

Town of Norwood



Fiscal Year 2021 Capital Improvement Plan (CIP) FALL UPDATE

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Divisions/Departments/Facilities

Department of Public Works

DPW: Highways DPW: Pavement Management STORM: Stormwater related projects
DPW: Water and Sewer Division DPW: Cemeteries

Fire Department

Information Technology Infrastructure

Police Department

Morrill Memorial Library

Norwood Public Schools

General Government/unallocated

Facilities

Norwood High School	Coakley Middle School	Savage Center	Elementary Schools
Public Safety Building	Town Hall	Civic Center	DPW Garage/Admin Building
Morrill Memorial Library	Norwood Memorial Airport	General Government- Unallocated Buildings	

Fleet Maintenance

Public Works Fleet	Cemeteries Fleet	Building and Grounds Fleet
Fire and Ambulance Fleet	Police Fleet	
Misc. Fleet/Vehicles	School Transportation Fleet	

Parks, Playgrounds, Open Space

Capital Planning Process

Annually, department and division heads submit capital requests to the General Manager's office who compiles the Capital Improvement Plan on behalf of the Capital Outlay Committee. Once assembled, the completed Capital Improvement Plan is delivered to the Capital Outlay Committee. The Capital Outlay Committee then meets and deliberates on merits of each project and makes recommendations as to which projects should be funded in the upcoming budget year.

Ultimately, the decisions as to what projects are or are not funded are made by Town Meeting and are subject to appropriation. The Capital Outlay Committee's recommendations are taken into consideration by the Board of Selectmen, the Finance Commission, and of course Town Meeting.

Understanding the Capital Improvement Plan

Below is a series of terms or subject/table headers that are used in the Capital Improvement Plan. These items will help as you better understand the Capital Improvement Plan.

Department: Town department in which the particular project will fall under, usually determined by function (who uses the projects or owns the capital item) or who would otherwise have responsibility for management or oversight of the project.

Division: Administrative divisions within departments that are large and capital intensive (such as Public Works) and helps to delineate the type of project in a large or complex department.

Fiscal Year: The fiscal year in which a particular item or is proposed on the plan is scheduled to begin. Most projects will be completed within the year specified, but larger more complex projects will begin in one year and may last for several years.

Total Cost: The total *projected* cost of a project. Efforts are made to secure as accurate of a project cost as possible, however until a project has been fully put out to bid or prices secured, the number in the CIP is still an estimate. The more complex the project/purchase, the higher the chance for potential price/cost volatility. The number in a given fiscal year represents what will be sought for an appropriation for the project in question, however that number may ultimately change at Town Meeting if new information is available.

Project Number: Project Numbering and Tracking System for a detailed explanation of the Project Numbering and Tracking System. The system ties a project number to a specific project allowing us to know when the project entered the plan and when it was originally scheduled, as well as the department the project belongs to. This will eventually tie into our ERP software to track projects by number and to integrate our capital planning with our financial software.

Design Services: The cost of engineering/architectural design needed in preparation for a project and will generally appear in the Capital Improvement Plan in the year preceding a project. The Town, following best practices, should engineer and design most projects before securing funding authorization to begin a project.

Funding Sources: An explanation of the proposed funding source for a project.

Free Cash: Surplus funds from previous years, revenues over collections or unspent line items.

Borrowing: Money to be borrowed (bonded) over the lifespan of the particular project or projects.

TBD: To Be Determined. This acronym is used frequently to describe the funding source for future CIP projects.

Rates-Cash: Water or sewer rates, directly raised in the water/sewer budget. Please remember that ALL water/sewer related expenses are paid by water/sewer rates and not by property taxes.

Operating Budget: The proposed project is included in the operating budget as part of the department's regular operating budget.

Grant Funds: Funds secured from a variety of grant sources, if available.

Community Preservation Act (CPA): Funds from the Community Preservation Act, which is a 1% surcharge on properties matched in part by the state. CPA funds have specific requirements for how the funds may be spent.

Chapter 90 Funds: State aid targeted specifically for paving/reconstruction of roads. The Town receives approximately \$860,000 annually through this program.

Rates-Borrow: Borrowing similar to above, but for water/sewer projects that will be paid out of rates as opposed to property taxes.

Other: Any other funding source will be explained in the appendix if utilized.

Summary for Fiscal 2021 – CIP Only

Funding Source	Amount
Free Cash	439,000
Borrowing	5,485,000
Rates-Cash	-
Operating Budget	869,000
CPA Funds	-
Chapter 90 Funds	913,450
Rates-Borrow	2,000,000
Total	\$ 9,706,450

Type	Number of Projects	Total Request by Type
FY2021 General Government/Unallocated Totals	13	5,522,450
FY2021 Facilities Totals	19	2,603,000
FY2021 Fleet Totals	19	1,581,000
Total	51	\$ 9,706,450

Capital Spending Requests by Division/Department/Facility

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Department of Public Works - *Highways Division*

Department of Public Works, Highways Division: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Traffic Study for Neponset St/Access Rd Intersection	21	75,000	HWY2021-21-01	Borrowing
Westover Parkway Bridge Design and Construction	21	500,000	HWY2021-21-02	Borrowing
Design and Construct signals at Neponset St /Access Rd	22	530,000	HWY2020-21-01	TBD
Install RRFB at 5 pedestrian crossings	23	230,000	HWY2021-23-01	TBD
Design Services, Washington Street/Nahatan Street Corridor	23	100,000	HWY2020-24-01	TBD
Upgrade traffic signals Washington St/Nahatan St Corridor	24	500,000	HWY2021-24-01	TBD
Traffic Study for Washington St/Mylod St Intersection	25	100,000	HWY2021-25-01	TBD

Department of Public Works, Highways Division: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	575,000
FY 2022	530,000
FY 2023	330,000
FY 2024	500,000
FY 2025	100,000
FY 2026	0
Six Year Total	\$2,035,000

Department of Public Works Highways Division: Project Descriptions

Traffic Study and Construction of Traffic Signals at Neponset St/Access Rd/Ridge Rd - This project would study the operation of the intersection of Neponset St at Access Rd/Ridge Rd. The current signal was installed as a temporary traffic signal to accommodate the Police and Fire Departments while they were located at the Airport during the construction of their new facility. Since that time, the signal flashes yellow for Neponset St traffic and red for Access Rd/Ridge Rd traffic. It does not provide safe passage for Access Rd/Ridge Rd traffic nor does it have pedestrian controls. If the study determines that a traffic signal is warranted per MassDOT requirements, the intersection will be upgraded to having a conventional traffic signal and pedestrian controls to improve safety for motorists and pedestrians.

Westover Parkway Bridge Design and Construction – The bridge/culvert that carries Germany Brook under Westover Parkway recently received a POOR rating by the MassDOT Bridge Inspection Department. The corrugated metal arch bridge has been identified as having Severe/Major Deficiencies and recommended the Urgency of Repair as ASAP. The Town will be submitting a grant application to the MassDOT's Municipal Small Bridge Program in April, 2020, for the maximum amount of \$500,000 and the award should be known in May. We are confident that we will be successful with the grant application; however, in the event we are not successful, we will proceed forward with the project with Town funds.

Install Rapid Rectangular Flashing Beacons – Install Rapid Rectangular Flashing Beacon (RRFB) at 5 highly active pedestrian crossings to greatly improve safety. Suggested location would be Washington Street in front of Norwood Hospital; East Hoyle St/Broadway at Norwood Central Station and Norwood Hospital; Winter Street at Prospect St; Dean Street at Richland Road; Pleasant St at Gay St.

Design Services, Washington Street/Nahatan Street Corridor- This project would begin a feasibility study and preliminary design to replace traffic signalization along the Washington Street and Nahatan Street corridor. The signalization and pedestrian systems were installed in 1984 and are reaching the end of their expected lifecycle.

Upgrade traffic signals along Washington St, Guild St to Railroad Ave and Nahatan St, Washington St to Pleasant St. Based on the results of the feasibility study, the traffic control equipment, including traffic signals, control cabinets and pedestrian controls will be replaced with current equipment and technology.

Traffic Study for Traffic Signals at Washington Street and Mylod Street - This project would study the operation of the intersection of Washington Street at Mylod Street. If traffic signals are deemed warranted, funding for construction would be made in FY2026.

Department of Public Works - *Pavement Management Program*

Department of Public Works, Pavement Management: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Funding Source
Berwick Street	21	187,940	Operating Budget & CH90
Bond St (Nichols St to Walpole St)	21	169,140	Operating Budget & CH90
Bond St (Nichols St to Winter St)	21	69,080	Operating Budget & CH90
Chickering Rd and Walters Rd	21	62,200	Operating Budget & CH90
East Cross St (Neponset St to Route 1)	21	68,500	Operating Budget & CH90
Edgehill Rd (Glendale Rd to Dean St near Whitewood Cir)	21	97,345	Operating Budget & CH90
Lenox Street (Shaw's Plaza Driveway to Avalon)	21	120,700	Operating Budget & CH90
Maple St (Nahatan St to Cottage St)	21	75,920	Operating Budget & CH90
Maple St (Cottage St to Vernon St)	21	34,000	Operating Budget & CH90
Nichols St (Bond St to Elliot St)	21	126,495	Operating Budget & CH90
Prospect St (Pine St to Prospect Ave)	21	155,050	Operating Budget & CH90
Railroad Ave (Pleasant St to Cleveland St)	21	157,000	Operating Budget & CH90
Ridge Road	21	37,860	Operating Budget & CH90
Rosemary St	21	104,750	Operating Budget & CH90
Wheelock Ave	21	100,470	Operating Budget & CH90

Department of Public Works, Pavement Management: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	1,566,450
FY 2022	1,552,280
FY 2023	1,542,105
FY 2024	1,558,025
FY 2025	1,576,760
FY 2026	0
Six Year Total	\$7,795,620

Department of Public Works, Pavement Management: Pavement Management Plan - The Town of Norwood, like most towns, uses a rating system to determine condition and quality of roadways throughout the community. This data, combined with traffic data and accident data, is utilized to determine which roads are paved in a given year. While roadwork is generally projected out for a five-year period, only the current year is presented in the CIP as this data is subject to great variation in any given year. Winter conditions can dramatically impact the condition of certain roads, while not having an impact on others, which can change a road rating substantially in a given year. Furthermore, certain roads may rank low in condition (thus ripe for repaving) but are delayed due to pending water, sewer or other utility work or their proximity to other nearby road projects. Final bid results in the spring will ultimately determine which roads are selected in a given year.

Department of Public Works - *Water & Sewer Division*

Department of Public Work, Water & Sewer Divisions: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Meadowbrook Area 5B Sewer Re-Lining	21	2,000,000	WNS2020-21-03	Rates-Borrow
Water Main Cleaning & Lining MWRA Grant/Loan	22	630,000	WNS2020-22-01	TBD
Supplement to MWRA Water Main C&L Grant/Loan	22	550,000	WNS2020-22-02	TBD
Meadowbrook Sewer Assessment	22	125,000	WNS2020-22-03	TBD
Painting Water Tank (4 million gallon)	22	1,750,000	WNS2020-22-04	TBD
Water Main Cleaning & Lining MWRA Grant/Loan	23	630,000	WNS2020-23-01	TBD
Supplement to MWRA Water Main C&L Grant/Loan	23	580,000	WNS2020-23-02	TBD
Sewer I & I Study/Removal MWRA Grant/Loan	23	2,000,000	WNS2021-23-01	TBD
Water Main Cleaning & Lining MWRA Grant/Loan	24	630,000	WNS2020-24-01	TBD
Supplement to MWRA Water Main C&L Grant/Loan	24	610,000	WNS2020-24-02	TBD
Water Main Cleaning & Lining MWRA Grant/Loan	25	630,000	WNS2020-25-01	TBD
Supplement to MWRA Water Main C&L Grant/Loan	25	640,000	WNS2020-25-02	TBD

Department of Public Works, Water & Sewer Division: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	2,000,000
FY 2022	3,055,000
FY 2023	3,210,000
FY 2024	1,240,000
FY 2025	1,270,000
FY 2026	\$0
Six Year Total	\$10,775,000

Meadowbrook Area 5B Sewer Re-Lining- The Meadowbrook area has a large retention basin that drains into Meadowbrook. This project would reline a majority of the sewers that are aged and leaking into the brook in this large area. This will help us meet mandatory environmental pollution requirements as well as improve the water and plant/animal life quality in the area of the brook which drains to the Neponset River.

Water Main Cleaning & Lining MWRA (Massachusetts Water Resources Authority) Grant/Loan- This is our annual water main cleaning and lining that is paid through borrowing through the MWRA at zero interest.

Supplement to MWRA Water Main C&L Grant/Loan- This project represents additional water main cleaning and lining that would be paid directly through rates and would continue annually. At current pace, it would be close to 30 years before all water mains in town are lined. Lining water mains reduces water waste, improves quality, taste and health of water being delivered, and improves system pressure/flows which helps cut water waste and enhances public safety via better functioning hydrants.

Meadowbrook Sewer Assessment- After concluding the known sewer replacement for residential and commercial properties in this area, an assessment will be performed to determine illegal flows and other illicit discharges to the Meadowbrook which drains into the Neponset River. This project must be completed after the relining of known sewers in the area to rule out illicit discharge from existing, known but damaged or degraded sewer lines.

Painting Water Storage Tank- This project will paint the exterior of the 4-million gallon water tank used by the Town to maintain flows and pressure, as well as water storage. It is located adjacent to the cemetery.

Sewer I & I Study/Removal – The Town has an extensive network of clay sewer pipes throughout its old sewer system. These clay pipes are very susceptible to cracking and root intrusion. This leads to groundwater being able to infiltrate the sewer pipe. In addition, over the years, direct connections of storm drains to the sewer system have contributed large amounts of inflow draining into the sewer pipes. This infiltration and inflow (I&I) over burdens our sanitary sewer system plus, the Town ends up paying the MWRA to treat “clean” water. With the benefit of a MWRA Grant/Loan, the sewer system would be studied to determine where there is significant I&I and to physically remove the I&I source through a construction contract.

