



Hybrid Police Cruiser

TOWN MANAGER'S RECOMMENDED CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

TOWN OF ANDOVER TOWN MANAGER'S RECOMMENDED CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

Andrew P. Flanagan Town Manager

November 15, 2022



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TOWN OF ANDOVER

MISSION & VALUES STATEMENT

Developed by the Select Board, Town Manager, and Town Department Heads Adopted by the Select Board on October 6, 2003

The mission of the Town of Andover is to ensure the safety, education, and well-being of the community; to be a leader in the delivery of efficient and effective quality services that respond to community needs; to promote the continuous improvement of staff skills and performance; to encourage an environment of trust; to respect cultural and economic diversity; and to preserve the historic character of the community.

The Select Board, as the chief policy makers for the Town of Andover, Massachusetts, will provide leadership in advancing the following primary and supporting values:

VALUE 1 – ENSURE THE SAFETY, EDUCATION, AND WELL-BEING OF THE COMMUNITY

- 1.1 Protect the safety of persons and property
- 1.2 Maintain the high quality of education for all
- 1.3 Maintain the Town's infrastructure
- 1.4 Promote public health programs and awareness
- 1.5 Manage the impact of non-municipal public utilities
- 1.6 Support human/community services
- 1.7 Ensure compliance with regulatory requirements
- 1.8 Identify and promote economic opportunities

VALUE 2 – BE A LEADER IN THE DELIVERY OF EFFICIENT AND EFFECTIVE QUALITY SERVICES THAT RESPOND TO COMMUNITY NEEDS

- 2.1 Deliver innovative municipal services
- 2.2 Encourage cost saving initiatives
- 2.3 Assess and prioritize community needs
- 2.4 Maintain the Town's "Aaa" bond rating

VALUE 3 – PROMOTE THE CONTINUOUS IMPROVEMENT OF STAFF SKILLS AND PERFORMANCE

- 3.1 Recruit, develop, and retain a highly skilled workforce
- 3.2 Promote and recognize municipal professionalism

3.3 Measure, evaluate, and improve performance

Value 4-Encourage an environment of trust and honesty

- 4.1 Uphold high ethical standards
- 4.2 Value teamwork and cooperation
- 4.3 Promote open communication with the public
- 4.4 Solicit citizen participation
- 4.5 Recognize the outstanding contributions of citizens

VALUE 5 – RESPECT CULTURAL AND ECONOMIC DIVERSITY

- 5.1 Promote diversity in the workforce and community
- 5.2 Provide services that are accessible, fair, and equitable
- 5.3 Support housing alternatives

VALUE 6 – PRESERVE THE HISTORIC CHARACTER OF THE COMMUNITY

- 6.1 Celebrate Andover's unique heritage
- 6.2 Protect and acquire open space

PRELIMINARY FY2024 BUDGET & TOWN MEETING PLANNING CALENDAR

PLANNED DATE TASK, ACTION, DEADLINE PRIMARY RESPONSIBILITY

July 28, 2022	Issue FY2024-FY2028 Capital Improvement Plan request forms	Finance Director
September 9, 2022	Dept. CIP requests due to Budget & Finance	Department Heads, School Supt
October 6, 2022	Staff review of Departmental CIP requests	Town Manager, Dept. Heads, School Supt.
October 28, 2022	2023 ATM Warrant opens	Select Board
November 10, 2022	Advertise CIP Public Hearing	TM's Executive Assistant
November 15, 2022	Town Manager's Recommended FY24-FY28 CIP released	Town Manager, Asst TM, Finance Director
November 21, 2022	Issue FY2024 Operating Budget Request Forms & Instructions	Town Manager, Finance Director
November 21, 2022	Select Board vote on Senior Tax Exemption Percentage	Select Board/Chief Assessor
November 21, 2022	Tax Classification Public Hearing / CIP Public Hearing	Select Board/Chief Assessor
December 1, 2022	Special Town Meeting - West Elementary Additional Funding	All
December 5, 2022	Tax Classification vote	Select Board/Chief Assessor
December 7, 2022	Tri-Board Meeting: CIP Review, Prelim FY2024 Projections	SB, Fin. Comm. & Sch. Comm.
December 12, 2022	Select Board vote to accept FY2024 CIP	Select Board
December 30, 2022	FY2024 Operating Budget Requests submitted to Town Manager	Department Heads
January 6, 2023	Town sponsored warrant articles submitted to Town Manager	Department Heads, School Supt., Boards
January 27, 2023	Town Meeting Warrant closes	Select Board
February 3, 2023	Town Manager's FY2024 Recommended Budget released	Town Manager, Finance Director
February 6, 2023	Warrant Article Review & Votes Begin	Select Board, Finance Committee
March 4, 2023	Department Operating Budget presentations (joint mtg.)	Department Heads
March 8, 2023	School FY2024 Operating Budget presentation (tri-board)	School Superintendent & School Committee
March 13, 2023	Budget & Warrant Article Votes	Select Board, Finance Committee
March 27, 2023	Budget & Warrant Article Votes	Select Board, Finance Committee
March 28, 2023	Annual Town Election	Town Clerk
March 31, 2023	Final Budget votes due to Fin Com for Town Meeting Report	Select Board, Finance Committee
March 31, 2023	Final Votes on Water & Sewer Budgets & Rates	Water & Sewer Commissioners
March 31, 2023	Chair Letters to the Finance Committee	Select Board, School Committee
April 7, 2023	Fin Com Report for Town Meeting sent to printer	Finance Committee
April 2, 2023	Fin Com Report mailed to residents	Printer
April 20, 2023	Town Meeting Preparation (speaking assignments, coordination, etc)	All
April 21, 2023	Annual Town Report Released	Town Manager
April 27, 2023	Moderator's Preparation Meeting	All
May 1, 2023	First night of the 2023 Annual Town Meeting	All

SECTION 1



TOWN MANAGER'S CIP TRANSMITTAL LETTER



TOWN OF ANDOVER

TOWN MANAGER'S OFFICE 36 BARTLET STREET ANDOVER, MA 01810 (978) 623-8200 WWW.ANDOVERMA.GOV

Andrew P. Flanagan Town Manager

November 15, 2022

Alex J Vispoli, Chairman Members of the Select Board Town Offices 36 Bartlet Street Andover, MA 01810

Dear Chairman Vispoli and Members of the Board:

I am pleased to present the Town Manager's Recommended Capital Improvement Program (CIP) for FY 2024 – FY 2028. This is Andover's thirty-second annual CIP. The CIP Bylaw requires that the Town Manager present the Select Board with the Town's capital needs for the next five years as the first step in the annual budget development process.

This year's CIP reflects a straightforward approach to capital planning and provides both the Town and the Schools with the opportunity to reset as we collectively look ahead and identify our major capital needs. This year's plan will continue a multi-year effort to improve the quality and condition of our public spaces, including improvements to Town and School buildings, recreational areas and sidewalks. The recommended funding for technology will provide us with the ability to maintain continuity of operations for both Town and Schools and aims to set a benchmark for the future funding of our capital technology needs.

We continue to align the capital budgeting with the Town Manager and Select Board's Strategic Goals & Objectives. The CIP provides us with the resources necessary to make meaningful progress towards the adopted goals that reflect residents' priorities and expectations around service delivery. The table below illustrates the alignment of the goals and the recommendations included in this document:

Goal/Objective Area	Deliverable	Recommendation in CIP	Source
Administration & Finance	Replace lead service lines in accordance with voluntary consent order from DEP	Lead service line replacement	Water Enterprise Borrowing
Capital Improvements	Implement Year 4 of the Gas Disaster Recovery Plan	Ongoing improvements to roads, sidewalks, parking areas and water infrastructure	General Fund Borrowing, Water Enterprise Borrowing, Free Cash

Capital Improvements	Implement Sidewalk	Continuation of Sidewalk	Free Cash
	Master Plan	Program	
River & Open Space	Identify opportunities for	Construction of an ADA kayak	General Fund
Access	improving access, and	launch at Nasan's Landing	Borrowing
	specifically ADA access to		
	the rivers and other open		
	space		

The Town Manager's Recommended CIP for FY 2024 totals \$24,454,254 The revenue sources shown below indicate how the program will be fiscally supported.

The details of the recommended projects, as well as the individual items in the Capital Projects Fund, are shown on the following pages.

As in every past CIP, the departmental requests far exceeded the resources available. However, through a collaborative process, the CIP was crafted in a manner consistent with the established tax rate target and it begins the budget process for FY 2024 in a fiscally responsible manner.

FY 2024 Capital Improvement Program				
General Fund Revenue	\$2,890,000			
General Fund Borrowing	\$4,850,000			
Use of Free Cash	\$1,919,128			
General Fund Exempt Borrowing	-0-			
Special Dedicated Funds	\$1,435,126			
Water and Sewer Enterprise	\$13,360,000			
Funds				
Total Recommendation	\$24,454,254			
Total Recommendation	ΨΖΤ,ΤΟΤ,ΖΟΤ			

Establishing a "Target"

Standard and Poor's continues to affirm Andover's credit worthiness and the Town's "AAA" General Obligation bond rating, the highest rating available to municipalities. In fact, the most recent report gives Andover a "strong or very strong" rating on each of the seven assessment factors: economy, budget flexibility, budgetary performance, liquidity, management conditions, debt and contingent liability profile and institutional framework.

Consistent with the Town's legacy of prudent financial planning and commitment to fiscal stability, we have continued to make a major commitment in developing a CIP that establishes predictability and consistency in the capital planning process. Departments, Senior Management and Town staff have been challenged to carefully plan future year requests. The key to successful capital planning is aligning projects with departmental priorities and scheduling major capital investments in a manner that responsibly integrates with the Town's debt schedule. Over the past year, I have presented a spending target that is both sustainable in the context of the limitations of Proposition 2 ½ and that ensures we are able to meet the long-term needs of our community. The non-exempt target, which sets the outer limit of what the CIP will spend in any given fiscal year, remains at 5.72% of adjusted revenue. This target draws on the following fiscal components:

The FY 2024 CIP is 5.48% of the budget and is therefore slightly less than the identified annual target. This is the result of a coordinated effort to build future capacity and provide long term assurances that we will be able to meet and fund our 5.72% target well into the future. The

recommended FY 2024 CIP is balanced and supports investments in all functions of Town government within the context of our target. The framework of the target is as follows:

Prior Non-Exempt Debt Service

New Non-Exempt Debt Service

General Fund Revenue

Total Non-Exempt Plan

As is the case with every CIP, future years assume the use of Free Cash. While the plan will evolve as we move forward, below is a summary of anticipated expenditures, and the financing plan for the next five years:

General Fund	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Prior Non-Exempt Debt	6,549,143	6,276,746	5,874,340	5,569,870	5,025,737
Capital Projects from Taxation	2,890,000	4,861,465	4,969,444	4,855,937	4,475,945
New Non-Exempt Debt Service		594,250	1,988,290	3,583,926	4,568,803
Non-Exempt Debt To Be Issued FY22/FY23	1,742,421	2,663,677	3,161,733	3,069,857	2,795,883
Total Non-Exempt Tax Burden	11,181,564	14,396,138	15,993,807	17,079,590	16,866,368
Pro Forma Adjusted Revenue Budget	204,061,210	209,556,212	216,293,599	223,212,690	230,248,811
Budget for Plan at 5.72%	5.72%	5.72%	5.72%	5.72%	5.72%
Plan as % of Adjusted Revenues	11,672,301	11,986,615	12,371,994	12,767,766	13,170,232
Potential Use of Free Cash		2,409,523	3,621,813	4,311,824	3,696,136
Variance from Budget		-	-	-	-

Capital Project Fund (General Fund Revenue)

The recommendation for the Capital Project Fund is \$2,890,000 from General Fund Revenues. The recommendation for funding Town department requests is \$1,552,000 and \$1,338,000 for School Department requests. This split is consistent with the distribution of resources from the Capital Project Fund over the past several years.

Funding from General Fund Revenue includes funds for maintenance projects within our

Town and school buildings, public works vehicles, our Participatory Budgeting Program, and the accident reconstruction system for the Police Department.

Free Cash

The Town's Free Cash Balance for FY 2024 is \$10,079,412 The CIP recommends that \$1,919,128 be appropriated from Free Cash to fund the Town & School technology program, police vehicle replacement, and minor sidewalk repairs.

Consistent with our plan to devote approximately 10% of Free Cash to sidewalk improvements, I am recommending a total of \$1,000,000 be dedicated to the installation of new sidewalks and repairs of existing sidewalks, with \$750,000 for the Town's Sidewalk Program and \$250,000 for Minor Sidewalk Repairs.

A total of \$714,128 is recommended for Information Technology for student and staff devices. Last year was the first year of a program to transition funding for student device leases from the CIP into the Information Technology Operating Budget. This partnership with the School Department will ensure the sustainability of our device deployment and maintenance program. The CIP is not able to accommodate significant fluctuations in technology capital expenditures and we expect that year two of transitioning funding to the operating budget will take us one step closer to maintaining a sustainable funding model.

I am also recommending that the annual investment in police vehicles be funded from Free Cash. Police vehicles have the shortest useful life of all Town vehicles and therefore must be funded by General Fund Revenue or Free Cash (and not through longer-term borrowing). Using Free Cash as the recommended funding source has provided us with the flexibility to increase investments in facilities and provide the necessary resources to move forward with other Town priorities that are recommended in Article 5 (General Fund Revenue).

This use of Free Cash is part of a multi-year plan to grow the balance available for appropriation and is consistent with the Department of Revenue (DOR) guidelines that Free Cash, as a nonrecurring revenue source, should be restricted to paying one-time expenditures, funding capital projects or replenishing reserves.

General Fund Borrowing

General Fund Borrowing includes several projects totaling \$4,850,000 for FY 2024. The sum of \$1,125,000 is being recommended for major School projects, which include \$600,000 for the conversion of the Bancroft School field to a turf field, and funds to repair and maintain building systems and infrastructure at Andover High School, South Elementary, and West Middle School. This recommendation allows for such investments as replacement of Engine 1 for Andover Fire Rescue and large public works vehicles, improvements to Town parks and playgrounds, and major Town projects including improvements at Old Town Hall and Memorial Hall Library.

Special Dedicated Funds

There are two projects being recommended from Special Dedicated Funds. Chapter 90, Major Annual Road Maintenance, is recommended to be funded at \$1,395,126, and the Active Transportation Plan is recommended to be funded with \$40,000 from revenue received from transportation network companies.

Water and Sewer Enterprise Funds

The Water and Sewer Enterprise Fund will support six recommended projects for FY 2024 totaling \$13,360,000. This year, it is recommended that \$6,000,000 be appropriated for the continuation of the major water main replacement program. A total \$2,500,000 is recommended for improvements to the Water Treatment Plant's SCADA system, the software infrastructure system which manages controls for the distribution system. Additionally, \$1,800,000 is recommended for the replacement of residential lead service lines. Granular activated carbon, which is an essential part of the water filtration system, will be replaced for \$560,000. There are two projects recommended for the Sewer Enterprise Fund: \$2,200,000 for the Shawsheen River Interceptor and \$300,000 for the inflow/infiltration removal project.

The requests for FY 2024 continue the accelerated water main replacement program as adopted by the Select Board in 2018. The accelerated replacement schedule will allow the Town to replace all unlined cast-iron water mains in approximately 12 years.

The upgrades to the system's critical software infrastructure system, lead service line replacements, and continued water main replacements will require a review of the current Water & Sewer Rate Structure. Rising costs of chemicals and treatment expenses, together with aggressive investments in our water system, will likely require a rate adjustment. Major infrastructure improvements over the next five years will "future proof" the water distribution system. We are exploring opportunities to leverage anticipated revenues from the Town's Water Agreement with North Reading to fund these improvements and to continue the major investment in water infrastructure that has been ongoing for the past several years.

Development of the Park Property (138 & 140 Chandler Road)

The development of the Park Property on Chandler Road will require a major investment from the community. The Town is currently engaging residents on potential uses for the site and has allocated funds from the American Rescue Plan Act (ARPA) to design a project that reflects the community's priorities for recreational facilities and field spaces. As a result of the availability of ARPA funds, the CIP does not include an allocation for advancing this project. Once a preferred concept is finalized, I will make a funding recommendation to Town Meeting. I intend to leverage several sources of funding, including potential revenues that may be generated from the uses included on the site, to offset the project costs. We are in the process of determining whether it may be appropriate to create an Enterprise Fund to enable an alternative funding model.

Conclusion

I will present the CIP to the Select Board at the Public Hearing on November 21, 2022. A Tri-Board meeting will be held on Wednesday, December 7, 2022 to discuss the CIP and the revenue and expenditure forecast and assumptions for FY 2024. The Select Board will discuss and consider formally adopting the CIP at its meeting on Monday, December 12, 2022. The CIP document is posted in its entirety on the Town's website at www.andoverma.gov.

I would like to take this opportunity to thank Chief Financial Officer Patrick J. Lawlor, Deputy Town Manager Michael A. Lindstrom, Management Analyst Faith O. Mangiafico and Executive Assistant Kathryn L. Forina for all of their contributions supporting the production of this year's CIP. I would also like to thank the Department and Division Heads who thoughtfully prepared their requests, provided historical perspectives, and contributed to the refinement of the program. I also want to extend my appreciation to Superintendent Dr. Magda Parvey, Assistant Superintendent Keith Taverna and the entire Andover Public Schools team for their participation in the capital budgeting process.

This year I would also like to especially acknowledge Finance Director Donna Walsh. Donna will be retiring from her current position in December. Her contributions to the Town of Andover are immeasurable. Donna is recognized as a statewide leader in the field of municipal finance, and she has been instrumental in advancing several major financial initiatives that have kept Andover in good standing and allowed us to maintain our AAA Rating from Standard and Poor's. Donna has earned the respect of her peers, both here in Andover and throughout the profession, and I want to thank her for her service to the Town.

The recommendations presented in this CIP begin the public discussion of both fiscal and program priorities for FY 2024 and the subsequent four years. I look forward to reviewing these recommendations with the Select Board, School Committee, Finance Committee, and our residents. My administration is committed to providing the information and resources necessary to fully inform the policy discussions that will take place in the coming months. The goal of our deliberations is to develop a CIP and Operating Budget that is well-reasoned, balanced and justified within the Town's available revenues. Together, we will finalize a CIP reflective of those discussions and directed toward meeting the service expectations of Andover residents.

Respectfully Submitted,

Andrew P. Flanagan

Town Manager

SECTION 2



FY 2024 CIP RECOMMENDATIONS AND FUNDING SUMMARY

FISCAL YEAR 2024 CAPITAL IMPROVEMENT PROGRAM (CIP)

TOWN MANAGER'S RECOMMENDATIONS AND FUNDING SUMMARY

The Town's Department Heads submitted CIP requests totaling \$34,211,392 for FY2024. Those requests were thoroughly discussed and considered during a series of internal group and individual review sessions. Based on the results of those sessions and the projected availability of funds as of this date, the Town Manager recommends a total FY24 CIP of \$24,454,254 from the following funding sources:

Town Manager's Total CIP Recommendation for FY24:	<u>\$ 24,454,254</u>
Water & Sewer Enterprise Funds:	\$ 13,360,000
Special Dedicated Funds:	\$ 1,435,126
General Fund Non-Exempt Borrowing:	\$ 4,850,000
Free Cash:	\$ 1,919,128
General Fund Revenue:	\$ 2,890,000

From General Fund Revenue:

It is recommended that the following capital projects be funded with General Fund Revenue. This is the annual "payas-you-go" funding from FY2024 tax dollars which will be presented as the Capital Projects Fund appropriation article at the Annual Town Meeting:

TM-1	Participatory Capital Budgeting	\$ 20,000
IT-4	Document Digitization	\$ 50,000
CDP-2	Improving Kiosks, Signage, and Interpretive Panels	\$ 25,000
POL-3	Accident Reconstruction Mapping Systems GNSS	\$ 40,000
FR-2	Radio Box Repeater System	\$165,000
FR-6	Emergency Services Call Box	\$ 20,000
DPW-7a	Public Works Vehicles - Small	\$ 82,000
DPW-28	Spring Grove Cemetery Maintenance	\$ 20,000
FAC-1	Town Projects - Building Division	\$475,000
FAC-2	Town Projects - Mechanical Electrical Division	\$420,000
FAC-3	Town and School Security Projects	\$130,000
FAC-4	Town Vehicles	\$105,000
SCH-1	School-Wide Maintenance Programs	\$950,000
SCH-2	School - Projects by Building	\$388,000
Total from	\$2,890,000	

From Free Cash:

It is recommended that the following projects be funded with Free Cash to save on long-term interest costs:

Total from Free Cash		\$1.919.128
DPW-4	Town Sidewalk Program	\$ 750,000
DPW-2	Minor Sidewalk Repairs	\$ 250,000
POL-1	Police Vehicle Replacement	\$ 205,000
IT-2	Annual Student Device Refresh	\$ 257,890
IT-1	Annual Staff Device Refresh	\$ 456,238

From General Fund Non-Exempt Borrowing:

It is recommended that the following capital projects be funded through General Fund Borrowing:

Total from General Fund Borrowing		
SCH-5	Major School Projects	\$1,125,000
IT-3	IT Infrastructure	\$ 300,000
FR-1	Fire Rescue Vehicles	\$ 975,000
FAC-7	Town / School Energy Initiatives	\$ 470,000
FAC-6	Major Town Projects	\$ 900,000
FAC-5	Town Parks and Playground Improvements	\$ 625,000
DPW-7b	Public Works Vehicles - Large	\$ 455,000

From Special Dedicated Funds:

It is recommended that the following capital programs be funded through Special Dedicated Funds:

Total from	Special Dedicated Funds	\$1 .	,435,126
DPW-1	Major Annual Road Maintenance (Ch 90)	<u>\$1,</u>	,395,126
CDP-1	Active Transportation Plan	\$	40,000

From Water and Sewer Enterprise Funds:

It is recommended that the following capital projects be funded through Water and Sewer Enterprise Funds:

DPW-14	Major Water Main Replacement/ Distribution Improvements Project	\$6,000,000
	(WEB)	
DPW-16	WTP Scada System Upgrades (WEB)	\$2,500,000
DPW-18	Water Treatment GAC Replacement (WEB)	\$ 560,000
DPW-25	Shawsheen River Sewer Interceptor Improvements (SEB)	\$2,200,000
DPW-30	Inflow/Infiltration (I/I) Removal Program (SER)	\$ 300,000
DPW-34	Lead Service Replacements (WEB)	\$1,800,000
Total from	\$13,360,000	
CIP Tota	d for FY24	\$24,454,254

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General Fun	Request Title	FY2024	FY2024	FY2025	FY2026	FY2027	FY2028	Comments
	General Fund Revenue (Capital Projects Fund)							
TM-1	Participatory Capital Budgeting	\$75,000	\$20,000	\$75,000	\$75,000	\$100,000	\$100,000	\$100,000 Supports funding \$20,000 for FY24
CDP-2	Improving Kiosks, Signage, and Interpretive Panels Across 24 Town-Owned Properties	\$25,000	\$25,000					Supports department's request for FY24
CDP-4	Public Art Program Fund	\$50,000	80					Does not support funding for FY24
CDP-5	Pactical Traffic Calming and Placemaking	\$20,000	0\$					Does not support funding for FY24
CDP-6	Improving the Accessibility of Town Conservation Land through Professional Trail Evaluation and Data Collection	\$21,638	80					Does not support funding for FY24
CDP-7	Funding for Tree Health, Maintenance, and Hazard Tree Removal on Andover Conservation Properties	\$20,000	80					Does not support funding for FY24
CDP-8 F	Funding for Boundary Survey(s) of Select Andover Conservation Properties	\$20,000	0\$					Does not support funding for FY24
SUS-1	Shawsheen River Stream Gage		80	\$15,965	\$16,444	\$16,937	\$17,445	\$17,445 Placeholder for future need
FIN-1	MUNIS Financial Software Improvements		0\$	\$15,000		\$15,000		Placeholder for future need
IT-3 I	IT Infrastructure (See General Fund Borrowing for FY24 - FY26)		0\$			\$42,500	\$22,500	\$22,500 Placeholder for future need
IT-4	Document Digitization	\$307,000	\$50,000	\$297,000	\$270,000			Supports funding \$50,000 for FY24
POL-1	Police Vehicle Replacement (See Free Cash for FY24)		0\$	\$205,000	\$225,000	\$225,000	\$225,000	\$225,000 Placeholder for future need
POL-3	Accident Reconstruction Mapping Systems GNSS	\$40,000	\$40,000					Supports department's request for FY24
POL-4	UAS/Unmanned Aerial System	\$30,000	0\$					Does not support funding for FY24
FR-1 F	Fire Rescue Vehicles (See General Fund Borrowing for FY24 - FY26 & FY28)		80			\$250,000		Placeholder for future need
FR-2 R	Radio Box Repeater System	\$165,000	\$165,000					Supports department's request for FY24
FR-4	Thermal Imaging Camera Replacement		80	\$50,000				Placeholder for future need
FR-5 C	Cordless Battery-Operated Rescue Tools		80		\$200,000			Placeholder for future need
FR-6	Emergency Services Call Box	\$20,000	\$20,000					Supports department's request for FY24
DPW-2	Minor Sidewalk Repairs (See Free Cash for FY24)		80	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000 Placeholder for future need
DPW-5	Imigation Systems and Greenspace Improvements	\$75,000	\$0	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000 Does not support funding for FY24
DPW-6	Storm Water Management	\$100,000	80	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000 Does not support funding for FY24
DPW-7a P	Public Works Vehicles - Small	\$251,000	\$82,000	\$199,000	\$194,000	\$324,000	\$187,000	Supports funding \$82,000 for FY24
DPW-15 F	Hazard Tree Removal	\$150,000	80	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000 Does not support funding for FY24
DPW-19 S	Stormwater Infrastructure Condition Assessment Program	\$50,000	0\$	\$50,000	\$50,000	\$50,000		Does not support funding for FY24
DPW-20 P	Portable Soil Screener		\$0		\$100,000			Placeholder for future need
DPW-28	Spring Grove Cemetery Maintenance	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000 Supports department's request for FY24
FAC-1	Fown Projects - Building Division	\$475,000	\$475,000	\$505,000	\$515,000	\$545,000	\$560,000	\$560,000 Supports department's request for FY24
FAC-2	Town Projects - Mechanical Electrical Division	\$420,000	\$420,000	\$430,000	\$450,000	\$455,000	\$485,000	\$485,000 Supports department's request for FY24
FAC-3	Town and School Security Projects	\$130,000	\$130,000	\$250,000	\$240,000	\$150,000	\$500,000	\$500,000 Supports department's request for FY24
FAC-4	Town Vehicles	\$251,000	\$105,000	\$145,000	\$113,000			Supports funding \$105,000 for FY24
FAC-7	Town / School Energy Initiatives (See General Fund Borrowing for FY24 - FY26 & FY28)		80			\$200,000		Placeholder for future need
	School-Wide Maintenance Programs	\$950,000	\$950,000	\$1,000,000	\$1,045,000	\$1,095,000	\$1,130,000	\$1,130,000 Supports department's request for FY24
SCH-2	School - Projects by Building	\$388,000	\$388,000	\$1,029,500	\$881,000	\$792,500	\$654,000	\$654,000 Supports department's request for FY24
	Total General Fund Revenue	\$4,053,638	\$2,890,000	\$4,861,465	\$4,969,444	\$4,855,937	\$4,475,945	

Free Cash							
IT-1	Amual Staff Device Refresh	\$456,238	\$456,238	\$450,557	\$552,665	\$544,425	\$536,846 Supports department's request for FY24
IT-2	Amual Student Device Refresh	\$257,890	\$257,890	\$421,908	\$370,774	\$447,250	\$472,006 Supports department's request for FY24
POL-1	Police Vehicle Replacement (See General Fund Revenue for FY25 - FY28)	\$205,000	\$205,000				Supports department's request for FY24
DPW-2	Minor Sidewalk Repairs (See General Fund Revenue for FY25 - FY28)	\$250,000	\$250,000				Supports department's request for FY24
DPW-4	Town Sidewalk Program (See General Fund Borrowing for FY25 - FY28)	\$1,000,000	\$750,000				Supports funding \$750,000 for FY 24
	Total Free Cash	\$2,169,128	\$1,919,128	\$872,465	\$923,439	\$991,675	\$1,008,852
General Fı	General Fund Borrowing						
IT-3	IT Infrastructure (See General Fund Revenue for FY27 - FY28)	\$847,500	\$300,000	\$1,485,000	\$482,500		Supports funding \$300,000 for FY24
FR-1	Fire Rescue Vehicles (See General Fund Revenue for FY27)	\$1,110,000	\$975,000	\$545,000	\$1,400,000		\$540,000 Supports funding \$975,000 for FY 24
DPW-3	Road Maintenance	\$1,500,000	\$0	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000 Does not support funding for FY24
DPW-4	Town Sidewalk Program (See Free Cash for FY24)		80	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000 Placeholder for future need
DPW-7b	Public Works Vehicles - Large	\$1,211,000	\$455,000	\$858,000	\$699,000	\$494,000	\$738,000 Supports funding \$455,000 for FY 24
DPW-8	Minor Storm Drainage Improvements	\$300,000	0\$		\$300,000		\$300,000 Does not support funding for FY24
DPW-9	Town Bridge Evaluation & Maintenance		\$0	\$500,000			Placeholder for future need
FAC-5	Town Parks and Playground Improvements	\$875,000	\$625,000	\$2,185,000	\$950,000	\$3,350,000	\$2,500,000 Supports funding \$625,000 for FY 24
FAC-6	Major Town Projects	\$900,000	\$900,000	\$3,360,000	\$825,000	\$3,180,000	\$2,820,000 Supports department's request for FY24
FAC-7	Town / School Energy Initiatives (See General Fund Revenue for FY27)	\$470,000	\$470,000	\$745,000	\$1,095,000		\$800,000 Supports department's request for FY24
SCH-5	Major School Projects	\$1,125,000	\$1,125,000	\$10,575,000		\$8,250,000	\$3,230,000 Supports department's request for FY24
	Total General Fund Borrowing	\$8,338,500	\$4,850,000	\$22,753,000	\$14,151,500	\$17,774,000	\$13,428,000
Special De	Special Dedicated Funds						
CDP-1	Active Transportation Plan	\$50,000	\$40,000				Supports funding \$40,000 for FY24
DPW-1	Major Annual Road Maintenance (Ch 90)	\$1,395,126	\$1,395,126	\$1,395,126	\$1,395,126	\$1,395,126	\$1,395,126 Supports department's request for FY24
	Total Special Dedicated Funds	\$1,445,126	\$1,435,126	\$1,395,126	\$1,395,126	\$1,395,126	\$1,395,126
Water & S	Water & Sewer Enterprise Funds						
DPW-12	Water & Sewer Vehicles (WER)	\$245,000	\$0	\$254,000	\$213,000	\$220,000	\$235,000 Does not support funding for FY24
DPW-13	Filter Backwash Discharge Tank (WEB)		0\$	\$500,000	\$4,200,000		Placeholder for future need
DPW-14	Major Water Main Replacement/ Distribution Improvements Project (WEB)	\$6,000,000	\$6,000,000	\$6,000,000	\$7,000,000	\$7,000,000	\$8,000,000 Supports department's request for FY24
DPW-16	WTP Scada System Upgrades (WEB)	\$3,200,000	\$2,500,000				Supports funding \$2,500,000 for FY24
DPW-17	Hydrant Replacement Program (WER)		\$0	\$50,000		\$50,000	Placeholder for future need
DPW-18	Water Treatment GAC Replacement (WEB)	\$560,000	\$560,000	\$585,000			\$650,000 Supports department's request for FY24
DPW-21	WTP Flocculation/Sedimentation Basins (WEB)		\$0	\$750,000	\$4,500,000		Placeholder for future need
DPW-22	WTP Chemical Room Upgrades (WEB)		\$0		\$130,000	\$885,000	Placeholder for future need
DPW-23	WTP Electrical Upgrades (WEB)		0\$		\$500,000	\$3,900,000	Placeholder for future need
DPW-24	Sanitary Sewer Collection System Improvements (SER)	\$250,000	\$	\$250,000	\$250,000	\$250,000	\$250,000 Does not support funding for FY24
DPW-25	Shawsheen River Sewer Interceptor Improvements (SEB)	\$2,200,000	\$2,200,000	\$750,000	\$750,000	\$750,000	\$750,000 Supports department's request for FY24
DPW-26	West Side Sewer Interceptor Study (SER)	\$350,000	80				Does not support funding for FY24
DPW-27	Wood Hill Pump Replacement (WEB)	COL	0\$	000000	\$150,000	\$1,800,000	Placeholder for future need
DPW-29	Fish Brook Intake Replacement (WEB)	\$750,000	\$0	\$15,000,000	000 000	000 000	Does not support funding for FY24
DFW-30	Innow/mingration (J/J) Kembyai Program (SEK) WATP HVAC Hymendes (WEB)	9300,000	9500,000	\$300,000	\$300,000	\$300,000	\$200,000 Supports department's request for FY24
Dr W-31	MI THAN OPEN AND AND AND AND AND AND AND AND AND AN	Ī	00		400 000	\$200,000	\$1,000,000 Fraceible 101 lume need
DPW-32	Shawsheen Pump Station Upgrades (SEB)		9		\$8,400,000		Placeholder for future need
DPW-32	Shawsheen Pump Station Upgrades (SER)		80	\$200,000			Placeholder for future need
DPW-33	WTP Powdered Activated Carbon Silo (WER)		80			\$650,000	Placeholder for future need
DPW-34	Lead Service Replacements (WEB)	\$3,600,000	\$1,800,000				Supports funding \$1,800,000 for FY24
DPW-35	Replacement of Ozone Generators (WEB)		\$0		TBD	TBD	Placeholder for future need
DPW-36	Raw Water Travelling Screens (WEB)		\$0		TBD		Placeholder for future need
DPW-37	Water Main Flushing Program Upgrades (WER)	\$350,000	\$0	\$100,000	\$100,000	\$50,000	\$50,000 Does not support funding for FY24
DPW-38							Does not support funding for FY24
	Total Water & Sewer Enterprise Funds	\$18,205,000	\$13,360,000	\$24,739,000	\$26,493,000	\$16,055,000	\$11,835,000
	Total All Rannects	624 711 392	274 454 254	950 169 950	647 022 500	\$34.711.307 \$24.454.754 \$54.671.056 \$47.937.500 \$41.071.738 \$37.142.973	627 147 073
		034,4114,45¢	107,404,470	934,041,050	741,734,007	\$41,0/1,00	632,142,923

SECTION 3



PROJECT REQUESTS BY DEPARTMENT

TOWN MANAGER



TOWN MANAGER

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Participatory Capital Budgeting

TM-1

Department Priority Ranking: 1TM's Rec. for FY24: \$20,000
(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$75,000

Submitted by: Patrick Lawlor, Assistant

Town Manager

Department: Town Manager

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$75,000

Project Description:

The Participatory Capital Budgeting Program will afford residents the opportunity to participate and engage in the budget process. This will allow residents a chance to decide what capital projects are funded. Residents will submit their ideas to a panel of staff members from various departments. After projects have been approved, and cost estimates have been verified, a Participatory Budgeting Committee will vote on which projects are funded.

Project Justification and Purpose:

This is a collaborative approach between the public and the town on capital budgeting.

Cost Estimate & Timing:

TBD

Estimated Annual Operating/Maintenance Cost or Savings:

TBD

Sustainability:

TBD

Town Manager's Recommendation:

The Town Manager supports funding \$20,000 for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$75,000	\$20,000
2025	\$75,000	\$75,000
2026	\$75,000	\$75,000
2027	\$100,000	\$100,000
2028	\$100,000	\$100,000

SUSTAINABILITY



SUSTAINABILITY

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Shawsheen River Stream Gage

SUS-1

Department Priority Ranking: 1 TM's Rec. for FY24: FY25 Request (1 = highest, 2 = second highest, etc.) Original Dept. Request: FY25 Request

Submitted by: Joyce Losick-Yang **Department:** Sustainability

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:

The U.S. Geological Survey stream gage number 01100627 is located at Balmoral Street in Andover. The gage monitors several physical characteristics of the Shawsheen River in real-time, including but not limited to precipitation, water discharge, and waterway height. Local funding is critical to support the real-time monitoring of the Shawsheen River. Funding is used to support remote sensing and data upload equipment maintenance, calibration, upgrades and upkeep by the U.S. Geological Survey team, as well as data servers and public engagement websites from the National Weather Service.

Project Justification and Purpose:

The state cost share support for stream gages largely stopped in fiscal year 2011. Since 2011, the Shawsheen Stream Gage support has come from local tax revenue raised through private Town Warrant Articles. Andover residents highly value the public safety benefits from the stream gage. For example, it is used by the Washington Park Condominium residents as a real-time flood risk warning and evacuation planning system. Private warrant articles supporting the stream gage has twice passed Town Meeting, most recently in 2022.

Stream gages act as environmental sentinels; the data collected by the stream gage are used in forecasts of severe flooding, as well as severe droughts. In light of worsening climate change impacts, such as increased precipitation and extreme weather events, the discontinuation of the Andover stream gage funding will severely compromise the ability of Andover's public safety departments to act quickly to prevent loss of property and life.

Cost Estimate & Timing:

The USGS projects the cost of stream gage services to be \$15,500 per year. A 3% per year cost increase is estimated due to inflation and cost of living adjustments and outyear support have been computed for the next four years.

Estimated Annual Operating/Maintenance Cost or Savings:

The support for the stream gage provides cross-cutting benefits for other climate and sustainability endeavors. For example, because of the importance of the data collected by the Shawsheen stream gage for hydrology and hydraulic characterization of the river, the funding is used as a part of the cost share on Town of Andover's new \$271,000 municipal vulnerability preparedness grant award in fiscal year 2023.

Sustainability:

Supporting a national network of stream gages provides many benefits for local environmental,

SUSTAINABILITY

recreational and other municipal endeavors. Outside of emergency responses, stream gage datasets are used for the following purposes:

- Safety for water sports and other recreational activities
- Design of infrastructure, such roads, bridges and culverts
- Determination of national flood maps and subsequent Planning Board decisions
- Managing water-quality or habitats
- Monitoring for long-term climate change

Town Manager's Recommendation:

The Town Manager supports future year requests at this time.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024		
2025	\$15,965	\$15,965
2026	\$16,444	\$16,444
2027	\$16,937	\$16,937
2028	\$17,445	\$17,445

FINANCE AND BUDGET



FINANCE AND BUDGET

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: MUNIS Financial Software Improvements FIN-1

Department Priority Ranking: 1 TM's Rec. for FY24: FY25 Request (1 = highest, 2 = second highest, etc.) Original Dept. Request: FY25 Request

Submitted by: Donna M. Walsh

Department: Finance

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:

This request would provide funding for the continued implementation of additional MUNIS modules and allows more users to be trained on existing modules. Over the past ten years many MUNIS modules have been implemented including Tyler Cashiering, Tyler Content Manager and Tyler Customer Service. This request will provide funding for implementation of Employee Self Service (ESS) and Utility Billing as well as on-going consulting to assist with required upgrades.

Project Justification and Purpose:

A fully integrated financial system should be a priority when feasible. Currently funds are available from past CIP requests to purchase the Employee Self-Service Module and the Utility Billing Module. These modules have not yet been implemented due to the major MUNIS upgrade currently underway. Once that upgrade is completed (by December 31, 2022) plans will be made to implement the above modules.

Employee Self Service software gives employees access to view sick and vacation history, allows employees to request time-off, which the supervisor can approve electronically and allows employees to easily make changes to personal information. The module also stores information such as paychecks, W-4's and historical W-2's. ESS also allows for a more seamless health insurance enrollment process.

