

Capital Recommendations and Funding Sources

Section 2

**Capital Recommendations and Funding Sources
Sectional Index**

Contents	Page
2019 Recommendations by Funding Source	
General Fund	2-01
Community Preservation Fund	2-04
RTS Enterprise Fund	2-04
Sewer Enterprise Fund	2-05
Water Enterprise Fund	2-05
2019 - 2023 Tier One Recommendations	
General Fund/Community Preservation Fund	2-10
Recycling and Transfer Station Enterprise Fund	2-16
Sewer Enterprise Fund	2-17
Water Enterprise Fund	2-18
2014 - 2019 Capital Funding Sources	
General Fund	2-20
Community Preservation Fund	2-30
RTS Enterprise Fund	2-33
Sewer Enterprise Fund	2-36
Water Enterprise Fund	2-39
Recap of All Funding Sources	2-42

**Capital Recommendations and Funding Sources
Sectional Index**

Contents	Page
Debt Financing	
Debt Service to Revenue Table (Including Recommended CIP)	2-43
FY2019 Debt Service by Category	
Debt Service as a Percentage of Revenue Chart	2-44
 Proposed Funding by Debt 2019 - 2023	
General Fund within the Levy Limit	2-45
Community Preservation Fund	2-46
RTS Enterprise Fund	2-47
Sewer Enterprise Fund	2-48
Water Enterprise Fund	2-49
Debt Exclusion	2-50
 Open Authorizations	2-51
Long Term Debt Service Obligations Table 2018 -2043	2-52
Long Term Debt Service Obligations Chart 2018 -2043	2-54
FY2018 Debt Service Share of Total Chart	2-55
Schedule of Issued Long Term Debt	2-56

Town of Needham
Capital Improvement Plan
January 2018

**FY2019
Capital Budget
Funding Recommendations**

Title	Code*	Submitting Department	Cat*	2019 Department Request	Cash Capital All Tiers	Debt	Other Funding Source	No Action	Note	Page
Athletic Facility and Public Recreation Improvements (Claxton Field Lighting)	M	Public Works	3	510,000				510,000	Insufficient Details	3-040
Athletic Facility and Public Recreation Improvements (Design for Turf Replacement)	M	Public Works	3	55,000			55,000		Funding from AFIF	3-040
Building Management System Upgrade	M	Public Works	1	102,000	102,000					3-067
DPW Boiler Replacement 470 Dedham Avenue	M	Public Works	2	34,000	34,000					3-071
DPW Central Avenue Storage Facility	M	Public Works	2	7,900,000	1,382,000	3,788,000			Refer to the Sewer and Water Enterprise sections for their allocated shares.	3-043
Energy Efficiency Upgrade Improvements	M	Public Works	2	71,000	71,000					3-077
Facility Assessment for Sustainable Building Management	MB	Public Works	2	100,000				100,000	Pending Results from Other Study	3-079
Hillcrest Radio Repeater Building Replacement	N	Public Works	2	136,000	136,000					3-059
Library Furniture Replacement	M	Library	1	43,970	43,970					3-097
Memorial Park Buildings and Grounds Improvements	M	Town Manager	2	5,900,000	1,032,000	3,068,000	1,800,000		\$1.8M from AFIF; CPA funding if available would reduce the amount to be funded by Debt.	3-119
Mitchell School Locker Replacement	N	Public Works	2	70,000	70,000				First time request	3-087
Non-Public Safety Data Center Servers and Storage Units	P	Finance	1	180,000	180,000					3-007
Personal Protective Equipment	M	Fire	1	43,424	43,424					3-036
Police Use-Of-Force Training Simulator	M	Police	1	47,000	47,000					3-032
Pollard Blue & Green Gym Upgrades	M	Public Works	2	540,000	540,000					3-091

Town of Needham
Capital Improvement Plan
January 2018

**FY2019
Capital Budget
Funding Recommendations**

Title	Code*	Submitting Department	Cat*	2019 Department Request	Cash Capital All Tiers	Debt	Other Funding Source	No Action	Note	Page
Pollard Phased Improvements Feasibility Study	M	School	2	65,000	65,000					3-171
Public Safety Complex/Station #2	M	Town Manager	2	65,405,000		65,405,000			Project to be funded by Excluded Debt; Ballot Question November 2018.	3-001
Public Safety Data Center Servers and Storage Units	P	Finance	1	30,000				30,000	Grant Funding Possibility	3-009
Public Safety Mobile Devices	P	Finance	1	35,000	35,000					3-011
Public Works Infrastructure Program	M	Public Works	3	1,773,500	1,523,500	250,000				3-052
Replace Unit 1 Passenger Vehicle	C	DPW Admin	4	33,616	33,616					3-019
Replace Unit 107 Sidewalk Tractor Plow	L	DPW Highway	4	190,811	190,811					3-019
Replace Unit 181 Street Sweeper	L	DPW Highway	4	264,101	264,101					3-019
Replace Unit 183 Trailer Large	L	DPW Parks	4	25,722	25,722					3-019
Replace Unit 301 Work Van	C	DPW Parks	4	34,069	34,069					3-019
Replace Unit 38 Medium Work Truck Class 6	L	DPW Parks	4	202,169	202,169					3-019
Replace Unit 4 Light Work Truck Class 3	C	DPW Garage	4	82,671	82,671					3-019
Replace Unit 44 Passenger Vehicle	C	DPW Engineering	4	33,616	33,616					3-019
Replace Unit 457 Passenger Vehicle	B	Building	4	21,336				21,336		3-019
Replace Unit 46 Passenger Vehicle	C	DPW Engineering	4	33,616	33,616					3-019

Town of Needham
Capital Improvement Plan
January 2018

**FY2019
Capital Budget
Funding Recommendations**

Title	Code*	Submitting Department	Cat*	2019 Department Request	Cash Capital All Tiers	Debt	Other Funding Source	No Action	Note	Page
Replace Unit 55 Medium Work Truck Class 5	L	DPW Highway	4	142,495	142,495					3-019
Replace Unit 65 Light Work Truck Class 3	C	DPW Parks	4	66,037	66,037					3-019
Replace Unit 702 Light Work Truck Class 2	C	DPW Building	4	45,765	45,765					3-019
Replace Unit 76 Skid Steer Loader	X	DPW Highway	4	122,182	122,182					3-019
Replace Unit E02 Fire Truck	L	Fire	4	840,163	840,163					3-019
Replace Unit Van 4 Transport Van	C	School	4	48,776	48,776					3-019
Replace Unit Van 5 Transport Van	C	School	4	48,776	48,776					3-019
School Copier Replacement	R	School	1	84,190	84,190					3-180
School Furniture	R	School	1	60,500	60,500					3-190
School Phone System Replacement	N	School	1	88,000	319,000				Department requested \$319,000 over several years, recommendation is to fund the project in whole and transfer responsibility of the telephone system effective July 1, 2018 to the School Department.	3-192
School Technology Replacement	R	School	1	303,600	303,600					3-184
Specialty Equipment - Unit 344 Large Mower	M	Public Works	1	76,500	76,500					3-048
Streetlight Conversion to LED	N	Public Works	3	685,000	685,000				New Request, budget savings merits early consideration.	3-061
Time Clock System	PB	Public Works	X	81,000				81,000	Not Capital	NA

Town of Needham
Capital Improvement Plan
January 2018

**FY2019
Capital Budget
Funding Recommendations**

Title	Code*	Submitting Department	Cat*	2019 Department Request	Cash Capital All Tiers	Debt	Other Funding Source	No Action	Note	Page
Town Multi-Function Printer Devices	M	Finance	1	35,600	35,600					3-001
Town Offices Replacement Furniture	P	Town Manager	1	25,000	25,000					3-003
Traffic Improvements	P	Public Works	3	50,000	50,000					3-065
Water Quality Improvements (Wildwood Drive Pond Analysis)	M	Public Works	3	25,000	25,000					3-134
General Fund				86,791,205	9,183,869	72,511,000	1,855,000	742,336		
Emery Grover Feasibility Study Refresh	N	School	2	70,000	70,000					3-162
Memorial Park Buildings and Grounds Improvements	M	Town Manager	2	Refer General Fund					CPA funding, if available, would reduce the amount to be funded by General Fund Debt.	3-119
Open Space Land Purchase	M	Park & Recreation	3	1,000,000				1,000,000	No specific request	3-113
Public Playgrounds	M	Park & Recreation	1	300,000	300,000					3-110
Rosemary Lake Camp and Trail	M	Park & Recreation	3	50,000	50,000					3-115
Water Quality Improvements (Rosemary Lake Sediment Removal)	M	Public Works	3	2,400,000	2,400,000					3-134
Community Preservation Fund				3,820,000	2,820,000			1,000,000		
Big Belly Trash Cans	N	Public Works	1	100,000	100,000					3-121
Replace Unit 143 Large Tractor Loader	L	DPW RTS	4	245,360	245,360					3-019
RTS Property Improvements	M	Public Works	2	645,000		645,000				3-129
RTS Enterprise Fund				990,360	345,360	645,000				

