PUBLIC INVESTMENT

CAPITAL BUDGETING PROCESS

The capital budget is one of the most significant components of the City's financial plan. Decisions made during this process have an impact on the City for many years to come. In order to achieve optimum results from this process, the Capital Investment Committee, which includes the Deputy City Manager; the heads of the Finance, Community Development, Budget, Police, Human Services and Public Works Departments; Chief Financial Officer of the School Department; and other City staff, meets to ensure that citywide needs are addressed in a timely and efficient manner.

The City uses its five-year financial projections for revenues and expenditures, in addition to its five-year capital plan, to formulate budget guidelines for departments. The City's FY20 projections were presented to the credit rating agencies in February 2019, prior to the bond sale.

For the FY20 capital budget process, departments were instructed to submit Pay-As-You-Go capital requests that were equal to or less than the approved amount received in FY19. Departments that did not receive a Pay-As-You-Go appropriation in FY19 or those that wanted to increase their current funding allocation could submit a FY20 supplemental request. This process required departments to focus their priorities and produce a sustainable plan for future years.

The Capital Investment Committee submitted an FY20 Pay-As-You-Go capital budget of \$8,625,000 (\$1,600,000 for citywide projects, \$1,100,000 for E-Gov projects, \$5,000,000 for Affordable Housing, and \$925,000 for Participatory Budgeting projects) to the City Manager for approval. Pay-As-You-Go reflects the appropriation of current revenues, including Property Taxes to fund capital projects, as opposed to incurring debt to cover costs.

The Budget Office periodically reviews unexpended balances contained in existing capital budgets to determine if balances can be reallocated to other areas or are sufficient to provide funding for ongoing projects. Department heads and project managers also work closely with the Finance Department in developing detailed cash flow forecasts and project schedules for capital projects that will be bonded. The Budget Office reviews arbitrage and authorized and unissued balances quarterly to make sure the City is in compliance. This process will continue throughout the fiscal year as needs arise that were not anticipated during the budget process.

E-GOV BUDGETING PROCESS

E-Gov is the process that guides the decision-making framework for information technology investments. This framework ensures that the City's overall portfolio of IT assets, projects, and programs allows City departments to best serve the Cambridge community. E-Gov has an Executive Committee comprised of senior managers that serves as the decision-making body and a Project Review Committee (PRC) that ensures IT projects align with the City's IT Strategic Plan.

Departments request E-Gov projects, ITD reviews requests for feasibility, and the PRC holds a hearing for all requests. The PRC decides which projects to recommend to the Executive Committee for approval. Projects that require less than 100 hours of staff time or cost less than \$50,000 do not require approval from the Executive Committee. The PRC presents its recommendations to the Executive Committee for approval.

The Budget Office and ITD work together in monitoring E-Gov project funds.

PUBLIC INVESTMENT

HISTORICAL & PROJECTED EXPENDITURES

The graph below shows the historical and projected expenditure trends for the Public Investment Fund. Actual expenditures are reflected in FY15-18. FY19 shows expenditures that were expended as of March 31, 2019. FY19 is the amount budgeted from all funding sources. Projected expenditures are reflected in FY21-24 as per the Five-Year Public Investment Plan.





CAPITAL CALENDAR

DECEMBER 10, 2018	Briefing on FY20 budget guidelines by City Manager. Distribution of budget notebook and materials to departments. Meeting of departmental finance personnel with Budget staff.
January 16, 2019	Deadline for Capital and E-Gov Budget submission to the Budget Office.
January 23, 2019 <i>through</i> February 26, 2019	Formal department presentations of capital requests to the Capital Investment Committee.
March 6, 2019	Capital Investment Committee makes recommendations to City Manager.
APRIL 22, 2019	Submission of the City Manager's Budget to the City Council.
May 1, 2019	Date for public hearing on FY20 Capital Budget.
May 20, 2019	Adoption date.
JULY 1, 2019	Begin execution of FY20 allotment plans.

PUBLIC INVESTMENT FINANCING PLAN

FY20 FINANCING PLAN BY SOURCE: \$101,096,725



\$- \$20,000,000 \$40,000,000 \$60,000,000 \$80,000,000

FY20 - 24 FINANCING PLAN

Funding Source	FY20	FY21	FY22	FY23	FY24	TOTAL
Bond Proceeds	\$53,800,000	\$245,800,000	\$9,800,000	\$10,800,000	\$24,800,000	\$345,000,000
Chapter 90	\$3,130,905	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$13,130,905
Community						
Development Block	\$1,583,565	\$1,279,645	\$1,279,645	\$1,279,645	\$1,279,645	\$6,702,145
Grant						
Departmental Revenue	\$4,944,330	\$5,052,455	\$5,032,200	\$5,156,300	\$5,283,520	\$25,468,805
Parking Fund Revenues	\$1,533,000	\$1,533,000	\$1,533,000	\$1,483,000	\$1,483,000	\$7,565,000
Property Taxes	\$8,625,000	\$9,025,000	\$9,287,500	\$9,563,125	\$9,852,530	\$46,353,155
Resident Parking Sticker Revenues	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
Sewer Bond Proceeds	\$20,500,000	\$36,500,000	\$6,500,000	\$7,500,000	\$19,150,000	\$90,150,000
Sewer Service Charges	\$1,500,000	\$1,500,000	\$2,500,000	\$3,500,000	\$4,000,000	\$13,000,000
Street Preservation Offset Fund	\$509,925	\$200,000	\$200,000	\$200,000	\$200,000	\$1,309,925
Tree Program Revenues	\$370,000	\$0	\$0	\$0	\$0	\$370,000
Water Service Charges	\$4,500,000	\$4,730,000	\$4,500,000	\$4,500,000	\$4,500,000	\$22,730,000
GRAND TOTAL	\$101,096,725	\$308,220,100	\$43,232,345	\$46,582,070	\$73,148,695	\$572,279,935

FY20 SOURCES OF FUNDING

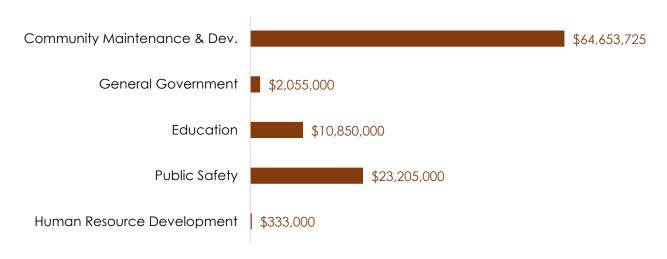
SOURCE OF FUNDING	EXPLANATION	FY20 FUNDING
Bond Proceeds	March 6, 2019, the City sold \$81,550,000 in General Obligation Bonds to finance capital projects such as the King Open/Cambridge Street Upper School and Complex renovations, Harvard Square Kiosk, Municipal Facilities Improvement Plan, School Boiler Replacement and Street and Sidewalk reconstruction. The City's AAA bond rating allowed the City to sell these bonds at the true interest cost of 2.4%.	\$53,800,000
Chapter 90	The State's Chapter 90 Program entitles municipalities to reimbursement of documented roadway expenditures under the provisions of General Laws, Chapter 90, Section 34, Clause 2(a) on approved projects.	\$3,130,905
Community Development Block Grant	The CDBG program provides funding to ensure decent affordable housing exists and services are provided to the most vulnerable in our community, and to aid in creating jobs through the expansion and retention of businesses.	\$1,583,565
Departmental Revenue	Revenue generated from user fees at the Fresh Pond Golf Course (\$30,000), War Memorial Recreation Center (\$48,000), Cable Television (\$141,330), and Building Permits (\$4,725,000).	\$4,944,330
Parking Revenue Fund	Revenue generated from enforcing parking regulations such as street meters, parking lots, and parking garages. Charges for annual resident parking stickers are also included. The FY20 amount of \$1,633,000 includes Parking Fund Revenues (\$1,533,000) and Resident Parking Stickers (\$100,000).	\$1,633,000
Property Taxes	An appropriation of current property tax revenues to fund capital improvements as opposed to incurring debt to cover the costs.	\$8,625,000
Sewer Bond Proceeds	Sewer Bond Proceeds-Sewer Bond Proceeds are supported by sewer service charges. Sewer Bonds finance sewer reconstruction such as Huron and Concord Avenue and the Harvard Square surface improvements.	\$20,500,000
Sewer Service Charges	Revenues generated by sewer usage. The sewer rate reflects a rate increase of 7.0% for FY20. Charges cover 100% of operating and capital expenditures.	\$1,500,000

FY20 SOURCES OF FUNDING

SOURCE OF FUNDING	EXPLANATION	FY20 FUNDING
Street Preservation Offset Fund	A permit fee is charged to contractors that are opening and completing work in or under a municipal street, sidewalk, public right of way, or public easement. Each permit holder is responsible for restoration. The funds are intended solely to reimburse the City for costs incurred for restoring openings in municipal street, sidewalks, public rights of way, and public easements.	\$509,925
Tree Program Revenues	Revenue from the Tree Fund associated with the Tree Ordinance.	\$370,000
Water Service Charges	Revenues generated by water usage. The water rate reflects a 0% rate increase for the consumption period from April 1, 2019 through March 31, 2020. Charges cover 100% of operating and capital expenditures.	\$4,500,000
TOTAL FUNDS FR	OM ALL SOURCES	\$101,096,725

PUBLIC INVESTMENT APPROPRIATION PLAN

FY20 APPROPRIATION PLAN: \$101,096,725



FY20 - 24 APPROPRIATION PLAN

FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
General Government	\$2,055,000	\$2,135,000	\$2,135,000	\$2,135,000	\$2,140,000	\$10,600,000
Public Safety	\$23,205,000	\$1,150,000	\$1,328,000	\$1,100,000	\$1,100,000	\$27,883,000
Community Maintenance and Development	\$64,653,725	\$66,820,100	\$38,644,345	\$42,209,070	\$68,770,695	\$281,097,935
Human Resources and Development	\$333,000	\$265,000	\$265,000	\$278,000	\$278,000	\$1,419,000
Education	\$10,850,000	\$237,850,000	\$860,000	\$860,000	\$860,000	\$251,280,000
GRAND TOTAL	\$101,096,725	\$308,220,100	\$43,232,345	\$46,582,070	\$73,148,695	\$572,279,935

FY20 PUBLIC INVESTMENT PROJECTS

PROJECT NAME	PROJECT CODE	FY20 AMOUNT
Finance: E-Gov Projects	FN20660	\$1,100,000
Finance: Participatory Budgeting	PB20500	\$925,000
Public Celebrations: Public Art Conservation Program	PC20507	\$30,000
GENERAL GOVERNMENT TOTAL		\$2,055,000
PUBLIC SAFETY		
Police: RWH Public Safety Building Door Hardware Replacement Project	PL20521	\$55,000
Fire: Fire Headquarters Construction	FI20538	\$22,000,000
Traffic: Meter Technology Improvement Program	TR20523	\$200,000
Traffic: Parking Garage Restoration and Improvements	TR20518	\$300,000
Traffic: Traffic Signal Program	TR20512	\$350,000
Traffic: Vision Zero Safety Improvements Fund	TR20524	\$300,000
PUBLIC SAFETY TOTAL		\$23,205,000
COMMUNITY MAINTENANCE AND DEVELOPMENT		
Cable TV: Media Arts Studio Hi-Definition Upgrade	CT20503	\$141,330
CDD: Economic Development - Biomedical Career Training Program	CD20712	\$99,000
CDD: Economic Development - Microenterprise Workshops	CD20729	\$82,000
CDD: Economic Development - Small Business Enhancement & Interior		
Access Programs	CD20699	\$91,500
CDD: Economic Development - Storefront Improvements Program	CD20687	\$200,000
CDD: Housing - Affordable Housing Preservation & Development	CD20674	\$9,725,000
CDD: Housing - Affordable Housing Project Development	CD20963	\$303,920
CDD: Housing - Home Improvement Program	CD20735	\$474,895
CDD: Housing - Housing Mediation Program	CD20835	\$120,000
CDD: Housing - Housing Rehabilitation Assistance Program	CD20614	\$337,250
CDD: Housing - Tenant Organizing Services	CD20801	\$75,000
CDD: Transportation - Electric Vehicle Charging Infrastructure	CD20868	\$100,000
CDD: Transportation - Bicycle Parking Program	CD20848	\$50,000
CDD: Transportation - Bicycle Parking Special Projects	CD20955	\$33,000
CDD: Transportation - Bicycle Spot Improvements	CD20954	\$25,000
CDD: Transportation - Bus Stop Improvements	CD20953	\$25,000
CDD: Transportation - Traffic Calming	CD20592	\$300,000
Public Works: Buildings - Energy Efficiency Projects	PW20781	\$100,000
Public Works: Buildings - Flooring & Furnishings	PW20622	\$72,500
Public Works: Buildings - Municipal Facilities Improvement Plan (MFIP)	PW20625	\$3,000,000
Public Works: City Hall Improvements	PW20848	\$10,000,000
Public Works: Parks - Park Play Area Shade Structures	PW20829	\$50,000
Public Works: Parks - Park Surfacing Restoration Program	PW20830	\$100,000
Public Works: Parks - Park Water Conservation Program	PW20811	\$100,000
Public Works: Parks - Recreational Hard Surface Restoration	PW20849	\$112,500
Public Works: Recycle - Public Area Litter and Recycling Bin Improvement Project	PW20842	\$50,000