Department of Public Works - *Cemeteries Division*

Department of Public Works: Cemeteries Division: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Cemetery – Bathroom Upgrade at Cemetery Office	21	60,000	CEM2020-21-01	Borrowing
Cemetery – Office Roof	21	20,000	CEM2021-21-01	Free Cash
Cemetery – Garage HVAC / Electric Upgrade	22	60,000	CEM2020-21-02	TBD

Department of Public Works: Cemeteries Division: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	80,000
FY 2022	60,000
FY 2023	0
FY 2024	0
FY 2025	0
FY 2026	0
Six Year Total	\$140,000

Cemetery Office Bathroom, HVAC and Electrical Improvements – The Cemetery Office bathrooms need to be reconstructed to be handicap accessible. Included in the project is the changeover from steam heat to hot water baseboard heat and to upgrade the electrical service to the building.

Cemetery Office Roof – Replace 40+ year old roof with new asphalt shingles.

Cemetery Maintenance Garage Bathroom, HVAC, Lighting and Lighting Improvements – The Cemetery Garage bathrooms are old, worn, and in need of an upgrade. A more efficient heating system needs to be installed and the electrical service, along with the interior lighting, needs to be upgraded.

Department of Public Works - *Stormwater*

Department of Public Works: Cemeteries Division: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Design Improvements to the Meadowbrook Channel	21	250,000	STORM2021-21-01	Borrowing
Design Box Culverts from Meadowbrook to Murphy Field	21	250,000	STORM2021-21-02	Borrowing
Construct Improvements to the Meadowbrook Channel	22	1,800,000	STORM2021-22-01	TBD
Construct Box Culverts from Meadowbrook to Murphy Field	23	1,300,000	STORM2021-23-01	TBD

Department of Public Works: Cemeteries Division: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	500,000
FY 2022	1,800,000
FY 2023	1,300,000
FY 2024	0
FY 2025	0
FY 2026	0
Six Year Total	\$3,600,000

The recent June 28, 2020 storm event highlighted the need to start implementing some of the recommendations provided in the 2004 Meadowbrook Drainage Study. The first two recommendations are as follows:

Design Improvements to the Meadowbrook Channel – The Meadowbrook overtops its banks in various locations between the headwall near Sunnyside Road and Sixth Street. This section of the brook, totaling 1,000 feet, is overgrown with dense vegetation and the banks and channel bedding are in poor condition. The downstream section of the brook, from Sixth Street to Dean Street, was dredged, shaped and stabilized by the U.S. Corps of Engineers in August 1994. The very same work is proposed to increase the capacity of the brook between Sixth Street and the headwall near Sunnyside Road.

Design Box Culverts from Meadowbrook to Murphy Field - The existing box culvert from the Meadowbrook headwall near Sunnyside Road to Murphy Field is comprised of 270' of a 5' x 7' box culvert and 350' of a 5' x 6' box culvert. During intense rainfalls, these box culverts are overburdened resulting in backups in the upstream drain system and the flooding of the area of Murphy Field and Allen Rd. To alleviate the backups and flooding, an additional 620' of box culvert, approximately 5' x 7', is anticipated to be installed from Murphy Field to the Meadowbrook headwall near Sunnyside Road.

Construct Improvements to the Meadowbrook Channel – See Meadowbrook Channel Design explanation for more information.

Construct Box Culverts from Meadowbrook to Murphy Field – See Design Culverts from Meadowbrook to Murphy Field description for more information.

Fire Department

Fire Department: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Large Diameter Supply Hose	21	85,000	NFD2020-21-01	Borrowing
One Time Purchase of Tools and Equipment for Mechanic	21	156,000	NFD2021-21-02	Free Cash
SCBA Apparatus	22	600,000	NFD2020-22-01	TBD
Firefighter Protective Clothing	23	350,000	NFD2020-23-01	TBD
Portable Radios	23	325,000	NFD2020-23-02	TBD
New Handlines	24	150,000	NFD2021-24-01	TBD

Fire Department: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	241,000
FY 2022	600,000
FY 2023	675,000
FY 2024	150,000
FY 2025	0
FY 2026	0
Six Year Total	\$1,666,000

Large Diameter Supply Hose- The large diameter hose the Norwood Fire Department currently operates with is approximately 18 years old. Two factors contributing to its need for scheduled replacement are age and wear and tear. Typically, modern fire hoses are required to be hydrostatically pressure tested. The National Fire Protection Association (NFPA) has guidelines for testing, but not a firm guideline on useful life. [NFPA 25, Chapter 6, table 6.1.1.2 states that fire hoses should be tested every 3 to 5 years, and they should be pressure-tested annually, in accordance with NFPA 1962, Care, Use, Inspection, Service Testing, and Replacement of Fire Hose, Couplings, Nozzles, and Fire Hose Appliances revised in 2013.] Inspection is also required after use in a fire event. NFPA 4 is a proposed guidance section that has not yet been formally adopted and is still in the comment stage, but suggestions of adopting 10-year life span guidance have been proposed. At present, so long as hoses pass inspection, there is no maximum life span, but common sense tells us that these materials will degrade over time. If obvious signs of wear are seen in the folded or coiled areas, or where the hose connects to the fittings, it is time to consider replacement of the hose. When contrasted with the cost of replacing facilities and even a loss of life, the cost of replacing hoses is truly insignificant.

One Time Purchase of Tools and Equipment for Mechanic – The new Fire Department mechanic needs a wide variety of tools and equipment so he can effectively service the Fire Department's complex fleet. Many of the tools he is requesting are specially designed to be used on fire engines and ambulances and are not readily available at a local hardware store. Without these tools and equipment, the Fire Department will be forced to continue to send its fleet to third-party mechanics to complete more complex services. Following this one-time purchase with free cash, the Fire Department will be able to use its operating budget to upgrade or replace tools and equipment for the mechanic in the future.

SCBA Apparatus- The NFPA recognizes 4 standards in relation to Self-Contained Breathing Apparatus (SCBA). These standards are NFPA 2002, 2007, 2013 and 2018. Norwood Fire Department's Air-Paks meet the 2002 standard and upon implementation of the 2013 standard, our Air-Paks will no longer be NFPA approved and will be considered obsolete. Multiple changes have been made to make SCBA safer and more reliable. Of all the changes the improved electronics reliability and a new facepiece lens with high heat standard along with the higher communications standard for the facepiece will greatly improve the safety factor of the Air-Paks compared to the Air-Paks currently in service.

Improvements:

NFPA 2002 - addition of Heads up Display and Rapid intervention connector

NFPA 2007 - CBRN approval, much higher test standards for the electronics (heat, exposure to water, shock tests, etc.) Internal data basing for electronics; also improved facepiece air flow design (reduction of CO2 in the nose cup)

NFPA 2013 - greater heat resistance to the facepiece lens, higher communication standard for the facepiece, universal pass device tone, 1/3 low air alarm

NFPA 2018 - improved regulator removal and retention standard (to prevent inadvertent regulator detachment), data basing of pneumatics, universal EBSS fitting.

Firefighter Protective Clothing- NFPA 1851: Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Firefighting and Proximity Firefighting. Retirement criteria should be based on several factors including, but not limited to, the following:

- Overall condition of the item.
- Specific deterioration of materials or components beyond their economic repair (wear and tear).
- Ability to adequately remove hazardous materials and other contaminants.
- Age of structural or proximity ensemble or ensemble elements.
- Excessive soil buildup that could impact performance of the ensemble or ensemble elements.

The Norwood Fire Department has maintained a scheduled 7-year rotation to ensure the efficacy of the gear and to have new gear in place before the maximum duration recommended in NFPA 1851.

Portable Radios- Portable radios often serve as lifelines that link firefighters with commanders either outside of a structure or at out-of-sight distances away from their location. Norwood Fire Department's current portable analog radios are over 15 years old making them prone to breakdown which translates into increased repair costs. They also lack recent technological advancements such as digital technology; Bluetooth Technology and GPS functionality have outpaced the current models used by Norwood Fire Department. The current radios were purchased in 2002.

New Handlines - The Fire Department needs new handlines, which are the smaller fire hoses firefighters handle when fighting fires.

Information Technology & Equipment

Information Technology: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
IT Upgrades/Replacements - NPS	21	160,000	ITE2021-21-02	Borrowing
Replace Desktops	21	310,000	ITE2020-21-01	Borrowing
Replace Public Safety Infrastructure	21	90,000	ITE2021-21-01	Borrowing
IT Upgrades/Replacements - NPS	22	313,750	ITE2021-22-02	TBD
Replace Laptop Computers in Police Vehicles	22	78,000	ITE2020-22-01	TBD
IT Upgrades/Replacements - NPS	23	196,250	ITE2021-23-01	TBD

Information Technology: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	560,000
FY 2022	391,750
FY 2023	196,250
FY 2024	0
FY 2025	0
FY 2026	0
Six Year Total	\$1,148,000

Generally, IT projects are only projected out 2-3 years at most due to changes in technology.

Desktop Replacement (Gen Gov't) - The Town needs replacement desktops throughout various departments. Desktops are replaced on a roughly 5-7-year cycle. This project would replace approximately 180 desktops.

IT Upgrades/Replacements - NPS Network Switch Replacements-\$21,000; Replacement laptops at Elementary Schools-\$56,250; Wireless Access Point Refresh Phase 1-\$15,000; School Labs/Library AV Technology Replacement and PreK Expansion-\$63,800

Public Safety Infrastructure Replacement- The Town needs to update the systems infrastructure at the Police/Fire Computer center. The existing servers are between 6 and 10 years old. We rely on these servers to run the Police and Fire dispatch and operations. This replacement would be to create a virtual environment which would enhance the capability and expand-ability of the systems. It is being modeled after what we are learning implementing the Tyler/Munis systems. The project details are as follows:

- 3 core servers
- centralized storage
- centralized switch
- related software and license

Cruiser Laptop Replacement- This project would replace the laptops currently in use in police cruisers. These laptops are purchased at the same time to ensure interoperability of laptops and cruisers and availability of replacement parts. When new cruisers are ordered, laptops from the older cruisers are cycled into new cruisers to ensure we are operating in the same hardware and software across the platform.

Norwood Police Department

Norwood Police Department: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Digital Portable Radios (10)	22	22,000	NPD2020-21-01	TBD
Body/Cruiser Dash Cameras	22	100,000	NPD2020-21-03	TBD
Desk Chair Replacement	22	12,400	NPD2020-22-01	TBD

Norwood Police Department: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	0
FY 2022	134,400
FY 2023	0
FY 2024	0
FY 2025	0
FY 2026	0
Six Year Total	\$134,400

Digital Portable Radios- All Norwood Police Officers are issued Motorola portable radios. We have replaced most of the older radios with Digital Capable portables. Currently one of our neighboring mutual aid communities recently went to a digital frequency. Those officers that were not issued a new Digital Radio cannot monitor or communicate with this agency. There are also several regional tactical channels throughout Massachusetts that operate on digital frequencies.

Body/Cruiser Dash Cameras- While some police departments around the U.S. have equipped their officers with body-worn cameras, others have installed dash-mounted cameras, or dash-cams, in their radio cars. While dash-cams don't capture every encounter between citizens and officers, they capture all that occur around vehicles. This makes them a useful but cost-efficient alternative. Dash-cams would help the Police Department resolve the few citizen complaints that motorists lodge against officers and would help the Department prosecute motorists impaired by alcohol and drugs because they would capture the field sobriety assessments conducted by officers at the roadside.

Desk/Chair Replacement - This request seeks to replace most, if not all, of the Police Department Office chairs in the Records Division, Shift Supervisor's Office, Administrative Services, Patrol Supervisors, School Resource Officers, and the MetroLec Computer Crime Lab. These chairs will be close to 19 years old when replaced.

Norwood Morrill Memorial Library

Norwood Morrill Memorial Library: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Radio Frequency ID (RFID)	22	100,000	LIB2020-21-01	TBD

Norwood Morrill Memorial Library: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	0
FY 2022	100,000
FY 2023	0
FY 2024	0
FY 2025	0
FY 2026	0
Six Year Total	\$100,000

Radio Frequency (RFID)- This project would affix RFID tags to all physical library materials. Radio Frequency ID is a tag that encodes complete digital data for materials and this information is captured by a reader, pad, or security device via radio waves. Many libraries across the state, particularly in the Minuteman Library Network, have tagged all materials and use smart pads and readers to check out materials that leave the library. A decade ago, tags were \$1.00 each and were cost prohibitive for our library. Now, the tags are around 15 cents each. The Capital request includes: (1) RFID tags for the current collection of 100,000 physical items; (2) 20,000 tags for new items in 2020-2022; and (3) smart pads for circulation stations. The equipment used to encode the tags will be borrowed.

Facilities - *Norwood High School*

Facilities: Norwood High School: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Design Services, Field Turf and Track Replacement	21	160,000	F-NHS2020-21-01	Free Cash
Football Field Turf & Track Replacement	22	744,349	F-NHS2020-22-01	TBD
Football Field Lights	22	550,000	F-NHS2020-23-01	TBD
Football Field Concession Stand	22	300,000	F-NHS2020-24-01	TBD

Facilities: Norwood High School: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	160,000
FY 2022	1,594,349
FY 2023	0
FY 2024	0
FY 2025	0
FY 2026	0
Six Year Total	\$1,754,349

Replace Exterior Track and Field Turf - This project would replace the exterior track at the high school and replace the turf field at the high school. Both the track and the field receive almost daily use. The anticipated lifespan of the turf fields averages 10 years; they were installed in 2010.

Stadium Lights - This project would add exterior evening lights so that games, events, and other functions could be held on the football field behind the High School.

Concession Stand - This project would build a permanent concession stand outside the high school adjacent to the football field.

