

Executive Summary

Section 1

EXECUTIVE SUMMARY

The Recommended Capital Plan

The Town Charter requires that the Town Manager, after consultation with the Board of Selectmen, submit in writing to the Board of Selectmen a careful, detailed estimate of the recommended capital expenditures showing specifically the amount necessary to be provided for each office, department and activity and a statement of the amounts required to meet the debt service requirements or other indebtedness of the Town. This plan includes the proposed FY2020 Capital Budget, which is recommended to the Finance Committee and ultimately to Town Meeting for consideration. The projects presented for FY2021-FY2024 reflect an assessment by municipal departments and the School Committee of future capital needs and are primarily shown for planning purposes. While many of these projects may ultimately be recommended for funding, the plan is a fluid one, and projects may be added and deleted from the list as circumstances change. The proposed financing plan for the recommended FY2020 capital budget is shown in Table 1.

Table 1

Fund	Cash	Debt	Other	Total
General Fund Tier 1	\$6,788,252		\$2,619,500	\$9,407,752
General Fund Tier 2	\$521,219			\$521,219
General Fund Total	\$7,309,471		\$2,619,500	\$9,928,971
Community Preservation Fund	\$1,147,000			\$1,147,000
Sewer Enterprise	\$1,631,487	\$800,000		\$2,431,487
Water Enterprise	\$291,500	\$4,500,000		\$4,791,500
Total (all funds)	\$10,379,458	\$5,300,000	\$2,619,500	\$18,298,958

FY2020 Highlights

In October 2016, the Board of Selectmen convened a Capital Facility Summit and committed to planning for the renovation, reconstruction or construction of eight facilities: Rosemary Pool, the Public Safety Building, Fire Station #2, the Memorial Park Fieldhouse, the DPW Complex, the Hillside School (now Sunita L. Williams), Needham High School, and Emery Grover. Over the past several years, the Town has made significant progress in this effort:

Rosemary Pool – The Rosemary Recreation Complex, including two pools, greatly improved parking, and office and programming space for the Park & Recreation and Health Departments, opened in August, 2018.

Public Safety Building & Fire Station #2 – The appropriation to fund the total reconstruction of these two public safety buildings was approved by the voters on November 6, 2018 and construction will begin in early 2019.

Memorial Park Fieldhouse – Construction of this facility is well underway with substantial completion expected in the summer of 2019.

DPW Complex – This project is progressing in phases. The fuel station was installed in 2017, and construction of the new DPW storage facility on Central Avenue will begin in early 2019. Continued planning for the phased reconstruction of the DPW operations building at 470 Dedham Avenue is a priority for the Board of Selectmen.

Sunita Williams School – The new school on Central Avenue replacing the Hillside School on Glen Gary Road is well underway and will open for the 2019/2020 school year.

Needham High School – The High School Cafeteria was expanded in 2017, and construction of eight new classrooms and A gym renovations were completed in the fall of 2018.

Emery Grover – The October 10, 2018 Special Town Meeting approved funding for an expanded feasibility study for appropriate workspace for School Administration.

FY2020 is the first year in which the transfer of the Recycling/Transfer Station function from an Enterprise Fund to the Department of Public Works General Fund is presented in the Capital Improvement Plan.

Capital Planning 101

Capital Improvement Plan

A capital expenditure is defined by the Needham General By-laws as the acquisition, construction, renovation, betterment, or improvement involving land, public buildings and facilities; water and sewer system laterals, mains and appurtenances; and equipment or vehicles; provided that the cost is \$25,000 or more and the improvement will have a useful life of five years or more; or any planning, feasibility, engineering or design study in preparation for such capital expense.

The Capital Improvement Plan (CIP) is a multi-year tool used to coordinate the financing and timing of major public improvements for the Town of Needham. It contains a list of capital projects proposed for the Town within the next five years and reflects the recommendations of citizens, boards, commissions, and staff from each of the Town departments. The CIP identifies each proposed project and presents a summary description, estimate of cost, method of financing, and a schedule of implementation. Capital planning helps ensure that the community is positioned to:

- preserve and improve its basic infrastructure through construction, rehabilitation and maintenance;
- maximize the useful life of capital investments by scheduling major renovation, rehabilitation, or replacement at the appropriate time in the life-cycle of the facility or equipment;
- identify and examine current and future infrastructure needs and establish priorities among projects so that available resources are used to the community's best advantage; and
- improve financial planning by balancing needs and resources and identifying potential fiscal implications.

Operating Budget and Capital Budget

The Town's capital budget and operating budget are developed separately but are closely linked. The annual operating budget provides for general municipal service delivery, including personnel, supplies and other contractual services, and certain capital equipment. Most appropriations in the annual operating budget are for a single fiscal year. In contrast, the capital budget is a multi-year budget designed to expend monies which add to the physical assets of the Town. Capital projects typically require expenditures which take place beyond a single fiscal year, funding with debt because of significant costs to be shared by current and future beneficiaries, systematic acquisition over an extended period of time in order to implement major operating systems or programs, and scheduled replacement or maintenance of specific elements of physical assets.

Notwithstanding the differences between the two, the operating and capital budgets are closely interwoven inasmuch as operating costs related to capital projects are estimated and incorporated into the operating budget. Many capital projects will have an impact on operating costs once constructed. Town practice is to project the net effect a capital project will have on the operating budget. While maintenance and repair costs may be lower in a new facility, larger and more modern facilities are often more costly to operate. In addition, since many capital projects are financed through municipal debt, repayment of that debt becomes part of the operating budget and is incorporated into the Town's forecasting models. The necessity to incur some

degree of debt in order to finance the CIP carries with it the burden to effectively manage that debt within the Town's financial resources.

Best Practices

The following best practices have been used in the development of the FY2020 operating and capital budgets:

1. Current revenues must be sufficient to support current expenditures.
2. The operating and capital budgets must be developed in conformance with the Town's comprehensive financial policies and must not be reliant on one-time revenue or unsustainable practices.
3. The five year Pro Forma budget must be updated on an annual basis to ensure that the underlying assumptions are adjusted based upon changing conditions and data.
4. Debt must not be used to fund on-going operating expenses, and will only be issued for capital improvements greater than \$250,000 with a useful life of five years or more.
5. The use of Free Cash to fund operations will be minimized by limiting such use to no more than 2% of the prior year's appropriated operating budget, or the actual turn back, whichever is lower.
6. Adequate contingency funds must be maintained.
7. Sufficient maintenance and replacement funds will be allocated to ensure that capital facilities and equipment are properly maintained.
8. The operating and capital budgets must be resilient – allowing the Town to maintain existing service levels, withstand typical local and regional economic disruptions, and meet the demands of natural growth, decline, and change.
9. The operating and capital budgets must be sustainable – meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Budget Priorities

The primary goal of the Board of Selectmen in consideration of the operating and capital budgets is the maintenance and optimization of existing Town services. In addition, mindful of the availability of revenue for appropriation, the Board has set the following priorities:

1. Support for items that contribute to the achievement of Townwide goals and objectives.
2. Support for a five to ten year plan for the renovation, reconstruction and/or preservation of the Town's capital assets in the most prudent, realistic, and efficient manner.
3. Support for initiatives that contribute to financial sustainability, including the maintenance of a debt service plan that balances capital needs with the Town's ability to pay, identification of alternative funding sources for traditional cash capital needs, evaluation of financing alternatives, and alignment of capital and maintenance needs with appropriate funding sources.

