size at desired levels.
- FY18 we will bring online 4 classroom conversions from existing spaces. These are likely the last K-8 classroom spaces available in the district for conversion and reclaiming
 - Driscoll added a fourth section of Grade 3.
 - Lawrence added a fourth section of Grade 6.
 - Pierce added a fifth section of Grade 4.
 - Devotion added a fifth section of Grade 6.

The work of adapting the High School to accommodate the growing enrollment is underway with building or reclaiming a total of 9 classrooms. To accomplish this, more than fifty staff members from Brookline Early Education Program (BEEP), Office of Student Affairs, METCO, ELL, Operations (Custodians, Transportation, & Food Service), Brookline Adult and Community Education (BACE), Office of Strategy and Performance, and Steps to Success Inc., were all moved in FY16 to 24 Webster Place (leased). In FY 17, the Help Desk was moved to the Health Building to join the Town IT Department. Educational Technology moved to the Sperber Center at Pierce Elementary in FY17. The movement of these departments from the High School, Pierce (Sperber Center), and Town Hall Annex/leased space has allowed the district to reclaim classroom and small group instructional spaces at the high school to be used by new teachers and support staff needed due to increased enrollment.

The Classroom Capacity item in FY2020 and beyond covers the leases at the temples, 62 Harvard, 24 Webster Place, the Brookline Teen Center and the Baker modules with very limited funding to modify smaller spaces in existing buildings. The FY2020 – 2025 budgets assume continuation of those lease arrangements.

Capital Improvements Program, 2020-2025

Town of Brookline, MA

Estimated Cost: \$9,844,000

Time Schedule:	Prior Year -- \$1,165,000	Property Tax / Free Cash
	FY 2020 -- \$1,450,000	Property Tax / Free Cash
	FY 2021 -- \$1,099,000	Property Tax / Free Cash
	FY 2022 -- \$1,065,000	Property Tax / Free Cash
	FY 2023 -- \$1,165,000	Property Tax / Free Cash
	FY 2024 -- \$1,300,000	Property Tax / Free Cash
	FY 2025 -- \$1,300,000	Property Tax / Free Cash
	Future Years -- \$1,300,000	Property Tax / Free Cash