FY20 PUBLIC INVESTMENT PROJECTS

PROJECT NAME	PROJECT CODE	FY20 AMOUNT
Public Works: Sewer/Stormwater - Alewife	PW20810	\$15,000,000
Public Works: Sewer/Stormwater - Capital Repairs Program	PW20793	\$5,000,000
Public Works: Sewer/Stormwater - Climate Change	PW20831	\$500,000
Public Works: Sewer/Stormwater - Remedial Construction	PW20599	\$1,500,000
Public Works: Streets - Complete Streets Reconstruction	PW20595	\$7,790,830
Public Works: Streets - Harvard Square Kiosk and Plaza and Surface Enhancements	PW20815	\$4,000,000
Public Works: Trees - Emerald Ash Borer Treatment	PW20804	\$100,000
Public Works: Trees - Park and Cemetery Tree Pruning	PW20619	\$100,000
Public Works: Trees - Public Shade Tree Investment Program	PW20819	\$495,000
Water: Fresh Pond Master Plan Implementation	WA20534	\$250,000
Water: Fresh Pond Reservation Major Projects	WA20586	\$50,000
Water: Hydroelectric Renewable Energy Generation	WA20585	\$250,000
Water: PC Upgrades	WA20578	\$20,000
Water: Reservoir Facilities Improvements - Upcountry	WA20562	\$550,000
Water: Reservoir Gaging Weather Station Maintenance	WA20581	\$200,000
Water: Water Facility Upgrades	WA20579	\$309,000
Water: Water Meter Replacement	WA20569	\$200,000
Water: Water Treatment Plant Equipment & Systems Upgrades	WA20555	\$528,000
Water: Water Works Construction	WA20543	\$2,000,000
Water: Watershed Consulting Services	WA20531	\$43,000
COMMUNITY MAINTENANCE AND DEVELOPMENT TOTAL		\$64,653,725
HUMAN RESOURCES AND DEVELOPMENT		
Human Services: Danehy Park Bench and Table Replacement	HS20534	\$50,000
Human Services: Danehy Park Maintenance	HS20522	\$50,000
Human Services: Disability Commission ADA Accessibility Improvements	PW20598	\$50,000
Human Services: Fresh Pond Golf Course Improvements	HS20509	\$30,000
Human Services: Human Services Buildings Repairs	HS20530	\$25,000
Human Services: War Memorial Recreation Center Maintenance	HS20521	\$48,000
Library: Main Library Building Repairs	LB20518	\$25,000
Library: Patron Privacy Enhancements	LB20535	\$55,000
HUMAN RESOURCES AND DEVELOPMENT TOTAL		\$333,000
EDUCATION		
School: Building Repairs/ Replacement of Analog Phone System	SC20945	\$800,000
School: Furniture Replacements/Facilities Repairs	SC20938	\$50,000
School: Tobin Montessori and Vassal Lane Upper School	SC20943	\$10,000,000
EDUCATION TOTAL		\$10,850,000
GRAND TOTAL		\$101,096,725

FINANCE: E-GOV PROJECTS

FY20 Project Description	CITY COUNCIL GOALS
The E-Gov Executive Committee recommends that the City invest \$1,100,000 in E-Gov Capital projects that will focus on supporting technical infrastructure initiatives such as maintenance of the City and Public Safety network, firewall, data center server equipment, Wifi and VoIP services, and all PC and Peripheral devices. The E-Gov Executive Committee will submit E-Gov innovation request for consideration and evaluation relating to the new strategic plan. Additional projects will be submitted to the City Council in the Fall of 2019 for appropriation.	- <u>`</u> Ċ

IMPACT ON OPERATING BUDGET

The maintenance agreements that support these non-discretionary technical infrastructure projects are included in ITD and Public Safety Operating budgets.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000	\$5,500,000
GRAND TOTAL \$1,100,000 \$1,100,000 \$1,100,000 \$1,100,000 \$1,100,000 \$5,500,0						

FY21-FY24 FUNDING

The City plans to use FY21-FY24 funding for continued maintenance of, both City and Public Safety, non-discretionary technical infrastructure initiatives. This funding includes maintenance and upgrade of network, firewall, data center server equipment, Wifi and VoIP services and all PC and Peripheral devices.

Project Visual	STATUS OF PRIOR YEAR PROJECTS
CAMBRIDGE E - LINE COMMON CAUSE	In the FY19 budget, the City appropriated \$1.1M for IT Initiatives. These funds supported the upgrade of staff computer equipment, AV enhancements, firewall, and server replacements. During FY19, additional appropriations of \$886,737 were approved to support a study of digital equity, improved GPS for DPW, and a new Fire house alerting and police training system all focused on innovation and operational improvements. Along with these and previous year balances IT continued to upgrade the permit and license online application system and payment system to include DPW and Traffic.

GENERAL GOVERNMENT

	ADDITIONAL PROJECT INFORMATION				
DEPT.	E-Gov Project and Description	FY20 Funding			
ITD/PSIT	PC Replacement for Public Safety and CoC: To enable the city employees to use the latest technology, PC hardware must be refreshed regularly. The City runs on a 5 year replacement cycle for most PCs. This figure also includes laptops and handheld devices the field work.	\$387,000			
ITD	Printers replacement for CoC: Replacement of printers on a 5 year plan to remove old problematic hardware and replace with new multifunction units.	\$53,000			
PSIT	Printers replacement for Public Safety: Replacement of printers on a 5 year plan to remove problematic hardware and replace with new multifunction units.	\$20,000			
ITD	Virtual Machine Refresh COC: Replacement of VM physical hardware occurs on a 5 year rotation	\$50,000			
PSIT	Virtual Machine Refresh Public Safety: Replacement of VM physical hardware phased over 3 years	\$75,000			
PSIT	Storage Refresh Public Safety: replace 2 Dell servers	\$80,000			
PSIT	Wireless Refresh for Public Safety: Phased over 3 years	\$80,000			
PSIT	Security Camera Refresh Public Safety: replace existing cameras at Healy building	\$40,000			
ITD/PSIT	AV Upgrades for the City and Public Safety: Audio-Visual upgrades to replace problematic or out dated equipment throughout the City Buildings.	\$135,000			
PSIT	Police Interview Recording equipment refresh: Upgrade phased over 2 years	\$40,000			
PSIT	Data Center Refresh Public Safety: Upgrade equipment phased over 5 years	\$50,000			
PSIT	UPS Maintenance for Public Safety Battery Backup: This is to replace a portion of batteries every year in the Public Safety data centers. These batteries have a limited life and need to be constantly replaced to ensure proper functioning of the battery backup.	\$75,000			
PSIT	Sequel Server Upgrade Public Safety: Phased over 3 years	\$15,000			
Total FY20	E-Gov Funding	\$ 1,100,000			

FINANCE: PARTICIPATORY BUDGETING

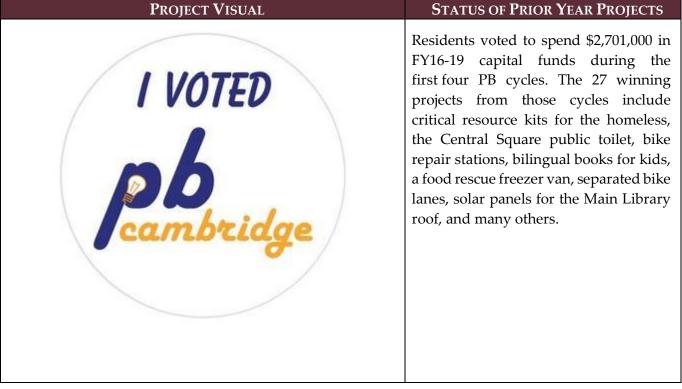
FY20 Project Description	CITY COUNCIL GOALS
6,849 Cambridge residents age 12 and older voted in the City's fifth Participatory Budgeting (PB) vote in December 2018. 1,047 project ideas were submitted and \$925,000	ňům
in FY20 capital funds will be allocated to the six winning projects. The winning projects as follows: Tree, Please! (\$200,000), Water Fountains in Every Park (\$90,000), Protect the	*
Health and Safety of Our Firefighters (\$110,000), Smoother Cycling (\$250,000), Clean up Cambridge (\$125,000), Rain Gardens for Resiliency (\$150,000). More project details can	•••
be found online at pb.cambridgema.gov.	

IMPACT ON OPERATING BUDGET

The Budget Office's operating budget includes funds to hire two PB interns each year and support PB implementation costs (outreach materials, T-shirts and food for volunteers, translation of voting materials, PB website and online idea collection map hosting fees, etc).

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$925,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$4,925,000
GRAND TOTAL	\$925,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$4,925,000
FY21-FY24 FUNDING						

The City expects Participatory Budgeting funding to be \$1,000,000 per year beginning in FY21.



PUBLIC CELEBRATIONS: PUBLIC ART CONSERVATION PROGRAM

FY20 Project Description			
Each year, approximately 240 artworks in the City-owned public art collection receive routine assessment, cleaning, and maintenance. In addition, more extensive	ňůň		
maintenance is done for artworks that have eroded or been damaged due to time, environmental stressors, or other factors. During the colder months, significant work is	₹_		
done to manage detailed project-based information, image and video files that			
document the conservation efforts, and the database that contains the collection care			
information and history. Together, this work ensures that the public art assets owned by			
the City are consistently well-maintained and contribute positively and safely to the			
experience of the Cambridge community.			

IMPACT ON OPERATING BUDGET

Allocating capital funds for conservation and preventative maintenance of public art should reduce the amount of emergency repair and maintenance the City has to perform with operating funds.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$30,000	\$35,000	\$35,000	\$35,000	\$40,000	\$175,000
GRAND TOTAL	\$30,000	\$35,000	\$35,000	\$35,000	\$40,000	\$175,000

FY21-FY24 FUNDING

Funding for the Public Art Conservation Program in FY21-24 allows for this work to continue and ensures that the basic needs of the artwork and public safety are met on an annual basis. This support also allows for staff to prioritize and address the more significant conservation and maintenance issues that occur as artworks age over time or involve more complex materials and technology.



STATUS OF PRIOR YEAR PROJECTS

FY19 funding covered assessments and routine maintenance of artwork in parks, schools, libraries, fire stations, and senior centers in the city. Program staff also provide response maintenance connected to seasonal and weather-related damage that may occur to artworks in the City collection. More significant restoration and preventative maintenance was conducted sculptures at Danehy Park and in the Walter J. Sullivan Water Treatment Facility.

POLICE: BODY ARMOR REPLACEMENT

FY20 Project Description	CITY COUNCIL GOALS
The Police Department replaces lifesaving body armor (protective vests) for its police officers in accordance with departmental policies, procedures, and collective bargaining agreements. The useful life of such vests worn regularly is five years.	F

IMPACT ON OPERATING BUDGET

There is no impact on the operating budget.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$0	\$0	\$178,000	\$0	\$0	\$178,000
GRAND TOTAL	\$0	\$0	\$178,000	\$0	\$0	\$178,000

FY21-FY24 FUNDING

In FY17, the department replaced approximately 200 vests purchased in 2012. The Department is seeking to replace approximately 185 vests in FY22 in order to remain in compliance, and on the necessary rotational cycle.



STATUS OF PRIOR YEAR PROJECTS

In FY17, the Department replaced approximately 200 of the vests purchased in 2012.

POLICE: RWH PUBLIC SAFETY BUILDING DOOR HARDWARE REPLACEMENT PROJECT

FY20 Project Description	CITY COUNCIL GOALS
The project to replace the security hardware on the doors at the RWH Healy Public Safety Building began in FY19, which had not been replaced since the building opened in 2008.	ℯⅎℷ
The doors are failing due to age and use of the mechanical hardware. Replacement parts for the existing hardware are expensive and difficult to source. There are 34 doors with security hardware in the building. This project will ensure that high volume doors are on the same standard hardware and will improve safety and security in the building. With FY19 funds, the Department replaced security hardware for approximately half of the doors. The hardware replacement project for FY20 will replace the security hardware on the remaining doors and complete the project.	

IMPACT ON OPERATING BUDGET

This project will decrease annual maintenance on the current hardware at these high volume locations.

5-Year Appropriation Plan						
FUNDING SOURCE FY20 FY21 FY22 FY23 FY24 TOTAL						
Property Taxes	\$55,000	\$0	\$0	\$0	\$0	\$55,000
GRAND TOTAL	\$55,000	\$0	\$0	\$0	\$0	\$55,000

FY21-FY24 FUNDING

The rotational cycle for replacement is approximately 10 years.

Project Visual	STATUS OF PRIOR YEAR PROJECTS
	The project received funding of \$50,000 in FY19 to replace the security hardware on half of the doors.

FIRE: FIRE HEADQUARTERS CONSTRUCTION

FY20 Project Description	CITY COUNCIL GOALS
The Fire Station Headquarters is located at 491 Broadway and was completed in 1933. The building has frequent community use and is listed as historically significant. The	ńůň
Municipal Facilities Improvement Plan assessed this facility in 2016 and it was identified as a priority for alteration by the Cambridge Fire Department due to major deficiencies.	\$
The finding proposed will address: • mechanical ventilation and cooling systems	
fire and life safety systemsemergency generator installation	
accessibility improvementsrepair of water infiltration from both the façade and roofs	
 repair of deteriorating and failing flashings and sealants improvement of sleeping quarters separation 	
flooring, ceiling, and wall finishes throughout the building, as well as restroom fixtures and kitchen appliances well beyond their useful life	

IMPACT ON OPERATING BUDGET

This will have a minimal impact on the operating budget.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Bond Proceeds	\$22,000,000	\$0	\$0	\$0	\$0	\$22,000,000
Grand Total	\$22,000,000	\$0	\$0	\$0	\$0	\$22,000,000

FY21-FY24 FUNDING

Future funding is not anticipated at this time.



STATUS OF PRIOR YEAR PROJECTS

\$3 million was requested in FY19 for Designer Services and a Feasibility Study in support of a major alteration to Fire Department Headquarters. This request was approved by the City Council in December 2018.

TRAFFIC: METER TECHNOLOGY IMPROVEMENT PROGRAM

FY20 Project Description	CITY COUNCIL GOALS
The Meter Technology Improvement Program will help replace existing pay station and multi space meters as they reach the end of their life cycle. The program also aims to	
replace existing conventional street meters in high demand areas with smart meters. The smart meters will allow customers to be able to pay with coins and credit cards directly at the meters. This technology will allow the City to manage its parking supply and	₫Ò
pricing more efficiently.	

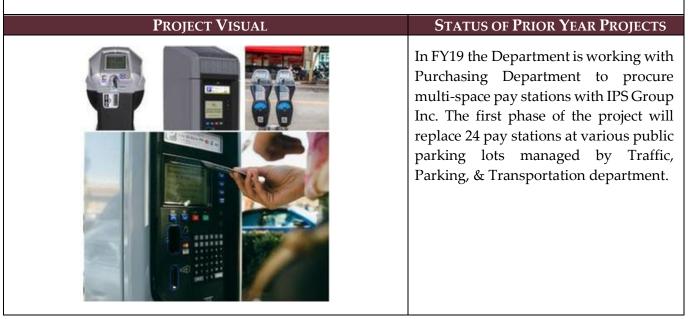
IMPACT ON OPERATING BUDGET

The Meter Technology Improvement Program will provide better management data on cash collection reconciliation and will help increase revenue by facilitating dynamic meter pricing. The introduction of new smart meters will enable the City to be more efficient in servicing and maintaining those meters based on their electronic reporting system. In the short term, we will be able to save on spare part costs for the maintenance of older mechanical meters by salvaging existing meter parts to repair broken meters. The smart meter equipment will have operating cost impacts associated with data communication and credit card fees.

