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**FY2010 – FY2014  
Capital Improvement Plan  
Executive Summary**

**Section 5**

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## Executive Summary

### The Critical Need for Capital Planning

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A core responsibility of local government officials is the preservation, maintenance, and improvement of capital assets. Everything the Town does – from providing services to residents and businesses, to equipping employees to effectively perform their jobs – requires the existence of certain basic physical assets. These assets include items such as roads and intersections, water and sewer systems, parks, buildings, rolling stock, large equipment and technology. These items must be purchased, maintained and replaced on a timely basis or their usefulness in providing public services will diminish. The Town's five-year Capital Improvement Program and annual Capital Budget are developed to ensure adequate capital investment in these Town's assets.

The Capital Improvement Plan (CIP) is primarily a planning document. It is updated annually, and is subject to change as the needs of the community become more defined. Used effectively, the capital improvement planning process can provide advance project identification, evaluation, scope definition, design, public discussion, cost estimating, and financial planning. 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.

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 sudden changes in debt service payments.

Needham's capital planning initiatives have contributed to the successful achievement and maintenance of its AAA bond rating from Standard and Poors. This bond rating places Needham in the top tier of communities (there are only a handful in Massachusetts) and allows the Town to borrow at a lower interest rate. In its October 24, 2008 bond rating report, Standard and Poor's notes: "Needham's experienced management focuses on long-range planning, which has resulted in a stable and sound financial position."

### Sustainability versus Stewardship?

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Despite the exceptional investment in public buildings during the past decade (more than \$150 million), significant investment in many capital facilities is still required and, in many cases, is long overdue. A similar picture can be painted of the Town's other capital assets, such as

roads, bridges, sidewalks, and sewer, drain and water infrastructure. With growth in many fixed and other operating costs continuing to outpace available revenue, the Town's ability to sustain its operating and capital budgets remains challenging.

Capital projects funded through general fund cash capital tend to be the "bread and butter" of Town operations. In recent years, the recommended allocation for general fund cash capital has been pegged at the amount of free cash over and above the \$2 million that can be counted on annually to support the operating budget. As a result, however, spending on cash capital tends to fluctuate depending on the Town's certified free cash in any given year. The general fund cash capital recommendation is broken into two components – primary and secondary. Secondary 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 large portion of the available free cash allocation – 89% of the "primary" category for fiscal year 2010. As a result, in years of lower free cash, little revenue is available for new projects or enhancements. Over the past two years, we have been able to supplement the primary cash capital recommendation with funds held in the Reserve Fund for snow and ice removal that was not needed. Thus, spending on this critical component of the capital plan now fluctuates not just on free cash certification, but also on the weather!

The Town's financial planning emphasizes sustainability (meeting the needs of the present without compromising the ability of future generations to meet their needs) and stewardship (the careful and responsible management of something entrusted to our care). As stewards, we have a responsibility to ensure adequate investment in our capital assets; yet the need for sustainability demands that we live within our means. The fiscal situation in the nation and in the Commonwealth is uncertain at best. At the same time, the recommended cash capital in the primary category is not sufficient to meet the Town's needs in fiscal year 2010, representing only 47% of the recommended investment.

The staff will work with the Finance Committee as well as the Board of Selectmen and School Committee over the coming year to identify strategies both to increase the available funding for cash capital, and to create a sustainable (non-fluctuating) funding source that can serve as the foundation for the five year allocation process.

#### Capital Improvement Policies

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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 residents or Town employees; 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.

#### Financing Methods

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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.

*Undesignated Fund Balance (or “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, it should not be relied upon 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 \$2,000,000 annually, and using the balance to improve reserves, invest in capital assets, and support one-time or short-duration programs. As such, the Plan includes as much as \$1,145,416 to be funded from General Fund revenue, to be offset by a transfer from Free Cash or other available funds.

*Capital Improvement Fund* – In 2004, the Annual Town Meeting 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. The November, 2008 balance in the fund is \$470,882. This plan includes no projects to be funded from the Capital Improvement Fund.

*Capital Facility Stabilization Fund* – In 2007, the Annual Town Meeting created a Capital Facility 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. The November, 2008 balance in the fund is \$623,421. This plan includes no projects to be funded from the Capital facility Stabilization 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 \$1,664,291 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 10 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 10. This plan includes a recommendation for \$14,007,500 in projects to be funded through 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 a significant State matching fund. The CPA was approved at the May, 2004 Annual Town Meeting and by voters at the November 2, 2004 election. The CPA mandates 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 Fund 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 \$13,566,319 to be funded through the Community Preservation Fund.

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 FY2010 Capital Budget, which is recommended to the Finance Committee and ultimately Town Meeting for consideration. The projects presented for FY2011-FY2014 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. Projects recommended for funding in this plan have been reviewed in light of the core budget priorities adopted by the Board of Selectmen. The proposed financing plan for the recommended FY2010 capital budget is shown in the table below.