4. Support for initiatives aimed at achieving greater coordination and efficiency among Town departments, and providing adequate resources to address identified service delivery and general administrative needs of the Town in a cost effective manner.

Financial Benefits of Capital Planning

Needham's capital planning initiatives have contributed to the successful achievement and maintenance of its AAA bond rating from Standard and Poor's. This bond rating places Needham in the top tier of communities in Massachusetts and allows the Town to borrow at a lower interest rate. Investors and bond rating agencies stress the value of a CIP for a municipality seeking to borrow funds. The absence of a rational, long-term planning instrument would weigh against the bond rating assigned to Needham by rating agencies and the result would be higher interest rates on bond issues and the diversion of tax dollars to pay for the interest on loans. Another financial benefit of the capital planning process is the avoidance of poorly timed projects. Good planning can ensure that capital improvement efforts are coordinated. In addition, significant savings can accrue to taxpayers when major capital financing is coordinated so that bond issues are sold infrequently, and at times during the economic cycle when the Town can take advantage of low interest rates.

Development of the CIP

The process for preparing the FY2020 - FY2024 Capital Improvement Program and its associated FY2020 Capital Budget involves active participation by the Town Manager, Assistant Town Managers, and requesting departments, boards, committees and commissions. The Capital Budget is prepared in the context of a five-year determination of need by departments and the School Committee, in conjunction with the Town's overall financial capacity to affordably accommodate the required debt service payments. Projected debt service payments and budgetary impacts are forecast annually to help ensure affordability and sustainability of the Capital Improvement Program. The Town's Capital Improvement Policies provide guidance for assessing the capital needs of the Town. These policies, included in Section 6, define capital projects as those items requiring the expenditure of at least \$25,000 and having a useful life of more than five years. Recommended capital project requests are prioritized using the following criteria:

- the project is required to comply with State and/or Federal accessibility standards;
- the project is necessary to protect the health and safety of people; and
- the project is necessary to maintain an existing capital facility, or operation of equipment used in providing Town services.

In addition to the criteria listed above, the Town has a long practice of funding the systematic replacement of obsolete or worn-out equipment, and those items requested for the improvement of operating efficiency and the equitable provision of services.

The development of the CIP occurs over the following approximate timeframe:

Late Summer — Following Town Meeting, departments are provided with their previously submitted five year requests for review, update and the addition of the next fifth year. While requests for each year should remain the same as in the initial request, there are occasionally changed circumstances which necessitate alterations to the requests. This information is returned to the Town Manager and staff for review. Also in the summer, the Assistant Town Manager/Finance Director develops a pro forma budget for the ensuing five year period. The pro forma budget is the basis for the determination of the amount of revenue available to support the CIP.

Autumn — The Town Manager and staff meet with each department to gain a better understanding of each request.

Late Autumn/Early Winter — The Assistant Town Manager/Finance updates the preliminary debt schedules and financial forecasts in order to provide context to the Capital Budget as well as the five-year Capital Improvement Plan, and the Town Manager presents the Board of Selectmen with a proposed five-year plan.

January – The Town Manager transmits the Capital Improvement Plan, along with any recommendations made by the Board of Selectmen, to the Finance Committee by the first Tuesday after the first Monday in January.

January/February/March — The Finance Committee reviews each project in the capital budget and makes recommendations on items included in the Town Meeting Warrant.

May — The capital budget is presented to Town Meeting for consideration.

Financing of Capital Projects

The number of capital projects to be funded must be considered in the context of the total operating budget, capital budget needs, and revenue growth. Capital improvement projects are funded through current receipts, reserves, and/or other funds such as grants.

Current Receipts – Current receipts include property tax revenue, local receipts (such as fees and charges), and state aid. This plan includes no projects to be funded from current receipts.

Free Cash – Free Cash is a function of actual revenue collections in excess of estimates and expenditures less than appropriations. Because Free Cash should not be relied upon as a recurring revenue source, the Town's practice is not to rely upon it as an operating revenue source. In this plan, we have continued the effort to minimize the Town's reliance on Free Cash to support on-going operations by limiting such use to no more than 2% of the prior year's appropriated operating budget, or the actual turn back, whichever is lower. The recommended plan includes \$6,788,252 in Tier 1 projects to be funded from Free Cash.

Capital Improvement Fund – In 2004, the Town created a General Fund Cash Capital Equipment and Facility Improvement Fund (CIF). The purpose of the CIF is to allow the Town to reserve funds to use for general fund cash capital. The CIF may be used in future years to fund the acquisition of new equipment, the replacement of existing equipment, and building and facility improvements which cost less than \$250,000, for which the Town may borrow for a period of five years or more. Projects must be included in the CIP in order to be eligible for funding through the CIF. This plan includes no projects to be funded from the Capital Improvement Fund.

Capital Facility Stabilization Fund – In 2007, the Town created a Capital Facility Stabilization Fund to allow the Town to reserve funds for design, maintenance, renovation or reconstruction relating to the structural integrity, building envelope or MEP (mechanical, electrical, plumbing) systems of then existing capital facilities. For this purpose, capital facility refers to any building or structure which is located on Town property and is under the jurisdiction of the Town Manager, including any Town-owned building, structure, room, or space within a building, facility, park or plaza, open space, driveway, landscaped area, or other physical improvements under the administrative control of the Town. This plan includes no projects to be funded from the Capital Facility Stabilization Fund.

Athletic Facility Improvement Fund – In 2012, the Town created an Athletic Facility Improvement Fund to reserve funds for the design, maintenance, renovation, reconstruction, or construction of athletic facilities. For the purpose of the fund, athletic facilities include any Town-owned building, structure, pool, synthetic turf and natural grass turf playing field or ball diamond, and associated grounds and parking areas whose primary purpose is for organized athletic events for Needham children, adults, and school teams. This plan includes \$2,500,000 to be funded from the Athletic Facility Improvement Fund for FY2020.

Debt Service Stabilization Fund – The November 2, 2015 Special Town Meeting approved the establishment of a Debt Service Stabilization Fund to set aside funds to be available as necessary to pay certain debt obligations. This fund is intended to be part of the Town's overall planning strategy for addressing capital facility needs. The fund would provide added flexibility to maintain the Town's capital investment strategy by smoothing out the impact of debt payments in years when the debt level is higher than is typically recommended. The fund would also be beneficial at times when interest rates are higher than expected. The plan for the fund is designed to ensure that the monies are not depleted in a single year, and that the amount available for appropriation is known before the budget year begins. All appropriations to and from the fund require Town Meeting action. This plan includes no projects to be financed through use of the Debt Service Stabilization Fund for FY2020.

Retained Earnings – Three of the Town's operations – water, sewer, and solid waste – are accounted for as enterprise funds. The revenues and expenditures of these operations are not commingled with those generated by General Fund operations. Generally, each enterprise will generate surplus funds on an annual basis. The Board of Selectmen's retained earnings policies are included in Section 6. The policies contain reserve targets to ensure liquidity and stability of operations. Surplus funds above the target are considered available for appropriation. This plan includes \$1,631,487 in funding from Sewer Enterprise Fund retained earnings and \$291,500 in Water Enterprise Fund retained earnings.