MUNIS Utility Billing software would replace the outdated CUSI billing system which has outlived it's useful life. Implementation of this module would allow all receivables to be on the same software thereby eliminating dual posting of receivables and receipts and would provide enhanced customer service related to on-line bill pay.

Cost Estimate & Timing:

It is anticipated that MUNIS Utility Billing implementation planning will begin after the MUNIS upgrade is complete

Estimated Annual Operating/Maintenance Cost or Savings:

Estimated annual support for Utility Billing is \$9,500

Sustainability:

N/A

FINANCE AND BUDGET

Town Manager's Recommendation:

The Town Manager supports future year requests at this time.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024		
2025	\$15,000	\$15,000
2026		
2027	\$15,000	\$15,000
2028		



TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Annual Staff Device Refresh

IT-1

Department Priority Ranking: 1TM's Rec. for FY24: \$456,238

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$456,238

Submitted by: Paul J. Puzzanghera, CIO **Department:** Information Technology

Funding Source: Free Cash

FY23 Dept. Request for FY24: \$378,245

Project Description:

This article provides personal computers (both desktop and laptop) to all Andover staff including Town knowledge workers, school knowledge workers and teachers. Devices are leased and are refreshed every four years.

Project Justification and Purpose:

This provides up to date computers for all Town and School staff. At this time all administrative and teaching staff have been issued laptop computers with full network connectivity allowing for uninterrupted operations during any future work from home (WFH) scenarios.

Cost Estimate & Timing:

See chart below for details.

Comments:

- All teacher and school laptops were refreshed in FY22. All town devices will be scheduled for their four year refresh in FY24.
- IT has elected to move away from purchasing vendor warranties and move to a self-repair model in most cases based on operating history. This has yielded a significant savings.
- Costs of certain management software is shared with IT-2.
- Town and schools have moved away from desktop versions of Microsoft Office to cloud-based
 Office 365 annual subscriptions. All email services have been migrated to the Microsoft cloud.
 This has allowed IT to wind down its investment in server and storage infrastructure to support on
 premise email management
- We continue to be affected by severe supply chain disruptions limiting our ability to procure new equipment and we have experienced a significant increase in device costs. Device lead times which previously were 4-6 weeks are now 6-8 months. Model selection is extremely limited.
- Instructional assistants and administrators have become more deeply dependent upon technology since the pandemic and are requiring more powerful and more modern devices than previously.
- The Town applied for CARES, ESSER and ARP and related funding which reduced some of the planned expenditures for FY22. However, these funds are no longer available leading to increased leasing costs in future years.
- Future years increased costs reflect the possibility of higher prices due to continued supply chain challenges and higher interest rates. These assumptions will be adjusted annually.

Estimated Annual Operating/Maintenance Cost or Savings:

All annual costs are included in this article. The use of leasing is designed to ensure both productivity and long run sustainability. Under this plan the Town allocates between \$350-400 per knowledge worker per year. This provides a current laptop, monitor and docking station to each knowledge worker along with core productivity software including email, Microsoft 365, device management and antivirus.

Sustainability:

Andover IT adheres to the sustainability principles of "Reduce, Reuse, Reclaim, Recycle". Each generation of IT devices requires lower power consumption that previous generations. When spread over the nearly 10,000 devices that we manage this reflects both a significantly reduced carbon footprint as well as considerable savings in energy annual costs.

At the end of our leases, all equipment is either returned to the vendor or sold via an auction process. All vendors are required to be Sustainable Electronics Recycling International (SERI R2) Certified with a focus on resale/reuse of existing material and parts. Responsible recycling allows 90%+ of material to be reused with only a small fraction entering the waste stream.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$456,238	\$456,238
2025	\$450,557	\$450,557
2026	\$552,665	\$552,665
2027	\$544,425	\$544,425
2028	\$536,846	\$536,846

П	-1 Annual Sta	ff Device	Refresh				
	Device	Unit					
	Count	Cost	FY24	FY25	FY26	FY27	FY28
Town Administrative Computers							
Existing Administrative Leases			0	0	0	0	0
FY23 Town Admin Lease	15	360	5,393	5,393	5,393		
FY24 Town Admin Lease	240	360	86,296	86,296	86,296	86,296	
FY25 Town Admin Lease	15	360		5,393	5,393	5,393	5,393
FY26 Town Admin Lease	15	360			5,393	5,393	5,393
FY27 Town Admin Lease	15	360				5,393	5,393
FY28 Town Admin Lease	240	360					86,296
Repair Allowance			10,000	10,000	10,000	10,000	10,000
Town Device Subtotal			101,689	107,083	112,476	112,476	112,476
School Teacher/IA/Admin Computers							
Existing Teacher/IA Leases			173,696	155,042	8,240	0	0
FY23 Teacher Lease	25	303	7,579	7,579	7,579		
FY24 Teacher Lease	25	303	7,579	7,579	7,579	7,579	
FY25 Teacher Lease	25	303		7,579	7,579	7,579	7,579
FY26 Teacher Lease	700	303			212,214	212,214	212,214
FY27 Teacher Lease	25	303				7,579	7,579
FY26 IA Lease	120	261			31,303	31,303	31,303
Repair Allowance			25,000	25,000	25,000	25,000	25,000
School Device Subtotal			213,854	202,779	299,494	291,254	283,675
Software							
Microsoft Office 365 Town Licenses	440	158	69,620	69,620	69,620	69,620	69,620
Microsoft Office School Enterprise License	850	59	25,075	25,075	25,075	25,075	25,075
Management Software			25,000	25,000	25,000	25,000	25,000
Anti Virus Software			21,000	21,000	21,000	21,000	21,000
Software Subtotal			140,695	140,695	140,695	140,695	140,695
Total Staff Fleet CIP Request			456,238	450,557	552,665	544,425	536,846

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Annual Student Device Refresh

IT-2

Department Priority Ranking: 2TM's Rec. for FY24: \$257,890

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$257,890

Submitted by: Paul J. Puzzanghera, CIO **Department:** Information Technology

Funding Source: Free Cash

FY23 Dept. Request for FY24: \$576,925

Project Description:

Provides funding for all student computing needs including the iAndover 1:1 technology initiative. 100% of all Andover students now have full time, on-demand access to technology as needed. Devices are leased and replaced every four years.

Project Justification and Purpose:

The Andover program historically utilized a hybrid approach that provided in-school devices to elementary students but has allowed middle and high school students to "Bring Your Own Device" (BYOD) permitting 24x7 access to learning tools and environments. The recent COVID crisis has emphasized the rapid adoption of the so-called "blended" learning model which requires universal access to technology. The use of the BYOD model allows us to promote a full 1:1 program in a more cost-efficient manner.

Specifically:

- Grade K-1 students utilize tablet type devices (currently Apple iPads)
- Grade 2-5 students utilize an internet capable laptop (currently a cost-effective Chromebook device). Beginning in FY23 students in all grades were issued a device that they will keep for the duration of their elementary experience. This will lead to a more predictable procurement and deployment model where we acquire roughly 500 new devices solely for 2nd grade students.
- Grades 6-12 students may bring their own laptop. Middle School students are required to bring Chromebooks.
- All students with demonstrated need receive district provided devices.
- Andover provides a "rental" program that allows parents to rent a fully configured, insured Chromebook for a modest annual fee (currently \$135) in lieu of purchasing a device themselves

This article provides funding to enable all Andover students to have access to a personal computing device during the school day to:

- Provide access to desktop and web-based applications and learning platforms
- Provide a platform for moving fully to an eBooks digital format in lieu of expensive traditional paper versions
- Access new generation learning content (learning management systems, videos, audiobooks, rich multimedia content, etc.)
- Facilitate research and note-taking
- Provide assistive learning environments for special education students
- Encourage collaboration
- Create new opportunities for differentiated instruction and real time assessment

Furthermore, this article provides funding in support of special purpose devices required by music, art, engineering, photography and other unique departments. These are typically provided as fixed "labs" or in mobile carts. With the advent of the 1:1 initiative, the number of devices required for these purposes has diminished dramatically.

Cost Estimate & Timing:

See chart below for details:

- Starting in FY23 the Town began the process of moving funding from IT-1 partially away from CIP style funding and began funding on-going devices costs with a \$250,000 contribution from the school operating budget.
- IT has elected to move away from purchasing vendor warranties and move to a self-repair model based on operating history. Most of the repair costs from student machines are from "accidental damage" rather than device failure. Student repair rates are higher than for staff devices. Nonetheless, this has yielded a significant savings.
- Estimated costs include costs for configuring devices, providing protective cases, licenses as well as charging stations.
- FY24 retains some funds to extend some existing leases as needed to maximize useful life of certain devices, particularly shared classroom equipment. In FY25 and FY26 lease renewals are anticipated for Music, Art, and Science devices.
- Costs of certain management software are now shared with IT-1 as the number of student devices continues to expand.
- Moving forward Andover plans to retain a fraction of "late in life" Chromebooks from matriculating 5th grade students for use as system wide "spares" and to assist in the administration of MCAS and other standardized testing. This will extend the useful life of student equipment.
- 2020-22 was marked by severe supply chain disruptions limiting our ability to procure new equipment and a significant increase in device costs. Consequently, students are operating with older devices that are past their useful life requiring us to accelerate purchasing updated devices.
- We continue to be affected by severe supply chain disruptions limiting our ability to procure new equipment and we have experienced a significant increase in device costs. Device lead times which previously were 4-6 weeks are now 6-8 months. Model selection is extremely limited.
- The Town applied for CARES, ESSER and ARP and related funding which reduced some of the planned expenditures for FY22. However, these funds are no longer available leading to increased leasing costs in future years.
- Due to supply chain shortages, IT was unable to procure all of the planned equipment in FY21 and FY22 which reduced new leasing costs. However, this was largely offset by lease extension costs that were required as we utilized equipment beyond the planned lease dates.

Estimated Annual Operating/Maintenance Cost or Savings:

All annual costs are included in this article. These include Microsoft Office, management software and anti-virus software.

Sustainability:

Andover IT adheres to the sustainability principles of "Reduce, Reuse, Reclaim, Recycle". Each generation of IT devices requires lower power consumption that previous generations. When spread over the nearly 10,000 devices that we manage this reflects both a significantly reduced carbon footprint as

well as considerable savings in energy annual costs.

At the end of our leases, all equipment is either returned to the vendor or sold via an auction process. All vendors are required to be Sustainable Electronics Recycling International (SERI R2) Certified with a focus on resale/reuse of existing material and parts. Responsible recycling allows 90%+ of material to be reused with only a small fraction entering the waste stream.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$257,890	\$257,890
2025	\$421,908	\$421,908
2026	\$370,774	\$370,774
2027	\$447,250	\$447,250
2028	\$472,006	\$472,006

Device	Hada					
	Unit					
Count	Cost	FY24	FY25	FY26	FY27	FY28
		117,665	93,635	59,243	0	0
120	75	9,000	9,000	9,000	9,000	9,000
400	115		46,137	46,137	46,137	46,137
0	115			0	0	0
980	115				113,036	113,036
0	115					0
		111,637	101,938	49,819	0	0
500	131	65,568	65,568	65,568	65,568	65,568
500	131		65,568	65,568	65,568	65,568
500	131			65,568	65,568	65,568
500					65,568	65,568
500						65,568
			37,500			
500	75				37,500	
		17,500	17,500	17,500	0	0
200	144	28,765	28,765	28,765	28,765	28,765
200	144	ļ i	28,765	28,765	28,765	28,765
200	144			28,765	28,765	28,765
					28,765	28,765
200	144					28,765
		(46,265)	(75,030)	(103,796)	(115,061)	(143,826)
		0	0	0	0	0
		303,870	419,345	360,902	467,944	496,012
		37 496	37 496	37 496	0	0
			37,430	37,430		
			9.849	9.849	9.849	
			88,269	88,269	88,269	88,269
				17,400	17,400	17,400
					17,400	17,400
						17,400
		77,345	135,614	153,014	132,919	140,469
		48,000	48,000	48,000	48,000	48,000
850	59	50,150	50,150	50,150	50,150	50,150
		14,400	14,400	14,400	14,400	14,400
500	35					17,500
		6,000	6,000	6,000	6,000	6,000
		88,050	88,050	88,050	88,050	88,050
		517,265	691,010	649,967	736,913	772,531
		(259,375)	(269,102)	(279,193)	(289,663)	(300,525)
	120 400 0 980 0 500 500 500 500 500 500 200 200 200	120	117,665 120	117,665 93,635 120 75 9,000 9,000 400 115 46,137 0 115 980 115 0 115 115 0 115,568 500 131 5500 131 5500 131 5500 131 5500 131 500 75 37,500 200 144 28,765 28,765 28,765 200 144 200 200 200 200 200 200 200 200 200 2	117,665 93,635 59,243 120 75 9,000 9,000 9,000 115 46,137 46,137 0 115 0 115 0 115 0 115 0 115 0 115 0 116,37 101,938 49,819 500 131 65,568 65,568 65,568 500 131 65,568 65,568 65,568 500 131 500 131 500 131 500 75 37,500 500 75 37,500 200 144 28,765 28,765 28,765 200 144 200 14	117,665 93,635 59,243 0 120 75 9,000 9,000 9,000 9,000 400 115 0 0 0 115 0 0 0 0 115 0 0 115

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: IT Infrastructure

IT-3

Department Priority Ranking: 3TM's Rec. for FY24: \$300,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$847,500

Submitted by: Paul J. Puzzanghera, CIO
Department: Information Technology
Funding Source: General Fund Borrowing /

General Fund Revenue

FY23 Dept. Request for FY24: \$1,032,500

Project Description:

This project contains funding for all IT infrastructure including both hardware and software platforms that are shared by all Town and School departments.

Project Justification and Purpose:

IT proposes to undertake a number of significant enhancement projects in FY24. The most critical projects include:

- Improved Collaboration The recent pandemic has accelerated transition to more virtual and collaboration intensive work. On both the town and school side this requires universal availability of video conferencing capabilities in all of our small and medium conference facilities. Further, the increased desire for citizen transparency through remote meetings of public boards requires significant renovation of our larger public meeting spaces to accommodate real time, interactive experiences. The largest expense is for a substantial update of the Emergency Operations Center at the Public Safety complex to provide real time collaboration and monitoring of emergency events. This proposal is advanced on behalf of the town's Emergency Management Working Group (EMWG)
- Classroom Modernization The current classroom video technology is now 9 years old and we propose a three-year refresh cycle for Andover High and the Middle Schools as the existing projectors become end of life. We expect to introduce touch sensitive, interactive displays and video conferencing capabilities that will allow students to engage in vastly more immersive experiences and to facilitate more economical sharing of resources across buildings and districts.
- Network Refresh Our original wireless infrastructure is now 9 years old and is no longer eligible for on-going support and maintenance, including on-going security enhancements. Current access points are limited to supporting the 802.11n (Wi-Fi 4) standard from 2009. This article provides funding for a multiyear program to upgrade core and edge switching infrastructure as well migrating access points to current standards.
- **Cyber Security** The increasingly hostile cyber environment that we face requires us to increase our investment in cyber security hardware, software and practices. With the increasing assault on municipalities it is imperative that we provide more aggressive defensive strategies, in particular, moving to new classes of hardware and software that rely on modern Artificial Intelligence (AI) analysis rather than more traditional static defenses. We must also invest in our staff since our human capital represent our most vulnerable asset.

Cost Estimate & Timing:

See chart below for more details.

Estimated Annual Operating/Maintenance Cost or Savings:

On-going cybersecurity enhancements are required to enable us to maintain our cyber liability insurances which mitigates the economic consequences of ransomware or similar attacks.

The enhanced use of video conferencing technology will reduce the amount of interbuilding travel for meetings, increasing productivity.

Sustainability:

The enhanced use of video conferencing technology will reduce the energy expended on travel by staff, students and vendors.

Town Manager's Recommendation:

The Town Manager supports funding \$300,000 for FY24 from General Fund Borrowing.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$847,500	\$300,000
2025	\$1,485,000	\$1,485,000
2026	\$482,500	\$482,500
2027	\$42,500	\$42,500
2028	\$22,500	\$22,500

IT-3 IT Infrastructure					
Project Description	FY24	FY25	FY26	FY27	FY28
BALIANO - di - /BM Dunio - do					
Multimedia/AV Projects					
Update Public Safety Conference Rooms Audio Visual	125 000				
Capabilities	125,000	20.000	20.000		
Digital Signage	30,000	30,000	30,000		
Update "Huddle" rooms. Provide video conferencing	F0 000	F0 000			
capabilities, projectors Classroom Modernization	50,000	50,000			
111111					
Projector Refresh (FY24: AHS, FY25:	270.000	220,000	210,000		
WHM/WMS/DMS/BAN. FY26 HPE/SAN/SOU	270,000	330,000	210,000		
Deployment of classroom based video conferencing	25.000	200.000	200,000		
and broadcasting. Pilot 1 room in each school	25,000	200,000	200,000		
Data Center Refresh/Cloud Transition		75.000			
Firewall Refresh	== 000	75,000			
Water Treatment Plant Server Security Upgrades	75,000				
Network Refresh					
Access Point Refresh and Version Upgrade (Replace					
100/200 Series)	160,000				
Access Point Refresh (Replace 300 Series)		262,500			
Edge Switch Refresh		160,000			
Core Switch Refresh	80,000				
Software Platforms					
Cyber Security Upgrades					
Security Audit and upgrades	10,000				
Unified Communications					
Refresh servers or move to fully cloud based voice					
capabilities		275,000			
Maintenance		,			
Wiring Maintenance/Expansion	10,000	10,000	10,000	10,000	10,000
Batteries		•	20,000	20,000	
UPS Refresh		80,000			
Handset Replacement/Expansion	2,500	2,500	2,500	2,500	2,500
Intercoms/Speakers	10,000	10,000	10,000	10,000	10,000
Total Infrastructure CIP Request	847,500	1,485,000	482,500	42,500	22,500

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Document Digitization

IT-4

Department Priority Ranking: 3TM's Rec. for FY24: \$50,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$307,000

Submitted by: Paul J. Puzzanghera, CIO

Paul Materazzo Donna Walsh Thomas Howard Jessica Porter

Department: Information Technology

CD&P Finance School HR Town HR

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:

CD&P was funded to conduct a digital records study to develop the framework to determine a target Enterprise Content Management (ECM) platform. In collaboration with the IT Department CD&P has started a pilot program to develop to an ECM platform for records management software, which will facilitate the scanning and indexing of all documents within CD&P and allow for them to be retrievable online. The process will increase transparency as volumes of public records will become available to the public, while increasing staff efficiency when retrieving, searching, collating and refiling records. Since the enactment of the new public records law CD&P has been overwhelmed with public records requests and has increased since FY19.

School HR and Town HR have paper-based files they manage containing Employee Personnel files. They need easy access to this information to respond to requests on Personnel matters. These files are confidential in nature and will be secured as such. The same ECM platform for records management software, which will facilitate the scanning and indexing of all documents within School HR and Town HR and allow for them to be retrievable online for HR staffs.

Finance has paper-based files they manage containing Assessor Property and Street cards; Attendance records; Payroll and Bond Contracts, Bank Statements, Cash Receipts. Many of these files are confidential in nature and will be secured as such. We will utilize the same ECM platform for records management software, which will facilitate the scanning and indexing of all documents within Finance and allow for them to be retrievable online for Finance staffs. Where possible, public access is planned for Assessor Property and Street information.

An ECM system holds digital images of records and provides access to staff and the public. The ECM system will eliminate of paper storage and handling of these records. It will increase the efficiency of the office staff and enables us to provide the information to the public in a quick and timely manner.

It is anticipated that over time, many additional Town and School departments will utilize this same platform to complete the digitization of existing records.

Project Justification and Purpose:

The IT Department has taken the lead in this effort in identifying a technology solution that we are using for the pilot of records management of Health and Conservation files. During FY22 IT, in partnership with CD&P, evaluated a number of content management solutions and decided to pilot the use of LaserFiche, a comprehensive system used by a substantial number of peer Commonwealth communities. We also engaged the services of a records management consultant and digitization firm to review existing historical paper records and prepare estimates of digitization coats. In the first half of FY23, the content management platform will be configured and roughly 25% of CD&P records will be converted as a pilot. This pilot was funded with existing funds from previous CIP investments.

Phase II of this project, scheduled to begin in FY24, will continue the expansion of this program and complete the conversion of CD&P records along with records for both the Town and the School Human Resource departments. These funds are entirely for the conversion of existing paper documents into scanned and indexed paper documents.

This project has several key objectives:

Move to Paperless – Going forward all CD&P will be natively digital. Applicants for permits will be strongly encouraged to submit electronic versions of documents, plans etc. and any paper submissions will be digitized real time.

Staff Productivity – Staff time will no longer be wasted retrieving and assembling paper documents from multiple sources scattered across multiple locations

Citizen Transparency – All records will be available on a near real-time basis for on-line searching and retrieval. No need to visit town hall, pay reproduction fees or wait for answers – all documents will be available through the town website.

Retrievability – As documents are scanned, sophisticated optical character recognition combined with manual recording will make all of these documents searchable both through the provided document retrieval software along with standard search engines. Simply typing in an address or the name of an establishment will retrieve all matching records.

Repurposing of storage space – Paper files consume thousands of square feet of prime town real estate that limit staff productivity and limit space available for citizen interaction. Transitioning these records to digital will ease the significant overcrowding in town and school buildings and reduce the pressure for costly renovations or expansion.

Safety – There is no backup for existing paper record. Water, fire or pest born contamination can easily eradicate 100+ years of crucial town history. Electronic preservation will ensure the ongoing safety of these crucial documents.

FY24-26 funding is being requested to support expansion of this project for the additional departments. The project will also examine whether application and permitting fees should be increased for the continuation of scanning records as new plans and projects are submitted.

Cost Estimate & Timing:

See details below.

Estimated Annual Operating/Maintenance Cost or Savings:

Savings will be achieved by:

• Improving staff productivity. Eliminating wasted hours retrieving documents to satisfy citizen

requests

- Improving citizen productivity. All requests can be satisfied directly by the requester from their home eliminating visits to town hall, reproduction costs, etc.
- Reducing usage of storage space eliminating needs for future building renovation and expansion

Sustainability:

Reducing the dependency on paper documents and reproduction of documents will reduce consumption of paper, energy, etc.

Town Manager's Recommendation:

The Town Manager supports funding \$50,000 for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$307,000	\$50,000
2025	\$297,000	\$297,000
2026	\$270,000	\$270,000
2027		
2028		

IT-4 Document Digitization					
	FY24	FY25	FY26	FY27	FY28
CDP&P Conservation/health/Zoning Planning/health Building Town and School HR Town Finance	157,000 100,000 50,000	197,000 100,000	270,000		
Total Digitization Costs	307,000	297,000	270,000	0	0



TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Active Transportation Plan

CDP-1

Department Priority Ranking: 1 \$40,000 TM's Rec. for FY24: (1 = highest, 2 = second highest, etc.)**Original Dept. Request:** \$50,000

> **Submitted by:** Paul Materazzo **Department:** CD&P/DPW

> > APD/Sustainability

Special Dedicated Funds **Funding Source:**

FY23 Dept. Request for FY24:

Project Description:

The Active Transportation Master Plan recognizes the impact that cars have had on our community and environment. It seeks to remedy the implications of living in a car-dependent community by offering a strategic plan for making walking and biking competitive alternatives to driving. It understands the need for an incremental approach to altering the priorities of our transportation system – from one with a main purpose of getting cars from A to B, to one that views our streets as public spaces. It is essential to have a long-term strategic plan that understands the community to address its needs.

The plan will:

- 1. Develop a long-term vision to enhance pedestrian/bicycling movement throughout town.
- 2. Augment the Town's work in development a Complete Street Prioritization Plan, while investigating opportunities to expand equitable access to destinations, sustainability, economic development, community development and public health.
- 3. Create a pathway to pursue MassDOT's Complete Streets funding.
- 4. Provide policies and guidelines for facilities that will make walking/biking safer, more comfortable and a competitive alternative to driving short distances.
- 5. Adopt published design standards that suit the needs of Andover's transportation network and public spaces.
- 6. Describe current conditions and opportunities to improve safety and comfort of Andover's streets for all users.
- 7. Identify major corridors
- 8. Structure an action plan to create a network of bike and pedestrian pathways that connect people to destinations within and beyond town boundaries.

Project Justification and Purpose:

The Active Transportation Master Plan can be viewed through multiple lenses. We are seeking to build this plan with a focus on equitable access to destinations, sustainability, economic development, community development, and public health. The Active Transportation Master Plan will set goals to:

- Make our transportation system accessible to people of diverse lifestyles and socio-economic
- Reduce short trips taken by car and encourage walking and biking distances within 15 minutes of destinations.
- Boost our business districts by reducing our dependence on parking spaces, increasing foot traffic and creating spaces for people.

- Build social infrastructure through increased personal interactions of people walking and biking in our streets.
- Encourage healthy lifestyles by providing public spaces safe for active transportation and recreation.

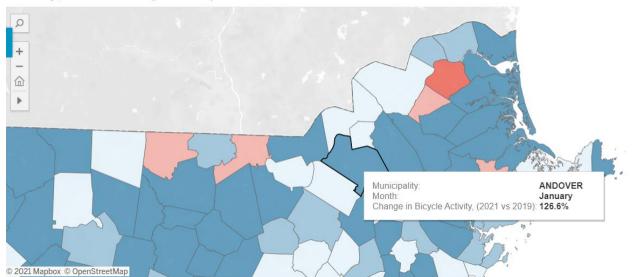
This project is supported by the Town's Climate Action Plan and 2012 Master Plan (excerpts below), which encourages:

- LU.1.4. Encourage pedestrian access in downtown.
- LU.1.7. Help downtown Andover to become 100% accessible to persons with disabilities.
- LU.5.2. Promote a pedestrian-oriented downtown that respects Andover's small-town character and heritage.
- OS.8.6. Support on-road and off-road biking for recreation and for commuting to work and school.
- TC.2.1. Promote local transportation improvements such as bridge repairs, congestion elimination, and new sidewalks.
- TC.3.1. Provide for safe and comfortable bicycle and pedestrian circulation throughout Andover.
- TC.4.1. Promote environmentally friendly road construction techniques.
- MF.1.6. Implement new technologies and "Green initiatives" to conserve power and reduce Andover's carbon footprint.

The Department of Transportation notes an overall increase in the amount of bicycling activity across the Commonwealth in April of 2021 compared to the 2019 baseline (see image below). The alternative transportation data specific to Andover is impressive, showing a 27% sustained increase in bicycling over the past two years. In addition, there was a marked increase in walking activities in Andover when comparing between 2019 to 2020. This positive trend indicates the community's interest and willingness to use active transportation modes and helps in part to justify this CIP request.

2020 vs. 2019 2021 vs. 2019 (Baseline)

January, 2021 vs 2019 (Baseline)





Cost Estimate & Timing:

Total Cost Feasibility Study \$50,000, Design Services \$TBA, Construction \$TBA

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Improving access for pedestrians and cyclists will help reduce the number of in-boundary vehicle trips within Andover town borders. The US Environmental Protection Agency estimates that car trips of under a mile add up to about 10 billion miles per year. If half of these trips can be done by biking or walking, then the US can eliminate 2 million metric tons of carbon emissions per year. Google's Environmental Insights Explorer data based on satellite location services data estimates that the over 8.7 million in-boundary trips were taken per year in Andover contributing to 8,550 metric tons of carbon emissions. Having an Active Transportation Master Plan will promote the use of alternative transportation modes for these short trips and help reduce greenhouse gas emissions.

Town Manager's Recommendation:

The Town Manager supports funding \$40,000 for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$50,000	\$40,000
2025		
2026		
2027		
2028		

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Improving Kiosks, Signage, and Interpretive
Panels Across 24 Town – Owned Properties

Department Priority Ranking: 2TM's Rec. for FY24: \$25,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$25,000

Submitted by: Paul Materazzo

Department: CD&P

Funding Source: General Fund Revenue

CDP-2

FY23 Dept. Request for FY24: \$0

Project Description:

The reservations that held in the care and custody of the Andover Conservation Commission are one of the Town's most valuable recreational resources. However, a majority of these properties do not have kiosks, lack updated trail maps or are missing maps entirely, and/or do not offer any interpretive information about the landscape context and natural history of the site. Trailhead signage is critical to the user experience of conservation land – it welcomes the public and informs the visitor experience by clarifying trail routes, describing appropriate use, identifying areas of steep terrain, and highlighting significant natural features. By adding kiosks where they are missing, installing permanent aluminum composite signs, and creating interpretive panels for several reservations across town, we hope to attract additional visitors to Town-owned properties, reduce confusion for hikers navigating trails, and provide residents of all ages with a rich educational outdoor experience. Furthermore, we have included in this request funding for language translation into Simplified Chinese and Spanish, with the possibility of additional languages in the future.



Figure 1. An image of a kiosk shared by the Town of Andover and AVIS, illustrating the contrast between the current signage for Andover Conservation Land (left) and the permanent aluminum composite signage for AVIS conservation land (right).

Project Justification and Purpose:

The addition of permanent aluminum composite maps and signs in our kiosks would be an excellent long-term investment that would cut down on current ongoing kiosk maintenance, while also demonstrating to the public the Town's commitment to managing and stewarding its open spaces in perpetuity. The installation of permanent interpretive panels along several trails, such as those installed throughout Al Retelle Reservation, would help to further engage the community by teaching visitors about the history of the land, the native communities that once lived there, the wildlife and plant communities on site, and much more.

This project would also support the much-needed incorporation of diversity, equity, and inclusion across Town-managed properties. Currently, all existing informational and interpretive signs on Andover Conservation Land are only available in English. The proposed updated signage would include QR codes that, when scanned with a smartphone, will take users to a translated version of the sign in Mandarin or Spanish. This will greatly improve the inclusivity of Andover's open spaces and will increase accessibility for historically marginalized members of the community.

Cost Estimate & Timing:

This project is targeted for FY24. The total funds requested is \$25,000.00, which would serve to update or install the various signage, kiosks, and interpretive panel needs for 16 different reservations across Andover. The costs associated with this request are broken down as follows:

Aluminum Composite Signage

Size	Quantity	Cost per Unit	Labor	Total Cost per Size
28"x26"	3	\$170.00	\$150.00	\$960.00
11"x17"	5	\$45.00	\$150.00	\$975.00
27"x25"	4	\$160.00	\$150.00	\$1,240.00
42"x45"	4	\$360.00	\$150.00	\$2,040.00
Total Overall Cost for Signage			\$5,215.00	

Interpretive Panel Installation

Printing Cost	Quantity	Metal Brackets	Cost of 4x4 Posts
\$250.00	16	\$100.00	\$200.00
Total Cost for Interpretive Panels			\$8,800.00

New Kiosk Installation

Materials Cost	Quantity
\$600.00	9
Total Cost of New Kiosk Installation	\$5,400.00

Translation into Spanish and Simplified Chinese

Materials Cost	Quantity
\$375.00	14.89333
Total Translation Cost	\$5,585.00

Estimated Annual Operating/Maintenance Cost or Savings:	
None.	
Sustainability:	

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$25,000	\$25,000
2025		
2026		
2027		
2028		

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Public Art Program Fund

CDP-4

Department Priority Ranking: 4TM's Rec. for FY24: \$0

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$50,000

Submitted by: Paul Materazzo

Department: CD&P

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:

One of the common themes of great public places is the presence of public art. According to the Imagine Andover report completed in 2016, the Town of Andover is encouraged to install public art throughout Town as a way to provide a more robust local art community as well as provide more opportunities for local artists to display and work with the public on community based public art. A steady funding source is a necessary element of a thriving art program.

The creation of this Public Art Program fund would be the first step in a long-range public art planning process. This funding will support implementation of the recommendations from the art and creative placemaking initiative that is scheduled to kick off this fall.

Along with the above-mentioned initiative coupled with a late winter Arts & Culture Summit, the natural step would be to identify locations for public art through Andover. The momentum of utilizing the resources of this fund would help to put the arts and culture community of Andover on the map.

In the long term, a "Percent for Art" ordinance, may be considered to fund long range public art installations and projects. A Percent for Art program which is adopted by the Town, where a fee, usually a percentage of a project cost, is placed on large scale development projects in order to fund and install public art. Examples of "percent for Art" include the City of Cambridge https://www.cambridgema.gov/arts/publicart/percentforart

Project Justification and Purpose:

A Public Art Program Fund would add to the energy and vitality of the community as we continue the work to become the best place to live, work, shop, dine and recreate North of Boston. This program could benefit all neighborhoods and business districts of the Town. Can you imagine a bronzed, whimsical public art display, like the Make Way for Ducklings sculpture in the Boston Public Garden, in the Park, Ballardvale Green or the Bowling Green in Shawsheen? While not a high priority such as a fire truck or IT needs, the need and desire for Public Art is strong and a sought-after item that contributes to the long-term viability of the Town.



Cost	Estimate	&	Timing	D'

\$50,000

Estimated Annual Operating/Maintenance Cost or Savings:

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Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$50,000	\$0
2025		
2026		
2027		
2028		

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Tactical Traffic Calming and Placemaking CDP-5

Department Priority Ranking: 5 TM's Rec. for FY24: **\$0** (1 = highest, 2 = second highest, etc.)**Original Dept. Request:** \$20,000

> **Submitted by:** Paul Materazzo **Department:** CD&P/DPW

APD/Sustainability

General Fund Revenue **Funding Source:**

FY23 Dept. Request for FY24:

Project Description:

Tactical, or quick-build, projects are innovative and creative ways for the Town to pilot quality of life improvements in the public realm. This approach allows the Town to design low-cost, temporary changes to public spaces in order to study their effects before implementing permanent, costly infrastructure.

An example of Tactical Traffic Calming would be the use of flex posts and paint to create chicanes on neighborhood streets where cars are unlawfully travelling above the speed limit. This intervention would allow the design of the road to dictate the speed of travel consistent with the posted speed limits. If the intervention is successful, then permanent curb extensions to create chicanes in place of the tactical chicanes would be placed. This process of implementation would allow the Town to be confident that the money spent on such infrastructure would be effective.

An example of Tactical Placemaking is the outdoor dining program that the Town first implemented during the Covid-19 pandemic. This approach created a place for people and businesses where there was none before at relatively low costs. The scheme has been successful, and considers review of whether permanent sidewalk bump outs are feasible to enhance the public realm.

Project Justification and Purpose:

Safe and comfortable public spaces are essential for strong community development, growth of small businesses, public health, climate change mitigation and civic engagement. To support all of these aspects, it is important to study and understand where we need to improve our public spaces to allow for all of these aspects to take place. Tactical approaches to public spaces will allow the Town to test out changes before making long-term investments. This could save the Town money and provide a way to make changes that can be removed if they are not effective.

Cost Estimate & Timing:

Total Cost of Construction \$20,000 – Total Request - \$20,000

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Tactical approaches to public spaces will allow the Town to test out changes before making long-term investments. The projects will target temporary shared streets, public placemaking or other pedestrian

friendly approaches with the goal of enhancing the public realm. The temporary tactical projects could save the Town money and provide a way to make changes that can be removed if they are not effective.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$20,000	\$0
2025		
2026		
2027		
2028		

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Improving the Accessibility of Town Conservation CDP-6

Land through Professional Trail Evaluation and

Data Collection

Department Priority Ranking: 6 (1 = highest, 2 = second highest, etc.)

TM's Rec. for FY24: \$0 Original Dept. Request: \$21,638

Submitted by: Paul Materazzo

Department: CD&P

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:



As the Town of Andover embarks on its mission to be more inclusive in the recreational opportunities, facilities, and other amenities it provides to the community, accessibility has rightfully become central to the conversation. "Accessible" is a term used to describe a facility or trail that can be approached, entered, and used by persons with disabilities, and that complies with standards established under the Americans with Disabilities Act (ADA) and Architectural Barriers Act (ABA). If a particular trail on Andover conservation land does not meet those standards, information about these trails is still useful to collect and display at trailheads to help individuals determine if a given trail is appropriate for them. Objective information about trail conditions enhances the accessibility, safety, and satisfaction of all trail users, both with and without disabilities. The inclusion of this information is required for federal lands, and will likely become required for municipalities in the future. In order to achieve compliance, existing trail systems on Andover Conservation Commission properties should be assessed by a professional company to determine which trails are most suitable for use by persons of all abilities.

All trails should be evaluated to determine the following, when practicable:

- Total trail length (in linear feet)
- Length of trail segments meeting accessible standards (in linear feet)

- Location of the first point of exception to accessible standards
- Running slope (average and maximum)
- Maximum cross slope
- Minimum clear tread width
- Surface type, firmness, and stability
- Tread obstacles that limit accessibility
- Elevation (trailhead, max

Beneficial Designs is an engineering and design firm that specializes in creating access solutions for persons with mobility impairments by measuring outdoor environments for accessibility, and their services came recommended by the Massachusetts Department of Conservation and Recreation. The information collected from a trail assessment with Beneficial Designs would then be used to create Trail Access Information SignPosts, or TAIs, which complied with the Architectural Barriers Act (ABA) Standards 2015 under Chapter 10: Recreational Facilities 1017 Trails.

Project Justification and Purpose:

Trails help connect Andover's citizens to nature, support healthy activity, and make the community more appealing and united. By assessing 18 miles of trails and synthesizing each trail's characteristics, this project supports the much-needed inclusion of accessibility on Town-managed properties. For far too long, differently abled members of the community have not been included in conversations surrounding conservation and recreation. By analyzing trails with a professional service and installing TAI signage at each trailhead over time, trail users will be able to make educated decisions regarding which trail they may be able to use based on their own individual abilities. It is time for the Town of Andover to demonstrate its investment in both conservation and accessibility, both of which have suffered from a lack of funding for many years. This request covers 18 miles of trails, or 12 miles of trails, to reflect the maximum amount of work Beneficial Designs estimates they could complete during a 5-day work week. Because they require financial assistance with travel and lodging per assessment, they recommended we pursue the maximum number of trails they could complete during a single visit in order to be as cost effective as possible.

Cost Estimate & Timing:

This project is targeted for FY24, with the field work taking 5 business days to complete. Upon the completion of the trail assessment, TAI signs could be quickly produced in-house using one of our many approved sign vendors and could then be installed immediately.

Estimated Annual Operating/Maintenance Cost or Savings:

Trail Assessment Labor	Unit Price	Hours	Total
Research/ Site Review/ Data Processing/ Summary Report Generation Fee	N/A	N/A	\$ 7,238.00
HETAP/RP/DORAP Assessment Hours (Including all equipment & HETAP software; calibration; etc.)	\$ 100.00	61	\$ 6,100.00
Total		\$ 13,338.00	

Travel	Rate	Days/Hours	Total
Daily per Diem per Assessor	\$ 83.00	7	\$ 581.00
Lodging per Diem	\$ 160.00	6	\$ 960.00
Round Trip Travel & Prep Time per Assessor	\$ 100.00	37.1 (hours)	\$ 3,710.00
Cart Shipping	\$ 300.00	1	\$ 300.00
Airfare	\$ 1,552.00		\$ 1,552.00
Ground Transportation on Site	\$ 480.00		\$ 480.00
Miscellaneous Travel Cost (e.g., mileage to airport, parking, baggage fees, etc.)	\$ 274.00		\$ 274.00
Contingency Travel Exp.	\$ 443.00		\$ 443.00
Total			\$ 8,300.00

Project Total	\$ 21,638.00
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Sustainability:

This analysis would cover 18 miles of trails, or 12 of the conservation properties currently held in the care and custody of the Andover Conservation Commission. This request would therefore encompass all the trails within our most highly trafficked reservations. Upon the successful completion of this initial round of funding, we could then assess the remaining miles of trails in need of analysis to produce a proposal for the next phase of this initiative. The need for this trail assessment is urgent and timely given the Town of Andover's investment in Diversity, Equity, and Inclusion.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$21,638	\$0
2025		
2026		
2027		
2028		

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Funding for Tree Health, Maintenance, and CDP-7 Hazard Tree Removal on Andover Conservation **Properties**

Department Priority Ranking: 7 (1 = highest, 2 = second highest, etc.)