<b>2010 Capital Recommendation Summary</b>	<b>Cash</b>	<b>Debt</b>	<b>Total</b>
General Fund	2,177,776	5,200,000	7,377,776
Solid Waste Enterprise	136,609	230,000	366,609
Sewer Enterprise	722,000	577,500	1,299,500
Water Enterprise	805,682	1,000,000	1,805,682
Community Preservation	6,566,319	7,000,000	13,566,319
Parking Meter Fund	42,000		42,000
Other	194,883		194,883
<b>Total (all funds)</b>	<b>10,645,269</b>	<b>14,007,500</b>	<b>24,652,769</b>

*Office of the Town Manager, January 6, 2009*

**Project Summaries – Recommended Projects**

Community Services

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**ATHLETIC FACILITY IMPROVEMENTS (Request: \$107,200)**

The Department of Public Works has developed a maintenance plan for all fields, which includes new or total reconstruction, renovation, irrigation and drainage improvements, and equipment replacement and repair of items such as bleachers, fences, backstops, player benches and miscellaneous equipment for all fields and ball diamonds. Unless circumstances require otherwise, the proposed expenditure in FY2010 includes improvements to Asa Small Diamond. The perimeter fencings and backstops are in need of replacement – the existing installations are those that were originally installed in 1969. Funding would provide new, updated backstops and complete perimeter fencing with gates (\$75,000). The player benches are wood boards and are a high maintenance and safety issue because of the splintering of the wood. The benches would be replaced with a durable constructed product (\$3,200). Finally, the irrigation system at Asa Small is not operational. The system will be replaced and connected to the new irrigation system at DeFazio Park (\$29,000). *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Athletic Facility Improvements is \$107,200 to be funded from the unexpended balance of a prior warrant article.

**CRICKET BUILDING REPAIRS (Request: \$75,000)**

The Cricket Field Park and building are used throughout the year for Park and Recreation summer programs, High School girl's soccer and lacrosse, general playground use, and year-round storage. The Park and Recreation Department is working with the Public Facilities Department to develop a phased process of completing the needed upgrades for the facility. Work is needed in order to keep the building in usable condition, to provide access to the site for persons with disabilities, to create a more efficient storage system, and to enable the Department to use the facility to hold programs. The requested funding would be for design of the proposed improvements. *(Submitted by: Park and Recreation Department)*

The Town Manager's recommendation for Cricket Building Repairs is \$75,000 in the secondary cash capital category.

**LIBRARY COLLECTION SUPPLEMENT (Request: \$25,000)**

The Library's materials budget is inadequate for the current level of circulation. As a result of increased circulation patterns, a high level of demand is placed on the library's collection of various materials. The increased demand wears the items out at a faster rate than would normally be the case. The current materials budget is not sufficient to encompass any large-scale purchase of replacement materials. Since the new library opened in March of 2006, circulation has increased significantly. One-half of the requested funding will be used for children's materials. *(Submitted by: Needham Public Library)*

The Town Manager's recommendation for the Library Collection Supplement is \$25,000 in the primary cash capital category.

**MEMORIAL PARK FENCING/BLEACHERS (Request: \$64,120)**

Additional improvements and security measures are needed to complete the Memorial Park Reconstruction project. The bleachers are 1948 vintage. The bleachers and player benches are constructed of wood and steel and require significant annual maintenance. The crowd control

fencing is needed for security and safety of the public for large events. Alternative funding sources, including donations, may be available to fund this item. The project would include bleachers with seating for 500 spectators, (\$14,300), transportable seating (\$25,830), transport wheel kit (\$690), player benches (\$4,800), and portable crowd control fencing (\$18,500). (*Submitted by: Department of Public Works*).

The Town Manager's recommendation for the Memorial Park Fencing and Bleachers is \$64,120 in the secondary cash capital category.

**MEMORIAL PARK PERIMETER FENCING (Request: \$49,300)**

The existing wooden guardrails at the top of the hill and in the parking lot are in need of replacement. The wood rail requires constant maintenance and the guardrail does not provide adequate security for events, and the chain link fencing near Pickering Street is in disrepair and needs to be replaced. The proposal includes 610 linear feet of four-foot black chain link fencing with openings at the top of hill (\$24,400), 260 linear feet of four-foot black chain link fencing with openings in the parking lot (\$10,400), 210 linear feet of six-foot black chain link fencing near Pickering Street extension side (\$9,500), and removal of old fencing (\$5,000). (*Submitted by: Department of Public Works*).

The Town Manager's recommendation for the Memorial Park Perimeter Fencing is \$49,300 in the secondary cash capital category.

**NEEDHAM RESERVOIR ALL-PERSON'S TRAIL DESIGN (Request: \$55,000)**

This request is for the design and permitting of a paved perimeter trail (with boardwalks) around the reservoir on Dedham Avenue. Because the trail falls within the permitting jurisdiction of the Conservation Commission, it will be necessary to design and permit the project prior to construction (survey plan, wetland delineation, trail/boardwalk design, Notice of Intent, potential need to develop a mitigation plan, and or to file for water quality certificate, as-built plans, etc.). While there is potential to obtain grant money to assist in building the trail, such funds are typically not available for pre-construction activities. (*Submitted by: Town Manager and Conservation Department*)

The Town Manager's recommendation for the Needham Reservoir All-Person's Trail Design is \$55,000 in Community Preservation Act Funding.

