

# 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 FY2015 Capital Budget, which is recommended to the Finance Committee and ultimately to Town Meeting for consideration. The projects presented for FY2016-FY2019 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 FY2015 capital budget is shown in Table 1.

The general fund cash capital recommendation is broken into two components – Tier 1 and Tier 2. Tier 2 cash capital is recommended only if additional revenue, not yet identified, becomes available. Recurring requests for on-going programs and replacement schedules represent by far the largest portion of the available cash capital allocation – 69% of the General Fund Tier 1 category for fiscal year 2015. As one of its fiscal year 2014 – 2015 goals, the Board of Selectmen has committed to exploring options for increasing the amount of funds available for cash capital needs.

**Table 1  
FY2015 Proposed Financing Plan**

<b>Capital Recommendation Summary</b>	<b>Cash</b>	<b>Debt</b>	<b>Other</b>	<b>Total</b>
General Fund Tier 1	\$2,467,260	\$800,000		\$3,267,260
General Fund Tier 2	\$448,703	\$900,000		\$1,348,703
General Fund Total	\$2,915,963	\$1,700,000	\$0	\$4,615,963
Community Preservation Fund	\$802,800			\$802,800
Solid Waste Enterprise	\$321,095			\$321,095
Sewer Enterprise	\$398,000			\$398,000
Water Enterprise	\$729,050			\$729,050
Total (all funds)	\$5,166,908	\$1,700,000	\$0	\$6,866,908

## **Capital Planning 101**

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### **Capital Improvement Plan**

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 such as the new Senior Center will have an impact on the operating costs of those facilities once opened. 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, it is often more costly to operate a larger and more modern facility. 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.

### **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 of Needham  
Capital Improvement Plan  
January 2014

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 and costly duplication is avoided. 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 FY2015 - 2019 Capital Improvement Program and its associated FY2015 Capital Budget involves active participation by the Town Manager, Assistant Town Managers, and requesting departments. 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 12, 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 handicapped accessibility standards;
- the project is necessary to protect the health and safety of people; the project is required to comply with State and/or Federal handicapped accessibility standards; 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 and presents 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.

Town of Needham  
Capital Improvement Plan  
January 2014

- *Autumn* —The Town Manager and staff meet with each department to gain a better understanding of each request. Finance Committee and Community Preservation Committee Liaisons are invited to participate in these meetings.
- *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* – The Finance Committee reviews each project in the capital budget and makes recommendations for inclusion in the Town Meeting Warrant.
- *May* – The capital budget is presented to Town Meeting for approval.

#### **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 cannot 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 departmental budgets, or the actual turn back, whichever is lower. As such, the plan includes as much as \$2,915,963 to be funded from General Fund revenue (of which \$2,467,260 is in the Tier 1 cash capital category).

*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.

Town of Needham  
Capital Improvement Plan  
January 2014

*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 no projects to be funded from the Athletic Facility Improvement Fund.

*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 12. 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 \$1,448,145 in funding from the enterprise fund retained earnings accounts.

*Debt* – The Board of Selectmen's debt management policies (Section 12) provide guidance in translating capital expenditures into annual debt service. Section 4 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 4. This plan includes a recommendation for \$800,000 in projects to be funded through General Fund debt in the Tier 1 category and an additional \$900,000 in the Tier 2 category. The plan includes no projects proposed for funding through enterprise fund debt.

*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 was approved at the May, 2004 Annual Town Meeting and by voters at the November 2, 2004 election. 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 Town of Needham 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

Town of Needham  
Capital Improvement Plan  
January 2014

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 \$802,800 in projects to be funded contingent upon Community Preservation Funding, of which \$621,150 is in the Tier 1 category.

**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 - \$104 Million Over Five Years***

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Asset preservation is defined as committing necessary resources to preserve, repair, or adaptively re-use current assets. Expenditures for asset preservation are intended to keep the physical plant and infrastructure in reliable operating condition for their present use. As noted in previous years, despite the most recent economic downturn and decades of financial uncertainty for municipal governments, the Town of Needham has made an extraordinary investment in public infrastructure during the past decade. While significant investment in many capital facilities is still required and, in some cases, overdue, the Town should be proud of this achievement. 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. Such prioritization of spending on infrastructure that is often "invisible" is the hallmark of a community that has refrained from diverting funding from the capital budget to fund operating budget programs and services that are needed and desired.

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 2 ½ in 1982, 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-1990's and continuing today. Table 2 shows the Town's investment in facilities and infrastructure over the past five years.