Debt – The Board of Selectmen’s debt management policies (Section 6) provide guidance in translating capital expenditures into annual debt service. Section 2 of this plan contains a graphic presentation of the Town’s current debt service and a calculation of the Town’s debt burden (annual debt service as a percent of total Town revenues). The figures used in calculating the debt burden are derived from the Town’s long-term debt service schedule that is also included in Section 2. This plan includes a no projects to be funded through General Fund debt, \$800,000 to be funded through Sewer Enterprise Fund debt, and \$4,500,000 to be funded through Water Enterprise Fund debt for FY2020.

Community Preservation Fund – The Community Preservation Act (CPA) allows cities and towns to raise monies through a surcharge on the tax levy. These funds may then be used to acquire, create and preserve open space, acquire and preserve historic resources, create, preserve and support community housing, and acquire, create and preserve land for recreational use. The CPA also provides for matching funds from the Commonwealth. The CPA requires that each fiscal year Needham must spend, or set aside for later spending, at least 10% of the annual revenues in the Community Preservation Fund for each of three CPA target areas: open space (but not including land for recreational use), historic resources, and community housing. The remaining 70% may be appropriated at the Town’s discretion as long as it is used for the three target areas or recreation. The statute also permits the Town to appropriate up to 5% of the annual revenue estimate for the administrative expenses of the Community Preservation Committee (CPC). Projects submitted for inclusion in the CIP that qualify for CPA funding are forwarded to the CPC for its consideration. This plan includes a recommendation for \$1,147,000 in projects contingent upon Community Preservation Funding for FY2020.

Other Available Funds – An Available Fund is actual monies which have become available and may be used to fund expenditures. Monies may become available after a project is completed and the cost was less than appropriated, monies that were previously set aside for future expenditure (e.g., stabilization fund), or monies that are received by the Town but must be specifically identified as a funding source in the Town Meeting motion. An available fund may be restricted to certain purposes (e.g. surplus bond proceeds, special stabilization funds, sale of surplus real estate, grants), or may be non-restricted and hence can be appropriated for any legal purpose. Some Available Funds carry over from year to year and others expire at the end of the fiscal year and close out to fund balance. This plan includes \$119,500 in projects to be funded from Other Available Funds in FY2020.

The CIP Is a Flexible Planning Tool

While much of the Town’s budget and financial planning efforts are by necessity focused on one or at most two year intervals, capital planning helps to focus attention on the Town’s long-term objectives and financial capacity, and the balance between operating and capital needs. The Town is often faced with the option of reducing its capital plan in order to balance the operating budget. Having a formal and accepted plan helps to maintain a consistent level of spending for capital needs, barring extraordinary circumstances. Individual projects are evaluated against long-term objectives and in relationship to each other. By strategically programming capital projects, the Town can maintain a tolerable level of debt service, and prevent unexpected changes in debt service payments.

Investment in Real Property, Facilities and Infrastructure

Asset preservation – committing necessary resources to preserve, repair, or adaptively re-use current assets – is a high priority for the Town in order to keep its physical plant and infrastructure in reliable operating condition. While significant investment in many capital facilities is still required, the Town of Needham has made an extraordinary investment in public infrastructure during the past decade. The Town's success in this area is a direct result of continued and sustained focus on asset evaluation, needs assessment, careful planning, and prioritization. The need for this level of investment in facilities and infrastructure is generally attributable to three factors – the age of the community and its infrastructure and assets, the built environment and amount of lane miles of roadway, and the growth in school age population after the Second World War that resulted in a building boom from 1951 to 1960. After the advent of Proposition 2½, the community found it difficult to make necessary investment in its array of school facilities. This resulted in a need for complete replacement or rehabilitation of the entire system beginning in the mid-1990s and continuing today. FY2019 saw the largest one-time investment in municipal facilities ever with the approximately \$70 million reconstruction of the public safety buildings. Finally, based on adoption of and changes to the Community Preservation Act, the Town has made a truly remarkable investment in athletic facility, parks, and recreational amenities including Walker Gordon Field, Greene's Field and Playground, Newman Fields, Eastman Trail, the Rail Trail, the all-abilities trail around the Needham Reservoir, the reconstruction of the Rosemary Pool and Recreation Complex, the reconstruction of the Memorial Park Fieldhouse, and the Rosemary Lake sediment removal project. Table 2 shows the Town's investment in facilities and infrastructure over the past five years.

Table 2

Description	2015	2016	2017	2018	2019	Total	Average
Municipal Facilities	\$105,779	\$90,000	\$649,000	\$6,126,000	\$74,641,000	\$81,611,779	\$16,322,356
Townwide Facilities and Community Services	\$750,219	\$3,513,323	\$756,154	\$17,202,000	\$8,826,000	\$31,047,696	\$6,209,539
Public Works Infrastructure Program	\$1,760,000	\$3,453,500	\$1,700,000	\$2,011,000	\$2,508,500	\$11,433,000	\$2,286,600
School Facilities	\$200,000	\$9,368,000	\$58,791,714	\$15,168,000	\$2,796,000	\$86,323,714	\$17,264,743
Drains, Sewer, and Water Infrastructure	\$1,283,050	\$2,320,500	\$375,860	\$2,900,000	\$2,395,000	\$9,274,410	\$1,854,882
Total Appropriations	\$4,099,048	\$18,745,323	\$62,272,728	\$43,407,000	\$91,166,500	\$219,690,599	\$43,938,120

Investment in Equipment, Technology and Fleet

The position of the Town with respect to its equipment and technology capital investment is also positive. Major categories of this capital spending include Public Safety, Public Works, and Public Facilities fleet and equipment, School and Town-wide technology, and School copiers and equipment. Table 3 shows the Town's investment in these categories of capital spending for the five year period FY2015 through FY2019.

Table 3

Description	2015	2016	2017	2018	2019	Total	Average
All Other Functions		\$30,645			\$68,970	\$99,615	\$19,923
Public Facilities & Works	\$29,797	\$144,000	\$120,000	\$162,000	\$176,500	\$632,297	\$126,459
Public Safety				\$167,872	\$43,424	\$211,296	\$42,259
Public School	\$112,000	\$108,145	\$45,000	\$45,000	\$60,500	\$370,645	\$74,129
Equipment	\$141,797	\$282,790	\$165,000	\$374,872	\$349,394	\$1,313,853	\$262,771
All Other Functions	\$130,000	\$30,000		\$145,000	\$215,000	\$520,000	\$104,000
Public Facilities & Works	\$33,000	\$129,500				\$162,500	\$32,500
Public Safety	\$408,615				\$112,000	\$520,615	\$104,123
Public School	\$679,325	\$403,000	\$347,080	\$510,290	\$706,790	\$2,646,485	\$529,297
Technology	\$1,250,940	\$562,500	\$347,080	\$655,290	\$1,033,790	\$3,849,600	\$769,920
All Other Functions			\$87,353			\$87,353	\$17,471
Public Facilities & Works	\$343,572	\$1,146,902	\$730,618	\$640,433	\$1,616,409	\$4,477,934	\$895,587
Public Safety	\$248,267		\$137,877	\$224,677	\$840,163	\$1,450,984	\$290,197
Public School				\$99,611	\$97,552	\$197,163	\$39,433
Fleet	\$591,839	\$1,146,902	\$955,848	\$964,721	\$2,554,124	\$6,213,434	\$1,242,687
Total Appropriations	\$1,984,576	\$1,992,192	\$1,467,928	\$1,994,883	\$3,937,308	\$11,376,887	\$2,275,377