**General Government and Land Use**

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**TOWN HALL HISTORIC PRESERVATION (Request: \$17,539,002)**

The 2008 Annual Town Meeting appropriated \$1,000,000 in CPA funds for the architectural design of the historic preservation and renovation of Town Hall. The current proposal provides for renovation of Town Hall and includes construction of an addition along the length of the rear wall of the current building. The design is intended to be consistent with the historic nature of the property, allow for a more efficient operation and greater public convenience, provide multiple small and medium-sized meeting spaces for public meetings, preserve historic features, restore the second floor meeting hall, provide flexibility for future growth, and fit within the Town's long-term financial plan. (*Submitted by: Board of Selectmen and Town Manager*)

The Town Manager's recommendation for the Town Hall Historic Preservation Project is \$17,539,002; \$13,511,319 in Community Preservation Act funding, \$4,000,000 in general fund debt, and \$27,683 from the unexpended balance of a prior warrant article.

**INTEL BASED SERVERS REDUNDANCY (Request: \$130,000)**

Currently the Information Technology Center (ITC) does not have the equipment or resources to support a disaster recovery/redundancy plan for the non-IBM servers in the event of a catastrophic event that leaves the Town Hall unusable. Events such as fire, flood, and other natural or man-made occurrences which could cause long term loss of use of the Town Hall or damage to the non-IBM servers would seriously hamper the Town's ability to operate at a basic level. The disaster recovery/redundancy model for the non-IBM servers would allow the data to be housed at a separate location, supported by a generator. *(Submitted by: Finance Department)*

The Town Manager's recommendation for the Intel Based Servers Redundancy is \$130,000 in the secondary cash capital category.

**NETWORK SERVERS, SWITCHES, PRINTERS & DESKTOPS (Request: \$125,000)**

The town-wide network requires many switches and hubs to allow for full access by all departments from various locations. These electronic/fiber devices are located in all Town buildings and do not last indefinitely. When they do fail, access for that department or building is interrupted. This access includes email, internet, file servers, and financial applications located on the IBM AS/400, as well as communication links for all public safety and school buildings. New application servers and the software required to run them are also a major component of the network and must be included in routine updates. Also part of the town-wide network are network printers that are used by multiple departments and desktop computers that are used for daily office functions. Daily use of network printers has increased significantly due to a policy of not replacing desktop printers when they fail. Network printers are also used by the financial application (HTE) to print reports, invoices, and checks. *(Submitted by: Finance Department)*

The Town Manager's recommendation for the Network Servers, Switches, Printers & Desktops is \$25,000 in the primary cash capital category.

**Public Facilities**

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**PUBLIC FACILITIES CORE FLEET (Request: \$55,452)**

This request is for the replacement of one vehicle and the purchase of one additional vehicle. The vehicle to be replaced is a 1998 Ford E250 cargo van equipped with a tradesman interior package for primary use by the Town's plumber. The current vehicle has an odometer reading of over 122,000 miles and is due for replacement as it is beyond industry standards for vehicle replacement schedules. The additional vehicle requested is a Ford Escape for the Director of Facility Operations. *(Submitted by: Public Facilities Department)*

The Town Manager's recommendation for the Public Facilities Core Fleet is \$55,452 in the secondary cash capital category.

**FACILITIES MAINTENANCE PROGRAM (Request: \$450,000)**

This project allows for on-going building maintenance efforts, including, but not limited to flooring, painting, ductwork cleaning, and window replacement. With respect to flooring, the program allows for the replacement of worn, damaged, unsafe, and unsightly floor surfaces. In addition, it provides for the removal of asbestos containing floor tile and allows for its replacement with vinyl composition floor tile in classrooms and carpeting in offices. Unless circumstances require otherwise, the FY2010 funding is intended for Mitchell School classrooms and the Police Station.

This project also allows for the systematic painting of interior and exterior spaces for schools and town buildings in a process that is prioritized based on condition. Unless circumstances require otherwise, the painting program for FY2010 will address the exterior of the Emery Grover building and the painting of various interior spaces at the Pollard Middle School, Newman School, Hillside School, and the Broadmeadow School.

A new addition to the on-going maintenance program is the cleaning of duct work that is part of HV/AC systems throughout the schools and municipal buildings. This program will operate on a rotating basis which will allow each duct system throughout the schools and municipal buildings to be cleaned every 5 to 6 years. Unless circumstances require otherwise, the duct cleaning program for FY2010 will include the Pollard School and the Mitchell School.

Another new component of the plan is the replacement of single pain windows with double pain windows at the Mitchell and Hillside Schools. This effort will help the Town lower its energy consumption at these facilities. *(Submitted by: Public Facilities Department)*

The Town Manager's recommendation for the Public Facilities Maintenance Program is \$450,000 of which \$400,000 is in the primary cash capital category and \$50,000 is in the secondary cash capital category.