Facilities - Coakley Middle School

Facilities: Coakley Middle School: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number

Facilities: Coakley Middle School: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	0
FY 2022	0
FY 2023	0
FY 2024	0
FY 2025	0
FY 2026	0
Six Year Total	0

Facilities - *Savage Center*

Facilities: Savage Center: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Parking Lot Renovation	23	600,000	F-SVC2020-23-01	TBD
Window and Door Replacement	25	450,000	F-SVC2021-25-01	TBD

Facilities: Savage Center: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	0
FY 2022	0
FY 2023	600,000
FY 2024	0
FY 2025	450,000
FY 2026	0
Six Year Total	1,050,000

Renovation of Parking Lot – This project would look to renovate and expand the parking at this building to address conditions and insufficient capacity. The project would involve redesigning the lot, increasing the number of parking spaces, and adding new lighting where needed. As this project approaches, it will need to be considered in conjunction with the current status of school facilities. This project is separate from the paving of the Senior Center lot.

Window and Door Replacement – This project would remove and replace all windows and exterior doors with energy saving products. The new doors and windows will also provide better security for the building.

Facilities - Elementary Schools

Facilities: Elementary Schools: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Oldham School – Tile Replacement	21	180,000	F-ELE2020-21-01	Borrowing
All Elementary – Replace Intercom & Clock Systems	21	400,000	F-ELE2020-22-04	Borrowing
All Schools – Replace Door Access Systems	21	165,000	F-ELE2021-21-01	Borrowing
Balch School – Boiler Replacement	22	350,000	F-ELE2020-22-01	TBD
Oldham School – Boiler Replacement	22	300,000	F-ELE2020-22-02	TBD
All Elementary – Security Upgrades	22	250,000	F-ELE2020-22-03	TBD
Balch School – Floor Tile Replacement	23	95,000	F-ELE2020-23-01	TBD
Callahan School – Floor Tile Replacement	23	30,500	F-ELE2020-23-02	TBD
Willett Floor Tile – Floor Tile Replacement	23	100,000	F-ELE2020-23-03	TBD
Willett School – Light Replacement	23	175,000	F-ELE2020-21-02	TBD
All Schools – Parking Lot Replacement	23	1,085,000	F-ELE2021-23-01	TBD
Callahan School – Masonry Repairs	24	35,000	F-ELE2020-24-01	TBD
Cleveland School – Masonry Repairs	24	30,000	F-ELE2020-24-02	TBD
Prescott School – Masonry Repairs	24	30,000	F-ELE2020-24-03	TBD

Facilities: Elementary Schools: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	745,000
FY 2022	900,000
FY 2023	1,485,500
FY 2024	95,000
FY 2025	0
FY 2026	0
Six Year Total	\$3,225,500

Oldham School Floor Tile Replacement- This project would remove and replace severely deteriorated asbestos floor tile in the main hallway and in classrooms. This would complete the removal of any remaining asbestos tile and includes 20 rooms and corridors in this school.

All Elementary Replace Intercom & Clock Systems - This project would replace the intercom systems and the clock systems at all 5 elementary schools. These systems are several decades old and are beginning to fail at varying intervals. The systems are integral to the school day timekeeping and the intercom system, which is related to an important element of school safety.

All Elementary Replace Door Access Systems – The access system is 15 years old, and the technology is no longer supported. In order to maintain a high standard for security, the entire access system must be replaced.

Balch School Boiler Replacement- This project would replace the boiler at the Balch School which is reaching the end of its useful life. This project may be an MSBA project depending on overall cost, and if the Town participates in the Green Communities program, we will apply for additional grant funding through that program as well.

Oldham School Boiler Replacement- This project would replace the boiler at the Oldham school which is reaching the end of its useful life. This project may be an MSBA project depending on overall cost, and if the Town participates in the Green Communities program, we will apply for additional grant funding through that program as well.

All Elementary Security Upgrades- This project would facilitate security enhancements planned for all the elementary schools. This project needs to follow upgraded systems including the intercom and clock system to ensure all systems are working in sync as we work to bring all elementary schools up to the most current security standards.

Balch School Floor Tile Replacement- This project would remove and replace asbestos floor tile in 15 classrooms and offices. This would complete the removal of remaining asbestos tiles in the building.

Callahan School Floor Tile Replacement- This project would remove and replace asbestos floor tile in 4 classrooms and offices. This would complete the removal of remaining asbestos tiles in the building.

Willett School Floor Tile Replacement- This project would remove and replace asbestos floor tile in the main corridor and hallways. This would complete the removal of remaining asbestos tiles in the building.

Willett School Light Replacement - This project would remove and replace original classroom lights with new high efficiency lighting, dimmable ballasts, motion control, and light harvesting. This is the last of the elementary schools to be updated with new lighting.

All Elementary School Parking Lot Replacement- All the parking lots for the elementary school are in disrepair and need replaced.\

Callahan School Masonry Repairs- This project would repair and repoint damaged brick masonry on the exterior of the building.

Cleveland School Masonry Repairs- This project would repair and repoint damaged brick masonry on the exterior of the building.

Prescott School Masonry Repairs- This project would repair and repoint damaged brick masonry on the exterior of the building.

Facilities - Public Safety Building

Facilities: Public Safety Building: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Update Community Room/Police	21	200,000	F-PSB2020-20-01	Borrowing
Design Repairs of Apparatus Floor	21	10,000	F-PSB2020-20-03	Free Cash
Replace Plymovent System	21	50,000	F-PSB2020-20-04	Borrowing
Upgrade Kitchen (Including Appliances) (Fire)	21	450,000	F-PSB2020-20-05	Borrowing
Design/CM for Carpet Replacement (Both Sides)	21	25,000	F-PSB2020-20-06	Free Cash
Replace Fire Alarm Panel	21	50,000	F-PSB2021-21-01	Borrowing
Apparatus Apron/Parking Lot Crack Sealing	21	10,000	F-PSB2021-21-02	Free Cash
Replace HVAC System	22	1,000,000	F-PSB2020-20-02	TBD
Carpeting and Other Flooring (Both Sides)	22	130,000	F-PSB2020-20-01	TBD
Repairs to Apparatus Floor	23	75,000	F-PSB2020-20-01	TBD
Design Services – Roof Repairs	23	12,000	F-PSB2020-20-02	TBD
Roof Repairs	24	100,000	F-PSB2020-20-01	TBD

Facilities: Public Safety Building: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	795,000
FY 2022	1,130,000
FY 2023	87,000
FY 2024	100,000
FY 2025	0
FY 2026	0
Six Year Total	\$2,112,000

Update Community Room- The community room, which is used frequently by town and community groups as well as our primary training facility for police and fire, is beginning to age, and the equipment and fixtures are beginning to deteriorate and become outdated. Design services would evaluate the room's use and needs and develop plans and cost estimates for work to this room, which will include replacing AV equipment, furniture, and fixtures.

Replace HVAC System- The HVAC system at the Public Safety Building has been problematic since its inception and currently experiences failure several times per year. This system operates 24/7 with most of the building on an occupied setting throughout the day, thus wearing the system down faster than a standard commercial HVAC system. We have already replaced one RTU (Roof Top Unit) at a cost of nearly \$100,000 and we are expecting more RTUs to fail in future years. This would begin the design and engineering process to replace the HVAC system in the following year.

Design Services, Apparatus Floor- See below for project description.

Plymovent System- This is the system that fire engine exhaust systems are hooked up to and required by code to prevent exhaust from filling the truck bay. This project would replace the system which is at the end of its useful life and beginning to fail.

Design Services, Kitchen Upgrade- The Fire Department kitchen has reached the end of its useful life cycle. This kitchen is used to feed about 15 firefighters three times per day, 365 days per year. Unfortunately, the contractors who built the Public Safety Building used residential-grade equipment, not commercial-grade equipment. Equipment failures (fridges, stoves, etc.) are now frequent. The cabinetry and millwork are damaged, chipped, peeling, and falling apart. The ceiling tiles and fans are in poor condition. This is not due to mistreatment or poor maintenance; it is due to high use and low-quality construction. The design services will develop replacement plans, specifications, and bid documents to upgrade the kitchen.

Design Services, Carpet/Flooring Replacement- Design services and engineering for various replacement of carpet and flooring throughout facility.

Replace Fire Alarm Panel - The fire alarm panel at the Fire Station is beginning to fail and needs replaced. If approved, we will replace the alarm panel with a non-proprietary panel.

Apparatus Apron/Parking Lot Crack Sealing – This project would crack seal the apron and parking lot, which will extend the life of the overall lot for 5-7 years. This will significantly save the Town funding in delaying the repaving of the lot and apron.

Carpeting/Flooring Replacement- Most of the carpeting and flooring throughout the building is reaching the end of its useful life. Because the Police and Fire Departments are all-weather, 24/7 departments, there is more wear and tear than in standard residential or commercial facilities. Much of the carpet in the building is original to the early 2000's construction. As carpet ages it begins to cause mold and air quality issues that can negatively impact the health and wellbeing of staff.

Repairs to Apparatus Floor – The apparatus floor on which millions of dollars of fire equipment sits is beginning to show its age. Because the apparatus floor is always in use by the Fire Department, could pose a safety hazard if the apparatus floor deteriorates a great deal, and could impact response times, we are trying to be proactive by seeking funding for design services in FY2021 and funding for repairs in FY2023.

Design Services, Roof Repairs/Replacement- Design services for repair/replacement of roof at the end of its expected life.

Roof Replacement- The roof will reach 20 years of age in FY2024, which is its life expectancy. The design services in FY23 will determine whether full replacement is needed, repairs should be undertaken, or the condition is good enough that no major work is necessary. If that is the case, it is recommended that money be placed into a reserve (special purpose stabilization) fund for the eventual replacement of the roof at that time.

Facilities - Town Hall

All Town Hall projects on hold until determination of current renovation project status

Facilities: Town Hall Summarize

Description	Cost	Project Number
Upgrade Mechanical, Electrical, Plumbing	00	
Design Services – Carillon Rehabilitation		
Carillon Rehabilitation Including Framework		
Design Services – Replacement of Gener		
Renovate Town Hall Offices	,000	
Replace Generator for Town Hall	2,580,000	

Day by Fiscal Year

Fiscal Year	Total Cost
FY 2021	\$2,800,000
FY 2022	\$445,600
FY 2023	\$1,380,000
FY 2024	\$
FY 2025	\$
FY 2026	
Six Year Total	\$4,625,600

All Town Hall projects on hold until determination of current renovation project status

Facilities - Civic Center

Facilities: Civic Center: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Repairs to Exterior of Building	21	500,000	F-CIV2020-21-02	Borrowing
Design Services for Women's Locker Room	21	10,000	F-CIV2020-21-03	Free Cash
Design Service for Lobby Area	21	10,000	F-CIV2021-21-01	Free Cash
Finish Replacement of Elevator at Civic Building	21	225,000	F-CIV2021-21-02	Borrowing
Renovations of Women's Locker Room	22	125,000	F-CIV2020-22-03	TBD
Renovations to Lobby Area	22	75,000	F-CIV2021-22-02	TBD
Design Services for Kitchen Remodel	23	15,000	F-CIV2020-23-03	TBD
Kitchen Remodel	24	125,000	F-CIV2020-22-01	TBD
Design Services for Asphalt Shingle Roof	24	22,000	F-CIV2020-22-02	TBD
Replacement of Asphalt Shingle Roof	25	150,000	F-CIV2020-23-02	TBD
Design Services for Generator Replacement	25	18,600	F-CIV2020-23-01	TBD
Design Services for Air Conditioning in Weight Room	25	10,000	F-CIV2021-25-01	TBD
Generator Replacement	26	100,000	F-CIV2021-26-01	TBD
Installation of Air Conditioning in Weight Room	26	200,000	F-CIV2021-26-02	TBD

Facilities: Civic Center: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	745,000
FY 2022	200,000
FY 2023	15,000
FY 2024	147,000
FY 2025	178,600
FY 2026	300,000
Six Year Total	\$1,585,600

Exterior Repair/Repainting- This would replace/repoint the problem areas in the front and rear of the Civic Center. The limestone (filler between stones and decorative areas) has surpassed its useful life and has begun to fail. This is obviously a major safety concern as it can fall on those who enter the building, but it is also a concern for rain/water damage.

Design Services, Women's Locker Room- See below for project description.

Renovation Women's Locker Room- The women's locker room has not had any major renovations since the building opened in the early 1980's. The shower floor is starting to crack, the shower posts are outdated and failing, and the partitions/benches are cracking. The Town renovated the men's locker room in 2018.

Design Service, Lobby/Office- See below for project description.

Finish Replacement of Elevator at Civic Building - The elevator has been in service since the Town moved into the building in 1984. The elevator has reached its useful life and needs to be replaced. The Civic Center is a voting location, the town shelter, and is used extensively for recreational programs and meetings.

Renovation to Lobby/Office- The Recreation Department has updated the old DPW offices and has started to offer programming and meeting spaces out of that room. We would like to make the waiting area and the hallway when you first enter the Civic Center one large lobby area. During peak times the entrance can be very crowded as it's a narrow hallway, we have no waiting area (currently use office), and it would allow us to serve residents more effectively. We would also like to renovate the office area and create two service desks in the lobby area along with creating offices within our main office area.

Design Services, Kitchen Remodel- See below for project description.

Kitchen Remodel- The kitchen has not had any major renovations since the building opened in the early 1980's. The cabinets and appliances are all outdated and failing. We use this area for recreational programs for all ages and it needs to be addressed as our demand for cooking programs has grown.

Design Services, Roof- See below for project description.

Replacement of Roof- The roof at the Civic is reaching the end of its useful life. The design services programmed in the year prior to this project will determine whether substantial work or complete replacement is necessary. If the roof is determined to be in good condition at that time, money should be placed in a reserve (special purpose stabilization) fund for the eventual replacement of this roof.

Design Services, Generator Replacement- As the generator for our primary emergency shelter ages, we will need to explore installing a new generator to ensure operability of the Civic as our emergency shelter.

Design Service for Air-Conditioning in Weight Room - See below for project description.

Installation of Air-Conditioning in Weight Room – We have received numerous inquiries about the possibility of installing air-conditioning in our weight room. Right now, the only two areas that do not have air-conditioning in the building are the weight room and the gymnasium. During the summer months the room becomes too hot for residents to enjoy the work out area and with a good portion of our members being seniors it is a concern.