Town of Needham  
Capital Improvement Plan  
January 2014

**Table 2**  
**Facility and Infrastructure Investment**  
**2010 to 2014**

Description	2010	2011	2012	2013	2014	Total	Five Year Average
Open Space	920,000	800,000				1,720,000	344,000
Municipal Facilities	18,204,837	548,000	8,075,000	40,000	2,771,500	29,639,337	5,927,867
Townwide Facilities and Community Services	507,200	455,600	622,500	1,247,315	951,828	3,784,443	756,889
Public Works Infrastructure Program	1,000,000	2,186,300	1,300,000	6,128,000	600,000	11,214,300	2,242,860
School Facilities	27,668,728	4,052,000	1,078,000	85,000	4,292,276	37,176,004	7,435,201
Drains, Sewer, and Water Infrastructure	2,533,300	1,483,800	8,269,500	1,079,300	7,670,900	21,036,800	4,207,360
<b>Total</b>	<b>50,834,065</b>	<b>9,525,700</b>	<b>19,345,000</b>	<b>8,579,615</b>	<b>16,286,504</b>	<b>104,570,884</b>	<b>20,914,177</b>

### **Investment in Equipment, Technology, and Fleet - \$11.7 Million Over Five Years**

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 Townwide technology, and School copiers, furniture and musical equipment. Table 3 shows the Town's investment in these categories of capital spending for the five year period FY2010 through FY2014.

Town of Needham  
Capital Improvement Plan  
January 2014

Table 3  
Equipment, Technology, and Fleet Capital  
2010 to 2014

Description	2010	2011	2012	2013	2014	Total	Five Year Average
<b>Equipment</b>	<b>238,681</b>	<b>799,603</b>	<b>378,763</b>	<b>430,200</b>	<b>829,995</b>	<b>2,677,242</b>	<b>535,448</b>
All Other Functions	25,000	68,000	0	0	146,250	239,250	47,850
Public Facilities & Works	132,000	623,953	259,063	235,000	480,100	1,730,116	346,023
Public Safety	0	0	0	40,000	27,500	67,500	13,500
Public School	81,681	107,650	119,700	155,200	176,145	640,376	128,075
<b>Technology</b>	<b>194,393</b>	<b>389,400</b>	<b>306,596</b>	<b>832,800</b>	<b>663,800</b>	<b>2,386,989</b>	<b>477,398</b>
All Other Functions	25,000	282,800	145,000	160,000	30,000	642,800	128,560
Public Facilities & Works	0	0	0	0	0	0	0
Public Safety	0	68,000	112,496	0	0	180,496	36,099
Public School	169,393	38,600	49,100	672,800	633,800	1,563,693	312,739
<b>Fleet</b>	<b>1,361,233</b>	<b>1,161,746</b>	<b>1,418,500</b>	<b>1,680,618</b>	<b>1,105,242</b>	<b>6,727,339</b>	<b>1,345,468</b>
All Other Functions	0	0	52,000	0	0	52,000	10,400
Public Facilities	0	65,046	25,000	50,318	33,600	173,964	34,793
Public Safety	35,000	30,000	400,000	785,000	94,242	1,344,242	268,848
Public Works	1,326,233	1,066,700	941,500	845,300	977,400	5,157,133	1,031,427
<b>Total</b>	<b>1,794,307</b>	<b>2,350,749</b>	<b>2,103,859</b>	<b>2,943,618</b>	<b>2,599,037</b>	<b>11,791,570</b>	<b>2,358,314</b>

## Project Summaries – Recommended Projects

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### **GENERAL GOVERNMENT**

#### **NETWORK HARDWARE SERVERS AND SWITCHES (Request: \$30,000)**

The request is to replace older servers, both application and data, with newer, faster, and more energy efficient models including hardware to install virtualization software. Funding will also support the replacement of the spam filter, virus firewall, and internet filtering, and of older network switches to connect buildings, departments, and workstations throughout the Town. Newer models of both servers and switches are better able to take advantage of the Town's fiber and increase the speed of data within the Town's fiber network. Not replacing or updating this equipment may have a negative effect on email, financial applications, internet access, data accessibility, and backups between the Town's datacenters. *(Submitted by: Finance Department)*

The Town Manager's recommendation for Network Hardware Services and Switches is \$30,000 in the Tier 1 cash capital category.

#### **TECHNOLOGY SYSTEMS AND APPLICATIONS UPGRADE (Request: \$100,000)**

This funding will support an update for the Town's Geographic Information System (GIS) including planimetric data and imagery. A Geographic Information System (GIS) is a system of hardware and software used for storage, retrieval, mapping, and analysis of geographic data. The GIS update will add changes and updates that have taken place throughout Needham and adjacent communities within 1000' feet of the Town's boundary between the spring 2009 flight and a proposed 2015 flight. The flight will also improve imagery to help in analysis of land use and development throughout Needham. The project will include updating infrastructure data (water, sewer, drain) as well as changes to the parcel data. The current data from the spring 2009 and any subsequent updates will be incorporated into the Town's public web GIS site. Because many departments, such as Engineering, Water & Sewer, Planning, Conservation and other Town and School Departments use the GIS data on a regular basis, it is important to have up to date data so these departments can plan, analyze, and display an accurate representation of the land base and infrastructure.