\$0 TM's Rec. for FY24: **Original Dept. Request:** \$20,000

Submitted by: Paul Materazzo

Department: CD&P

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:

This CIP request is being submitted in order to obtain funding for tree removal/tree management/arborist services for properties under the care and custody of the Andover Conservation Commission. Licensed tree management professionals and arborists would be retained for this purpose on an as-needed basis. Other services include treatment for invasive species, such as the Emerald Ash Borer, to preserve biodiversity on conservation properties.

Project Justification and Purpose:

Over 2,000 acres of land in Andover are conserved as permanently preserved open space for passive recreation, wildlife habitat, green space, and a variety of other purposes. These lands are an asset to the Town of Andover and are thoroughly enjoyed by residents and visitors alike.

These lands are held under the care and custody of the Andover Conservation Commission. Management and upkeep of trails, signage, parking areas, and other infrastructure is often completed by volunteers who contribute time and expertise. Occasionally, tree management services are required. Scenarios include hazard tree cutting and removal, removal of hazard trees that threaten abutter's property, removal of trees from trails and access points, and assessment of potential hazard trees.

This type of tree work requires expertise, specialized equipment, and the proper licensing requirements. Tree work may be incredibly hazardous to life and property.

The need for tree work arises multiple times a year on Andover Conservation land. When possible, Andover Conservation Staff rely on volunteer assistance or Andover Forestry personnel to complete necessary tree work. However, the work that is needed often surpasses the capabilities, resources, and time available to these volunteers and Town Staff.

The intent of this CIP request is to have funding in reserve to retain professional tree management companies and personnel on an as-needed basis.



Fallen Tree onto Private Residence.



Fallen Trees onto Street and Sidewalk.

Cost Estimate & Timing:

The total amount requested is \$20,000. These funds would be utilized on an as-needed basis for tree removal/tree management/arborist/invasive species management services for Andover Conservation

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Estimated Annual Operating/Maintenance Cost or Savings:
N/A

Sustainability:	
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N/A

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$20,000	\$0
2025		
2026		
2027		
2028		

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Funding for Boundary Survey(s) of Select Andover Conservation Properties CDP-8

Department Priority Ranking: 8TM's Rec. for FY24: \$0
(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$20,000

Submitted by: Paul Materazzo

Department: CD&P

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:

This CIP request is being submitted in order to obtain funding for boundary survey(s) on properties under the care and custody of the Andover Conservation Commission. Licensed surveyors would be retained for this purpose on an as-needed basis.

Project Justification and Purpose:

Over 2,000 acres of land in Andover are conserved as permanently preserved open space for passive recreation, wildlife habitat, green space, and a variety of other purposes. These lands are an asset to the Town of Andover and are thoroughly enjoyed by residents and visitors alike.

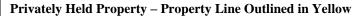
These lands are held under the care and custody of the Andover Conservation Commission. Management and upkeep of trails, signage, parking areas, and other infrastructure is often completed by volunteers who contribute time and expertise. Occasionally, the exact property boundaries of one or more of these parcels needs to be known. A property-specific survey and boundary markout is the only way to accurately and legally determine these boundaries.

Property-specific surveys require expertise, specialized equipment, and the proper licensing requirements.

The need for surveying assistance arises multiple times a year. Conservation land boundary disputes, encroachments, tree removal inquiries, access questions, and other scenarios surface every year. Often, Andover Conservation Staff rely on insufficient boundary information when responding to Conservation land inquires and concerns from members of the public.

The intent of this CIP request is to have funding in reserve to retain licensed surveyors on an as-needed basis.

Andover Conservation Land – Property Encroachment Example. Conservation Property Line Survey and Markout Would Be Helpful In This Case.





Andover Conservation Land – Almost an Acre of Conservation Land Maintained as Lawn/Landscaped Areas (With a Structure) by Homeowner.

Cost Estimate & Timing:

The total amount requested is \$20,000. These funds would be utilized on an as-needed basis for Andover Conservation property boundary survey and marking services.

Estimated Annual Operating/Maintenance Cost or Savings:

N/A

Sustainability:

N/A

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal	Year	Dept. Request	Town Manager Recommendation
202	24	\$20,000	\$0



TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Police Vehicle Replacement

POL-1

Department Priority Ranking: 1 TM's Rec. for FY24: \$205,000 (1 = highest, 2 = second highest, etc.) Original Dept. Request: \$205,000 Submitted by: Police Chief

Department: Police Department
Funding Source: General Fund Revenue /

Free Cash

FY23 Dept. Request for FY24: \$205,000

Project Description:

• Replace 4 Police cruisers

• Replace 1 Unmarked Cruiser

Project Justification and Purpose:

• Generally marked cruisers are replaced every three years and unmarked cruisers and special utility vehicles are replaced every 5-6 years. The determination as to which vehicles are traded in each year is made on a case by case basis depending on the mileage, hours of use and the overall condition of the vehicle. Purchase of these vehicles will allow the Department to continue with the rotational replacement program and avoid major repair costs and downtime.

Cost Estimate & Timing:

• \$205,000 for FY24 - FY25 and \$225,000 for FY26 - FY28.

Estimated Annual Operating/Maintenance Cost or Savings:

Varies by vehicle

Sustainability:

• N/A

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request from Free Cash.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$205,000	\$205,000
2025	\$205,000	\$205,000
2026	\$225,000	\$225,000
2027	\$225,000	\$225,000
2028	\$225,000	\$225,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Accident Reconstructing Mapping System GNSS POL-3

Department Priority Ranking: 3 TM's Rec. for FY24: \$40,000 (1 = highest, 2 = second highest, etc.) Original Dept. Request: \$40,000

Submitted by: Police Chief **Department:** Police Department

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:

• The Police Department is looking to purchase an Accident Reconstruction Mapping System. This system would be a Global Navigation Satellite System. Designed to assist in Accident Reconstruction for vehicle, motorcycle, bicycle and pedestrian.

Project Justification and Purpose:

• The current system is incompatible with new technology and is becoming a burden or impossible to retrieve data from updated vehicles or basic survey data. The new system will allow Officers to Survey a crash site without impeding traffic. The system will also be compatible with the State Police and NHTSA

Cost Estimate & Timing:

- The components of this estimate are the 1. GNSS System, 2. LTE Field Controller, 3. Tracking System, 4. Battery, Hardware. \$35,000
- Software and Training \$5,000
- This is a one-time purchase which will not incur additional requests.

Estimated Annual Operating/Maintenance Cost or Savings:

• This purchase is the replacement for a Total Survey System which is over 15 years old and is no longer compatible due to technology.

Sustainability:

N/A

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$40,000	\$40,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: UAS/Unmanned Aerial System

POL-4

Department Priority Ranking: 4 TM's Rec. for FY24: \$0 (1 = highest, 2 = second highest, etc.) Original Dept. Request: \$30,000

Submitted by: Police Chief **Department:** Police Department

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:

The Police Department is looking to purchase a Commercial Grade Unmanned Aerial System.
 The system will be comprised of an aerial platform and camera platform. The system will allow longer flight time and allow flight and optics during poor and cold weather.

Project Justification and Purpose:

• This will allow the police department to continue to use a UAS for searches for lost persons and wanted persons. The system is also used for Accident reconstruction, Crime scene processing and during natural and man-made disasters.

Cost Estimate & Timing:

- The components of this estimate are
 - 1. Flying Platform \$18,000-\$20,000
 - 2. Camera Platform \$8,000-\$10,000.
- The cost is for the entire system.
- This is a one-time purchase which will not incur additional requests.

Estimated Annual Operating/Maintenance Cost or Savings:

• This purchase is the replacement for the current UAS an updated camera and technology.

Sustainability:

N/A

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$30,000	\$0



TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Fire Rescue Vehicles

FR-1

Department Priority Ranking: 1TM's Rec. for FY24: \$975,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$1,110,000

Submitted by: Chief Michael B. Mansfield

Department: Fire Rescue

Funding Source: General Fund Borrowing /

General Fund Revenue

FY23 Dept. Request for FY24: \$450,000

Project Description:

Replace the following vehicles:

FY24

2009 Pierce Arrow – Engine 1 2004 Ford Pick-up – Forestry 2

FY25

1994 Ford F450 – Fire Alarm Utility bucket truck 2014 International 4300 - Ambulance 3

FY26

2006 Pierce Aerial Ladder - Ladder 2

<u>FY27</u>

2003 Chevrolet EXPC Utility Box Truck

FY28

2018 Chevrolet Tahoe – Car 1 2018 International Ambulance 2 2013 Zodiac Cadet Inflatable/Honda Motor - Marine 2

Project Justification and Purpose:

FY24

2009 Pierce Arrow - Engine 1

Engine 1 is located at the Station 1 located at 32 North Main Street and serves a very large response area within town. This apparatus is also the first to respond to any community requesting mutual aid assistance for any fire or emergency related incidents. This apparatus has been "moved up" for replacement due to the volume of incidents this apparatus responds to and the overall condition of the truck. Secondly, due to a world-wide supply chain crisis, once ordered, a new piece of apparatus will now take up to 26 months to build and deliver. In comparison, apparatus ordered pre-pandemic would take only eleven (11) months to build and deliver. This apparatus will be placed in reserve for additional service once the new one is delivered.

2004 Ford Pick-Up – Forestry 2

Forestry 2 is housed at the West Fire Station and serves as one of two forestry firefighting vehicles within

the fleet. This apparatus responds to brush or wildland fires within the community and also serves as a utility truck when performing at rescue responses that require lengthy extrications of injured people in wooded areas and those areas that pose access challenges. This response unit has already had significant body and mechanical work performed on it to maintain its serviceability and reliability and is in need of additional work at this time.

FY25

2014 International SER - Ambulance 3

This vehicle was utilized as a front-line response vehicle for five years and serves as a back-line reserve vehicle and is placed back into front line status when required due to preventative maintenance or mechanical malfunctions of the current front-line response ambulances

The current vehicle may be traded in to offset some of the purchase costs of the replacement vehicle. Because these ambulances are operating much of the time, they are utilized as front-line vehicles and then when replaced put into a back-up vehicle status for additional years of service.

The entire community of Andover will benefit from this project by having reliable and efficient apparatus to meet the needs of those who require EMS services. The consequences of deferring this project will result in increased unreliability, decreased organizational efficiency and an increase in maintenance costs.

1994 Ford F450 – Fire Alarm Bucket/Boom Truck

This vehicle is equipped with a boom to allow personnel the ability to maintain current fire alarm and public safety communications fiber optics and serves as a back-up to the Facilities truck when undergoing repairs or preventative maintenance. The current vehicle does not meet current standards and will require substantial body work and there is a lack of parts available to maintain the vehicle which will force the department to decommission it.

FY26

2006 Pierce 105-foot Aerial Ladder-Ladder 2

This vehicle serves as the back-up or reserve aerial ladder that is placed in service when Ladder 1 is out of service for preventative maintenance or other repairs and service.

The Insurance Services Organization requires the community to have a back-up aerial ladder that can be placed in service immediately when needed as a front-line vehicle. Ladder 2 is also placed into service and is manned when Ladder 1 is called out of town for mutual aid assistance in other communities which allows Andover Fire Rescue to maintain response service levels to the town.

FY27

2003 Chevrolet EXPC Utility - Air Supply

This vehicle houses a portable air supply, specialized Technical Rescue equipment, and firefighter rehabilitation equipment. This vehicle responds to all incidents where a portable air supply is required and where firefighter rehab is necessary and required by NFPA Standards.

FY28

2018 Chevrolet Tahoe – This vehicle serves as the staff vehicle for the Fire Chief to allow for response to emergency incidents 24/7/365. This vehicle is also upfitted with firefighting equipment, emergency radio communications and computer technologies that support the full incident response and acts as the Incident Command vehicle at major responses.

2018 International SER - Ambulance 2

This vehicle was utilized as a front-line response vehicle for five years and serves as a back-line reserve

vehicle and is placed back into front line status when required due to preventative maintenance or mechanical malfunctions of the current front-line response ambulance.

The current vehicle may be traded in to offset some of the purchase costs of the replacement vehicle. Because these ambulances are operating much of the time, they are utilized as front-line vehicles and then when replaced put into a back-up vehicle status for additional years of service.

The entire community of Andover will benefit from this project by having reliable and efficient apparatus to meet the needs of those who require EMS services. The consequences of deferring this project will result in increased unreliability, decreased organizational efficiency and an increase in maintenance costs.

2013 Zodiac Cadet 340/2002 15 HP Honda Motor - Marine 2

This boat and motor unit has been utilized to respond to water emergencies in static water supplies and the Merrimack River for the last several years. The Zodiac Boat is at the end of its useful life and needs to be replaced according to the manufacturer's recommendations due to safety concerns. The Honda motor is also beyond its useful life and is becoming increasingly unreliable. The AFR maintenance staff also recommends replacement of both the boat and motor due to reliability issues and due to the lack of available repair parts.

Cost Estimate & Timing:

FY24

2009 Pierce Arrow – Engine 1

\$975,000 based upon bid specifications that are consistent with the additional Engines in the fleet and price escalation due to the global supply-chain crisis. The manufacturing and delivery of this apparatus will take up to 26 months from its order date. This apparatus will meet all current NFPA Standards.

2004 Ford Pick-up with mounted forestry skid unit – Forestry 2

\$135,000 based upon similar specifications utilized for Forestry 1 to include a skid mounted pump 250-gallon water tank and various forest firefighting tools and equipment. This apparatus replacement request was deferred from FY 2023.

FY25

2014 International 4300 – Ambulance 3

\$370,000 based upon current bid specifications as arranged by EMS Apparatus Committee and current NFPA standards.

■ 1994 Ford F450 – Fire Alarm Bucket/Boom Truck

\$175,000 based upon current bid specifications and town wide fleet consistency for warranty, and ease of locating replacement parts and repairs. This vehicle is equipped with a boom to allow personnel the ability to maintain current fire alarm and public safety communications fiber optics and serves as a back-up to the Facilities truck when undergoing repairs or preventative maintenance.

FY26

2006 Pierce Aerial Ladder – Ladder 2

\$1,400,000 based upon bid specifications and cost increases anticipated. Purchase from this manufacturer would maintain fleet consistency for operations, warranty, firefighter safety, and ease of locating parts for repairs.

FY27

■ 2003 Chevrolet EXPC Utility – Air Supply

\$250,000 based upon bid specifications and the anticipated cost increases due to new emissions standards and mandated safety features. This vehicle is equipped with a portable air supply system that responds to emergency scenes where additional breathing air requirements exist. The vehicle also has specialized Technical Rescue equipment on board to provide additional levels of safety for those on scene and also acts as a mobile firefighter rehabilitation unit as well.

FY28

■ 2018 Chevrolet Tahoe – Car 1

\$90,000 based upon current vehicle specification and the installation of emergency radios and lighting packages.

2018 International Ambulance 2

\$400,000 based upon current specifications and anticipated manufacturing costs. This ambulance will be constructed to the exact specifications as the others in the fleet to ensure safety and consistency in equipment location.

2013 Zodiac Cadet 340/2004 15hp Honda motor – Marine 2

\$50,000 based upon current replacement specifications and needs of the organization. This response unit is utilized for any type of water-based rescue or incident that would require emergency personnel to interact via a static water supply or the Merrimack and Shawsheen Rivers.

Estimated Annual Operating/Maintenance Cost or Savings:

All of the vehicle replacements are recommended based upon the Andover Fire Rescue vehicle replacement schedule developed in 2007 and revised in 2021. The replacement schedule was formulated so that Andover Fire Rescue could forecast their vehicle replacements based on industry standards and the overall use of the specific vehicles within the fleet. These replacements are usually necessary based upon their lack of reliability, firefighter safety, cost of maintenance, and technology upgrades. However, each apparatus replacement is reviewed on a case by case basis.

Engines are scheduled to be replaced every twenty (20) years. Ladders are scheduled to be replaced every twenty (20) years. Ambulances are scheduled to be replaced every ten (10) years. Staff vehicles are scheduled to be replaced every ten (10) years

Sustainability:

N/A

Town Manager's Recommendation:

The Town Manager supports funding \$975,000 for FY24 from General Fund Borrowing.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$1,110,000	\$975,000
2025	\$545,000	\$545,000
2026	\$1,400,000	\$1,400,000
2027	\$250,000	\$250,000
2028	\$540,000	\$540,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Radio Box Repeater System

FR-2

Department Priority Ranking: 1TM's Rec. for FY24: \$165,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$165,000

Submitted by: Chief Michael B. Mansfield

Department: Fire Rescue

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:

This project, if funded, would allow for the installation of a radio box repeater system to be installed at Fire Headquarters and the new Ballardvale Fire Station. The current radio box system is beginning to experience weak signals transmissions to the Public Safety Dispatch Center. If approved, this system will allow for the retransmission of all boxes to all three fire stations and allow for digital readouts of the emergency incident locations within the apparatus bays.

The transmissions are sent to the Communications Center through the use of radio frequencies to transmit alarms of fire or any other type of emergency that may exist in any commercial, industrial or municipal building throughout the Town of Andover. Weak signal reception could lead to the systems inability to reliably transmit emergency alarms to the Andover Public Safety Communications Center and retransmit to all of the fire stations.

Project Justification and Purpose:

Installation of the Radio Box Repeater would boost the radio box signal to the Andover Public Safety Dispatch Center so that the system would regain its reliability and guarantee that all transmitted radio boxes would be received at the Andover Public Safety Communications Center. This will increase the safety of the public working or residing in the buildings currently monitored by these systems and ensure expedient emergency response by Andover Fire Rescue to the correct locations.

Cost Estimate & Timing:

The cost of the new equipment is estimated at \$165,000 and would be ordered and installed in the first quarter of FY 2024

Estimated Annual Operating/Maintenance Cost or Savings:

Operating costs for the unit is estimated to be approximately \$150.00 annually. This cost is directly associated with the maintenance of the unit.

Sustainability:

N/A

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$165,000	\$165,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Thermal Imaging Camera Replacement

FR-4

Department Priority Ranking: 1TM's Rec. for FY24: FY25 Request (1 = highest, 2 = second highest, etc.)
Original Dept. Request: FY25 Request

Submitted by: Chief Michael B. Mansfield

Department: Fire Rescue

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:

This project, if funded, would allow for the replacement of all seven (7) thermal imaging cameras (TIC's) that are in current use by Andover Fire Rescue.

Project Justification and Purpose:

The current thermal imaging cameras are experiencing malfunctions with batteries and overall operational deficiencies. These devices are key to firefighter safety and in the search for fire and emergency victims when searches are necessary to perform. These devices have a unique ability to indicate heat profiles and have assisted in a myriad of emergency scenes from motor vehicle accidents with injured patients who have been ejected from motor vehicles to finding hidden pockets of fire in ceilings and walls of buildings. This technology has saved many lives and hundreds of thousands of dollars in fire damage due to the quick hidden fire detection.

Cost Estimate & Timing:

The cost of the new equipment is estimated at \$50,000 and would be ordered and installed in the apparatus during the first quarter of FY 2025.

Estimated Annual Operating/Maintenance Cost or Savings:

Operating costs for the units are estimated to be approximately \$150.00 annually. This cost is directly associated with the maintenance of the units.

Sustainability:

N/A

Town Manager's Recommendation:

The Town Manager supports future year requests at this time.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024		
2025	\$50,000	\$50,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Cordless Battery-Operated Rescue Tools

FR-5

Department Priority Ranking: 1TM's Rec. for FY24: FY26 Request (1 = highest, 2 = second highest, etc.)
Original Dept. Request: FY26 Request

Submitted by: Chief Michael B. Mansfield

Department: Fire Rescue

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:

This project, if funded, would allow for the replacement of all outdated hydraulic rescue tools that are currently in use by Andover Fire Rescue with battery powered rescue tools.

Project Justification and Purpose:

The current hydraulic rescue tools are outdated and need to be upgraded to maintain pace with the new vehicle technology that is developed by the vehicle manufacturers on an annual basis. This technology has increased the tensile strength of the metals used in the vehicles and has also added the use of additional plastic and polymers that the current tools have difficulty cutting and removing from around the patient. The new battery powered tool technology would also allow the AFR personnel the freedom to use the rescue tools without having hydraulic hoses and portable hydraulic pumps towed behind them. The battery powered units are all individually self-contained which will increase extrication speed and increase firefighter safety when in use.

Cost Estimate & Timing:

The cost of the new equipment is estimated at \$200,000 and would be ordered and installed in the apparatus during the first quarter of FY 2026.

Estimated Annual Operating/Maintenance Cost or Savings:

Operating costs for the units are estimated to be approximately \$3,500.00 annually. This cost is directly associated with a purchased maintenance program for the units.

Sustainability:

 $\overline{N/A}$

Town Manager's Recommendation:

The Town Manager supports future year requests at this time.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024		
2025		
2026	\$200,000	\$200,000

FIRE RESCUE

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 - FY2028

PROJECT REQUEST: Emergency Services Call Box

FR-6

Department Priority Ranking: 2 TM's Rec. for FY24: \$20,000 (1 = highest, 2 = second highest, etc.)**Original Dept. Request:** \$20,000

> **Submitted by:** Chief Michael B. Mansfield

> > on behalf of the Recreation

Department

Fire Rescue / Recreation **Department: Funding Source:** General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:

If funded, this project would allow for the installation of a three button, solar powered radio box in the area of the Recreation Park pickleball courts and softball field. This resource will provide the residents and visitors the ability to report a fire/medical emergency/police alarm activation to the Andover Public Safety Communications Center in the event of an emergency.

Project Justification and Purpose:

This project would allow for the installation of one solar powered emergency radio box in the area of the Rec Park pickleball courts and the softball field recreational areas. This area is utilized by hundreds of youths and adults annually and they should have quick access to emergency response personnel and equipment in the event of an injury, medical emergency or police matter.

The radio box would eliminate the need to use cellular phones to contact the Andover emergency services and decrease the response times to the fields when someone from the community is in need.

Cost Estimate & Timing:

The estimated cost of this project is \$20,000

If approved, this project would be specified and completed in FY 2024.

Estimated Annual Operating/Maintenance Cost or Savings:

There are very minimal operational or maintenance costs associated with this project.

Sustainability:

N/A

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$20,000	\$20,000



TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Major Annual Road Maintenance

DPW-1

Department Priority Ranking: 1TM's Rec. for FY24: \$1,395,126

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$1,395,126

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: State Chapter 90 Funds

FY23 Dept. Request for FY24: \$1,364,279

Project Description:

To provide major maintenance and repairs to town roads and bridges as allowed under the Chapter 90 State Aid Highway Guidelines adopted by the MA Public Works Commission including but not limited to reconstruction, resurfacing, engineering, sidewalks, traffic control or any other allowable transportation related expenses.

Actual roads that will receive treatment are determined based on an annual review and evaluation by Department of Public Works personnel, approval by Massachusetts State Aid Office and coordination with water and sewer construction schedules to avoid street cuts into newly paved streets.

Project Justification and Purpose:

New roads have an expected life of 20 to 25 years before major maintenance is required. Costs are less the earlier this maintenance can be accomplished plus the public gains through higher property values and less wear and tear on vehicles and fewer damage claims.

Cost Estimate & Timing:

\$1,395,126 estimated per year at current state allocation.

Estimated Annual Operating/Maintenance Cost or Savings:

N/A

Sustainability:

Annual road maintenance contributes directly to pavement condition thus affecting traffic and fuel efficiency which has a correlation to reducing energy use and emissions. Approximately 92% of asphalt used in the US utilizes Recycled Asphalt Products (RAP) according to Hansen and Copeland (2014). Mix designs used in Massachusetts require at least 10% RAP content.

Town Manager's Recommendation:

The Town Manager supports this request to use Chapter 90 funds.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$1,395,126	\$1,395,126
2025	\$1,395,126	\$1,395,126
2026	\$1,395,126	\$1,395,126
2027	\$1,395,126	\$1,395,126
2028	\$1,395,126	\$1,395,126

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Minor Sidewalk Repairs

DPW-2

Department Priority Ranking: 1TM's Rec. for FY24: \$250,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$250,000

Submitted by: Christopher Cronin,

Director

Department: Public Works **Funding Source:** Free Cash /

General Fund Revenue

FY23 Dept. Request for FY24: \$250,000

Project Description:

This funding will be used to make minor safety related repairs to existing Town sidewalks, using a combination of Town forces and contractors.

Project Justification and Purpose:

Minor sidewalk repairs are needed in various locations to address deteriorating surfaces for pedestrian safety and accessibility purposes. Locations may include; TBD

Cost Estimate & Timing:

\$250,000 for FY24 through FY28

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

The design and condition of sidewalks can positively or negatively influence the choices and behaviors of citizens. A comfortable sidewalk network will promote walkability, social interaction, and use of public transportation, contributing to the Town's sustainability, economy, livability, and health. A well-designed pedestrian network will ensure not only connection between two or more points, but also quality and safety of travel, and equity and accessibility for the whole population, while producing a positive impact on the environment.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request from Free Cash.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$250,000	\$250,000
2025	\$250,000	\$250,000
2026	\$250,000	\$250,000
2027	\$250,000	\$250,000
2028	\$250,000	\$250,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Road Maintenance

DPW-3

Department Priority Ranking: 3 TM's Rec. for FY24: \$0

 $(1 = highest, 2 = second \ highest, \ etc.)$ Original Dept. Request: \$1,500,000

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: General Fund Borrowing

FY23 Dept. Request for FY24: \$1,500,000

Project Description:

Maintenance of public roads, pave with bituminous concrete (asphalt), 5 miles of road per year.

Project Justification and Purpose:

The Town of Andover has approximately 200 miles of road to maintain. The average life span for a properly built road is 20 years. In order to properly maintain our roadways, 10 miles of roads will need minor to major work every year to continue with a quality road program. Approximately 5 miles of roadways are repaved/reconstructed per year with a combination of the following sources: private contractors, State Chapter 90 funding, and the Town of Andover in conjunction with water and sewer improvements. For the past 5 years, an average of 5 miles of road are deferred per year due to the lack of adequate funding. We are now potentially in a deficit of 25 miles, or more, of paving being deferred.

In order to provide some reconstruction and maintenance to our roadway system, an additional \$1,500,000 is being requested with the anticipation of a Roadway Maintenance Program being instituted going forward.

Cost Estimate & Timing:

\$1,500,000 is the requested funding for FY2024 for Road Maintenance.

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Annual road maintenance contributes directly to pavement condition thus affecting traffic and fuel efficiency which has a correlation to reducing energy use and emissions. Approximately 92% of asphalt used in the US utilizes Recycled Asphalt Products (RAP) according to Hansen and Copeland (2014). Mix designs used in Massachusetts require at least 10% RAP content.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$1,500,000	\$0
2025	\$1,500,000	\$1,500,000
2026	\$1,500,000	\$1,500,000
2027	\$1,500,000	\$1,500,000
2028	\$1,500,000	\$1,500,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Town Sidewalk Program

DPW-4

Department Priority Ranking: 2TM's Rec. for FY24: \$750,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$1,000,000

Submitted by: Christopher Cronin,

Director

Department: Public Works **Funding Source:** Free Cash /

General Fund Borrowing

FY23 Dept. Request for FY24: \$1,000,000

Project Description:

This capital request would provide \$1,000,000 for the installation of new sidewalks as well as reconstruction and repairs of existing sidewalks.

Project Justification and Purpose:

It is a strategic goal of the Select Board and Town Manager to establish a sidewalk program. Recognizing the need for the installation of new sidewalks, as well as the repair and replacement of existing sidewalk, this new program represents a target of 10% of certified Free Cash balance. When combined with the small sidewalk repair program, the overall funding for sidewalk replacement.

The Sidewalk Program will be reflective of the Sidewalk Master Plan that was formalized in 2001. This plan gives priority to constructing sidewalks on at least one side of many streets within one mile of a school or other municipal facility, which generates heavy pedestrian traffic.

Cost Estimate & Timing:

The projected costs incorporate a base figure of \$141/ft., which includes new bituminous concrete sidewalks, and granite curbs, and trees. Additional items such as engineering, police, retaining walls, guardrail and drainage structures, where necessary at each location, are also incorporated. \$1,000,000 annual appropriation.

Estimated Annual Operating/Maintenance Cost or Savings:

N/A

Sustainability:

The design and condition of sidewalks can positively or negatively influence the choices and behaviors of citizens. A comfortable sidewalk network will promote walkability, social interaction, and use of public transportation, contributing to the Town's sustainability, economy, livability, and health. A well-designed pedestrian network will ensure not only connection between two or more points, but also quality and safety of travel, and equity and accessibility for the whole population, while producing a positive impact on the environment.

Town Manager's Recommendation:

The Town Manager supports funding \$750,000 for FY24 from Free Cash.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$1,000,000	\$750,000
2025	\$1,000,000	\$1,000,000
2026	\$1,000,000	\$1,000,000
2027	\$1,000,000	\$1,000,000
2028	\$1,000,000	\$1,000,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

DPW-5 PROJECT REQUEST: Irrigation Systems and Greenspace Improvements

Department Priority Ranking: 3 TM's Rec. for FY24: \$0 (1 = highest, 2 = second highest, etc.)**Original Dept. Request:** \$75,000

> **Submitted by:** Christopher Cronin,

> > Director

Department: Public Works

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$10,000

Project Description:

To install and/or provide replacement/rehabilitation to the existing irrigation systems around Town including but not limited to, System installation, replacement, rehabilitation/repair, fertilization, and plantings on Town owned properties.

Project Justification and Purpose:

There are currently 21 systems in Town that consist of a total of 254 zones, 1,289 irrigation sprinkler heads and 75 spigots. This project would consist of installation, replacement, or rehabilitation where possible on a system or two per year, depending on the size of the system.

The irrigation systems in Town are 15-25 years old, with the exception of The Bancroft School system which was replaced with the construction of the new school. Having the irrigation systems scheduled for replacement every 15 years will help reduce the annual cost of repairs necessary to keep the systems operational.

Cost Estimate & Timing:

\$75,000 for FY24 for systems located at West Middle School and other Town wide Green Space Improvements.

Estimated Annual Operating/Maintenance Cost or Savings:

\$75,000 per year

Sustainability:

Consistent updates to the Town's turf irrigation system ensures that leaks and broken irrigation heads are fixed a regular basis reducing water waste and ensuring installation of efficient systems reducing overall water consumption.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$75,000	\$0
2025	\$75,000	\$75,000
2026	\$75,000	\$75,000
2027	\$75,000	\$75,000
2028	\$75,000	\$75,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Storm Water Management

DPW-6

Department Priority Ranking: 1TM's Rec. for FY24: \$0

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$100,000

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$100,000

Project Description:

Under the EPA National Pollutant Discharge Elimination System (NPDES) Phase II Storm Water Permit Program that was signed into law in October 1999, the Town of Andover was required to obtain a permit for our municipal storm water discharges. This required the implementation of a Storm Water Management Program (SWMP), which included a number of tasks to be accomplished to improve water quality by reducing the discharge of pollutants from storm water runoff into the local rivers, ponds, streams and other receiving water bodies. The SWMP outlined the town's plan for public education and involvement, mapping the storm drainage system, inspecting outfalls, sampling discharges, detection and elimination of illicit discharges, pollution prevention plans, management of storm water during and after land disturbance activities, and implementation of best management practices. Funds are necessary to update the SWMP to meet the new regulations for the 2nd permit term and to continue implementation of the necessary tasks.

Project Justification and Purpose:

In July 2003, Andover was issued a general permit for the first 5-year term for implementation of the SWMP. EPA initially issued draft regulations for the second 5-year permit in November 2010. After several delays the second 5-year permit became effective July 1, 2018.

To comply with the Federal mandate, the Town is required to further expand the activities of the existing permit under the new permit. This will enable Andover to meet the EPA requirements with the implementation of sound responsible storm water operation and maintenance practices, and help to protect the quality of our receiving waters.

The 2001, 2002 and 2003 Annual Town Meetings approved \$75,000 each year and ATM 2008 appropriated \$50,000 for continuing the program. An additional funding amount of \$100,000 was approved at ATM 2017 to begin the implementation of the Program requirements under the new 5-year permit term. These funds will be used to begin the work starting on the new permit. At this time, \$100,000 is projected for future years FY 2024 – 2028, however the figure may change as the updated SWMP is developed.

The cost of any major improvements, which may result from the drainage outfall inspection and system assessment and/or storm water regulations, is yet to be determined. Funds for these improvements will be needed in future years after the locations of illicit discharges have been identified and costs have been determined

Cost Estimate & Timing:

Funds have been approved in 2001, 2002 and 2003 that have allowed the initial engineering study of the Town's facilities, operational procedures and regulations relative to the EPA requirements and for the preparation of the Storm Water Management Plan. These funds have also enabled for the implementation of the recommendations and improvements in SWMP such as installing gas/oil separators at four town buildings, necessary engineering services for outfall inspections and storm drain mapping, preparation of a storm water bylaw, and eliminating four illicit discharges that were found, and preparation of the annual report to EPA. Funds will be necessary to continue and expand the permit requirements including engineering services, system mapping, dry and wet weather sampling, annual reports, detection and elimination of illicit discharges, implementation of good housekeeping maintenance activities at town facilities and other necessary services, equipment, and improvements. Recent drain outfall inspections have detected several locations of possible illicit connections, which are under investigation and will need to be corrected and eliminated. Funds for the construction and implementation of the storm water management program will be necessary to address other problems that are identified as the evaluation and assessment of the town's drainage system progresses. Major improvements may be needed at some point in the future. The cost of such major improvements has yet to be determined.

Estimated Annual Operating/Maintenance Cost or Savings:

There will be additional operational costs associated with the implementation of the program. These costs will not be known until the evaluation and assessment of the town's drainage system is completed.