Facilities - *Morrill Memorial Library*

Facilities: Morrill Memorial Library Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Design Services – Painting of Interior	21	20,000	F-MML2020-21-01	Free Cash
Painting of Interior	21	120,000	F-MML2020-22-01	Borrowing

Facilities: Morrill Memorial Library: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	140,000
FY 2022	0
FY 2023	0
FY 2024	0
FY 2025	0
FY 2026	0
Six Year Total	\$140,000

Design Services, Painting of Interior- See below for project description.

Interior Painting- This project would allow us to paint the entire library interior. The renovation will be 20 years old in 2021. The walls and ceilings will need to be entirely repainted, although the custodial crew has already repainted smaller rooms (bathrooms, kitchens, program rooms). Painters will need to erect scaffolding in order to paint the high ceilings and walls in the library.

Facilities - General Government Unallocated Buildings

Facilities: General Government Unallocated Buildings: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
VFW – Feasibility Study for Repairs	22	20,000	F-UNA2020-22-01	TBD
Animal Shelter – Feasibility Study for Repairs	22	20,000	F-UNA2020-22-02	TBD
206 Central Street – Design Services for Renovations	22	50,000	F-UNA2020-22-03	TBD
Consulting Services – Demolition of Ellis Pump Station	23	25,000	F-WTR2020-23-01	TBD
206 Central Street – Renovations	23	250,000	F-UNA2020-23-02	TBD
Demolition of Ellis Pump Station	24	250,000	F-WTR2020-24-01	TBD

Facilities: General Government Unallocated Buildings: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	0
FY 2022	90,000
FY 2023	275,000
FY 2024	250,000
FY 2025	0
FY 2026	0
Six Year Total	\$615,000

VFW- The Town purchased this property, located on Dean Street, in 2010 and leases it back to the VFW for a nominal fee. The existing lease expires in October 2035. No repairs have been done to the building since the Town purchased it, and both the interior and exterior need significant repairs and upgrades. While the lease provides for the VFW to maintain and repair the building, the Town should know the condition of the building. A feasibility study will review the building and provide updated information as to the condition of the building.

Animal Shelter- Housed in a portion of one of the public works buildings, the animal shelter provides a holding area for stray and quarantined animals found in Norwood. The shelter does not have bathroom facilities. Minor repairs have been made over the years. A feasibility study will examine the building and provide preliminary cost estimates for repairs.

206 Central Street - This building used to be the offices of Norwood Light and Broadband. Both departments moved into a renovated facility in January 2020, leaving the headend equipment but vacating the office and customer service areas. The hope is to move several offices from Town Hall into this building, alleviating overcrowding at Town Hall. A feasibility study will examine the areas and make recommendations for renovations as well as preliminary cost estimates. Design services in FY22 will provide the Town with estimated construction costs. Renovations would begin in FY23.

Demolition of Ellis Pump Station - This building is unoccupied and currently used for some storage of Water Department materials. At one time, the Town had hoped to make repairs to the roof and continue to use the building for storage, but the deterioration of the building has made that option impossible. This building was built as a pumping station and is essentially a brick shell encasing old pumping equipment and large diameter piping. It is not considered usable for office or other space; it is essentially a brick shell covering large equipment, not a standard building. The Town allocated funds for the demolition years ago, but they were allocated elsewhere in a difficult budget year. The building has no ADA accessibility, is loaded with asbestos, and was shut down in the late 1970's and has been mothballed since. It cannot return to use as a pump station.

Facilities - *Norwood Memorial Airport*

Facilities: Norwood Memorial Airport: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Post construction monitoring Taxiway A (years 1-3)	21	3,000	F-AIR2021-21-01	Free Cash
Environmental Assessment, Taxiway C stub, Phase 1	21	15,000	F-AIR2020-21-03	Free Cash
Wildlife fence/obstruction removal (Phase 1 & 2)	22	90,000	F-AIR2021-22-01	TBD
Environmental Assessment, Taxiway C stub	22	20,000	F-AIR2021-22-02	TBD
Lease Buyback of 1,100 Ft. Strip	22	125,000	F-AIR2020-22-02	TBD
Reconstruction Runway 10/28	23	155,000	F-AIR2020-22-01	TBD
Construct runway 17/35 safety areas	23	75,000	F-AIR2021-23-01	TBD
Reconstruct taxiway C stub	23	30,000	F-AIR2021-23-02	TBD
Reconstruct runway 17/35	24	205,000	F-AIR2021-24-01	TBD
Runway 35 holding pad reconstruction	24	27,500	F-AIR2021-24-02	TBD
Taxiway D stub, relocation	24	30,000	F-AIR2021-24-03	TBD
Acquire Land for Runway 10 Runway Protection Zone	25	150,000	F-AIR2020-23-01	TBD
Construction south taxi-lane helipads	26	30,000	F-AIR2020-26-01	TBD

Facilities: Norwood Memorial Airport: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	18,000
FY 2022	235,000
FY 2023	260,000
FY 2024	262,500
FY 2025	150,000
FY 2026	30,000
Six Year Total	\$955,500

Post construction monitoring Taxiway A (years 1-3) – This federal/state grant project will provide environmental monitoring services during the post-construction phase of the airport's taxiway re-location project. Monitoring and invasive species control measures are specifically required by the Massachusetts Department of Environmental Protection and Natural Heritage and Endangered Species Program for a period of five years before a request for a Certificate of Compliance can be made. This scope of work addresses the first several years of monitoring and reporting as required by the variance order of conditions.

Environmental Assessment, Taxiway C Stub- This federal/state grant project involves the preparation of an environmental assessment/permitting as well as permitting design plans for the proposed re-location of taxiway C (800 ft. x 35 ft.). This action would meet FAA's required runway-to-taxiway separation criteria. The environmental assessment is a precursor to a follow-on construction project, addressing new FAA design standards for taxiways which connect runways and parking aprons.

Lease Buyback of 1,100 Ft. Strip- In 1967, *Boston Metropolitan Airport Inc. (BMA)* gave the Town 7.5 acres (known as the 1,100-foot strip) in addition to the land already turned over to the Town by the War Department after World War II. The *BMA* land transfer was approved at Town Meeting. Included in this agreement was a lease back from the Town to *BMA*, with an 80-year term running to the year 2047. This lease restricted the use of land to aeronautical purposes. Today, *BMA's* 1,100-ft. strip includes sub-leases to tenants like *Flight Level Norwood, LLC*, *Boston Executive Helicopters, LLC* and *Subaru of New England (Boch Aviation)*. The agreement also requires *BMA* each year to pay the Town an amount in lieu of taxes that would have been due were the land privately owned. Therefore, since 1967, the Town has not received any direct revenue from this lease, only payments in lieu of taxes. With federal and state grant participation, a buyback of the remaining years (approx. 28 years) of this long-term lease would give the Airport Commission direct control of the land—for more business development—along with direct revenue. Additionally, this lease buyback would put the Town in compliance with the federal grant assurances since FAA discourages long-term leases in which the airport authority effectively gives up rights and powers to publicly funded land.

Re-Construction of Runway 10/28- Runway 10/28, which is 3,995 feet long and 75 feet wide, was re-constructed with federal/state grant assistance in 1995. As a general rule, FAA expects publicly funded runways to realize a 20-year life cycle, and runway 10/28 is now four years beyond its projected life cycle. Additionally, based on a recent pavement management system inspection by MassDOT, this runway's need for re-construction has been identified using quantifiable methodologies.

Acquire Land for Runway 10 Runway Protection Zone- By definition, a runway protection zone (RPZ) is an area off the runway end "that serves to enhance the protection of people and property on the ground" should an aircraft land or crash beyond the runway end. Per an FAA design standard, the airport owner must have sufficient interest in the RPZ "to protect it from both obstructions and incompatible land use." The preferred method of gaining such interest is through land ownership, which is the course of action the Norwood Airport Commission would like to take in acquiring the privately held runway 10 RPZ off Access Road. This alternative would give the Airport Commission maximum control over the land. Additionally, this land is expected to be a significant revenue enhancer as an auto storage lot.

Construct Runway 17/35 Safety Areas - To enhance safety in the event of an aircraft overrun or 'undershoot,' this federal/state project involves the construction of paved safety areas (300 ft. x 75 ft.) on each of the two runway ends for runway 17/35.

Runway 35 Holding Pad Reconstruction - This federal/state grant project involves the re-construction of a section of taxiway A (63,800 sq. ft.) which serves as a run-up area for runway 17 /3 5. Components of the construction will include grading, lighting, erosion control, wetland and floodplain mitigation design, storm drainage design, paving and marking.

Taxiway D Stub, Relocation - This federal/state grant project involves the re-location of taxiway D (170 ft. x 35 ft.) in order to address a new FAA design standard for taxiways which connect runways and parking aprons. Components of the construction will include grading, lighting, erosion control, wetland and floodplain mitigation design, storm drainage design, paving and marking.

Acquire Land for Runway 10 Runway Protection Zone - By definition, a runway protection zone (RPZ) is an area off the runway end "that serves to enhance the protection of people and property on the ground" should an aircraft land or crash beyond the runway end. Per an FAA design standard, the airport owner must have sufficient interest in the RPZ "to protect it from both obstructions and incompatible land use." The preferred method of gaining such interest is through land ownership, which is the course of action the Airport Commission would like to take in acquiring the privately held runway 10 RPZ off Access Road. This alternative would give the Airport Commission maximum control over the land. Additionally, this land is expected to be a significant revenue enhancer as an auto storage lot.

Construction South Taxi-Lane Helipads - This federal/state grant project involves the re-location and construction of five helipads on the south end of the north/south taxi-lane, to improve parking and fueling efficiencies. Components of the project will include erosion control, wetland and floodplain mitigation design, storm drainage design, paving, and marking.

Parks, Playgrounds, Open Space

Parks, Playgrounds, Open Space: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Design Services for Hawes Pool & Father McAleer's Pool	22	135,000	PPO2020-22-01	CPA
Design Services, Eliot Field Bathroom/Storage Area	22	20,000	PPO2020-22-02	TBD
Replace Hawes Pool	23	3,000,000	PPO2020-23-01	TBD
Design for Lights at Lower Coakley Field	23	10,000	PPO2021-23-01	TBD
Renovations Eliot Field Bathroom/Storage Area	23	100,000	PPO2020-23-03	TBD
Alterations to Fr. McAleer's Pool Area	24	2,000,000	PPO2020-24-01	TBD
Installation of Lights at Lower Coakley Field	24	250,000	PPO2021-24-01	TBD

Parks, Playgrounds, Open Space: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	0
FY 2022	155,000
FY 2023	3,110,000
FY 2024	2,250,000
FY 2025	0
FY 2026	0
Six Year Total	\$5,515,000

Design Services, Hawes Pool & Fr. MacAleer's Pool Area - See below for project description.

Design Services, Eliot Field Bathroom/Storage- See below for project description.

Replace Hawes Pool- Hawes Pool is reaching the end of its life expectancy and requires major work to continue to seal the pool and prevent major water leakage. This project would replace the pool with a modern, code compliant, zero entry pool.

Design and installation of Lights at Lower Coakley Field – In preparation of losing athletic fields during construction of the new middle school construction, installing lights at the Lower Coakley Field will create more playing fields during and after construction of the new middle school.

Renovations Eliot Field/Storage Area- The bathroom and storage area at the Eliot Field area has reached its useful life and has begun to fail. Currently there is significant damage to the roof, windows, and structure itself needs work. The storage unit and bathroom are two separate buildings and we would like to see those buildings combined.

Alterations to Fr. MacAleer's Pool Area- This project would provide work similar to that done on Hawes Pool in 2017, which also may require bath house upgrades and other work. The design services for this project should include alternatives including, but not limited to, eliminating the pool and replacing it with a splash park.

Fleet Management - *Public Works Fleet*

Fleet Management: Public Works Fleet: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Replace Truck #15 – Utility Truck	21	50,000	V-HWY2021-21-02	Borrowing
Replace Truck #34 – 1 Ton Dump Truck	21	55,000	V-HWY2020-21-02	Borrowing
Replace Truck # 39 – 1 Ton Dump Truck	21	55,000	V-HWY2021-21-03	Borrowing
Replace Asst. Supt. Vehicle #59	21	35,000	V-HWY2021-21-04	Borrowing
Replace 1 Truck #46 – Dump Truck	21	55,000	V-HWY2021-21-05	Borrowing
Midsize Pick-up Truck	21	30,000	V-HWY2021-21-06	Borrowing
Midsize Pick-up Truck	21	30,000	V-HWY2021-21-07	Borrowing
Replace Truck #4 – Dump Truck	22	90,000	V-HWY2021-22-01	TBD
Replace Truck #25 – Dump Truck	22	95,000	V-HWY2020-23-01	TBD
Replace Truck #32 – 10 Wheel Dump Truck	22	130,000	V-HWY2020-22-01	TBD
Replace Truck #45 – Dump Truck	22	90,000	V-HWY2020-22-02	TBD
Replace Truck #47 – Dump Truck	23	95,000	V-HWY2020-23-02	TBD
Replace Loader L1	23	165,000	V-HWY2020-23-03	TBD
Replace Truck #6- Salt Truck	24	120,000	V-HWY2021-24-01	TBD
Replace Truck #8 - Pickup	24	55,000	V-HWY2021-24-02	TBD
Replace Backhoe – JD1	24	110,000	V-HWY2020-21-03	TBD
Replace Truck #10 – Water Utility Truck	25	60,000	V-HWY2021-25-01	TBD
Replace Truck #20 – Salt Truck	25	120,000	V-HWY2021-25-02	TBD
Replace Truck #50 – Salt Truck	25	120,000	V-HWY2021-25-03	TBD

Fleet Management: Public Works Fleet: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	310,000
FY 2022	405,000
FY 2023	260,000
FY 2024	285,000
FY 2025	300,000
FY 2026	0
Six Year Total	\$1,560,000

Currently, the Department of Public Works maintains a fleet of approximately 65 vehicles and large equipment. The average age of a vehicle/piece of equipment is approximately 10 years. The recommended replacement age of vehicles and equipment varies but the replacement plan calls for most equipment to be replaced no longer than 5 years past the end of its useful life expectancy, with most front-line pickup/plow trucks averaging about 12 years of service before replacement. Replacements are projected five years out but the schedule is updated annually as vehicle conditions change, which may necessitate adjusting the programmed replacement schedule. A good model is to have a replacement of approximately 10% of the value of the fleet in any given year.