The Town Manager's recommendation for Technology Systems and Applications Upgrade is \$100,000 in the Tier 1 cash capital category.

## **PUBLIC SAFETY**

### **PUBLIC SAFETY COMPUTER-AIDED DISPATCH SYSTEM (\$244,615)**

This request is to replace the current Computer Aided Dispatch (CAD) application with an application that is designed to be run on an Intel style server. The current CAD application has been used by the Needham Police and Fire Departments since 1994 - initially installed on an IBM A/S 400 and currently operating on an IBM iSeries Blade Server that is nearing its end of life. The operating system is increasingly difficult to maintain in-house, and the style and interface of the current application - commonly known as "green screen" - makes it difficult for users to transition from standard windows based interfaces. It will be helpful for the Needham Police and Fire Departments to have an application that is widely used by other Public Safety agencies throughout the Commonwealth, to leverage local knowledge to help them use the application more effectively.

The Town Manager's recommendation for the Public Safety Computer-Aided Dispatch System is \$244,615 in the Tier 1 cash capital category.

### **WIRELESS MUNICIPAL RADIO MASTER FIRE BOX SYSTEM (\$164,000)**

The long-term plan is to eliminate the older style fire alarm master boxes and install wireless radio master box systems where needed. All pole mounted fire alarm boxes (222) would be permanently removed. Building master boxes (129) would be replaced with radio box transmitters. The 129 master boxes are privately owned, and property owners pay the Town an annual monitoring fee of \$480. Privately owned buildings would not be required to change over to the new municipal system if they chose to use their own private alarm company. The aspects of the project include acquisition of the head-end equipment to be located within the fire dispatch center, and purchase and installation of radio boxes for 28 Town buildings. With this new system, the fire dispatch center will be capable of monitoring alarms, troubles, security/intrusion, and any other alarm or status that uses a contact closure. Once the wireless system is complete, the Fire Department will evaluate the continued need for staffing and equipment in the Fire Alarm Division. *(Submitted by: Fire Department)*

The Town Manager's recommendation for the Wireless Municipal Radio Master Fire Box System is \$164,000 in the Tier 1 cash capital category.

### **FIRE ALARM CABLE REPLACEMENT (Request \$60,000)**

This project is a companion to the wireless municipal radio master fire box system project. This request is to fund the replacement of all municipal fire alarm cables which cross Route 128 (I-95) during the construction of the "Add-A-Lane" project as it progresses through Needham. While the project will be conducted through Town appropriation, the costs may be reimbursed by the Commonwealth of Massachusetts. The cables being replaced are part of the municipal fire alarm system which provides service to all of the neighborhoods (both residential and commercial), and many of the buildings on the east side of Route 128. All of the cables that need to be replaced are either on the Kendrick Street Bridge or the Highland Avenue Bridge. If the wireless municipal radio master fire box system is installed prior to the construction phase of the Add-a-Lane

project in these two areas, replacement of the cables will not be necessary and the funds will be available for repurposing.

The Town Manager's recommendation for the Fire Alarm Cable Replacement is \$60,000 in the Tier 1 cash capital category.

## **PUBLIC SCHOOLS**

### **SCHOOL COPIER REPLACEMENT (Request: \$30,320)**

Photocopiers are located in all of 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 48 copiers. Copier replacement is planned on a lifecycle analysis, which projects when a copier should be replaced based on actual usage and the manufacturer's total estimated capacity. Copiers that are heavily used are replaced more frequently than copiers that are lightly used. A seven-year maximum duty life is assumed for most machines, even if they have not yet reached maximum copy allowances, given the additional operating expense associated with servicing and maintaining older equipment, as well as the difficulty in obtaining replacement parts. This analysis assumes that copiers are re-deployed around the District, as needed, to match copier use with equipment capacity. The requested funding will support the replacement of five (5) copy machines. *(Submitted by: Needham Public Schools)*

### **SCHOOL FURNITURE, MUSICAL INSTRUMENTS, & FITNESS, PRODUCTION & GRAPHIC ARTS EQUIPMENT (Request: \$81,680)**

Musical Equipment – In FY2005, Town Meeting allocated funds to begin a ten-year replacement cycle for old and heavily used school musical instruments, including band and orchestra instruments, as well as pianos. The plan, which ended in FY2014, has significantly improved the quality of musical instruments used by students. Beginning with FY2015, the focus of this request is shifted from inventory replacement to inventory expansion, particularly at the middle and high schools, where enrollment is growing and students need the larger-sized instruments in the brass and string families. The need for additional instruments to meet enrollment growth is compounded by several other factors. Since students are prohibited from transporting large instruments on school buses, there is a need to provide additional instruments for classroom use, particularly cellos, basses, and large wind and percussion instruments. Additionally, there is a need to provide upright acoustic pianos in all music rooms, practice rooms and performance facilities, to enable choral groups to have proper accompaniments and to allow small student ensembles. Unless circumstances dictate otherwise, fiscal year 2015 funding will support the acquisition of additional upright pianos for High School practice rooms, and expand the inventory of bass violins/cellos and low brass at the Pollard School, High Rock School and Needham High School.