5-Year Appropriation Plan							
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL	
Parking Fund Revenues	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000	
GRAND TOTAL	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000	

FY21-FY24 FUNDING

Future funding will be used to gradually replace obsolete meters and pay stations with newer equipment.



TRAFFIC: PARKING GARAGE RESTORATION AND IMPROVEMENTS

FY20 Project Description	CITY COUNCIL GOALS
The Traffic, Parking & Transportation Department (TP&T) plans to use the existing capital budget balances to pay for expenses related to garage repairs and maintenance. These repairs include the need for an elevator replacement, fixing rusted metal pipes, and repairing cracks in various locations around the garages. TP&T hired an Engineering Consultant to address existing repair needs, not limited to the adaptability of the garages to future technological advancements.	₅ ± }

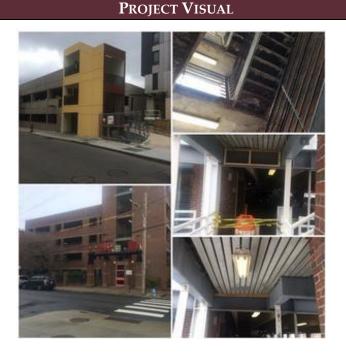
IMPACT ON OPERATING BUDGET

Capital improvements at the parking garages help to minimize spending on garage repairs in the operating budget.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Parking Fund Revenues	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000
GRAND TOTAL	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000

FY21-FY24 FUNDING

Future year funding will be used to undertake parking garage repairs as needed each year. By spending \$300,000 per year in FY20-FY24, necessary capital repairs will be completed at the Green Street and First Street garages.



STATUS OF PRIOR YEAR PROJECTS

During FY19 the department released an Engineering Consultant Request for Proposals that prioritize the needs of the garages. A contract was awarded and an initial assessment of the conditions is underway. Once the assessment is complete, work is expected to commence in FY20.

TRAFFIC: TRAFFIC SIGNAL PROGRAM

FY20 Project Description	CITY COUNCIL GOALS
An FY20 allocation of \$350,000 will be used to upgrade and modernize the traffic signal system. Improvements will include equipment cabinet and controller upgrades, cabling	,•• }
and conduit installation, audible pedestrian signals, pole-mounted push button upgrades, rapid flashing beacons, wired and wireless connectivity for traffic signals, loop and microwave detection for vehicles and bicycles, and permanent count stations	₫Ò
to track vehicle and bicycle volume trends. As the City continues to implement the Vision Zero program, audible pedestrian systems and other traffic signal modifications will be needed to align with this critical City initiative.	

IMPACT ON OPERATING BUDGET

Upgrades will minimize maintenance and repair costs in the operating budget.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Parking Fund Revenues	\$350,000	\$350,000	\$350,000	\$300,000	\$300,000	\$1,650,000
GRAND TOTAL	\$350,000	\$350,000	\$350,000	\$300,000	\$300,000	\$1,650,000

FY21-FY24 FUNDING

Future year funding will be used for traffic signal system improvements with specific projects to be determined each year.

PROJECT VISUAL



STATUS OF PRIOR YEAR PROJECTS

TP&T installed Accessible Pedestrian Signals and Transit Signal Priority at two locations. Traffic signal cable was installed at the Mass Avenue/Prospect Street intersection. Using wireless radios, a bicycle "green wave" was programmed for three intersections to minimize the frequency of cyclists arriving on a red light. At Mass Avenue/Vassar Street, a high incident location, right-turn indications were added to signal separate right-turning traffic from the motorists heading straight on Mass Avenue.

TRAFFIC: VISION ZERO SAFETY IMPROVEMENTS FUND

FY20 Project Description	CITY COUNCIL GOALS
An FY20 allocation of \$300,000 will be used to fund small and medium size capital improvement projects to improve traffic safety and support the City's Vision Zero	,•• }
Initiative to eliminate traffic fatalities and serious injuries. The funds will be used to make spot improvements at locations that will increase safety for vulnerable road users including people who walk, bike, and take transit. Typical projects may include pedestrian refuge islands or curb extensions, bicycle signals, bus bulbs, or additional traffic calming measures.	ĕ₹ò

IMPACT ON OPERATING BUDGET

This item will have minimal impacts on the Department's operating budget. Signal equipment, such as bicycle signals, will be maintained using existing operating funds. Additional operating impacts are not anticipated.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Parking Fund Revenues	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000
GRAND TOTAL	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000

FY21-FY24 FUNDING

Future funding will continue to support the elimination of traffic fatalities and serious injuries.

PROJECT VISUAL	STATUS OF PRIOR YEAR PROJECTS
BICYCLE SIGNAL	No funds were appropriated in the FY19 Capital Budget for this purpose.

CABLE TV: MEDIA ARTS STUDIO HI-DEFINITION UPGRADE

FY20 Project Description	CITY COUNCIL GOALS
In order to remain consistent with current production and broadcast standards, 22-CityView will continue to upgrade the Media Arts Studio facility to include LED lighting on the production grid. The City will also replace some of the studio furniture, and explore the use of modular production sets that will allow for several set configurations.	<u></u>

IMPACT ON OPERATING BUDGET

Maintenance and repair costs may increase with equipment over time.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Departmental Revenue	\$141,330	\$141,330	\$0	\$0	\$0	\$282,660
GRAND TOTAL	\$141,330	\$141,330	\$0	\$0	\$0	\$282,660

FY21-FY24 FUNDING

This project will be funded through FY21, pending a new cable TV franchise agreement.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

FY19 funding of \$141,330 was used to upgrade studio equipment and provide fiber connections to City buildings to allow remote broadcasting.

CDD: ECONOMIC DEVELOPMENT - BIOMEDICAL CAREER TRAINING PROGRAM

FY20 Project Description	CITY COUNCIL GOALS
For FY20, an allocation of \$99,000 of CDBG funds will support 9 low-moderate income students in the Biomedical Career Training Program. This is a nine-month certificate	- <u>;</u> Ġ:-
program that provides academic, and lab instruction to Cambridge Neighborhood Revitalization Strategy (NRS) area residents to prepare them for entry level biotech jobs	\$
such as lab technicians, manufacturing technicians, and animal care technicians at local life science companies, universities, research institutions, clinical laboratories and hospitals. This program provides an economic opportunity to the eligible residents who	9,
participate in the program.	

IMPACT ON OPERATING BUDGET

There is no direct financial or personnel impact on the operating budget.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Community Development Block Grant	\$99,000	\$99,000	\$99,000	\$99,000	\$99,000	\$495,000
GRAND TOTAL	\$99,000	\$99,000	\$99,000	\$99,000	\$99,000	\$495,000

FY21-FY24 FUNDING

Depending on Federal funding levels, it is expected that \$99,000 in future allocations will be used to continue offering training opportunities to eligible NRS residents.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

\$99,000 was used in FY19 to support Biomedical Career Training Program activities.

Photo: Biomedical Career Program Graduation

CDD: ECONOMIC DEVELOPMENT - MICROENTERPRISE WORKSHOPS

FY20 Project Description	CITY COUNCIL GOALS
For FY20, an allocation of \$82,000 of CDBG funds will support the Business Development Services program for Cambridge businesses, the 10-week business	÷Ö;-
planning program, Small Business Coaching Program, and the Cambridge Entrepreneurship Assistance Program. The programs will provide business	\$
development workshops and counseling services to new and emerging income-eligible entrepreneurs in Cambridge. This program provides economic opportunity and growth to the residents and business owners who participate in the programs.	٩,

IMPACT ON OPERATING BUDGET

There is no direct financial or personnel impact on the operating budget.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Community Development Block Grant	\$82,000	\$82,000	\$82,000	\$82,000	\$82,000	\$410,000
GRAND TOTAL	\$82,000	\$82,000	\$82,000	\$82,000	\$82,000	\$410,000

FY21-FY24 FUNDING

Depending on Federal funding levels, it is expected that \$82,000 in future allocations will be used to continue offering these business development workshops, business planning program, Small Business Coaching Program, and the Cambridge Entrepreneurship Assistance Program.

PROJECT VISUAL



STATUS OF PRIOR YEAR PROJECTS

FY19, In funding supported Microenterprise training workshops in topics such as: Adwords vs. Search Engine Optimization, Shopify for Small Business, Facebook, Social Media Strategy, Art of Networking, WordPress, and Preparing Business for Construction. Funding also supported the Small Business Coaching Program, and two rounds of the 10week business planning course.

CDD: ECONOMIC DEVELOPMENT - SMALL BUSINESS ENHANCEMENT & INTERIOR ACCESS PROGRAMS

FY20 Project Description	CITY COUNCIL GOALS
For FY20, an allocation of \$91,500 of CDBG funds will be used to support the City's economic development programs for low and moderate-income home-based and brick	- <u>;</u> Ċ;-
and mortar business owners through the Small Business Enhancement Program. The program includes staff consultation and financial assistance. After obtaining feedback	\$
in individual consultations, program participants are assisted with implementation of recommendations through a grant program.	٩
This allocation also supports the Retail Interior Accessibility Program, which provides financial assistance to business owners seeking to renovate or improve the interior of their commercial buildings to make their business more accessible to those who are sensory and/or physically disabled. The program seeks to improve accessibility and physical appearances of independent businesses and make Cambridge commercial districts more accessible to all.	

IMPACT ON OPERATING BUDGET

There is no direct financial or personnel impact on the operating budget.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Community Development Block Grant	\$91,500	\$91,500	\$91,500	\$91,500	\$91,500	\$457,500
GRAND TOTAL	\$91,500	\$91,500	\$91,500	\$91,500	\$91,500	\$457,500

FY21-FY24 FUNDING

It is anticipated that future allocations will continue at the same level if program participation remains high and CDBG funding is available to support this highly successful program.

Project Visual	STATUS OF PRIOR YEAR PROJECTS
	FY19 funding of \$91,500 allowed for businesses to receive grants for new kitchen and display equipment, ADA bathrooms, and new e-commerce websites. It is anticipated that at the end of FY19, a total of 28 businesses will receive in-store consultations and/or grants through the Small Business Enhancement and Interior Access Programs.

CDD: ECONOMIC DEVELOPMENT - STOREFRONT IMPROVEMENTS PROGRAM

FY20 Project Description	CITY COUNCIL GOALS
In FY20, an allocation of \$200,000 will support the City's Storefront Improvements Program, which was enhanced in FY15 with the addition of the Architectural Barriers	-;&;-
Removal component. This program, which supports multiple City goals, enables participating businesses to remove barriers to accessibility and improve their overall	*
storefront appearance, which helps integrate businesses of all sizes into the thriving Cambridge ecosystem. These upgrades are often challenging for small businesses due to their high cost. This program provides economic benefits to the businesses that participate in the program, supports the City's commercial districts and assists in	\$
building a more stable tax base.	

IMPACT ON OPERATING BUDGET

There is no direct financial or personnel impact on the operating budget.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000
GRAND TOTAL	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000

FY21-FY24 FUNDING

\$225,000 in future allocations each year will be used to continue offering storefront improvements, including architectural barrier removal.

PROJECT VISUAL



STATUS OF PRIOR YEAR PROJECTS

FY19 funding of \$200,000 continued storefront improvements, including architectural barrier removal. It is anticipated that at the end of FY19, 16 projects, including 8 signage and 8 façade/accessibility improvement projects for various amounts, will be complete or under contract. This funding has facilitated restoration of many of the City's historic retail storefronts and contributed to streetlevel vibrancy throughout Cambridge, as demonstrated by the recently completed project shown at left (281 Concord Avenue-awarded full \$35,000 facade/accessibility grant).

CDD: HOUSING - AFFORDABLE HOUSING PRESERVATION & DEVELOPMENT

FY20 Project Description	CITY COUNCIL GOALS
In FY20, an allocation of building permit fee revenue will supplement allocations of Community Preservation Act funds to help the Affordable Housing Trust preserve and create permanently affordable housing for low-, moderate-, and middle-income residents. The amount allocated for FY20 reflects an increase to 25% of budgeted building permit fees, versus 20% in FY19 as well as a new allocation of \$5,000,000. The FY20 allocation reflects a \$6,275,000 increase from last year. Dedicating additional City funds to the Affordable Housing Trust will help with efforts to advance the City Council's affordable housing goals and pursue opportunities to create new affordable units and preserve existing affordable housing. These funds will be appropriated to the Affordable Housing Trust for use in supporting specific affordable housing preservation	\$
and development efforts.	

IMPACT ON OPERATING BUDGET

There is no direct financial or personnel impact on the operating budget.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Departmental Revenue	\$4,725,000	\$4,843,125	\$4,964,200	\$5,088,300	\$5,215,520	\$24,836,145
Property Taxes	\$5,000,000	\$5,250,000	\$5,512,500	\$5,788,125	\$6,077,530	\$27,628,155
Grand Total	\$9,725,000	\$10,093,125	\$10,476,700	\$10,876,425	\$11,293,050	\$52,464,300

FY21-FY24 FUNDING

The City will continue this capital allocation to the Affordable Housing Trust by allocating 25% of budgeted building permit fees each year to ensure that the Affordable Housing Trust has resources necessary to carry out affordable housing goals. In addition, 5 million has been added in FY20 with increasing amounts in FY21-24.

Project Visual	STATUS OF PRIOR YEAR PROJECTS
	Prior year funding is being used to support Concord Highlands (left) where 98 new units of affordable rental housing for low-, moderate-, and middle-income households is now being built. The FY19 allocation will be used to assist in preserving affordability of the 504-unit Fresh Pond Apts.

CDD: HOUSING - AFFORDABLE HOUSING PROJECT DEVELOPMENT

FY20 Project Description	CITY COUNCIL GOALS
In FY20, allocation of \$303,920 of CDBG funds will support the development of new affordable housing units in the City.	\$
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IMPACT ON OPERATING BUDGET

There is no direct financial or personnel impact on the operating budget.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Community Development Block Grant	\$303,920	\$0	\$0	\$0	\$0	\$303,920
GRAND TOTAL	\$303,920	\$0	\$0	\$0	\$0	\$303,920

FY21-FY24 FUNDING

As Federal funding levels change from year to year, it is not assumed that future allocations will be available for new development. However, if CDBG funding is maintained, these funds will continue to be available in future years.