Town of Needham
Capital Improvement Plan
January 2018

**FY2019
Capital Budget
Funding Recommendations**

Title	Code*	Submitting Department	Cat*	2019 Department Request	Cash Capital All Tiers	Debt	Other Funding Source	No Action	Note	Page
DPW Central Avenue Storage Facility	M	Public Works	2	Refer General Fund	944,000				Refer to the General Fund section	3-043
Replace Unit 28 Light Work Truck Class 3	C	DPW Sewer	4	64,247	64,247					3-019
Replace Unit 94 Light Work Truck Class 2b	C	DPW Sewer	4	67,864	67,864					3-019
Sewer Main Extension Zone I and II	M	Public Works	3	690,000	690,000					3-136
Sewer Main Replacements	M	Public Works	3	330,000	330,000					3-138
Sewer System Infiltration & Inflow Removal	M	Public Works	3	205,000	205,000					3-144
Sewer Enterprise Fund				1,357,111	2,301,111					
Birds Hill Water Tank	M	Public Works	3	340,000	340,000					3-146
DPW Central Avenue Storage Facility	M	Public Works	2	Refer General Fund	1,786,000				Refer to the General Fund section	3-043
Replace Unit 14 Heavy Duty Truck Class 7	L	DPW Water	4	239,404	239,404					3-019
Replace Unit 22 Medium Work Truck Class 4	L	DPW Water	4	115,644	115,644					3-019
Water Distribution System Improvements	M	Public Works	3	830,000	830,000					3-150
Water Supply Development	M	Public Works	3	400,000				400,000		3-157
Water Enterprise Fund				1,925,048	3,311,048			400,000		
Total				94,883,724	17,961,388	73,156,000	1,855,000	2,142,336		

Town of Needham
Capital Improvement Plan
January 2018

**FY2019
Capital Budget
Funding Recommendations**

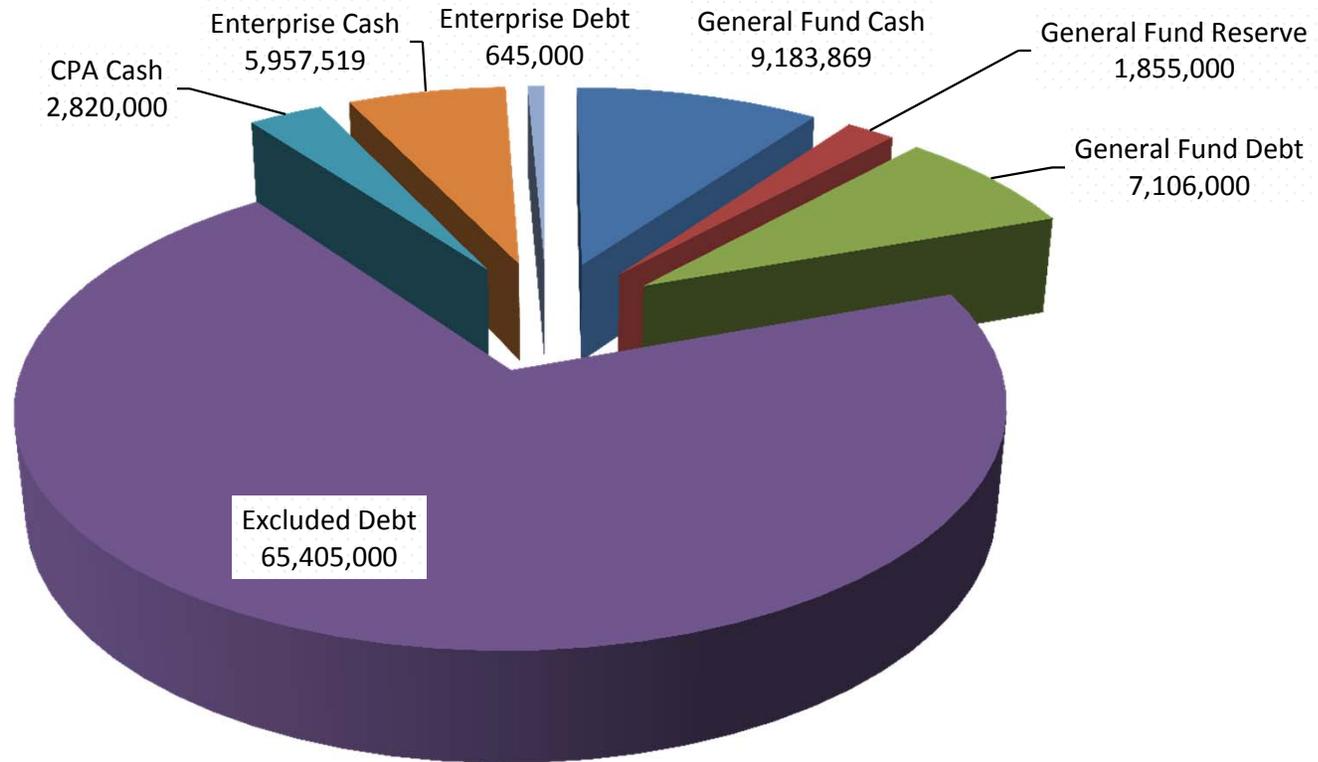
Title	Code*	Submitting Department	Cat*	2019 Department Request	Cash Capital All Tiers	Debt	Other Funding Source	No Action	Note	Page
Buildings & Facilities - All			2	80,936,000	6,130,000	72,906,000	1,800,000	100,000		
Equipment & Technology - All			1	1,554,784	1,755,784			30,000		
Fleet - All			4	2,968,440	2,947,104			21,336		
Infrastructure & Land - All			3	9,343,500	7,128,500	250,000	55,000	1,910,000		
Other - All				81,000				81,000		
TOTAL				94,883,724	17,961,388	73,156,000	1,855,000	2,142,336		

Code
B = Funding may be considered under the operating budget/special warrant article
C = Core Fleet
D = Recommendation is deferred or on hold pending other actions
E = Emergency approval
F = Funded appropriation outside the capital plan
G = Request may not qualify as capital submission
L = Specialized Fleet Equipment
I = Project submission is incomplete or waiting additional information
M = Submission has been modified from previous submission
N = New submission with this CIP
P = Project request has appeared in previous CIP's
Q = Request does not qualify as a capital submission
R = Request is a regularly occurring capital expense
S = No recommendation; under study
U = Urgent request based on identified conditions

Cat (Category)
1 = Equipment or Technology
2 = Building or Facility
3 = Infrastructure
4 = Fleet