Fleet Management - Cemetery Fleet

Fleet Management: Cemetery Fleet: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Truck #CEM3 – 1-Ton Dump Truck	21	60,000	V-CEM2020-21-01	Borrowing
Utility Vehicle	21	25,000	V-CEM2020-21-02	Borrowing
Truck #CEM2 – 1-Ton Dump Truck	22	57,000	V-CEM2020-22-01	TBD
Rider Mowers	22	10,000	V-CEM2020-22-02	TBD
Backhoe	23	110,000	V-CEM2021-23-01	TBD
New Equipment	24	10,000	V-CEM2021-24-01	TBD
New Equipment	25	10,000	V-CEM2021-25-01	TBD

Fleet Management: Cemetery Fleet: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	85,000
FY 2022	67,000
FY 2023	110,000
FY 2024	10,000
FY 2025	10,000
FY 2026	0
Six Year Total	\$282,000

Similar to the DPW/Highways fleet, the Cemetery Fleet is on a scheduled replacement plan and the average age of a vehicle/piece of equipment is approximately 10 years. The fleet and equipment utilized by the cemetery division is, by its nature, smaller and lower cost than larger highway equipment, such as street sweepers and loaders.

Utility Vehicle – For reference, we are looking for a vehicle similar to a Kubota RTV500. This vehicle will better suit the needs of Cemetery staff than a small pickup truck. Town employees can also use the utility vehicle during Town events.

Fleet Management - *Fire & Ambulance Fleet*

Fleet Management: Fire & Ambulance Fleet: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
NC-3	21	65,000	V-NFD2020-21-01	Borrowing
Replace Ambulance (NA3) w/Stryker and cardiac monitor	21	550,000	V-NFD2020-21-02	Borrowing
NC-4	21	65,000	V-NFD2020-21-03	Borrowing
NC-05	22	65,000	V-NFD2020-22-01	TBD
Replace Engine #4	24	950,000	V-NFD2020-24-01	TBD
Replace Ambulance (NA2) w/Stryker	25	550,000	V-NFD2020-25-01	TBD

Fleet Management: Fire & Ambulance Fleet: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	680,000
FY 2022	65,000
FY 2023	0
FY 2024	950,000
FY 2025	550,000
FY 2026	0
Six Year Total	\$2,245,000

NC-3 Replacement- This is the vehicle that is utilized by the Deputy Fire Chief. This vehicle is also used as an incident response vehicle when the Deputy Fire Chief is off duty. It is a 2007 Chevy Tahoe and will be replaced by a current year vehicle with the same model. As the vehicles age, their reliability, fuel efficiency, and repair costs escalate.

NA3 Ambulance Replacement- This project would complete the scheduled replacement of NA3, one of our primary ambulance units. NA3 is a 2012 vehicle and is currently the oldest in the fleet of ambulances. This replacement will include a stryker unit which is a patient lift assistance device to reduce the potential for injury to paramedics and patients when being lifted in and out of the ambulance. When a front-line ambulance is replaced it becomes the backup ambulance and the backup ambulance is removed from service.

Engine #4 Replacement- This project would replace Engine #4 as it reaches its expected 20-year life span.

NA2 Ambulance Replacement- This project would complete the scheduled replacement of NA2, one of our primary ambulance units. NA2 is a 2015 vehicle and will be oldest in the fleet of ambulances. This replacement will include a stryker unit which is a patient lift assistance device to reduce the potential for injury to paramedics and patients when being lifted in and out of the ambulance.

Fleet Management - Police

Fleet Management: Police Fleet: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Police Cruisers (4)	21	216,000	Operating Budget	Operating Budget
Police Cruisers (4)	22	226,800	Operating Budget	Operating Budget
Police Cruisers (4)	23	238,140	Operating Budget	Operating Budget
Police Cruisers (4)	24	250,048	Operating Budget	Operating Budget
Police Cruisers (4)	25	262,500	Operating Budget	Operating Budget
Police Cruisers (4)	26	275,624	Operating Budget	Operating Budget

Fleet Management: Police Fleet: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	216,000
FY 2022	226,800
FY 2023	238,140
FY 2024	250,048
FY 2025	262,500
FY 2026	275,624
Six Year Total	\$1,469,112

Fleet Management: Police Fleet

The police fleet maintains 20 vehicles with an average age of 4.5 years. The replacement of a front-line patrol vehicle should be done every 3 years. Back up and administrative vehicles should not exceed a 5-year replacement. Police vehicles require a higher degree of reliability than other municipal vehicles. Police vehicles also wear and tear much faster than other municipal vehicles due to their continued use, all weather conditions they operate in, as well as the engine degradation from pursuit and immediate response requirements.

Fleet Management - *Miscellaneous Vehicles Fleet*

Fleet Management: Miscellaneous Vehicles Fleet: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Recreation – SUV Vehicle	21	45,000	V-MS2020-21-01	Borrowing
COA Sedan for Medical Transport	21	40,000	V-MS2021-21-01	Borrowing
Recreation – Pick Up Truck	21	55,000	V-MS2021-21-01	Borrowing

Fleet Management: Miscellaneous Vehicles Fleet: Projected Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	140,000
FY 2022	0
FY 2023	0
FY 2024	0
FY 2025	0
FY 2026	0
Six Year Total	\$140,000

This fleet replacement section is for vehicles assigned to departments that do not maintain large fleets and as such are only replaced when the vehicle reaches its useful life but is not otherwise projected out.

Fleet Management - School Transportation Fleet

Fleet Management: School Transportation Fleet: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Ford E-150 Van (5) (2)	21	60,000	V-STR2021-21-01	Borrowing
Ford E-150 Van (3)	22	105,000	V-STR2020-22-01	TBD
Ford E-150 Van (3)	23	120,000	V-STR2020-23-01	TBD
GMC Savana	24	40,000	V-STR2021-24-01	TBD
Dodge Caravan (2)	24	80,000	V-STR2021-24-02	TBD
Ford E-150 Van	24	40,000	V-STR2021-24-03	TBD

Fleet Management: Miscellaneous Vehicles Fleet Projected: Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	60,000
FY 2022	105,000
FY 2023	120,000
FY 2024	160,000
FY 2025	0
FY 2026	0
Six Year Total	\$445,000

This fleet replacement section is for vehicles used for the transportation of Norwood Public School students.

Fleet Management - School Buildings & Grounds Fleet

Fleet Management: School Buildings & Grounds Fleet: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
F250 Pickup Truck	23	60,000	V-SCH2020-23-01	TBD
Backhoe	23	65,000	V-SCH2020-23-02	TBD
Owens Trailer	24	7,500	V-SCH2020-24-01	TBD
Chevy Box Truck	24	45,000	V-SCH2020-24-02	TBD

Fleet Management: Buildings & Grounds Fleet Projected: Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	0
FY 2022	0
FY 2023	125,000
FY 2024	52,500
FY 2025	0
FY 2026	0
Six Year Total	177,500

Currently the School's Buildings & Grounds Department maintains 15 vehicles and large equipment and trailers. The average age of our vehicle/equipment is 11 years. We try to replace our fleet in the 5 - 9-year range; but as you can see, we are projected five years out, but the schedule is annual as vehicle conditions change. A good model is to have a replacement of 10% of the value of the fleet in any given year.

Fleet Management - *Facilities Department*

Fleet Management: Facilities Department Fleet: Summarized Capital Outlay

Description	Fiscal Year	Total Cost	Project Number	Funding Source
Facilities Truck	21	45,000	V-FAC2021-21-01	Borrowing
Facilities SUV	21	45,000	V-FAC2021-21-02	Borrowing

Fleet Management: Buildings & Grounds Fleet Projected: Capital Outlay by Fiscal Year

Fiscal Year	Total Cost
FY 2021	90,000
FY 2022	0
FY 2023	0
FY 2024	0
FY 2025	0
FY 2026	0
Six Year Total	\$90,000

FY2021 will be the first year during which the Town of Norwood will have a unified Facilities Department. Due to the short amount of time between the final approval of the Facilities Department and the start of the FY2021 budget preparation, we could not aggregate the various facility capital budgets under one budget. Rather, we are starting the Facilities Department CIP with a couple of much needed vehicles for the new department.

Appendices

Appendix 1: Previous year expenditure update

Appendix 2: Unaddressed capital

Appendix 3: Horizon capital

Appendix 4: Understanding the project numbering system

Appendix 5: Proposed Funding Schedule

Appendix 6: Fall Updates

Appendix 7: Debt Service Analysis

Appendix 8: DPW Fleet Replacement Plan

Appendix 9: Cemetery Fleet Replacement Plan

Appendix 10: Fire Department Fleet and Equipment Replacement Plan

Appendix 11: Police Fleet Replacement Plan

Appendix 12: School Fleet Replacement Plan

Appendix 13: School Buildings and Grounds Fleet Replacement Plan

Appendix 1- Previous Year Expenditure Update

This section lists final close out costs and total project expenses incurred for each capital item in the previous year if they were completed.

Municipal Parking Lot (\$950,000) - Three of the five lots have been designed in house by the Engineering Department. The original estimate was to begin in fall and continue in spring. We estimate that the design work will be completed and ready for BOS approval in February with bidding and construction to follow. The Senior Center parking lot (\$230,000) is included in this summary.

Traffic Signals – Washington St. (\$590,000) - The original estimate was one year of design to be completed in the spring with construction following. Design is ongoing and on schedule.

Pavement Management Road Work (\$1,712,157) - To date, our contractor has performed \$1,564,601 of work paving all, or a portion of, 18 streets. In spring 2020, we plan to pave Morningside Drive, Garden Parkway (Wilson Street to Morningside Drive), Bond Street, and Ridge Road.

Water Main Cleaning & Lining MWRA Grant/Loan (\$630,000), Supplement to MWRA Water Main C&L Grant/Loan (\$500,000) – By the end of the fiscal year, we plan to clean and line 3,850 feet of water mains, install 2,167 feet of water mains, install 43 new water main gate valves, and install eight new fire hydrants. The Town will perform this work on Prospect St., High St., Fulton St., High St., Lydon St., Summit Ave., and Curran Ave.

Replace MTU's for AMR System- (\$129,800) – The units have been purchased. Replacement of the 9,000 units is ongoing.

Design Services for Cemetery-Roof, Bathroom, Electric, and Heating System (\$20,000), Cemetery Garage Roof Replacement (\$20,000) – The design and construction of the new roof is complete. Meetings have been scheduled with a designer to start the designs for the bathrooms, electrical needs, and heating system.

Network Switch Replacements (NHS) (\$42,000) – This project is complete.

NPS Laptop Replacements (\$60,750) and NPS Desktop Computer Replacements (\$20,750) - All units have been delivered, set up, and are in use. This project is complete.

Tactical Vests/Body Armor (\$75,000), Tactical Helmets (\$10,400) - All the units have been ordered. We anticipate a late February delivery date.

CMS- Design Services/Feasibility for New Facility (\$1,500,000) – We have been accepted by the MSBA to seek proposals for a feasibility study to replace CMS.

Design Services, Police Community Room (\$12,000) – We have received two quotes for design services. The project is on hold until the Facilities Department is operational. We believe that we could see significant savings by allowing the Facilities Department manage and, potentially, complete part of the project.

HVAC Design, Public Safety Building (\$150,000) – This project has been postponed for one year.

Upgrade to LED Lighting (Both Sides), Public Safety Building (\$100,000) – This project is on hold until the energy manager is hired and working, which will take place in spring 2020. In addition, we should have significant funding from the Town's recent designation as a Green Community. This funding should allow the Town, at the least, to reduce the amount needed to borrow for complete project.

Replace Stainless Steel Toilets in Holding Cells, Public Safety Building (\$25,000) - We have received one quote for supplies (the toilets) and are awaiting a quote for installation. Although we are seeking a quote for installation, we may put the project on hold until the Facilities Department is operational. We believe that we could see significant savings by allowing the Facilities Department manage the project.

Design Services, Fire Department Kitchen (\$12,000) - We have received two quotes for design services. The project is on hold until the Facilities Department is operational. We believe that we could see significant savings by allowing the Facilities Department manage the project.

Design Services (\$24,000) and Construction (\$300,000), Civic Center Elevator - Salamone and Associates started design services in February. We should begin soliciting bids in March, with a bid opening in late March. Construction could begin as early as May.

Design Services, Exterior of Civic Center (\$60,000) - Proposals have been received. We anticipate awarding a design contract in April.

LED Lighting Upgrade, Library (\$60,000) – This project is on hold until the energy manager is hired and working, which will take place in spring 2020. In addition, we should receive a significant amount of funding from the Town's recent designation as a Green Community. This funding should allow the Town, at the least, to reduce the amount needed to borrow to complete this project.

Wildlife Fence, Airport (\$90,000) – This project is pending funding approval from MassDOT.

Purchase of the Saints Lot (\$300,000) - The purchase and sale agreement has been signed. The survey, which the Engineering Department and Coneco Engineering completed together, has been approved by the Mass. Land Court. The Planning Board is expected to approve an Approval Not Required Plan (ANR) at their February 24th meeting. Following the Board's Approval of the ANR, it will be sent to the Registry of Deeds. Once the Registry of Deeds records the ANR, the seller's legal team and Town Counsel can finalize the sale. We believe the purchase of the Saints lot will be complete no later than April.

Replace DPW Trucks 31, 35, 49 (\$265,000) - Truck 31 has been purchased and is in operation. Truck 35 has been ordered. Delivery is expected in February. Truck 45 has been ordered. Delivery is expected in February. Trucks 25 and 49 are larger trucks, which required more time to procure.

DPW Riding Lawnmowers (\$9,000) - One riding lawnmowers has been delivered and is operational. The second riding lawn mower is scheduled for delivery in spring.

Replace Squad #3 with a Brush Rapid Attack Truck (BRAT) (\$200,000) – The BRAT is being delivered to Norwood at the time of this writing on February 24, 2020.