Project Visual



STATUS OF PRIOR YEAR PROJECTS

CDBG funding is used to develop affordable housing units throughout the city, including this home being renovated on Fifth Street which will be offered as an affordable ownership opportunity.

CDD: HOUSING - HOME IMPROVEMENT PROGRAM

FY20 Project Description			
In FY20, an allocation of \$474,895 in CDBG funds will support nonprofit housing agencies to provide technical and financial assistance to low- and moderate-income eligible Cambridge homeowners to provide needed repairs and stabilize owner-occupants in their homes.	\$ Â		

IMPACT ON OPERATING BUDGET

There is no direct financial or personnel impact on the operating budget.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Community Development Block Grant	\$474,895	\$474 <i>,</i> 895	\$474 <i>,</i> 895	\$474 <i>,</i> 895	\$474,895	\$2,374,475
GRAND TOTAL	\$474,895	\$474,895	\$474,895	\$474,895	\$474,895	\$2,374,475

FY21-FY24 FUNDING

Depending on Federal funding levels, it is expected that \$474,895 in future allocations will be used to continue this program.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

FY19 funding provided financial and technical assistance to 30 households in need of home repairs and improvements, which often include heating system updates to increase energy efficiency to reduce operating costs.

CDD: HOUSING - HOUSING MEDIATION PROGRAM

FY20 Project Description	CITY COUNCIL GOALS
The allocation of \$120,000 of CDBG funds will support the services of an agency to provide Housing Mediation services in FY20. The agency will provide dispute resolution, conflict management and stabilization services to eligible tenants and property owners to assist in resolving housing-related disputes including non-payment of rent, health and safety violations, nuisance complaints, and other lease violations.	A
IMPACT ON OPERATING BUDGET	

There is no direct financial or personnel impact on the operating budget.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Community Development Block Grant	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$600,000
GRAND TOTAL	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$600,000

FY21-FY24 FUNDING

Depending on Federal funding levels, it is expected that \$120,000 in future allocations will be used to continue this program.

Project Visual	STATUS OF PRIOR YEAR PROJECTS
	FY19 funding supported efforts to mediate or otherwise resolve more than 100 cases of housing-related conflicts among tenants, rental property owners, and homeowners and offer assistance for condominium owners in associations with affordable homes.

CDD: HOUSING - HOUSING REHABILITATION ASSISTANCE PROGRAM

FY20 Project Description	CITY COUNCIL GOALS
In FY20, allocation of \$337,250 of CDBG funds will support the Housing Rehabilitation Assistance Program which offers underserved Cambridge youth employment and skills training while engaging them in rehab and development of affordable housing.	A S

IMPACT ON OPERATING BUDGET

There is no direct financial or personnel impact on the operating budget.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Community Development Block Grant	\$337,250	\$337,250	\$337,250	\$337,250	\$337,250	\$1,686,250
GRAND TOTAL	\$337,250	\$337,250	\$337,250	\$337,250	\$337,250	\$1,686,250

FY21-FY24 FUNDING

Depending on Federal funding levels, it is expected that \$337,250 in future allocations will be used to continue this program.

PROJECT VISUAL



STATUS OF PRIOR YEAR PROJECTS

FY19 funds supported 100 young people in participating in employment and rehab skills training which included work to renovate a home on Fifth Street to be sold to a first-time homebuyer.

CDD: HOUSING - TENANT ORGANIZING SERVICES

FY20 Project Description	CITY COUNCIL GOALS
In FY20, an allocation of \$75,000 of CDBG funds will support the services of an agency to provide support to residents in buildings at-risk through expiring affordable housing restrictions. This program provides advocacy services to low- and moderate-income tenants to preserve expiring units at risk.	\$ 渝
teriants to preserve exprining and at risk.	

IMPACT ON OPERATING BUDGET

There is no direct financial or personnel impact on the operating budget.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Community Development Block Grant	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$375,000
GRAND TOTAL	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$375,000

FY21-FY24 FUNDING

Depending on Federal funding levels, it is expected that \$75,000 in future allocations will be used to continue this program.

PROJECT VISUAL



STATUS OF PRIOR YEAR PROJECTS

FY19 funding was used to support efforts to assist tenants in buildings facing expiring use restrictions to identify problems and offer interventions to tenants, and to support preservation efforts to extend affordability commitments and keep people in their homes.

CDD: TRANSPORTATION - ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

FY20 Project Description	CITY COUNCIL GOALS
In FY20 CDD will design and install up to twelve dual head Level 2 electric vehicle charging stations on municipal property and/or in the public right of way. State and	*
federal incentives, as well as state emissions standards for vehicles have resulted in an increasing number of electric vehicle models being available and an increase in the number of Cambridge residents who own or lease electrical vehicles (EVs). Given the high percentage of Cambridge residents who do not have a dedicated off-street parking spot, a network of public charging infrastructure in the public right of way is necessary to allow Cambridge residents to own or lease an EV.	&®
Supporting EV ownership for residents who choose to own/lease a personal vehicle is consistent with City Council goals, and a public Electric Vehicle Supply Equipment (EVSE) network ensures that these goals are met in an equitable way.	

IMPACT ON OPERATING BUDGET

The new stations will add approximately \$16,000 in operating costs to DPW's operating budget. Operating costs comprise the Chargepoint network fee, E-commerce fees and preventive maintenance services. These costs are expected to be fully recovered through the user fee structure the City adopted July 1, 2018.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
GRAND TOTAL	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000

FY21-FY24 FUNDING

Budget requests for FY21-24 will support the need to expand the EV charging network in the future to meet the charging needs as EV ownership in Cambridge is expected to increase over time.

Project Visual	STATUS OF PRIOR YEAR PROJECTS
RESERVED SPACE FOR ELECTRIC VEHICLE CHARGING ONLY VOLATOS SIMILET TO FIRST TOP FIRST T	FY19 funds (\$100,000) for EVSE was expected to cover the cost of 3 new EVSE stations. Since then, Eversource announced an infrastructure program call "Make-Ready," which covers the excavation and electricity upgrade costs for new EVSE. Cambridge's partnership with Eversource will allow the City to leverage capital funds to install an additional 4 stations (7 new stations in FY19 total).

CDD: Transportation - Bicycle Parking Program

FY20 Project Description	CITY COUNCIL GOALS
In FY20, an allocation of \$50,000 will be used for the procurement and installation of at least 150 bicycle parking racks, primarily in the main business districts, small business	*
districts in neighborhoods, schools, and other locations based on public requests. In addition, funds will used to install seasonal bicycle parking corrals that will take the	₫Ò
place of on-street vehicle parking spaces in locations with limited sidewalk space, heavy pedestrian traffic, and high bicycle parking demand.	

IMPACT ON OPERATING BUDGET

There is no direct financial or personnel impact on the operating budget.

5-YEAR APPROPRIATION PLAN							
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL	
Parking Fund Revenues	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000	
GRAND TOTAL	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000	

FY21-FY24 FUNDING

\$50,000 per year in future allocations will be used to continue the procurement and installation of approximately 150 bicycle racks per year as well as the installation of bicycle parking corrals. Funds will also be used for the maintenance of Cambridge's 13 bicycle repair stations.

PROJECT VISUAL



STATUS OF PRIOR YEAR PROJECTS

FY19 funding was used for the procurement and installation of more than 150 bicycle racks and the installation of seasonal on-street bicycle parking corrals. Installation began in fall 2018 and continued in spring 2019. Four bicycle parking corrals remained deployed over the winter season in high demand areas.

Photo: Covered bicycle parking was added at 101 Main Street in fall 2018.

CDD: Transportation - Bicycle Parking Special Projects

FY20 Project Description	CITY COUNCIL GOALS
In FY20, an allocation of \$33,000 will be used in combination with FY19 funding for additional and covered bicycle parking at Cambridge Rindge and Latin School (CRLS)	*
and the Main Library in conjunction with ongoing planning for this site. Funds will be used primarily for the procurement of a bicycle shelter to protect bikes from precipitation and encourage employee and visitor cycling.	& [™] O

IMPACT ON OPERATING BUDGET

There is no direct financial or personnel impact on the operating budget.

5-YEAR APPROPRIATION PLAN							
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL	
Parking Fund Revenues	\$33,000	\$33,000	\$33,000	\$33,000	\$33,000	\$165,000	
GRAND TOTAL	\$33,000	\$33,000	\$33,000	\$33,000	\$33,000	\$165,000	

FY21-FY24 FUNDING

\$33,000 per year in future allocations will be used for the procurement and installation of bicycle parking shelters at municipal buildings and other high demand locations. Funds will also be used for more complex bike parking projects that require new curbing, concrete, asphalt, or brick surfaces.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

FY19 funding will be used in combination with FY20 funding as described above. Prior year funding is also being used for site work (completed, as shown at left) and a shelter, which will be installed in spring 2019 at the Peabody and Rindge Avenue Upper schools.

Photo: A bicycle parking shelter will be installed at this location at the Peabody and Rindge Avenue Upper Schools.

CDD: Transportation - Bicycle Spot Improvements

FY20 Project Description	CITY COUNCIL GOALS
In FY20, an allocation of \$25,000 will be used to fund changes to infrastructure to support bicycling, and to improve safety and comfort of riders. These modifications make	*
facilities more attractive for riders of all ages and abilities. Projects generally include changes to curbs, signals, or other streetscape elements to allow for improvements to bicycle facilities and bicycle travel. With large increases in bicycle ridership, the completion of a bicycle connectivity study, and implementation of quick-build separated facilities, there is documented increasing demand for changes to streets that are not in the Five-Year Street and Sidewalk Plan. This allocation will facilitate tactical response to high-priority interventions. FY20 options include installation of bicycle signals at one or more key intersections, or construction of a floating bus stop to improve overall safety as a proof-of-concept example for future projects.	ĕ₹ò

IMPACT ON OPERATING BUDGET

There is no direct financial or personnel impact on the operating budget.

5-YEAR APPROPRIATION PLAN							
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL	
Property Taxes	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$125,000	
GRAND TOTAL	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$125,000	

FY21-FY24 FUNDING

\$25,000 in annual future allocations will be used to make physical improvements for cycling on an ongoing basis.

PROJECT VISUAL STATUS OF PRIOR YEAR PROJECTS In FY19, funds were used for bicyclesignals. specific The signals significantly increase bicycle safety TURN movements at the intersection of Mass Ave/Vassar St and address pedestrian safety at the 77 Mass Ave crossing, where bicycle signals supplement the standard signal. Photo: A bicycle traffic signal was installed on Mass Ave/Vassar St in November 2018 as part of the South Mass Ave Corridor Safety Improvements project.

CDD: Transportation - Bus Stop Improvements

FY20 Project Description	CITY COUNCIL GOALS
The allocation of \$25,000 for this program is intended improve customer experience, reduce conflicts between buses and other roadway users, and improve the ability of bus	*
operators to both pull up to the stop and provide easy boarding and alighting. This program began with a three-year pilot and ongoing annual funding at this level is	\$
requested, as this work has been effective and is one of the top priorities of the Transit Advisory Committee.	<u>♣</u> .
	₫ħ

IMPACT ON OPERATING BUDGET

Typical infrastructure improvements, like curb extensions, do not have operating impact. The piloted real-time signs do require ongoing operating funds for the vendor to continuously provide real time information and physical maintenance of the sign. This need has been incorporated into CDD's operating budget request for an additional \$4,000 for signs previously deployed.

5-YEAR APPROPRIATION PLAN							
FUNDING SOURCE FY20 FY21 FY22 FY23 FY24 TOTAL							
Property Taxes	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$125,000	
GRAND TOTAL	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$125,000	

FY21-FY24 FUNDING

Future needs for funding at this level include purchasing and installing city-owned shelters where JC Decaux shelters cannot be installed, purchasing and installing non-shelter bus stop amenities such as benches and leaning bars, as well as constructing floating bus stops at locations of high conflict or increased desire for cyclist safety.



STATUS OF PRIOR YEAR PROJECTS

Funds from prior years have been used to pilot two types of real-time information signs (*left*) to inform use of the bigger pool of Participatory Budgeting funding available, construct curb extensions to fit bus shelters and allow buses to pull up flush to the curb (e.g. Green Street at Pearl Street), and to purchase other bus stop amenities such as shelters and benches.

CDD: Transportation - Traffic Calming

FY20 Project Description	CITY COUNCIL GOALS
An allocation of \$300,000 from Parking Fund Revenues will be used for the design and construction of traffic calming measures on the following proposed streets: Chestnut	*
Street, Green Street, Maple Avenue, Riedesel Avenue and Sixth Street. Generally, projects occur in conjunction with roadway improvement projects and are therefore determined based on DPW plans for the fiscal year. The goal of the traffic calming program is to improve the safety and comfort of citizens of all ages and abilities who walk, bike, and drive in Cambridge.	ĕ₹ò

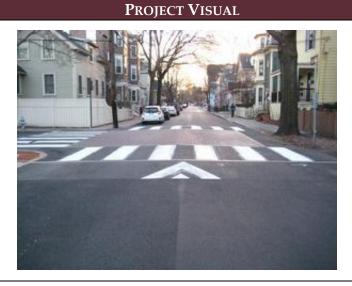
IMPACT ON OPERATING BUDGET

There is no direct impact on the operating budget.

5-YEAR APPROPRIATION PLAN							
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL	
Parking Fund Revenues	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000	
GRAND TOTAL	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000	
T3/04 T3/04 T							

FY21-FY24 FUNDING

It is anticipated that an allocation will be made in each year's budget cycle to fund traffic calming projects.



STATUS OF PRIOR YEAR PROJECTS

The Pearl Street project consisted of the reconstruction of sidewalks and roadway on Pearl St from Mass Ave to Granite St. The work included installation of eleven new crosswalks, three raised intersections and several curb extensions. Raised intersections help to reinforce the new, lower speed limit for vehicles. Curb extensions reduce crossing distances and make pedestrians more visible while waiting to cross the street.

PUBLIC WORKS: BUILDINGS - ENERGY EFFICIENCY PROJECTS

FY20 Project Description	CITY COUNCIL GOALS
An allocation of \$100,000 from Resident Parking Sticker revenue and utility rebates will continue to support the City's energy efficiency program. These projects support the City's commitment to reduce greenhouse gas emissions from municipal operations by 30% below 2008 levels by 2020. The FY20 allocation supplemented by prior year appropriations will fund the installation of LED lighting in Cambridgeport and Amigos school classrooms, Fletcher Maynard Academy LED lighting project Phase 2 (corridors, conference rooms, offices) and high-efficiency heating, ventilation and air conditioning	\$
(HVAC) improvements at the Moses Youth Center day care center.	