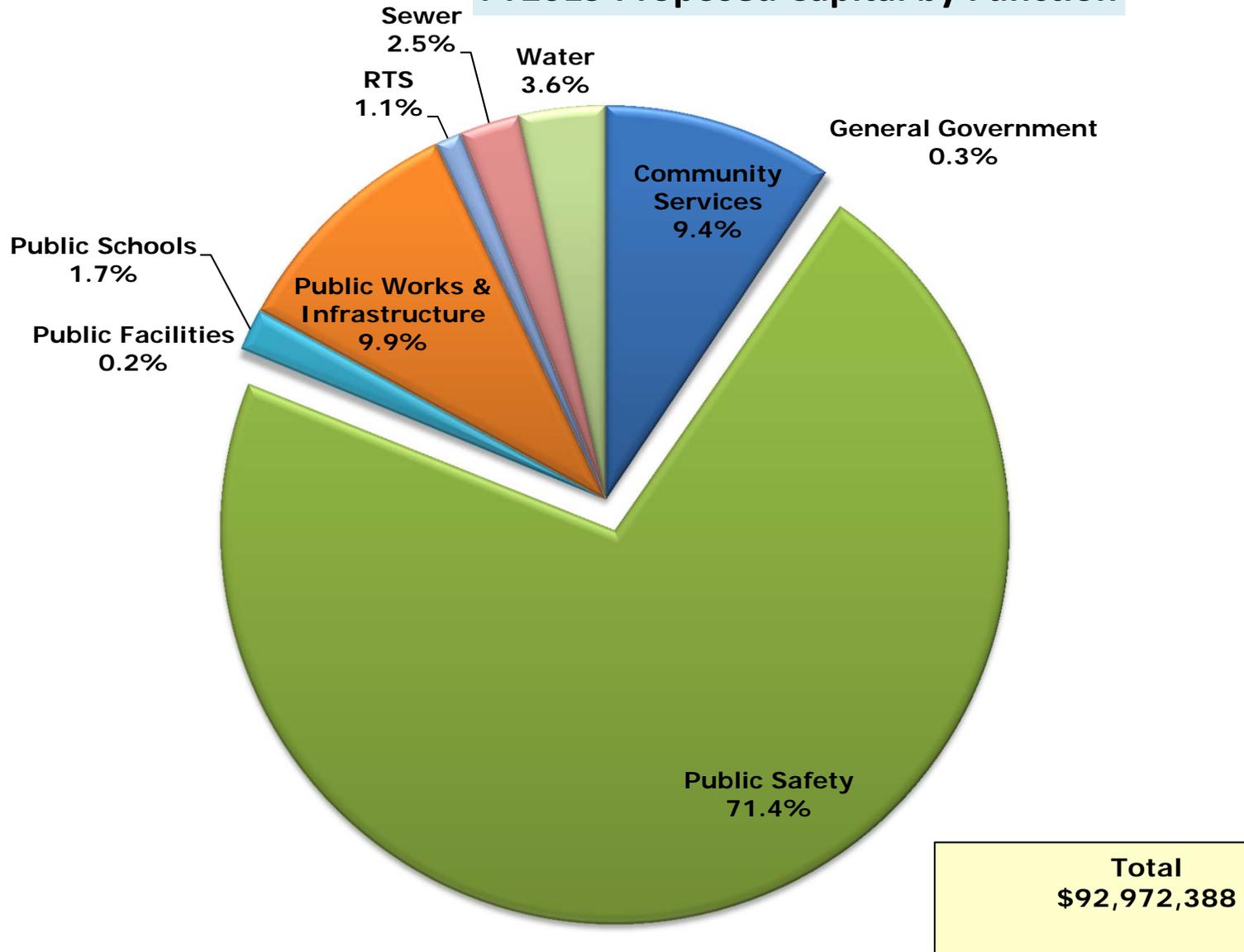
Truck Classification
Class 1 = Smallest Pick-up Trucks 6,000 lbs.
Class 2 = Full Size or 1/2 Ton Pick-up Trucks 6K to 10K lbs. (ex Ford F150 and F250)
Class 3 = Heavy Duty Pick-up Trucks 10K to 14K lbs. (ex Ford F350)
Class 4 = Medium Size Work Trucks 14K to 16K lbs. (ex Ford F450)
Class 5 = Medium Job Trucks 16K to 19.5K lbs. (ex Ford F550)
Class 6 = Medium to Large Trucks 19.5K to 26K (ex Ford F650)
Class 7 = Heavy Duty Trucks 26K to 33K (ex Ford F750) Requires Class B Commercial
Class 8 = Largest Heavy Duty Trucks 33K lbs. or more (ex 18-wheeler)

FY2019 Proposed Capital by Funding Source

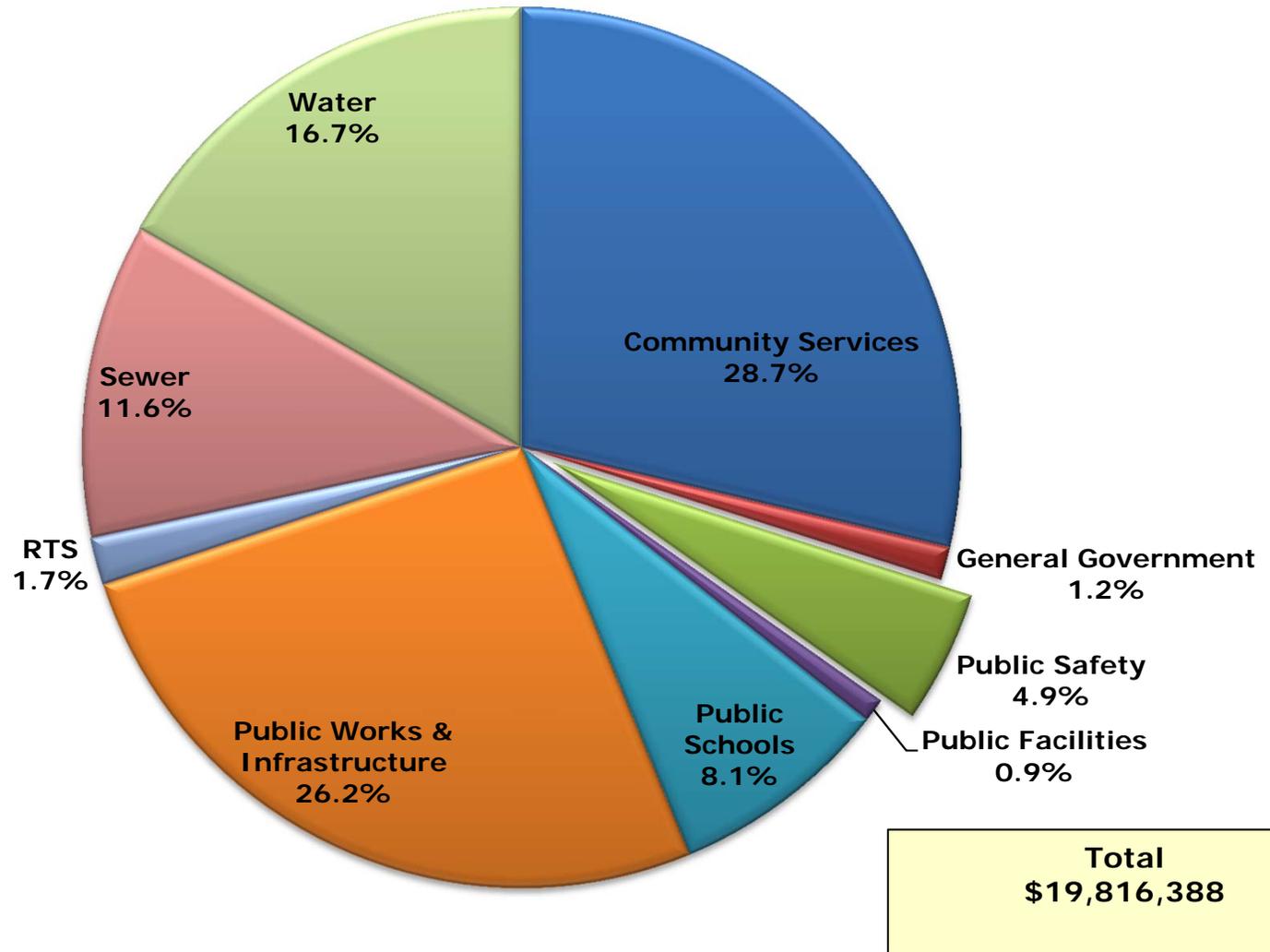


■ General Fund Cash ■ General Fund Reserve ■ General Fund Debt ■ Excluded Debt ■ CPA Cash ■ Enterprise Cash ■ Enterprise Debt

FY2019 Proposed Capital by Function



FY2019 Proposed Cash Capital by Function



Town of Needham
Capital Improvement Plan
January 2018

Five Year Capital Improvement Plan
Preliminary Tier One Recommendations
FY2019 - FY2023