Town of Needham  
Capital Improvement Plan  
January 2014

School Furniture - This purpose of this program is to continue the replacement cycle for school furniture in poor and fair condition at Hillside, Mitchell, Newman and Pollard. In these schools, furniture is 10-20+ years old and in a state of disrepair after decades of heavy use. By FY2015, all furniture in poor condition will have been replaced at these schools.

Fitness Equipment - The Needham High School renovation project budget included a large amount of fitness equipment for student use, which will need to be replaced as the components age and the equipment reaches the end of its useful life. In addition, the Pollard Middle School owned a number of strength circuit machines, which will need to be replaced on a regular basis going forward. The manufacturer's estimated life cycle is five (5) years for treadmills, six (6) years for cross trainers, eight (8) years for recumbent and upright bicycles, 23 years for rowing machines, and 25 years for circuit training equipment. The Department's request is based on a longer replacement cycle of: five to seven (5 - 7) for treadmills, nine (9) years for cross trainers, eight (8) years for recumbent bikes, 12 years for upright bikes, 19-20 years for rowing machines and 11-16 years for circuit training equipment. Unless circumstances dictate otherwise, the FY2015 funding is planned for three spinning bikes and one treadmill.

Production Center - This request is to purchase a replacement mail meter and folder/stuffer/insert machine for the Needham Public Schools Production Office. The existing folder/stuffer/insert machine was purchased in 2004 and is nearing the end of its useful life, after a decade of heavy use.

High School Graphics Production Room - This program continues the equipment replacement cycle for equipment used in the Graphics Production Center at Needham High School. This program provides convenient and cost effective service, and also provides hands-on educational training in the field of professional graphics and printing production for students. Unless circumstances dictate otherwise, the FY2015 funding is intended for purchase of a high capacity large print photo printer and a binder/spireler. *(Submitted by: Needham Public Schools)*

**INTERACTIVE WHITEBOARD TECHNOLOGY, 1:1 INITIATIVE, TECHNOLOGY INOVATION, AND TECHNOLOGY REPLACEMENT (Total Request: \$679,325)**

Interactive Whiteboard Technology - This program funds the purchase and installation of whiteboard technology in the Needham schools.

School Department NPS 1:1 Initiative - This project continues the initiative begun in FY2013 to introduce tablet technology on a 1:1 basis at Pollard, High Rock and Needham High Schools. A portion of this funding will support the purchase of devices for Pollard students who are unable to provide their own devices. Funding also includes devices for secondary level teachers, the purchase of AppleCare+, and completes the preparation of the High Rock infrastructure to support 1:1.

Technology Innovation - The requested funding will support structured technology experimentation to help the Schools better identify and prepare for use and deployment of technology.

Town of Needham  
Capital Improvement Plan  
January 2014

Technology Replacement – This request is for funding to continue the School Department’s regular replacement cycle for technology devices, including computers, printers, and servers. The FY2015 request includes the replacement of 300 teacher, administrator, student, lab and laptop computers, which have reached or are functioning beyond the end of their seven-year lifecycle. A total of 39 of these computers are for teachers and administrators throughout the District. Another 261 are lab and classroom computers at Hillside, Mitchell, Newman, Pollard and the High School. The majority of the computers being purchased will be deployed at the High School. FY2015 represents the third year of the anticipated five-year timeframe to replace the High School computers. FY2015 costs also include additional hardware infrastructure to expand Internet Bandwidth, additional network infrastructure and servers at the Emery Grover School Administration Building, and replacement of failing SMART Boards and LCD projectors at District schools. *(Submitted by: Needham Public Schools)*

The Town Manager’s recommendation for Consolidated School Capital is \$791,325 in the Tier 1 cash capital category.

**PUBLIC WORKS**

**GENERAL FUND SMALL SPECIALTY EQUIPMENT (Request: \$29,797)**

Unit	Division	Year	Description – Existing	Description - Request	Hours	Cost
340	Parks & Forestry	2008	Mower	Same	580	\$8,114
352	Parks & Forestry	2008	Mower	Same	533	\$21,683

*(Submitted by: Department of Public Works)*

The Town Manager’s recommendation for Small Specialty Equipment is \$29,797 in the Tier 1 cash capital category.