IMPACT ON OPERATING BUDGET

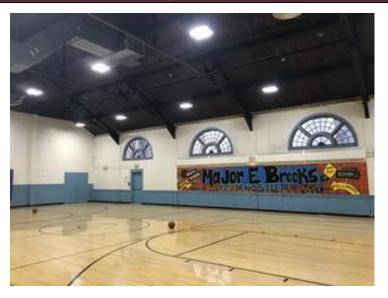
Installation of energy-saving equipment reduces energy and maintenance costs and creates a more comfortable work and learning environment.

5-YEAR APPROPRIATION PLAN							
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL	
Resident Parking Sticker Revenues	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	
GRAND TOTAL	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	

FY21-FY24 FUNDING

Annual funding for energy efficiency projects will continue through FY24.

PROJECT VISUAL



STATUS OF PRIOR YEAR PROJECTS

FY19 projects included LED lighting at the Fletcher Maynard Academy classrooms, War Memorial Field House and CRLS stairwells. HVAC projects included expanded energy management controls at the Central Square library, Coffon building and Graham and Parks school and new heating equipment at the Boudreau Library and Moore Youth Center.

In addition, the Electrical Department and School Department installed thousands of LED light bulbs provided at no cost through a special state/utility incentive program.

PUBLIC WORKS: BUILDINGS - FLOORING & FURNISHINGS

FY20 Project Description						
FY20 funding will support replacement of flooring, carpeting, and furnishings throughout City buildings.	\$					
	5					

IMPACT ON OPERATING BUDGET

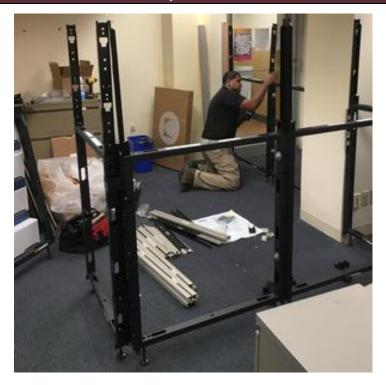
Repairs will reduce the number of service calls made and will ensure that walking surfaces remain safe and accessible.

5-Year Appropriation Plan							
Funding Source	FY20	FY21	FY22	FY23	FY24	TOTAL	
Property Taxes	\$72,500	\$80,500	\$80,500	\$80,500	\$80,500	\$394,500	
GRAND TOTAL	\$72,500	\$80,500	\$80,500	\$80,500	\$80,500	\$394,500	

FY21-FY24 FUNDING

Future funding will continue to resolve ongoing issues with flooring, carpets, and furnishings.

PROJECT VISUAL



STATUS OF PRIOR YEAR PROJECTS

Projects funded in FY19 include locations within the 3rd floor and portions of the 1st floor of the Coffon Building, carpet replacement of the 3rd and 4th floors in their entirety at City Hall Annex, the computer room in the Frisoli Youth Center, and carpet replacement of the 3rd floor Senior Center. New furnishings were purchased for the Sullivan Chamber, Women's Commission and Peace Commission Office for the Domestic and Gender Based Violence Prevention Initiative, and Finance Department.

PUBLIC WORKS: BUILDINGS - MUNICIPAL FACILITIES IMPROVEMENT PLAN (MFIP)

FY20 Project Description	CITY COUNCIL GOALS
The goal of the MFIP is to provide, and maintain, high-performing facilities for staff, occupants, the public, and the broader environment. An allocation of \$3 million in FY20	*
will continue to fund significant building improvements.	\$

IMPACT ON OPERATING BUDGET

Strategic improvements to building systems will result in lower energy and maintenance costs, higher occupant comfort and satisfaction, and preservation of building infrastructure.

5-YEAR APPROPRIATION PLAN							
FUNDING SOURCE FY20 FY21 FY22 FY23 FY24 TOTAL							
Bond Proceeds	\$3,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$23,000,000	
Grand Total	\$3,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$23,000,000	

FY21-FY24 FUNDING

This is a multi-year program; funding will be ongoing. Proposed projects in upcoming years include, but are not limited to the following; alteration to the Department of Public Works Complex; accessibility, and fire & life safety upgrades; deferred upgrades of HVAC, plumbing, lighting, electrical, and interior finishes at multiple sites.

STATUS OF PRIOR YEAR PROJECTS

Recent MFIP funded projects include the following:

- Taylor Square Fire House alteration and temporary facility
- East Cambridge Fire House Cooling and Ventilation Upgrade
- Robert W. Healy Public Safety Building Cooling Tower Replacement
- Cambridge Public Library Cooling Tower Replacement
- Electrical Shop Roof Replacement and Envelope Repair (CPA partial funding)
- Coffon Building Lower Level Interior Alteration
- City Hall Annex Traffic and Parking Accessibility and Interior Upgrade
- City Hall Annex Entry Plaza Accessibility Upgrade
- Moses Youth Center patio repair and accessibility upgrade
- Ryan Overhead Doors Replacement
- Cambridge Public Library 66.6 kW Solar Photovoltaic Array
- Fletcher Maynard Academy 97 kW AC Solar Photovoltaic Array

PUBLIC WORKS: CITY HALL IMPROVEMENTS

FY20 Project Description					
This project will create a legislative floor in City Hall along with other improvements such as renovating City Clerk's Archival Storage, elevator replacement, and	niún				
consolidating offices for the Mail Room and Print Shop. The City Council Offices created on the Second Floor will included installation of gender neutral toilets and adding	\$				
cooling to the City Council Chamber. The Assessor offices will be moved to the lower level to accommodate new offices on the second floor. Required mechanical and electrical systems upgrades are included in this project with an estimated design,	<u> </u>				
construction, and soft costs at approximately \$10,000,000.					

IMPACT ON OPERATING BUDGET

There is minimal impact on the operating budget.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Bond Proceeds	\$10,000,000	\$0	\$0	\$0	\$0	\$10,000,000
Grand Total	\$10,000,000	\$0	\$0	\$0	\$0	\$10,000,000

FY21-FY24 FUNDING

Future funding is not anticipated at this time for City Hall.

PROJECT VISUAL

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STATUS OF PRIOR YEAR PROJECTS

In 2017, the City engaged in a feasibility study to determine if renovating City Hall was possible to create a Legislative floor and a cost estimate was produced. In FY19, \$3,000,000 was approved to support the planning, feasibility, and design of the City Hall Improvement, 831 Massachusetts Avenue, and 3 Bigelow Street Buildings.

PUBLIC WORKS: PARKS - PARK PLAY AREA SHADE STRUCTURES

FY20 Project Description	CITY COUNCIL GOALS
Semi-permanent shade canopy structures at playgrounds will enable the public to enjoy these facilities during hot summer days when there is no natural shade.	Ť ≞

IMPACT ON OPERATING BUDGET

There is minimal impact anticipated on the operating budget.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$50,000	\$100,000	\$0	\$115,000	\$0	\$265,000
GRAND TOTAL	\$50,000	\$100,000	\$0	\$115,000	\$0	\$265,000

FY21-FY24 FUNDING

Funding is expected to continue through FY23.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

Allocations of \$50,000 in both FY18 and FY19 are being applied to design and construction of a shade structure at both Greene-Rose Heritage Park and Russell Field.

PUBLIC WORKS: PARKS - PARK SURFACING RESTORATION PROGRAM

FY20 Project Description	CITY COUNCIL GOALS
Rubber surfacing at several parks has deteriorated to the point where it cannot be temporarily patched. Replacement will ensure that walking and play surfaces remain safe and accessible.	↑
FY20 work addresses Gore Park and Maple and Marie Playground.	

IMPACT ON OPERATING BUDGET

Regular upgrades will reduce routine maintenance costs.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$100,000	\$100,000	\$100,000	\$150,000	\$160,000	\$610,000
GRAND TOTAL	\$100,000	\$100,000	\$100,000	\$150,000	\$160,000	\$610,000

FY21-FY24 FUNDING

Future years' work will continue to resolve ongoing issues with rubber surface repairs. FY21 work will include Dana and Cooper Playground. In FY22, work will include Alden Playground and Silva Playground. In FY23, work will include Fletcher Maynard and Larch Road Park.

Project Visual



STATUS OF PRIOR YEAR PROJECTS

The FY19 allocation of \$140,000 has been applied to the restoration of Peabody School Playground. The FY18 allocation of \$150,000 was applied to a restoration of the Corporal Burns Park in spring 2018.

PUBLIC WORKS: PARKS - PARK WATER CONSERVATION PROGRAM

FY20 Project Description	CITY COUNCIL GOALS
Public Works began to implement a central control system for park and public area irrigation sites, water plays, and water fountains starting in FY17. This system enables monitoring and control of this equipment throughout the City and will put Cambridge at the forefront of municipal water conservation among New England municipalities.	\$ *
The City manages 97 irrigated sites (ranging from small planting beds to large fields), 22 water plays, and 52 water fountains. Irrigation provides important community benefits, including beautification and plant health, while water plays and fountains provide much needed relief during hot weather. With this new system, any sudden drop in water pressure will automatically shut off leaking equipment. All of these efforts will help conserve water.	

IMPACT ON OPERATING BUDGET

This project is expected to result in more efficient maintenance and repair processes, and better levels of service (in terms of quality of plantings and reduced downtime) and better water conservation.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Water Service Charges	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$400,000
GRAND TOTAL	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$400,000
FY21-FY24 FUNDING						

Public Works estimates that full program implementation, which includes all Public Works-maintained facilities and Danehy Park, will cost \$700,000 in total between FY17 and FY23.



STATUS OF PRIOR YEAR PROJECTS

Allocations of \$100,000 in FY18 and FY19 have been used to install control equipment at a first group of parks. The FY20 allocation will be used for the same purpose.

PUBLIC WORKS: PARKS - RECREATIONAL HARD SURFACE RESTORATION

FY20 Project Description	CITY COUNCIL GOALS
The City manages and maintains 34 basketball courts, 11 tennis courts and 3 street hockey courts. Many of these facilities are heavily used for youth and adult sports, and some hard surfaces support special events that would not otherwise be possible.	♣.
At this time there are a number of courts that need to be replaced, despite significant repairs. These funds will allow the initiation of a capital repair program, starting in FY20 with the basketball courts at Ahern Field.	

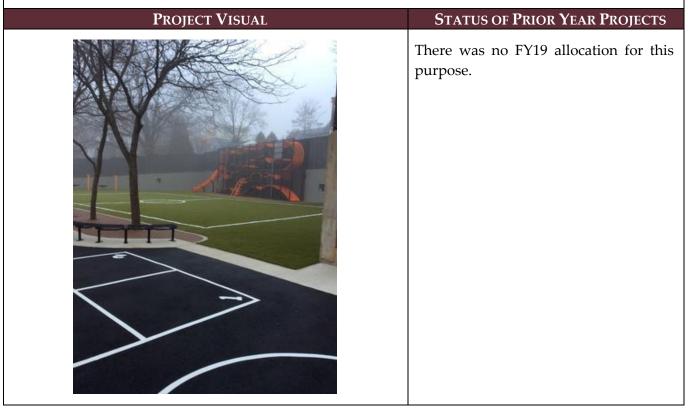
IMPACT ON OPERATING BUDGET

This request would reduce the operating budget resources dedicated to small, short-term repairs.

FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$112,500	\$112,500	\$124,500	\$124,500	\$124,500	\$598,500
Grand Total	\$112,500	\$112,500	\$124,500	\$124,500	\$124,500	\$598,500

FY21-FY24 FUNDING

Future allocations will be used for hard surface restoration at Riverside Press Tennis Court and Corporal Burns, Lindstrom, Reverend Williams and Riverside Press basketball courts



PUBLIC WORKS: RECYCLE - PUBLIC AREA LITTER AND RECYCLING BIN IMPROVEMENT PROJECT

FY20 Project Description	CITY COUNCIL GOALS
This funding will allow trash and recycling collection in public areas to be more efficient and to improve the appearance of commercial areas. Big Belly bins are dual-purpose	\$
public receptacles; one side is a solar-powered trash compactor and the other is a single-stream recycling receptacle. These bins have been very popular and make collection and disposal more efficient.	1 1 €
The FY20 request will be used to install ten paired bins along Cambridge Street.	

IMPACT ON OPERATING BUDGET

These bins compact trash and need to be emptied less frequently than traditional trash bins. They also transmit data about fullness levels, notifying staff when specific bins need to be emptied. This enables less frequent service by City staff and vehicles, reducing operating costs for collection as more bins are installed across the city over time.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
GRAND TOTAL	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000

FY21-FY24 FUNDING

Public Works requests an annual allocation from FY21-FY24 to continue to implement this program.

Project Visual



STATUS OF PRIOR YEAR PROJECTS

The use of Big Belly receptacles has made our streets cleaner and less unsightly. The pairing of trash and recycling bins helps increase waste diversion, which ultimately helps Cambridge reach its goal of 30% reduction in trash by 2020. Prior investments in these receptacles through a variety of funding sources has allowed the installation of 130 stations throughout the City.

PUBLIC WORKS: SEWER/STORMWATER - AGASSIZ

FY20 Project Description	CITY COUNCIL GOALS
The Agassiz program is an ongoing sewer separation and stormwater program. No funding is being appropriated in FY20.	4
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IMPACT ON OPERATING BUDGET

Continued investment in the improvement of sewer and stormwater infrastructure reduces the need for emergency responses to sewer backups and flooding, saving on operating costs.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Sewer Bond Proceeds	\$0	\$30,000,000	\$0	\$0	\$0	\$30,000,000
GRAND TOTAL	\$0	\$30,000,000	\$ 0	\$0	\$0	\$30,000,000

FY21-FY24 FUNDING

FY21 funding will be used for the design and construction of sewer, stormwater, water, street, and sidewalk improvements on Kirkland Street and Roberts Road. Kirkland Street is a major connector for pedestrians and cyclists traveling to and from Harvard Square. A comprehensive community design process will be undertaken to develop the design of this key corridor with an emphasis on designing streets for all users and supporting the City's commitment to Complete Streets and Vision Zero.