Title	Code *	Function	Cat*	FY2019 Department Request	FY2019 Recommended Tier 1	FY2020 Department Request	FY2020 Recommended Tier 1	FY2021 Department Request	FY2021 Recommended Tier 1	FY2022 Department Request	FY2022 Recommended Tier 1	FY2023 Department Request	FY2023 Recommended Tier 1	Cash	Debt	Other	Page
Athletic Facility and Public Recreation Improvements	M	Community	3	565,000	55,000	2,880,000	2,500,000	52,500		677,000		1,102,000				2,555,000	3-040
Athletic Fields Master Plan	GM	Community	2							75,000							3-102
Boat Launch on Charles River	P	Community	2														3-104
Center at the Heights Computer Lab	P	Community	1			50,000	50,000							50,000			3-005
Center at the Heights Space Utilization Study	N	Community	2									30,000					3-069
Cricket Field Building Renovation	M	Community	2			162,000		649,000									3-106
Library Furniture Replacement	M	Community	1	43,970	43,970	112,960	112,960	82,740	82,740	83,182	83,182			322,852			3-097
Library RFID Conversion	M	Community	1					327,200									3-099
Memorial Park Buildings and Grounds Improvements	M	Community	2	5,900,000	5,900,000									1,032,000	3,068,000	1,800,000	3-119
Open Space Land Purchase	M	Community	3	1,000,000													3-113
Outdoor Basketball Courts	N	Community	2									125,000					3-108
Public Playgrounds	M	Community	1	300,000	300,000	400,000	400,000									700,000	3-110
Replace Unit 404 Ford E350 VAN	C	Community	4							100,240	100,240			100,240			3-019
Rosemary Lake Camp and Trail	M	Community	3	50,000	50,000	200,000	200,000									250,000	3-115
Town Common Historic Redesign and Beautification	M	Community	3			52,000	52,000	906,000	906,000							958,000	3-063
Walker Pond Improvements	N	Community	3														3-117
Energy Efficiency Upgrade Improvements	M	Facilities	2	71,000	71,000			200,000	200,000	100,000	100,000	100,000	100,000	471,000			3-077
Accounting and Revenue Software Package Replacement	P	General	1					1,100,000	1,100,000					1,100,000			3-013
Multi-Function Printer Devices	M	General	1			35,600	35,600	35,600	35,600	35,600	35,600	35,600	35,600	142,400			3-017
Non-Public Safety Data Center Servers and Storage Units	P	General	1	180,000	180,000							145,000	145,000	325,000			3-007
Permanent Message Boards	M	General	1			52,000		54,000		56,000		58,000					3-050
Replace Unit 452 Ford Taurus	C	General	4									41,034	41,034	41,034			3-019
Technology Systems and Application Updates	M	General	1									100,000	100,000	100,000			3-015

Town of Needham
Capital Improvement Plan
January 2018

Five Year Capital Improvement Plan
Preliminary Tier One Recommendations
FY2019 - FY2023

Title	Code *	Function	Cat*	FY2019 Department Request	FY2019 Recommended Tier 1	FY2020 Department Request	FY2020 Recommended Tier 1	FY2021 Department Request	FY2021 Recommended Tier 1	FY2022 Department Request	FY2022 Recommended Tier 1	FY2023 Department Request	FY2023 Recommended Tier 1	Cash	Debt	Other	Page
Town Multi-Function Printer Devices	M	General	1	35,600		35,600	35,600	35,600	35,600	35,600	35,600			106,800			3-017
Town Offices Replacement Furniture	P	General	1	25,000	25,000					25,000	25,000			50,000			3-003
Automated External Defibrillators Replacement	N	Public Safety	1									27,832	27,832	27,832			3-034
Firearm Replacement	M	Public Safety	1			31,000	31,000							31,000			3-030
Personal Protective Equipment	M	Public Safety	1	43,424	43,424	43,424	43,424	43,424	43,424	43,424	43,424	43,424	43,424	217,120			3-036
Police Cruiser Radio Replacement	M	Public Safety	1					93,351	93,351					93,351			3-028
Police Use-Of-Force Training Simulator	M	Public Safety	1	47,000	47,000									47,000			3-032
Public Safety Complex/Station #2	M	Public Safety	2	65,405,000	65,405,000										65,405,000		3-001
Public Safety Data Center Servers and Storage Units	P	Public Safety	1	30,000				60,000	60,000					60,000			3-009
Public Safety Mobile Devices	P	Public Safety	1	35,000	35,000	35,000	35,000							70,000			3-011
Replace Unit 400 Ford Taurus	C	Public Safety	4							38,310	38,310			38,310			3-019
Replace Unit 457 Ford Taurus	B	Public Safety	4	21,336													3-019
Replace Unit C-01 FORD EXPLORER	C	Public Safety	4					51,133	51,133					51,133			3-019
Replace Unit C-06 Ford F350	C	Public Safety	4					73,647	73,647					73,647			3-019
Replace Unit C-42 Ford Sedan	C	Public Safety	4			50,462	50,462							50,462			3-019
Replace Unit E02 E-ONE CYCLONE ii Fire Truck	L	Public Safety	4	840,163	840,163									840,163			3-019
Replace Unit HAZ HAZMAT TRAILER	L	Public Safety	4														3-019
Asa Small Field Renovation	M	Public Works	2			34,000	34,000	152,000	152,000							186,000	3-038
DPW Boiler Replacement 470 Dedham Avenue	M	Public Works	2	34,000		400,000											3-071
DPW Central Avenue Storage Facility	M	Public Works	2	7,900,000	7,900,000									1,382,000	3,788,000	2,730,000	3-043
DPW Complex	M	Public Works	2			2,950,000				35,000,000							3-045
Drain System Improvements - Water Quality (EPA)	M	Public Works	3	2,425,000	2,400,000			126,500		1,035,000						2,400,000	3-134
Hillcrest Radio Repeater Building Replacement	N	Public Works	2	136,000	136,000									136,000			3-059

Town of Needham
Capital Improvement Plan
January 2018

Five Year Capital Improvement Plan
Preliminary Tier One Recommendations
FY2019 - FY2023

Title	Code *	Function	Cat*	FY2019 Department Request	FY2019 Recommended Tier 1	FY2020 Department Request	FY2020 Recommended Tier 1	FY2021 Department Request	FY2021 Recommended Tier 1	FY2022 Department Request	FY2022 Recommended Tier 1	FY2023 Department Request	FY2023 Recommended Tier 1	Cash	Debt	Other	Page
Public Works Infrastructure Program	M	Public Works	3	1,773,500	1,773,500	1,985,500	1,985,500	2,320,000	2,145,000	2,022,000	2,022,000	1,805,500	1,805,500	9,481,500	250,000		3-052
Replace Unit 1 Ford Escape Hybrid	C	Public Works	4	33,616	33,616									33,616			3-019
Replace Unit 10 INTERNATIONAL 7400 Series	L	Public Works	4			239,000	239,000							239,000			3-019
Replace Unit 102 JOHN DEERE LOADER 544J	L	Public Works	4			181,481	181,481							181,481			3-019
Replace Unit 107 CAMOPLAST SW4S	L	Public Works	4	190,811													3-019
Replace Unit 108 TRACKLESS TRACTOR	X	Public Works	4									206,164	206,164	206,164			3-019
Replace Unit 112 Prinoth	L	Public Works	4									206,618	206,618	206,618			3-019
Replace Unit 113 CAMOPLAST SW4S	L	Public Works	4					192,880	192,880					192,880			3-019
Replace Unit 124 ADDCO MINI UTILITY TRAILER	L	Public Works	4							26,429	26,429			26,429			3-019
Replace Unit 168 GORMAN UTILITY TRAILER	L	Public Works	4							37,706	37,706			37,706			3-019
Replace Unit 181 Elgin PELICAN Sweeper	L	Public Works	4	264,101	264,101									264,101			3-019
Replace Unit 182 FREIGHTLINER ELGIN CROSSWIND SWEEPER	L	Public Works	4			302,028	302,028							302,028			3-019
Replace Unit 183 GIANT UTILITY LEAF PICKER TRAILER	L	Public Works	4	25,722	25,722									25,722			3-019
Replace Unit 186 GIANT LEAF VAC TRAILER	L	Public Works	4							27,275	27,275			27,275			3-019
Replace Unit 2 Ford F150 XL	C	Public Works	4					36,000	36,000					36,000			3-019
Replace Unit 253 VERMEER STUMP CUTTER	L	Public Works	4			54,207	54,207							54,207			3-019
Replace Unit 256 TRAILER UTILITY	L	Public Works	4			44,005	44,005							44,005			3-019
Replace Unit 3 Ford F450	L	Public Works	4							84,163	84,163			84,163			3-019
Replace Unit 301 FORD E150 VAN	C	Public Works	4	34,069	34,069									34,069			3-019
Replace Unit 32 Ford F350	CL	Public Works	4							71,137	71,137			71,137			3-019
Replace Unit 350 JOHN DEERE TRACTOR LOADER 4720	L	Public Works	4					53,156	53,156					53,156			3-019
Replace Unit 38 INTERNATIONAL IH 4300 Series	L	Public Works	4	202,169													3-019
Replace Unit 39 Ford F550	L	Public Works	4			73,233	73,233							73,233			3-019