Sustainability:

The NPDES permit program addresses water pollution by regulating point sources that discharge pollutants to water of the US. Created in 1972 by the Clean Water Act, the NPDES permit program is authorized to state governments by the EPA to perform many permitting, administrative, and enforcement aspects of the program. An NPDES permit will generally specify an acceptable level of a pollutant or pollutant parameter in a discharge (for example, a certain level of bacteria). The permittee may choose which technologies to use to achieve that level. Some permits, however, do contain certain generic 'best management practices' (such as installing a screen over the pipe to keep debris out of the waterway). NPDES permits make sure that a state's mandatory standards for clean water and the federal minimums are being met.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$100,000	\$0
2025	\$100,000	\$100,000
2026	\$100,000	\$100,000
2027	\$100,000	\$100,000
2028	\$100,000	\$100,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Public Works Vehicles DPW-7

Department Priority Ranking: 1 TM's Rec. for FY24: a. \$82,000 b. \$455,000 (1 = highest, 2 = second highest, etc.) Original Dept. Request: a. \$251,000 b. \$1,211,000

Submitted by: Christopher Cronin, Director

Department: Public Works

Funding Source: a. General Fund Revenue

b. General Fund Borrowing

FY23 Dept. Request for FY24: a. \$192,750 b. \$540,000

Dept.	Vehicle #	Year	Make/Model	FY24	FY25	FY26	FY27	FY28
			Ford F350 1Ton					
			F3HZ 145 4X4 Reg					
Cemetery	65	2018	Chas Cab Drw					71,000
-			Ford F550 Dump 1					
Cemetery	66	2019	Ton 4X4, Dump body				64,000	
•			John Deere Backhoe					
Cemetery	68	2018	Loader 310L			179,000		
•			Vermeer Brush					
Cemetery	Trailer-1	1996	Chipper (SPARE)	82,000				
·			, ,					
Park	60	2009	Ford F350 Dump 4x2				85,000	
· ·			Ford F550 2 Ton				,	
			Dump F5H7 145 4X4					
Park	61	2019	Reg Chas Cab Drw			64,000		
Turk	01	2017	Ford F350 1 Ton			01,000		
			Rack Body w/tailgate					
Park	62	2006	4x2					
Turk	02	2000	Ford F-350 1T F3H					
			145 4X4 REG CHAS					
Park	63	2020	CAB DRW					71,000
Turk	03	2020	Ford F250 3/4 Ton					71,000
			X2B 142 4X4					
			Supercab SRW					
Park	64	2016	Pickup		61,000			
1 ark	04	2010	Jacobsen HR 9016 T		01,000			
			Kubota Turbo Diesel					
Park	65	2015	Tractor Mower					
raik	0.5	2013	Toro Ground Master					
Park	66	2012	4700-D Mower 4x4					
гак	00	2012	Kubota Tractor					
Park	Tractor-1	2018	M7060HDC12	89,000				
Park	Tractor-1	2018	M7000HDC12	89,000				
			Earl E150 1/2T					
			Ford F150 1/2T					
F	20	2010	Pickup 141 RegCab				45,000	
Forestry	20	2019	4X4 SS				45,000	
Es as at a	~ 1	2012	Ford F550 2T FSH					
Forestry	51	2012	DRW w chip body					1
Forestry	52	2016	Mack, GU432					
_			Freightliner M2 106					
Forestry	53	2018	Truck		325,000			
			GMC C Series					
Forestry	54	1999	Bucket Truck - Diesel					

Dept.	Vehicle #	Year	Make/Model	FY24	FY25	FY26	FY27	FY28
Forestry	55	2006	Kubota Tractor					
•			Vermeer Stump					
Forestry	56	2004	Cutter (Diesel Only)					
			Brush Bandit Chipper					
			Model 1390XP - 15"					
Forestry	57	2017	Drum Style			59,000		
			Morbark Tub					
Forestry	TUB	2014	Grinder 950 Trailer				260,000	
			Ford F150 1/2T					
			Pickup 141 Reg Cab					
Vehicle Maintenance	8	2019	4X4 SS					45,000
			Ford Ranger Ext.Cab					
Vehicle Maintenance	18	2002	Pickup 4x4					
			Ford F-550 2T 169					
			4X4 REG CHAS					
			CAB DRW,					
			Maintainer Body, w/					
Vehicle Maintenance	86	2020	crane					
			Ford F250 3/4T 137					
*****	0.5	2005	SD Reg Cab SRW					
Vehicle Maintenance	87	2006	4X4					
			Komatsu FG25T-16,					
			5000# Capacity, I.C.					
*****	0.0		Pneumatic Tire					
Vehicle Maintenance	88		Forklift					
			Utility Trailer for					
			Powergard 60KW					
37.11.1 34.1	T 1 O CEN	2001	Kohler Emergency	16,000				
Vehicle Maintenance	Trailer 2-GEN	2001	Generator	16,000				
			Comotour Doules					
			Cemetery, Parks, Forestry Total					
			_	187,000	386,000	302,000	454,000	187,000
					300,000	302,000	737.000	107,000
			Request	107,000	,		- /	
Dent	Vehicle #	Vear	_			FV26		FV28
Dept.	Vehicle #	Year	Make/Model	FY24	FY25	FY26	FY27	FY28
Dept.	Vehicle #	Year	Make/Model Mack Dump Truck			FY26		FY28
-			Make/Model Mack Dump Truck w/2 CaCl Tanks	FY24		FY26		FY28
Dept. Highway	Vehicle #	Year 2012	Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh)			FY26		FY28
-			Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh) Mack Dump Truck	FY24		FY26		FY28
Highway	1	2012	Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh) Mack Dump Truck w/2 CaCl Tanks	FY24		FY26		FY28
-			Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh) Mack Dump Truck w/2 CaCl Tanks (6wh)	FY24		FY26		FY28
Highway	1	2012	Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh) Mack Dump Truck w/2 CaCl Tanks (6wh) Mack Dump Truck	FY24		FY26		FY28
Highway Highway	3	2012	Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh) Mack Dump Truck w/2 CaCl Tanks (6wh) Mack Dump Truck w/2 CaCl Tanks	FY24		FY26		FY28
Highway	1	2012	Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh)	FY24		FY26		FY28
Highway Highway	3	2012	Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh) Mack GR42R Dump	FY24		FY26		
Highway Highway	3	2012 2012 2009	Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh) Mack GR42R Dump Truck	FY24		FY26		FY28 140,000
Highway Highway	3	2012 2012 2009	Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh) Mack GR42R Dump Truck Mack RD Dump	FY24		FY26		
Highway Highway Highway	3	2012 2012 2009	Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh) Mack GR42R Dump Truck Mack RD Dump Truck V/2 CaCl	FY24		FY26		
Highway Highway	1 3 4 5	2012 2012 2009 2020	Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh) Mack GR42R Dump Truck Mack RD Dump Truck w/2 CaCl Tanks (6wh)	FY24		FY26		
Highway Highway Highway Highway	1 3 4 5	2012 2012 2009 2020	Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh) Mack GR42R Dump Truck Mack RD Dump Truck w/2 CaCl Tanks (6wh) Freightliner M2 106	FY24		FY26		
Highway Highway Highway	1 3 4 5	2012 2012 2009 2020 2009	Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh) Mack GR42R Dump Truck Mack RD Dump Truck W/2 CaCl Tanks (6wh) Freightliner M2 106 26,000 GVW	FY24		FY26		140,000
Highway Highway Highway Highway	1 3 4 5	2012 2012 2009 2020 2009	Make/Model Mack Dump Truck w/2 CaCl Tanks (6wh) Mack GR42R Dump Truck Mack RD Dump Truck w/2 CaCl Tanks (6wh) Freightliner M2 106	FY24		FY26		140,000

Dept.	Vehicle #	Year	Make/Model	FY24	FY25	FY26	FY27	FY28
			Mack GR64F Dump					
Highway	9	2020	Truck					
			Mack RD 690P					
			Dump Truck w/2					
Highway	10	2015	CACI Tanks (6wh)		273,000			
			Mack RD Dump		, , , , , , , , , , , , , , , , , , , ,			
			Truck w/2 CACI					
Highway	11	2013	Tanks (6wh)	260,000				
8			Caterpillar Wheel					
Highway	12	2013	Loader Model 938G		260,000			
<u> </u>			Caterpillar Loader					
Highway	13	2019	Model 938M					
			Ford F450, 4x4					
Highway	14	2017	w/Plow			71,000		
<u> </u>			Ford F450 1 1/2T			, , , , , ,		
			F4H 145 SD 4X4					
Highway	15	2018	Chas Cab Drw				78,000	
			Ford F450 1 Ton				, 0,000	
			Supercab F47 Chassis					
			Rack w/Plow - (new					
			body & tailgate in					
Highway	16	2011	FY16)					
<u> </u>			Ford Drwsup F450 1					
Highway	17	2015	Ton Dump Truck		71,000			
			Ford F150 1/2 Ton		,000			
			Supercab 4x4 SS 145					
Highway	18	2020	Pickup					
8			Ford F450 1 1/2T					
			Supe F4H 169 4x4					
Highway	20	2017	Reg Chas Cab Drw					
			Mack GR24F Dump					
Highway	21	2020	Truck					
<u> </u>			Mack 10-Wheeler					
			w/2 CACI Tanks					
Highway	22	2017	(10wh)			260,000		
			Mack 10-Wheeler					
			w/2 CACI Tanks					
Highway	23	2017	(10wh)			260,000		
	_		Ford F350, 1 Ton			,		
			Regular cab 4X4					
Highway	24	2013	Pickup					
<u> </u>			Ford F450 1 Ton 4x4					
			1 ton, Gasoline, w/					
Highway	25	2019	plow					
<u> </u>			Bobcat Skidsteer					
Highway	26	2014	773T Loader	64,000				
			Bobcat Skidsteer					
Highway	27	2016	S570 Loader		67,000			
<u> </u>		1	Holder Tractor C992		,			
Highway	28	2014	w/attachments	250,000				
B··-J		1 - 32 .	Holder Tractor C992					
Highway	29	2015	w/attachments	250,000				
Engineering	39	2013	Ford F350	,				<u> </u>

Dept.	Vehicle #	Year	Make/Model	FY24	FY25	FY26	FY27	FY28
-			Wacker Neuson WL-					
			30 Articulated Wheel					
Highway	51	2013	Loader	178,000				
			Falcon Asphalt					
			Recycler & Hot Box,					
Highway	52	2015	Trailer Mounted					
			Prinoth SW4S					
			Sidewalk Plow					
Highway	53	2017	Welded Cab				130,000	
			Kubota KX0804S,					
Highway	54	2018	Excavator				104,000	
			Compac Asphalt					
			Pavement Roller					
Highway	A	2013	GX630 T175V					
			3 Wheel Elgin					
Highway	B-Sweep	2019	Pelican Sweeper					
,	•		3 Wheel Elgin					
Highway	C-Sweep	2015	Pelican Sweeper					
	<u> </u>		2013 Sullair 185CFM					
			Air Compressor,					
Highway	D	2013	100psi					
IIIgii wij		2010	SRECO Utility					
Highway	Е	1987	Trailer Water					
Ingiiway	2	1707	Precision Solar					
			Controled Message					
			Board SMC4000					
Highway	HW-MB-1	2015	M521 Utility Trailer				26,000	
Inghway	II W WID I	2013	Precision Solar				20,000	
			Controled Message					
			Board SMC4000					
Highway	HW-MB-2	2015	M522 Utility Trailer				26,000	
Inghway	HW WB 2	2013	Power Eagle 1470-				20,000	
Highway	POWEAG		BE Steam Cleaner					
Inghway	TOWERG		Salsco TP44					
Highway	SALPAV	2014	Sidewalk Track Paver					
Ingnway	SALIAV	2017	CAM Utility trailer,					
Highway	T-4	2019						
ıııgııway	1-4	2017	MGS Utility Trailer					
			(Use to hall cement					
			block, brick, man					
Highway	Trailer 1	1998	hole repairs items					
ıııgııway	Tranci i	1990	CAM SUPERLINE					
			P3CAM612TT Utility					
			Single Axel, Ball					
Highway	Trailer 2	2021	Type Utility Trailer					
ıngnway	1141101 4	2021	CAM SUPERLINE					
			P6CAM18 Utility					
			Single Axel, Ball					
Highway	Trailer 3	2020	Type Utility Trailer					
ıııgııway	Tranci 3	2020	CAM Superline					
Highway	Trailer 4	2019	12CAM825TE					
Highway	11anel 4	2019	Work Zone Trailer,					
Municipal Carriage	WITT	2014	Car Mate					
Municipal Services	WZT	2014	Cai iviate					
			III alama - Ta 4 1					
			Highway Total	1 275 000	671 000	501 000	264.000	729 000
1			Request	1,275,000	671,000	591,000	364,000	738,000

Dept.	Vehicle #	Year	Make/Model	FY24	FY25	FY26	FY27	FY28
			TOTAL DPW	1,462,000	1,057,000	893,000	818,000	925,000

Sustainability:

Vehicles that operate primarily on gasoline or diesel have historically accounted for over 99% of cars and passenger truck sales. However, sales of cars that operate on other fuels — particularly electricity — are growing. New models of both electric vehicles and plug-in hybrid electric vehicles are entering the market in increasing numbers each year. Other alternative fuel vehicles include those that run on compressed natural gas (CNG) or E85 (a mixture of about 85% ethanol and 15% gasoline). As technology becomes available, Public Works continues to update its fleet with the most fuel efficient vehicle available.

Town Manager's Recommendation:

The Town Manager supports funding \$82,000 for small vehicles and \$455,000 for large vehicles in FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$1,462,000	\$537,000
2025	\$1,057,000	\$1,057,000
2026	\$893,000	\$893,000
2027	\$818,000	\$818,000
2028	\$925,000	\$925,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

DPW-8 PROJECT REQUEST: Minor Storm Drainage Improvements

Department Priority Ranking: 1 \$0 TM's Rec. for FY24: (1 = highest, 2 = second highest, etc.)**Original Dept. Request:** \$300,000

> **Submitted by:** Christopher Cronin,

> > Director

Department: Public Works

Funding Source: General Fund Borrowing

FY23 Dept. Request for FY24:

Project Description:

This project is to provide funds to address maintenance and repairs of storm drains. The specific locations to be addressed will be determined by the Public Works Director and staff.

Project Justification and Purpose:

To prevent further roadway deterioration, property damage, alleviate flooding, and reduce the discharge of pollutants from storm water runoff. Town Meeting has been appropriating \$300,000 every other year for storm drain improvements. This request continues to provide the funds for making improvements and repairs as they become necessary.

Cost Estimate & Timing:

Projects will be done as necessary by private contractors at Town bid prices. The 2020 Annual Town Meeting approved \$300,000 which funded our latest requests. These funds will be expended by the end of FY 2023.

This request continues the funding, every other year, of \$300,000 for Minor Improvements.

The estimated total cost for all years shown is - \$900,000.

Estimated Annual Operating/Maintenance Cost or Savings:

There will be some additional operational costs associated with catch basin cleaning and repair.

Sustainability:

Reliability, resilience and sustainability are key goals of any functioning urban drainage system. Climate change, population growth, urbanization and other changing factors could be particularly damaging when simultaneously acting upon any of these systems, posing an important challenge to their future performance. Consistent upgrades and repairs to the Town's drainage system ensures that this critical infrastructure can perform when faced with the threat of climate change.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$300,000	\$0
2025		
2026	\$300,000	\$300,000
2027		
2028	\$300,000	\$300,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Town Bridge Evaluation & Maintenance DPW-9

Department Priority Ranking: 3TM's Rec. for FY24: FY25 Request
(1 = highest, 2 = second highest, etc.)
Original Dept. Request: FY25 Request

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: General Fund Borrowing

FY23 Dept. Request for FY24: \$500,000

Project Description:

To provide for minor repairs, rehabilitation, and reconstruction of Town-owned bridges according to Massachusetts Department of Transportation specifications. The MassDOT routinely inspects the Town owned bridges and issues reports citing any deficiencies in the bridge structures. There is an ongoing need to rehab bridge abutments, place scour protection and make other repairs as necessary for the following town owned bridges on the Shawsheen River: Essex Street Bridge; Andover Street Bridge; Stevens Street Bridge; Balmoral Street Bridge; and Central Street Bridge. An engineering evaluation is necessary to identify, recommend and design mitigation methods and rehab alternatives.

Project Justification and Purpose:

Improvements were made in 2009 and 2010 to the Balmoral Street and Stevens Street Bridges to address deficiencies that were previously detected. Future requests will continue to help fund necessary assessments and repairs to the Town owned bridges. Inspections have been performed on the Andover St, Stevens St, and Balmoral St bridges. These recent reports from MassDOT indicate minor deficiencies on Stevens St and Balmoral St. The Andover St Bridge report indicates some minor deficiencies as well as severe deficiencies to the deck and the approach guardrail ends. Conditions will be monitored on all Town owned bridges and repairs made as needed in the future.

Cost Estimate & Timing:

Amount to be determined includes engineering, design and construction to repair identified deficiencies as needed. Evaluations, repairs, and rehabilitation will be determined and additional funds requested in future years as necessary to supplement available funds remaining. Funding options for major repairs will also be sought through available state bridge programs.

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Bridges allow individuals, vehicles and utility infrastructure to cross expanse in a safe and efficient way. A sustainable bridge design does not simply involve minimizing how a bridge integrates into its natural environment but also ensuring that it functions and performs in an efficient way, limiting the impact it has on the natural environment and climate, and controlling the affect it has as it serves its ongoing function of allowing people, vehicles, and utilities to cross spaces and distances. Continuous repair and maintenance of the Town's bridges allows multiple forms of transportation to traverse the Town in an efficient manner and minimizing emissions from vehicles traversing these bridges.

Town Manager's Recommendation:

The Town Manager supports future year requests at this time.

Fiscal Year	Dept. Request	Town Manager Recommendation
2025	\$500,000	\$500,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Water & Sewer Vehicles

DPW-12

Department Priority Ranking: 1 TM's Rec. for FY24: \$0

(1 = highest, 2 = second highest, etc.) **Original Dept. Request:** \$245,000

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Reserves

FY23 Dept. Request for FY24: \$145,000

Dept.	Vehicle #	Year	Make/Model	FY24	FY25	FY26	FY27	FY28
			Ford F150 4x4 Pickup					
Water	30	2019	w/Ext Cab (G F's)					\$50,000
			Ford F350 1 Ton F37					
Water	31	2015	CABCA Pick w/Crane		72,000			
			Ford F350 1 Ton F31					
Sewer	32	2020	Dump PU Truck w/Plow					\$70,000
			Ford F350 1 Ton F31					
Sewer	33	2020	Pickup w/Plow					\$70,000
			Mack 10-Wheel Dump					
Water	34	2020	Truck w / Snow Setup					
Water	35	2015	Ford F350		46,000			
Water	36	2016	Ford Transit 150			35,000		
Water	40	2007	John Deere 410J Backhoe	190,000				
Water	41	2016	Ford Escape AWD		35,000			
			Ford F550 1 Ton 4x4		,			
Water	42	2015	Dump & Plow	55,000				
			Ford F150 4x4 Pickup w /					
Water	47	2019	Ext Cab					
			Infrastructure					
Water	70	2013	Maintenance Vehicle					
Water	WS-B	2012	Gorman Rup Pump (6")					
Water	WS-C	2012	Gorman Rup Pump (6")					
			Big Tezx Utility Trailer					
Water	Trailer-6	2007	30SA8 - black		20,000			
Water	WS-1	1997	Trailer Utility Sedan					
			Haulmark K714BT					
Water	WS-2	2003	Kodiak Enclosed Trailer		20,000			
			Seca Utility Trailer for					
Water	WS-3	2000	Water Jet Flusher				\$50,000	
Water	WS-4	2021	Solar Message Board			\$26,000		
			<u> </u>			,		
Water	WS-5	2021	Solar Message Board			\$26,000		
Water	WS-7	2021	Solar Message Board			, , , , , , , , , , , , , , , , , , , ,		
			D210PHJD Compressor,					
Water	WS-B	2010	weight 2700#				\$30,000	

Dept.	Vehicle #	Year	Make/Model	FY24	FY25	FY26	FY27	FY28
			Vactron U-Dump Flat					
			Trailer 512F Diesel Light					
Water	WS-C	2000	Tower				\$50,000	
			Terex Light Tower/6FW					
			Gen SNL GYF20083,					
Water		2007	Model RLA 060D1-4UH					
			(No PM, Trailer services					
			by Water Shop)					
WTP	2	2019	Ford Escape AWD					
			Ford F150 1/2T 145					
WTP	37	2020	Supercab 4X4 SS					
			Ford F250 1/2 Ton					
			Pickup F18 4X4 139					
WTP	38	2012	Regular Cab Styleside					
WTP	43	2016	Ford Transit 350			65,000		
						·		
WTP	44	2015	Ford F150		48,000			
WTP	45	2016	Ford F250, Supercab			61,000		
			Ford F150 1/2T 145					
WTP	46	2020	Supercab 4X4 SS					
WTP	48	2018	Ford Escape AWD				\$45,000	
WTP	49	2018	Ford Escape AWD				\$45,000	
			Ford F350 1 ton pickup					
WTP	50	2006	w/ Crane					
			Ford 1/2T Explorer 113					
WTP	51	2019	K8D XLT 4WD 4DR UT					\$45,000
			Onan Generator					
WTP	A-GEN	1977	(Unleaded)					
			Trailer for Airman					
WTP	T1	2000	SDG45 Generator		13,000			
			Water/Water Treatment					
			Total Request	245,000	254,000	213,000	220,000	235,000

Sustainability:

Vehicles that operate primarily on gasoline or diesel have historically accounted for over 99% of cars and passenger truck sales. However, sales of cars that operate on other fuels — particularly electricity — are growing. New models of both electric vehicles and plug-in hybrid electric vehicles are entering the market in increasing numbers each year. Other alternative fuel vehicles include those that run on compressed natural gas (CNG) or E85 (a mixture of about 85% ethanol and 15% gasoline). As technology becomes available, Public Works continues to update its fleet with the most fuel efficient vehicle available.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$245,000	\$0
2025	\$254,000	\$254,000
2026	\$213,000	\$213,000
2027	\$220,000	\$220,000
2028	\$235,000	\$235,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Filter Backwash Discharge Tank

DPW-13

Department Priority Ranking: 3 TM's Rec. for FY24: FY25 Request (1 = highest, 2 = second highest, etc.) Original Dept. Request: FY25 Request

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Borrowing

FY23 Dept. Request for FY24: \$500,000

Project Description:

The WTP's eight filters are backwashed at an average interval of 36 hours (40 in the winter months). Backwash water originates in the clearwell, where it is pumped via two backwash water pumps. The current practice presents several concerns. First, during a backwash, water is effectively diverted from the treatment process, diminishing plant output. Based on the current configuration of the clearwell, it is believed that this practice can short-circuit the water in the clearwell, reducing Contact Time (CT). As a preventative measure, current Standard Operating Procedure (SOP) involves timing backwashes when finished water output is the lowest (such as when Wood Hill pumps are not running). A second concern is regarding the fact that water in the clearwell is chlorinated, and thus filters are being backwashed with chlorinated water. Not only is there an added cost component due to the wasted chemical, but the backwash waste water is disposed of with a chlorine residual, which is heavily regulated by the EPA.

Project Justification and Purpose:

This project would involve the construction of a new tank and wetwell for the purpose of storing unchlorinated, but filtered, water to be used primarily for filter backwashing. If possible, existing backwash pumps and motors would be reused since they are relatively new.

Cost Estimate & Timing:

\$500,000 for design, engineering and permitting. \$4,200,000 Construction

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

The water used for filter backwashing has been treated with several chemicals, including sodium hydroxide, sodium hypochlorite, and fluoride. The cost of such incremental chemical dosing is approximately, \$98 per 1 million gallons. In 2021, a total of 155 million gallons of water was used for backwashing purposes, resulting in wasted water.

Town Manager's Recommendation:

The Town Manager supports future year requests at this time.

Fiscal Year	Dept. Request	Town Manager Recommendation
2025	\$500,000	\$500,000
2026	\$4,200,000	\$4,200,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Major Water Main Replacement/
Distribution Improvements Project

DPW-14

Department Priority Ranking: 1TM's Rec. for FY24: \$6,000,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$6,000,000

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Borrowing

FY23 Dept. Request for FY24: \$6,000,000

Project Description:

Replacement of cast iron water mains, water mains identified within the Distribution Study, and water mains identified to have historical issues. The project will also include the replacement, rehabilitation and abandonment of existing water mains (parallel Mains).

Cleaning and lining on section of unlined cast iron water mains that are of adequate size and replacement of appurtenances as identified by the Water Superintendent and Engineers.

Project Justification and Purpose:

A significant portion of the Towns Water distribution system consists of unlined cast iron water mains that have reduced hydraulic capacity (firefighting), and water quality issues due to mineral deposits. Water enterprise funding /borrowing would be used to replace, rehabilitate and abandon water mains. This will help to prevent catastrophic failures, improve capacity and water quality, further identification of areas with periodic water color concerns, prevent water loss within the system, and provide adequate fire protection.

In an effort to ensure a reliable and also a system with sufficient capacity within the water distribution system, The Water Distribution Study and Analysis has identified that areas of the Town Water infrastructure consist of deficient water mains. These main have reduced hydraulic capacity due to size, age, pipe material and historical structural issues. Town officials have identified areas throughout the Towns system that need water main replacement for reasons such as but not limited to hydraulic capacity and historical structural issues. A number of location within the system have parallel water mains, these mains are typically unlined cast iron mains which have limited capacity, and these locations require services and fire hydrants to be switched over to the new main prior to the abandonment of the older main.

The Town's Water Division conducts annual infrastructure improvements to properly maintain and upgrade the Town's aging water distribution system. This program helps to prevent catastrophic failures, improve capacity, prevent water loss, provide adequate fire protection and improve overall water quality.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Replacing water mains typically results in a substantial reduction of unaccounted water and reduces the instances of water main breaks by replacing old and brittle pipes. Ensuring a functioning distribution system assures that Town residents and businesses have access to clean and potable drinking water. Whenever feasible a sustainability assessment for water main replacement involves: (1) minimizing environmental impact; (2) maximizing economical benefit and output; (3) social and cultural conservation and promotion; and (4) satisfying basic requirements such as structural soundness and capacity.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$6,000,000	\$6,000,000
2025	\$6,000,000	\$6,000,000
2026	\$7,000,000	\$7,000,000
2027	\$7,000,000	\$7,000,000
2028	\$8,000,000	\$8,000,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Hazard Tree Removal

DPW-15

Department Priority Ranking: 1TM's Rec. for FY24: \$0
(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$150,000

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$150,000

Project Description:

Hazard Tree Removal

Project Justification and Purpose:

Andover covers 32 square miles of land, much of which is forested. Our forest is aging, and the impacts of this aging are being felt dramatically in the form of significant mortality and dieback of many trees along public roadways and on Town parcels. The number of trees that need to be removed or pruned greatly exceeds the capacity of our existing Forestry crews. We will use these funds to reduce our backlog of hazard tree removals and to grind the stumps resulting from these removals, thereby improving the safety of our roadways.

Cost Estimate & Timing:

\$150,000 annually

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Proper tree care enhances growth diversity, creating an environment conducive to the growth and thriving of vegetation that otherwise wouldn't be there. Also, as the trees continue to grow, they attract a host of wildlife such as birds, squirrels, and insects wanting to make the trees their home and source of food. Removal of dead or diseased trees allow for a more robust environment for other trees to grow and develop.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$150,000	\$0
2025	\$150,000	\$150,000
2026	\$150,000	\$150,000
2027	\$150,000	\$150,000
2028	\$150,000	\$150,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: WTP Scada System Upgrades

DPW-16

Department Priority Ranking: 1 \$2,500,000 TM's Rec. for FY24: (1 = highest, 2 = second highest, etc.)**Original Dept. Request:** \$3,200,000

> **Submitted by:** Christopher Cronin,

> > Director

Department: Public Works

Funding Source: Water Enterprise Borrowing

FY23 Dept. Request for FY24:

Project Description:

The WTP's current SCADA software is a custom-built solution that has been in place since the early days of the plant's operations. The software was designed and is maintained by the manufacturer without issue, but was never intended to be used in this fashion. The SCADA software has served the WTP well over the years, but has several limitations that have rendered it obsolete and of little value past its original purpose of monitoring operations and adjusting equipment. Specifically, the software lacks the capability to store and retrieve historical data, which is critical for troubleshooting purposes, and has become expected within the industry.

Project Justification and Purpose:

This project would replace the WTP's SCADA software with an industry-accepted alternative that would allow for unlimited upgrades and expansions in the future, enabling future automation projects to tie in seamlessly with the software. Additionally, all obsolete Local Processing Units (LPUs) would be upgraded, along with panels, servers, PCs, and all appurtenances. The WTP's telemetry communications system would be replaced in its entirety with a new radio network to improve operability and reliability. Finally, the SCADA main servers, engineering server, and reporting server would all be relocated to a secure, climate-controlled server room in order to restrict physical access and prolong their useful life by controlling their environment.

Cost Estimate & Timing:

\$3,200,000 for FY2024

Estimated Annual Operating/Maintenance Cost or Savings:

N/A

Sustainability:

The Water Treatment Plant is the largest energy consumer in the municipal portfolio using more than 4,900 megawatt-hours (MWh) of electricity in fiscal year 2022. In addition to the benefits of monitoring and logging operational data in real time, an upgraded SCADA is a pre-requisite to improve WTP energy efficiency. First, higher resolution data will allow operators to detect and address system malfunctions such as leaks over the 200 miles of water mains, and to optimize the addition of chemicals and ozonation in real time. Second, advanced SCADA systems are required to upgrade certain WTP pumps with variable frequency drives (VFDs) and associated programmable logic controller systems. To maintain a given water level in the system, operators currently have limited options to either turn the constant speed

pumps on or off. If the system was upgraded with VFDs and controls, the pump speeds can be adjusted with much greater sensitivity, which is important given the dramatic seasonal variations in water use (nearly 15 million gallons per day during the summer and roughly 5 million gallons per day in the winter). As was shown in the City of Columbus, VFDs can reduce this specific energy use of municipal water plants by up to 30%. Last, data gathered from the SCADA could suggest additional cost savings including but not limited to capacitor installations and operational peak power reductions.

Town Manager's Recommendation:

The Town Manager supports funding \$2,500,000 for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$3,200,000	\$2,500,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Hydrant Replacement Program

DPW-17

Department Priority Ranking: 3
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY24: FY25 Request
Original Dept. Request: FY25 Request
Submitted by: Christopher Cronin,

Director

Director

Department: Public Works

Funding Source: Water Enterprise Reserves

FY23 Dept. Request for FY24: \$50,000

Project Description:

Continue with the installed hydrant inventory resulting in, but not limited to, the identification of hydrants needing replacement, repair and/or maintenance including replacement of identified hydrants.

Project Justification and Purpose:

Older fire hydrants within the Water Distribution system were identified during the comprehensive hydrant inventory and inspection. The continuation of the program will replace the remaining older fire hydrants to ensure reliability.

Cost Estimate & Timing:

It is estimated that approximately 20-30 hydrants will need major repair or replacement, at an estimated cost of \$2,000 - \$4,000 per unit depending upon the need.

Engineering and oversight of this project will be done in-house.

\$50,000 from water enterprise reserves, every other year.

Estimated Annual Operating/Maintenance Cost or Savings:

Annual maintenance cost associated with this program will be included in the budget

Sustainability:

Hydrants provide an essential function in the maintenance of the water distribution system and adequate fire protection for the Town. Ensuring that hydrants are properly maintained and replaced, as necessary, contribute to the Town's overall sustainability goals.

Town Manager's Recommendation:

The Town Manager supports future year requests at this time.

Fiscal Year	Dept. Request	Town Manager Recommendation
2025	\$50,000	\$50,000
2026		
2027	\$50,000	\$50,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Water Treatment GAC Replacement DPW-18

Department Priority Ranking: 2TM's Rec. for FY24: \$560,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$560,000

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Borrowing

FY23 Dept. Request for FY24: \$560,000

Project Description:

The water filtration system at the Water Treatment Plant consists of eight filter beds, each holding approximately 66,000 pounds of granular activated carbon (GAC). The FY24 funding replaces the GAC in four units, with the remaining four units being replaced for in FY25. This will allow for the recommended in-service life from the carbon while staying in compliance with the life-cycle requirements.

Project Justification and Purpose:

The granular activate carbon filtration system is operated and maintained in order to ensure a supply of drinking water of the highest quality. Timely replacement of the filter media is critical in maintenance requirements. Each replacement is expected to have a life span of four (4) years.

Cost Estimate & Timing:

The cost is estimated to be \$1,145,000 for FY 24-25 and \$650,000 in FY28.

Estimated Annual Operating/Maintenance Cost or Savings:

	FY 24	FY 25	FY 26	FY27	FY28
FILTER #1	Sep-23				Sep-27
FILTER #2	Sep-23				Sep-27
FILTER #3	Apr-24				Apr-28
FILTER #4	Apr-24				Apr-28
FILTER #5		Sep-24			
FILTER #6		Sep-24			
FILTER #7		Apr-25			
FILTER #8		Apr-25			

GAC COST \$560,000 \$585,000 \$650,000

Sustainability:

No obvious sustainability component.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Fiscal Year Dept. Request	
2024	\$560,000	\$560,000
2025	\$585,000	\$585,000
2026		
2027		
2028	\$650,000	\$650,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Stormwater Infrastructure Condition Assessment Program

DPW-19

Department Priority Ranking: 2 TM's Rec. for FY24: **\$0** (1 = highest, 2 = second highest, etc.)**Original Dept. Request:** \$50,000

> **Submitted by:** Christopher Cronin,

> > Director

Department: Public Works

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24:

\$50,000

Project Description:

Stormwater Infrastructure Condition Assessment Program

Project Justification and Purpose:

Much of the Town's stormwater infrastructure is aged and needs to be renovated or replaced. This article will enable us to create a 4-year condition assessment program to evaluate the condition of our stormwater pipes, catch basins, manholes, inlets, outlets, and swales. We'll use this data to create a maintenance and replacement plan, similar to what we do with our water and sewer infrastructure. This program will help ensure the safe passage of vehicles and pedestrians on Town roadways and assist us in complying with the new Federal NPDES permit.

Cost Estimate & Timing:

\$50,000 per year for four years beginning in FY2024.

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Reliability, resilience and sustainability are key goals of any functioning urban drainage system. Climate change, population growth, urbanization and other changing factors could be particularly damaging when simultaneously acting upon any of these systems, posing an important challenge to their future performance. Consistent upgrades and repairs to the Town's drainage system ensures that this critical infrastructure can perform when faced with the threat of climate change.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year Dept. Request		Town Manager Recommendation
2024	\$50,000	\$0
2025	\$50,000	\$50,000
2026	\$50,000	\$50,000
2027	\$50,000	\$50,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Portable Soil Screener

DPW-20

Department Priority Ranking: 3 TM's Rec. for FY24: FY26 Request (1 = highest, 2 = second highest, etc.) Original Dept. Request: FY26 Request

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$0

Project Description:

The portable soil screener would allow us to manufacture loam at the Bald Hill Compost site for DPW and Facilities projects Town wide. We use about 5,000 cubic yards annually for these projects. Currently we rent a screener to make loam for projects twice per year.

Project Justification and Purpose:

Currently we screen two or three times a year to achieve the loam needed for Town projects. A private contractor is hired at an approximate cost of \$9,000 each time to manufacture the quantity of loam needed. It would cost over \$100,000 annually to purchase the loam as opposed to being made at the Bald Hill Compost Site. The screener could also be used to refine our compost product by removing plastic and larger particles. Owning a screener allows us to use the machine when convenient for us instead of being committed to rental constraints. The machine will pay for itself in about five years.

Cost Estimate & Timing:

\$100,000 for the purchase of the machine.

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

No obvious sustainability link

Town Manager's Recommendation:

Fiscal Year	Fiscal Year Dept. Request To	
2026	\$100,000	\$100,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: WTP Flocculation/Sedimentation Basins **DPW-21**

Department Priority Ranking: 2 TM's Rec. for FY24: **FY25 Request** (1 = highest, 2 = second highest, etc.)**Original Dept. Request:** FY25 Request

> **Submitted by:** Christopher Cronin,

> > Director

Department: Public Works

Funding Source: Water Enterprise Borrowing

FY23 Dept. Request for FY24:

Project Description:

The WTP's eight flocculation and sedimentation basins serve as a key element of the water treatment process. Flocculation and sedimentation help settle out suspended particles prior to filtration, increasing the efficiency of the filters. These proven treatment techniques are a critical component in meeting compliance with the Surface Water Treatment Rule, specifically helping the WTP remove turbidity.

Project Justification and Purpose:

Four of the basins were constructed with the original plant in the early 1970, while the other four were constructed during the first expansion in 1989. All eight basins are exhibiting severe signs of deterioration including concrete spalling and failure, corrosion of flight tracks and valving, and failure of mechanical equipment. As a result of the concrete failures, railings have become unsecured, presenting a major safety risk as a result.

This project would provide for critical concrete repairs in order to prevent future decay and prolong the life of the existing basins. The existing tracks would be replaced or rehabilitated, and valves would be replaced in kind with a more appropriate NSF 61-complaint alternative. The flight drives and chains would be replaced, as would all of the mixing equipment (32 mixers in total). Finally, the effluent channel would be covered to prevent prolonged exposure to sunlight that, which is believed to contribute to algae growth in the channel and enter the filter basins.

Cost Estimate & Timing:

\$750,000 Design/Engineering FY2025, \$4,500,000 construction FY2026

Estimated Annual Operating/Maintenance Cost or Savings:

N/A

Sustainability:

24 of the 32 mixers operate 24/7 in order to form and maintain proper floc to aide in the sedimentation process. Since the mixers were installed (half in 1970 and half in 1989), several advancements in technology have made the equipment lighter and more energy efficient to operate. Algae growth in the effluent channel leads to premature filter backwashing, which consumes increased chemicals and energy in order to power the backwash pumps.

Town Manager's Recommendation:

Fiscal Year	Dept. Request	Town Manager Recommendation
2024		
2025	\$750,000	\$750,000
2026	\$4,500,000	\$4,500,000
2027		
2028		

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: WTP Chemical Room Upgrades

DPW-22

Department Priority Ranking: 3 TM's Rec. for FY24: FY26 Request (1 = highest, 2 = second highest, etc.) Original Dept. Request: FY26 Request

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Borrowing

FY23 Dept. Request for FY24: \$0

Project Description:

Two of the four sodium hypochlorite storage tanks were replaced as part of the 1989 WTP Upgrades. Differential settlement at the transition between the original chemical room and the expanded section caused the failure of the concrete pad, containment area, and one of the tanks. Based on the current chemical room design, all chemical storage tanks (with the exception of Sodium Hydroxide) act as both bulk and day tanks. That is, there are no separate day tanks, and thus chemical injection is made directly from a bulk storage tank. Day tanks provide an increased level of safety, as it limits the volume of chemical that can potentially be in direct contact with the potable water system. In the event of a catastrophic failure, only the day tank would drain directly into the system, thus limiting the potential impact.

Project Justification and Purpose:

This project would involve the complete redesign of the chemical room to include the addition of a day tank for each chemical used in the treatment process, as well as replacement of one or more existing bulk tanks as needed due to age or condition, or as deemed appropriate to accommodate the design. Additionally, a new chemical containment system would be designed to meet DEP guidelines. As a starting point, the option of one or more containments tanks would be considered in lieu of containment within the chemical room itself, as containment wall would have to be of a height that would hinder maintenance of the chemical systems. Finally, this project would include demolishing and replacing the concrete pad, repairing the floor and containment area, and replacing both of the 1989 storage tanks.

Cost Estimate & Timing:

\$130,000 for design and engineering in FY26; \$885,000 for construction in FY27

Estimated Annual Operating/Maintenance Cost or Savings:

N/A

Sustainability:

No obvious sustainability component.

Town Manager's Recommendation:

Fiscal Year	Dept. Request	Town Manager Recommendation
2024		
2025		
2026	\$130,000	\$130,000
2027	\$885,000	\$885,000
2028		

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: WTP Electrical Upgrades

DPW-23

Department Priority Ranking: 3 TM's Rec. for FY24: FY26 Request (1 = highest, 2 = second highest, etc.) Original Dept. Request: FY26 Request

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Borrowing

FY23 Dept. Request for FY24: \$0

Project Description:

Most of the WTP's electrical infrastructure dates back to the construction of the original plant in the early 1970s. Under an ongoing contract, both electrical substations are being replaced, including all switchgear, transformers, breakers, and feeders. In addition, all feeds to the various Motor Control Centers (MCCs) will be replaced as part of this project. The project does not include the replacement of the MCCs nor local electrical infrastructure.

Project Justification and Purpose:

This project would include the replacement of all MCCs and control panels as part of an effort to modernize the existing systems and avoid catastrophic failure. It is worth noting that most of the equipment is obsolete and proves difficult to maintain and repair. Additionally, as part of this project, Variable Frequency Drives (VFDs) would be installed for the Bancroft Pumps, as a way to adjust flow to the Bancroft system in order to better meet the variable system demand. The design would include a structural analysis of the existing space, in order to ensure that the structure can support the new equipment and VFDs.

Cost Estimate & Timing:

\$500,000 for design and engineering in FY2026. Construction in FY2027 for \$3,900,000

Estimated Annual Operating/Maintenance Cost or Savings:

N/A

Sustainability:

Components for the Motor Control Centers are no longer available through traditional channels and are typically cannibalized from older decommissioned equipment across the US and Canada. Not only does this lead to long lead times, but also increased costs associated with identifying and procuring the parts. The installation of VFDs on one or more Bancroft Pumps would allow for automated reduction in flow to meet demand during decreased demand periods. This would avoid having to turn the pumps off and back on, which increases the electrical draw on the grid and contributes to the WTP's electrical demand charges.

Town Manager's Recommendation:

Fiscal Year	Dept. Request	Town Manager Recommendation
2026	\$500,000	\$500,000
2027	\$3,900,000	\$3,900,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Sanitary Sewer Collection System Improvements DPW-24

Department Priority Ranking: 1TM's Rec. for FY24: \$0

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$250,000

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Sewer Enterprise Reserves

FY23 Dept. Request for FY24: \$200,000

Project Description:

Repairs to the sanitary sewer are necessary to ensure that the collection system is operating correctly. Repairs will include but not limited to sewer manhole installation, replacement and repair. Defective pipe repairs will be made to eliminate I/I sources.

Project Justification and Purpose:

With the aging of the Sanitary Sewer Collection System dating as far back as 1898, repairs are necessary to ensure the integrity of the collection system and to eliminate I/I sources.

Cost Estimate & Timing:

\$250,000 annually beginning in FY2024.

Estimated Annual Operating/Maintenance Cost or Savings:

Annual cost associated with this program will be included in the budget.

Sustainability:

Ensuring a properly functioning wastewater collection system is key to ensuring a sustainable environment by reducing sewer overflows into water bodies. Improvements to the system are necessary as it also reduces opportunities for waterborne illnesses.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year Dept. Request		Town Manager Recommendation
2024	\$250,000	\$0
2025	\$250,000	\$250,000
2026	\$250,000	\$250,000
2027	\$250,000	\$250,000
2028	\$250,000	\$250,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Shawsheen River Sewer Interceptor Improvements DPW-25

Department Priority Ranking: 1TM's Rec. for FY24: \$2,200,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$2,200,000

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Sewer Enterprise Borrowing

FY23 Dept. Request for FY24: \$200,000

Project Description:

Rehabilitation in the form of but not limited to open-cut replacement and cured in place pipe of the Shawsheen River Sewer Interceptor.

Project Justification and Purpose:

A study performed by CDM Smith concluded that there is extensive corrosion, sediment accumulation, and other structural related issues on the Shawsheen River Sewer Interceptor. The interceptor is one of the most critical pieces of infrastructure which traverses from the southern most point of Town to the Shawsheen Pump Station. This program will target areas in the greatest need of rehabilitation.

Cost Estimate & Timing:

Approximately \$4.6 million for the total cost of project: \$2,200,000 Requested + Balance from A33-08 + A25-04 (\$2,428,794 was repurposed at ATM 2022 Article 32).

Estimated Annual Operating/Maintenance Cost or Savings:

Annual cost associated with this program will be included in the budget beginning in FY25.

Sustainability:

Ensuring a properly functioning wastewater collection system is key to ensuring a sustainable environment by reducing sewer overflows into water bodies. Improvements to the system are necessary as it also reduces opportunities for waterborne illnesses.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$2,200,000	\$2,200,000
2025	\$750,000	\$750,000
2026	\$750,000	\$750,000
2027	\$750,000	\$750,000
2028	\$750,000	\$750,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: West Side Sewer Interceptor Study **DPW-26**

Department Priority Ranking: 3 TM's Rec. for FY24: **\$0** (1 = highest, 2 = second highest, etc.)**Original Dept. Request:**

\$350,000 **Submitted by:** Christopher Cronin,

Director

Department: Public Works

Funding Source: Sewer Enterprise Reserves

FY23 Dept. Request for FY24:

Project Description:

This project entails a thorough assessment of a critical piece of Andover's infrastructure. The study would provide a full and comprehensive understanding of the condition and capacity of the sewer interceptor line that services the River Road area on the west side of Town.

Project Justification and Purpose:

Over the last several years projects have been proposed in the industrial area of River Rd. These projects have projected sewer flows that are large enough to warrant considerable attention. In order for us to make valued decisions and recommendations to the Planning Board as it relates to guiding these projects it is imperative that we have sound and reliable data to guide us. Understanding what the capacity and maintenance needs of the sewer interceptor are critical to providing sound guidance.