**LARGE FORMAT SCANNER (Request: \$33,000)**

This submission is for the purchase of a large format multi purpose color scanner/printer/copier that will allow the Engineering Division to replace and upgrade the existing large format monochrome scanner/printer/copier. The existing large format Monochrome scanner/copier/printer was purchased in FY2008 and has been used extensively by the Department of Public Works, Department of Public Facilities, Planning Department, Department of Public Health, and other departments as needed to reproduce and to electronically store large format plans and posters. The amount of use of the existing monochrome scanner/copier/printer has increased over the last several years. Parts have become worn down requiring more frequent replacement and services to keep the equipment operational; this machine has been down between 8 and 12 days over the last 2- years, impacting the Department’s ability to serve the public. This request is also for a color machine, because there have been increasing requests for the Engineering Division to produce full size color plans. The new large format multi purpose color

Town of Needham  
Capital Improvement Plan  
January 2014

scanner/printer/copier will serve as a backup plotter for the Engineering Division in case the Plotter purchased in 2005 requires work, and will be capable of making multiple color copies/scanned images for all departments that the Engineering Division supports. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Large Format Scanner is \$33,000 in the Tier 1 cash capital category.

**CENTRAL AVENUE/ELIOT STREET ("COOKS") BRIDGE REPLACEMENT DESIGN (Request: \$900,000)**

In the spring of 2013, this bridge was identified by the Commonwealth as having structural deficiencies. Upon receiving this information, the Town of Needham and the City of Newton engaged a structural engineer to further evaluate the bridge. A report by the structural engineer was completed in the late summer of 2013 and indicates that further monitoring is necessary to determine what action needs to be taken with this bridge. The Town of Needham is in the process of engaging a consultant to monitor the bridge for a period of six months to determine the extent of the structural deficiency. It is possible that if the result of that monitoring indicates that the bridge is in need of major repair or replacement, the Town will need to perform engineering and design services in the summer of 2014, with construction to follow, in order to ensure the safety of this bridge. The budgetary figure indicated for design and engineering is based on the most costly option for repair/replacement, should both communities choose to take that option. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Central Avenue/Eliot Street Bridge Design is \$900,000 in the Tier 2 debt financing category.

**DRAIN SYSTEM IMPROVEMENTS – WATER QUALITY (Request: \$80,000)**

In 2003, the Environmental Protection Agency (EPA) issued a National Pollutant Discharge Elimination System (NPDES) Permit to the Town to upgrade the quality of the water discharged to the Charles River. A renewal permit is overdue and is expected in the current fiscal year. In compliance with the permit, the Town has completed a number of projects to improve stormwater discharge with a variety of methods at the Public Library, High School, Chestnut Street, High Rock School, and Lake Drive. This project will fund a watershed management plan. The Town is divided into four distinct watersheds. The goal of the plan is for the identification of sub-watersheds so that the Town can target different water quality treatment strategies depending on the conditions of each sub-region. The development of the plan will also identify the Town's storm drain capacity. Recent severe weather events, such as the Labor Day, 2013 storm, have highlighted the need for investment in a variety of strategies to reduce the incidence of flooding that creates both inconvenience and property damage for property owners and the Town. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Drain System Improvements – Water Quality is \$80,000 in the Tier 1 Cash capital category.

Town of Needham  
Capital Improvement Plan  
January 2014

**DRAIN SYSTEM REPAIRS (Request: \$76,000)**

This request is to fund design, engineering and wetlands consulting to replace ten feet of pipe underneath a culvert on Edgewater Drive. This pipe is particularly problematic - it is over 100 years of age, and is plugged-up and degraded beyond remediation. This pipe is presently supporting two sewage pipes, one that is in service, and one that was abandoned in place. The drainage pipe and one of the active sewage pipes are all uncovered due to erosion and the drainage pipe is providing the structural foundation for the sewage pipes. Should the drainage pipe be compromised, it will subject the sewage pipes it supports to failure. This replacement includes extensive wetland consulting and permitting which is a major factor in the cost of this project. Additionally, this drainage pipe needs to be constructed under the existing sewage pipes adding to the difficulty of this replacement. This repair will resolve drainage issues in the area that have resulted in flooding of the abutters of the brook, and will ensure the structural stability of the adjacent sewage pipes. It is expected that the cost of construction will be in the range of \$90,000. (*Submitted by: Department of Public Works*)

The Town Manager's recommendation for Drain System Repairs is \$76,000 in the Tier 1 Cash capital category.
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**PUBLIC WORKS INFRASTRUCTURE PROGRAM (Request: \$600,000)**

Street Resurfacing - This purpose of this program is to improve the structural and surface integrity of the Town's miles of accepted streets. The primary strategy of this program is asphalt paving and incidental work, such as asphalt berm curb, new grass shoulders, corner reconstruction including handicapped ramps, minor drainage improvements, street sign replacement, traffic markings and signs.