Purchase of Medical Assist Response Vehicle (MARV) (\$60,000) – The MARV has been delivered and is operational.

Purchase of a Rescue Boat (\$20,000) – The rescue boat has been delivered and is operational.

Purchase of four (4) Police Cruisers (\$194,936) - The vehicles have been ordered. Due to the high demand for Ford's hybrid Explorer, they have not yet been delivered. We anticipated delivery by the end of April, but this could change as Ford has experienced challenges delivering the hybrid Explores.

Wheelchair Van, School Transportation Fleet (\$60,000) - The van has been delivered and is in use.

Ford E-150 Van, School Transportation Fleet (\$40,000) - The van has been delivered and is in use.

Appendix 2- Unaddressed Capital

For the purposes of the Norwood Capital Improvement Plan the Town defines unaddressed capital as areas that require either routine capital maintenance or investment that go unaddressed in the 5-year plan due to a lack of resources but must none- the-less be on the radar of the BOS, Finance Commission, and Town Meeting.

Pavement Management- The Town had made progress in FY2017 and FY2018 in adding consistent general fund monies for road paving. Unfortunately, this funding was eliminated from the FY2020 operating budget. At the time of this writing in February 2020, \$630,000 is currently budgeted for road paving in the general operating budget. The Town should target approximately twice its annual chapter 90 allocation of approximately \$860,000 as a general fund contribution to pavement management.

Appendix 3- Horizon Capital

For the purposes of the Norwood capital improvement plan, horizon capital will be defined as large capital projects that will occur at some point in the future but are not yet on a 5-year schedule. These may be projects that are “at some point” such as a facility repair, or something that is currently in working shape but due to age the possibility of it needing repair or replacement may come up at some point.

Replace Traffic Signals Washington Street/Nahatan Street Corridor- This project would replace the traffic signals along Washington and Nahatan Streets. This system is several decades old and will require attention at some point. As traffic increases and development continues, the system’s age makes it less reliable requiring more routine work and maintenance. A project of this nature would likely cost somewhere in the \$5 million range. Engineering/feasibility funds are provided for in the later years of this plan, however the entire project will be costly.

Renovation of Town Hall – Town Hall is over 90 years old and has never had a major renovation since it was built in 1928. Although still structurally sound and arguably the most beautiful municipal building in the country, the interior of the building is showing its age. Renovations have been made to make the building more accessible, but improvements could be made to make the building more inclusive for everyone. A total renovation of Town Hall will likely be very expensive. However, the hope is that after completing the next renovation, Town Hall won’t have to be renovated for another 90 years.

Appendix 4- Project Numbering & Tracking System

When a project is placed into the CIP queue it is assigned an alphanumeric code that relates to the department the project most closely applies to, the year it was first placed on the CIP, the year the project was originally scheduled to be completed and finally a number from 1-10 or higher to distinguish multiple projects in the same fiscal year within the same department. The purpose of this system is to ensure that a record is kept for projects that are deferred from one year to another or taken off the plan, which also allows us to trace when the project was first placed into the program. This allows us to create a history that we can trace back the origins of projects and if projects are deleted all together we can understand the reasons why so that the Board of Selectmen, the Finance Commission, the Capital Outlay Committee and Town Meeting will understand the changes annually to the CIP, as many projects will be deferred in various years due to funding issues or change in need or priority.

An example of a (hypothetical) FY21 Library project would be as follows:

New bookshelves for the Morrill Memorial Library

LIB2021-21-01

LIB is the department (clearly identified in this case), 2021 is the fiscal year the project was added to the CIP, 21 indicates the fiscal year the project was originally planned to be completed, and the 01 is identifying it as one of several projects that year. If this project were to be deferred to a future year, let's say FY2023, the project number would remain the same wherever it is on the plan whether deferred or taken off completely. This will allow us to identify that the project was originally scheduled in FY21 but may be completed at a later date. This also ensures we have an understanding of all projects that have been eliminated, completed, or deferred as the CIP becomes more of a living document over time.

Codes are as follows (though new codes could be added at any time)

NPD: Police Department

NFD: Fire Department

HWY: Department of Public Works, Highway Division

PVM: Department of Public Works, Pavement Management

WNS: Department of Public Works, Water & Sewer

CEM: Department of Public Works, Cemeteries

LIB: Morrill Memorial Library

NPS: Norwood Public Schools

ITE: Information Technology & Equipment

PPO: Facilities, Parks, Playgrounds, Open Space

UNC: Uncategorized (General Government/Unallocated)

FAC: Facilities Department

STORM: Stormwater related projects

V-NPD: Vehicles, Police Department Fleet

V-NFD: Vehicles, Fire & Ambulance Department Fleet

V-HWY: Vehicles, Public Works Fleet

V-CEM: Department of Public Works, Cemeteries

V-SCH: Vehicles, Schools Buildings & Grounds

V-STR: Vehicles, School Transportation of Students

V-MSC: Vehicles, Miscellaneous/small fleets

V-FAC: Vehicles, Facilities Department

F-NHS: Facilities, Norwood High School

F-CMS: Facilities, Coakley Middle School

F-SVC: Facilities, Savage Center

F-ELE: Facilities, Elementary Schools

F-PSB: Facilities, Public Safety Building

F-THA: Facilities, Town Hall

F-CIV: Facilities, Civic Center

F-DPW: Facilities, DPW garage/admin building

F-MML: Facilities, Morrill Memorial Library

F-AIR: Facilities, Airport

F-UNA: Facilities, General Government Unallocated

Appendix 5: Proposed Funding Schedule

FY2021 CIP and IIP - Proposed Funding Schedule								
Project	Project #	Funding Source						
		Free Cash	Borrowing	Operating Budget	Grant funds	CPA	CH90	Rates-Borrow
Traffic Study for Neponset St/Access Rd Intersection	HWY2021-21-01	-	75,000	-	-	-	-	-
Westover Parkway Bridge Design and Construction	HWY2021-21-02	-	500,000	-	-	-	-	-
Paving (Aggregate)	Multiple	-	-	653,000	-	-	913,450	-
Meadowbrook Area 5B Sewer Re-Lining	WNS2020-21-03	-	-	-	-	-	-	2,000,000
Cemetery – Bathroom Upgrade at Cemetery Office	CEM2020-21-01	-	60,000	-	-	-	-	-
Cemetery – Office Roof	CEM2021-21-01	20,000	-	-	-	-	-	-
Design Improvements to the Meadowbrook Channel	STORM2021-21-01	-	250,000	-	-	-	-	-
Design Box Culverts from Meadowbrook to Murphy Field	STORM2021-21-02	-	250,000	-	-	-	-	-
Large Diameter Supply Hose	NFD2020-21-01	-	85,000	-	-	-	-	-
One Time Purchase of Tools and Equipment for Mechanic	NFD2021-21-02	156,000	-	-	-	-	-	-
IT Upgrades / Replacements (NPS)	ITE2021-21-02	-	160,000	-	-	-	-	-
Replace Desktops (GG)	ITE2020-21-01	-	310,000	-	-	-	-	-
Replace Public Safety Infrastructure (GG)	ITE2021-21-01	-	90,000	-	-	-	-	-
Design Services, Field Turf and Track Replacement	F-NHS2020-21-01	160,000	-	-	-	-	-	-
Oldham School – Tile Replacement	F-ELE2020-21-01	-	180,000	-	-	-	-	-
All Elementary – Replace Intercom & Clock Systems	F-ELE2020-22-04	-	400,000	-	-	-	-	-
All Schools – Replace Door Access Systems	F-ELE2021-21-01	-	165,000	-	-	-	-	-
Update Community Room/Police	F-PSB2020-20-01	-	200,000	-	-	-	-	-
Design Repairs of Apparatus Floor	F-PSB2020-20-03	10,000	-	-	-	-	-	-
Replace Plymovent System	F-PSB2020-20-04	-	50,000	-	-	-	-	-
Upgrade Kitchen (Including Appliances) (Fire)	F-PSB2020-20-05	-	450,000	-	-	-	-	-
Design/CM for Carpet Replacement (Both Sides)	F-PSB2020-20-06	25,000	-	-	-	-	-	-
Replace Fire Alarm Panel	F-PSB2021-21-01	-	50,000	-	-	-	-	-
Apparatus Apron/Parking Lot Crack Sealing	F-PSB2021-21-02	10,000	-	-	-	-	-	-
Repairs to Exterior of Building	F-CIV2020-21-02	-	500,000	-	-	-	-	-
Design Services for Women's Locker Room	F-CIV2020-21-03	10,000	-	-	-	-	-	-
Design Services for Lobby Area	F-CIV2021-21-01	10,000	-	-	-	-	-	-
Finish Replacement of Elevator at Civic Building	F-CIV2021-21-02	-	225,000	-	-	-	-	-
Design Services – Painting of Interior	F-MML2020-21-01	20,000	-	-	-	-	-	-
Painting of Interior	F-MML2020-22-01	-	120,000	-	-	-	-	-
Post construction monitoring Taxiway A (years 1-3)	F-AIR2021-21-01	3,000	-	-	-	-	-	-
Environmental Assessment, Taxiway C stub, Phase 1	F-AIR2020-21-03	15,000	-	-	-	-	-	-
Replace Truck #15 - Utility Truck	V-HWY2021-21-02	-	50,000	-	-	-	-	-
Replace Truck #34 - 1 Ton Dump Truck	V-HWY2020-21-02	-	55,000	-	-	-	-	-
Replace Truck #39 - 1 Ton Dump Truck	V-HWY2021-21-03	-	55,000	-	-	-	-	-
Replace Asst. Supt. Vehicle #59	V-HWY2021-21-04	-	35,000	-	-	-	-	-
Replace 1 Truck #46 – Dump Truck	V-HWY2021-21-05	-	55,000	-	-	-	-	-

Appendix 5: Proposed Funding Schedule

FY2021 CIP and IIP - Proposed Funding Schedule								
Project	Project #	Funding Source						
		Free Cash	Borrowing	Operating Budget	Grant funds	CPA	CH90	Rates-Borrow
Midsize Pick-up Truck	V-HWY2021-21-06	-	30,000	-	-	-	-	-
Midsize Pick-up Truck	V-HWY2021-21-07	-	30,000	-	-	-	-	-
Truck #CEM3 – 1-Ton Dump Truck	V-CEM2020-21-01	-	60,000	-	-	-	-	-
Utility Vehicle	V-CEM2020-21-02	-	25,000	-	-	-	-	-
NC-3	V-NFD2020-21-01	-	65,000	-	-	-	-	-
Replace Ambulance (NA3) w/Stryker and cardiac monitor	V-NFD2020-21-02	-	550,000	-	-	-	-	-
NC-4	V-NFD2020-21-03	-	65,000	-	-	-	-	-
Police Cruisers (4)	Operating Budget	-	-	216,000	-	-	-	-
Recreation - SUV Vehicle	V-MSC2020-21-01	-	45,000	-	-	-	-	-
COA Sedan for medical Transport	V-MSC2021-21-01	-	40,000	-	-	-	-	-
Pick Up Truck - Recreation Department	V-MSC2021-21-01	-	55,000	-	-	-	-	-
Ford E-150 Van – 2	V-STR2021-21-01	-	60,000	-	-	-	-	-
Facilities Vehicle	V-FAC2021-21-01	-	45,000	-	-	-	-	-
Facilities Vehicle	V-FAC2021-21-02	-	45,000	-	-	-	-	-
Road Repair Program First Year	IIP - HWY2021-21-01	-	2,800,000	-	-	-	-	-
Water Improvement Program First Year	IIP - WNS2021-21-01	-	-	-	-	-	-	4,500,000
Totals		\$ 439,000	\$ 8,285,000	\$ 869,000	\$ -	\$ -	\$ 913,450	\$ 6,500,000

Appendix 6: Fall Updates

FY2021 CIP FALL UPDATE			
Completed or Postponed Projects			
Department	Item/Project	Reason	Amount
DPW	Dump Truck	Postponed to FY22	(90,000)
Schools	Transportation Van - E-150	Completed	(30,000)
Schools	Transportation Van - E-150	Completed	(30,000)
Schools	Transportation Van - E-150	Completed	(30,000)
Schools	Transportation Van - E-150	Completed	(30,000)
Schools	IT Upgrades/Replacements*	Partially Completed	(428,550)
Airport	Marsh Master Plan with Attachments	Completed Using Grant Funding	(38,000)
DPW/Water	Water Main Cleaning & Lining MWRA Grant/Loan	Completed	(630,000)
DPW/Water	Supplement to MWRA Water Main C&L Grant/Loan	No longer needed due to Infrastructure Improvement Plan	(525,000)
Total - Completed or Postponed Projects			(1,831,550)
* Partially Completed Project - The School Department is still requesting \$160,000 to complete "IT Upgrades/Replacements".			