Cost Estimate & Timing:

\$350,000 FY24

Estimated Annual Operating/Maintenance Cost or Savings:

There will be additional operational costs associated with the implementation of the program. These costs will not be known until the evaluation and assessment of the town's drainage system is completed.

Sustainability:

No obvious link to sustainability.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$350,000	\$0

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Wood Hill Pump Replacement

DPW-27

Department Priority Ranking: 3 TM's Rec. for FY24: FY26 Request (1 = highest, 2 = second highest, etc.) Original Dept. Request: FY26 Request

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Borrowing

FY23 Dept. Request for FY24: \$0

1 1

Project Description:

The two existing Wood Hill pumps were replaced as part of the WTP's 1989 expansion, and should be considered for replacement in the next few years, as they exhibit signs of age and wear. Additionally, newer pumps are expected to operate more efficiently, resulting in energy savings for the WTP. This project would include the full replacement of both vertical turbine pumps and motors. As part of the design work, we would use the hydraulic model and historical demand data in an attempt to specify pumps that would operate closer to their curve, for maximum efficiency.

Project Justification and Purpose:

As part of the design work, we would use the hydraulic model and historical demand data in an attempt to specify pumps that would operate closer to their curve, for maximum efficiency.

Cost Estimate & Timing:

\$150,000 for design and engineering in FY2026. Construction in FY2027 for \$1,800,000.

Estimated Annual Operating/Maintenance Cost or Savings:

N/A

Sustainability:

The Wood Hill pumps were last replaced as part of the 1987-1989 WTP Expansion Project, and are well past their useful life, as exhibited by ongoing overheating of the pump motors. As a result of overheating, the pumps alternate much more frequently than what would be considered optimal, resulting in increased stopping and starting of the pumps. This in turn increases the electrical draw on the grid and contributes to the WTP's electrical demand charges. New pumps and motors of this size have increased efficiency, which can lower total electrical costs associated with their operation.

Town Manager's Recommendation:

Fiscal Year	Fiscal Year Dept. Request	
2024		
2025		
2026	\$150,000	\$150,000
2027	\$1,800,000	\$1,800,000
2028		

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Spring Grove Cemetery Maintenance **DPW-28**

Department Priority Ranking: 2 TM's Rec. for FY24: \$20,000 (1 = highest, 2 = second highest, etc.)**Original Dept. Request:** \$20,000

> **Submitted by:** Christopher Cronin,

> > Director

Department: Public Works

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24:

\$20,000

Project Description:

	FY2024	FY2025	FY2026	FY2027	FY2028
General maintenance and					
Cemetery Improvements,					
including expansion of grave					
sites, software upgrades and					
roadway paving.	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Totals	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000

Project Justification and Purpose:

General Maintenance – In addition to the expansion of grave sites, funds are used for cemetery maintenance such as grinding and screening of the loam pile, removal of hazard trees, repairs to the stone wall along Abbot Street, and for maintenance and upgrades to the cemetery GIS software.

<u>Cemetery Improvements</u> –Expansion of the cemetery is currently being planned and these funds would continue ongoing work along with the expanded section.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

No obvious link to sustainability.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$20,000	\$20,000
2025	\$20,000	\$20,000
2026	\$20,000	\$20,000
2027	\$20,000	\$20,000
2028	\$20,000	\$20,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Fish Brook Intake Replacement

DPW-29

Department Priority Ranking: 1TM's Rec. for FY24: \$0

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$750,000

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Borrowing

FY23 Dept. Request for FY24: \$15,000,000

Project Description:

The Fish Brook Pumping Station is a critical component of the water treatment system, as it provides, on average, two-thirds of the Town's drinking water supply. Originally constructed in 1965, the station was capable of pumping water from both Fish Brook and the Merrimack River in order to augment the natural yield of Haggetts Pond. Over the years, the ability to draw water from the Merrimack River was greatly reduced, requiring the installation of a submersible pump near the river intake, to aid in maintaining proper water levels at the impoundment. This not only presents an increased operational burden by way of added electrical and O&M costs, but highlights the need for a deeper wetwell at the pumping station.

Project Justification and Purpose:

This project would include a full demolition and replacement of the pumping station, including a full redesign that conforms with all current regulations and industry standards. A new intake would be permitted on the Merrimack, designed to be able to convey river water even in the event that the river elevation is lowered at the Great Stone Dam in Lawrence. Several options are currently being evaluated for the intake, including a direct intake, gate house, and a radial collector system. The existing pumping configuration (2 small, 2 large) would be replaced with 3 large pumps with VFDs. One pump would have the ability to meet 100% of off-peak seasonally needs, while 2 pumps would be able to pump at a rate equal to the design capacity of the force main. The third pump would serve as a backup for redundancy purposes. The pumping station would have the capability to be able to be operated remotely through the SCADA system, reducing the need for staff to travel to and from the station each time the pump speeds need to be adjusted.

Cost Estimate & Timing:

\$500,000 was appropriated in FY2022.

\$750,000 request in FY2024 for design services, Construction in FY2025 for \$15,000,000. Final construction cost TBD pending design.

Estimated Annual Operating/Maintenance Cost or Savings:

Estimated \$20,000 per year in electrical savings.

Sustainability:

Based on today's needs and future anticipated needs, it is expected that a new pumping station could operate with 3 equal sized pumps, while providing equal or even greater output. One pump would is expected to be operated during low-demand season, two pumps during periods of high demand, and one

pump shall serve to provide redundancy in the event of equipment maintenance or failure. Reduced electrical costs contribute to a reduced carbon footprint.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$750,000	\$0
2025	\$15,000,000	\$15,000,000
2026		
2027		
2028		

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Inflow/Infiltration (I/I) Removal Program DPW-30

Department Priority Ranking: 1TM's Rec. for FY24: \$300,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$300,000

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Sewer Enterprise Reserves

FY23 Dept. Request for FY24: \$250,000

Project Description:

Elimination of I/I sources within the sanitary sewer collection system.

Project Justification and Purpose:

Based on the outcome of the I/I investigation study, I/I sources will be identified through various means including but not limited to pipe camera, smoke testing and flow metering. Problem areas are then prioritized and elimination methods are evaluated. Elimination methods include but are not limited to reconstruction of sewer lines.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

The quantity of I/I removed from the collection system will result in savings on pumping and treatment costs.

Sustainability:

Ensuring a properly functioning wastewater collection system is key to ensuring a sustainable environment by reducing sewer overflows into water bodies. Additionally, reducing the amount of treatment of wastewater reduces the energy consumption of the wastewater treatment plan and its carbon footprint.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$300,000	\$300,000
2025	\$300,000	\$300,000
2026	\$300,000	\$300,000
2027	\$300,000	\$300,000
2028	\$300,000	\$300,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: WTP HVAC Upgrades

DPW-31

Department Priority Ranking: 3 TM's Rec. for FY24: **FY27 Request** (1 = highest, 2 = second highest, etc.)**Original Dept. Request:** FY27 Request

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Borrowing

FY23 Dept. Request for FY24:

Project Description:

Most of the WTP's HVAC infrastructure dates back to the construction of the original plant in the early 1970s. In 2020, several major components were replaced, including the two gas-fired boilers and the air handler unit. This project did not include any major modification to the existing steam heating system, which continues to present an operations and maintenance (O&M) challenge. Due to the age of the piping network, there is an overaccumulation of rust in the boiler, which in turn affects its proper operation. As an interim solution, operators routinely drain the boilers, as frequently as once per day, in order to flush the rust out of the system.

Project Justification and Purpose:

This project would include demolition of unused HVAC infrastructure, and replacement of the steam piping system. Additionally, unit heaters and air handlers serving the oldest portions of the building (filters 1-6) would be replaced with modern alternatives, including indirect-gas systems. Finally, indirectgas unit heaters would be installed in the Pipe Gallery to prevent instrument freezing.

Cost Estimate & Timing:

\$200,000 for design and engineering in FY2027. Construction in FY2028 for \$1,600,000

Estimated Annual Operating/Maintenance Cost or Savings:

N/A

Sustainability:

The proposed equipment upgrades for the process areas would provide equal heating, with much greater efficiency. Further, the reduction in the steam-piping network would eliminate intermediate condensate pumping, resulting in electrical savings and therefore reducing energy consumption.

Town Manager's Recommendation:

Fiscal Year	Dept. Request	Town Manager Recommendation
2027	\$200,000	\$200,000
2028	\$1,600,000	\$1,600,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Shawsheen Pump Station Upgrades DPW-32

Department Priority Ranking: 3TM's Rec. for FY24: FY25 Request
(1 = highest, 2 = second highest, etc.)
Original Dept. Request: FY25 Request

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Sewer Enterprise Reserves /

Sewer Enterprise Borrowing

FY23 Dept. Request for FY24: \$0

Project Description:

The Shawsheen Village Sewer Pumping Station serves at the Town's most critical sewer pumping station, as the majority of the Town's wastewater flow is conveyed through this site. Constructed in 1985, the pumping station has operated nearly 24/7, conveying wastewater to the GLSD. The four pumps operate with one "lead pump" to maintain a constant wetwell level, and two "lag" pumps, which operate during periods of high flow. The fourth pump serves as a backup. Current SOP includes rotating the lead pump in order to avoid overburdening a single pump.

As of the date of this memo, only two pumps are currently operating, due to the failure of two check valves. While this is currently being addressed under a separate contract, this project is being proposed as an acknowledgement that failure of critical components will become more frequent as the pumping station continues to age.

Project Justification and Purpose:

This project would include the full replacement of all four pumps, motors, check valves, isolation valves, and associated piping (not including the header pipe). Isolation valves will be added to the header pipe to allow for flexibility in isolating segments of the array for future repairs. Additionally, electrical upgrades would be made, consisting of a full replacement of the MCCs and local equipment, VFDs, and the standby generator. The new generator would be located outside of the building, and would be procured with its own above-ground fuel storage tank. Other miscellaneous upgrades for this pumping station include:

- Retrofit of existing odor-scrubber;
- Removal of underground storage tank;
- Energy efficiency lighting upgrades;
- Rehabilitation of bathroom facilities;
- Installing removable railings at loading dock/stairway;
- Minor concrete repairs, and application of masonry sealant;
- HVAC upgrades to improve heat removal from building

Cost Estimate & Timing:

\$200,000 for additional design/engineering work in FY2025, \$8,400,000 for construction in FY2026

Estimated Annual Operating/Maintenance Cost or Savings:

N/A

Sustainability:

Replacement of pumps, motors, and equipment would decrease electrical costs associated with pumping, as newer pumps and motors provide greater efficiency. Additionally, by installing new submersible pumps, greater resiliency can be achieved by ensuring that the pumps will continue to operate during flooding events, facilitating the transport of combined sewage and flood waters. Finally, new electrical and HVAC equipment, coupled with structural repairs, will ensure greater efficiency in the winter and proper heat removal in the summer, which is expected to prolong the life of electrical equipment in the station.

Town Manager's Recommendation:

Fiscal Year	Dept. Request	Town Manager Recommendation
2024		
2025	\$200,000	\$200,000
2026	\$8,400,000	\$8,400,000
2027		
2028		

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: WTP Powdered Activated Carbon Silo **DPW-33**

Department Priority Ranking: 3 TM's Rec. for FY24: **FY27 Request** (1 = highest, 2 = second highest, etc.)**Original Dept. Request:** FY27 Request

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Reserves

FY23 Dept. Request for FY24: \$0

Project Description:

The WTP's Powdered Activated Carbon (PAC) system provides a key advantage in reducing taste and odor from raw water, by aiding in the coagulation process and in removing organic material. PAC is fed from a silo, via a hopper, and introduced as a slurry just before the rapid mix basins. While the silo itself appears (superficially) to be in good structural shape, the mechanical equipment is in need of replacement.

Project Justification and Purpose:

This project would include the replacement of the hopper and related components as well as the failed dust-suppression system, which keeps carbon dust contained within the silo.

Cost Estimate & Timing:

\$650,000 in FY2027

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

No obvious sustainability component.

Town Manager's Recommendation:

Fiscal Year	Dept. Request	Town Manager Recommendation		
2024				
2025				
2026				
2027	\$650,000	\$650,000		
2028				

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Lead Service Replacements

DPW-34

Department Priority Ranking: 1TM's Rec. for FY24: \$1,800,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$3,600,000

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Borrowing

FY23 Dept. Request for FY24: \$0

Project Description:

Every year, the Andover Water Division tests the lead levels in water from 30 homes that may have lead service lines or lead solder. The Andover Water Division found elevated levels of lead in drinking water in some homes/buildings during the June 1, 2021 – September 30, 2021 monitoring period. Six homes tested above the Action Level of 15 parts per billion (ppb). Lead can cause serious health problems, especially for pregnant women and young children.

Although most homes have very low levels of lead in their drinking water, some homes may still have lead levels above the EPA and State Action Level of 15 parts per billion (ppb). To monitor lead levels, Andover tests tap water in homes that are most likely to have lead. These homes are usually older homes that may have lead service lines or lead solder, and they must be tested after water has been sitting overnight. The EPA rule requires that 90% of these worst-case samples must have lead levels below the Action Level of 15 ppb. In order to further monitor lead levels, Andover has moved to a semi-annual sampling schedule and increasing the number of homes we monitor from 30 to 60.

With this, Andover has committed to replacing 25 lead services each calendar year.

Project Justification and Purpose:

Town Official's best estimate is that there may be as many as 450 active lead services in town. It is the Town's overall intention to replace these lead services over a multi-year period.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

replacing the Town's water service lines to lead-free materials ensures that we meet the goal of equity and environmental justice by committing to full lead service line replacement (*Sustainability Journal* (Baehler et. Al, 2022).

Town Manager's Recommendation:

The Town Manager supports funding \$1,800,000 for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$3,600,000	\$1,800,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Replacement of Ozone Generators

DPW-35

Department Priority Ranking: 3 TM's Rec. for FY24: **FY26 Request** (1 = highest, 2 = second highest, etc.)**Original Dept. Request:** FY26 Request

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Borrowing

FY23 Dept. Request for FY24:

Project Description:

This project would include the demolition and replacement of both ozone generators and appurtenances. Further, structural, mechanical, electrical, and plumbing repairs would be made to the ozone building where required.

Project Justification and Purpose:

The first step in the treatment process is the injection of ozone, which oxidizes metals such as manganese, and allows them to settle out further in the treatment process. Ozonation improves the smell and taste of the finished water, and greatly reduces the likelihood of manganese precipitation in customer's homes. Ozone is produced on-site via two (2) generators, which convert liquid oxygen into the gas, which is then carried by a high-pressure water stream and injected into the raw water. The generators were installed as part of the 2005-2007 WTP upgrades and are reaching the end of their useful life, expected to be about 20 years. From discussions with contractors and other Public Water Suppliers, it seems that the expected life cycle of these units holds true. As an example, the Town of Billerica installed the exact same system in 1997, and operated it for 23 years, before replacing it in 2020. In the last two years, the generators have malfunctioned and required significant repairs, resulting in simultaneous downtime of both units.

Cost Estimate & Timing:

\$TBD for design in FY2026 and \$TBD for construction in FY2027

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Modern ozone generators are expected to operate with slight efficiency gains, reducing the electrical costs associated with operation. Further, wear parts, including fuses, dielectrics, and connecting rods have a failure rate that increases exponentially as the generators age. As a result, more frequent replacement of these components has been needed, resulting in additional expenses of approximately, \$20-\$30,000 per year. New generators, when properly maintained, require fewer part replacements.

Town Manager's Recommendation:

Fiscal Year	Dept. Request	Town Manager Recommendation
2026	TBD	TBD
2027	TBD	TBD

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Raw Water Travelling Screens

DPW-36

Department Priority Ranking: 3 TM's Rec. for FY24: **FY26 Request** (1 = highest, 2 = second highest, etc.)**Original Dept. Request:** FY26 Request

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Borrowing

FY23 Dept. Request for FY24:

Project Description:

Raw water from Haggetts Pond enters the Raw Water Pumping Station via a 36-inch RCP pipe, into an intake chamber, and through two (2) travelling screens, before being pumped further into the first treatment unit. The travelling screens are designed to remove debris from the raw water, including leaves, twigs, and other material which may enter the intake chamber. These screens were installed during the 1989 WTP upgrades and are past their useful life. One of the screens is inoperable, while the other is operated seldomly, as to preserve its remaining life.

Project Justification and Purpose:

This project would include the replacement of both travelling screens in kind. Further, a modern control center would be installed, allowing for scheduled operation via SCADA at a time when operation would be less likely to impact overall treatment capacity. This approach is similar to the scheduled operation of the individual flights and chains in the sedimentation basins.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

No obvious sustainability component.

Town Manager's Recommendation:

Fiscal Year	Dept. Request	Town Manager Recommendation
2026	TBD	TBD

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Water Main Flushing Program Updates DPW-37

Department Priority Ranking: 2TM's Rec. for FY24: \$0

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$350,000

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Reserves

FY23 Dept. Request for FY24: \$0

Project Description:

Since 2014, the Town has been regularly maintaining water mains using the unidirectional flushing (UDF) method. UDF is a flushing technique designed to bring water through the distribution system in a controlled fashion at velocities sufficient to provide a scouring action in the pipe. Essentially, a particular section of pipe loop is isolated as hydrants are exercised in a sequential manner. The Town has noted favorable results including fewer instances of discolored water since the implementation of UDF.

Project Justification and Purpose:

As improvements in the water distribution system are made, updates to the UDF program are necessary. The program provides step by step instructions on valve and hydrant operation along with predicted flow results. In recent years, there has been a considerable investment towards water distribution infrastructure. With this, new valves have been added, old mains have been abandoned, and pipe sizes changed. These upgrades warrant updated or modified processes in order to flush the distribution system efficiently and effectively.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

No obvious link to sustainability.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$350,000	\$0
2025	\$100,000	\$100,000
2026	\$100,000	\$100,000
2027	\$50,000	\$50,000
2028	\$50,000	\$50,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Water System -Distribution & Treatment

Masterplan

DPW-38

Department Priority Ranking: 2 TM's Rec. for FY24: \$0

 $(1 = highest, 2 = second \ highest, \ etc.)$ Original Dept. Request: \$400,000

Submitted by: Christopher Cronin,

Director

Department: Public Works

Funding Source: Water Enterprise Reserves

FY23 Dept. Request for FY24: \$0

Project Description:

The water distribution system was last evaluated in 2010. With a commitment to invest in the Town's water system, a full study or master plan of both distribution and treatment is necessary.

Project Justification and Purpose:

The purpose of the water distribution and treatment plant study is to determine and report on the need for water system improvements as required to address existing system deficiencies in Andover. The recommendations from this report will provide the basis for the town's long-term capital improvements program for the water system.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

No obvious link to sustanaibility.

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$400,000	\$0
2025		
2026		
2027		
2028		

FACILITIES



FACILITIES

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Town Projects – Building Division

FAC-1

Department Priority Ranking: 1TM's Rec. for FY24: \$475,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$475,000

Submitted by: Janet Nicosia, Director Department: Department of Facilities General Fund Revenue

FY23 Dept. Request for FY24: \$450,000

Project Description:

	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
ADA Compliance	1	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Door and door hardware replacement	1	\$25,000	\$30,000	\$30,000	\$30,000	\$35,000
Interior finish upgrades- Painting, flooring and ceilings	1	\$50,000	\$50,000	\$55,000	\$55,000	\$55,000
Landscaping, BMP maintenance	1	\$25,000	\$25,000	\$30,000	\$30,000	\$35,000
Masonry maintenance and repairs	1	\$35,000	\$40,000	\$40,000	\$45,000	\$45,000
Building envelope/roof repairs	1	\$30,000	\$35,000	\$35,000	\$40,000	\$40,000
Paving, sidewalk and curb repairs	1	\$50,000	\$50,000	\$50,000	\$50,000	\$55,000
Playground maintenance	1	\$30,000	\$40,000	\$40,000	\$45,000	\$45,000
Project overtime	1	\$85,000	\$85,000	\$85,000	\$90,000	\$90,000
Security system upgrades	1	\$30,000	\$30,000	\$30,000	\$35,000	\$35,000
Town buildings improvements	1	\$40,000	\$45,000	\$45,000	\$50,000	\$50,000
Totals		\$475,000	\$505,000	\$515,000	\$545,000	\$560,000

Project Justification and Purpose:

<u>ADA Compliance</u> – Funds are requested to address accessibility requirements as identified in the Town's most recent Self-Evaluation and Transition Plan Update.

<u>Door & Door Hardware Replacement</u> – Funds are requested to continue the ongoing program to replace our aging interior and exterior doors and door hardware on Town buildings.

<u>Interior Upgrades – Painting, flooring, and ceilings</u> – Ongoing improvement program for painting, flooring and ceilings as needed.

<u>Landscaping</u>, <u>BMP maintenance</u> – Ongoing maintenance and improvement program for landscaped areas and storm water features at Town building locations.

<u>Masonry maintenance and repairs</u> – Funds are requested for ongoing maintenance of masonry at Town buildings, including cleaning, repointing, sealing and minor repairs as needed.

<u>Building envelope and roof repairs</u> – Funds are requested to make minor repairs to Town building exteriors and roofs.

<u>Paving, Sidewalks, Curb Repairs</u> – Funds are requested to repair aging driveways, sidewalks and catch basins at all Town buildings.

<u>Playground maintenance</u> – Funds are requested to repair playground structures and replenish playground surfaces and mulch.

Project Overtime – Facilities trade staff in support of Town/School capital projects.

<u>Security System upgrades</u> – Funds are requested to upgrade and repair security systems, which include cameras systems, badge access controls, keyless entry mechanisms, electronic locks and burglar alarms.

<u>Town buildings improvements</u> – Funds are requested for the ongoing program to replace carpeting, flooring, signage and minor renovations in Town buildings.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Sustainability in construction involves "cradle to grave" consideration of the environmental impact of our maintenance and construction activities. We consider from the "cradle" the source and materials selection of low emissions, recycled and local materials, to the "grave" analysis of whether materials used can be recycled at the end of their useful life. Examples of Sustainability decisions in FAC-1 include: low VOC paint and carpeting, all water-based paints, water-based adhesives, recycled rubber playground surfacing, locally sourced engineered wood fiber, and our use of construction materials waste stream where recyclable materials are separated.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year Dept. Request		Town Manager Recommendation
2024	\$475,000	\$475,000
2025	\$505,000	\$505,000
2026	\$515,000	\$515,000
2027	\$545,000	\$545,000
2028	\$560,000	\$560,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Town Projects – Mechanical Electrical Division FAC-2

Department Priority Ranking: 1TM's Rec. for FY24: \$420,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$420,000

Submitted by: Janet Nicosia, Director Department: Department of Facilities

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$360,000

Project Description:

	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
Asbestos abatement and inspections	1	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Building Fire Systems	1	\$30,000	\$30,000	\$30,000	\$35,000	\$35,000
Electrical/Elevator upgrades	1	\$40,000	\$40,000	\$45,000	\$45,000	\$45,000
Energy Conservation	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Engineering	1	\$75,000	\$80,000	\$80,000	\$80,000	\$85,000
Exterior Oil/Water/Sand Separators Cleaning	1	\$20,000	\$20,000	\$20,000	\$20,000	\$25,000
HVAC/Controls Upgrades	1	\$75,000	\$75,000	\$80,000	\$80,000	\$85,000
Plumbing Upgrades	1	\$20,000	\$20,000	\$25,000	\$25,000	\$30,000
Public Safety Center Shooting Range Lead Abatement	1	\$30,000	\$35,000	\$35,000	\$35,000	\$40,000
Technology Devices	1	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Upgrade or Replace Street Light Poles and street light equipment	1	\$50,000	\$50,000	\$55,000	\$55,000	\$60,000
Totals		\$420,000	\$430,000	\$450,000	\$455,000	\$485,000

Project Justification and Purpose:

<u>Asbestos abatement and inspections</u> – Funds are requested to address asbestos abatement and inspections as needed.

<u>Building Fire Systems</u> – Funding is requested for the ongoing repair and replacement of smoke detectors and fire alarm systems.

<u>Electrical and Elevator upgrades</u> – Funds are requested to make electrical upgrades at Town facilities, including elevators.

<u>Energy Conservation</u> – Funds are requested to implement minor energy conservation upgrades.

Engineering – Funds are needed for professional engineering fees to implement capital projects.

<u>Exterior Oil/Water/Sand Separators Cleaning</u> – Funds are requested to comply with EPA Regulations regarding the annual cleaning of oil/water/sand separators in all of our School and Town buildings parking areas.

<u>HVAC/ Controls Upgrades</u> – Funds are requested to upgrade HVAC equipment at Town facilities and implement Building Automation Systems (BAS).

<u>Plumbing upgrades</u> – Funding is requested for the ongoing repair and replacement of plumbing fixtures in Town buildings as needed.

<u>PSC Shooting Range Lead Abatement</u> – Shooting Ranges and portions of the range exhaust system accumulate lead contamination and must be abated annually. Funds are requested for this lead abatement.

<u>Technology Devices</u> – Technology supplies only one device per person. Most Facilities employees require multiple devices to effectively perform their duties providing 24/7 service.

<u>Upgrade or Replace Street Light Equipment</u> – Funds are requested to upgrade or replace Town owned street light poles and equipment as needed.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Sustainability in construction involves "cradle to grave" consideration of the environmental impact of our maintenance and construction activities. We consider from the "cradle" the source and materials selection of low emissions, recycled and local materials, to the "grave" analysis of whether materials used can be recycled at the end of their useful life. Examples of Sustainability decisions in FAC-2 include: Energy efficiency upgrades in lighting and HVAC systems, including heat pumps and LED lighting, and the safe removal and disposal of hazardous materials like asbestos, lead, and mercury.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$420,000	\$420,000
2025	\$430,000	\$430,000
2026	\$450,000	\$450,000
2027	\$455,000	\$455,000
2028	\$485,000	\$485,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Town and School Security Projects FAC-3

Department Priority Ranking: 1TM's Rec. for FY24: \$130,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$130,000

Submitted by: Janet Nicosia, Director Department: Department of Facilities General Fund Revenue

FY23 Dept. Request for FY24: \$290,000

Project Description:

Town Project Description:	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
Deyermond Field camera installations			\$100,000			
Old Town Hall security upgrades			Ψ100,000		\$100,000	
Playstead Ballfield and Track camera installations				\$90,000		
Town Offices camera installations and upgrades.		\$30,000				
Upgrade of Access Control system server and software						\$250,000
Total Town		\$30,000	\$100,000	\$90,000	\$100,000	\$250,000

School Project Description:	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
School Entrance Renovations at						
Doherty and West Middle						
Schools		\$100,000	\$100,000	\$100,000		
Upgrade of Access Control system server and software						\$250,000
Multi-School Security Camera						
Upgrades-Schools to digital						
(WMS, South, Sanborn)			\$50,000	\$50,000	\$50,000	
Total Schools		\$100,000	\$150,000	\$150,000	\$50,000	\$250,000

					1	1
Total Town and School Combined	\$130,000	\$250,000	\$240,000	\$150,000	\$500,000	1
Total Town and School Combined	ΨΙΟΟ	Ψ=50,000	Ψ=-τυ,υυυ	ΨΙΟΟ	Ψουσίουσ	

Project Justification and Purpose:

<u>Devermond Field security camera installations</u> – Funds will be requested to install security cameras at the Devermond Field, at the request of the Town and Andover Police Department. The area is difficult to monitor. Fiber will need to be run to the space through conduit, and cameras and recording devices will need to be installed.

<u>Old Town Hall security upgrades</u> – Funds will be requested to upgrade the card access readers, burglar alarm, and interior cameras at the Old Town Hall and Andover Town House.

<u>Playstead Ballfield and Track camera installations</u> – Funds will be requested to install long range cameras to monitor the area.

<u>Town Offices security camera upgrades</u> – Funds are requested to upgrade the existing cameras at the Town Offices building.

<u>Town Offices Finance Office entry enclosure</u> – Funds will be requested to enclose the Finance Office entry area in the Town Offices building.

<u>Upgrade of the Access Control system server and software</u> – Funds will be requested to upgrade the Access Control system server and software to keep pace with expanded use in our Town and School buildings and with changing technology. Funding for this project is being requested equally from both the Town and School departments.

School Entrance Renovations – Andover Public School buildings are undergoing a comprehensive program of security upgrades and renovations. The new entrance vestibules that have been installed at several of our school buildings are an example of the security enhancements being undertaken to keep our school buildings safe. Funds are requested to continue constructing these high priority security vestibules throughout our school system.

<u>Security Camera Upgrades-Schools to digital</u> – Funds will be requested to continue the upgrade of the interior camera security systems in Andover schools. The upgrades include new NVR digital recording systems and cameras at West Middle School and ongoing security component replacements.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

School entrance renovations are designed to capture heat and cold air prior to it entering the school. Systems are properly balanced to help insulate the interior spaces of the school while providing added security.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Fiscal Year Dept. Request	
2024	\$130,000	\$130,000
2025	\$250,000	\$250,000
2026	\$240,000	\$240,000
2027	\$150,000	\$150,000
2028	\$500,000	\$500,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Town Vehicles FAC-4

Department Priority Ranking: 1TM's Rec. for FY24: \$105,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$251,000

Submitted by: Janet Nicosia, Director Department: Department of Facilities General Fund Revenue

FY23 Dept. Request for FY24: \$185,000

Project Description:

Project Description:

Dept./Div.	Year	Make/Model	FY2024	FY2025	FY2026	FY2027	FY2028
Build. Maint-7	2015	Ford Tansit Connect Van 1/2T S7E1 121 LWB			\$40,000		
Build. Maint-12	2014	Ford F250 3/4T F2B Pickup 4x4		\$40,000			
Elder Services- 1	2012	Ford Focus/possible move to EV	\$33,000				
Elder Services- 2	2013	Ford Focus/possible move to EV	\$33,000				
Information Technology-1	2014	Ford Transit Connect Cargo S6EZ SWEB XL		\$40,000			
Mech/Electrical-7	2015	Ford Tansit Connect Van 1/2T S7E1 121 LWB	\$40,000				
Mech/Electrical-9	2013	Ford Transit Connect Van 1/2T S6A	\$40,000				
Mech/Electrical-11	2010	Ford Transit Connect XL Cargo Van	\$40,000				
Recreation -1	NEW	Ford E350 Elkhart 15 Passenger Coach			\$65,000		
Youth Services- 1	2011	Ford E450 1 1/2T Elkhart 15 Passenger Coach		\$65,000			
Youth Services- 2	2010	Ford E450 1 1/2T Elkhart 15 Passenger Coach					
Youth Services- 3	2012	Ford E450 1 1/2T Elkhart 15 Passenger Coach	\$65,000				
Youth Services- Trailer 2	1999	Home Utility Trailer			\$8,000		
Total FAC-4			\$251,000	\$145,000	\$113,000	\$0	\$0

Project Justification and Purpose:

Estimated Annual Operating/Maintenance Cost or Savings:

Vehicle replacements are often pushed out year after year due to budget constraints. We can keep vehicles running mechanically, but metal rot can damage the vehicles' frames and bodies to the point that they become unsafe to drive.

Cost Estimate & Timing:		

Sustainability:		

The Andover Green Community designation includes a commitment to lowering carbon emissions of our fleet and considering non-fossil fuel options. Facilities continues to use small work vans when possible, and we are moving towards electric vehicles when possible and available. Currently two EV vehicles are in service.

Town Manager's Recommendation:

The Town Manager supports funding \$105,000 for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$251,000	\$105,000
2025	\$145,000	\$145,000
2026	\$113,000	\$113,000
2027		
2028		

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Town Parks and Playground Improvements FAC-5

Department Priority Ranking: 1TM's Rec. for FY24: \$625,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$875,000

Submitted by: Jemma Lambert, Director

Janet Nicosia, Director

Department: DCS and Facilities

Funding Source: General Fund Borrowing

FY23 Dept. Request for FY24: \$585,000

Project Description:

Major improvements, renovations, and construction of Town parks and playgrounds.

	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
Ballardvale Playground Phase 2		\$250,000				
Deyermond Field Parking Lot Drainage and Paving, Design then construction			\$85,000		\$850,000	
Lower Shawsheen replace fencing along the river						\$600,000
Penguin Park paving				\$550,000		
Playstead Improvements Phase 1, Phase 2 and Phase 3		\$250,000	\$250,000	\$250,000		
Nasan's Landing construction of ADA kayak launch		\$375,000				
Pomps Pond bathhouse				\$150,000	\$2,500,000	
Pomps Pond playground						\$800,000
Recreation Park new shade pavillion and updated restrooms			\$600,000			
Recreation Park new basketball court and playground						\$600,000
Recreation Park new pavement with speed bar at back parking lot						\$500,000
The Park Site Improvements			\$1,250,000			
Totals		\$875,000	\$2,185,000	\$950,000	\$3,350,000	\$2,500,000

Project Justification and Purpose:

<u>Ballardvale Playground phase two</u> – The first phase of the Ballardvale playground renovation included playground equipment and walkways. Funds will be requested for a second phase, which will address the ballfield and basketball court, as well as the fencing and perimeter walking path.

<u>Devermond Field parking lot drainage and paving</u> – Currently, the parking area at the Devermond Field Complex is unpaved. Heavy use and weather have impacted the integrity of this unpaved surface, resulting in large ruts and puddling. Funds are requested to design, then pave and complete this lot.

<u>Lower Shawsheen fencing replacement</u> – Funds will be requested to replace the fence that runs along the Shawsheen River at the lower Shawsheen recreational area.

<u>Penguin Park paving</u> – Funds will be requested to resurface the parking lot at Penguin Park.

<u>Playstead Improvements</u> – Funds are requested for the continued implementation of the Playstead and Downtown Connectivity Master Plan.

<u>Nasan's Landing ADA kayak launches</u> – Funds are requested to construct ADA compliant kayak launches at Pomps Pond and Nasan's Landing to improve universal accessibility.

<u>Pomps Pond bathhouse</u> – Funds will be requested for design, then construction of a new bathhouse at the Pomps Pond recreation area. Feasibility study was completed in FY2021.

<u>Pomps Pond Playground</u> – Funds will be requested for the construction of a new playground at the Pomps Pond recreation area.

<u>Recreation Park Shade Pavilion and Restrooms</u>– Funds are requested to construct a shade pavilion and update the restrooms at Recreation Park.

<u>Recreation Park Basketball Court and Playground</u> – Funds will be requested to install a new basketball court and a new playground at Recreation Park.

<u>Recreation Park Pavement</u> -Funds will be requested to repave the paved areas at Recreation Park, and improve the back parking lot.

<u>The Park Site Improvements</u> – Funds will be requested to design, and then construct a renovated plaza area at The Park at the Town Offices complex.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

The development of local recreational spaces reduces the need for travel, while encouraging health and fitness. Pathways include recycled asphalt content, and rubber surfacing for playgrounds uses recycled

rubber.

Town Manager's Recommendation:

The Town Manager supports funding \$625,000 for FY24.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$875,000	\$625,000
2025	\$2,185,000	\$2,185,000
2026	\$950,000	\$950,000
2027	\$3,350,000	\$3,350,000
2028	\$2,500,000	\$2,500,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Major Town Projects

FAC-6

Department Priority Ranking: 1TM's Rec. for FY24: \$900,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$900,000

Submitted by: Janet Nicosia, Director Department: Department of Facilities General Fund Borrowing

FY23 Dept. Request for FY24: \$1,730,000

Project Description:

	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
Ballardale Fire traffic signals					\$250,000	
Cormier Youth Center garage						
area HVAC. Design then						
construction.			\$80,000		\$800,000	
Memorial Hall Library 2nd						
floor restrooms. Design then						
construction.			\$50,000		\$350,000	
Memorial Hall Library carpet						
replacements on Level 1 and		# 100.000	# 100 000			
Lower Level.		\$100,000	\$100,000			
Memorial Hall Library recover						
rubber stairs.					\$50,000	\$50,000
Memorial Hall Library wrought						
iron fence and granite pylon						
repairs.			\$300,000			
Memorial Hall Library new						
ceiling in Technical Processing						
area.						\$200,000
Memorial Hall Library						
renovation of cabinetry and						
flooring in Technical		* * * * * * * * * * * * * * * * * * * *				
Processing area.		\$150,000				
Memorial Hall Library partial						
roof replacement.				\$500,000		
Memorial Hall Library						
architectural uplighting.						\$120,000
Memorial Hall Library						
replacement of motorized						
shades.					\$120,000	

	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
Memorial Hall Library redesign of HVAC in Hall. Design then construction.			\$50,000		\$300,000	
Memorial Hall Library parking reconfiguration. Design then construction. Militia Building at Bowling Green. Feasibility then				\$65,000		\$650,000
Old Town Hall mosaic floor restoration.				\$80,000	\$110,000	\$800,000
Old Town Hall kitchen. Design then renovation. Old Town Hall HVAC-replace chiller, investigate VRF/heat pump systems. Design then				\$50,000	Ψ220,000	\$750,000
Construction. Old Town Hall renovations and upgrades		\$200,000	\$100,000		\$1,000,000	
Old Town Hall post office upgrades.		Ψ200,000	\$80,000			
Public Safety Center paving- main drive then larger lot.					\$150,000	\$250,000
Public Safety roof replacement.			\$1,000,000			
Public Safety side and rear sidewalks and concrete.			\$450,000			
Red Spring Road maintenance facility renovations.			\$100,000			
Town Offices renovations.		\$50,000	\$50,000	\$50,000	\$50,000	
Town Offices main entry granite stairway replacement.			\$800,000			
Town Offices accessible walkway from front of building to park side parking lot.				\$80,000		
Traffic study-Route 133 at Greenwood, Lovejoy and Elm Square.		\$50,000				
West Fire Station epoxy apparatus bay floor.		\$75,000				

	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
West Fire Station landscaping, walkways and flagpole.		\$75,000				
West Fire Station windows and lintels replacements, masonry façade repairs and sealing.		\$200,000	\$200,000			
Totals		\$900,000	\$3,360,000	\$825,000	\$3,180,000	\$2,820,000

Project Justification and Purpose:

<u>Ballardvale Fire traffic signals</u> – Funds will be requested to install a traffic signal at Ballardvale Fire Station to stop traffic and allow the fire apparatus to exit the site safely.

<u>Cormier Youth Center garage area HVAC</u> – Funds will be requested to design, then install an HVAC system in the garage shop area of the Cormier Youth Center.

<u>Memorial Hall Library Restrooms</u> – Funds will be requested to construct restrooms on the second floor at Memorial Hall Library. Currently there are no restrooms located on this level of the library. Patrons and meeting attendees have to go to another level of the library to use the restrooms.

<u>Memorial Hall Library carpet replacements</u> – Funds are requested to replace the carpeting on level one at Memorial Hall Library. Future funding will be requested to replace the carpeting in the lower level as well.

<u>Memorial Hall Library rubber stairs</u> – Funds will be requested to replace rubber stair treads at Memorial Hall Library.

<u>Memorial Hall Library wrought iron fence and granite pylon repairs</u> – Funds will be requested to repair the historic wrought iron fence and granite pylons at Memorial Hall Library.

<u>Memorial Hall Library Ceiling in Technical Processing area</u> – Funds will be requested to replace the ceiling in the Technical Processing area at Memorial Hall Library.

<u>Memorial Hall Library Technical Processing area renovation</u> – Funds are requested to renovate the copy area of Technical Processing at Memorial Hall Library, including new cabinetry and flooring.

<u>Memorial Hall Library partial roof replacement</u> – Funds will be requested to replace a section of the roof at Memorial Hall Library.

Memorial Hall Library architectural uplighting – Funds will be requested to install architectural uplighting to the exterior of Memorial Hall Library, similar to the uplighting that displays Andover's Old Town Hall.

<u>Memorial Hall Library motorized shades</u> – Funds will be requested to replace the motorized shades at Memorial Hall Library.