Project Summaries – Recommended Projects for Fiscal Year 2020

GENERAL GOVERNMENT

TOWN OFFICE FURNITURE REPLACEMENT

Furniture in heavy use is in need of replacement at the Public Services Administration Building and Town Hall, which opened in 2010 and 2011 respectively. The \$25,000 requested in Fiscal Year 2020 will allow for the purchase of replacement furniture including tattered audience chairs in Powers Hall and the conference tables in the Public Services Administration Building. *(Submitted by: Office of the Town Manager)*

The Town Manager's recommendation for Town Offices Replacement Furniture is \$25,000 to be funded by Free Cash.

TOWN MULTI-FUNCTION PRINTER DEVICES

This funding will allow for the replacement of multi-function copier/printers in the four primary Town locations (Town Hall, Public Services Administration Building, Public Safety, and Center at the Heights) as part of a planned replacement schedule. There are nine of these devices, only three of which were not purchased as part of the original construction project. Several of these devices are currently over six years old, and one over eight years old. The cycle for replacement of these multi-function printers is seven years. *(Submitted by: Information Technology Center)*

The Town Manager's recommendation for Town Multi-Function Printer Devices is \$35,600 to be funded by Free Cash.

PUBLIC SAFETY DESKTOPS, PRINTERS AND PERIPHERALS

This request is to provide hardware for locations within the new public safety buildings. An estimated ninety (90) desktops and laptops are required. The majority of this hardware is located in the Fire Department, where there are few if any devices available currently. Often staff members in both Police and Fire are sharing equipment, requiring them to wait for others to finish their work. There are no available desktops or laptops for officers to use for online training or meetings. *(Submitted by: Information Technology Center)*

The Town Manager's recommendation for Public Safety Desktops, Printers and Peripherals is \$200,000 to be funded by Free Cash.

PUBLIC SAFETY MOBILE DEVICES

This funding will replace laptops and tablets that are used in the Needham Police and Fire Department Vehicles. The hardware is used to access multiple applications during daily operations. The hardware communicates with the Public Safety CAD software as well as State and Federal databases. The devices themselves are hardened military specification hardware manufactured for use in more intensive environments than normal off the shelf hardware. *(Submitted by: Information Technology Center)*

The Town Manager's recommendation for Public Safety Mobile Devices is \$35,000 to be funded by Free Cash.

CENTER AT THE HEIGHTS COMPUTER LAB

The purpose of this request is to replace the hardware and upgrade software associated with the Center at The Heights (CATH) Computer Lab. This will include desktops, laptops, servers, switches, firewall, and software upgrades. New models will take advantage of upgraded operating systems and faster processors to better serve the users of the Computer Lab. *(Submitted by: Information Technology Center)*

The Town Manager's recommendation for Public Safety Mobile Devices is \$50,000 to be funded by Free Cash.

PUBLIC SAFETY

POLICE AND FIRE MOBILE AND PORTABLE RADIOS

Radios are the primary communication tool between Fire and Police staff in the field and the dispatch center. Current radios have been discontinued by the manufacturer, or are at the end of their useful life. This funding will support the replacement of Police cruiser radios, Police portable radios, Fire portable and mobile radios, and Emergency Management portable radios. *(Submitted by: Police Department)*

The Town Manager's recommendation for Police and Fire Mobile and Portable Radios is \$617,550 to be funded by Free Cash.

PERSONAL PROTECTIVE EQUIPMENT – BUNKER GEAR

This request is to replace Personal Protective Equipment ("PPE" or "bunker gear") for 20% of all firefighting personnel on an annual basis. The PPE requested includes boots, firefighting pants and coat. Firefighting personnel regularly work in toxic environments caused by spills, chemical releases and the products of combustion. Further, the toxicity of these carcinogens appears to be greater and more concentrated, due to the widespread use of synthetic and petroleum based building materials

and furnishings found in modern construction. These contaminants, chemicals, toxins and carcinogens adhere to firefighters' bunker gear, thus creating a lingering exposure concern. Current safety practices dictate that firefighters be issued two sets of PPE, so that once contaminated the equipment can be washed and dried in equipment designed specifically for that purpose. Maintaining a second set of PPE allows for contaminated equipment to be washed and dried properly, while allowing personnel to remain available to respond to calls. *(Submitted by: Fire Department)*

The Town Manager's recommendation for Personal Protective Equipment is \$43,424 to be funded by Free Cash.

PUBLIC SAFETY FITNESS EQUIPMENT

This request is to provide fitness and exercise equipment to be installed in the new Public Safety Building and Fire Station #2. The equipment will be used by Fire and Police personnel to maintain fitness and health during their careers. Optimal physical fitness can serve to limit occupational injuries and the resulting expenses in human and financial terms. The request includes funding for Cardio, strength training and conditioning equipment and accessories, including but not limited to treadmills, Stairmasters, elliptical machines, rowers, bikes, and weights. *(Submitted by: Fire Department)*

The Town Manager's recommendation for Public Safety Fitness Equipment is \$83,613 in the Tier 2 category subject to availability of alternate funding sources.

PUBLIC SCHOOLS

HIGH SCHOOL LOCKER RECONFIGURATION

This funding would support the reconfiguration of student physical education lockers at Needham High School to accommodate the increased student population. Currently, there are 508 lockers at the High School. The project will add 111 lockers in the boys' locker room and 104 lockers in the girls' locker room. Currently, each locker room has small, medium and large lockers. The reconfiguration would remove the doors and frames from the medium and large lockers, and would create three new, small lockers from every two medium lockers, and three new small lockers from every one large locker. (The existing small lockers would remain unchanged.) Additionally, a new bank of 30 lockers would be added in the boys' locker room, and 24 new lockers will be added in the girls' locker room. *(Submitted by: School Department)*

The Town Manager's recommendation for High School Locker Reconfiguration is \$50,000, with \$37,500 to be funded from Free Cash and \$12,500 to be funded from alternative funding sources.

NEWMAN PRESCHOOL PLAYGROUND CUSTOM SHADE SHELTER

The Newman Preschool playground is situated in a part of the school that has constant sunlight. Access to the playground is limited to cloudy days or to mild weather, given that there is no available shade. About half of the children who attend the preschool are identified as having special needs, and many struggle with their social-emotional skills. A custom shade shelter would increase the students' comfort and access to the playground, which in turn would create more meaningful social opportunities for them during the day. *(Submitted by: School Department)*

The Town Manager's recommendation for Newman Preschool Playground Custom Shade Shelter is \$69,200 to be funded from Free Cash.