#### Public Safety

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##### **SHIFT COMMANDER VEHICLE/C-2 (Request: \$35,000)**

This request is for the replacement of a 2003 Ford Expedition used daily by the shift commander. The vehicle will have 60,000 to 70,000 miles at the time of replacement. The vehicle is a front-line emergency response vehicle and carries emergency supplies, technology, and information to support many types of incidents. In the past, such vehicles were "handed down" to the Inspection Division after their front line use of five years. Several years ago the Town changed this policy, purchasing passenger vehicles more suited to inspectional work, as the re-used SUV's were very expensive in terms of fuel economy and maintenance. This 2003 vehicle is expected to be sold at auction. *(Submitted by: Fire Department)*

The Town Manager's recommendation for the Shift Commander Vehicle is \$35,000 in the primary cash capital category.

#### Public Schools

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##### **HILLSIDE SCHOOL EXTERIOR DOOR REPAIR (Request: \$181,600)**

The project will provide for the replacement of twelve (12) doors that still remain from the original building construction, which have outlived their projected duration and should be replaced both for safety and energy conservation purposes. These doors will cost \$6,800 per door to replace. *(Submitted by: Public Facilities Department)*

The Town Manager's recommendation for the Hillside School Exterior Door Repair is \$81,600 in the primary cash capital category.

##### **POLLARD MIDDLE SCHOOL PARKING STUDY (Request: \$75,000)**

This project would fund a parking lot evaluation feasibility study to be conducted in FY2010. This study will help the Town evaluate the current parking situation and develop possible solutions to bridge the gap between the 77 parking spaces at the Pollard School and 130 employees who work there. This study will examine all areas surrounding the Pollard Middle School including the existing faculty parking lot, the front drop-off area and bus loop, the rear

parking lot, the area behind the school, and neighboring roadways. Parking improvements will be needed to address clogging of neighboring streets, access for emergency vehicles, insufficient driveway length for bus loading and unloading, and both safety and convenience issues for staff, parents, and the general public which may be created by the lack of available parking spaces. *(Submitted by: Public Facilities Department)*

The Town Manager's recommendation for the Pollard Middle School Parking Study is \$75,000 in the secondary cash capital category.

**SCHOOL COPIER REPLACEMENT (Request: \$87,012)**

In 2003 the Town established a replacement cycle for school photocopiers. School 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 45 copiers and 6 RISO machines. Since FY05, funds allocated by Town Meeting have replaced approximately five copiers per year on average, or 14 total copiers. Based on the lifecycle replacement methodology used to project copier replacements, which projects when a copier should be replaced based on actual usage and the manufacturer's total estimated capacity, seven copiers are due for replacement in FY2010, at a total cost of \$87,012. *(Submitted by: Needham Public Schools)*

The Town Manager's recommendation for School Copier Replacement is \$87,012, of which \$46,581 is in the primary cash capital category and \$40,431 is in the secondary cash capital category.

**SCHOOL FURNITURE AND MUSICAL EQUIPMENT REPLACEMENT (Request: \$45,100)**

In FY05, the Town established an on-going program to replace school furniture and musical equipment at Hillside, Mitchell, Newman and Pollard Schools (all of which are school facilities not scheduled to undergo capital renovation/addition projects in the near future.) In these schools, furniture is 10-20+ years old and in a state of disrepair after decades of heavy use. The FY2010 request is for \$30,100 based on a summer 2008 inventory and condition analysis of the overall furniture stock at these four schools, following several years of replacement. This analysis revealed that of the 8,032 items presently located at these schools, 14% (or 1,094 items) remain in poor or poor/fair condition, and are in immediate need of replacement. If funded, the FY2010-2014 request would complete the replacement of all items currently identified as 'poor' plus some items of poor/fair condition from the 'fair' category. Unless circumstances require otherwise, The FY2010 funding request is targeted for the Hillside school.

Currently, the School Fine and Performing Arts Department has numerous musical instruments that are 30+ years old and are in need of replacement. The School Department owns a large number of instruments, including pianos, string instruments, brass instruments, woodwind and percussion instruments that, after many years of use, are no longer usable or repairable. Students do purchase more common, less expensive instruments such as clarinets, trumpets and flutes, but a quality band and/or orchestra program must supply large, more expensive instruments to ensure balanced instrumentation. Based on a recent inventory and condition analysis of school musical instruments, approximately 17% of the total stock remains in poor condition, with an additional 14% in fair condition. The FY2010-2014 request of \$15,000 per year is intended to replace approximately 74% of the instruments currently identified as 'poor' and approximately 6% of the instruments currently identified as 'fair.' Unless circumstances require otherwise, the FY2010 request of \$15,000 is intended to replace two upright pianos, two cellos and a bass violin at Needham High School. *(Submitted by: Needham Public Schools)*

The Town Manager's recommendation for School Furniture and Musical Instrument Replacement is \$45,100, of which \$35,100 is in the primary cash capital category and \$10,000 is in the secondary cash capital category.