Memorial Hall Library redesign of HVAC in Memorial Hall – Funds will be requested to upgrade the HVAC system in Memorial Hall.

<u>Memorial Hall Library parking lot improvements</u> – Funds will be requested for a redesign of the parking area and retaining wall. This will improve drainage, create additional parking spaces, and beautify the lot with landscape improvements. This area is also being considered for the installation of electric charging stations.

<u>Militia Building renovations</u> – The historic stone Militia building at Bowling Green needs repointing, roofing and other renovations. Funds will be requested to keep this Town asset in good repair.

<u>Old Town Hall mosaic floor restoration</u> – The historic Mosaic floor in Old Town Hall foyer needs to be restored. The floor beneath the mosaic has become soft, causing the mosaic tiles to become loose.

<u>Old Town Hall kitchen renovation</u> – Funds will be requested to design, then construct kitchen renovations in the Andover Town House function hall in the Old Town Hall.

<u>Old Town Hall HVAC upgrade</u> – The system needs to be redesigned for higher energy efficiency and possibly a lower profile, as well as for noise reduction for the exterior.

Old Town Hall renovations and upgrades – The Facilities Department along with Planning and DPW, are investigating marketing and future uses options for the Old Town Hall and Andover Town House. A number of upgrades are needed. This funding will allow for work to begin in a methodical fashion and in concert with the results of the study. Some issues that need to be addressed are restrooms, façade woodwork, doors, and windows.

<u>Old Town Hall Post Office upgrades</u> – Funds will be requested to upgrade and refresh the U.S. Post Office satellite space in the Old Town Hall.

<u>Public Safety Center paving</u> – Funds will be requested to pave the main drive, and then the larger lot at the Public Safety Center.

<u>Public Safety Center roof replacement</u> – Funds are requested to replace the entire roof at the Public Safety Center in preparation for future solar installation.

<u>Public Safety Center side and rear sidewalks</u> – Funds will be requested to replace the concrete sidewalks at the side and rear of the building.

<u>Red Spring Road Maintenance Shop renovation</u> – Funds will be requested to renovate the existing multistall restroom to one multi-stall and one single use restroom with shower. Currently the maintenance shop cannot accommodate female staff. Minor exterior improvements included.

<u>Town Offices building renovations</u> – Funds are requested to make upgrades to various office spaces in the Town Offices building. As staff are replaced, or new staff are hired, changes in the layout of the offices and wall modifications are required.

<u>Town Offices replacement of Main Entrance granite stairway</u> – Funds will be requested to replace the existing granite stairway. Several repairs have been made during the past five years to remedy damage caused by winter salt and freeze damage.

<u>Town Offices construction of an accessible walkway to parking</u> – The lack of an accessible route from the Park side parking lot to the front of the Town Offices building was identified in the most recent ADA Self-Evaluation and Transition Plan update. Funding will be requested to improve accessibility from this lot to the front walkway at Town Offices.

<u>Traffic Study</u> – Funds are requested to conduct a traffic study in the areas of Route 133 at Greenwood Avenue, Route 133 at Lovejoy Street, and at Elm Square.

West Fire Station apparatus bay – Funds are requested to epoxy the apparatus bay at West Fire Station.

<u>West Fire Station site improvements</u> – Funds are requested to improve the site at West Fire Station with new landscaping, walkways and a new flagpole.

<u>West Fire Station windows, lintels, and masonry replacements and repairs</u> – Funds are requested to replace the windows and supportive lintels at West Fire Station and to repair and seal the masonry façade of the building.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Sustainability in construction involves "cradle to grave" consideration of the environmental impact of our maintenance and construction activities. We consider from the "cradle" the source and materials selection of low emissions, recycled and local materials, to the "grave" analysis of whether materials used can be recycled at the end of their useful life. The efficient window replacement at West Fire will save energy.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$900,000	\$900,000
2025	\$3,360,000	\$3,360,000
2026	\$825,000	\$825,000
2027	\$3,180,000	\$3,180,000
2028	\$2,820,000	\$2,820,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Town / School Energy Initiatives

FAC-7

Department Priority Ranking: 1TM's Rec. for FY24: \$470,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$470,000

Submitted by: Janet Nicosia, Director
Department: Department of Facilities
Funding Source: General Fund Borrowing /

General Fund Revenue

FY23 Dept. Request for FY24: \$1,230,000

Project Description:

Town	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
Memorial Hall Library LED Atrium lighting		\$120,000				
Memorial Hall Library, replace chiller with more efficient unit					\$200,000	
Public Safety Add EV charger			\$35,000			
Public Safety Center - LED retrofit			\$95,000	\$95,000		
Total Town		\$120,000	\$130,000	\$95,000	\$200,000	\$0

Schools	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
AHS Collins Center - Install New Roof Top Units				\$500,000		
Doherty Middle School - Window replacements, Phase 1 & 2 (Green Repair-Phase 1 only)		\$350,000	\$350,000			
Doherty Middle School - Convert auditorium lighting to LED technology			\$115,000			
Doherty Middle School - Upgrade Gym ventilation				\$300,000		
West Middle - Retrofit lighting to LED			\$150,000			
West Middle - Retrofit Auditorium lighting to LED				\$120,000		
Wood Hill/High Plain replace boilers design then construction				\$80,000		\$800,000
Total Schools		\$350,000	\$615,000	\$1,000,000	\$0	\$800,000

	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
Total Combined		\$470,000	\$745,000	\$1,095,000	\$200,000	\$800,000

Project Justification and Purpose:

Memorial Hall Library LED lighting – Funds are requested to install energy efficient LED technology lighting in the atrium at Memorial Hall Library.

Memorial Hall Library air conditioning — Funds will be requested to replace the chiller at Memorial Hall Library with a more energy efficient unit.

<u>Public Safety Center EV charging station</u> – Funds are requested to install an EV charging station at the Public Safety Center.

<u>Public Safety Center LED lighting</u> – Funds will be requested to retrofit the lighting in the Public Safety Center with more energy efficient LED technology.

<u>Andover High School Collins Center installation of new roof top units</u> – Funds will be requested to replace the roof top units at the Collins Center. The units are more than 20 years old and it is expected that we will be able to receive utility incentives to retrofit them with higher efficiency units.

<u>Doherty Middle School window replacements</u> – Funds are requested for phase one of a two phased window replacement project for Doherty Middle School. Under the Green Repair program, the Town may be eligible for matching funds.

<u>Doherty Middle School auditorium lighting conversion to LED</u> – Funds will be requested to convert the auditorium lighting to more efficient LED technology.

<u>Doherty Middle School gymnasium ventilation and exhaust</u>– Funds will be requested to replace a 40-year old fan with a more powerful and variable speed fan, which will be linked to the energy management system and will use the CO2 sensor to maintain sufficient ventilation. Gyms are used intermittently and there is energy savings when sensors are added to detect occupancy and air quality.

<u>West Middle School LED lighting</u> – Funds will be requested to retrofit the current fluorescent lighting at West Middle School with energy efficient LED fixtures. The new fixtures will be fit with occupancy sensing so that lights will shut off when areas are unoccupied.

<u>West Middle School Auditorium LED lighting</u> – Funds will be requested to retrofit the lighting in the West Middle School auditorium with energy efficient LED fixtures.

<u>Wood Hill/High Plain boilers replacements</u> – Funds will be requested to replace the boilers at Wood Hill/High Plain with high efficiency boilers.

NOTE: Andover Energy Division may apply for grants and/or incentives to fund the cost, or reduce the cost, of some of the projects identified above.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Memorial Hall atrium lighting will be LED technology and incorporate daylight sensors to dim the lights when sufficient light is provided from the atrium windows. Doherty Middle School windows are old and inefficient. This funding will be used to leverage a Green Building Repair grant application next year to begin to replace windows in phases.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request from General Fund Borrowing.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$470,000	\$470,000
2025	\$745,000	\$745,000
2026	\$1,095,000	\$1,095,000
2027	\$200,000	\$200,000
2028	\$800,000	\$800,000



TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: School-Wide Maintenance Program SCH-1

Department Priority Ranking: 1TM's Rec. for FY24: \$950,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$950,000

Submitted by: Magda Parvey, Ed.D./

Janet Nicosia, Director

Department: School and Facilities Depts.

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$905,000

Project Description:

	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
504 & IEP Compliance						
(Individual Educational Plan)	1	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
ADA Compliance (Accessibility)	1	\$55,000	\$55,000	\$60,000	\$60,000	\$60,000
Asbestos survey and remediation	1	\$45,000	\$50,000	\$50,000	\$55,000	\$55,000
Building Envelope/roofing maintenance and repairs	1	\$40,000	\$40,000	\$45,000	\$45,000	\$50,000
Carpet and flooring replacement	1	\$60,000	\$60,000	\$60,000	\$65,000	\$65,000
Door and door hardware and installation	1	\$30,000	\$30,000	\$35,000	\$35,000	\$35,000
Electrical upgrades for new technology	1	\$30,000	\$35,000	\$35,000	\$40,000	\$40,000
Engineering	1	\$55,000	\$60,000	\$60,000	\$65,000	\$65,000
Energy conservation	1	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Fence and guardrail repairs	1	\$45,000	\$45,000	\$50,000	\$50,000	\$55,000
Furniture replacement	1	\$35,000	\$35,000	\$40,000	\$40,000	\$45,000
HVAC/Energy Management upgrades	1	\$50,000	\$55,000	\$55,000	\$60,000	\$65,000
Landscaping	1	\$25,000	\$25,000	\$30,000	\$30,000	\$30,000
Lead and Copper testing and remediation	1	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Painting and parking lot striping	1	\$50,000	\$60,000	\$60,000	\$65,000	\$65,000
Plumbing upgrades	1	\$30,000	\$30,000	\$35,000	\$35,000	\$40,000
Refinish gymnasium and stage floors	1	\$25,000	\$30,000	\$30,000	\$35,000	\$35,000
Restroom renovations	1	\$55,000	\$55,000	\$60,000	\$60,000	\$65,000

	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
School playgrounds maintenance	1	\$30,000	\$35,000	\$35,000	\$40,000	\$40,000
Security system upgrades	1	\$85,000	\$85,000	\$90,000	\$90,000	\$95,000
Sidewalk repairs and replacements	1	\$80,000	\$85,000	\$85,000	\$90,000	\$90,000
Smoke Detector and Fire Alarm Repairs	1	\$30,000	\$35,000	\$35,000	\$40,000	\$40,000
Totals		\$950,000	\$1,000,000	\$1,045,000	\$1,095,000	\$1,130,000

Project Justification and Purpose:

504 & IEP Compliance (Individual Educational Plan) – (Mandated IEP Building Modifications) – Funds are requested to provide building modifications on an as-needed basis when a staff member, or a student's IEP plan, requires upgrades or modifications to the classrooms or offices to provide reasonable accommodations. These needs come up without advance notice and require immediate attention.

<u>ADA Compliance</u> – Funds are requested to address accessibility requirements.

<u>Asbestos Survey and Remediation</u> – Funds are requested to continue compliance with the AHERA law and asbestos removal.

<u>Building Envelope/Roofing maintenance and repairs</u> – Funds are requested for the maintenance and minor repairs to building envelope systems.

<u>Carpet and Flooring Replacement</u> – Funds are requested to replace carpeting and flooring as needed.

<u>Door and Door Hardware Replacement</u> – Funds are requested to continue the ongoing program of replacing aging interior and exterior doors and door hardware.

<u>Electrical Upgrades for New Technology</u> – Funds are requested to provide additional electrical outlets and power to service additional needs, driven by new technology in our schools.

Engineering – Funds are requested for professional engineering fees to implement capital projects.

<u>Energy Conservation</u> – Funds are requested to implement minor energy conservation upgrades.

<u>Fence and Guardrail Repairs</u> – Fences and guardrails on school sites frequently sustain damage during the year. Funds are requested for repair or replacement as necessary, and to install new fences when the need arises.

Furniture Replacement – Funds are requested to begin replacing aging furniture at the schools.

<u>HVAC/Energy Management Upgrades</u> – Funds are requested to upgrade heating, ventilating and air conditioning equipment, and control system components.

<u>Landscaping</u>, <u>BMP maintenance</u> – Ongoing maintenance and improvement program for landscaped areas

and storm water features at School buildings.

<u>Lead and Copper testing and remediation</u> – Funds are requested for ongoing testing for lead and copper in drinking water.

Painting and Parking Lot Striping – Funds are requested for painting and parking lot striping.

<u>Plumbing Upgrades</u> – Funds are requested to upgrade plumbing fixtures.

<u>Refinishing Gymnasium and Stage Floors</u> - Funds are requested to screen and refinish approximately 92,626 square feet of gymnasium and stage floors.

Restroom Renovations – Funds are requested to renovate existing restrooms.

<u>School Playgrounds Maintenance</u> – Funds are requested to replace and repair playground structures and surfaces.

<u>Security System Upgrades</u> –Funds are requested to upgrade and repair school security system equipment, which include cameras systems, badge access controls, keyless entry mechanisms, electronic locks and burglar alarms.

Sidewalk Repairs and Replacements – Funds are requested to repair or replace sidewalks.

<u>Smoke Detector and Fire Alarm repairs</u> – Funding is requested for the ongoing repair and replacement of smoke detectors and fire alarm systems.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Sustainability in construction involves "cradle to grave" consideration of the environmental impact of our maintenance and construction activities. We consider from the "cradle" the source and materials selection of low emissions, recycled and local materials, to the "grave" analysis of whether materials used can be recycled at the end of their useful life. Examples of Sustainability decisions in SCH-1 include: low VOC paint and carpeting, all water-based paints, water-based adhesives, recycled rubber playground surfacing, locally sourced engineered wood fiber, and our use of construction materials waste stream where recyclable materials are separated. Also, energy efficiency upgrades in lighting and HVAC systems, including heat pumps and LED lighting, and the safe removal and disposal of hazardous materials like asbestos, lead, and mercury.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$950,000	\$950,000
2025	\$1,000,000	\$1,000,000
2026	\$1,045,000	\$1,045,000
2027	\$1,095,000	\$1,095,000
2028	\$1,130,000	\$1,130,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: School - Projects by Building

SCH-2

Department Priority Ranking: 1TM's Rec. for FY24: \$388,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$388,000

Submitted by: Magda Parvey, Ed.D./

Janet Nicosia, Director

Department: School and Facilities Depts.

Funding Source: General Fund Revenue

FY23 Dept. Request for FY24: \$948,000

Project Description:

	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
Andover High restroom renovations		\$28,000	\$29,500	\$31,000	\$32,500	\$34,000
Andover High carpet/flooring replacement		\$50,000	\$50,000	\$50,000	\$60,000	\$60,000
Andover High classroom renovations; flooring, paint, ceilings, lighting		\$40,000	\$45,000	\$45,000	\$45,000	\$50,000
Andover High School-Collins Center replace electrical panel			\$60,000			
Andover High Band Room Cabinets				\$100,000		
Andover High Tennis Court shade structure		\$25,000				
Doherty Middle restroom renovations		\$55,000	\$60,000	\$60,000	\$65,000	\$65,000
Doherty Middle rubber floor replacement in adaptive gym			\$70,000			
Doherty Middle furniture replacements; desks, chairs, lab tables, stools		\$55,000	\$55,000	\$60,000	\$60,000	\$65,000
Doherty paint gym and complete acoustic tiles				\$65,000		
Doherty Middle add high velocity fans to gym				\$50,000		
Doherty Middle classroom cabinetry replacements			\$50,000	\$50,000	\$50,000	\$50,000

1						
	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
Doherty Middle replace cafeteria floor			\$75,000			
Sanborn Elementary classroom counters replacements		\$35,000	\$40,000	\$40,000	\$45,000	\$45,000
School Administration restroom renovations					\$60,000	\$60,000
South Elementary bathroom renovations.		\$50,000	\$55,000	\$55,000	\$60,000	\$60,000
South Elementary cafeteria floor vinyl planking			\$75,000			
West Middle door replacements			\$25,000	\$25,000	\$25,000	\$25,000
West Middle window replacements			\$30,000	\$30,000	\$30,000	\$30,000
West Middle cabinetry upgrade		\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
West Middle restroom renovation			\$60,000	\$60,000	\$60,000	\$60,000
Wood Hill/High Plain add expansion joints to floor Wood Hill/High Plain kitchen			\$50,000	\$50,000		
roll down door replace with solid door				\$60,000		
Wood Hill/High Plain library carpet replacement					\$50,000	
Wood Hill/High Plain Phase 1; reconfigure parking entrance and sidewalk					\$100,000	
Wood Hill/High Plain concrete repairs at back of building, add						
trees and landscape in basketball area			\$150,000			
Totals		\$388,000	\$1,029,500	\$881,000	\$792,500	\$654,000

Project Justification and Purpose:

<u>Andover High School restroom renovations</u> – Funds are requested to continue renovating one restroom each year.

 $\underline{Andover\ High\ School\ carpet/flooring\ replacement}-Funds\ are\ requested\ to\ replace\ carpeting\ and\ other\ flooring\ within\ the\ school.}$

<u>Andover High School classroom renovations</u> – Funds are requested for classroom renovations such as flooring, painting, ceiling replacements and lighting upgrades.

<u>Andover High School Collins Center</u> – Funds are requested to replace the electrical panel in the Collins Center.

<u>Andover High School Band Room cabinets</u> – Funds will be requested to replace the equipment storage cabinets in the Band Room at Andover High School.

<u>Andover High School Tennis Courts shade structure</u> – Funds are requested to install a shade structure at the tennis courts.

<u>Doherty Middle School restroom renovations</u> – Funds are requested to continue renovating one restroom each year.

<u>Doherty Middle School rubber floor replacement</u> – Funds are requested to replace the rubber floor in the adaptive gymnasium.

<u>Doherty Middle School furniture replacement</u> – Funds are requested to replace desks, chairs, lab tables and stools. The existing furnishings are quite old and have been repaired many times.

<u>Doherty Middle School gym improvements</u> – Funds will be requested to paint the gymnasium and complete installation of acoustic wall panels.

<u>Doherty Middle School add high velocity fans to gymnasium</u> – Funds will be requested to add high velocity fans to improve air circulation in the gymnasium.

<u>Doherty Middle School classroom cabinetry replacements</u> – Cabinetry in the classrooms at Doherty Middle School are aged and in need of replacement. Funding is requested to begin a classroom cabinetry replacement project.

Doherty Middle School cafeteria floor replacement – Funds will be requested to replace the floor in the cafeteria.

<u>Sanborn Elementary School classroom counters replacements</u> – Funds are requested to replace the countertops in classrooms at Sanborn Elementary School. These replacements will be phased over a number of years until complete.

<u>School Administration restrooms</u> – Funds will be requested to renovate the restrooms on the second and third floors of the Central Offices building. These restrooms are heavily used and are worn and dated.

<u>South Elementary School restroom renovations</u> – The restrooms at South Elementary are in need of upgrades. Funds are requested to renovate two restrooms per year.

<u>South Elementary School cafeteria floor replacement</u> – Funds are requested to replace the existing flooring in the cafeteria with new vinyl planking.

<u>West Middle School door replacements</u> – Funds will be requested to begin a program of replacing doors at West Middle School over the course of several years. This project is expected to commence in FY2025.

<u>West Middle School window replacements</u> – Funds will be requested to begin a multi-phased project of replacing the windows at West Middle School.

<u>West Middle School classroom cabinetry replacements</u>— Cabinetry in the classrooms at West Middle School are aged and in need of replacement. Funding is requested to begin a classroom cabinetry replacement project.

<u>West Middle School restroom renovations</u> – Funds will be requested to begin a program of renovating one restroom each year.

<u>Wood Hill/High Plain add expansion joints to floor</u> – Funds will be requested to add expansion joints to VCT flooring where cracking occurs.

<u>Wood Hill/High Plain replace kitchen roll down door with solid door</u> – Funds will be requested to replace the roll down door in the kitchen, which is an open grate style, with a solid door to create a sound barrier.

<u>Wood Hill/High Plain library carpet replacement</u> – Funds will be requested to replace the carpeting in the Wood Hill/High Plain library.

<u>Wood Hill/High Plain create additional parking – Phase one</u>: – Funds will be requested to reconfigure a parking lot entrance and entry sidewalk as phase one of a two phase approach to create additional parking.

<u>Wood Hill/High Plain concrete repair and landscaping</u> – Funds will be requested to make repairs to the concrete at the back of the building, as well as to landscape the basketball court area, including the planting of trees.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Sustainability in construction involves "cradle to grave" consideration of the environmental impact of our maintenance and construction activities. We consider from the "cradle" the source and materials selection of low emissions, recycled and local materials, to the "grave" analysis of whether materials used can be recycled at the end of their useful life.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$388,000	\$388,000
2025	\$1,029,500	\$1,029,500
2026	\$881,000	\$881,000
2027	\$792,500	\$792,500
2028	\$654,000	\$654,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2024 – FY2028

PROJECT REQUEST: Major School Projects

SCH-5

Department Priority Ranking: 1TM's Rec. for FY24: \$1,125,000

(1 = highest, 2 = second highest, etc.)
Original Dept. Request: \$1,125,000

Submitted by: Magda Parvey, Ed.D./

Janet Nicosia, Director

Department: School and Facilities Depts. **Funding Source:** General Fund Borrowing

FY23 Dept. Request for FY24: \$2,900,000

Project Description:

	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
Andover High Central Heating Plant upgrade or temp boiler hookups		\$150,000				
Andover High Collins Center auditorium seating upgrades				\$300,000		
Andover High flooring abatement and replacement Andover High powerwash, seal and paint Field House metal roof		\$100,000		\$150,000		
Bancroft School motorized gymnasium wall			\$250,000			
Bancroft School change field to turf field		\$600,000				
Bancroft rubberize two playground surfaces					\$600,000	
Doherty Middle replacement of air handlers in the main building			\$400,000			
Doherty Middle wall unit heaters						\$80,000
Doherty Middle replace ceilings and lighting in hallways and second floor, remove slats.			\$250,000			
Doherty Middle repointing, power washing and masonry sealing.			\$150,000			

	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
Doherty Middle audit for air						
conditioning. Design, and estimate construction.					\$100,000	
DMS accessibility upgrades					\$100,000	
to the biology and chemistry						
labs.					\$150,000	
Sanborn Elementary HVAC						
replacement to heat pumps,						
possible geothermal for net			+=			
zero system			\$7,000,000			
Sanborn Elementary						
demolition and removal of						
modular classrooms			\$150,000			
Sanborn Elementary						
construct ADA accessible			Φ50,000		Ф.400.000	
ramp to rear field			\$50,000		\$400,000	
Sanborn Elementary School new playground. Design, then						
construction.						
			\$100,000		\$1,000,000	
Sanborn Elementary replace						
remaining concrete walkways				\$200,000		
Sanborn locker replacement						\$300,000
School Administration						
windows replacement.						
Design, and estimate						¢1.50.000
construction. School Administration rubber						\$150,000
stair treads and ADA						
handrails						\$800,000
School-wide code compliance						4000,000
for school sprinkler systems.						
Feasibility then estimate						
construction.			\$50,000		\$5,000,000	
South Elementary School						
paving & concrete			\$800,000		\$900,000	
South Elementary concrete					Í	
and masonry repairs, cleaning						
and sealing; walls, sills,						
sidewalk and entry			\$175,000			
South renovate teachers'						
lounge and adjoining areas:						
flooring, paint, ceiling,			\$100,000			
cabinetry, lighting.			\$100,000			

	Priority	FY2024	FY2025	FY2026	FY2027	FY2028
South Elementary lockers replacement						\$200,000
South Elementary playgrounds. Design, then construct.					\$100,000	\$1,000,000
South Elementary masonry cleaning, paint metal at gym		\$125,000				
West Middle Partial Air Conditioning Construction				\$4,000,000		
West Middle Air Conditioning in cafeteria						\$600,000
West Middle Hart room HVAC			\$400,000			
West Middle renovation of office, counters and HVAC			\$600,000			
West Middle porous pavement fire road West Middle exterior				\$250,000		
masonry front plaza redevelopment/reconstruction		\$150,000				
West Middle science room renovations. Design, then construction.			\$100,000	\$1,000,000		
Wood Hill/High Plain expand artificial turf						\$100,000
Totals		\$1,125,000	\$10,575,000	\$5,900,000	\$8,250,000	\$3,230,000

Project Justification and Purpose:

Andover High School Central Heating Plant – Funds are requested to make improvements to the existing heating system including temporary boiler hookups.

<u>Andover High School Collins Center seating upgrades</u> – Funds will be requested to replace the worn seating in the Collins Center auditorium.

<u>Andover High School flooring abatement and replacements</u> – Funds will be requested to abate and replace flooring in areas of expansion joints in various corridors throughout the school.

<u>Andover High School Field House</u> – Funds are requested to power wash, seal and paint the metal roof on the Andover High School Field House.

<u>Bancroft Elementary School motorized gymnasium wall</u> – Funds will be requested to replace the manual divider wall with a motorized divider wall. The existing divider wall is difficult to operate and often gets stuck.

<u>Bancroft Elementary School artificial turf</u> – Funds are requested to replace the existing sports field with artificial turf.

<u>Bancroft Elementary School playgrounds</u> – Funds will be requested to install rubber surfacing on two of the playgrounds at Bancroft Elementary school.

<u>Doherty Middle School Replacement of six main air handlers in the main building</u> – Funds will be requested to replace these units, which are original equipment from construction of the building.

<u>Doherty Middle School wall unit heaters</u> – Funds will be requested to replace wall unit heaters.

<u>Doherty Middle School ceilings and lighting replacements</u> – Funds will be requested to remove the slatted ceilings and replace them, along with the lighting in the second floor hallways.

<u>Doherty Middle School masonry maintenance</u> – Funds will be requested to repoint, power wash and seal the exterior masonry at Doherty Middle School.

<u>Doherty Middle School audit for air conditioning</u> – Funds will be requested for an air conditioning audit and design. Future funding will be requested for the construction phase of this project.

<u>Doherty Middle School accessibility upgrades</u> – Funds will be requested to bring the biology and chemistry labs into compliance with the Americans with Disabilities Act.

<u>Sanborn Elementary construction for new heating and air conditioning</u> – Design funds were approved in FY2021 for new heating and air conditioning. Construction funds will be requested in a future CIP.

<u>Sanborn Elementary School demolition and removal of the modular classrooms</u> – The modular building was installed in the year 2000 as a temporary structure and has reached the end of its useful life. Funds will be requested to demolish and remove this building.

<u>Sanborn Elementary ADA accessible ramp to rear field</u> – Funds are requested to design, then construct an ADA compliant ramp to access the rear field.

<u>Sanborn Elementary new playground</u> – Funds will be requested to construct a new ADA compliant playground at the school.

<u>Sanborn Elementary walkways replacement</u> – Funds will be requested to replace the remaining concrete walkways at Sanborn Elementary school.

<u>Sanborn Elementary lockers replacement</u> – Funds will be requested to replace the student lockers at Sanborn School. The current lockers have reached the end of their useful purpose.

<u>School Administration building windows replacement</u> – Funds will be requested for design, then construction of a window replacement project in the Central Offices building second and third floors. The first-floor windows were replaced during The Robb Center renovation.

<u>School Administration building stairwells improvements</u> – Funds will be requested to install ADA compliant handrails in the stairwells in the School Administration building, as well as to retread the existing stairways with new rubber treads.

<u>School-wide code compliance</u> – Funds are requested to remedy code compliance issues in Andover school buildings by installing, or making necessary improvements to sprinkler systems district wide.

<u>South Elementary School paving</u> – Funds are requested to phase in site redevelopment at South School. The project is phased due to the scheduling complexity in the school which houses summer programs.

<u>South Elementary School concrete and masonry repairs</u> – Funds are requested to complete concrete and masonry repairs, cleaning and sealing to the walls, sills, sidewalks and entry at South Elementary school.

<u>South Elementary School teachers' lounge renovation</u> – Funds are requested to make necessary improvements, including flooring, paint, ceiling, cabinetry and lighting to the teachers' lounge and adjoining areas at South Elementary school.

<u>South Elementary School lockers</u> – Funds will be requested to replace the student lockers at South Elementary School. The current lockers have reached the end of their useful purpose.

<u>South Elementary playgrounds</u> – Funds will be requested to construct new ADA compliant playgrounds at South Elementary school.

<u>South Elementary School masonry cleaning, paint metal</u> – Funds are requested to clean the masonry and metal, and paint the metal at the gym.

<u>West Middle School air conditioning</u> – Funds will be requested for the construction phase of a partial air conditioning project at West Middle School.

<u>West Middle School cafeteria air conditioning</u> – Future funding will be requested to air condition the cafeteria portion of West Middle School.

<u>West Middle School Hart Room air conditioning</u> – Funds are requested to install air conditioning in the Hart Room at West Middle School.

<u>West Middle School main office renovation</u> – Funds will be requested for the construction phase of the West Middle school office renovation. FY2023 funding for the design phase of this two-phase project was approved at Town Meeting 2022. HVAC improvements will be included in this project.

West Middle School porous pavement – Funds will be requested to replace the porous pavement fire road.

<u>West Middle School front plaza masonry reconstruction</u> – Funds are requested to redevelop and reconstruct the exterior masonry at the front plaza at West Middle School.

<u>West Middle science room renovations</u> – Funds are requested for the design to renovate the West Middle school science room. This will be a two-phase project with design, then construction to follow two years

later to allow adequate time for the design phase.

<u>Wood Hill/High Plain playground</u> – Funds will be requested to replace and expand the artificial turf area of the playground at Wood Hill Middle/High Plain Elementary.

Cost Estimate & Timing:

Estimated Annual Operating/Maintenance Cost or Savings:

Sustainability:

Sustainability in construction involves "cradle to grave" consideration of the environmental impact of our maintenance and construction activities. We consider from the "cradle" the source and materials selection of low emissions, recycled and local materials, to the "grave" analysis of whether materials used can be recycled at the end of their useful life.

Town Manager's Recommendation:

The Town Manager supports funding the FY24 request.

Fiscal Year	Dept. Request	Town Manager Recommendation
2024	\$1,125,000	\$1,125,000
2025	\$10,575,000	\$10,575,000
2026	\$5,900,000	\$5,900,000
2027	\$8,250,000	\$8,250,000
2028	\$3,230,000	\$3,230,000

SECTION 4



CIP Bylaw, Definitions, and Financial Policies

BYLAW, DEFINITIONS, AND FINANCIAL POLICIES

Town of Andover General By-laws

Miscellaneous - Article XII, § 34.

CAPITAL IMPROVEMENT PROGRAM. [AMENDED 4-2-1991, ART. 37]

- (a) Preparation and submission. The Town Manager annually shall prepare, with the assistance of the Town Planning Board, a five-year capital improvement program. At the request of the Town Manager, all town boards, committees, commissions and other agencies of the town shall submit to the Manager, in such form and according to such schedule of time as the Manager may require, detailed statements of capital improvements requested for their respective boards, committees, commissions and agencies during the next five fiscal years. The Manager shall submit the five-year capital improvement program to the Select Board at least three months prior to the final date for submission of the annual budget as prescribed by Town Bylaw. Concurrently, copies of the capital improvement program shall also be transmitted to the Finance Committee and School Committee. The capital improvement program shall include:
 - (1) A clear general summary of its contents;
 - (2) A list of all capital improvements which are proposed to be undertaken during the five fiscal years ensuing, with appropriate supporting information as to the necessity for such improvements;
 - (3) Cost estimates, method of financing and recommended time schedules for each such improvement; and
 - (4) The estimated annual cost of operating and maintaining any facilities to be constructed or acquired.

The above information may be revised and extended each year with regard to capital improvements still pending or in process of construction or acquisition.

- (b) Action on capital improvement program:
 - (1) Notice and hearing. The Select Board shall cause to be published in one or more newspapers of general circulation in the town the general summary of the capital improvement program and a notice stating: (a) the times and places where copies of the capital improvement program are available for inspection; and (b) the time and place, not less than two weeks after such publication, for a public hearing on the capital improvement program.
 - (2) (Meeting with Finance Committee.) After the public hearing but at least 10 days before adoption of the capital improvement program, the Select Board shall meet and confer with the Finance Committee concerning the program.

Adoption. The Select Board by resolution shall adopt the capital improvement program with or without amendment after the public hearing and after conferring with the Finance Committee, at least one month before the required date for submission of the annual budget by the Town Manager.

A. FISCAL POLICIES/GENERAL FUND

- 1. All current operating expenditures will be paid for with current operating revenues. The purpose of this policy is to maintain a financially sound operating position for the town by promoting Andover's ability to 1) balance its budget on a current basis, 2) maintain reserves for emergencies, and 3) have sufficient liquidity to pay bills on time to avoid short-term borrowing costs. The town will avoid budgetary procedures that balance current expenditures at the expense of meeting future years' expenses, such as postponing expenditures, accruing future years' revenues or rolling over short-term debt.
- 2. The combined balance of Free Cash and Stabilization Fund should be maintained at 3%-7% of general fund operating revenues.
 - a. The Town will endeavor to maintain a certified Free Cash balance equal to 3% 7% of general fund. The Free Cash balance is an important indicator of whether a town is living within its means. A declining balance means that the town is spending more on an annual basis than it is collecting in revenues. Andover's goal is to maintain its Free Cash balance at 3% 7% as a reserve which can be tapped in case of emergency and to provide enough cash in the bank to meet payrolls and pay the bills without having to borrow in anticipation of taxes. Together with the Stabilization Fund the 3-7% goal is a widely accepted measure of good financial standing and a factor in Andover's bond rating.

Free Cash provides a financial cushion against events such as a sudden loss of a revenue source, an economic downturn, emergency or other unanticipated expenditures, non-recurring capital expenditures and uneven cash flow. A constant decline or a low level of Free Cash indicates a problem in meeting current expenditures and revenue targets, subsidizing the current operating budget, or utilizing reserves for purposes not planned. A sudden decline in free cash may be temporary or related to planned purposes.

- b. The Town will endeavor to maintain a Stabilization Fund. Funds held in Stabilization may be appropriated for one-time capital expenses only. The Town may appropriate monies into the Stabilization Fund over two or more years for a specific planned capital project in order to avoid borrowing costs.
- 3. Free Cash in excess of goal should be used for non-recurring or emergency expenditures or appropriated to a stabilization fund for future capital projects and equipment purchases. This goal, combined with Policy 2, will provide a strategy to avoid creating future operating deficits by over reliance on Free Cash to subsidize the operating budget. The policy should allow, once a reasonable level of Free Cash is attained, for a contingency reserve (either appropriated or unappropriated) to be used for expenditures of a non-recurring nature, capital and equipment purchases, or unexpected, nonrecurring small increases in public service costs.

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Fiscal Year	Certified Free Cash Going into Town Meeting	Free Cash as % of Budget	Amount Spent by Town Meeting	Amount Remaining after Town Meeting
2012	1,239,055	0.9%	0	1,239,055
2013	4,073,271	2.6%	3,180,966	892,305
2014	3,963,320	2.4%	3,300,000	663,320
2015	5,761,265	3.3%	4,821,083	940,182
2016	4,843,241	2.9%	3,793,000	1,050,241
2017	5,062,537	2.9%	1,825,000	3,237,537
2018	8,912,647	4.9%	2,714,000	6,198,647
2019	8,807,910	4.9%	3,610,000	5,197,910
2020	9,563,348	5.2%	3,428,870	6,134,478
2021	9,360,482	4.84%	3,628,652	5,731,830

5. Annual budget should include a Capital Projects Fund from current dollars to maintain an equipment replacement and facilities maintenance schedule equal to 2% of General Fund Operating Budget. Much of

- the Town's government wealth is invested in our capital plant i.e. buildings, fields, infrastructure, equipment, and vehicles. Long-term debt is an appropriate source of funding for certain types of projects while current revenues should be used for those assets with a short useful life.
- 6. Annual budget should include 20% of the property taxes from new growth/construction and should be allocated to capital projects fund. This goal will provide for a source of funding that does not compete with the operating budget but increases or decreases in relation to growth in the budget and growth in the community.
- 7. Fees and user charges should be reviewed annually in relation to the costs of providing the service. As State and Federal assistance has declined and/or been eliminated, the Town's local non-property tax revenue base has provided more funding for local services. In order to continue to provide these services without an additional burden on the property tax, these fees should be reviewed to cover, when appropriate, any cost increase or decrease associated with delivering that program or service.
- 8. When positions are funded with grants or user fees, the budget for the use of those revenues should include a transfer to the General Fund to cover employee health insurance costs.

B. FISCAL POLICIES - WATER & SEWER

- Rates and fees for water and sewer funds should be set at a level to provide for self-supporting operations.
 The water and sewer funds should be reviewed annually to project revenues and expenditures for the next
 fiscal year, estimates of current year, and projections for future years. Estimates of capital projects and debt
 service should be included in order to project the impact on water or sewer rates. Any water or sewer costs
 not supported by user revenues or betterments would place a requirement on the General Fund for financial
 support.
- 2. Betterments will be assessed for water and sewer extensions. In line with Policy 1, water and sewer projects that are extensions on the existing system will be assessed to the property owner according to the betterment formula for water and sewer.
- 3. Water and sewer main replacements should be scheduled so as to avoid major increases in water and sewer rates. The current water and sewer funds are established as self-supporting on a cash basis. Revenues are planned to cover operating budgets, indirect and overhead costs, and debt service payments. Depreciation is not funded, therefore, a carefully designed replacement plan is necessary to ensure a rate structure adequate to pay all costs including proposed new long-term debt.
- 4. Water and sewer debt service should not exceed 40% of water and sewer operating revenues. Water and sewer capital plan should attempt to invest in the town's water and sewer system at a rate that does not place dramatic increases on the ratepayer. One method for accomplishing this objective is to relate debt service to operating revenues at the 1994 fiscal year base level. This practice would allow increased investment in the Town's enterprises but in proportion to revenue increases.

C. CAPITAL PLANNING POLICIES

1. General

<u>CAPITAL PROJECT/ITEM</u>: An expenditure of \$15,000 or more with a useful life greater than one year for one of the following purposes:

- Acquisition of land;
- Construction, expansion or renovation of a facility. Facilities include buildings, streets, bridges, sidewalks, parking lots, utilities, playing fields, cemeteries, playgrounds, etc.;
- · Acquisition of large capital items including vehicles, technology, communication equipment, etc;
- Facility maintenance projects including roof repair, HVAC, electrical, masonry, painting, carpeting, street resurfacing, sidewalk reconstruction, playground equipment/major repairs;
- Planning, feasibility, engineering or design studies related to a capital project.

CRITERIA FOR SETTING PRIORITIES:

- <u>Highest priority</u> Projects/items essential to protecting the health/safety of the public, employees and school children; Projects essential to protecting public and private property.
- <u>Second highest priority</u> Projects/items without which an existing or critically needed service cannot be properly delivered in terms of quality or dependability.
- <u>Third highest priority</u> Projects/items that produce a cost savings to the Town by reducing future replacement or operating costs; Projects that are responsive to the desires of a significant segment of the

community.