SCHOOL COPIER REPLACEMENT

In May of 2003, Town Meeting authorized first year funding to establish a replacement cycle for school photocopiers. School photocopiers are located in all the schools and the administration building, and are used both by administrative and teaching staff. Teachers use the machines to reproduce classroom materials, including homework sheets, exams, teaching packets etc. Currently the School Department owns 45 copy machines. Copier replacement is planned on a life-cycle basis, which projects when a copier should be replaced based on actual usage and the manufacturer's total estimated capacity. Copiers which are heavily used are replaced more frequently than copiers that are lightly used. This analysis assumes that copiers can be re-deployed around the District as needed, to better match projected usage with equipment capacity. *(Submitted by: Needham Public Schools)*

The Town Manager's recommendation for School Copier Replacement is \$52,470 in the Tier 1 Free Cash category, and \$83,050 in the Tier 2 category.

SCHOOL FURNITURE

In FY2005, Town Meeting approved funding to begin the replacement of furniture in poor and fair condition throughout the School Department. By FY2015, all furniture in poor condition was replaced in the schools. The FY2020 funding request will continue the replacement of furniture in fair condition at the Pollard School, provide funding for new classroom furniture as needed, and will address targeted furniture needs at Eliot and Mitchell Schools. *(Submitted by: Needham Public Schools)*

The Town Manager's recommendation for School Furniture is \$35,000 to be funded by Free Cash.

SCHOOL TECHNOLOGY REPLACEMENT

The FY2020 request would fund the purchase of School Department technology, including desktop computers, printers, interactive white boards (IWBs), specialized instructional labs, projectors, video displays, security cameras and electronic door

access controllers. The request also incorporates funding for school technology infrastructure, which consists of servers, network hardware, wireless infrastructure, data cabling and access points. The FY2020 request consists of \$519,350 for hardware (computers, printers, interactive white boards, door access controllers, projection screens and TV studio) and \$113,000 for infrastructure replacement (servers, network hardware, wireless data cabling and access points). *(Submitted by: Needham Public Schools)*

The Town Manager's recommendation for School Technology Replacement is \$632,350 to be funded by Free Cash.

NEEDS ASSESSMENT OF POLLARD, NEWMAN AND NHS AUDITORIUM THEATRICAL SOUND AND LIGHTING SYSTEMS

This project is to conduct a needs assessment/feasibility study of upgrading the theatrical sound and lighting systems in the Pollard, Newman and Needham High School auditoriums. These auditoriums are venues for student and community group productions. The theatrical equipment currently installed in these venues is old and often not adequate for contemporary musical or theatrical productions. Although some issues are unique to particular venues, common deficiencies in the audio systems include speakers which are poorly placed, insufficient in number and/or non-functioning, thereby impairing the audience's ability to hear what is happening clearly on stage from all seats; sound boards that are old, partially non-functioning and/or not at a standard that is necessary for a modern musical or theatrical production; and amplification equipment (such as wireless receivers and microphones), which are insufficient in number and/or broken. The lighting systems also include light fixtures that are partially non-functioning, and uncoordinated with sound delivery. *(Submitted by: Needham Public Schools)*

The Town Manager's recommendation for Needs Assessment of Pollard, Newman and NHS Auditorium Theatrical Sound and Lighting Systems is \$60,000 in the Tier 2 category.

SCHOOL MASTER PLAN SUPPLEMENT

Capital planning for the School Department has grown increasingly complex, given the pressing needs of accommodating Full-Day Kindergarten, providing capacity for a growing enrollment, and repairing and renovating aging facilities. These needs have made it difficult for the School Committee to prioritize the capital needs on the planning horizon. Meeting the identified needs within available resources and reasonable timeframes will require the School Department to carefully consider all of the possibilities and options for prioritizing and scheduling building projects going forward. The proposed study would develop recommendations for long-range school capital plans under different enrollment scenarios/trajectories and the practical considerations of aging buildings. Potential recommendations could involve other buildings and/or non-building solutions like redistricting. *(Submitted by: Needham Public Schools)*

The Town Manager's recommendation for School Master Plan Supplement is \$125,000 to be funded by Free Cash.

PUBLIC WORKS

DPW BOILER REPLACEMENT DESIGN/470 DEDHAM AVENUE

This funding will support design of the replacement of the DPW/470 Dedham Avenue boiler with two high efficiency condensing boilers. The increase to two boilers is based on both the need for redundancy in the heating season and the desire to improve energy efficiency. The boiler at the DPW was installed in 1961 and is past its useful life. This project may be eligible for energy efficiency rebates to offset the cost of buying a more efficient model. The project includes the upgrade of heat piping throughout the building with the assumption that the building will need to remain in use for the foreseeable future. *(Submitted by: Public Works Building Maintenance)*

The Town Manager's recommendation for DPW Boiler Replacement 470 Dedham Avenue is \$50,000 to be funded from alternative funding sources.

ENERGY EFFICIENCY UPGRADE IMPROVEMENTS

An energy efficiency study was conducted for ten municipal buildings in 2011. The results of this study illustrate that if the Town makes an investment in recommended energy upgrades, the cost of these upgrades will pay for themselves within ten years. Unless circumstances require otherwise, FY2020 improvements will include the installation of bi-lighting throughout the building hallways to improve lighting at the Pollard Middle School, and the retro-commissioning of the HVAC at the High Rock School. *(Submitted by: Public Works Building Maintenance)*

The Town Manager's recommendation for Energy Efficiency Upgrade Improvements is \$57,000 to be funded from alternative funding sources.

BUILDING MANAGEMENT SYSTEM UPGRADE

The Town maintains a Building Management System (BMS) to manage the heating, ventilation, and air conditioning (HVAC) for all major facilities throughout Town. This system consists of internal sensors in the HVAC components and a back-end software product that allows Building Maintenance staff to review and diagnose HVAC issues both remotely and on-site. This system is critical to the maintenance of healthy air temperature within the buildings. Currently, the Town has three separate systems. This request is to upgrade and standardize all of the existing systems so that the Town is only maintaining one system. The system will work with all of the controls in all buildings, with the exception of the Newman School, which will require a conversion of the controls in order for this new system to communicate. The new system will simplify the hardware and software in each building, be more user friendly, and allow integration with the afterhours permitting system. *(Submitted by: Public Works Building Maintenance)*

The Town Manager's recommendation for Building Management System Upgrade is \$392,000 to be funded by Free Cash.

MITCHELL SCHOOL RESTROOM UPGRADES

There are currently six restrooms at the Mitchell that are not ADA/MAAB accessible. Many of the existing plumbing fixtures are 40 to 60 years old. The current stalls are not the proper size and do not have grab bars, the urinals and dispensers are not set at the proper height, the sinks do not have insulated pipes, and the restrooms do not have the minimum clearance or appropriate turning radius. The restrooms will be upgraded to meet ADA/MAAB requirements. *(Submitted by: Public Works Building Maintenance)*

The Town Manager's recommendation for Mitchell School Restroom Upgrades is \$67,000 to be funded by Free Cash.