Appendix 6: Fall Updates

FY2021 CIP FALL UPDATE			
New Requests			
Department	Item/Project	Reason	Amount
DPW	1-Ton Dump Truck #46	The frame of this vehicle is cracked and is undrivable.	55,000
DPW	Mid-size Pickup	Needed to maintain one employee per vehicle	30,000
DPW	Mid-size Pickup	Needed to maintain one employee per vehicle	30,000
Rec	Pickup Truck	The Recreation Department's 2010 pickup truck was totaled as a result of the June 28th rainstorm. The Recreation Department used that truck regularly to complete the Department's day to day operations.	55,000
Fire	Chevy Tahoe	NC-4 was the On Duty Shift Commander's response car for multiple years. It was then rotated down to become the Fire Prevention Lieutenant's vehicle with constant daily use. It is a 2009 with 104,217 miles and will require significant maintenance if not replaced.	65,000
DPW	Design Improvements to the Meadowbrook Channel	The Meadowbrook overtops its banks in various locations between the headwall near Sunnyside Road and Sixth Street. This section of the brook, totaling 1,000 feet, is overgrown with dense vegetation and the banks and channel bedding are in poor condition. The downstream section of the brook, from Sixth Street to Dean Street, was dredged, shaped and stabilized by the U.S. Corps of Engineers in August 1994. The very same work is proposed to increase the capacity of the brook between Sixth Street and the headwall near Sunnyside Road.	250,000
DPW	Design Box Culverts from Meadowbrook to Murphy Field	The existing box culvert from the Meadowbrook headwall near Sunnyside Road to Murphy Field is comprised of 270' of a 5' x 7' box culvert and 350' of a 5' x 6' box culvert. During intense rainfalls, these box culverts are overburdened resulting in backups in the upstream drain system and the flooding of the area of Murphy Field and Allen Rd. To alleviate the backups and flooding, an additional 620' of box culvert, approximately 5' x 7', is anticipated to be installed from Murphy Field to the Meadowbrook headwall near Sunnyside Road.	250,000
Fire	One Time Purchase of Tools and Equipment for Mechanic	The new Fire Department mechanic needs a wide variety of tools and equipment so he can effectively service the Fire Department's complex fleet. Many of the tools he is requesting are specially designed to be used on fire engines and ambulances and are not readily available at a local hardware store. Without these tools and equipment, the Fire Department will be forced to continue to send its fleet to third-party mechanics to complete more complex services. Following this one time purchase with free cash, the Fire Department will be able to use its operating budget to upgrade or replace tools and equipment for the mechanic in the future.	156,000
Recreation	Finish Replacement of Elevator at Civic Building	The elevator has been in service since the Town moved into the building in 1984. The elevator has reached its useful life and needs to be replaced. The Civic Center is a voting location, the town shelter, and is used extensively for recreational programs and meetings. This project was added to the CIP this fall due to unforeseen expenses.	225,000
Total - New Requests			1,116,000
Total Change from Original FY2021 CIP			\$ (715,550)

Appendix 7: Debt Service Analysis

Purpose	Town of Norwood Current and Projected Debt Service							
	6/30/20	Authorized	FY21	FY22	FY23	FY24	FY25	FY26
GENERAL GOVERNMENT								
General Fund -Beginning Balances	24,424,000	Prior to FY2020	4,007,270	3,970,662	2,984,491	2,658,881	2,421,011	2,240,641
Less Debt Service Allocations (Transferred to Water/Sewer Fund		Multiple	(577,564)	(564,784)	(552,004)	(539,224)	(526,444)	(513,664)
Engine 1	650,000	FY2020	12,964	94,250	91,325	88,400	85,475	82,550
Dean Street Bridge Repair	500,000	FY2020	997	72,500	70,250	68,000	65,750	63,500
Municipal Parking Lots (15 Years)	950,000	FY2020	18,947	137,750	133,475	129,200	124,925	120,650
Traffic Signals Washington @ Short Street (10 Years)	590,000	FY2020	11,767	85,550	82,895	80,240	77,585	74,930
Senior Center Parking Lot (15 Years)	230,000	FY2020	4,587	33,350	32,315	31,280	30,245	29,210
Design of HVAC System (10 Years)	150,000	FY2020	2,992	44,250	42,563	40,875	39,188	-
LED Upgrades Police/Fire (Light Department Grant??) (10 Years)	100,000	FY2020	1,994	24,500	23,600	22,700	21,800	20,900
LED Upgrades Library (5 Years)	60,000	FY2020	1,197	17,700	17,025	16,350	15,675	-
Elevator Design (5 Years)	24,000	FY2020	479	7,080	6,810	6,540	6,270	-
Elevator Upgrade (10 Years)	300,000	FY2020	5,983	33,500	32,600	31,700	30,800	29,900
Design Fire Community Room	12,000	FY2020	239	3,540	3,405	3,270	3,135	-
Design Services for Repairs to Exterior Building (10 Years)	60,000	FY2020	1,197	14,700	14,160	13,620	13,080	12,540
10-Wheel Dump Truck (5 Years)	160,000	FY2020	3,191	39,200	37,760	36,320	34,880	33,440
Utility Truck - Signs (5 Years)	50,000	FY2020	997	12,250	11,800	11,350	10,900	10,450
Asphalt Dump Truck (5 Years)	55,000	FY2020	1,097	17,475	16,800	16,125	10,450	-
Brush Rapid Attack Truck (10 Years)	200,000	FY2020	3,989	49,000	47,200	45,400	43,600	41,800
Medical Assist Response Vehicle (5 Years)	60,000	FY2020	1,197	14,700	14,160	13,620	13,080	12,540
Rescue Boat (5 Years)	20,000	FY2020	399	4,900	4,720	4,540	4,360	4,180
Coakley Middle School Planning Design	1,500,000	FY2020	29,917	167,500	163,000	158,500	154,000	149,500
Forbes Hill Purchase **	13,000,000	FY2020	921,483	-	-	-	-	-
Traffic Study	75,000	FY2021	-	18,375	17,700	17,025	16,350	15,675
Cemetery Bathroom Upgrade	60,000	FY2021	-	17,700	17,025	16,350	15,675	-
Large Diameter Supply Hose	85,000	FY2021	-	23,825	17,925	17,250	16,575	15,900
IT Upgrades/Replacements - NPS	160,000	FY2021	-	42,200	40,625	34,050	32,700	31,350
Replace desktops	310,000	FY2021	-	78,950	76,025	68,100	65,400	62,700
Replace Public Safety Infrastructure	90,000	FY2021	-	24,050	23,150	22,250	16,350	15,675
Update Community Room/Police	200,000	FY2021	-	29,000	28,100	27,200	26,300	25,400
Finish Replacement of Elevator at Civic Building	225,000	FY2021	-	19,500	19,200	18,900	18,600	18,300
Replace Plymovent System	50,000	FY2021	-	12,250	11,800	11,350	10,900	10,450
Replace Fire Alarm Panel	50,000	FY2021	-	18,375	17,700	17,025	16,350	15,675
Painting of Interior	120,000	FY2021	-	30,400	29,275	28,150	27,025	20,900
Replace Truck #15 – Utility Truck	50,000	FY2021	-	12,250	11,800	11,350	10,900	10,450
Replace Truck #34 – 1 Ton Dump Truck	55,000	FY2021	-	17,475	11,800	11,350	10,900	10,450
Replace Truck # 39 – I Ton Dump Truck	55,000	FY2021	-	17,475	11,800	11,350	10,900	10,450
Replace Asst. Supt. Vehicle #59	35,000	FY2021	-	11,575	11,125	5,675	5,450	5,225

Appendix 7: Debt Service Analysis

Purpose	Town of Norwood Current and Projected Debt Service							
	6/30/20	Authorized	FY21	FY22	FY23	FY24	FY25	FY26
Truck #CEM3 – 1-Ton Dump Truck	60,000	FY2021	-	17,700	17,025	11,350	10,900	10,450
Utility Vehicle	25,000	FY2021	-	6,125	5,900	5,675	5,450	5,225
NC-3	65,000	FY2021	-	17,925	17,250	16,575	10,900	10,450
Recreation – SUV Vehicle	45,000	FY2021	-	17,025	11,350	10,900	10,450	-
COA Sedan for Medical Transport	40,000	FY2021	-	11,800	11,350	10,900	10,450	-
Ford E-150 Van 2	60,000	FY2021	-	17,700	17,025	11,350	10,900	10,450
Facilities Truck	45,000	FY2021	-	17,025	11,350	10,900	10,450	-
Facilities Truck	45,000	FY2021	-	17,025	11,350	10,900	10,450	-
Westover Parkway Bridge Design and Construction	500,000	FY2021	-	72,500	70,250	68,000	65,750	63,500
Oldham School Tile Replacement	180,000	FY2021	-	38,100	36,750	35,400	34,050	32,700
All Elementary - Replace Intercom & Clock Systems	400,000	FY2021	-	98,000	94,400	90,800	87,200	83,600
All Schools - Replace Door Access Systems	165,000	FY2021	-	42,425	40,850	39,275	32,700	31,350
Fire Kitchen Upgrade	450,000	FY2021	-	65,250	63,225	61,200	59,175	57,150
Repairs to Exterior Building	500,000	FY2021	-	72,500	70,250	68,000	65,750	63,500
Ambulance with Styker and Cardio Monitor	550,000	FY2021	-	79,750	77,275	74,800	72,325	69,850
DPW 1-Ton Dump Truck #46	55,000	FY2021	-	17,475	11,800	11,350	10,900	10,450
DPW Mid-size Pickup	30,000	FY2021	-	11,350	5,900	5,675	5,450	5,225
DPW Mid-size Pickup	30,000	FY2021	-	11,350	5,900	5,675	5,450	5,225
Recreation Pick up Truck	55,000	FY2021	-	17,475	11,800	11,350	10,900	10,450
DPW Design Improvements to the Meadowbrook Channel	250,000	FY2021	-	36,250	35,125	34,000	32,875	31,750
DPW Design Box Culverts from Meadowbrook to Murphy Field	250,000	FY2021	-	36,250	35,125	34,000	32,875	31,750
NC-4	65,000	FY2021	-	17,925	17,250	16,575	10,900	10,450
Road Repair Program First Year	2,800,000	FY2021	-	326,000	317,000	308,000	299,000	290,000
Road Repair Program Second Year	2,800,000	FY2022	-	-	326,000	317,000	308,000	299,000
Road Repair Program Third Year	2,800,000	FY2023	-	-	-	326,000	317,000	308,000
Road Repair Program Fourth Year	2,800,000	FY2024	-	-	-	-	326,000	317,000
Road Repair Program Fifth Year	2,800,000	FY2025	-	-	-	-	-	326,000
Total General Government (Not including Exclusion)	51,380,000		4,455,320	5,717,898	4,944,900	4,850,712	4,836,390	4,765,192

Appendix 7: Debt Service Analysis

Town of Norwood Current and Projected Debt Service								
Purpose								
	6/30/20	Authorized	FY21	FY22	FY23	FY24	FY25	FY26

DEBT MANAGEMENT CCOMPLIANCE TABLE						
Estimated General Fund Debt Service	4,455,320	5,717,898	4,944,900	4,850,712	4,836,390	4,765,192
Estimated Non-Utility Revenue	121,052,862	123,698,918	126,220,622	130,118,164	133,438,896	137,466,598
Estimated Debt Service as a Percentage of estimated non-utility Revenues	3.68%	4.62%	3.92%	3.73%	3.62%	3.47%
Max Debt Service Permitted by Financial Policies (5% of current non-utility revenues)	6,052,643	6,184,946	6,311,031	6,505,908	6,671,945	6,873,330
Additional Capacity	1,597,324	467,048	1,366,131	1,655,196	1,835,555	2,108,138

Appendix 7: Debt Service Analysis

Purpose	Town of Norwood Current and Projected Debt Service							
	6/30/20	Authorized	FY21	FY22	FY23	FY24	FY25	FY26
WATER AND SEWER								
Water and Sewer -Beginning Balances	11,960,429	Prior to FY2020	1,304,203	752,650	683,932	646,847	609,777	572,724
Less Debt Service Allocations (Transferred from General Operating Fund		Multiple	577,564	564,784	552,004	539,224	526,444	513,664
Water Main Improvement Bond Sharon Connection****	1,500,000	Multiple	29,917	945,863	918,030	885,198	786,090	631,700
Water Improvement****	500,000	Multiple	9,972	584,375	556,250	528,125	500,000	471,875
Meadowbrook Area 5B sewer Re-lining	2,000,000	FY2021	-	190,000	185,500	181,000	176,500	172,000
Water Improvement Program First Year 30 Years	4,500,000	FY2021	-	315,000	308,925	302,850	296,775	290,700
Water Improvement Program Second Year 30 Years	4,500,000	FY2022	-	-	315,000	308,925	302,850	296,775
Water Improvement Program Third Year 30 Years	4,500,000	FY2023	-	-	-	315,000	308,925	302,850
Water Improvement Program Fourth Year 30 Years	4,500,000	FY2024	-	-	-	-	315,000	308,925
Water Improvement Program Fifth Year 30 Years	4,500,000	FY2025	-	-	-	-	-	315,000
Water Improvement Program Sixth Year 30 Years	4,500,000	FY2026	-	-	-	-	-	-
Water Improvement Program Seventh Year 30 Years	4,500,000	FY2027	-	-	-	-	-	-
Water Improvement Program Eighth Year 30 Years	4,500,000	FY2028	-	-	-	-	-	-
Water Improvement Program Ninth Year 30 Years	4,500,000	FY2029	-	-	-	-	-	-
Water Improvement Program Tenth Year 30 Years	4,500,000	FY2030	-	-	-	-	-	-
Total Water and Sewer	\$ 20,460,429		\$ 1,984,321	\$ 3,352,672	\$ 3,519,641	\$ 3,707,169	\$ 3,822,361	\$ 3,876,213
DEBT SERVICE BY FUND - SUMMARY								
General Government - Debt Exclusion	16,880,000		1,778,146	1,731,886	1,683,254	1,634,289	1,587,364	1,538,954
General Government	51,380,000		4,455,320	5,717,898	4,944,900	4,850,712	4,836,390	4,765,192
Water and Sewer	20,460,429		1,984,321	3,352,672	3,519,641	3,707,169	3,822,361	3,876,213
Light	46,992,000		10,233,749	9,226,884	9,078,794	4,176,406	4,031,044	2,359,794
Broadband	2,529,000		1,023,705	945,795	188,720	180,340	174,780	92,000
Total Authorized	\$ 138,241,429		\$ 19,475,240	\$ 20,975,135	\$ 19,415,309	\$ 14,548,916	\$ 14,451,939	\$ 12,632,153