Project Visual	STATUS OF PRIOR YEAR PROJECTS
	Photo: Kirkland Street

PUBLIC WORKS: SEWER/STORMWATER - ALEWIFE

FY20 Project Description	CITY COUNCIL GOALS
Funding in FY20 will support the construction of a stormwater holding tank in conjunction with the Tobin School construction. This will reduce the flooding in the Vassal Lane / Standish Street area.	* \$
The Alewife Preparedness Plan identified this storage tank to improve the resiliency of the Alewife neighborhood to climate change. As part of the recently completed sewer separation construction on Vassal Lane, the utilities were designed to support the installation of this stormwater storage tank.	

IMPACT ON OPERATING BUDGET

Continued investment in the improvement of sewer and stormwater infrastructure reduces the need for emergency responses to sewer backups and flooding, saving on operating costs.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Sewer Bond Proceeds	\$15,000,000	\$0	\$0	\$0	\$0	\$15,000,000
GRAND TOTAL	\$15,000,000	\$0	\$0	\$0	\$0	\$15,000,000

FY21-FY24 FUNDING

After this initial allocation in FY20, no additional funding is anticipated.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

Previous funding supported sewer separation in the Huron and Concord Avenue neighborhoods; construction of the Alewife Stormwater Wetlands; sewer separation in the Whittemore Avenue area; and the reconstruction of Fresh Pond Parkway.

Photo: Stormwater holding tank on Hovey Avenue.

PUBLIC WORKS: SEWER/STORMWATER - CAPITAL REPAIRS PROGRAM

FY20 Project Description	CITY COUNCIL GOALS
An FY20 appropriation and bond authorization of \$5 million to the Capital Repairs Program will maintain the quality of the existing sewer and drain infrastructure throughout the city by completing repairs of older pipes. Typical methods include cured-in-place pipe (CIPP) lining and slip-lining. The goal is to structurally rehabilitate older pipe systems that are showing signs of age in areas where more significant sewer separation and stormwater management projects are not scheduled.	* \$

IMPACT ON OPERATING BUDGET

Continued investment in the improvement of sewer and stormwater infrastructure reduces the need for emergency responses to sewer backups and flooding, saving on operating costs.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Sewer Bond Proceeds	\$5,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$29,000,000
Grand Total	\$5,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$29,000,000

FY21-FY24 FUNDING

Future allocations to this program will be used to continue rehabilitating pipe systems.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

Previous funding supported the creation of the program, repairs of deteriorated pipes, and CIPP lining contracts. The InfoWorks program is used to identify defects and develop an overall rating index for each segment of pipe based on video inspections. This used to create a rating index is prioritization of locations for rehabilitation. Lining contracts are continuing to structurally rehabilitate our older pipe segments.

PUBLIC WORKS: SEWER/STORMWATER - CLIMATE CHANGE

FY20 Project Description	CITY COUNCIL GOALS
An FY20 appropriation and bond authorization of \$500,000 is being requested to implement efforts identified through the City's Climate Change Vulnerability	4
Assessment and the Climate Change Preparedness and Resilience Plan. Funding will be used for outreach to property owners, residents, and businesses to help them undertake	riârin
efforts to improve their resiliency to the impacts of climate change (increased precipitation and sea level rise) and additional modeling efforts to further refine the	*
projected impacts to Cambridge and evaluate potential resiliency efforts.	\$
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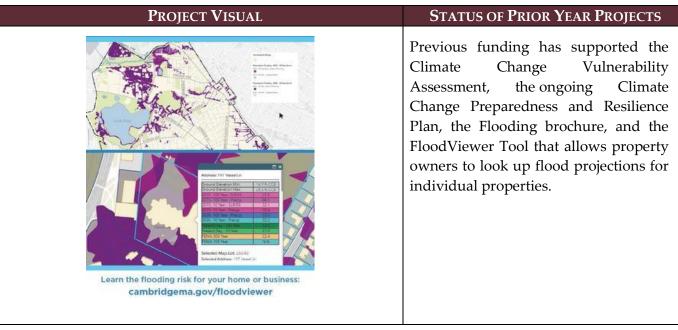
IMPACT ON OPERATING BUDGET

Continued investment in understanding the City's vulnerabilities to climate change and implementing preparedness and resiliency efforts will reduce the need for emergency responses to sewer backups and flooding, saving on operating costs.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Sewer Bond Proceeds	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,500,000
GRAND TOTAL	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,500,000

FY21-FY24 FUNDING

Future allocations to this program will be used to continue implementing resiliency efforts.



PUBLIC WORKS: SEWER/STORMWATER - HARVARD SQUARE

FY20 Project Description	CITY COUNCIL GOALS
The Harvard Square program is an ongoing sewer separation and stormwater management program. Previous funds appropriated are supporting the cleaning of the	
existing CAM005 stormwater outfall near Mt. Auburn Hospital, constructing a new stormwater outfall at Willard Street, and reconstructing Willard Street between Mt.	ňůň
Auburn Street and Brattle Street with an emphasis on designing streets for all users and supporting the City's commitment to Complete Streets and Vision Zero. The Willard St	*
construction is scheduled to begin summer 2019.	\$
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IMPACT ON OPERATING BUDGET

Continued investment in the improvement of sewer and stormwater infrastructure reduces the need for emergency responses to sewer backups and flooding, saving on operating costs.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Sewer Bond Proceeds	\$0	\$0	\$0	\$0	\$2,650,000	\$2,650,000
GRAND TOTAL	\$0	\$0	\$ 0	\$0	\$2,650,000	\$2,650,000

FY21-FY24 FUNDING

Future funding will be used for Upper Harvard Square improvements and providing improved stormwater conveyance between Brattle Street and Mt. Auburn Street (via Mifflin Place) to carry stormwater to the outfall on University Road.

PROJECT VISUAL VIEW TO FOSTER STREET - AFTER FY16 (\$800,000) and FY17 (\$3,500,000) funding is being used to clean the existing stormwater outfall, construct a new stormwater outfall at Willard Street, and reconstruct Willard Street between Mt. Auburn Street and Brattle Street. Photo: Willard Street at Foster Street Proposed Design

PUBLIC WORKS: SEWER/STORMWATER - REMEDIAL CONSTRUCTION

FY20 Project Description	CITY COUNCIL GOALS
This program is focused on the maintenance of existing sewer and drain infrastructure throughout the City. The program addresses emergency repairs, catch basin repair and replacement, manhole repair and replacement, pipeline repair and maintenance, and the cleaning and inspection of existing sewer and drain infrastructure.	* \$

IMPACT ON OPERATING BUDGET

Continued investment in the improvement of sewer and stormwater infrastructure reduces the need for emergency responses to sewer backups and flooding, saving on operating costs in that area.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Sewer Service Charges	\$1,500,000	\$1,500,000	\$2,500,000	\$3,500,000	\$4,000,000	\$13,000,000
GRAND TOTAL	\$1,500,000	\$1,500,000	\$2,500,000	\$3,500,000	\$4,000,000	\$13,000,000

FY21-FY24 FUNDING

Future allocations for this program will be used to continue maintenance of existing sewer and drain infrastructure.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

Previous funding was used for emergency repair and replacement of existing infrastructure, such as this section of drain line on Pearl Street (shown left).

PUBLIC WORKS: STREETS - CENTRAL SQUARE

FY20 Project Description	CITY COUNCIL GOALS
An FY23 and FY24 appropriation and bond authorizations will support the design of surface enhancements and sewer and drainage infrastructure improvements on Mass.	4
Ave. between Inman Street and Sidney Street. Project improvements will include rehabilitation of City utilities (sewer, drain, and water), coordination with private utility	
companies, full depth roadway reconstruction, new sidewalks, new street trees, an enhanced bicycle facility, enhanced transit amenities for the key bus stops along the	*
corridor, and will be integrated with the River Street and Carl Barron Plaza improvements. A comprehensive community design process will be undertaken to	\$
develop the design of this key corridor with an emphasis on designing streets for all users and supporting the City's commitment to Complete Streets and Vision Zero.	♣ .
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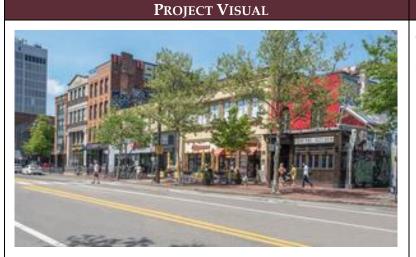
IMPACT ON OPERATING BUDGET

Continued investment in infrastructure reduces the need for emergency repairs, saving on operating costs.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Bond Proceeds	\$0	\$0	\$0	\$2,000,000	\$15,000,000	\$17,000,000
Sewer Bond Proceeds	\$0	\$0	\$0	\$1,000,000	\$10,000,000	\$11,000,000
GRAND TOTAL	\$0	\$0	\$0	\$3,000,000	\$25,000,000	\$28,000,000

FY21-FY24 FUNDING

An FY23 appropriation and bond authorization of \$3,000,000 will support the design. An FY24 appropriation and bond authorization of \$25,000,000 will support the construction.



STATUS OF PRIOR YEAR PROJECTS

This project has not been previously funded.

PUBLIC WORKS: STREETS - COMPLETE STREETS RECONSTRUCTION

FY20 Project Description			
These funds support the Complete Streets and Miscellaneous Sidewalk Programs. Priority is placed on locations where the street, sidewalk, and bike	4		
facilities are in poor condition; locations serving significant pedestrian populations such as those near parks, squares, libraries, schools, elderly housing, and Senior Centers;	ďům		
requests by the Cambridge Commission for Persons with Disabilities; streets serving bus routes; priority routes identified in the City's Bike Plan; and locations with tree/sidewalk	*		
conflicts. The goal of the program is to provide high quality infrastructure with an emphasis on designing streets for all users and supporting the City's commitment to	\$		
Complete Streets and Vision Zero.	øð.		

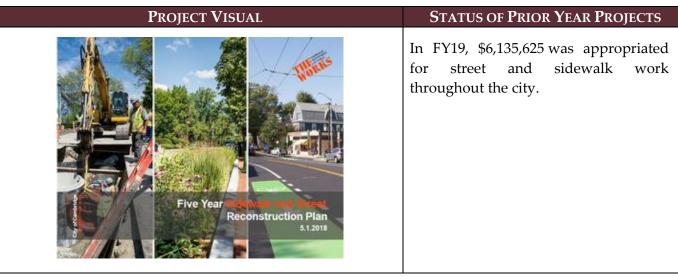
IMPACT ON OPERATING BUDGET

By allocating funds for the reconstruction of streets and sidewalks, the City is reducing street maintenance costs in the operating budget.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Bond Proceeds	\$4,000,000	\$3,000,000	\$4,000,000	\$3,000,000	\$4,000,000	\$18,000,000
Chapter 90	\$3,130,905	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$13,130,905
Property Taxes	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
Street Preservation Offset Fund	\$509,925	\$200,000	\$200,000	\$200,000	\$200,000	\$1,309,925
GRAND TOTAL	\$7,790,830	\$5,850,000	\$6,850,000	\$5,850,000	\$6,850,000	\$33,190,830

FY21-FY24 FUNDING

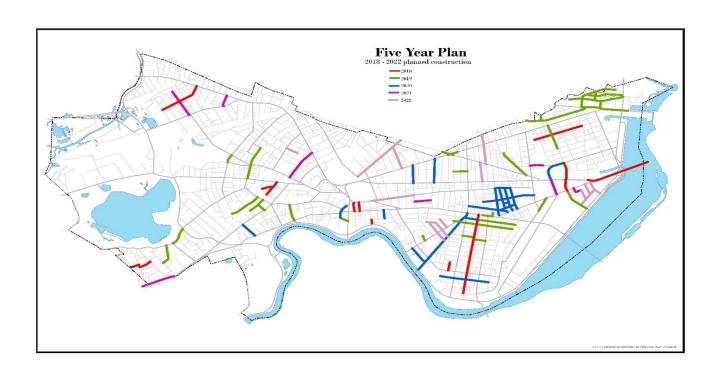
Future allocations to this program will be used to continue reconstructing streets and sidewalks throughout the city.



ADDITIONAL PROJECT INFORMATION

FY20 Complete Streets construction projects include:

STREETS AND SIDEWALKS			
STREET	FROM	То	Cost
Bike/Pedestrian Infrastructure (Inman Square)			\$1,000,000
Belmont	Holworthy	Town Line	\$1,240,217
Cemetery-5 Year Street and Drainage Plan			\$100,000
Chestnut Street Design	Sidney	Pleasant	\$1,300,000
Dana Street Design	Broadway	Mass Ave	\$200,000
Maple Avenue	Broadway	Cambridge	\$1,665,692
Rogers Street	Third Street		\$175,000
Washington Street	Norfolk	Portland	\$450,000
Central Square	Sidewalk Repairs		\$1,000,000
Miscellaneous Sidewalks			\$659,923
TOTAL COST			\$7,790,832



PUBLIC WORKS: STREETS - HARVARD SQUARE KIOSK AND PLAZA AND SURFACE ENHANCEMENTS

FY20 Project Description	CITY COUNCIL GOALS
The FY20 appropriation will fund the design and construction of Eliot Street between JFK St. and Brattle St. The first phase of this construction will be Eliot St between JFK	<u></u>
St. and Bennett St. and will be underway in FY20. The second phase of the project will be Eliot St. between Bennett St. and Brattle St. A larger community design process for	ůůň
the second phase will begin in FY21 with an emphasis on designing streets for all users and supporting the City's commitment to Complete Streets and Vision Zero.	*
Previous appropriations are being used to renovate the Harvard Square Kiosk to open	\$
up the historic kiosk building for more public use, renovate and enhance the historic character of the building, and build on its iconic presence in Harvard Square. The surrounding plaza area and the Eliot Street Loop will be reconstructed to make it more	<u> </u>
inviting, enhance pedestrian usage, improve accessibility and improve conditions for people biking and taking buses.	ራ የት
Construction of the kiosk and plaza are scheduled to begin in the spring / summer of 2019.	

IMPACT ON OPERATING BUDGET

There will likely be an increase in operating costs associated with the operation of the building.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Bond Proceeds	\$4,000,000	\$0	\$0	\$0	\$0	\$4,000,000
GRAND TOTAL	\$4,000,000	\$0	\$0	\$0	\$0	\$4,000,000
		EV/04	EVO4 Errors			

Future funding is not anticipated.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

In FY16 and FY17 a total of \$8,600,000 was appropriated for the design and construction of the Kiosk and Plaza renovations and Eliot St.

Image of proposed renovations to Kiosk and Plaza.