**SCHOOL DISTRICT TECHNOLOGY UPGRADE AND REPLACEMENT (Request: \$375,650)**

This request would fund the replacement of school technology, including instructional computers, administrative computers, printers, and network servers. Additionally, funds are requested to install SMART boards at all schools, except the High School; to replace the student information management system (SIMS) in FY2012; and to replace the email archiving backup server/storage array in FY2012. The five-year plan is based on replacing Broadmeadow technology over four years beginning in FY2009; replacing Eliot technology over three years, beginning in FY2010; replacing High School technology over five years beginning in FY2012; maintaining a seven year replacement cycle for all other instructional computers; maintaining a five year replacement cycle for administrative computers, as needed; maintaining current inventory quantities, with adjustments for programmatic needs; replacing and recycling data servers in year four; and replacing printers, with a new deployment model for shared laser printing and eliminating inkjet printing over the next five years. The five-year plan incorporates estimated reductions in future years for Pollard and NHS, based on enrollment at Pollard and the introduction of student-owned laptops or wireless devices at the High School. The FY2010 funding would provide \$285,650 to replace 206 instructional computers at Broadmeadow, Eliot, Hillside, Mitchell, Newman, and Pollard; 17 administrative computers; 22 instructional printers; seven administrative printers and five network hardware servers. Additionally, \$90,000 will fund the installation of 30 SMART boards at the five elementary schools and Pollard. *(Submitted by: Needham Public Schools)*

The Town Manager's recommendation for School Technology Replacement is \$305,450, of which \$169,393 is in the primary cash capital category and \$136,057 is in the secondary cash capital category.

**TECHNOLOGY & ELECTRICAL INFRASTRUCTURE STUDY/HILLSIDE & MITCHELL SCHOOLS (Request: \$50,000)**

The Facilities Master Plan anticipates renovation of the Hillside and Mitchell schools no sooner than 2018 to bring these facilities to a level of modernization comparable to that of the Eliot and Broadmeadow schools. It would normally be at the time of major renovation that electrical and technology infrastructure would be upgraded. The School Department has identified a current need to expand the technological capabilities of these schools to meet students' needs over the ten-year interim period prior to full renovation. Analysis is also needed to ensure that the capacity of the electrical system is sufficient, regardless of the introduction of new technology. This request would fund technology and electrical infrastructure studies at both schools to assess electrical capacity and distribution; current and future data cabling needs, including wireless; classroom layouts with built-in technology benches; and audio-visual enhancements for classroom projection of video and data. *(Submitted by: Public Facilities Department)*

The Town Manager's recommendation for Technology & Electrical Infrastructure Study – Hillside and Mitchell Schools is \$50,000 in the primary cash capital category.

**Public Works**

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**PUBLIC WORKS CORE FLEET REPLACEMENT (\$277,742)**

The Core fleet consists of passenger vehicles such as sedans and wagons, vans, pick-up trucks, small dump trucks and utility trucks. A ten year core fleet replacement schedule is included in

Fiscal Year 2010 Proposed Budget

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this Plan in Section 9. Unless circumstances require otherwise, the vehicles scheduled to be replaced in FY2010 include:

Unit	Division	Year	Description	Miles	Cost
#2	Garage	2005	Pickup Truck	47,461	\$23,000
#70	Parks	1996	One Ton Dump Truck	63,981	\$59,871
#71	Parks	1996	One Ton Dump Truck	73,658	\$59,871
#10	Highway	1994	Six Wheel Dump Truck	43,315	\$135,000

*(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Public Works Core Fleet Replacement is \$277,742 in the primary cash capital category.

**SMALL SPECIALTY EQUIPMENT (Request: \$184,600)**

This program provides funding to purchase new and replace existing Public Works specialty equipment. This equipment is critical for the efficient operation of the Parks and Forestry Division's maintenance programs. The purchase of this equipment will increase productivity and expand the use of maintenance dollars. Unless circumstances require otherwise, the vehicles scheduled to be replaced in FY10 include:

Unit	Division	Year	Description	Miles	Cost
#350	Parks	1976	Farm Tractor	n/a	\$40,000
#321	Parks	2003	14 foot Utility Trailer	n/a	\$9,000
#322	Parks	2003	16 foot Utility Trailer	n/a	\$10,000
#186	Parks	1963	Leaf Collector	n/a	\$21,000
#256	Parks	1989	Brush Chipper	n/a	\$44,100
#325	Parks	n/a	Line Marker	n/a	\$5,500
#308	Parks	1987	Large Field Mower	n/a	\$55,000

*(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Public Works Small Specialty Equipment is \$59,000 in the secondary cash capital category.

**KENDRICK STREET BRIDGE REPAIR DESIGN/CHARLES RIVER (Request: \$125,000)**

As it is 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 to have some level of deficiency and has recommended repairs. This program is essential to improve the structural and/or surface integrity of all bridges throughout Needham. The South Street/Willow Street Bridge and the Kendrick Street Bridge are both in need of repair. Capital Project costs will include surveying, engineering evaluation, design, and repair or reconstruction. Recent reports from Mass Highway indicated that the conditions of the South Street/Willow Street Bridge and the Kendrick Street Bridge are worsening and are in immediate need of repair. The State has agreed to pay for the repairs of the Willow Street Bridge, which will be designed under the direction of the Town of Dover. Bridges are one of the infrastructure assets whose value and depreciation are now tracked under the GASB 34 program. FY10 funding is intended for the Kendrick Street Bridge Evaluation and Design. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for the Kendrick Street Bridge Repair Design (Charles River) is \$125,000 to be funded through general fund debt.