FUNDING SOURCES:

- <u>Borrowing</u> Projects/items of \$25,000 or more with a useful life of at least 10 years may be considered for borrowing. The sources of revenues to support Borrowing are:
 - o General Fund Within Proposition 21/2;
 - Sewer Enterprise Fund and Water Enterprise Fund;
 - General Fund With Debt Exclusion Vote.
- <u>Pay-As-You-Go (PAYGO)</u> Projects/items of \$15,000 or more with a useful life of at least 5 years may be considered for PAYGO funding. The sources of Pay-As-You-Go funds are:
 - Capital Project Fund supported by General Fund Revenues;
 - Water and Sewer Reserves, Cemetery Receipts, Parking Receipts, Field Rental Receipts; and Cable Franchise Fee Receipts;
 - o General Fund Capital Outlay Exclusion;
 - o Free Cash warrant articles.
- <u>Departmental Operating Budget</u> Projects/items of less than \$15,000 with a useful life of greater than one year may be considered for funding in departmental operating budgets. The sources of revenues to support Operating budgets are:
 - General Fund
 - Water and sewer reserves, cemetery receipts, parking receipts, and rental receipts;
 - Departmental revolving receipts
- 2. The annual operating cost of a proposed capital project, as well as debt service costs, will be identified before any long-term bonded capital project is recommended. Capital projects may increase future expenses, decrease future expenses or may be cost-neutral. The funding of capital projects may fall within available revenues (taxes or fees) or new revenue sources (debt or capital exclusions). It is important to project the impact that the proposed capital project has on the operating budget so that operating budget funding sources could also be identified or new funding sources recommended.
- 3. Capital projects should be reviewed in relation to impact on property tax limitation and annual operating budgets.
 - a. Projects funded with current tax revenues should identify the impact on the annual operating budget.
 - b. Projects funded with long-term debt and <u>not exempted</u> from Proposition 2 ½ should identify the impact on annual operating budgets.
 - c. Projects funded with long-term debt and <u>exempted</u> from Proposition 2 1/2 should identify the impact on the annual tax rate and/or tax bill. (Debt Exclusion)
 - d. Projects funded with <u>capital exclusion</u> should identify the impact on current annual tax rate and/or tax bill. (Capital Expenditure Exclusion)
- 4. Funding for discretionary capital projects should be contingent on voter approval of either a debt exclusion or capital expenditure exclusion so that the limited resources available within Proposition 2½ remain available for Town and School operating needs and essential capital projects. Non-discretionary projects are those needed to protect health and safety or to meet legal mandates. Debt Exclusions or Capital Expenditure Exclusions may also be considered for non-discretionary projects on a non-contingent basis.

D. DEBT MANAGEMENT POLICIES

- Long-term debt should not be incurred without a clear identification of its financing sources. Long-term debt
 is generally utilized to fund capital projects that have a long useful life and are relatively expensive. Because
 of the debt service costs and annual appropriations necessary to retire this debt, there should be clear
 knowledge and commitment of revenue sources available to pay these costs without competing with
 operating budgets for limited resources. See Financing Options and Capital Planning policies for further
 discussion.
- 2. Betterments will be assessed on all capital projects where applicable. (e.g. water, sewer, street, sidewalks, etc.) When specific benefits accrue to property owner(s), betterments will be assessed in accordance with State Statutes and local policies. This funding source will contribute all or a portion of the costs associated with the capital project.
- 3. General Fund debt service will not exceed 10% of General Fund revenues. The credit rating agencies, such as Moody's Investors Services, consider debt service on net direct debt (i.e. non-self supporting) exceeding 20% of net operating revenues as a potential problem. Dramatic increases in debt service also indicate

- potential problems unless revenue sources increase to keep pace with these additions to fixed costs. The 10% benchmark provides a policy to apply to new projects and the growth of revenues to finance such projects.
- 4. The Town will attempt to maintain a long-term debt schedule so that at least 50% of outstanding principal will be paid within 10 years. Debt service costs include annual principal and interest payments. Debt service costs are also a significant portion of fixed costs. A reasonable maturity schedule not only reduces interest costs but recognizes that capital needs will continue to be identified and recommended. Credit rating bureaus review these maturity schedules and future capital needs.

Debt Service Fund

The Debt Service Fund provides the appropriation for the Town's annual principal and interest costs associated with various capital construction projects. The projects are funded by the issuance of tax-exempt bonds. The Water and Sewer Enterprises pay for its debt service from user fees and betterments.

SECTION 5



Three Year Capital History

	Actual FY2021	Actual FY2022	Actual FY2023	TM Rec FY2024	Grand Total	Funding Source
FINANCE	\$0	\$0	\$45,000	\$0	\$45,000	
MUNIS Financial Software Improvements			\$15,000		\$15,000	Taxation
Patriot Assessing Software Upgrade			\$30,000		\$30,000	
TOWN MANAGER	\$2,210,000	\$970,000	\$880,000	\$20,000	\$4,060,000	
Town Offices Meeting Room & Public Access Improvements	\$625,000	. ,	. ,	. ,	\$625,000	Free Cash
Sidewalk Program	\$950,000	\$950,000	\$850,000		\$2,750,000	Borrow
Tree Management Fund	\$125,000				\$125,000	Free Cash
Merrimack River Access Way	\$510,000				\$510,000	Free Cash
Participatory Capital Budgeting		\$20,000	\$30,000	\$20,000	\$50,000	Taxation
COMMUNITY DEVELOPMENT & PLANNING	\$20,000	\$570,000	\$35,000	\$65,000	\$625,000	
Conservation Land Management		. ,	\$15,000	. ,	\$15,000	Taxation
Historic Mill District Circulation & Street Design		\$500,000	, ,,,,,,		\$500,000	Borrow
Historic Mill District Feasibility Study/Services Land Disp	\$20,000	,,,,,,,,			\$20,000	Taxation
Master Plan Compliation and Completion	,	\$30,000			\$30,000	Taxation
Shawsheen River Master Plan		\$40,000			\$40,000	Taxation
Review of Andover Wetlands Protection By-Law		7.0,000	\$20,000		\$20,000	Taxation
Active Transportation Plan			Ψ20,000	\$40,000	\$0	Special Dedicated Funds
Improving Kiosks, Signage, and Interpretive Panels				\$25,000	\$0	Taxation
SUSTAINABILITY	\$0	\$47,000	\$40,000	\$0	\$87,000	TUMETON
Climate and Sustainability Action Plan	Ψ	\$47,000	\$40,000	Ψ	\$87,000	Taxation
LIBRARY	\$50,000	\$225,000	\$0	\$0	\$275,000	Taxation
Circulation Desk Replacement	\$35,000	φ225,000	Ψ	φυ	\$35,000	Taxation
Makerspace Design & Construction	\$15,000	\$225,000			\$240,000	Taxation/Borrow
INFORMATION TECHNOLOGY	\$902,108	\$1,733,372	\$1,270,340	\$1,064,128	\$3,905,820	Taxation/ Bollow
Annual Student PC Replacement/Lease Program	\$200,000	φ1,733,372	φ1,270,540	\$1,004,120	\$200,000	Cable
Annual Student PC Replacement/Lease Program	\$240,086				\$240,086	Taxation
Annual Student PC Replacement/Lease Program	\$240,000	\$418,128	\$436,477	\$257,890	\$854,605	Free Cash
Annual Staff PC Replacement/Lease Program	\$362,022	\$410,120	\$430,477	\$237,690	\$362,022	Taxation
Annual Staff PC Replacement/Lease Program	\$302,022	\$627,744	\$379,363	\$456,238	\$1,007,107	Free Cash
IT Platform and Infrastructure		\$687,500	\$454,500	\$430,236	\$1,007,107	Free Cash
IT Platform and Infrastructure	\$100,000	\$067,500	\$454,500		\$100,000	Taxation
	\$100,000			\$300,000	\$100,000	Borrow
IT Infrastructure						
Document Digitization POLICE	\$527,000	\$255,000	\$205,000	\$50,000	\$0 \$987,000	Taxation
			\$205,000	\$245,000		T
Vehicle Replacement	\$195,000	\$205,000	#205 000	¢205 000	\$400,000	Taxation
Vehicle Replacement	¢222.000		\$205,000	\$205,000	\$205,000	Free Cash
Public Safety CAD/RMS System	\$332,000	#50.000			\$332,000	Taxation
Mobile Camera Trailer System		\$50,000			\$50,000	Taxation
Accident Reconstruction Mapping Systems GNSS				\$40,000	\$0	Taxation
FIRE	\$1,121,000	\$648,000	\$345,000	\$1,160,000	\$2,114,000	_
Fire Apparatus Replacement	\$725,000	\$360,000		\$975,000	\$1,085,000	Borrow
Fire Apparatus Replacement			\$145,000		\$145,000	Free Cash
Public Safety Microwave Communications System		\$200,000			\$200,000	Borrow
Bi-Directional Amplifier System	\$300,000				\$300,000	Taxation
SCBA Air Compressor System	\$96,000				\$96,000	Taxation
Radio Box Repeater System		\$38,000		\$165,000	\$38,000	Taxation
Multiband Portable Radios		\$50,000			\$50,000	Taxation
Multiband Portable Radios			\$200,000	\$20.000	\$200,000	Borrow

Three Year Capital History

PUBLIC WORKS	\$2,659,279	\$2,179,279	\$2,184,279	\$2,952,126	\$7,022,837	
Major Annual Road Maintenance	\$1,364,279	\$1,364,279	\$1,364,279	\$1,395,126	\$4,092,837	Chapter 90
Minor Sidewalk Repairs	\$200,000				\$200,000	Taxation
Minor Sidewalk Repairs		\$250,000	\$250,000	\$250,000	\$500,000	Free Cash
Highway Vehicles - Small	\$120,000	\$145,000	\$150,000	\$82,000	\$415,000	Taxation
Highway Vehicles - Large	\$580,000	\$400,000	\$400,000	\$455,000	\$1,380,000	Borrow/Free Cash
Minor Storm Drain Improvements	\$300,000				\$300,000	Borrow
Spring Grove Cemetery Improvements	\$20,000	\$20,000	\$20,000	\$20,000	\$60,000	Taxation
Two Way Radio System Phase 2	\$75,000				\$75,000	Taxation
Town Sidewalk Program				\$750,000	\$0	Free Cash
WATER/SEWER ENTERPRISE	\$8,549,350	\$9,375,000	\$6,560,000	\$13,360,000	\$24,484,350	
Water/Sewer Vehicles	\$225,000	\$125,000	\$350,000		\$700,000	Reserves
Hydrant Replacement Program	\$100,000				\$100,000	Reserves
Major Water Main Replacement	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$18,000,000	Borrow
Water Treatment Plant GAC Replacement	\$450,000				\$450,000	Reserves
Water Treatment GAC Replacement				\$560,000	\$0	Borrow
Minor Sanitary Sewer Collection System Improvements	\$50,000	\$100,000			\$150,000	Reserves
Date Street Pumping Station Replacement			\$210,000		\$210,000	Reserves
Inflow/Infiltration Removal Program	\$150,000	\$150,000		\$300,000	\$300,000	Sewer Reserves
Shawsheen Pump Station	\$1,574,350				\$1,574,350	Borrow
WTP Generator		\$2,500,000			\$2,500,000	Borrow
Fish Brook Intake Replacement		\$500,000			\$500,000	Borrow
WTP Scada System Upgrades				\$2,500,000	\$0	Borrow
Shawsheen River Sewer Interceptor Improvements				\$2,200,000	\$0	Borrow
Lead Service Replacements				\$1,800,000	\$0	Borrow
PLANT & FACILITIES	\$2,008,000	\$2,315,000	\$3,315,000	\$3,125,000	\$7,638,000	
Town Projects - Building	\$380,000	\$400,000	\$445,000	\$475,000	\$1,225,000	Taxation
Town Projects - Mechanical & Electrical	\$280,000	\$325,000	\$345,000	\$420,000	\$950,000	Taxation
Town Vehicle Replacement	\$35,000	\$70,000	\$65,000	\$105,000	\$170,000	Taxation
Major Town Projects	\$825,000	\$605,000	\$1,600,000	\$900,000	\$3,030,000	Borrow
Town & School Energy Initiatives	\$300,000	\$530,000	\$90,000	\$470,000	\$920,000	Borrow/Free Cash
Town & School Security Projects	\$188,000	\$125,000	\$100,000	\$130,000	\$413,000	Taxation
Town Parks and Playground Improvements			\$550,000	\$625,000	\$550,000	Borrow
Town Playground Replacements		\$260,000	\$120,000		\$380,000	Taxation
SCHOOL	\$3,430,000	\$4,010,000	\$3,021,500	\$2,463,000	\$10,461,500	
School Projects - All Schools	\$650,000	\$735,000	\$870,000	\$950,000	\$2,255,000	Taxation
School - Projects by Building	\$500,000	\$450,000	\$401,500	\$388,000	\$1,351,500	Taxation
Major School Projects	\$2,280,000	\$2,825,000	\$1,750,000	\$1,125,000	\$6,855,000	Borrow
Grand Total	\$21,476,737	\$22,327,651	\$17,901,119	\$24,454,254	\$61,705,507	

		Dollar	Percent			Percent			Percent									Percent					5 Year
PEVENIE	FY 2022	Change	Change	FY 2023	Change	Change	FY 2024	Change	Change	FY 2025	Change	Change	FY 2026	Change	Change	FY 2027 (Change	Change	FY 2028	Change	Change	Average	Average
A. Property Taxes																							
Prior Year Levy	157,043,309	6,511,689	4.33%	162,894,020	5,850,711	3.73%	169,062,036	6,168,016	3.79%	175,220,009	6,157,973		181,531,931	6,311,922	3.60%	188,001,651	6,469,720		194,633,114	6,631,463	3.53%	5,021,526	3.08%
2 1/2% Increase	3,926,083	162,792	4.33%	4,072,351	146,268	3.73%	4,226,551	154,200	3.79%	4,380,500	153,949	3.64%	4,538,298	157,798		4,700,041	161,743	3.56%	4,865,828	165,787	3.53%	125,538	3.08%
New Growth	1,924,628	(823,770)	-29.97%	2,095,665	171,037	8.89%	1,931,422	(164,243)	-7.84%	1,931,422	•	%00:0	1,931,422	•	%00:0	1,931,422	•	%000	1,931,422	•	%00'0	(32,849)	-1.57%
Unused Excess Levy Capacity	(435,739)	649,030	-59.83%	(186,580)	(350,841)	80.52%	(300,000)	486,580	-61.86%	(300,000)		%00'0	(300,000)		%00:0	(300,000)		%00'0	(300,000)	•	%00:0	97,316	-12.37%
Unused Levy Capacity (POB)		0	%00'0	(2,162,645)	(2, 162, 645)	100.00%	(2,326,399)	(163,754)		(2,561,253)	(224,855)		(2,777,301)	(226,048)		(3,008,916)	(231,615)		(3,246,698)	(237,783)		(169,254)	7.83%
Exempt Debt Service	3,000,574	(529,536)	-15.00%	8,656,912	5,656,338	188.51%	11,313,463	2,656,551	30.69%	11,010,340	(303, 123)	-2.68%	10,936,301	(74,039)	-0.67%	10,739,793	(196,508)	-1.80%	10,695,343	(44,450)	-0.41%	416,576	4.81%
Total Property Taxes	165,458,855	5,970,205	3.74%	174,769,723	9,310,868	9:63%	183,907,073	9,137,350	5.23%	189,691,018	5,783,945	Ì	195,860,651	6,169,633		202,063,992	6,203,341		508,579,009	6,515,017	3.22%	5,458,854	3.12%
B. State Aid	14,237,530	237,606	1.70%	14,872,497	634,967	4.46%	15,157,237	284,740	1.91%	15,447,672	290,435	1.92%	15,743,916	296,244	1.92%	16,046,085	302, 169	1.92%	16,354,297	308,212	1.92%	234,718	1.58%
C. Local Receipts	11,398,551	334,933	3.03%	11,634,191	235,640	2.07%	11,955,278	321,087	2.76%	12,099,440	144,162	1.21%	12,245,937	146,498	1.21%	12,394,775	148,837	1.22%	12,546,040	151,265	1.22%	152,117	1.31%
D. Free Cash for CIP & Articles	3,628,651	199,781	%00:0	2,364,340	(1,264,311)	-34.84%	1,919,128	1,719,347	72.72%	872,465	2,136,776	111.34%	923,439	(795,908)	-91.23%	991,675	(1,145,101) -1	-124.00%	1,008,852	1,804,760	181.99%	(274,533)	-11.61%
E Other Revenues - Indirects, Cable, Bond Prem	2,055,726	(106,364)	-4.92%	2,062,824	2,098	-0.35%	2,175,692	(4,238,516)	205.47%	2,242,571	(4,418,263)	203.07%	2,311,394	(4,553,965) 20	03.07%	2,382,644	(4,694,038) 2	203.08%	2,481,426	(4,864,070)	204.15%	63,964	3.10%
TOTAL REVENUES	196,779,313	6,636,161	3.49%	205,703,574	8,924,261	>9	215,114,408	7,224,008	3.51%	220,353,166	3,937,055	1.83%	227,085,337	1,262,502	0.57% 2	233,879,171	815,207	0.36%	240,969,623	3,915,184	1.67%	5,635,119	2.74%
																						•	
APPROPRIATIONS - Debt/Obligations/Capital																						•	
A. Capital & Debt Selvice																							
Non-Exempt Debt Service	7,992,016	767,640	10.63%	8,955,749	963,733	12.06%	8,476,564	(479, 185)	-5.35%	9,719,673	1,243,109	14.67%	11,209,363			12,408,653	1, 199, 290	10.70%	12,575,423	166,770	1.34%	690,581	7.71%
Persion Obligation Bond Non-Exempt				5,662,645	5,662,645	100.00%	5,661,399	(1,247)	-0.02%	5,662,953	1,556	0.03%	5,661,235		-0.03%	5,660,529	92	-0.01%	5,661,343	814	0.01%	(423)	-0.01%
Pension Obligation Bond Exempt				5,662,645	5,662,645	100.00%	5,661,399	(1,247)	-0.02%	5,662,953	1,556	0.03%	5,661,235		-0.03%	5,660,529	(902)	-0.01%	5,661,343	814	0.01%	(423)	-0.01%
Exempt Debt Service	3,065,537	(535,912)		3,052,853	(12,684)	-0.41%	5,704,273	2,651,420	86.85%	5,383,219	(311,054)	-5.45%	5,314,521	(78,698)	-1.46%	5,112,342	(202, 179)	-3.80%	5,060,703	(51,639)	-1.01%	411,898	13.49%
Cash Capital Outlay	3,010,000	1,098,892	57.50%	2,756,500	(253,500)	-8.42%	2,890,000	133,500	4.84%	2,225,000	(665,000)	-23.01%	1,725,000	(500,000)	-22.47%	1,875,000	150,000	8.70%	2,700,000	825,000	44.00%	(176,300)	-6.40%
Total General Fund Capital	14,067,553	1,330,620	10.45%	26,090,392	12,022,839	85.47%	28,393,634	2,303,242	8.83%	28,663,798	270,164	0.95%	29,571,354	902'206	3.17%	30,717,053	1,145,699	3.87%	31,658,812	941,759	3.07%	925,332	3.55%
B. Obligations - Fixed Costs																						•	
Retirement Esr Normal Cost	12,897,390	(712,911)	-5.24%	5,514,652	(7,382,738)	-57.24%	5,707,465	192,813	3.50%	5,960,542	253,077	4.43%	6,169,161	208,619	3.50%	6,385,081	215,920	3.50%	6,608,559	223,478	3.50%	174,086	3.16%
Retirement Est Unfunded GF Contribution				739,303	739,303		1,417,179	978,779	91.69%	1,600,196	183,017	12.91%	1,664,204		4.00%	1,730,773	692'99	4.00%	1,800,004			198,294	26.82%
Insurance/Workers Comp	1,240,000	14,079	1.15%	1,164,000	(76,000)	-6.13%	1,280,400	116,400	10.00%	1,408,440	128,040	10.00%	1,549,284		10.00%	1,704,212	154,928	40.00%	1,874,634	170,421	10.00%	108,042	9.28%
Unemployment Compensation	160,000		%00'0	164,000	4,000	2.50%	168,100	4,100	2.50%	172,303	4,202		176,610	4,308		181,025	4,415	2.50%	185,551	4,526	2.50%	3,405	2.08%
Health Insurance	24,742,244	867,230	3.59%	24,815,945	73,701	0.30%	26,056,742	1,240,797	2.00%	27,880,714	1,823,972	2.00%	30,111,171	2,230,457	8.00%	32,520,065	2,408,894	8.00%	35,121,670	2,601,605	8.00%	1,540,824	6.21%
Less: Retiree Savings To OPEB	(636)079)			(1,039,042)			(1,080,604)			(1,123,828)			(1,168,781)			(1,215,532)			(1,264,154)			(35,298)	3.40%
Less: New Employee Contribution Split	(595,703)			(742,106)			(1,141,044)			(1,168,865)			(1,197,242)			(1,210,000)			(1,240,250)			(93,579)	12.61%
Total Health Insurance	23,147,462	809,205	3.62%	23,034,797	(112,665)	-0.49%	23,835,094	800,298	3.47%	25,588,021	1,752,927	7.35%	27,745,148	2, 157, 127	8.43%	30,094,533	2,349,384	8.47%	32,617,267	2,522,734	8.38%	1,411,947	6.13%
OPEB	1,696,026			1,753,413	57,387	3.38%	1,812,834			1,874,364			1,938,081			2,004,064			2,072,399			50,130	2.86%
Total General Fund Obligations	53,208,431	1,032,627	2.00%	58,460,557	(6,639,624)	-12.48%	62,614,707	3,091,705	5.29%	65,267,664	4,206,765	%7.79	68,813,842	4,869,079			5,266,095	7.65%	76,817,225	3,518,699	4.83%	2,871,237	4.91%
C. State Assessments	827,852	93,266		1,073,498	245,646	29.67%	1,100,335	26,837	2.50%	1,127,844	27,508	2.50%	1,156,040	28, 196	2.50%	1,184,941	28,901	2.50%	1,214,564	29,624	2.50%	22,289	2.08%
D. Offset Aid - Assistance to Libraries	59,121	3,086.00		78,478	19,357	32.74%	78,478	•		78,478			78,478			78,478	•		78,478	•			0.00%
E. Technical School Assessment	800,000	000'09	8.11%	1,274,000	474,000	59.25%	1,312,220	38,220	3.00%	1,351,587	39,367	3.00%	1,392,134	40,548	3.00%	1,433,898	41,764	3.00%	1,476,915	43,017	3.00%	31,980	2.51%
F. Overlay Reserve	721,542	15,089	2.14%	000'009	(121,542)	%00:0	200,007	100,000	%00:0	000'006	200,000	%00:0	800,000	(100,000)	%00:0	800,000	•	%00:0	800,000		%00:0	40,000	6.67%
G Warrant Articles - From Taxation (Inc POB Reserve)	12,000	(14,000)	45.16%	283,481	266,481	0.00%	271,000	(12,481)	%00.0	237,235	(33,765)	%00:0	338,533	101,298	0.00%	439,304	100,771	%000	449,512	10,208	%000	31,165	10.99%
H. Warrant Articles - From Free Cash	3,628,651	199,781	0.00%	2,364,340	(1,264,311)	0.00%	1,919,128	(445,212)	0.00%	872,465	(1,046,663)	0.00%	923,439	50,974	0.00%	991,675	98,236	0.00%	1,008,852	11,111	0.00%		-11.61%
I. Other - Court Judgements & Delicits				•	•	0.00%	82,422	82,422	0.00%	150,000	8/5/9		150,000	•	_	150,000		0.00%	150,000	•	0.00%	_	#DIV/0i
Total Debt/Obligations/Capital	59,262,597	1,389,849	2.42%	64,134,354	(7,019,993)	-11.85%	68,078,290	2,881,491	4.49%	69,985,272	3,460,790	2.08%	73,652,466	4,990,095	7.13%	77,895,038	5,505,767	7.48%	81,995,546	3,618,724	4.65%	2,752,137	4.29%
III APPROPRIATIONS - Town & School Operations																						•	
lown	44,693,264	1,196,170	2.75%	45,922,329	1,229,065	2.75%	47,185,193	1,262,864	2.75%	48,482,786	1,297,593	2.75%	49,816,062	1,333,277	2.75%	51,186,004	1,369,942	2.75%	52,593,619	1,407,615	2.75%	1,052,735	2.29%
Unfunded Liability Offset	230,000	230,000		250,000	20,000	0.55%	250,000		0.55%	529,875	6,875		263,939	#0.		250,000	(13,939)	0.55%	250,000		0.55%		0.00%
lotal lown	44,923,264	000	3.30%	46,442,329	1,519,065	3.38%	47,435,193	992,864	3.30%	48,739,661	1,304,468	3.30%	50,080,001	1,340,341	3.30%	51,436,004	1,356,003	3.30%	52,843,619	1,407,615	3.30%	998,735	2.15%
lotal School	92,593,452	92,593,452		95,126,891	2,533,439	e :	98,/41,924	3,615,033	3.80%	102,471,959	3,730,035		10/,211,058	4,739,098		111,231,472	4,020,415		115,402,652	4,1/1,180		3,220,916	3.39%
Total Appropriations for Operations	137,516,716	4,542,921		141,569,220	4,052,504	2.95%	147,036,117	4,862,897	3.43%	152,075,620	5,032,627		157,291,059	5,208,375		162,667,476	5,390,356		168,246,272	5,578,795		4,219,651	2.98%
TOTAL APPROPRIATIONS	196,779,313	5,932,770	3.12%	205,703,574	8,924,261	×8	215,114,407	9,410,833	4.57%	222,060,892	6,946,485	3.23%	230,943,525	8,882,633	4.00%	240,562,514	9,618,989	4.17%	250,241,817	9,679,303	4.02%	6,971,788	3.39%
BALANCE	0			(0)			0			(1,707,726)			(3,858,188)			(6,683,343)			(9,272,194)			(1,336,669)	

PEVENTIES	17707//	10/0/22 EV20024	500CVI	EV2026	70000	82022	
	COMPONIONA	PEOPLE I	CTOTAL A	DECEMBER 1	TEORET AND	PRO TROUBON	DINOMINATION PARA
RIVIAXES	PROJECTION	PROJECTION	PROJECTION	PROJECTION	PROJECTION	PROJECTION	FY24 ASSUMPTIONS
Prior year Tax Levy Limit	162.894.020	169,062,036	175,220,009	181,531,931	188,001,651	194,633,114	Beginning tax levy limit based on prior year full levy
Annual Increase	4,072,351	4,226,551	4,380,500	4,538,298	4,700,041	4,865,828	Additional 2.5% allowed by law
Certified New Growth	2,095,665	1,931,422	1,931,422	1,931,422	1,931,422	1,931,422	
Onused Tax Levy Capacity Reserved Unused Levy	(2.162645)	(326.399)	(300,000)	(300,000)	(3,008,916)	(3.246.698)	Unused Levy A IM 2015
TOTAL	166,112,811	172,593,610	178,680,678	184924.350	191,324,199	197,883,666	
RTYTAXES							
Debt Service Exclusion (Existing)	2,736,844	2,341,408	2,254,313	2,172,115	1,973,811	1,918,547	Existing bonded projects
Now Wast Demonton/Shoughon Des School	(30,300)	3.360.965	(45,632)	2 142 406	3 139 531	3 142 156	ret rown Acet calculation
Dancier Officeries Bond (2007 Del)	500,000	5,502,000	5,136,900	2001,241,0	160,900,00	5,144,130	
on Congation Bond (30% Ped.)	2,002,043	3,001,399	3,002,933	3,001,233	3,000,529	3,001,343	
STATEAID	0,000,012	004/016/11	0+0'010'11	105,055,01	10,100,100	O-COCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOC	
Chapter 70 Education Aid	12,167,131	12,410,474	12,658,683	12,911,857	13,170,094	13,433,496	Increase 2% FY24-FY28
Charter Tuition/Capital Assessment Reimbursement	147,723	147,723	147,723	147,723	147,723	147,723	
Reserve for Direct Expenditures (CS Offsets)	10.473	10.473	19.478	10.473	10.473	19473	Level Funded
Veterans Denoms Vet. Blind, Surv Spouse Exempt	59985	59,985	59,985	59.985	59,985	59,985	
State Owned land	329,827	329,827	329,827	329,827	329,827	329,827	
General Municipal Aid	2,069,880	2,111,278	2,153,503	2,196,573	2,240,505	2,285,315	Increase 2% FY24-FY28
TOTAL	14,872,497	15,157,237	15,447,672	15,743,916	16,046,085	16,354,297	
GENERAL LOCAL REVENUES	2 6 6 1 0 2 4	020 001 3	200 370 3	000 200 3	6 001 331	E 040 124	Lancacca 10/ ECOTA FOOT
Licenses/Permis	2,377,540	2,401,315	2,703,430	2,449,582	2,001,321	2,498,818	Increase 1% FY24FY28
Penalties/Interest	480,000	480,000	480,000	480,000	480,000	480,000	Level Fund
	132,500	132,500	132,500	132,500	132,500	132,500	
General Government	276,586	276,586	276,586	276,586	276,586	276,586	
Fees	00019	000,000	900,190	000,19	000,19	61,000	Level Fund
Meals Tax	204,000	300,000	300,000 304,520	725 656	200,016	769.848	
Hotel/Motel Excise	1,135,000	1,248,500	1,273,470	1,298,939	1,324,918	1,351,417	FY24 Increase 10% FY25-FY28 2%
Medicaid Reimbursement	200,000	200,000	200,000	200,000	200,000	200,000	
Miscellaneous/PILOTS	451,731	463,024	474,600	486,465	498,584	511,007	Increase 2.5%
TOTAL	11,634,191	8/2,669,11	12,099,440	12,245,957	14394,775	12,546,040	
Community Services	531,531	531,531	531,531	531,531	531,531	531,531	Based on avail bal/reserved direct exp within dept. budgets
Elder Services	106,000	106,000	106,000	106,000	106,000	106,000	
Municipal Facilities	40,000	000'09	80,000	90,000	000'08	80,000	: 2
Spinig Grove Centerary Police Off-Duty Fee	000009	70,000	70,000	70,000	70,000	70,000	
Ambulance	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	
TOTAL	2,097,531	2,127,531	2,147,531	2,147,531	2147,531	2,147,531	
ENTERPRISE FUNDS	1		000000	8 0000	000000000000000000000000000000000000000	100000000000000000000000000000000000000	
Water and Sewer Rates and Operating Reserves	16,656,145	18,214,457	18,853,885	19,802,564	20,589,809	20,867,761	
OTHER AVAILABLE FUNDS- BUDGET	10,050,143	18,214,457	18,803,883	19,802,209	20,289,809	20,807,701	
Off-Street Parking Fund (Operating Budget)	152,426	152,426	152,426	152,426	152,426	152,426	Reserved direct expenditure in GF Dept Budget
Youth Services	25,000	25,000	25,000	25,000	25,000	25,000	
Cemetary Perpetual Care	000'9	00009	000'9	000'9	000'9	6,000	_
Andover Youth Foundation	30,000	- 000 30	- 000 30	- 000 30	- 000 30	- 00036	Youth Center Exp
TOTAL	238.426	208.426	208.426	208.426	208.426	208426	
ABLEFUNDS- ARTICLES							
Cable Operating	429,500	- 000	- 000	- 000	- 000	-	
Water/Sewer Reserves Articles	200,000	300,000	300,000	300,000	200,000	300,000	Water/Samer Projections 10/31/22
Overlay Surplus	30,000	- 10,232	-				water Sewer 110 Journal 10/31/22
Parking Funds		•		•	•	•	
Elder Service Stabilization Transfer	- 000						
ULO to POB Stabilization	250,000	'	'	•	'		
Columbia Gas Settlement				,			
Bond Premium Stabilization	100,000	100,000	100,000	100,000	100,000	100,000	
	262,417,232	70,000	016,440	400,000	Avo, wo	400,000	
Capital Projects Articles	2,364,340	1,919,128	872,465	923,439	991,675	1,008,852	IT/DPW/POLICE CIP FY24-FY28
ig bunger rticles	1,049,932						
TOTAL	3,414,292	1,919,128	872,465	923,439	991,675	1,008,852	
* GRAND TOTAL REVENUES *	226.597.036	233,968,082	239,865,407	247.332,465	254,842,292	262,111,915	
	ocoti cotore	Total Com	10112001				

EXPENDITURES	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	
	PROJECTION	PROJECTION	PROJECTION	PROJECTION	PROJECTION	PROJECTION	FY24 ASSUMPTIONS
OBLIGATIONS							A THE LANGE COLOR OF THE ACT OF T
Normal Cost	5514.652	5.707.465	5.960.542	6.169.161	6.385.081	6.608.559	AND 1721/Funding Date 20403.73% Per KMS 1/1/21 Revised Valuation Funding Schedule M-1 1/28/22/3-5% Inc FY28
Unfunded Estimate	739,303	1,417,179	1,600,196	1,664,204	1,730,773	1,800,004	Per KMS 1/1/21 Revised Valuation Funding Schedule M-1 1/28/22/4% Inc FY28
Insurance/Workers Comp	1,164,000	1,280,400	1,408,440	1,549,284	1,704,212	1,874,634	
Unemployment Compensation	164,000	168,100	172,303	176,610	181,025	185,551	Increase 2.5%
Health insurance	24,815,945	26,056,742	27,880,714	30,111,171	32,520,065	35,121,670	FY24 5% Inc, 7% FY25 8% FY26-FY28
Health Insurance Savings Offset to OPEB	(1,039,042)	(1,080,604)	(1,123,828)	(1,168,781)	(1,215,532)	(1,264,154)	Retiree Savings to OPEB/Contribution Change
Health Insurance Savings New Employee Contributions	(742,106)	(1,141,044)	(1,168,865)	(1,197,242)	(1,210,000)	(1,240,250)	
State Assessments	1,073,498	1,100,335	1,127,844	1,156,040	1,184,941	1,214,564	Increase 2.5%
Overlay	000,009	700,000	000'006	800,000	800,000	800,000	Revaluation FY25
OPEB Original	714,371	732,230	750,536	769,300	788,532	808,245	Increase 2.5%
OPEB Additional Retiree Savings	1,039,042	1,080,604	1,123,828	1,168,781	1,215,532	1,264,154	Per OPEB Funding Schedule
Technical Schools	1,274,000	1,312,220	1,351,587	1,392,134	1,433,898	1,476,915	
Water and Sewer Operating/Debt Budget	15,009,259	717,717,21	16,356,284	17,091,171	17,807,165	18,011,335	
Reserve for Direct Expenditures	78,478	78,478	78,478	78,478	78,478	78,478	
Other Local Expenditures (Deficits to be Raised)		82,422	150,000	150,000	150,000	150,000	Overlay/court judgments,deficits to be raised
IOIAL	20,405,400	55,212,245	800,800,000	116,019,96	05,534,171	00,889,700	
DEBT SERVICE							
Existing Non-Exempt General Fund Debt	6,167,227	6,549,143	6,276,746	5,874,340	5,569,870	5,025,737	Actual Debt
Appropriated/Not Bonowed Non- Exempt General Fund	1,999,522	1,742,421	2,663,677	3,161,733	3,069,857	2,795,883	Per 10/6/22 GF Debt Analysis
New General Fund CIP PROJECTS	- 000		594,250	1,988,290	3,583,926	4,568,803	Per 10/6/22 GF Debt Analysis
School Debt Service	004,000		-		- 000 000 0		
Pension Obligation Bond (50% Non-Exempt) Pension Obligation Bond (50% Evennet)	5,002,045	5,001,399	5,002,953	5,001,235	5,000,529	5,001,343	
BAN Interest Non-Evernnt	80,000	80,000	80000	00008	80 000	80,000	
General Fund Bond Issue Expense	105.000	105.000	105000	105.000	105.000	105.000	
New Exempt Debt-West El	316,009						
Existing Exempt Debt - School and Public Safety Center	2,736,844	5,704,273	5,393,219	5,314,521	5,112,342	5,060,703	Actual Debt
TOTAL	23,333,892	25,503,634	26,438,798	27,846,354	28,842,053	28,958,812	
J. Danis Later Phys. J. Section 1988							
Capital Projects Fund from taxation	005 952 6	2 890 000	2 225 000	1 725 000	1 875 000	2 700 000	FV3.FV27 CIP Requests.5 72%/Free Cash to Balance FV24.FV27
TOTAL	2756 500	2 890 000	2 225000	1 725,000	1 875 000	2 700 000	
	ood o	oooto oot	Continue	Occionative and the second	Octobrie	oootoo di	
OFFSET/A VAILA BLEFUNDS EXPENDITURES							
Offset Local Revenues	2,097,531	2,127,531	2,147,531	2,147,531	2,147,531	2,147,531	
	232,426	232,426	232,426	232,426	232,426	232,426	Parking (\$152,426)/Wetlands (\$25,000)/AYF(\$30,000)/AYS(\$25,000)
TOTAL	2,329,957	2,359,957	2,379,957	2,379,957	2,379,957	2,379,957	
A PTICI ES							
Transfer to Stabilization Fund							
Transfer to POB Stabilization Reserve Fund	252,481	240,000	206,235	307,533	408,304	418,512	Per TM Spreadsheet (Inc 2.5% FY28)
Capital Projects Articles - Free Cash	2,364,340	1,919,128	872,465	923,439	991,675	1,008,852	
Operating Budget (S&I) - Free Cash/Deficits			•		•	•	
Articles from Water/Sewer reserves/rates	1,360,000	800,000	300,000	300,000	300,000	300,000	
Cable Operating	000 14	000	000 10	000 10	000 10	000 10	_
Articles from taxation	31,000	31,000	31,000	31,000	31,000	31,000	Transp-\$12K/Andover Days-\$5K/Fireworks \$14K
Other Available Funds	36,000	000'9	0009	000'9	000'9	000'9	Cemetery-\$6K
TOTAL	4043.821	2.996.128	1.415.700	1.567.972	1.736.979	1.764.364	
			on the state of th				
* TOTAL DEDUCTIONS *	82,869,570	86,961,964	89,027,513	93,429,594	98,388,160	102,692,838	
BAL, FOR TOWN & SCHOOL OPERATING BUDGETS	143,727,466	147,006,118	150,837,893	153,902,871	156,454,133	159,419,077	
\$ INCREASE FOR TOWN & SCHOOL OPERATING BUD	6,210,750	3,278,651	3,831,776	3,064,977	2,551,262	2,964,944	
WARRAGE OVER FRIOR IBAR	4.3270	7.70 70	0.710.7	2.03%	1.00%	1.90%	
	226,597,036	233,968,082	239,865,407	247,332,465	254,842,292	262,111,915	
SCHOOL OBER A TING BITICET	95 500 603	97,679,133	373 926 001	102 265 455	103 964 179	105 940 615	
	COO'OOC'C	CC1,C10,17	010,622,001	0.000,200,000	000,000	CIO/OFC/COL	
\$ Inc/Dec % Inc/Dec	4,131,022	2,178,531	2,550,542	2,035,779	1,698,724	1,976,436	
TOWN OPERATING BUDGET (inc Water/Sewer Alloc)	48,237,670	49,337,489	50,625,197	51,652,889	52,510,327	53,508,023	
	2 0086 053	019 000 1	907 790 1	0077601	967 739	909 200	
\$ IIIC/Dec	CC0,000,023	a succession and a succession of	Transfer Company	a y Carly Com	COLUMN TO THE PERSON TO THE PE	hand 1 f f	