Traffic Signal & Intersection Improvements - This program funds traffic signal and intersection improvements, and new traffic signal installations.

Combined Sidewalk Program - This Program funding addresses the failing 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.

Storm Drain Capacity Improvements - This program provides funding to improve roadway drainage capacity. The Town has identified and prioritized a number of areas throughout Needham where improvements are required to resolve flooding problems and illicit discharge. These measures include installation of additional storm drains, and storm drain replacement, extension, and capacity increases.

Town of Needham  
Capital Improvement Plan  
January 2014

Brooks and Culverts – Repair and Maintenance - This repair and maintenance program was developed to address flooded and poor draining brooks, streams, waterways and culverts throughout the Town that have been severely damaged by heavy rains/storms.

Unless circumstances dictate otherwise, fiscal year 2015 funding will be directed to street resurfacing, sidewalk improvements, and storm drain capacity improvements. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for the Public Works Infrastructure Program is \$600,000, plus an additional \$200,000 is recommended in the Tier 1 debt financing category.

## **PUBLIC FACILITIES**

### **PUBLIC FACILITIES MAINTENANCE PROGRAM (Request: \$482,000)**

This project supports the annual maintenance of public buildings throughout the Town including but not limited to: asbestos abatement, small equipment replacement, duct cleaning, painting, and other repairs and necessary upgrades. Unless circumstances dictate otherwise, fiscal year 2015 funding is proposed for duct cleaning at the High Rock School, Mitchell School, and Public Services Administration Building, asbestos abatement at the Pollard School, flooring replacement at the Eliot School, xeriscaping at Needham High School, and wood floor refinishing in various school buildings. Minor adjustments to the site configuration at the Pollard School are also planned. *(Submitted by: Public Facilities Department)*

The Town Manager's recommendation for the Public Facilities Maintenance Program is \$482,000 in the Tier 1 cash capital category.

## **COMMUNITY SERVICES**

### **ATHLETIC FACILITY IMPROVEMENTS (Request \$256,900)**

The Department of Public Works and Park and Recreation have developed a maintenance plan for all fields, which includes new or total reconstruction, partial renovation, irrigation, drainage improvements, and equipment replacement or repair (bleachers, fences/backstops, player benches and miscellaneous equipment) for multi-use fields and ball diamonds. This project will support drainage and soil improvements at Memorial Field. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Athletic Facility Improvements is \$256,900 in the Tier 1 cash capital category contingent on Community Preservation Funding.

Town of Needham  
Capital Improvement Plan  
January 2014

**CRICKET FIELD BUILDING RENOVATIONS DESIGN (Request: \$181,650)**

This funding will support the design and engineering of a renovation of the Cricket Field building. The building is currently used for Park and Recreation summer programs, Needham High Girls Soccer and Girls Lacrosse, storage for Park and Recreation programs; and storage for DPW Parks and Forestry. The 1964 wood structure building is approximately 1,250 square feet. Without renovations, it will become more difficult to use it for the summer program. In past years, the Town received donations for other projects at the park, totaling approximately \$200,000. Those projects include the rebuilding of the athletic fields, addition of new playground equipment, and a bubbler and garden with park benches

The Park and Recreation Commission completed a feasibility study of the Cricket Field building with the PPBC in March 2012. The study evaluated options including renovation of the building for current uses, renovation of the building for year-round use, construction of new building at same location, and construction of new building elsewhere on site. The final recommendations provided a range for renovation and a modular building at a different location at the park. (*Submitted by: Park and Recreation*)

The Town Manager's recommendation for Cricket Field Building Design is \$181,650 in the Tier 2 alternative funding category, contingent on Community Preservation Funding.

**MILLS FIELD IMPROVEMENTS (Request: \$364,250)**

Mills Field has been the location of several park improvements in the past four years including renovated tennis courts, new playground equipment, addition of high barrier fencing between the baseball diamond and tennis courts, irrigation work and replacement of backstop and outfield fencing. Fencing around the playground area has also been replaced. The purpose of the current project is to provide safety and aesthetic renovations to the park, including the creation of new parking areas; basketball improvements including an asphalt overlay to basketball court, striping, and replacement poles and backboards; replacement of current bathrooms with modular bathrooms; replacement of picnic tables and grills; and xeriscape gardening in appropriate locations. The ballfield will also be stripped and sodded, and drainage/water quality improvements will be incorporated. (*Submitted by: Department of Public Works*)

The Town Manager's recommendation for Mills Field Improvements is \$364,250 contingent on Community Preservation Funding.