PUBLIC WORKS: TREES - EMERALD ASH BORER TREATMENT

FY20 Project Description	CITY COUNCIL GOALS
FY20 funds will be used to continue a proactive plan to protect ash trees that are at risk of developing Emerald Ash Borer (EAB) disease. The EAB insect kills nearly all trees that it infests. Past allocations provided for treatment of trees, removal of trees in poor	*
condition that are vulnerable to infection, and replacing trees that require removal.	Ť.
Due to a significant increase in contract cost to treat trees, the FY20 allocation of \$100,000 and future allocations will only support the treatment of trees.	

IMPACT ON OPERATING BUDGET

Tree maintenance programs will reduce emergency service needs and promote better tree health.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$100,000	\$200,000	\$100,000	\$100,000	\$200,000	\$700,000
GRAND TOTAL	\$100,000	\$200,000	\$100,000	\$100,000	\$200,000	\$700,000

FY21-FY24 FUNDING

Future year funding will continue the EAB treatment program. The practice heretofore has been to treat fifty percent of the ash tree population annually; however, it is expected that during FY21 and FY24 the entire population of ash trees will need to be treated, thus doubling annual costs in those years.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

In FY19, \$100,000 was appropriated to continue the EAB treatment program.

PUBLIC WORKS: TREES - PARK AND CEMETERY TREE PRUNING

FY20 Project Description	CITY COUNCIL GOALS
The allocation will fund an ongoing program to perform structural pruning of trees in City parks and at the Cambridge Cemetery. The emphasis is on overall maintenance of	*
tree health and hazard elimination. The funds will be used for hazard tree removal and allow a pruning cycle of approximately eight years.	\$
	<u>♣</u> .
	,± }.

IMPACT ON OPERATING BUDGET

Preventative maintenance programs reduce emergency service needs and promote better tree health.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$100,000	\$125,000	\$125,000	\$125,000	\$125,000	\$600,000
GRAND TOTAL	\$100,000	\$125,000	\$125,000	\$125,000	\$125,000	\$600,000

FY21-FY24 FUNDING

Future funding will be used to continue park and cemetery tree pruning.



STATUS OF PRIOR YEAR PROJECTS

In FY19, \$100,000 was appropriated to fund park and cemetery tree pruning.

PUBLIC WORKS: TREES - PUBLIC SHADE TREE INVESTMENT PROGRAM

FY20 Project Description	CITY COUNCIL GOALS
The FY20 funds will be used to continue to maintain and grow a healthy, diverse tree canopy in the City. Specifically, these funds will be used to plant new trees and maintain	*
them through establishment. This project also aids the City's efforts to mitigate the impact of climate change by reducing urban heat island impacts and increasing carbon	<u>♣</u> .
sequestration. In addition to the property tax allocation of \$125,000, the FY20 allocation for this project will include \$370,000 in tree program revenue. Tree program revenue is received mainly in connection with development projects in the City under the Tree Protection Ordinance. Water Department Funds will be used to plant a significant number of additional trees at the Fresh Pond Golf Course within the Fresh Pond Reservation. All new trees will be planted in accordance with revised standard specifications developed with the participation of the Committee on Public Planting.	

IMPACT ON OPERATING BUDGET

The funds proposed are adequate to ensure proper care of the trees through establishment, thus reducing the operating costs that would otherwise be needed to care for these trees through the first three years of their growth.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000	\$625,000
Tree Program Revenues	\$370,000	\$0	\$0	\$0	\$0	\$370,000
GRAND TOTAL	\$495,000	\$125,000	\$125,000	\$125,000	\$125,000	\$995,000

FY21-FY24 FUNDING

Funds will be provided per year to continue to improve the city's urban forest.

PROJECT VISUAL	STATUS OF PRIOR YEAR PROJECTS
	In FY19 \$250,000 was appropriated including \$125,000 in taxes and \$125,000 in tree program revenue. In addition, a supplemental Free Cash appropriation of \$100,000 was also made for additional trees in parks and open spaces in FY19.

WATER: FRESH POND MASTER PLAN IMPLEMENTATION

FY20 Project Description	CITY COUNCIL GOALS
FY20 funds will be used for various Fresh Pond Reservation Master Plan priorities, including Weir Meadow Perimeter Road design.	1

IMPACT ON OPERATING BUDGET

As projects are completed, there is the potential for increased maintenance costs.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Water Service Charges	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
GRAND TOTAL	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000

FY21-FY24 FUNDING

Future funds will be used for Fresh Pond Master Plan priorities.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

Prior year funds were used for Fresh Pond Master Plan priorities such as Black's Nook In-Lake Assessment.

WATER: FRESH POND RESERVATION MAJOR PROJECTS

FY20 Project Description	CITY COUNCIL GOALS
FY20 funds will be used to implement Black's Nook improvement recommendations.	1 .

IMPACT ON OPERATING BUDGET

This project will not impact the operating budget

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Water Service Charges	\$50,000	\$330,000	\$685,000	\$400,000	\$750,000	\$2,215,000
GRAND TOTAL	\$50,000	\$330,000	\$685,000	\$400,000	\$750,000	\$2,215,000

FY21-FY24 FUNDING

Future projects include paving the perimeter road with ADA compliant material and Fresh Pond professional signage upgrades.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

In FY19 these funds were used to purchase electric landscaping equipment and an O2 composter.

WATER: HYDROELECTRIC RENEWABLE ENERGY GENERATION

FY20 Project Description	CITY COUNCIL GOALS
FY20 funds will be used to continue the design and prepare for construction of hydroelectric energy generation downstream of the Stony Brook Dam and at the Wier Chamber in Fresh Pond.	1 a

IMPACT ON OPERATING BUDGET

The project will reduce energy costs for the Treatment Plant.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Water Service Charges	\$250,000	\$0	\$0	\$0	\$0	\$250,000
GRAND TOTAL	\$250,000	\$0	\$0	\$0	\$0	\$250,000

FY21-FY24 FUNDING

Future funding is not anticipated.



STATUS OF PRIOR YEAR PROJECTS

Prior year funds were used to initiate the design of hydroelectric energy generation.

WATER: PC UPGRADES

FY20 Project Description	CITY COUNCIL GOALS
FY20 funds will be used to replace personal computers (PCs) and other IT equipment at the Water Department.	L
1	\$

IMPACT ON OPERATING BUDGET

Funding this project prevents delays in accurately reporting water bill revenues and other Department functions.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Water Service Charges	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$100,000
GRAND TOTAL	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$100,000

FY21-FY24 FUNDING

Future funds will be used to upgrade PCs and fulfill other IT needs of the Department.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

Prior year funds were used to upgrade PCs and other IT equipment.

WATER: RESERVOIR FACILITIES IMPROVEMENTS - UPCOUNTRY

FY20 Project Description	CITY COUNCIL GOALS
FY20 funds will be used to continue the repair of Hobbs Dam Slope/Winter Street drainage, removing vegetation from City-owned easements.	Ť ≞
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IMPACT ON OPERATING BUDGET

There is no anticipated impact on the operating budget.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Water Service Charges	\$550,000	\$230,000	\$200,000	\$335,000	\$300,000	\$1,615,000
GRAND TOTAL	\$550,000	\$230,000	\$200,000	\$335,000	\$300,000	\$1,615,000

FY21-FY24 FUNDING

Future funding will be used to continue biennial Dam Inspections, removing vegetation from Cityowned easements, and develop Stony Brook spillway upsizing alternatives.





PROJECT VISUAL

Prior year funds were used to repair Hobbs Dam Slope/Winter Street drainage, remove vegetation from Cityowned easements and conduct biennial dam inspections.

WATER: RESERVOIR GAGING WEATHER STATION MAINTENANCE

FY20 Project Description	CITY COUNCIL GOALS
FY20 funds will be used to cover the costs of maintenance/reporting for the United States Geological Survey (USGS) reservoir gaging stations located upcountry.	*

IMPACT ON OPERATING BUDGET

USGS will contribute funds for maintenance/reporting on the reservoir gaging stations, reducing operating costs for the Water Department.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Water Service Charges	\$200,000	\$205,000	\$210,000	\$210,000	\$210,000	\$1,035,000
GRAND TOTAL	\$200,000	\$205,000	\$210,000	\$210,000	\$210,000	\$1,035,000

FY21-FY24 FUNDING

Future funds will be used to cover maintenance for the reservoir gaging weather station located upcountry.

PROJECT VISUAL



STATUS OF PRIOR YEAR PROJECTS

Prior year funds were used to cover the costs of maintenance/reporting for the USGS reservoir gaging stations located upcountry.

WATER: WATER FACILITY UPGRADES

FY20 Project Description	CITY COUNCIL GOALS
FY20 funds will be used for remote site security, replacement of HVAC controllers, floor tiles and chiller unit, HVAC spare parts and initial funding of the roof replacement.	*
	\$

IMPACT ON OPERATING BUDGET

Planned facility upgrades reduce the need for costly emergency repairs.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Water Service Charges	\$309,000	\$148,000	\$122,000	\$97,000	\$50,000	\$726,000
GRAND TOTAL	\$309,000	\$148,000	\$122,000	\$97,000	\$50,000	\$726,000

FY21-FY24 FUNDING

Future funding will be used for additional remote site security, continued roof replacement, carpet replacement and interior painting of the Treatment plant.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

FY19 funds were used for remote site security, HVAC spare parts and to conduct a roof inspection of the Treatment plant.

WATER: WATER METER REPLACEMENT

FY20 Project Description	CITY COUNCIL GOALS
FY20 funds will be used to cover replacement of water meters. Replacement improves the accuracy of the measurement of water consumption.	*
	\$

IMPACT ON OPERATING BUDGET

There is no impact on the operating budget.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Water Service Charges	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000
GRAND TOTAL	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000

FY21-FY24 FUNDING

Future funds will be used to replace water meters and MTUs.

PROJECT VISUAL



STATUS OF PRIOR YEAR PROJECTS

Prior year funds were used to cover replacement of water meters and MTUs.

WATER: WATER TREATMENT PLANT EQUIPMENT & SYSTEMS UPGRADES

FY20 Project Description				
FY20 funds will be used for plant instrumentation replacement, raising the residual hatches, SCADA upgrade, facility pipe repair, purchase a deionized water system and a	*			
jar tester.	\$			

IMPACT ON OPERATING BUDGET

Planned maintenance and replacement of Water Plant equipment reduces the need for costly emergency repairs.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Water Service Charges	\$528,000	\$810,000	\$645,000	\$455,000	\$295,000	\$2,733,000
GRAND TOTAL	\$528,000	\$810,000	\$645,000	\$455,000	\$295,000	\$2,733,000

FY21-FY24 FUNDING

Future funds will be used for plant instrumentation replacement, SCADA upgrade, and continue facility pipe repair.

Project Visual



STATUS OF PRIOR YEAR PROJECTS

Prior year funds were used for Water Plant instrumentation replacement, high lift pump rebuild, Hypo bulk tank replacement, SCADA upgrade, GC/MS (organics) instrument replacement, and DAF Recirculation Pump Replacement.

WATER: WATER WORKS CONSTRUCTION

FY20 Project Description	CITY COUNCIL GOALS
FY20 funds will be used for water works construction projects, which include repair/replacement of water infrastructure, assistance during emergency repairs and	*
unanticipated needs within the City. Also including fire hydrant and large valve replacement, police details and the annual leak detection survey.	\$
	•••

IMPACT ON OPERATING BUDGET

Replacement of old water mains reduces the potential of leaks in the system, which in turn reduces potential overtime costs for the Water Department.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Water Service Charges	\$2,000,000	\$2,369,000	\$2,000,000	\$2,365,000	\$2,357,000	\$11,091,000
GRAND TOTAL	\$2,000,000	\$2,369,000	\$2,000,000	\$2,365,000	\$2,357,000	\$11,091,000

FY21-FY24 FUNDING

Future funds will be used for water works construction projects and annual leak detection.

PROJECT VISUAL



STATUS OF PRIOR YEAR PROJECTS

Prior year funds were used for water works construction projects such as water main replacement on Maple Avenue, Inman Street and Riedesel Avenue.

WATER: WATERSHED CONSULTING SERVICES

FY20 Project Description	CITY COUNCIL GOALS
FY20 funds will be used to support the DEP Source Water Protection Plan, GIS mapping and analysis, distribution hydraulic model updates, vulnerability assessment and specialized site plan review.	*

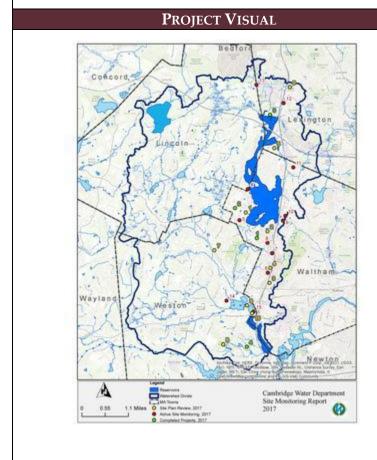
IMPACT ON OPERATING BUDGET

Services will have no impact on the operating budget.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Water Service Charges	\$43,000	\$68,000	\$68,000	\$68,000	\$68,000	\$315,000
GRAND TOTAL	\$43,000	\$68,000	\$68,000	\$68,000	\$68,000	\$315,000

FY21-FY24 FUNDING

Future projects include the continuation of incorporating improvements from the DEP Source Water Protection Plan, GIS mapping and analysis, distribution hydraulic model updates and specialized site plan review.



STATUS OF PRIOR YEAR PROJECTS

Prior year funds were used to support the DEP Source Water Protection Plan for Cartograph Asset system support, USGS equipment, GIS mapping and analysis, distribution hydraulic model updates and specialized site plan review.

HUMAN SERVICES: DANEHY PARK BENCH AND TABLE REPLACEMENT

FY20 Project Description					
In FY19, phase 1 of the bench replacement project was completed using \$60,000 in capital funds plus \$52,000 from an existing bond. During FY19, all wooden benches within	ňůň				
Danehy Park will have been replaced with the approved powder coated metal units. In FY20, phase 2 of the project will include replacing several clusters of wooden picnic	♣.				
tables and with powder coated metal units that also include 3 or more ADA approved units. In prior years a portion of the total request from the Cambridge Commission for					
Persons with Disabilities has been allotted to this phased project, which is expected to continue. The total amount needed to complete the replacement of standard picnic tables throughout the park will be an estimated \$250,000. The total amount needed to complete the replacement of all ADA picnic tables will be \$45,000.					