**NEEDHAM CENTER STREETScape IMPROVEMENTS (Request: \$130,000)**

The 1995 report, "Town of Needham Design Guidelines for the Business Districts," helped guide several projects in the square, including the recent reconstruction of Great Plain Avenue near Pickering Street, the Highland Avenue/Chapel Street/May Street intersection, the reconstruction of a portion of Chapel Street, the Chestnut Street parking lots and the Chestnut Street reconstruction project currently underway. This has allowed property owners to enhance the rear entrances to their buildings or improve their main entrances. Public improvements have also been identified and include recommendations for improved streetscape character involving the use of pedestrian-scale light fixtures, landscaping, including additional trees and plantings, and other public amenities such as benches, trash receptacles and bicycle racks. The 1995 work is currently being updated in the on-going Downtown Design Study. The anticipated recommendations for public investment in the Downtown Design Study report include greater public accessibility by providing wider sidewalks, additional crosswalks and safer crossings at intersections. The first phase of the work begins with the development of conceptual plans in order to determine the desired outcome followed by engineering/design, and finally construction. Grant funding for construction may be available once a design is completed. The proposed funding for 2010 is intended for the first phase of conceptual design. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Needham Center Streetscape Improvements is \$50,000 from the direct allocation included in the 2009 State budget.

**ROADS, BRIDGES, SIDEWALKS & INTERSECTION IMPROVEMENTS (Request: \$1,000,000)**

The roadway system throughout the community developed over the last century. Many miles of roadway, mainly residential, were developed after World War II. A combination of the aging of the earliest roads, the tremendous expansion of the road system, and the inability to provide adequate, ongoing maintenance and repair over the past 25 years has resulted in a significant decline in the overall condition of Needham's roads, bridges, sidewalks, and intersections. This program is essential to improve the structural and surface integrity of the Town's network of accepted streets. The primary strategy in this program is asphalt paving and incidental work directly associated with paving. Incidental work includes corner reconstruction, handicap ramps, leveling, structural overlays, utility adjustments, minor drainage improvements, some drain extension work, street sign replacement, asphalt curbing with grass shoulders and pavement markings. Many streets have insufficient pavement thickness, are poorly shaped, lack curbing and require some drain improvements. Applying this repair strategy in a timely manner will help defer costly and disruptive street reconstruction on all but the most highly traveled roadways. Paving roadways in a timely manner will extend the useful life of the roadway system in the most cost effective manner. This program also provides funding for reconstruction and repair of sidewalks. There are over 160 miles of sidewalks in Needham, of which, 52 miles are designated as school walking routes. Finally, this program funds traffic signal improvements for existing traffic signals and provide funding for new traffic signal where none currently exist. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Roads, Bridges, Sidewalks, Intersection Improvements is \$875,000 to be funded through general fund debt.

**SNOW & ICE EQUIPMENT (Request: \$288,000)**

Unless circumstances require otherwise, the vehicles and equipment proposed for replacement in 2010 are as follows:

Fiscal Year 2010 Proposed Budget

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Unit	Division	Year	Description	Miles	Cost
#10A	Highway	1989	Material Spreader	n/a	\$ 28,000
#108	Highway	1989	Sidewalk tractor (Wheel w/blower)	n/a	\$125,000
#206	Highway	1980	Snow Blower (Loader-mounted)	n/a	\$135,000

*(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Snow & Ice Equipment is \$288,000 in the secondary cash capital category.

**STORMWATER MASTER PLAN DRAINAGE IMPROVEMENTS (Request: \$240,000)**

The March 2002 Storm Water Master Plan identified a number of areas throughout the Town where improvements are required to resolve flooding problems and illicit discharges. Locations for improvements have been prioritized within the Plan. The funding request includes installation of additional storm drains between Lantern Lane and Gayland Road. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Stormwater Master Plan Drainage Improvements is \$200,000 to be funded through general fund debt.

**TRAFFIC & STREET LIGHTING ENERGY CHALLENGE PROGRAM (Request: \$10,000)**

The Community Energy Challenge is an opportunity to identify simple and cost-effective measures that increase energy efficiency and renewable energy use while reducing air pollution and saving money. The DPW Engineering and Highway Divisions have been exploring new technologies relative to traffic signal lamps. This request proposes to retrofit all of the existing red, yellow and green lamps which use 116 watt incandescent bulbs (average life 1 year) with a 6 watt/12 watt Light Emitting Diode (LED) unit (guaranteed 5 year life with up to 10 years life for those currently in service around the country). These LED displays provide efficient, durable and reliable service. They also offer the added benefit of improved brightness for safety and easy maintenance by only having to be replaced every 5-10 years vs. once per year.

The Town will be completing the portion of its Energy Challenge program involving the conversion of streetlights (approved at the 2008 Annual Town Meeting) by the end of December 2009. Under this program, mercury vapor lights are being replaced with more energy efficient and mercury-free high-pressure sodium (HPS) lights. The investigation as to whether the Town can reduce the overall number of streetlights within the Town, as part of the Town's Sustainable Needham Initiative, will be completed in 2010. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Traffic and Street Lighting Energy Challenge Program is \$10,000 to be funded through the Municipal Street lighting operating budget.