Town of Needham
Capital Improvement Plan
January 2018

Five Year Capital Improvement Plan
Preliminary Tier One Recommendations
FY2019 - FY2023

Title	Code *	Function	Cat*	FY2019 Department Request	FY2019 Recommended Tier 1	FY2020 Department Request	FY2020 Recommended Tier 1	FY2021 Department Request	FY2021 Recommended Tier 1	FY2022 Department Request	FY2022 Recommended Tier 1	FY2023 Department Request	FY2023 Recommended Tier 1	Cash	Debt	Other	Page
Replace Unit 4 Ford F350	CL	Public Works	4	82,671	82,671									82,671			3-019
Replace Unit 43 Ford F350	CL	Public Works	4							71,137	71,137			71,137			3-019
Replace Unit 44 Ford Escape Hybrid	C	Public Works	4	33,616	33,616									33,616			3-019
Replace Unit 45 FORD E150 VAN	C	Public Works	4							38,467	38,467			38,467			3-019
Replace Unit 46 Ford Escape Hybrid	C	Public Works	4	33,616	33,616									33,616			3-019
Replace Unit 55 Ford F550	L	Public Works	4	142,495	142,495									142,495			3-019
Replace Unit 57 Ford F350	CL	Public Works	4			66,407	66,407							66,407			3-019
Replace Unit 65 Ford F350	CL	Public Works	4	66,037	66,037									66,037			3-019
Replace Unit 700 Ford Econ Van E250	C	Public Works	4									41,656	41,656	41,656			3-019
Replace Unit 702 Ford F250	C	Public Works	4	45,765	45,765									45,765			3-019
Replace Unit 705 Ford Econ Van E250	C	Public Works	4			37,571	37,571							37,571			3-019
Replace Unit 707 Ford Econ Van E250	C	Public Works	4					38,886	38,886					38,886			3-019
Replace Unit 712 Ford Econ Van E250	C	Public Works	4							40,247	40,247			40,247			3-019
Replace Unit 713 Ford F450 Dump Truck	L	Public Works	4														3-019
Replace Unit 756 Ford F150	C	Public Works	4							37,260	37,260			37,260			3-019
Replace Unit 76 BOBCAT A300 SKID STEER	L	Public Works	4	122,182	122,182									122,182			3-019
Replace Unit 92 FORD EXPLORER	C	Public Works	4			38,385	38,385							38,385			3-019
Specialty Equipment - Loader Mounted Snow Blower (H)	M	Public Works	1					163,000	163,000					163,000			3-048
Specialty Equipment - Unit 334 Specialty Mower (PF)	M	Public Works	1							40,000	40,000			40,000			3-048
Specialty Equipment - Unit 344 Large Specialty Mower (PF)	M	Public Works	1	76,500	76,500									76,500			3-048
Specialty Equipment - Unit 351 Tractor (PF)	M	Public Works	1			90,000	90,000							90,000			3-048
Streetlight Conversion to LED	N	Public Works	3	685,000													3-061
Traffic Improvements	P	Public Works	3	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	250,000			3-065

Town of Needham
Capital Improvement Plan
January 2018

Five Year Capital Improvement Plan
Preliminary Tier One Recommendations
FY2019 - FY2023

Title	Code *	Function	Cat*	FY2019 Department Request	FY2019 Recommended Tier 1	FY2020 Department Request	FY2020 Recommended Tier 1	FY2021 Department Request	FY2021 Recommended Tier 1	FY2022 Department Request	FY2022 Recommended Tier 1	FY2023 Department Request	FY2023 Recommended Tier 1	Cash	Debt	Other	Page
Building Management System Upgrade	M	Schools	1	102,000		126,000	126,000	94,000	94,000					220,000			3-067
Emery Grover Feasibility Study Refresh	N	Schools	2	70,000	70,000											70,000	3-162
Emery Grover Roof Replacement	M	Schools	2					15,000		160,000							3-075
Emery Grover Window Replacement	M	Schools	2			30,000		330,000									3-073
Facility Assessment for Sustainable Building Management	MB	Schools	2	100,000													3-079
Full Day Kindergarten Space Modifications	P	Schools	2			50,000											3-164
Harris Avenue Parking Lot (Pollard School)	N	Schools	2									25,000	25,000	25,000			3-081
High Rock School Locker Room Upgrade	N	Schools	2									20,000	20,000	20,000			3-083
Hillside School Boiler Upgrade	N	Schools	2			11,000		220,000									3-095
Mitchell Elementary School Renovation	P	Schools	2														3-166
Mitchell School Bathroom Upgrades	N	Schools	2					60,000		600,000							3-085
Mitchell School Locker Replacement	N	Schools	2	70,000													3-087
Newman Preschool Playground Custom Shade Shelter	N	Schools	1			49,800	49,800							49,800			3-169
Pollard Blue & Green Gym Upgrades	M	Schools	2	540,000	540,000	30,000	30,000							570,000			3-091
Pollard Locker Room Retrofit	M	Schools	2					60,000	60,000	630,000	630,000			690,000			3-093
Pollard Phased Improvements Feasibility Study	M	Schools	2	65,000	65,000									65,000			3-171
Pollard School Air Conditioning Upgrade	N	Schools	2							100,000		550,000					3-089
Pollard School Improvements	P	Schools	2														3-173
Renovate/Reconstruct Emery Grover Building at Highland Avenue Location	P	Schools	2			1,605,200		13,089,300									3-177
Renovate/Reconstruct Hillside as Swing Space	N	Schools	2					750,000									3-159
Replace Unit Bus 1 BLUE BIRD 303 SCHOOL BUS	C	Schools	4									96,693	96,693	96,693			3-019
Replace Unit Bus 14 IC SCHOOL BUS	C	Schools	4			90,568	90,568							90,568			3-019
Replace Unit Bus 2 BLUE BIRD 303 SCHOOL BUS	C	Schools	4									96,693	96,693	96,693			3-019

Town of Needham
Capital Improvement Plan
January 2018

Five Year Capital Improvement Plan
Preliminary Tier One Recommendations
FY2019 - FY2023

Title	Code *	Function	Cat*	FY2019 Department Request	FY2019 Recommended Tier 1	FY2020 Department Request	FY2020 Recommended Tier 1	FY2021 Department Request	FY2021 Recommended Tier 1	FY2022 Department Request	FY2022 Recommended Tier 1	FY2023 Department Request	FY2023 Recommended Tier 1	Cash	Debt	Other	Page
Replace Unit Van 1 FORD E150 VAN	C	Schools	4			50,483	50,483							50,483			3-019
Replace Unit Van 10 TOYOTA SIENNA	C	Schools	4							54,079	54,079			54,079			3-019
Replace Unit Van 2 FORD E150 VAN	C	Schools	4			50,483	50,483							50,483			3-019
Replace Unit Van 4 FORD E150 VAN	C	Schools	4	48,776	48,776									48,776			3-019
Replace Unit Van 5 FORD E150 VAN	C	Schools	4	48,776	48,776									48,776			3-019
Replace Unit Van 7 FORD E250 VAN	C	Schools	4					52,250	52,250					52,250			3-019
Replace Unit Van 8 FORD E250 VAN	C	Schools	4					52,250	52,250					52,250			3-019
Replace Unit Van 9 TOYOTA SIENNA	C	Schools	4							54,079	54,079			54,079			3-019
School Copier Replacement	R	Schools	1	84,190	84,190	52,470	52,470	84,690	84,690	86,360	86,360	52,140	52,140	359,850			3-180
School Document Management System	M	Schools	1			176,900	176,900							176,900			3-187
School Furniture	R	Schools	1	60,500	60,500	45,000	45,000	25,000	25,000	25,000	25,000	25,000	25,000	180,500			3-190
School Phone System Replacement	N	Schools	1	88,000	319,000	114,000		117,000						319,000			3-192
School Technology Replacement	R	Schools	1	303,600	303,600	566,100	347,500	556,325	177,050	500,200		428,000		828,150			3-184
Sustain Hillside School as Swing Space for Future Use	P	Schools	2					100,000		2,607,400		16,253,100					3-195
TOTAL				90,530,205	87,755,289	13,733,867	7,761,067	22,502,432	6,057,657	44,667,295	3,856,695	21,664,454	3,118,354	24,389,062	72,511,000	11,649,000	
Buildings & Facilities			2	80,291,000	80,087,000	5,272,200	64,000	15,625,300	412,000	39,272,400	730,000	17,103,100	145,000	4,391,000	72,261,000	4,786,000	
Equipment & Technology			1	1,454,784	1,518,184	2,015,854	1,631,254	2,871,930	1,994,455	930,366	374,166	914,996	428,996	5,247,055		700,000	
Fleet			4	2,235,921	1,821,605	1,278,313	1,278,313	550,202	550,202	680,529	680,529	688,858	688,858	5,019,507			
Infrastructure & Land			3	6,548,500	4,328,500	5,167,500	4,787,500	3,455,000	3,101,000	3,784,000	2,072,000	2,957,500	1,855,500	9,731,500	250,000	6,163,000	
TOTAL				90,530,205	87,755,289	13,733,867	7,761,067	22,502,432	6,057,657	44,667,295	3,856,695	21,664,454	3,118,354	24,389,062	72,511,000	11,649,000	