Town of Needham  
Capital Improvement Plan  
January 2014

**GENERAL FUND FLEET REPLACEMENT PROGRAM**

**CORE FLEET REPLACEMENT (Request: \$189,916)**

Unit	Division	Year	Description – Existing	Description - Request	Miles	Cost
41	Parks & Forestry	2009	Ford F-350	Same	39,876	\$50,723
50	Parks & Forestry	2008	Ford F-150	Ford F-350	30,066	\$50,187
453	Building	2005	Ford Taurus	Ford Fusion	58,943	\$30,830
455	Building	2006	Ford Taurus	Ford Fusion	55,684	\$30,830
704	Public Facilities	2005	Ford E250 Cargo Van	Same	69,677	\$27,346

*(Submitted by: Multiple Departments)*

The Town Manager’s recommendation for Core Fleet Replacement is \$189,916 in the Tier 1 cash capital category.

**FLEET REPLACEMENT - SPECIALIZED EQUIPMENT (\$433,009)**

Unit	Division	Year	Description – Existing	Description - Request	Miles/Hours	Cost
R2	Fire	2005	Ford/Osage Ambulance	Same	51,400/8,050	\$186,607
7	Highway	2000	Dump Truck	Same	38,880/3812	\$169,366
73	Parks	2008	One Ton Dump Truck	Same	36,890	\$77,036

*(Submitted by: Multiple Departments)*

The Town Manager’s recommendation for the Fleet Replacement – Specialized Equipment is \$186,607 in the Tier 1 cash capital category and \$246,402 in the Tier 2 cash capital category.

**FLEET REPLACEMENT - SNOW AND ICE EQUIPMENT (Request: \$202,301)**

Unit	Division	Year	Description – Existing	Description - Request	Miles	Cost
117	Highway	2000	Sidewalk Tractor	Same	4,240	\$171,021
7A	Highway	2000	Material Spreader	Same	n/a	\$31,280

*(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Fleet Replacement Snow and Ice Equipment is \$202,301 in the Tier 2 cash capital category.

## **RECYCLING/TRANSFER STATION (RTS) ENTERPRISE FUND**

### **TRANSFER STATION OFFICE TRAILER (Request: \$75,779)**

The current working conditions for staff in the main office at the RTS are sub-standard. The supervisor's office is isolated from day-to-day operations and staff activity, making supervision and oversight challenging. The proximity of the main office to the tipping floor results in odors from transfer station building migrating into the office area, and the air filtration system in the main office is inadequate and incapable of ameliorating the odor problem. The facility has inadequate space for the office and customer reception area (current total combined space for both functions is 169 square feet) neither of which is ADA accessible. The plumbing in the staff restroom occasionally freezes in the winter, and restroom conditions are poor and not ADA compliant. This proposal is for the purchase and installation of a temporary 12' x 44' office trailer, to be situated to the Northeast of the transfer station building. The trailer will immediately improve working and operation conditions and will be placed so that it will not interfere with, and can be used during, future expansion of the transfer station building. The trailer will provide an improved customer reception area, improved office areas, and an ADA compliant restroom. The cost estimate includes the purchase price and setup costs for the trailer, and electrical, sewer, and water tie-ins. An evaluation of the entire facility will be conducted as part of the on-going facility master planning process. The acquisition of a trailer is a measure designed to immediately improve the working conditions of staff and enhance the user experience for the public. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Transfer Station Office Trailer is \$75,779 in the Tier 1 RTS cash capital category.

### **MESSAGE BOARD (Request: \$30,000)**

Currently the Public Works Department has three mobile message boards that are used for large construction projects. These message boards are removed from construction projects and relocated to various sites in Town when requested for non-construction notifications to residents and commuters. The existing message boards are difficult to maneuver, time consuming to program, and are often unavailable for non-emergency notices. This request will support a pilot program of permanently installed message boards to be used to communicate with residents in their cars and on the streets. These message boards will have the capacity to be programmed remotely and simultaneously from a Town work station or a laptop, and will help to eliminate competition for the current message boards.

The Town Manager's recommendation for Permanent Message Board is \$30,000 in the Tier 1 RTS cash capital category.

## **SEWER ENTERPRISE FUND**

### **SEWER ALARM SYSTEM UPGRADE (Request: \$258,000)**

The Sewer Alarm system upgrade includes the implementation of a Supervisory Control & Data Acquisition (SCADA) System. The Town's Sewer SCADA system will collect data from various sensors from all of the sewer lift stations that will enable operators to efficiently manage and control the operations of the station from a central or remote location. The upgraded alarm system will provide dispatchers with more details about the type of alarm, which will enable them to better prepare the call person when responding. A request for the funding a study for the sewer alarm upgrade was approved at the May 2012 Annual Town Meeting and was completed in the fall of 2012. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Sewer Alarm System Upgrade is \$258,000 in the Tier 1 Sewer cash capital category.