**PARKING METERS (Request: \$42,000)**

This is the second year of a two-year request to replace the Town's parking meters to black street side parking meters with fluted bases. These electronic parking meters are easier to read and have a "smart lock revenue management system." The coin collection system is sealed, which eliminates direct access to the funds collected. The system can produce a collection audit data report to verify the amount of funds collected as well as operational status. Since the installation of the new meters, collections have increased. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Parking Meter Replacement is \$42,000 from the Parking Meter Fund.

Solid Waste & Recycling Enterprise Fund

**RTS CONSTRUCTION EQUIPMENT (Request: \$230,000)**

Unit #143 is a front line loader at the RTS. This piece of equipment was purchased in 2000. In 2010 this piece of equipment will be 10 years old with a very high number of operating hours (14,500). (Submitted by: Department of Public Works)

Unit	Division	Year	Description	Miles	Cost
#143	RTS	2000	Front End Loader	n/a	\$230,000

The Town Manager's recommendation for RTS Construction Equipment is \$230,000 to be funded through RTS Enterprise Fund debt.

**RTS CORE FLEET REPLACEMENT (Request: \$26,609)**

The Core fleet consists of passenger vehicles such as sedans and wagons, vans, pick-up trucks, small dump trucks and utility trucks. A ten year core fleet replacement schedule is included in this Plan in Section 9. Unless circumstances require otherwise, the vehicles scheduled to be replaced in FY10 include:

Unit	Division	Year	Description	Miles	Cost
#56	RTS	2002	Facility Pickup Truck	121,000+	\$ 26,609

The Town Manager's recommendation for RTS Core Fleet Replacement is \$26,609 from RTS Enterprise Fund retained earnings.

**RTS LARGE SPECIALTY EQUIPMENT (Request: \$110,000)**

Unit # 91, the Vertical Vibratory Material Screener, is the front line processing device used to handle all DPW infrastructure waste. This unit was placed in service in 2000. By using this equipment, the Town is able to avoid both disposal costs and construction material costs, saving hundreds of thousands of dollars annually. (Submitted by: Department of Public Works)

The Town Manager's recommendation for RTS Large Specialty Equipment is \$110,000 from RTS Enterprise Fund retained earnings.

Sewer Enterprise Fund

**SEWER CONSTRUCTION EQUIPMENT (Request: \$160,000)**

Unit # 101 is a front line loader in the Water and Sewer Division. This piece of equipment was purchased in 1993. In 2010 this piece of equipment will be 17 years old with a high number of operating hours. (Submitted by: Department of Public Works)

The Town Manager's recommendation for Sewer Construction Equipment is \$160,000 from Sewer Enterprise Fund retained earnings.

**SEWER CORE FLEET REPLACEMENT (Request: \$122,000)**

The Core fleet consists of passenger vehicles such as sedans and wagons, vans, pick-up trucks, small dump trucks and utility trucks. A ten year core fleet replacement schedule is included in this Plan in Section 9. Unless circumstances require otherwise, the vehicle(s) scheduled to be replaced in FY10 include:

Fiscal Year 2010 Proposed Budget

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Unit	Division	Year	Description	Miles	Cost
#19	Sewer	1994	Six Wheel Dump Truck	58,469	\$122,000

*(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Sewer Core Fleet Replacement is \$122,000 from Sewer Enterprise Fund retained earnings.

**SEWER LARGE SPECIALITY EQUIPMENT (Request: \$345,000)**

This program will provide funding to purchase new and replace existing Public Works specialty equipment. This equipment is critical for the efficient operation of each division's maintenance programs. The purchase of this equipment will increase productivity and expand the use of maintenance dollars. The equipment proposed to be purchased in FY2010 includes a combination jet flusher/vacuum collection truck to replace Unit #37 (a 1999 catch basin cleaner). *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Sewer Large Specialty Equipment is \$345,000 from Sewer Enterprise Fund retained earnings.

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

Installation or replacement of sewer service connections should be performed when roadways are reconstructed or resurfaced. There are homes in Needham that have not been connected to the sewer system. Should these septic systems fail, the homeowners may be ordered to connect to the sewer system for health reasons, regardless of the DPW-imposed moratorium on excavations in new roadways. Homeowners will be encouraged to connect to the system prior to road improvements. However, for those homeowners who do not choose to connect to the system, a partial connection within the right-of-way will be installed. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Sewer Service Connections is \$50,000 from Sewer Enterprise Fund retained earnings.

**SEWER SMALL SPECIALITY EQUIPMENT (Request: \$45,000)**

This program will provide funding to purchase new and replace existing Public Works specialty equipment. This equipment is critical for the efficient operation of each division's maintenance programs. The purchase of this equipment will increase productivity and expand the use of maintenance dollars. Unless circumstances require otherwise, the equipment to be replaced in FY2010 includes is an emergency trailer pump used to by-pass sewer pumping stations or alleviate flooding:

Unit	Division	Year	Description	Miles	Cost
#169	Sewer	1998	Trailer Pump, 6 inch	n/a	\$45,000

*(Submitted by: Department of Public Works)*

The Town Manager's recommendation for the Sewer Small Specialty Equipment is \$45,000 from sewer retained earnings.