NEWMAN SCHOOL GYM FLOOR

The floors at the Newman School gym are original to the building. Over the years, they have been subject to buckling. This buckling has accelerated in the past few years, making the conditions in the gym potentially unsafe. Due to the presence of asbestos-containing materials in the subfloor, temporary repairs are not possible. The existing flooring will be removed, the asbestos containing materials will be abated, and new wood sports flooring will be installed. *(Submitted by: Public Works Building Maintenance)*

The Town Manager's recommendation for Newman School Gym Floor is \$275,000 to be funded by Free Cash.

POLLARD SCHOOL BLUE AND GREEN GYM SCORE BOARDS

The Department is in the process of designing upgrades for both the Blue and Green gyms at the Pollard Middle School. These upgrades include replacement of the rubber flooring, replacement of siding, painting, and installation of padding, backboards, and winch mechanisms on the basketball hoops. In the Green gym, two sections of pull-out seating will be installed to accommodate classes. After those upgrades are made, the existing scoreboards will need to be replaced – they are beyond their useful life and the technology is outdated. They also contain incandescent bulbs, which are not energy efficient. The scoreboards in both gyms will be replaced with updated, electronic LED scoreboards. Shot clocks will be installed that have wireless controls and technology. *(Submitted by: Public Works Building Maintenance)*

The Town Manager's recommendation for Pollard School Blue and Green Gym Score Boards is \$30,000 to be funded by Free Cash.

FACILITY ASSESSMENT FOR SUSTAINABLE BUILDING MANAGEMENT

A facility assessment helps to guide major repairs and upgrades that may be required to ensure that older buildings remain sustainable. The Broadmeadow and Eliot Elementary Schools are approaching 20 years old, and may require upgrades beyond general maintenance. Many of the systems within the buildings, including heating, ventilation, and air conditioning (HVAC), boilers, and plumbing, are reaching the end of their useful life. A facility assessment will be conducted to determine the condition of the facility and to identify any major repairs and replacement needs. *(Submitted by: Public Works Building Maintenance)*

The Town Manager's recommendation for Sustainable Building Management is \$100,000 to be funded by Free Cash.

TOWN COMMON HISTORIC REDESIGN AND BEAUTIFICATION

This project would fund a redesign of the Town Common to maximize the current usage of space, complement Town Hall, enhance the "blue tree", and integrate with the new Downtown Streetscape Improvement Project. This project will include the installation of new sod, trees, plantings, low maintenance hardscape materials, and handicap accessibility. The pathways and landscaping will be adjusted to become more aesthetically pleasing and functionally appropriate. There will be increased electrical and sound capacity to accommodate Town-wide events. *(Submitted by: Public Works Parks and Forestry Department)*

The Town Manager's recommendation for Town Common Historic Redesign and Beautification is \$117,000 contingent on Community Preservation Funding.

ATHLETIC FACILITY AND PUBLIC RECREATION IMPROVEMENTS (TURF, CRICKET, CLAXTON)

This funding request includes synthetic turf field replacement at DeFazio Complex and Memorial Park, natural turf and irrigation system replacement at Cricket Field, and field lighting design at Claxton Field. Each year, an impact test is performed on all artificial turf fields in Town. The most recent test shows that these fields are approaching the end of their useful life. The Town will hire a contractor to remove the existing turf carpet, regrade, and install new artificial field turf. Cricket Field does not have a fully functioning irrigation system; the current system was gifted to the Town over 15 years ago and is showing signs of age. The grading on this site is also inconsistent, leading to localized drainage problems. As part of the removal and improvement of turf and soil, the existing irrigation system will be abandoned in place and new water efficient irrigation system will be installed. This article will also fund the design of lighting improvements at Claxton Field. *(Submitted by: Public Works Parks and Forestry Department)*

The Town Manager's recommendation for Athletic Facility and Public Recreation Improvements is \$2,500,000 from the Athletic Facility Improvement Fund, and \$550,000 contingent on Community Preservation Funding.

DPW SPECIALTY EQUIPMENT

Unit	Division	Year	Replacement	Amount
351	Parks & Forestry/DPW	2002	Tractor to be replaced in kind	\$68,000

(Submitted by: Department of Public Works)

The Town Manager's recommendation for DPW Specialty Equipment is \$68,000 to be funded by Free Cash.

PUBLIC WORKS INFRASTRUCTURE PROGRAM

The Public Works Infrastructure Program allows the Department of Public Works to make improvements and repairs to Town infrastructure, including but not limited to roads, bridges, sidewalks, intersections, drains, brooks, and culverts. This program consists of multiple categories, each with their own sub-projects. This year's request includes funding for street resurfacing, the sidewalk program, bridge repairs, storm drain capacity improvements and storm drain system repairs.

Street Resurfacing

The Town has 279 lane miles of accepted road that require maintenance. The average lifecycle of a road is 15 to 20 years. Specialized surface treatments can be applied within this period of time to sustain or extend the lifecycle of the roadway based on usage. The Town targets 17 lane miles of road per year in order to resurface roads before they reach the end of their lifecycle. These roads are prioritized based on a pavement condition index (PCI). The Town targets roads with a PCI of less than 70 for resurfacing and specialized treatment, and less than 60 for repair and renovation. The primary strategy of this program is asphalt paving and incidental work, including asphalt berm curb, new grass shoulders, corner reconstruction including handicapped ramps, minor drainage improvements, street sign replacement, traffic markings, and signs. Target funding for street resurfacing in FY2020 is \$924,550.

Roadway Reconstruction

Town evaluates the sight distance, drainage, handicap ramps, sidewalks, subsurface utilities, public utility poles and overhead utilities of all roads. The physical condition of roads to be considered for full reconstruction includes shape, foundation and traffic volume. This is a multi-year process requiring surveying, designing, utility evaluation and construction. Some of the roads that may be targeted for full reconstruction in the future include: Marked Tree Road, Nehoiden Street, Kingsbury Street, sections of Central Avenue, and Webster Street from Dedham Avenue to South Street. No funding is allocated to the Roadway Reconstruction category in FY2020.

Guardrail

Many of the Town's guardrails are noncompliant and the DPW is preparing a plan to systematically upgrade existing guardrails to make them both compliant and aesthetically pleasing. No funding is proposed for this category in FY2020.

Sidewalk Program

This Program funds improvements to the network of sidewalks throughout the community. There are over 160 miles of accepted sidewalks in Needham. Over half of the Town's sidewalks do not comply with current standards and require significant improvements, including the installation of handicapped ramps. Sidewalk improvements must comply with Federal and State laws and construction standards. Target funding for the sidewalk program in FY2020 is \$512,500.

Traffic Signal & Intersection Improvements

This Program will fund traffic signal improvements, intersection improvements, and new traffic signal installations where none currently exist. In FY2020, DPW will evaluate intersection prioritization for future projects.

Bridge Repairs

Surrounded on three sides by the Charles River, the Town jointly maintains a number of bridges with neighboring communities. The Massachusetts Bridge Inspection Program has identified a number of bridges that have some level of deficiency and has recommended repairs. Target funding for bridge repair in FY2020 is \$100,000 (Newell's Bridge on Central Avenue into Dover – Design).