### **SEWER PUMP STATION IMPROVEMENTS (Request: \$90,000)**

This project will fund the replacement of a programmable logic controller (PLC) at the West Street Sewer Pump Station. The PLC receives input data from various sensors that is used for the automation of electromechanical processes within the pump station. The PLC also stores historical data. The station is currently operating with a back-up controller that is basic in design. It controls the on/off operations of the pump only. The controller does not record data (flows and alarms) and there is no digital display of the operations (wet well level, mode of operations, etc.). Replacement of the non-functioning PLC is an essential component of the SCADA system proposed for funding in FY2015. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Sewer Pump Station Improvements is \$90,000 in the Tier 1 Sewer cash capital category.

### **SEWER SERVICE CONNECTIONS (Request: \$50,000)**

There are approximately 100 homes with access to sewer that are not connected to the Sewer System because the owner has chosen not to connect. The purpose of this request is to provide the lateral sewer line from the sewer main to the property line so that homeowners can connect should they choose to, or should their septic system fail. The lateral sewer lined are planned to be installed prior to road reconstruction/paving projects. The cost for these service installations are not typically included in road construction estimates, and, in the case of Chapter 90 Projects, the costs are not eligible for reimbursement. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Sewer Service Connections is \$50,000 in the Tier 1 Sewer cash capital category.

## **WATER ENTERPRISE FUND**

### **WATER SYSTEM REHABILITATION PROGRAM (Request: \$91,000)**

Under the Water System Rehabilitation Program, the Town's water infrastructure is continually analyzed 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 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. Fiscal year 2015 funding is planned for the engineering and design of a new eight inch pipe from Pleasant Street/Howland Street to Dedham Avenue(1,160 linear feet) and engineering and design of a new eight inch water pipe from Norfolk Street/Warren Street to Webster Street (1,300 linear feet). *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Water System Rehabilitation is \$91,000 in the Tier 1 Water cash capital category.

### **FILTER MEDIA REPLACEMENT (Request \$238,050)**

The filter media greensand is used for manganese removal at the Charles River Water Treatment Facility. Greensand must be replaced frequently and requires additional potassium inputs. A new product, Greensand Plus, is a synthetic alternative to natural greensand that can withstand wider variations in operating conditions and has an extended life. Further, Greensand Plus does not require additional potassium inputs. The Town completed the first of four conversions to Greensand Plus in FY2013. The second conversion was approved for FY2014. The greensand lasts for approximately 15 years so the next scheduled replacement is scheduled for FY2028. This request is for the final two years of conversion, and includes an allocation for repairing the exposed screen – a factor that was encountered in the first year of conversion. Replacing the media in two of the filters simultaneously will be more cost effective in terms of set up time and quicker avoidance of the need for potassium additives. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Filter Media Replacement is \$238,050 in the Tier 1 Water cash capital category.

### **SERVICE CONNECTIONS (Request: \$200,000)**

The purpose of this program is to remove old iron pipe water services that contain lead from the water distribution system. Old iron and lead water services are replaced prior to road reconstruction/paving projects. If the water service connections are not replaced, an element of the subsurface infrastructure is susceptible to failure before the useful life of the reconstructed roadway has been realized. The FY2015 funding will provide approximately one year's value of water service replacements, which will fall in line with the road resurfacing program schedule. *(Submitted by: Department of Public Works)*

Town of Needham  
Capital Improvement Plan  
January 2014

The Town Manager's recommendation for Water Service Connections is \$200,000 in the Tier 1 Water cash capital category.

**WATER SUPPLY DEVELOPMENT DESIGN (Request \$200,000)**

**Replacement of Well #3**

In April 2013 the Town redeveloped Well #3 and restored the yield of the well to approximately one third of its original capacity. The original capacity of the well was 50 gallons per foot, and the redevelopment enabled the well to achieve up to 18 gallons per foot. Prior to the redevelopment, the yield of the well was 5 gallons per foot. Since this last redevelopment in April 2013, the well is already showing signs of losing capacity, and is pumping 15 gallons per foot as of September 2013. This well is the least productive of the three wells. While the Department originally proposed the development of a fourth well, the current request is to support the replacement of Well #3. The funding proposed for fiscal year 2015 will support the design and engineering of a replacement well, with a request for construction funding planned for fiscal year 2016. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Water Supply Development Design is \$200,000 in the Tier 1 Water cash capital category.

**ENTERPRISE FUND FLEET REPLACEMENT PROGRAM**

**FLEET REPLACEMENT - SPECIALTY EQUIPMENT (Request: \$215,316)**

Unit	Division	Year	Description - Existing	Description - Request	Miles/Hours	Cost
93	RTS	2004	Screeener	Same	NA/4,370	\$215,316

*(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Fleet Replacement - Specialty Equipment is \$215,316 in the Tier 1 RTS cash capital category.