DETAIL DEBT SCHEDULE BY FISCAL YE	AR								
AS OF JUNE 30, 2022									
PRINCIPAL & INTEREST		LOAN	TOTAL						TOTAL
ISSUE	ARTICLE	DATE	LOAN	2023	2024	2025	2026	2027	ALL YEARS
XEMPT DEBT									
CCHOOL BONDS EXEMPT REFI	ART 9, 2000	12/22/11	3,361,700	318,543.75	-	-	-	-	318,543
ANCROFT FEASABILITY	ART 59,. 2009	12/22/11	162,000	11,500.00	11,275.00	6,100.00	5,971.88	5,837.51	67,637
MIDDLE/EL SCHOOL Refi NC BANCROFT SCHOOL	ART 9, 2000 ART 03, 2012	12/19/12 12/19/12	1,500,000 14,000,000	159,600.00 957,250.00	154,000.00 929,250.00	148,400.00 901,250.00	142,800.00 873,250.00	845,250.00	604,800 9,109,625
BANCROFT SCHOOL	ART 03, 2012	3/6/14	13,055,000	949,062.50	916,312.50	883,562.50	845,812.50	826,312.50	9,630,812
BANCROFT SCHOOL	ART 1, 2013	3/6/14	2,435,000	174,150.00	168,150.00	162,150.00	156,150.00	152,550.00	1,774,950
BANCROFT SCHOOL BANCROFT SCHOOL	ART 3, 2010 ART 1, 2013	6/19/15 6/19/15	100,000 779,000	7,162.50 56,487.50	6,962.50 54,887.50	6,762.50 53,287.50	6,562.50 51,687.50	6,412.50 50,487.50	79,637 603,162
BANCROFT SCHOOL	ART 3, 2010	12/15/16	967,000	73,950.00	72,450.00	70,700.00	68,700.00	66,700.00	901,525
VEST EL/SHAWSHEEN PRE-SCHOOL	ART 15 2021	12/16/21	6,695,000	316,008.98	318,456.26	316,581.26	319,331.26	316,706.26	9,528,774
VEST ELEMENTARY/SHAWSHEEN PRE-SCHOOL OTAL SCHOOL	ART 15, 2021 017112-5741	7/28/22	46,914,500	3,023,715.23	3,044,408.96 5,676,152.72	2,822,325.00 5,371,118.76	2,823,075.00 5,293,340.64	2,821,825.00 5,092,081.27	84,907,083 117,526,552
PENSION OBLIGATION BONDS OTAL PENSION OBLIGATION BONDS			82,500,000	5,662,644.99 5,662,644.99	5,661,398.44 5,661,398.44	5,662,952.63 5,662,952.63	5,661,234.81 5,661,234.81	5,660,528.68 5,660,528.68	101,909,219
UBLIC SAFETY									
UBLIC SAFETY CENTER	ART 10-1, 2002	12/1/07	80,000	5,300.00	5,100.00	-	-	-	10,400
PUBLIC SAFETY CENTER	ART 10-1, 2002	3/15/09	425,000	23,837.50	23,020.00	22,100.00	21,180.00	20,260.00	139,577
OTAL PUBLIC SAFETY CENTER OTAL EXEMPT	017112-5746			29,137.50 8,715,497.72	28,120.00 11,365,671.16	22,100.00 11,056,171.39	21,180.00 10,975,755.45	20,260.00	149,977 219,585,749
				0,110,431.12	11,000,071.10	11,000,171.00	10,570,700.40	10,112,003.33	213,000,140
UBLIC SERVICE ENTERPRISES VATER DEBT									
/ATER TREATMENT PLANT	ART 42, 2002	12/22/11	473,000	46,473.75	43,483.75	-	-	-	89,957
VATER SYSTEM	ART 20, 2003	12/15/11	997,400	98,138.75	93,035.00		-	-	191,173
VATER MAINS REFINANCED VATER SYSTEM	ART 43, 2002 ART 20, 2008	12/19/12 10/15/06	235,050 1,000,000	21,976.00 58,975.00	21,176.00 57,000.00	19,788.00 55,000.00	53,000.00	51,000.00	62,940 274,975
VATER STSTEM VATER PLANT (WPAT)	ART 34, 2005	12/14/06	4,666,635	283,575.87	283,575.89	283,576.13	283,576.45	283,575.68	1,417,880
VATER PLANT (WPAT)	ART 34, 2005	12/14/06	634,717	38,371.01	38,370.31	38,370.86	38,370.38	38,370.59	268,594
VATER SYSTEM VATER SYSTEM	ART 20, 2003 ART 34, 2005	12/1/07 12/1/07	1,472,000 1,000,000	85,662.50 61,187.50	82,862.50 59,187.50	80,062.50 57,187.50	77,218.75 55,156.25	74,331.25 53,093.75	471,581 336,843
VATER STSTEM VATER TREATMENT PLANT	ART 34, 2005	12/1/07	250,000	12,662.50	12,437.50	12,200.00	11,943.75	11,675.00	114,825
VATER MAINS	ART 31, 2010	12/19/12	500,000	34,187.50	33,187.50	32,187.50	31,187.50	30,187.50	325,343
VATER MAIN CONSTRUCTION VATER MAIN REPLACEMENT	ART 42, 2011 ART 35, 2012	3/6/14 3/6/14	500,000 1,439,000	36,281.26 101,587.50	35,031.26 98,087.50	33,781.26 94,587.50	32,531.26 91,087.50	31,781.26 88,987.50	369,781 1,035,387
IYDRANT REPLACEMENT	ART 46, 2013	3/6/14	500,000	55,000.00	52,500.00	94,367.30	91,007.50	-	107,500
VATER MAIN REPLACEMENT	ART 41, 2013	3/6/14	1,000,000	72,562.50	70,062.50	67,562.50	65,062.50	63,562.50	739,562
AC REPLACEMENT	ART 33, 2010	3/6/14 6/19/15	110,000	11,000.00 56,000.00	10,500.00	52,000.00	-	-	21,500
VATER DISTRIBUTION MAINTENANCE VATER DISTRIBUTION MAINT PROGRAM	ART 43,2012 ART 42, 2013	6/19/15	500,000 500,000	56,000.00	54,000.00 54,000.00	52,000.00	-		162,000 162,000
IRE HYDRANT INFRAST MAINT 1	ART 46, 2016	6/19/15	500,000	56,000.00	54,000.00	52,000.00	-	-	162,000
IRE HYDRANT INFRAST MAINT 2	ART 22, 2014	6/19/15	500,000	56,000.00	54,000.00	52,000.00	-	-	162,000
VATER TREATMENT PLANT EQUIPMENT VATER STORAGE TANKS REHAB	ART 44, 2011 ART 44, 2016	6/19/15 12/15/16	340,000 1,375,800	38,800.00 162,190.00	32,400.00 153,065.00	31,200.00 148,340.00	142,940.00	133,620.00	102,400 740,155
VATER MAIN REPLACEMENT	ART 56, 2015	12/15/17	1,308,000	124,800.00	120,300.00	110,925.00	106,675.00	102,425.00	1,121,025
VATER MAIN REPLACEMENT	ART 27, 2017	12/15/17	464,300	42,150.00	40,650.00	39,150.00	37,650.00	36,150.00	391,950
VTP ELECTRICAL SUBSTATION ANCROFT HIGH LIFT PUMPS	ART 30, 2017 ART 31, 2017	12/15/17 12/15/17	276,800 464,300	27,350.00 42,150.00	26,350.00 40,650.00	25,350.00 39,150.00	24,350.00 37,650.00	23,350.00 36,150.00	229,925 391,950
/TP HEATING SYSTEM	ART 38, 2017	12/15/17	93,500	7,025.00	6,775.00	6,525.00	6,275.00	6,025.00	65,325
VATER MAIN REPLACEMENT	ART 41, 2016	11/15/18	500,000 1,500,000	43,375.00 130,125.00	42,125.00	40,875.00	39,625.00	38,375.00	577,500
VATER MAIN REPLACEMENT VTP ELECTRICAL SUBSTATION	ART 27, 2017 ART 30, 2017	11/15/18	200,000	21,975.00	126,375.00 21,225.00	122,625.00 20,475.00	118,875.00 19,725.00	115,125.00 18,975.00	1,732,500 193,125
ANCROFT HIGH LIFT PUMPS	ART 31, 2017	11/15/18	90,000	7,675.00	7,425.00	7,175.00	6,925.00	6,675.00	76,000
VTP HEATING SYSTEM	ART 38, 2017	11/15/18	100,000	13,050.00	12,550.00	7,175.00	6,925.00	6,675.00	86,500
VATER MAIN REPLACEMENT VATER MAIN REPLACEMENT	ART 41, 2016 ART 27, 2017	12/18/19 12/18/19	500,000 597,000	40,531.26 48,500.00	39,281.26 47,000.00	38,031.26 45,500.00	36,781.26 44,000.00	35,531.26 42,500.00	571,172 678,000
VATER MAIN REPLACEMENT	ART 25, 2018	12/18/19	3,000,000	243,187.50	235,687.50	228,187.50	220,687.50	213,187.50	3,427,031
/ATER MAIN REPLACEMENT	ART 29, 2019	12/18/19	2,000,000	162,125.00	157,125.00	152,125.00	147,125.00	142,125.00	2,284,687
VTP ELECTRICAL SUBSTATION REPLACEMENT VATER MAIN REPLACEMENT (MCWT 0% INTEREST)	ART 27, 2018 VARIOUS	12/17/20 12/16/21	1,306,400 4,791,300.00	110,650.00 156,495.00	102,275.00 156,730.00	99,025.00 156,965.00	95,775.00 157,201.00	92,525.00 157,437.00	1,548,850 4,635,039
VTP ELECTRICAL SUBSTATION	ART 27 2018	12/16/21	3,500,000	325,592.36	286,125.00	277,375.00	268,625.00	259,875.00	4,515,092
VATER MAIN REPLACEMENT	ART 26 2020	12/16/21	2,757,000	256,364.03	228,100.00	221,100.00	214,100.00	207,100.00	3,555,964
VATER MAIN REPLACEMENT VTP GENERATOR	ART 23 2021 ART 23 2021	12/16/21 12/16/21	3,000,000 1,000,000	279,079.17 93,026.39	245,250.00 81,750.00	237,750.00 79,250.00	230,250.00 76,750.00	222,750.00 74,250.00	3,870,079 1,290,026
VATER MAIN REPLACEMENT	ART 23, 2021	7/28/22	485,000	00,020.00	59,288.75	46,975.00	45,725.00	44,475.00	724,588
OTAL WATER				3,617,857.35	3,474,999.72	3,163,552.51	2,823,769.10	2,741,865.79	39,284,731
EWER DEBT		46.55	4.5	40					
EWER SO MAIN ST (Betterment) EWER ROGERS BROOK (Betterment)	ART 41, 1999 ART 42, 1999	12/22/11 12/22/01	1,941,350 485,000	182,025.00 45,506.25	-	-	-	-	182,025 45,506
EWER SO MAIN ST (Betterment)	ART 41, 1999	12/22/01	1,495,000	149,781.25	141,575.00	-	-	-	291,356
EWER ROGERS BROOK (Betterment)	ART 42, 1999	12/22/11	1,798,550	201,581.25	197,193.75		-	-	398,775
EWER SO MAIN ST (Betterment) EWER SO MAIN ST (Betterment)	ART 41, 1999 ART 2A, 2004	12/19/12 10/15/06	936,650 1,000,000	103,914.00 58,975.00	95,214.00 57,000.00	87,057.00 55,000.00	53,000.00	51,000.00	286,185 274,975
EWER SO MAIN ST (Betterment)	ART 24, 2004 ART 41, 1999	10/15/06	4,002,000	235,900.00	228,000.00	220,000.00	212,000.00	204,000.00	1,099,900
EWER SO MAIN ST (Betterment)	ART 35, 2004	12/1/07	1,225,000	73,425.00	71,025.00	68,625.00	66,187.50	63,712.50	404,212
EWER SO MAIN ST (Betterment) EWER SO MAIN ST (Betterment)	ART 41, 1999 ART 2A, 2004	12/1/07 12/1/07	4,458,000 500,000	258,399.98 30,593.76	259,799.98 29,593.76	255,899.98	246,759.36	237,478.11 26,546.88	1,452,256
EWER SO MAIN ST (Betterment)	Art 33, 2004	3/15/09	350,000	16,842.50	16,305.00	28,593.76 15,665.00	27,578.13 15,025.00	14,287.58	168,421
EWER SHAWSHEEN OUTFALL	Art 33, 2008	3/15/09	1,500,000	84,390.00	80,615.00	77,162.50	74,115.00	71,355.00	521,387
EWER - DASCOMB ROAD (Betterment)	Art 36, 2007	3/15/09	200,000	11,262.50	10,837.50	10,412.50	9,987.50	9,562.50	69,912
EWER KIRKLAND ROAD (Betterment) EWER SAWSHEEN PUMP STATION	Art 41, 2007 Art 64, 2007	3/15/09 3/15/09	250,000 200,000	11,262.50 11,262.50	10,837.50 10,837.50	10,412.50 10,412.50	9,987.50 9,987.50	9,562.50 9,562.50	69,912 69,912
EWER SHAWSHEEN OUTFALL	Art 33, 2008	2/24/11	300,000	20,531.26	19,931.26	19,331.26	18,731.26	18,131.26	163,087
EWER MAINS	ART 46, 2010	12/22/11	225,000	12,662.50	12,437.50	12,200.00	11,943.75	11,675.00	114,825
EWER MAINS HAWSHEEN PUMPING STATION	Art 51, 2001 ART 64, 2007	2/24/11 12/19/12	200,000	13,687.50 13,675.00	13,287.50 13,275.00	12,887.50 12,875.00	12,487.50 12,475.00	12,087.50 12,075.00	108,725
EPAIR SANITARY SEWER	ART 33, 2006	12/19/12	150,000	12,037.50	6,637.50	6,437.50	6,237.50	6,037.50	70,268
EWER MAIN CONSTRUCTION	ART 51, 2008	12/19/12	300,000	20,512.50	19,912.50	19,312.50	18,712.50	18,112.50	195,206
EWER MAIN CONSTRUCTION OTAL SEWER	ART 32, 2010	12/19/12	500,000	34,187.50 1,602,415.25	33,187.50 1,327,502.75	32,187.50 954,472.00	31,187.50 836,402.50	30,187.50 805,373.83	325,343 6,547,127
JINL OLWEN	017102-5743		-	5,220,272.60	4,802,502.47	4,118,024.51	3,660,171.60	3,547,239.62	45,831,85

DETAIL DEBT SCHEDULE BY FISCAL YE	AK								
AS OF JUNE 30, 2022									
PRINCIPAL & INTEREST									
		LOAN	TOTAL						TOTAL
ISSUE	ARTICLE	DATE	LOAN	2023	2024	2025	2026	2027	ALL YEARS
GENERAL FUND NON-EXEMPT									
SCHOOL DEBT									
SCHOOL RENOVATIONS	ART 11, 2005	12/19/12	480,000	51,300.00	49,500.00	47,700.00	45,900.00	-	194,400.00
WEST EL - ASBESTOS	ART 12, 2002	10/15/06	200,000	11,395.00	11,000.00	10,600.00	10,200.00	-	43,195.00
SCHOOL HVAC	ART 46, 2006	12/1/07	200,000	14,280.00	-	-	-	-	14,280.00
WEST EL - ASBESTOS	ART 12, 2002	12/1/07	100,000	5,100.00	-	-	-	-	5,100.00
SCHOOL RENOVATIONS	ART 17, 2006	12/1/07	250,000	15,300.00	-	-	-	-	15,300.00
SCHOOL RENOVATIONS	ART 11, 2005	12/1/07	500,000	30,600.00	-	-	-	-	30,600.00
SCHOOL RENOVATIONS	ART 17, 2006	3/15/09	865,000	49,500.00	47,657.50	45,810.00	43,762.50	41,817.50	268,420.00
SCHOOL ROOF	ART 17, 2007	3/15/09	1,480,000	88,020.00	84,725.00	81,225.00	77,725.00	74,225.00	456,657.50
SCHOOL RENOVATIONS	ART 28, 2007	3/15/09	465,000	27,437.50	26,440.00	25,340.00	24,240.00	18,167.50	138,947.50
SCHOOL ROOF	ART 15, 2007	2/15/10	1,500,000	100,000.00	96,800.00	93,600.00	85,500.00	82,500.00	614,400.00
SCHOOL REMODELING	ART 28, 2007	2/15/10	300,000	18,900.00	18,300.00	17,700.00	17,100.00	16,500.00	119,700.00
SCHOOL REPAIRS	ART 27, 2008	2/15/10	1,000,000	63,000.00	61,000.00	59,000.00	57,000.00	55,000.00	399,000.00
SCHOOL REMODELING	ART 28, 2007	2/24/11	300,000	19,875.00	19,275.00	18,675.00	18,075.00	17,475.00	142,181.26
SCHOOL REPAIRS	ART 27, 2008	2/24/11	810,000	53,000.00	51,400.00	49,800.00	48,200.00	46,600.00	379,150.00
SCHOOL REPAIRS	ART 56, 2009	2/24/11	850,000	59,406.26	57,606.26	55,806.26	54,006.26	52,206.26	419,793.82
SCHOOL RENOVATIONS	ART 41, 2010	2/24/11	2,000,000	136,875.00	132,875.00	128,875.00	124,875.00	120,875.00	1,087,250.00
SCHOOL REMODELING	ART 16, 2011	12/22/11	925,000	56,981.25	55,968.75	54,900.00	53,746.88	52,537.51	516,712.55
WEST MIDDLE SCHOOL	ART 17, 2011	12/22/11	655,000	43,043.75	37,312.50	36,600.00	35,831.25	35,025.00	349,531.25
SCHOOL ROOF REPAIRS	ART 41, 2010	12/22/11	525,000	31,656.25	31,093.75	30,500.00	29,859.38	29,187.51	287,062.55
VETERANS WAR MEMORIAL AUDITORIUM	ART 58, 2009	2/24/11	650,000	41,062.50	39,862.50	38,662.50	37,462.50	36,262.50	326,175.00
SCHOOL BUILDING RENOVATIONS	ART 25, 2012	12/19/12	1,000,000	79,950.00	77,350.00	74,750.00	72,150.00	69,550.00	440,700.00
WEST MIDDLE SCHOOL REPAIRS	ART 38, 2012	12/19/12	530,000	34,187.50	33,187.50	32,187.50	31,187.50	30,187.50	325,343.76
BANCROFT SCHOOL	ART 1, 2013	3/6/14	927,000	65.306.26	63.056.26	60,806.26	58.556.26	57,206.26	665,606.32
SCHOOL REPAIRS	ART 36, 2013	3/6/14	900,000	65,306.26	63,056.26	60,806.26	58,556.26	57,206.26	665,606.32
SCHOOL SITE IMP (DOHERTY)	ART 18, 2013	3/6/14	2,400,000	174.150.00	168.150.00	162,150,00	156,150.00	152,550,00	1.774.950.00
WEST MIDDLE HVAC	ART 38, 2013	3/6/14	1,250,000	107,200.00	102,950.00	93,700.00	89,700.00	87,300.00	648,250.00
SCHOOL BLDG MAINT & RENOVATION	ART 52, 2014	6/19/15	1,500,000	127,000.00	123,000.00	119,000.00	115,000.00	112,000.00	914,000.00
BANCROFT SCHOOL	ART 1, 2013	6/19/15	285,000	21,000.00	20.400.00	19,800.00	19,200.00	18,750.00	218,062.50
SCHOOL BLDG MAINT & RENOVATION	ART 39, 2015	12/15/16	432,500	51,725.00	50.375.00	43,900,00	42,300.00	38,250,00	226,550,00
LOVELY FIELD TURF REPLACEMENT	ART 30, 2016	12/15/16	475,000	52,425.00	51,075.00	49,500.00	47,700.00	45,900.00	246,600.00
SCHOOL BLDG MAINT & RENOVATION	ART 34, 2016	12/15/16	475,000	52,425.00	51.075.00	49.500.00	47,700.00	45,900.00	246,600,00
COLLINS CENTER FACADE	ART 29, 2016	12/15/17	1.700.000	131,975.00	127,725.00	123,475,00	119,225.00	114,975,00	1.685.250.00
HIGH PLAIN/WOODHILL AC UPGRADE	ART 45, 2017	12/15/17	449,100	56,325.00	54,075.00	51,825.00	49,575.00	47,325.00	299,725.00
MAJOR SCHOOL PROJECTS	ART 47, 2017	12/15/17	360,000	43.925.00	42,175,00	40.425.00	38,675,00	36,925,00	237.650.00
COLLINS CENTER FAÇADE	ART 29, 2016	11/15/18	300.000	26.025.00	25.275.00	24,525.00	23,775.00	23.025.00	346,500.00
HIGH PLAIN/WOODHILL AC UPGRADE	ART 45, 2017	11/15/18	275.000	38.500.00	37.000.00	30.625.00	29,375.00	28,125,00	216.125.00
MAJOR SCHOOL PROJECTS	ART 47, 2017	11/15/18	370,000	51,500.00	44,625.00	42.875.00	41,125.00	39.375.00	293,000.00
MAJOR SCHOOL PROJECTS	ART 36, 2018	11/15/18	722,000	75,450.00	72,950.00	70.450.00	67.950.00	65,450,00	718,500.00
SCHOOL IMPROVEMNTS - SANBORN ELEMENTARY	ART 39, 2015	12/18/19	319,000	46.075.00	39.450.00	37.950.00	36,450.00	34,950.00	290.875.00
MAJOR SCHOOL PROJECTS	ART 28, 2019	12/17/20	600,000	61,000.00	59,000.00	57,000.00	55,000.00	53,000.00	688,200.00
MAJOR SCHOOL PROJECTS	ART 22 2020	12/16/21	1,978,000	195,349.44	169,175.00	163,925.00	158,675.00	153,425.00	2,538,799.44
MAJOR SCHOOL PROJECTS	ART 38 2019	12/16/21	180,000	30,537.92	27,350.00	26,350.00	25,350.00	24,350.00	222,762.92
MAJOR SCHOOL PROJECTS	ART 23 2021	12/16/21	1,850,000	175,378.19	154,225.00	149.475.00	144.725.00	139.975.00	2,384,678.19
TOTAL SCHOOL	017102-5741	12/10/21	.,000,000	2,679,448.08	2,477,516.28	2,379,793.78	2,291,583.79	2,154,078.80	22,102,190.88

AS OF JUNE 30, 2022	•								
PRINCIPAL & INTEREST									
ISSUE	ARTICLE	LOAN DATE	TOTAL LOAN	2023	2024	2025	2026	2027	TOTAL ALL YEARS
STREET									
BRIDGE CONSTRUCTION	ART 54, 2005	10/15/06	250,000	11,395.00	11,000.00	10,600.00	10,200.00		43,195.00
STORM DRAINS BRIDGE CONSTRUCTION	ART 50, 2008 ART 52, 2007	3/15/09 2/24/11	100,000	5,682.50 6,625.00	5,467.50 6,425.00	5,252.50 6,225.00	5,037.50 6,025.00	4,725.00 5,825.00	34,985.00 47,393.76
BRIDGE CONSTRUCTION	ART 32, 2008	2/24/11	400,000	26,718.76	25,918.76	25,118.76	24,318.76	23,518.76	196,543.84
BRIDGE REPAIR PARKING LOT	ART 24, 2011	12/22/11	100,000	6,331.25	6,218.75	6,100.00	5,971.88	5,837.51	57,412.55
DRAINAGE	ART 25, 2011 ART 33, 2011	12/22/11	85,000 200,000	5,562.51 12,662.50	5,450.01 12,437.50	5,331.26 12,200.00	5,203.13 11,943.75	5,068.75 11,675.00	26,615.66 114.825.00
SURFACE DRAIN CONSTRUCTION	ART 50, 2008	2/24/11	280,000	19,687.50	19,087.50	18,487.50	17,887.50	17,287.50	136,725.00
BRIDGE REPAIR STORM DRAINAGE	ART 32, 2008 ART 33, 2011	12/19/12 12/19/12	200,000 100,000	13,675.00 6,837.50	13,275.00 6,637.50	12,875.00 6,437.50	12,475.00 6,237.50	12,075.00 6,037.50	130,137.50
HIGH PLAIN/FISHBROOK	ART 42, 2012	12/19/12	1,100,000	86,987.50	79,187.50	76,587.50	68,987.50	66,587.50	65,068.76 542,743.76
MINOR STORM DRAIN REPAIRS	ART 44, 2015	12/15/16	285,400	34,386.00	33,486.00	32,436.00	26,336.00	21,318.00	147,962.00
ENMORE STREET RECONSTRUCTION MINOR STORM DRAIN REPAIRS	ART 29, 2017 ART 48, 2018	11/15/18	300,000 100,000	39,750.00 14,050.00	38,250.00 13,550.00	36,750.00 13,050.00	35,250.00 12,550.00	33,750.00 12,050.00	246,750.00 108,550.00
MINOR STORM DRAIN REPAIRS	ART 22,2020	7/28/22	100,000	14,030.00	17,069.44	14,250.00	13,750.00	13,250.00	127,319.44
TOTAL STREET	017102-5744			290,351.02	293,460.46	281,701.02	262,173.52	239,005.52	2,026,227.27
MUNICIPAL FACILITIES									
TOWN HVAC TOWN BUILDING RENOVATION	ART 46, 2006 ART 27, 2007	12/1/07 3/15/09	250,000 255,000	16,320.00 10,975.00	10,545.00	10,212.50	9,777.50	9,245.00	16,320.00 59,570.00
TOWN BUILDING RENOVATION	ART 28, 2007	3/15/09	290,000	16,847.50	16,192.50	15,537.50	14,882.50	14,227.50	94,487.50
PUBLIC SAFETY (NON EXEMPT PORTION)	ART 10, 2002	3/15/09	75,000	4,180.00	4,020.00	3,957.50	3,792.50	3,627.50	24,685.00
TOWN BUILDINGS TOWN BUILDING REMODELING	ART 27, 2007 ART 55, 2009	2/15/10 2/24/11	400,000 650,000	25,200.00 45,750.00	24,400.00 44,350.00	23,600.00 42,950.00	22,800.00 41.550.00	22,000.00 40,150.00	159,600.00 312,362.50
TOWN BUILDING REPAIRS	ART 42, 2010	12/22/11	163,000	11,500.00	11,275.00	6,100.00	5,971.88	5,837.51	67,637.55
TOWN BUILDING REPAIRS	ART 34, 2011 ART 27, 2007	12/22/11	500,000	31,656.25	31,093.75	30,500.00	29,859.38	29,187.51	287,062.55
TOWN BUILDING REPAIRS BLANCHARD BALLFIELDS	ART 27, 2007 ART 57, 2009	12/22/11 12/22/11	100,000 325,000	6,331.25 22,250.00	6,218.75 21,800.00	6,100.00 21,325.00	5,971.88 20,812.50	5,837.51 20,275.00	57,412.55 106,462.50
BLANCHARD ST BALLFIELDS	ART 57, 2009	2/24/11	100,000	5,600.00	5,400.00	5,200.00	-	-	16,200.00
TOWN BUILDING RENOVATIONS PLAYGROUND REPLACEMENTS	ART 23, 2007 ART 23, 2012	12/19/12 12/19/12	200,000 200,000	17,500.00 17,600.00	11,900.00 17.000.00	11,500.00 16,400.00	11,100.00 10.800.00	10,700.00 10,400.00	73,000.00 72,200.00
TOWN BUILDING REMODELING	ART 24, 2012	12/19/12	400,000	30,750.00	29,750.00	28,750.00	27,750.00	26,750.00	169,500.00
BALMORAL FENCE/MASONRY	ART 28, 2012	12/19/12	125,000	11,350.00	5,950.00	5,750.00	5,550.00	5,350.00	39,100.00
YOUTH CENTER TOWN BUILDING RENOVATIONS	ART 3, 2011 STM ART 28, 2013	3/6/14 3/6/14	2,000,000 300,000	145,125.00 25,425.00	140,125.00 24,425.00	135,125.00 23,425.00	130,125.00 22,425.00	127,125.00 21,825.00	1,479,125.00 159,375.00
TOWN & SCHOOL ENERGY INTIATIVES	ART 39, 2014	6/19/15	236,000	25,425.00	21,600.00	20,800.00		- 1,025.00	64,800.00
TOWN BLDG & FACILITY MAINTENANCE	ART 43, 2014	6/19/15	467,000	50,400.00	48,600.00	46,800.00	-	-	145,800.00
PLAYGROUND REPLC & HANDICAP ACCESS SAFETY & SECURITY UPGRADES	ART 41, 2014 ART 38, 2015	6/19/15 12/15/16	150,000 387,600	16,800.00 46,104.00	16,200.00 44,904.00	15,600.00 43,504.00	37,004.00	33,252.00	48,600.00 204,768.00
TOWN BUILDING REMODELING	ART 46, 2015	12/15/16	1,153,400	104,450.00	97,125.00	94,500.00	91,500.00	88,500.00	882,200.00
TOWN BLDG & FACILITY MAINTENANCE TOWN BUILDING FACILITY & MAINTENANCE	ART 28, 2016 ART 28, 2016	12/15/16 12/15/17	333,000 315,250	40,095.00 37,500.00	39,045.00 36,000.00	32,920.00 34,500.00	31,720.00 33,000.00	28,560.00 31,500.00	172,340.00 197,875.00
MEMORIAL PLAYSTEAD PLAYGROUND	ART 57, 2016	12/15/17	108,650	12,400.00	11,900.00	11,400.00	10,900.00	10,400.00	62,075.00
MUNICIPAL SERVICES FACILITY	ART 33, 2017	12/15/17	8,868,000	474,725.00	474,725.00	474,225.00	473,225.00	476,600.00	12,329,292.00
MAJOR TOWN PROJECTS TOWN & SCHOOL ENERGY PROJECTS	ART 43, 2017 ART 44, 2017	12/15/17 12/15/17	288,300 270,800	37,000.00 31,375.00	35,500.00 30,125.00	34,000.00 28,875.00	27,625.00 27,625.00	26,375.00 26,375.00	185,875.00 169,750.00
SAFETY & COMMUNICATIONS UPGRADE PHASE II	ART 46, 2017	11/15/18	300,000	43,875.00	42,125.00	40,375.00	33,750.00	32,250.00	223,125.00
MUNICIPAL SERVICES FACILITY I	ART 33, 2017	11/15/18	5,000,000	299,500.00	299,375.00	299,000.00	298,375.00	302,375.00	7,797,100.00
MUNICIPAL SERVICES FACILITY II TOWN BUILDING PROJECTS	ART 33, 2017 ART 34, 2018	11/15/18 11/15/18	3,000,000 775,000	174,675.00 82,125.00	176,800.00 79,375.00	178,675.00 71,750.00	175,425.00 69,250.00	177,050.00 66,750.00	4,759,225.00 770,500.00
TOWN & SCHOOL ENERGY EFFICIENCY	ART 35, 2018	11/15/18	173,000	25,000.00	19,125.00	18,375.00	17,625.00	16,875.00	128,500.00
PUBLIC WORKS FREIGHTLINER PUBLIC WORKS SIDEWALK PLOW & DUMP TRUCK	ART 41, 2017	11/15/18	226,575	22,825.00	22,075.00 11,500.00	21,325.00	20,575.00 5,625.00	14,950.00 5,375.00	236,400.00
PUBLIC WORKS SIDEWALK PLOW & DUMP TRUCK PUBLIC WORKS VEHICLES	ART 41, 2017 ART 41, 2017	11/15/18 11/15/18	78,425 145,000	12,000.00 19,625.00	18,875.00	11,000.00 18,125.00	17,375.00	16,625.00	50,625.00 116,750.00
MUNICIPAL SERVICES FACILITY	ART 33, 2017	12/18/19	500,000	25,400.00	24,900.00	24,400.00	28,775.00	28,025.00	704,568.76
TOWN & SCHOOL ENERGY INITIATIVES PUBLIC WORKS VEHICLES	ART 44, 2017 ART 32, 2018	12/18/19 12/18/19	120,000 420,000	19,025.00 59,975.00	18,275.00 57,725.00	12,650.00 50,600.00	12,150.00 48,600.00	11,650.00 46,600.00	105,750.00 391,500.00
BALLARDVALE FIRE STATION LAND ACQUISITION/CONST	ART 1, 2019 STM	12/18/19	2,000,000	101,275.00	104,150.00	101,900.00	104,525.00	102,025.00	2,854,243.76
SENIOR CENTER RENOVATION AT PUNCHARD	ART 24, 2019	12/18/19	1,000,000	50,656.26	49,656.26	53,531.26	52,281.26	51,031.26	1,424,428.27
TOWN & SCHOOL ENERGY INITIATIVES BALLARDVALE FIRE STATION LAND ACQUISITION/CONST	ART 37, 2019 ART 1, 2019 STM	12/18/19 12/17/20	200,000 1,247,000	27,300.00 58,212.50	26,300.00 61,837.50	25,300.00 60,337.50	24,300.00 58,837.50	23,300.00 57,337.50	190,500.00 1,674,812.51
BALLARDVALE FIRE STATION LAND ACQUISITION/CONST	ART 1, 2019 STM	12/17/20	2,753,000	127,631.26	129,756.26	126,756.26	128,631.26	130,256.26	3,732,997.13
SENIOR CENTER RENOVATION AT PUNCHARD SENIOR CENTER RENOVATION AT PUNCHARD	ART 24, 2019	12/17/20	680,000	33,125.00 13,518.76	32,375.00 13,268.76	31,625.00	30,875.00 17,643.76	35,000.00	914,475.00 432,909.64
MAJOR TOWN BUILDING PROJECTS	ART 24, 2019 ART 36 2019	12/17/20 12/17/20	320,000 81,600	13,150.00	12,650.00	13,018.76 12,150.00	11,650.00	17,143.76 11,150.00	82,400.00
TOWN & SCHOOL ENERGY INITIATIVES	ART 37 2019	12/17/20	210,000	33,225.00	27,100.00	26,100.00	25,100.00	24,100.00	222,225.00
PUBLIC WORKS VEHICLES BALLARDVALE FIRE STATION LAND ACQUISITION/CONST	ART 22, 2020 ART 1 2019 STM	12/17/20 12/16/21	580,000 1,000,000	83,400.00 50,435.87	80,400.00 47,462.50	77,400.00 46,462.50	74,400.00 50,337.50	71,400.00 49,087.50	625,150.00 1,409,348.38
SENIOR CENTER RENOVATION AT PUNCHARD	ART 24 2019	12/16/21	500,000	22,655.72	23,756.26	23,256.26	22,756.26	22,256.26	705,671.61
TOWN & SCHOOL ENERGY INITIATIVES	ART 23 2021	12/16/21	200,000	31,722.78	28,300.00	27,300.00	26,300.00	25,300.00	250,522.78
LIBRARY MAKERSPACE RENOVATION TOWN & SCHOOL ENERGY INITIATIVES	ART 23 2021 ART 22, 2020	12/16/21 7/28/22	225,000 50,000	38,156.81	34,175.00 8,534.72	32,925.00 7,125.00	31,675.00 6,875.00	30,425.00 6,625.00	278,956.81 63,659.72
TOTAL MUNICIPAL FACILITIES	22, 2020	.120122	50,000	2,786,098.96	2,710,041.26	2,635,019.04	2,489,479.68	2,449,062.07	47,803,819.52
PENSION OBLIGATION BONDS NON-EXEMPT	ART 7 2021	12/16/21	82,500,000	5,662,644.99	5,661,398.44	5,662,952.63	5,661,234.81	5,660,528.68	101,909,219.17
TOTAL PENSION OBLIGATION BONDS	2021	12/10/21	02,000,000	5,662,644.99	5,661,398.44	5,662,952.63	5,661,234.81	5,660,528.68	101,909,219.17
PUBLIC SAFETY									
FIRE APPARATUS REPLACEMENT AMBULANCE	ART 42, 2017	11/15/18	270,000	38,250.00	36,750.00	35,250.00	33,750.00	32,250.00	207,000.00
FIRE LADDER TRUCK FIRE APPARATUS REPLACEMENT	ART 33, 2018 ART 35, 2019	11/15/18 12/18/19	1,100,000 314,000	95,425.00 67,500.00	92,675.00 64,500.00	89,925.00 61,500.00	87,175.00	84,425.00	1,270,500.00 193,500.00
FIRE APPARATUS REPLACEMENT	ART 22, 2020	12/17/20	700,000	74,500.00	72,000.00	69,500.00	67,000.00	59,625.00	796,225.00
FIRE APPARATUS REPLACEMENT TOTAL PUBLIC SAFETY	ART 22, 2020 017102-5746	7/28/22	50,000	275,675.00	5,765.07 271,690.07	256,175.00	187,925.00	176,300.00	5,765.07 2,472,990.07
	011102-0140			210,015.00	211,080.07	230,175.00	101,525,00	170,300.00	2,712,330.01
LAND ACQUISITION	ADT 20 COCC	10/10/11	100 100	40 410 00	47.010.01	44.0=0.00			444.450.00
LAND ACQUISITION REFINANCE LAND ACQUISITION REFINANCE	ART 23, 2002 ART 32, 2000	12/19/12 12/19/12	469,400 657,700	49,440.00 74,870.00	47,640.00 72,070.00	44,370.00 17,085.00	-	-	141,450.00 164,025.00
LAND ACQUISITION	ART 12, 2001	10/15/06	1,100,000	62,672.50	60,500.00	58,300.00	56,100.00	-	237,572.50
16 PEARSON ST	ART 3A, 2007	12/1/07	455,000	28,750.00	22,850.00	22,050.00	21,237.50	20,412.50	115,300.00
18 PEARSON ST 37 PEARSON ST	ART 4A, 2007 ART 5A, 2007	12/1/07 12/1/07	390,000 505,000	23,650.00 29,562.50	22,850.00 28,562.50	22,050.00 27,562.50	21,237.50 26,546.88	20,412.50 25,515.63	110,200.00 137,750.01
15 BLANCHARD ST	ART 51, 2007	12/1/07	2,100,000	128,493.76	124,293.76	120,093.76	115,828.13	111,496.88	707,371.92
LAND ACQUISITION FOSTERS POND	ART 12, 2001	2/24/11	100,000	6,625.00	6,425.00	6,225.00	6,025.00	5,825.00	47,393.76 108.725.00
LAND ACQUISITION FOSTERS POND LAND ACQUISITION BLANCHARD ST	ART 55, 2010 ART B1, 2011	2/24/11 2/24/11	220,000 290,000	13,687.50 20,093.76	13,287.50 19,493.76	12,887.50 18,893.76	12,487.50 18,293.76	12,087.50 17,693.76	108,725.00 149,368.82
LAND ACQUISITION CHANDLER RD	ART 33, 2013	3/6/14	775,000	57,150.00	55,150.00	53,150.00	51,150.00	49,950.00	557,537.50
CHANDLER ROAD LAND ACQUISITION TOTAL LAND ACQUISITION	ART 35 2021 017102-5747	12/16/21	3,000,000	140,637.78 635,632.80	142,150.00 615,272.52	144,025.00 546,692.52	140,775.00 469,681.27	142,400.00 405,793.77	4,268,425.30 6,745,119.81
								.00,1 30.11	
LANDFILL CLOSURE LANDFILL	ART 44, 1999 ART 44, 1999	10/15/06 12/22/11	500,000 300,000	28,487.50 18,993.75	27,500.00 18,656.25	26,500.00 18,300.00	25,500.00 17,915.63	- 17,512.51	107,987.50 172,237.55
LANDFILL	ART 44, 1999 ART 44, 1999	12/22/11	300,000	18,993.75	18,656.25	18,300.00	17,915.63	17,512.51	172,237.55
LANDFILL	ART 44, 1999	12/22/11	100,000	6,331.25	6,218.75	6,100.00	5,971.88	5,837.51	57,412.55
LANDFILL LANDFILL	ART 44, 1999 ART 44, 1999	12/22/11 3/6/14	100,000 200,000	6,331.25 14,512.50	6,218.75 14,012.50	6,100.00 13,512.50	5,971.88 13,012.50	5,837.51 12,712.50	57,412.55 147,912.50
CLOSING LANDFILL	ART 44, 1999 ART 44, 1999	6/19/15	700,000		48,737.50	47,337.50	45,937.50	12,712.50 44,887.50	557,462.50
	ART 31, 2008	2/11/16	675,000	41,104.20	41,157.92	41,213.14	41,269.56	41,326.88	580,814.24
LANDFILL (MCWT)							173,494.58	145,626.92	1,853,476.94
LANDFILL (MCWT) TOTAL GENERAL FUND NON-EXEMPT	017102-5749			184,891.70 12,514,742.55	181,157.92 12,210,536.95	177,363.14 11.939.697.13	11.535.572.65	11.230.395.76	184,913,043.66