Town of Needham
Capital Improvement Plan
January 2018

Five Year Capital Improvement Plan
Preliminary Tier One Recommendations
FY2019 - FY2023

Title	Code *	Function	Cat*	FY2019 Department Request	FY2019 Recommended Tier 1	FY2020 Department Request	FY2020 Recommended Tier 1	FY2021 Department Request	FY2021 Recommended Tier 1	FY2022 Department Request	FY2022 Recommended Tier 1	FY2023 Department Request	FY2023 Recommended Tier 1	Cash	Debt	Other	Page
RTS Enterprise																	
Replace Unit 143 CASE LOADER 721E	L	RTS	4	245,360	245,360									245,360			3-019
Replace Unit 5 INTERNATIONAL 7400 Series	L	RTS	4									264,984	264,984	264,984			3-019
Replace Unit 56 Ford F150	C	RTS	4			34,783	34,783							34,783			3-019
Replace Unit 91 CONSTRUCTION SCALP TRUCK	L	RTS	4							153,337	153,337			153,337			3-019
Big Belly Trash Cans	N	RTS	1	100,000	100,000									100,000			3-121
RTS Efficiency Study and Master Plan	N	RTS	3														3-123
Employee Trailer	N	RTS	2														3-125
Horizontal Grinder	M	RTS	1			750,000											3-127
RTS Property Improvements	M	RTS	2	645,000	645,000	27,000	27,000	120,000	120,000	120,000	120,000			267,000	645,000		3-129
Stormwater Plan at RTS	M	RTS	3			250,000	250,000	275,000	275,000					525,000			3-132
TOTAL				990,360	990,360	1,061,783	311,783	395,000	395,000	273,337	273,337	264,984	264,984	1,590,464	645,000		
Buildings & Facilities		RTS	2	645,000	645,000	27,000	27,000	120,000	120,000	120,000	120,000			267,000	645,000		
Equipment & Technology		RTS	1	100,000	100,000	750,000								100,000			
Fleet		RTS	4	245,360	245,360	34,783	34,783			153,337	153,337	264,984	264,984	698,464			
Infrastructure & Land		RTS	3			250,000	250,000	275,000	275,000					525,000			
TOTAL		RTS		990,360	990,360	1,061,783	311,783	395,000	395,000	273,337	273,337	264,984	264,984	1,590,464	645,000		

Town of Needham
Capital Improvement Plan
January 2018

Five Year Capital Improvement Plan
Preliminary Tier One Recommendations
FY2019 - FY2023

Title	Code *	Function	Cat*	FY2019 Department Request	FY2019 Recommended Tier 1	FY2020 Department Request	FY2020 Recommended Tier 1	FY2021 Department Request	FY2021 Recommended Tier 1	FY2022 Department Request	FY2022 Recommended Tier 1	FY2023 Department Request	FY2023 Recommended Tier 1	Cash	Debt	Other	Page
Sewer Enterprise																	
Replace Unit 101 CASE LOADER	L	Sewer	4							202,621	202,621			202,621			3-019
Replace Unit 11 FORD EXPLORER	C	Sewer	4									42,558	42,558	42,558			3-019
Replace Unit 17 Ford F550	L	Sewer	4							78,449	78,449			78,449			3-019
Replace Unit 19 INTERNATIONAL 7400 Series	L	Sewer	4							256,023	256,023			256,023			3-019
Replace Unit 23 Ford F350	C	Sewer	4					60,046	60,046					60,046			3-019
Replace Unit 28 Ford F350	C	Sewer	4	64,247	64,247									64,247			3-019
Replace Unit 29 INTERNATIONAL 7400 Series	L	Sewer	4			239,000	239,000							239,000			3-019
Replace Unit 37 INTERNATIONAL 7500 Series	L	Sewer	4							441,303	441,303			441,303			3-019
Replace Unit 94 Ford F250	C	Sewer	4	67,864	67,864									67,864			3-019
Sewer Main Extension Zone I and II	M	Sewer	3	690,000	690,000									690,000			3-136
Sewer Main Replacements	M	Sewer	3	330,000	330,000	1,950,000	500,000	9,000,000						830,000			3-138
Sewer Pump Station Improvements	M	Sewer	3			630,000	630,000			345,000	345,000	3,370,500		975,000			3-140
Sewer Service Connections	R	Sewer	3			50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	200,000			3-142
Sewer System Infiltration & Inflow Removal	M	Sewer	3	205,000	205,000	1,600,000	1,600,000							205,000	1,600,000		3-144
TOTAL				1,357,111	1,357,111	4,469,000	3,019,000	9,110,046	110,046	1,373,395	1,373,395	3,463,058	92,558	4,352,110	1,600,000		

Buildings & Facilities	Sewer	2															
Equipment & Technology	Sewer	1															
Fleet	Sewer	4	132,111	132,111	239,000	239,000	60,046	60,046	978,395	978,395	42,558	42,558	1,452,110				
Infrastructure & Land	Sewer	3	1,225,000	1,225,000	4,230,000	2,780,000	9,050,000	50,000	395,000	395,000	3,420,500	50,000	2,900,000	1,600,000			
TOTAL	Sewer		1,357,111	1,357,111	4,469,000	3,019,000	9,110,046	110,046	1,373,395	1,373,395	3,463,058	92,558	4,352,110	1,600,000			

Town of Needham
Capital Improvement Plan
January 2018

Five Year Capital Improvement Plan
Preliminary Tier One Recommendations
FY2019 - FY2023

Title	Code *	Function	Cat*	FY2019 Department Request	FY2019 Recommended Tier 1	FY2020 Department Request	FY2020 Recommended Tier 1	FY2021 Department Request	FY2021 Recommended Tier 1	FY2022 Department Request	FY2022 Recommended Tier 1	FY2023 Department Request	FY2023 Recommended Tier 1	Cash	Debt	Other	Page
Water Enterprise																	
Replace Unit 14 INTERNATIONAL 7400	L	Water	4	239,404	239,404									239,404			3-019
Replace Unit 164 Trailer ATLAS Copco	L	Water	4			35,803	35,803							35,803			3-019
Replace Unit 22 Ford F450	L	Water	4	115,644	115,644									115,644			3-019
Replace Unit 25 Ford F450	L	Water	4							84,163	84,163			84,163			3-019
Replace Unit 26 Ford F150	C	Water	4					48,428	48,428					48,428			3-019
Replace Unit 27 Ford F150	C	Water	4														3-019
Replace Unit 30 Ford F550	L	Water	4							78,449	78,449			78,449			3-019
Replace Unit 31 Ford F150	C	Water	4					36,000	36,000					36,000			3-019
Replace Unit 35 INTERNATIONAL 4900	L	Water	4														3-019
Replace Unit 40 Ford F350	C	Water	4							62,148	62,148			62,148			3-019
Birds Hill Water Tank	M	Water	3	340,000	340,000									340,000			3-146
Fire Flow Improvements	M	Water	3			540,000	540,000	2,400,000	2,400,000					540,000	2,400,000		3-148
Water Distribution System Improvements	M	Water	3	830,000	830,000	4,640,000	4,640,000	390,000	390,000	100,000	100,000	460,000	460,000	1,780,000	4,640,000		3-150
Water Distribution Study	QB	Water	3									222,000	222,000	222,000			3-153
Water Service Connections	R	Water	3									200,000	200,000	200,000			3-155
Water Supply Development	M	Water	3	400,000				1,100,000									3-157
TOTAL				1,925,048	1,525,048	5,215,803	5,215,803	3,974,428	2,874,428	324,759	324,759	882,000	882,000	3,782,038	7,040,000		
Buildings & Facilities		Water	2														
Equipment & Technology		Water	1														
Fleet		Water	4	355,048	355,048	35,803	35,803	84,428	84,428	224,759	224,759			700,038			
Infrastructure & Land		Water	3	1,570,000	1,170,000	5,180,000	5,180,000	3,890,000	2,790,000	100,000	100,000	882,000	882,000	3,082,000	7,040,000		
TOTAL		Water		1,925,048	1,525,048	5,215,803	5,215,803	3,974,428	2,874,428	324,759	324,759	882,000	882,000	3,782,038	7,040,000		
Grand Total				94,802,724	91,627,808	24,480,453	16,307,653	35,981,906	9,437,131	46,638,786	5,828,186	26,274,496	4,357,896	34,113,674	81,796,000	11,649,000	