**WASTEWATER PUMP STATION "RESERVOIR B" DESIGN (Request: \$577,500)**

As part of the Wastewater System Master Plan, several of the wastewater pumping stations were evaluated to determine their current physical condition, capacity vs. current & future

flow projections and compliance with current codes or standards of operation. The Reservoir Street "B" Station is the second oldest station in the system. Its standby generator has failed and pumps need constant maintenance. The amount of activity in the Needham Business Center will have a tremendous impact on the Kendrick Street and Reservoir "B" Stations. New enhancements must now be contemplated in anticipation of the addition of 350 residential units at 300 Second Avenue and other commercial development proposed for completion in the next few years. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Wastewater Pump Station "Reservoir B" Design is \$577,500 to be funded through Sewer Enterprise Fund debt.

Water Enterprise Fund

**WATER CORE FLEET REPLACEMENT (Request: \$54,882)**

The Core fleet consists of passenger vehicles such as sedans and wagons, vans, pick-up trucks, small dump trucks and utility trucks. A ten year core fleet replacement schedule is included in this Plan as Section 9. Unless circumstances require otherwise, the vehicle(s) scheduled to be replaced in FY2010 include:

Unit	Division	Year	Description	Miles	Cost
#20	Water	1998	Sedan	68,117	\$25,057
#21	Water	2001	Pick-up	96,078	\$29,825

*(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Water Core Fleet Replacement is \$54,882 from Water Enterprise Fund retained earnings.

**FIRE HYDRANT REPLACEMENT PROGRAM (Request: \$100,000)**

The goal of this program is to remove and replace older and out-dated fire hydrants with new and more reliable fire hydrants within the community. There are approximately 300 unreliable fire hydrants. During the annual fall hydrant inspection (dry testing), older fire hydrants have been targeted as potential freezing hazards due to their lack of ability to either properly drain or efficiently shut down. Using prior year funding, the Town installed approximately 60% more hydrants than anticipated by using its own forces instead of contracting the work out. The proposed funding will support the removal and replacement of approximately 50 hydrants. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for the Fire Hydrant Replacement Program is \$100,000 from water retained earnings.

**WATER SMALL SPECIALTY EQUIPMENT (Request: \$45,000)**

The Water and Sewer Division remains on stand-by status 24 hours per day to respond to emergencies. The Division has inventoried its emergency response capabilities and has determined that the existing, 1962 vintage mobile generator (Unit #218) is not equal to the task of supporting the St. Mary Street Pump Station. The existing mobile generator was acquired as surplus equipment from the Civil Defense Department in the 1960's.

Unit	Division	Year	Description	Miles	Cost
#218	Water	1962	Mobile Generator	n/a	\$45,000

*(Submitted by: Department of Public Works)*

The Town Manager's recommendation for Water Small Specialty Equipment is \$45,000 from water retained earnings.

**WATER DISTRIBUTION SYSTEM REHABILITATION (Request: \$1,330,800)**

The annual Water System Rehabilitation Program draws from the recommendations of the Water System Master Plan. This master plan recommends that pipes 85 years or older be considered for replacement or relining. This list of older pipes is evaluated and prioritized, and then cross-referenced with work proposed for other utilities, road repairs, or reconstruction. Unless circumstances require otherwise, projects for FY2010 include Chapel Street/May Street (construction), Pickering Street/Great Plain Avenue to the end (engineering, design and construction). *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for the Water Distribution System Rehabilitation is \$1,330,800; \$330,800 to be funded from Water Enterprise Fund retained earnings and \$1,000,000 to be funded through Water Enterprise Fund debt.

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

The primary purpose of this program is to remove lead from the system by replacing older water service connections containing lead. The Town's water treatment process reduces the corrosivity of Needham's water to minimize the leaching of lead from the water pipes and house plumbing. However, only the removal of the lead sources will completely assure total compliance. The lead found in water service connections can be eliminated over time by replacing these connections. The DPW integrates this program with road repair and replacement initiatives - service connections are being replaced on streets that have been identified for road improvements. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for the Water Service Connection project is \$200,000 from water retained earnings.

**WATER SUPPLY DEVELOPMENT FEASIBILITY STUDY (Request: \$75,000)**

The historical demand in water supply is seasonal in nature. The typical usage during non-summer periods is 2-3 million gallons per day (mgd). The summer usage can reach as high as 5-7 mgd. Therefore, the Town must supplement its supply from the MWRA. Ideally the reliance on the MWRA source would be for emergency purposes as a back-up supply. Becoming more self-reliant would require the development of additional wells. The timeframe for putting new or additional supply on-line is typically 10 years. The development of new wells within the well field would allow the Town to better manage the water within the well field. This process would be initiated through a feasibility study. *(Submitted by: Department of Public Works)*

The Town Manager's recommendation for the Water Supply Development Feasibility Study is \$75,000 from water retained earnings.