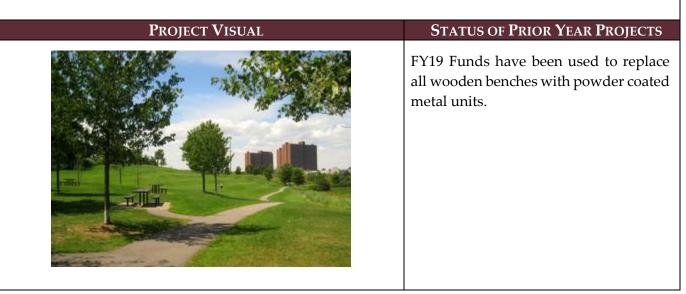
IMPACT ON OPERATING BUDGET

Due to weather, vandalism, and trends in cross training our benches and tables have reached their useful life. Keeping up with both aesthetics and safe use across our park is a challenge that carries significant cost in supplies and labor. Staff has to consistently purchase, paint, reshape and replace more than 76 combined units. Powder coated metal benches are rated for 30 years. Using this type of material would allow our park staff to refocus their effort on a growing demand for the park and would also enhance user experience greatly.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
GRAND TOTAL	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000

FY21-FY24 FUNDING

Funding in FY21 will be used to continue replacing benches and tables.



HUMAN SERVICES: DANEHY PARK MAINTENANCE

FY20 Project Description	CITY COUNCIL GOALS
FY20 funding will support annual Danehy Park land and infrastructure repairs. Irrigation upgrades and drainage, with dual purpose machinery for snow and	ňůň
turf management will be necessary to keep up with growing use of park facility. Purchasing this multi-use equipment will: a) substantially decrease the amount	*
of time spent by our staff resetting our playing fields to accommodate a growing number of high-school, school-aged, and adult users; b) substantially decrease the amount of time spent on snow removal during the winter months, allowing our staff to more	<u> </u>
effectively complete the City exemption list; c) limit physical labor and potential injury to staff during all seasons. Expected base price of the vehicle is \$40,000, leaving approximately \$10,000 and existing balances from previous years to manage land use	
and infrastructure repair.	

IMPACT ON OPERATING BUDGET

These projects will reduce yearly operating and maintenance costs and allow our staff to repair and reset public space more efficiently.

5-YEAR APPROPRIATION PLAN						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$50,000	\$37,000	\$37,000	\$50,000	\$50,000	\$224,000
GRAND TOTAL	\$50,000	\$37,000	\$37,000	\$50,000	\$50,000	\$224,000

FY21-FY24 FUNDING

Future funding will be used to maintain Danehy Park and the increased cost of capital improvements due to inflation, aging park features and aging equipment.

Project Visual	STATUS OF PRIOR YEAR PROJECTS
	FY19 funding was used to install security netting to protect pedestrians, neighbors, and patrons from the risk of being hit by stray balls.

HUMAN SERVICES: DISABILITY COMMISSION ADA ACCESSIBILITY IMPROVEMENTS

FY20 Project Description	CITY COUNCIL GOALS
In FY20 \$50,000 will be used to provide ADA compliant picnic tables in city parks, fire pedestals, and universal design equipment to retrofit features in existing parks at the	i ůři
discretion of the Open Space Committee.	414
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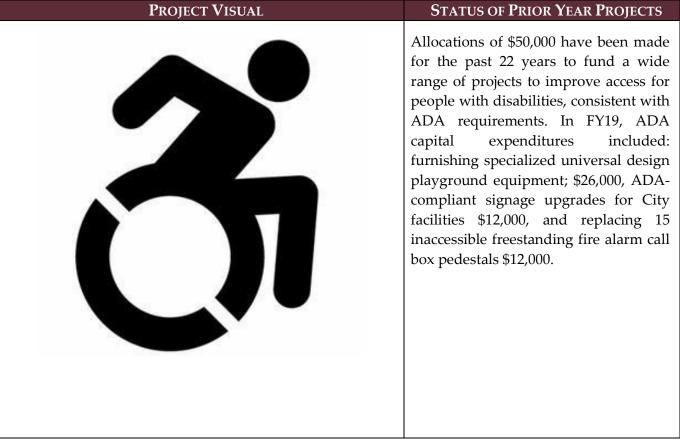
IMPACT ON OPERATING BUDGET

There is no impact on the operating budget.

5-Year Appropriation Plan						
FUNDING SOURCE FY20 FY21 FY22 FY23 FY24 TOTAL						
Property Taxes	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
GRAND TOTAL	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000

FY21-FY24 FUNDING

The City plans to continue allocating \$50,000 in future years, for ADA accessibility improvements.



HUMAN SERVICES: FRESH POND GOLF COURSE IMPROVEMENTS

FY20 Project Description					
In FY20 allocation of \$30,000 for the Fresh Pond Golf Course will be used for land and irrigation improvements, and drainage issues. Beyond our annual planned	ňůň				
improvements to irrigation systems the Fresh Pond Golf Course will also purchase machinery and materials to deploy a drill/infill operation to enhance the health of the	*				
turf across the course.	♣.				

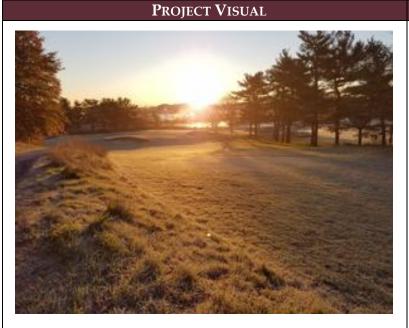
IMPACT ON OPERATING BUDGET

Projects should reduce the costs of repair and maintenance calls while keeping up with user load and enhancing natural setting.

5-Year Appropriation Plan							
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL	
Departmental Revenue	\$30,000	\$20,000	\$20,000	\$20,000	\$20,000	\$110,000	
GRAND TOTAL	\$30,000	\$20,000	\$20,000	\$20,000	\$20,000	\$110,000	

FY21-FY24 FUNDING

Golf Course revenues will be allocated annually for improvement projects.



STATUS OF PRIOR YEAR PROJECTS

Prior year funding of \$20,000 was used to improve land conditions at the Fresh Pond Golf Course.

HUMAN SERVICES: HUMAN SERVICES BUILDINGS REPAIRS

FY20 Project Description					
FY20 Human Services building maintenance will be used to replace and revitalize furnishings across the 27 Human Service Program Sites/ Buildings. Programs have	ňůň				
submitted priority lists that will be used to configure a general improvement list.	414				
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IMPACT ON OPERATING BUDGET

This project should reduce need for replacement furnishings.

5-YEAR APPROPRIATION PLAN							
FUNDING SOURCE FY20 FY21 FY22 FY23 FY24 TOTAL							
Property Taxes	\$25,000	\$30,000	\$30,000	\$30,000	\$30,000	\$145,000	
GRAND TOTAL	\$25,000	\$30,000	\$30,000	\$30,000	\$30,000	\$145,000	

FY21-FY24 FUNDING

Funding in the out years will be used to maintain Human services buildings as needed.

PROJECT VISUAL



STATUS OF PRIOR YEAR PROJECTS

This item has been funded in prior years and used to revitalize several youth centers, and office spaces. FY19 funding was allocated for the revitalization of the Moses Youth Center basement and Boys to Men program.

HUMAN SERVICES: WAR MEMORIAL RECREATION CENTER MAINTENANCE

FY20 Project Description	CITY COUNCIL GOALS
FY20 funding will be used to replace larger pool systems, structures and equipment at the War Memorial Recreation Center.	ňůň
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IMPACT ON OPERATING BUDGET

Upgrades and repair will ensure program demand can be met without significant increases in operating costs or interruptions in revenue.

5-Year Appropriation Plan							
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL	
Departmental Revenue	\$48,000	\$48,000	\$48,000	\$48,000	\$48,000	\$240,000	
GRAND TOTAL	\$48,000	\$48,000	\$48,000	\$48,000	\$48,000	\$240,000	

FY21-FY24 FUNDING

Future funding will support continued maintenance of the War Memorial Recreation Center.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

This project was funded in previous years. Funding was used for large filter replacement, structural assessment, and pool system equipment.

LIBRARY: MAIN LIBRARY BUILDING REPAIRS

FY20 Project Description	CITY COUNCIL GOALS
The beautiful Main Library continues to experience peak demand over the weekends. The Library will use FY20 funds for various repairs and improvements to maintain the	nůř
facility and ensure smooth operations for patrons.	\$
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IMPACT ON OPERATING BUDGET

This project will not impact the operating budget.

5-Year Appropriation Plan							
FUNDING SOURCE FY20 FY21 FY22 FY23 FY24 TOTAL							
Property Taxes	\$25,000	\$30,000	\$30,000	\$30,000	\$30,000	\$145,000	
Grand Total	\$25,000	\$30,000	\$30,000	\$30,000	\$30,000	\$145,000	

FY21-FY24 FUNDING

Annual allocations will be used to maintain the Main Library building.



STATUS OF PRIOR YEAR PROJECTS

FY 19 funds are scheduled to be used to help fund building improvements including the STEAM initiative.

Photo: Meeting Pod located on the second floor of the Main Library purchased with capital funding in FY19

LIBRARY: PATRON PRIVACY ENHANCEMENTS

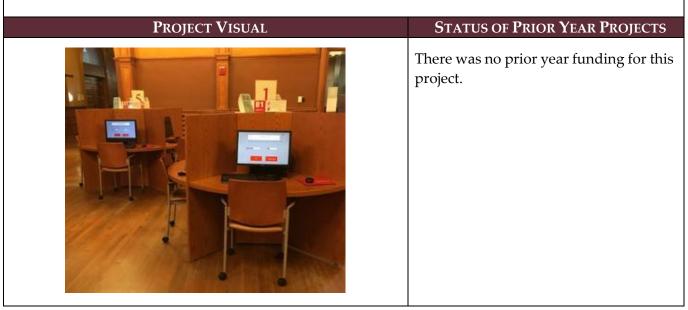
FY20 Project Description	CITY COUNCIL GOALS
CPL offers members of the public free access to computers and the internet at all library locations. The size and physical arrangement of our branches and computer work areas presents a challenge because upright computer monitors may be inadvertently viewed by others who are conducting their own library business nearby. The library will implement three mitigation strategies to enhance patron privacy and reduce inadvertent viewing: purchasing new furniture or retrofitting existing furniture to recess computer screens for additional privacy, rearranging existing computer work areas to minimize unwanted sight lines of patron monitors, and purchasing additional privacy screens to offer laptop users. Privacy screens would be purchased for the system and made available at all library locations. We anticipate needing to purchase new furniture and/or rearranging existing computer work areas at the Main Library, Central Square, O'Neill and O'Connell to increase patron privacy.	*** ** *

IMPACT ON OPERATING BUDGET

This will have a minimal impact on the operating budget.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$55,000	\$0	\$0	\$0	\$0	\$55,000
GRAND TOTAL	\$55,000	\$0	\$0	\$0	\$0	\$55,000
		EV91	EV24 ELIMIDIA	IC.		

No future funding is anticipated.



SCHOOL: BUILDING REPAIRS/ REPLACEMENT OF ANALOG PHONE SYSTEM

FY20 Project Description	CITY COUNCIL GOALS
There are repairs and replacements that require immediate attention at Morse, Kennedy Longfellow and the War Memorial. These funds will be used to replace front entrance doors and framing, replace an emergency generator, and update energy management software to comply with security standards. Along with these projects the City has worked on moving all of its departments from analog phones to voice over internet protocol (VOIP). These funds will also be used to support a compatibility phone upgrade to reduce the cost of repairs in the old phone system	٩

IMPACT ON OPERATING BUDGET

Funding will reduce the number of needed repairs, burden of finding obsolete equipment and improve reliability of the services.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Bond Proceeds	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$4,000,000
GRAND TOTAL	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$4,000,000

FY21-FY24 FUNDING

Future funds will be used to replace one school boiler or HVAC system replacement per year as well as to provide funds for school building repairs.



STATUS OF PRIOR YEAR PROJECTS

The FY19 allocation was used to fund the cost of boiler/HVAC improvements at the Solomon Building at CRLS.

SCHOOL: FURNITURE REPLACEMENTS/FACILITIES REPAIRS

FY20 Project Description				
FY20 funding of \$50,000 will be used to address ongoing needs of schools by replacing aging and broken student desks, chairs, office desks, file cabinets, and cafeteria tables. Replacing a number of classrooms simultaneously allows for more efficient purchasing, uniformity of equipment, and a more favorable learning environment for all students.	٩			

IMPACT ON OPERATING BUDGET

Maintenance done through the capital budget should reduce emergency repairs and maintenance charged to the operating budget.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Property Taxes	\$50,000	\$50,000	\$60,000	\$60,000	\$60,000	\$280,000
GRAND TOTAL	\$50,000	\$50,000	\$60,000	\$60,000	\$60,000	\$280,000

FY21-FY24 FUNDING

Future allocations will continue to address school facility maintenance needs.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

In FY19, \$50,000 was used to replace aging desks, chairs and tables for one on one teaching space.

SCHOOL: TOBIN MONTESSORI AND VASSAL LANE UPPER SCHOOL

FY20 Project Description	CITY COUNCIL GOALS
An FY20 appropriation of \$10,000,000 will be used to enter into a design contract with Perkins Eastman and continue with Licensed Site Professional (LSP), Geotechnical	ňůň
Services for CDM/Smith, and Commissioning services. It is anticipated that the City will engage in bidding early construction packages to support the recommendation(s) of the	٩
Feasibility Study.	

IMPACT ON OPERATING BUDGET

The impact on the operating budget will be defined once the design phase of the project is complete.

5-Year Appropriation Plan						
FUNDING SOURCE	FY20	FY21	FY22	FY23	FY24	TOTAL
Bond Proceeds	\$10,000,000	\$237,000,000	\$0	\$0	\$0	\$247,000,000
GRAND TOTAL	\$10,000,000	\$237,000,000	\$0	\$0	\$0	\$247,000,000

FY21-FY24 FUNDING

Funds will be used for design and construction services for the Tobin Montessori and Vassal Lane Upper School.

PROJECT VISUAL

STATUS OF PRIOR YEAR PROJECTS

The FY19 appropriation of \$3,000,000 was used to enter into a contract with Perkins Eastman to develop a Feasibility Study, provide on-going LSP and geotechnical, commissioning, and preconstruction services.