Town of Needham
Capital Improvement Plan
January 2018

Five Year Capital Improvement Plan
Preliminary Tier One Recommendations
FY2019 - FY2023

Title	Code *	Function	Cat*	FY2019 Department Request	FY2019 Recommended Tier 1	FY2020 Department Request	FY2020 Recommended Tier 1	FY2021 Department Request	FY2021 Recommended Tier 1	FY2022 Department Request	FY2022 Recommended Tier 1	FY2023 Department Request	FY2023 Recommended Tier 1	Cash	Debt	Other	Page
Buildings & Facilities - All			2	80,936,000	80,732,000	5,299,200	91,000	15,745,300	532,000	39,392,400	850,000	17,103,100	145,000	4,658,000	72,906,000	4,786,000	
Equipment & Technology - All			1	1,554,784	1,618,184	2,765,854	1,631,254	2,871,930	1,994,455	930,366	374,166	914,996	428,996	5,347,055		700,000	
Fleet - All			4	2,968,440	2,554,124	1,587,899	1,587,899	694,676	694,676	2,037,020	2,037,020	996,400	996,400	7,870,119			
Infrastructure & Land - All			3	9,343,500	6,723,500	14,827,500	12,997,500	16,670,000	6,216,000	4,279,000	2,567,000	7,260,000	2,787,500	16,238,500	8,890,000	6,163,000	
TOTAL				94,802,724	91,627,808	24,480,453	16,307,653	35,981,906	9,437,131	46,638,786	5,828,186	26,274,496	4,357,896	34,113,674	81,796,000	11,649,000	

Codes

- B = Funding may be considered under the operating budget/special warrant article
- C = Core Fleet
- D = Recommendation is deferred or on hold pending other actions
- E = Emergency approval
- F = Funded appropriation outside the capital plan
- G = Request may not qualify as capital submission
- L = Specialized Fleet Equipment
- I = Project submission is incomplete or waiting additional information
- M = Submission has been modified from previous submission
- N = New submission with this CIP
- P = Project request has appeared in previous CIP's
- Q = Request does not qualify as a capital submission
- R = Request is a regularly occurring capital expense
- S = No recommendation; under study
- U = Urgent request based on identified conditions

Cat (Category)

- 1 = Equipment or Technology
- 2 = Building or Facility
- 3 = Infrastructure
- 4 = Fleet

Pink highlighted amounts indicate that all or a portion of the funding recommendation may be funded by debt.

Town of Needham
Capital Improvement Plan
January 2018

**General Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019
Current Year Requests						86,710,205	83,549,869
Cash							
Current Receipts & Free Cash	5,566,941	2,667,260	2,432,606	2,729,117	5,438,467		9,183,869
Other Available Funds	575,000		320,305	302,000	3,888,000		1,855,000
Total - Cash	6,141,941	2,667,260	2,752,911	3,031,117	9,326,467		11,038,869
Debt							
Within the Annual Levy Limit	3,958,000	1,700,000	5,100,000	500,000	18,825,000		7,106,000
Excluded from the Levy Limit			7,000,000	58,305,000			65,405,000
Total - Debt	3,958,000	1,700,000	12,100,000	58,805,000	18,825,000		72,511,000
Total	10,099,941	4,367,260	14,852,911	61,836,117	28,151,467	86,710,205	83,549,869

Town of Needham
Capital Improvement Plan
January 2018

**General Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019	
100kW Portable Generator	61,250							G
Athletic Facility and Public Recreation Improvements (Claxton Field Lighting)						510,000		
Athletic Facility and Public Recreation Improvements (Design for Turf Replacement)						55,000	55,000	S
Building Management System Upgrade						102,000	102,000	G
Central Avenue/Elliot Street Bridge		900,000	2,000,000					D D
Defibrillators	27,500							G
DPW Boiler Replacement 470 Dedham Avenue						34,000	34,000	G
DPW Central Avenue Storage Facility					150,000	7,900,000	5,170,000	G DG
DPW/Public Services Administration Building Location Feasibility Study			40,000					A
Drain System Improvements – Water Quality		80,000						G
Drain System Repairs		76,000						G
Election Equipment	85,000							G
Emery Grover School Administration Tank			73,000					A
Energy Efficiency Upgrade Improvements	113,078		96,323	38,154	57,000	71,000	71,000	G G G G
Facilities Maintenance Program	465,750	482,000						GO G
Facility Assessment for Sustainable Building Management						100,000		
Fire Alarm Cables		60,000						G

Town of Needham
Capital Improvement Plan
January 2018

**General Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019
Firefighting Protective Gear					167,872	G	
Fleet - Ambulance (Fire)					224,677	G	
Fleet - Ambulance (Fire)		186,607	G				
Fleet - Brush Truck C6 (Fire)	49,200						
Fleet - Delivery Van (School)					33,861	G	
Fleet - Dump Truck 10 Wheel Heavy Class 8 Unit 49 (Highway)			269,930	G			
Fleet - Dump Truck 10 Wheel Unit 47 (Highway)				223,109	G		
Fleet - Dump Truck 6 Wheel Heavy Class 8 Unit 6 (Highway)	178,400						
Fleet - Dump Truck 6 Wheel Heavy Class 8 Unit 7 (Highway)			219,746	G			
Fleet - Dump Truck 6 Wheel Unit 66 (Highway)	78,300						
Fleet - Dump Truck 6 Wheel Unit 70 (Parks)				68,364	G		
Fleet - Dump Truck 6 Wheel Unit 71 (Parks)				68,364	G		
Fleet - Dump Truck 6 Wheel Unit 72 (Parks)	78,400						
Fleet - Dump Truck 6 Wheel Unit 73 (Parks)			78,296	G			
Fleet - Dump Truck 6 Wheel Unit 75 (Parks)			78,296	G			
Fleet - Dump Truck 6 Wheel with Hook Lift Unit 74 (Parks)			104,102	G			
Fleet - Fire Engine E2 (Fire)						840,163	840,163

Town of Needham
Capital Improvement Plan
January 2018

**General Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019
Fleet - Passenger Vehicle Electric Unit 453 (Building)		30,830	G				
Fleet - Passenger Vehicle Electric Unit 455 (Building)		30,830	G				
Fleet - Passenger Vehicle Unit 1 (Admin)						33,616	33,616
Fleet - Passenger Vehicle Unit 15 (Admin)					35,481		G
Fleet - Passenger Vehicle Unit 43 (Fire)				35,123			G
Fleet - Passenger Vehicle Unit 44 (Engineering)						33,616	33,616
Fleet - Passenger Vehicle Unit 454 (Building)	22,521						G
Fleet - Passenger Vehicle Unit 456 (Building)	22,521						G
Fleet - Passenger Vehicle Unit 457 (Building)						21,336	
Fleet - Passenger Vehicle Unit 46 (Engineering)						33,616	33,616
Fleet - Passenger Vehicle Unit 52 (Highway)					34,729		G
Fleet - Pick Truck Unit 65 (Parks)	51,900						G
Fleet - Pickup Truck 4WD Unit 50 (Parks)			50,723				G
Fleet - Pickup Truck Unit 12 (Parks)					38,277		G
Fleet - Pickup Truck Unit 41 (Parks)			50,187				G
Fleet - Pickup with Cab Unit 701 (Carpenter)	33,600						G
Fleet - Sidewalk Tractor Plow Unit 106 (Highway)				152,912			G