Storm Drain Capacity Improvements

This Program provides funding to improve roadway drainage capacity. The Town's Stormwater Master Plan identified a number of areas throughout Needham where improvements are required to resolve flooding problems and illicit discharge. Since the issuance of the Stormwater Master Plan numerous multi-unit developments have been built in the Town of Needham. These developments include new roads with drainage structures and roof or sump connections that are then connected to existing Town systems. These new connections have increased the load on the Town's drainage system and caused flooding in some areas. Unless circumstances dictate otherwise, FY2020 target funding of \$362,500 is planned for Ardmore Road and Hunnewell Street storm drain construction.

Storm Drain System Repairs

This Program provides funding to repair failing storm drainage infrastructure within Town easements that have been discovered through investigation work. These projects will include the replacement of existing culverts that have deteriorated over time and are restricting flow. This work will eliminate flooding and capacity issues in the immediate vicinity. Unless circumstances dictate otherwise, FY2020 funding in the amount of \$270,000 is targeted for construction activities at 470 South Street.

Brooks and Culverts – Repair and Maintenance

Flooding has caused the failure of retaining walls, resulting in extensive erosion and silt deposits in brooks and streams. The silt has provided a medium for vegetation and affected the flow of water, and the situation has resulted in the loss of useable abutting property and flooded basements. No funding is proposed for this category in FY2020. *(Submitted by: Public Works Engineering Department)*

The Town Manager's recommendation for Public Works Infrastructure Program is \$2,169,550 to be funded from Free Cash.

TRAFFIC IMPROVEMENTS

This funding would support projects that are recommended by the DPW and the Traffic Management Advisory Committee (TMAC). These recommendations include items such as permanent speed monitoring devices, traffic calming measures, and school zone enhancements. The proposed funding will support one or two construction-related requests per year, such as 500 feet of roadway granite curb installation, two school zone installations, two average traffic calming installations, several radar sign installations or sign and/or pavement markings. *(Submitted by: Public Works Engineering Department)*

The Town Manager's recommendation for Traffic Improvements is \$50,000 to be funded by Free Cash.

RTS PROPERTY IMPROVEMENTS

This request is to fund improvements to the Recycling & Transfer Station (RTS) facility to increase efficiency, comply with regulatory requirements, and improve the facility function. Presently the RTS is accessible to the public after hours. The installation of fencing will minimize public access and increase security. The RTS uses 100-yard open top containers to haul trash and recyclables. During the winter, the loaded trailers are left outside and the loads of trash or recyclables inside the containers often freeze, making the trailers impossible to empty until the loads thaw. The funding would enable the purchase and installation of a fabric-covered storage facility for four containers to prevent precipitation from accumulating. The Town is under obligation to separate the composting operations from the wetlands. This funding will allow the purchase and installation of 300 jersey barriers to create a barrier between the composting operation and the wetlands. Finally, the installation of an extended scale will accurately determine the weights of materials being shipped out of or dropped off at the RTS. *(Submitted by: Public Works RTS)*

The Town Manager's recommendation for Recycling and Transfer Station Property Improvements is \$295,000 to be funded from Free Cash.

DRAIN SYSTEM IMPROVEMENTS – WATER QUALITY (EPA)

The Town entered into a Memorandum of Understanding (MOU) with the Environmental Protection Agency (EPA) to commence a Town-wide investigation of stormwater discharge to address the pollutants through stormwater into the Charles River Basin and other water bodies. This request is to support action items identified in the MOU and included in the Town's National Pollutant Discharge Elimination System (NPDES) Stormwater Drainage Permit. Unless circumstances require otherwise target funding of \$25,000 is proposed for Wildwood Drive Pond. *(Submitted by: Public Works Drains)*

The Town Manager's recommendation for Drain System Improvements – Water Quality (EPA) is \$25,000 in the Tier 2 category.

COMMUNITY SERVICES

LIBRARY FURNITURE

This request is for the second year of a four-year plan to replace library furniture. The Library has been open to the public for more than twelve years, and, due to heavy use, the furniture is beginning to show wear and tear. This request is to replace the community room audience stackable chairs. *(Submitted by: Needham Free Public Library)*

The Town Manager's recommendation for Library Furniture is \$112,960 to be funded by Free Cash.

LIBRARY TECHNOLOGY

This is the first year of a five-year request that will fund the Library's Technology Plan. In FY2020 the plan is to replace 20 staff computers located in the circulation area, children's area, reference area, technical services area, and administration. *(Submitted by: Needham Free Public Library)*

The Town Manager's recommendation for Library Technology is \$30,000 in the Tier 2 category.

LIBRARY SPACE PLANNING

The Library Trustees desire to hire a professional library space planner to determine if the Library's interior space could be better arranged to accommodate the many students and tutors that use the Library's study rooms and study areas. In the afternoons, during the school year, the Library is full of students, tutors, and other people using the three study rooms, the row of carrels, and the many four-seat tables. The Trustees are also interested in updating the furniture and exploring a set-up that would allow the library to use an automatic materials handler that would check in and sort returned materials. *(Submitted by: Needham Free Public Library)*

The Town Manager's recommendation for Library Space Planning is \$60,000 contingent on the availability of an alternative funding source.

PUBLIC PLAYGROUNDS

The Town of Needham has 18 public playground locations: Broadmeadow (2), Eliot (2), Hillside (2), Mitchell (1), Newman (3), Claxton, Cricket, DeFazio, Greene's, Mills, Perry, Riverside, and Walker-Gordon. With the addition of two locations at the Williams School, there will be 20. This funding will be the first in a multi-year plan to improve or replace public playground

equipment in School and non-School locations. Unless circumstances require otherwise, the FY2020 funding will be used to enhance ADA compliant features at Greene's Field and Cricket Field, and to begin the process of installing poured-in-place surfacing at priority locations. *(Submitted by: Park and Recreation Department)*

The Town Manager's recommendation for Public Playgrounds is \$350,000 contingent on Community Preservation Funding.

CRICKET FIELD BUILDING RENOVATION DESIGN

A feasibility study of the Cricket Field building was completed in 2012. The study looked at several options for use of the facility. Since the study was completed, the new Rosemary Recreation Center has opened, providing necessary programming space for Park and Recreation. This funding will support the design of an upgrade of the building for its current uses: Park and Recreation summer program; Needham High Girls Soccer and Girls Lacrosse; storage for Park and Recreation programs; and storage for DPW Parks and Forestry. The building will be made handicap accessible and site work would add appropriate accessible parking. Any portion of the project related to outdoor recreation would be eligible for CPA funding. *(Submitted by: Park and Recreation Department)*

The Town Manager's recommendation for Cricket Field Building Renovation Design is \$163,765 contingent on Community Preservation funding.

ROSEMARY LAKE CAMP AND TRAIL

The Park and Recreation Commission's vision for Rosemary Lake and the Recreation Complex is that it be a place for year-round outdoor recreation. Town Meeting approved funding to remove the existing buildings at the camp property. This funding will complete the project by replacing the large building with a picnic shelter for programs and other visitors. Benches will be added along the trails, floating docks will be added to both sides of the lake, with a larger dock on the pool side to accommodate paddle boats, and minor improvements will be made to the trails. *(Submitted by: Park and Recreation Department)*

The Town Manager's recommendation for Rosemary Lake Camp and Trail is \$200,000 contingent on Community Preservation funding.