Appendix 8: DPW Fleet Replacement Plan

Norwood DPW Vehicle Replacement Plan								
Vehicle #	Vehicle Year	Replacement Value	Vehicle Description	FY2021	FY2022	FY2023	FY2024	FY2025
3	2015	59,000	Ford Silverado Rack	-	-	-	-	-
4	2006	90,000	Sterling 8500	-	90,000	-	-	-
5	2010	115,000	Peterbilt 5 Ton Dump	-	-	-	-	-
6	2009	120,000	Peterbilt 5 Ton Dump	-	-	-	120,000	-
7	1995	60,000	Packer	-	-	-	-	-
8	2008	55,000	Chevy Pickup	-	-	-	55,000	-
9	2010	130,000	Packer	-	-	-	-	-
10	2010	60,000	Ford Water Utility Truck	-	-	-	-	60,000
11	2011	120,000	Peterbilt 5 Ton Dump	-	-	-	-	-
12	2006	120,000	Tree Bucket Truck	-	-	-	-	-
15	2007	50,000	Chevy Pickup	50,000	-	-	-	-
20	2009	120,000	Peterbilt 5 Ton Dump	-	-	-	-	120,000
22	2017	45,000	Chevy Pickup	-	-	-	-	-
23	2013	375,000	Peterbilt Sewer Vac Truck	-	-	-	-	-
24	2017	55,000	Chevy Sewer Utility Truck	-	-	-	-	-
25	2007	95,000	Sterling L500 Truck	-	95,000	-	-	-
30	2012	55,000	Ford F450 Dump	-	-	-	-	-
31	2019	160,000	Volvo Dump	-	-	-	-	-
32	2002	130,000	Volvo Dump	-	130,000	-	-	-
33	2016	55,000	Ford F550 Dump Truck	-	-	-	-	-
34	2007	55,000	Chevy 1 Ton Dump	55,000	-	-	-	-
35	2020	50,000	Chevy Utility Pickup	-	-	-	-	-
36	2015	57,000	Ford F550 Dump Truck	-	-	-	-	-
39	2007	55,000	Chevy 1 Ton Dump	55,000	-	-	-	-
40	2005	155,000	Egin Sweeper	-	-	-	-	-
41	2010	155,000	Egin Sweeper	-	-	-	-	-
43	2015	55,000	Ford Water Utility Truck	-	-	-	-	-
44	2013	55,000	Ford F550 Dump Truck	-	-	-	-	-
45	2006	90,000	Sterling 8500	-	90,000	-	-	-
46	2009	55,000	Chevy 1 Ton Dump	55,000	-	-	-	-
47	2007	95,000	Sterling 8500 5 Ton Dump	-	-	95,000	-	-
48	2012	58,000	Ford F450 Dump	-	-	-	-	-
49	2020	55,000	Chevy 1 Ton Dump	-	-	-	-	-
50	2009	120,000	Peterbilt 5 Ton Dump	-	-	-	-	120,000
51	2017	50,000	Chevy Water Utility Truck	-	-	-	-	-
52	2018	50,000	Chevy Silverado Pickup	-	-	-	-	-
54	2009	30,000	Skid loader	-	-	-	-	-
57	2015	44,000	Ford Pickup	-	-	-	-	-
58	2017	32,000	Ford Explorer	-	-	-	-	-

Appendix 8: DPW Fleet Replacement Plan

Norwood DPW Vehicle Replacement Plan								
Vehicle #	Vehicle Year	Replacement Value	Vehicle Description	FY2021	FY2022	FY2023	FY2024	FY2025
59	2007	35,000	Chevy Trailblazer	35,000	-	-	-	-
L1	2005	165,000	Volvo Loader	-	-	165,000	-	-
L2	2011	140,000	Volvo Loader	-	-	-	-	-
L3	2016	165,000	Volvo Loader	-	-	-	-	-
JD1	2008	110,000	John Deere Backhoe	-	-	-	110,000	-
JD2	2014	80,000	Mini Excavator	-	-	-	-	-
Sewer	2013	85,000	Sewer Camera Van	-	-	-	-	-
B4	2018	130,000	Bombardier	-	-	-	-	-
T8	2002	2,600	Trailer	-	-	-	-	-
T5	2000	2,600	Trailer	-	-	-	-	-
T6	1998	2,600	Trailer	-	-	-	-	-
C1	2011	40,000	Brush chipper	-	-	-	-	-
AC1	2005	11,500	Compressor Utility Trailer	-	-	-	-	-
T9	2005	5,000	Magnum Light Tower	-	-	5,000	-	-
T2	2008	2,600	Trailer	-	-	-	-	-
	2014	120,000	Bombardier	-	-	-	-	-
	2015	125,000	Bombardier + Blower	-	-	-	-	-
	2009	26,000	Kubota Tractor	-	-	-	-	-
	2019	48,000	Kubota Tractor	-	-	-	-	-
	2017	65,000	Multi-purpose mini loader	-	-	-	-	-
	2011	55,000	Multi-purpose mini loader	-	-	-	-	-
	1984	18,000	Trailer	-	-	18,000	-	-
	2013	32,000	4" diesel pump	-	-	-	-	-
	2015	42,000	Asphalt hot box	-	-	-	-	-
	2015	20,000	Bombardier Blower Attach.	-	-	-	-	-
	1975	35,000	Sicard Roadway Snowblower	-	-	-	-	-
	2013	57,000	Mechanical soil screener	-	-	-	-	-
Total		\$ 5,004,900		Totals \$ 250,000	\$ 405,000	\$ 283,000	\$ 285,000	\$ 300,000

Appendix 9: Cemetery Fleet Replacement Plan

Norwood Cemetery Fleet Replacement Plan								
Vehicle #	Vehicle Year	Replacement Value	Vehicle Description	FY2021	FY2022	FY2023	FY2024	FY2025
CEM 1	2016	30,000	Ford Explorer	-	-	-	-	-
Tractor	2016	39,000	Kubota Tractor	-	-	-	-	-
Tractor	2018	40,000	Kubota Tractor	-	-	110,000	-	-
Backhoe	2001	100,000	Backhoe	-	-	-	-	-
Mini Excay	2017	40,000	Mini Excavator	-	-	-	-	-
CEM 4	2018	44,000	Ford Pickup	-	-	-	-	-
CEM 2	2008	57,000	Chevy 1 Ton Dump Truck	-	57,000	-	-	-
CEM 3	2007	57,000	Chevy 1 Ton Dump Truck	57,000	-	-	-	-
Utility	2009	25,000	Utility Vehicle	25,000	-	-	-	-
Mowers	2019	10,000	Rider Mowers	-	10,000	-	10,000	10,000
Total \$		442,000	Totals	\$82,000	\$67,000	\$110,000	\$10,000	\$10,000

Appendix 10: Fire Department Fleet and Equipment Replacement Plan

Fire Department Fleet and Equipment Replacement Plan								
Equipment	Make	Vehicle Year	Original Cost	FY2021	FY2022	FY2023	FY2024	FY2025
Engine # 1	E-One	2000	350,000	-	-	-	-	-
Engine # 2	E-One	2005	445,000	-	-	-	-	-
Engine # 3	E-One	2005	450,000	-	-	-	-	-
Engine #4	E-One	2010	625,000	-	-	-	950,000	-
Squad# 2	INT/E-One	2007	420,000	-	-	-	-	-
Ladder #1	E-One	2013	1,100,000	-	-	-	-	-
Ambulance NA-1	Ford 550	2017	295,000	-	-	-	-	-
Ambulance NA-3	International	2012	281,250	\$550,000	-	-	-	-
Ambulance NA-2	Ford 550	2015	290,000	-	-	-	-	550,000
SRS - #1 (Special Response)	Freightliner	1998	145,000	-	-	-	-	-
Lighting Plant	Terex RT4	2015	8,500	-	-	-	-	-
NC-1 (Chief's Car)	Chevy Tahoe	2015	50,000	-	-	-	-	-
NC-2 (Shift Commander)	Chevy Tahoe	2017	45,000	-	-	-	-	-
NC-3 (Deputy Chief)	Chevy Tahoe	2007	30,000	65,000	-	-	-	-
NC-4 (Fire Prevention Lt.)	Chevy Tahoe	2009	45,000	65,000	-	-	-	-
Squad #3 (Skid UniVUtility)	Chevy U/B	2008	75,000	-	-	-	-	-
Rescue Boat #1	Zodiac	2004	8,500	-	-	-	-	-
Extrication Rescue Tool E-1	Hurst• Hale	1997	-	-	-	-	-	-
Extrication Rescue Tool E-2	Hurst• Hale	2005	30,000	-	-	-	-	-
Extrication Rescue Tool E-3	Hurst• Hale	2005	30,000	-	-	-	-	-
SCBA Bottles	Scott	2013	-	-	-	-	-	-
SCBA (Breathing Apparatus	SCOTT	2004	118,000	-	500,000	-	-	-
SCBA Air Compressor	SCOTT	2003	31,000	-	-	-	-	-
Firefighters Protective Clothing	Lion Apparel	2015	150,000	-	-	200,000	-	-
Large Diameter Supply Hose	Neidner	2003	-	85,000	-	-	-	-
Cardiac Monitors/AED-Defibs	Medtronic	2006	20,000	-	-	-	-	-
Base & Mobile Emerg. Radios	Motorola	2007	213,997	-	-	-	-	-
Dispatch Console/Radios	Motorola	2003	110,000	-	-	-	-	-
Firefighters Portable Radios	Motorola	2002	62,000	-	-	155,000	-	-
15 Lead EKG Monitor-AL\$	Physio15EKG	2015	24,000	-	-	-	-	-
Total			\$ 5,452,247	\$ 215,000	\$ 500,000	\$ 355,000	\$ 950,000	\$ 550,000

Appendix 11: Police Fleet Replacement Plan

Police Fleet Replacement Plan								
Vehicle #	Vehicle Year	Vehicle Description	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026
661	2016	Radio Car	-	-	59,535	-	-	68,906
662	2014	Radio Car	54,000	-	-	62,512	-	-
663	2014	Radio Car	54,000	-	-	62,512	-	-
664	2014	Radio Car	-	56,700	-	-	65,625	-
665	2018	Radio Car	-	-	59,535	-	-	68,906
666	2014	Radio Car	-	56,700	-	-	65,625	-
667	2016	Radio Car	-	-	59,535	-	-	68,906
668	2017	Patrol Supervisor	-	56,700	-	-	-	-
669	2016	Radio Car	-	56,700	-	-	65,625	-
670	2011	Prisoner Van	54,000	-	-	-	-	-
671	2015	Chief of Police	-	-	-	-	65,625	-
672	2017	Deputy Chief	-	-	-	-	-	-
673	2007	Detective	-	-	-	-	-	-
674	2015	Detective	-	-	-	-	-	68,906
675	2009	Detective	-	-	-	-	-	-
676	2017	Detective	-	-	-	-	-	-
677	2014	Radio Car	54,000	-	-	62,512	-	-
678	2013	School Resource / Radio Car	-	-	59,535	-	-	-
679	2013	School Resource / Radio Car	-	-	-	62,512	-	-
680	2013	Administrative Use	-	-	-	-	-	-
Totals			\$ 216,000	\$ 226,800	\$ 238,140	\$ 250,048	\$ 262,500	\$ 275,624

Appendix 12: School Fleet Replacement Plan

School Transportation Fleet Replacement Plan							
Vehicle #	Vehicle Year	Replacement Value	Vehicle Description	FY2021	FY2022	FY2023	FY2024
1	2009	30,000	Ford E150 Van	30,000	-	-	-
2	2009	35,000	Ford E150 Van	-	35,000	-	-
3	2013	35,000	Ford E150 Van	-	35,000	-	-
4	2017	40,000	Chev Express Van	-	-	-	-
5	2013	40,000	Ford E150 Van	-	-	40,000	-
6	2019	32,000	Chevrolet Express	-	-	-	-
7	2016	40,000	GMC Savana	-	-	-	-
8	2009	30,000	Ford E150 Van	30,000	-	-	-
9	2013	40,000	Ford E150 Van	-	-	40,000	-
10	2009	30,000	Ford E150 Van	30,000	-	-	-
11	2009	35,000	Ford E150 Van	-	35,000	-	-
12	2015	40,000	GMC Savana	-	-	-	40,000
13	2009	30,000	Ford E150 Van	30,000	-	-	-
14	2019	50,000	Ford Transit Wheelchair	-	-	-	-
15	2009	50,000	Ford Wheelchair E-250	-	-	-	-
16	2019	50,000	Ford Transit Wheelchair	-	-	-	-
17	2009	50,000	Ford Wheelchair E-250	-	-	-	-
18	2015	40,000	Dodge Caravan	-	-	-	40,000
19	2013	40,000	Dodge Caravan	-	-	-	40,000
20	2013	40,000	Ford E150 Van	-	-	-	40,000
21	2013	40,000	Ford E150 Van	-	-	40,000	-
22	TBD	-	Ford E-150 Van	30,000	-	-	-
23	TBD	-	Ford E-150 Van	30,000	-	-	-
101	2017	60,000	Bluebird	-	-	-	-
102	2017	60,000	Bluebird / Wheelchair	-	-	-	-
103	2017	60,000	Bluebird	-	-	-	-
104	2017	60,000	Bluebird	-	-	-	-
105	2017	60,000	Bluebird / Wheelchair	-	-	-	-
Total		\$ 1,117,000	Totals	\$ 180,000	\$ 105,000	\$ 120,000	\$ 160,000

Appendix 13: School Buildings and Grounds Fleet Replacement Plan

School Buildings and Grounds Fleet Replacement Plan							
Vehicle #	Vehicle Year	Replacement Value	Vehicle Description	FY2021	FY2022	FY2023	FY2024
1	1982	7,500	Owens Classic Trailer	-	-	-	7,500
2	1999	8,000	Cross Trailer	-	-	-	-
3	2015	8,500	Utility Trailer	-	-	-	-
4	2006	7,500	Haulmark Transport Trailer	-	-	-	-
5	1998	65,000	Back Hoe	-	-	65,000	-
6	2008	30,000	Kubota Tractor	-	-	-	-
7	2017	65,000	Ford F250/plow	-	-	-	-
8	2016	65,000	Ford F250/plow	-	-	-	-
9	2015	65,000	Ford F250/plow	-	-	-	-
10	2015	75,000	Ford F350/plow	-	-	-	-
11	2015	45,000	Cut Van/Launch Truck	-	-	-	-
12	2010	60,000	Chev Silverado/Plow	-	-	60,000	-
13	2009	38,000	Ford E150 Van	-	-	-	-
14	2006	45,000	Chev Box Truck	-	-	-	45,000
15	2010	65,000	Chev Silverado/Plow	-	-	-	-
Total		\$ 649,500	Totals	\$ -	\$ -	\$ 125,000	\$ 52,500