GENERAL FUND FLEET REPLACEMENT PROGRAM

The Town's fleet replacement program was established in FY2015. The program includes a budget and schedule for the Town's rolling stock fleet of appropriately 220 vehicles, trailers, and large specialized attachments and the School Department fleet of

14 vans and buses. General purpose vehicles include pickup trucks, a variety of sedans, SUV's, vans, and police vehicles (87). They comprise approximately 39 percent of the entire fleet. General purpose vehicles are utilized in every department and are relatively inter-changeable. The replacement of these vehicles can proceed on a regular schedule and should be part of the of the Town's recurring costs. The Town relies on a number of trailers for the purpose of moving tools and equipment, hauling trash and debris, and transporting special equipment. The Town has 47 trailers which represents approximately 23 percent of the fleet. Specialized, high value vehicles and snow and ice equipment comprise the other 38 percent of the fleet. These vehicles and equipment are just as integral to Town operations as the general purpose vehicles, but serve the unique purposes of specific departments or divisions. Included in this group are the high value vehicles such as ambulances, large dump trucks, fire engines, street sweepers, and others for which appropriations need to be planned. Unless circumstances require otherwise, the proposed FY2020 fleet replacement schedule is as follows. *(Submitted by: Multiple Departments)*

GENERAL FUND CORE FLEET REPLACEMENT

UNIT	DIVISION	YEAR	REPLACEMENT	AMOUNT
457	Building	2006	Ford Taurus to be replaced by Toyota FAV4 or similar	\$33,085
C-42	Fire	2013	Explorer to be replaced by an SUV	\$35,249
2	Fleet/DPW	2010	Ford F150 to be replaced in kind	\$37,060
92	Engineering/DPW	2012	Ford Explorer to be replaced by Ford Van	\$41,550
57	Highway/DPW	2012	Ford F350 to be replaced in kind	\$63,804
705	Building Maintenance/DPW	2006	Ford E250 to be replaced by Ford F150	\$37,060
715	Building Maintenance/DPW	Addition to Fleet	Ford Van	\$43,709
56	RSD/DPW	2010	Ford F150 to be replaced by Ford F250	\$50,332
Bus 14	Needham Public Schools	2012	School Bus to be replaced in kind	\$81,942
Van 1	Needham Public Schools	2011	Ford E150 Van to be replaced by similar passenger van	\$38,388
Van 2	Needham Public Schools	2011	Ford E150 Van to be replaced by similar passenger van	\$38,388

GENERAL FUND FLEET REPLACEMENT – SPECIALIZED EQUIPMENT

UNIT	DIVISION	YEAR	REPLACEMENT	AMOUNT
256	Parks & Forestry/DPW	2008	Brush Bandit Chipper	\$64,936

UNIT	DIVISION	YEAR	REPLACEMENT	AMOUNT
38	Parks & Forestry/DPW	2007	Aerial Lift	\$274,434

REPLACEMENT SNOW AND ICE EQUIPMENT

UNIT	DIVISION	YEAR	REPLACEMENT	AMOUNT
102	Highway/DPW	2008	Large Tractor to be replaced in kind	\$252,140
107	Highway/DPW	2008	Sidewalk Tractor Plow to be replaced in kind	\$178,571

The Town Manager's recommendation for General Fund Core Fleet Replacement is \$500,567 to be funded by Free Cash.

The Town Manager's recommendation for General Fund Specialized Equipment is \$339,370 to be funded by Free Cash.

The Town Manager's recommendation for General Fund Snow & Ice Replacement is \$430,711 to be funded by Free Cash.

SEWER ENTERPRISE FUND

SEWER PUMP STATION IMPROVEMENTS

The Town maintains nine sewer pump stations at elevations below the gravity system. Without these stations, sewage would not enter the Town's sewerage system at these locations. This project will fund the design and engineering of the replacement of the Lake Drive pump station. The pump station at this location is beyond its useful life and requires constant maintenance. The pumps are failing more frequently due to electrical or mechanical issues and require more personnel time and emergency funds to keep the station running. The plan is to replace the existing canister pump station with a new canister pump station. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Sewer Pump Station Improvements is \$630,000 to be funded by Sewer Enterprise Fund Retained Earnings.

SEWER SYSTEM INFILTRATION & INFLOW (I/I) REMOVAL

The Town recently completed a study identifying priority areas for inflow and infiltration removal for the next ten years. The Town of Needham, along with numerous other communities, is under Administrative Orders from the Department of

Environmental Protection (DEP) to identify and remove Infiltration and Inflow (I/I) in existing sewer systems. Infiltration is defined as groundwater or storm water runoff that enters the system through deteriorated pipe or manhole structures that need to be repaired. Inflow is defined as clean, non-septic water, which is introduced to the system. This water is generally produced by residential sump pumps that drain basements. Unless circumstances require otherwise, this funding will support the design of the removal of the remaining locations of identified infiltration in the system by methods including replacing sewer manholes, lining sewer mains, replacing sewer mains and services, and testing and sealing joints. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Sewer System Infiltration and Inflow Removal is \$1,600,000: \$800,000 to be funded by Sewer Enterprise Fund Retained Earnings and \$800,000 to be funded through Sewer Enterprise Fund debt.

SEWER FLEET REPLACEMENT - SPECIALIZED EQUIPMENT

Unit	Division	Year	Replacement	Amount
35	Sewer/DPW	1999	Catch Basin Cleaner to be replaced in kind.	\$201,487

(Submitted by: Department of Public Works)

The Town Manager's recommendation for Sewer Core Fleet Replacement is \$201,487 to be funded by Sewer Enterprise Fund Retained Earnings.

WATER ENTERPRISE FUND

WATER DISTRIBUTION SYSTEM IMPROVEMENTS

Water System Rehabilitation

Through the Water System Rehabilitation Program, the Town's water infrastructure is continually evaluated to assess functionality and performance, and to identify areas in need of repair. Water infrastructure requires ongoing attention and periodic replacement, and portions of the Town's water infrastructure are 75+ years old and approaching the end of their useful life. A diligent rehabilitation program encompassing maintenance, repair, and replacement ensures a continual supply of water to the public. The Department of Public Works prioritizes replacement of water pipes based upon pipe condition, water break history, and adequacy of water flow to fire hydrants. Unless circumstances require otherwise, the FY2020 funding will support the replacement of water mains on Bennington Street from High Street to Concord Street, Country Way, and Alder Book Lane, and the design of water main replacement under Rosemary Lake.

Failing Lined Water Main Replacement

The existing water line dates from 1936-1939 and is cast iron with bitumastic or coal tar liner. The lining of these pipes breaks down over time, causing discoloration in the water and concern for the water quality in the areas serviced by this line. The Town began addressing this issue in 2008, when there was approximately 19,000 linear feet of piping in need of replacement. This funding will complete the project and replace the remainder of existing pipe – 5,500 linear feet of 14" water main – with a new 16" water main from the intersection of Pine Street and Marked Tree Road to High Rock Street. This project will include replacing the pipe and reconstruction of the road. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Water Distribution System Improvements is \$4,791,500, \$4,500,000 to be funded by Water Enterprise Fund Debt and \$291,500 to be funded by Water Enterprise Fund Retained Earnings.
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