Town of Needham
Capital Improvement Plan
January 2018

**General Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019	
Fleet - Sidewalk Tractor Plow Unit 107 (Highway)						190,811	190,811	G
Fleet - Sidewalk Tractor Plow Unit 116 (Highway)	169,300	G						
Fleet - Sidewalk Tractor Plow Unit 117 (Highway)			173,967	G				
Fleet - Skid Steer Loader Unit 76 (Highway)						122,182	122,182	G
Fleet - Snow and Ice Equipment Material Spreaders (Highway)	41,000	G						
Fleet - SUV Emergency Response Unit 2 (Fire)				56,635	G			
Fleet - SUV Emergency Response Unit 3 (Fire)				46,116	G			
Fleet - Street Sweeper Unit 181 (Highway)						264,101	264,101	G
Fleet - Tractor Mower Unit 336 (Parks)					98,747	G		
Fleet - Trailer Large Unit 183 (Parks)						25,722	25,722	G
Fleet - Transport Van Unit 3 (School)					32,875	G		
Fleet - Transport Van Unit 4 (School)						48,776	48,776	G
Fleet - Transport Van Unit 404 (HHS Aging Services)				87,354	AG			
Fleet - Transport Van Unit 5 (School)						48,776	48,776	G
Fleet - Transport Van Unit 6 (School)					32,875	G		
Fleet - Utility Trailer Portable Messenger Board Unit 120 (Highway)				23,031	G			
Fleet - Work Truck Class 2 Unit 702 (Building Maintenance)						45,765	45,765	G

Town of Needham
Capital Improvement Plan
January 2018

**General Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019	
Fleet - Work Truck Class 3 Unit 4 (Fleet)						82,671	82,671	G
Fleet - Work Truck Class 3 Unit 65 (Parks)						66,037	66,037	G
Fleet - Work Truck Class 5 Unit 55 (Highway)						142,495	142,495	G
Fleet - Work Truck Class 6 Unit 38						202,169	202,169	G
Fleet - Work Van Unit 301 (Parks)						34,069	34,069	G
Fleet - Work Van Unit 703 (HVAC)		27,346	G					
Fleet - Work Van Unit 704 (Building Maintenance)					31,222	G		
Fleet - Work Van Unit 706 (Glazier)				35,073	G			
Fleet - Work Van Unit 708 (Delivery)			28,049	G				
Fleet -Utility Truck Unit 48 (Highway)					83,561	G		
Fuel Island Relocation and Upgrade				131,000	G	1,056,000	G	
Fuel System Software/Hardware Upgrade			94,500	G				
Geographic Information System		100,000	G					
High School A Gym Upgrade				130,557	G			
High School Chiller					125,000	O		
High School Classroom Expansion & Other Improvements					14,138,000	ADS		
High School Classroom Expansion Alternatives Feasibility Study				65,000	G			

Town of Needham
Capital Improvement Plan
January 2018

**General Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019			
High School Expansion Options			150,000	A						
High School Radio System	37,275	G								
High School Reconfiguration Work		200,000	G							
Hillcrest Radio Repeater Building Replacement						136,000	136,000	G		
Hillside (Williams) Feasibility & Design	650,000	G	45,000	A						
Library Furniture Replacement						43,970	43,970	G		
Mail Processing Machines			30,645	G						
Memorial Park Buildings and Grounds Improvements				50,000	G	375,000	G	5,900,000	5,900,000	DGS
Mitchell School Locker Replacement						70,000	70,000	G		
Mitchell School Modular Classrooms	2,729,276	G								
Mobile Column Lifts			73,500	G						
Needham High School Cafeteria Expansion			2,100,000	D						
Network Hardware, Servers & Switches	30,000	G	30,000	G	30,000	G				
Non-Public Safety Data Center Servers and Storage Units					145,000	G	180,000	180,000	G	
Personal Protective Equipment						43,424	43,424	G		
Police Station Underground Storage Tank Removal	28,500	G								
Police Use-Of-Force Training Simulator						47,000	47,000	G		

Town of Needham
Capital Improvement Plan
January 2018

**General Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019
Pollard Bathroom Upgrades					650,000	o	
Pollard Blue & Green Gym Upgrades					45,000	G	540,000 540,000 G
Pollard Boiler Replacement	800,000	D					
Pollard Locker Replacement				41,157	G		
Pollard Phased Improvements Feasibility Study						65,000	65,000 G
Pollard Telephone System Replacement	53,000	G					
Property Acquisition (609 Central Avenue)				762,500	X		
Property Acquisition (66-70 Chestnut Street)	1,533,000	DR					
Property Acquisition (Owens Farm & Abutting Properties)			7,000,000	X			
Public Safety Complex/Station #2 Projects			50,000	oA	90,000	o	4,000,000 D*o 65,405,000 65,405,000 X
Public Safety Computer Aided Dispatch System		244,615	G				
Public Safety Data Center Servers and Storage Units						30,000	
Public Safety Mobile Devices						35,000	35,000 G
Public Works Garage Bay	1,100,000	D					
Public Works Garage Vehicle Service Lift	110,000	G					
Public Works Infrastructure Program	600,000	D	800,000	D	1,453,500	DG	1,700,000 DG 1,762,000 G 1,773,500 1,773,500 DG
Public Works Large Format Scanner		33,000	G				

Town of Needham
Capital Improvement Plan
January 2018

**General Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014		Funded FY2015		Funded FY2016		Funded FY2017		Funded FY2018		Requested FY2019	Proposed FY2019	
Public Works Small Specialty Equipment	130,800	G	29,797	G									
Public Works Two-Way Radios	47,700	G											
Rosemary Complex									3,800,000	DO			
School 1:1 Initiative	145,000	O	127,725	G									
School Fitness Equipment Replacement	14,380	G	14,810	G									
School Furniture & Musical Equipment	56,600	G	49,180	G	45,405	G	45,000	G	45,000	G	60,500	60,500	G
School Graphic Arts Equipment	8,270	G	8,350	G									
School Interactive Whiteboard Technology			24,600	G									
School Phone System Replacement											88,000	319,000	G
School Photocopier Replacement	59,620	G	30,320	G	62,740	G	39,330	G	46,790	G	84,190	84,190	G
School Postage and Folding Machines			9,340	G									
School Technology Innovation			25,000	G									
School Technology Replacement	488,800	G	502,000	G	403,000	G	307,750	G	463,500	G	303,600	303,600	G
Specialty Equipment - Unit 344 Large Mower											76,500	76,500	G
Specialty Equipment Field Renovator (Parks)									30,000	G			
Streetlight Conversion to LED											685,000	685,000	G
Town Hall Stair Modifications									200,000	G			

Town of Needham
Capital Improvement Plan
January 2018

**General Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019		
Town Multi-Function Printer Devices						35,600	35,600	G	
Town Offices Replacement Furniture						25,000	25,000	G	
Traffic Improvements					249,000	G	50,000	50,000	G
Water Quality Improvements (Wildwood Drive Pond Analysis)						25,000	25,000	G	
Williams Elementary School				57,542,500	X				
Williams Elementary School Outside Play Area				250,000	A				
Wireless Master Fire Box System		164,000	G						

- Funding Source
- A = Transfer from another Financial Warrant Article
 - B = Operating Budget
 - C = CPA Fund Cash
 - D = Debt
 - E = Enterprise Fund Cash
 - G = General Fund Cash
 - O = Overlay Surplus
 - R = Retained Earnings
 - S = Stabilization Fund
 - T = CPA General Reserve
 - 1 = Community Housing Reserve
 - 2 = Historic Reserve
 - 3 = Open Space Reserve
 - 4 = CPA Free Cash
 - X = Excluded Debt

Town of Needham
Capital Improvement Plan
January 2018

**Community Preservation Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019
Current Year Requests						7,521,800	2,820,000
Cash							
Current Receipts & State Match					1,030,000		
Other Available Funds	433,000	268,219	3,417,000	978,000	4,075,000		2,820,000
Total - Cash	433,000	268,219	3,417,000	978,000	5,105,000		2,820,000
Debt							
CPA Surcharge Supported					8,000,000		
Total - Debt					8,000,000		
Total	433,000	268,219	3,417,000	978,000	13,105,000	7,521,800	2,820,000

Town of Needham
Capital Improvement Plan
January 2018

**Community Preservation Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019	
Athletic Facility and Public Recreation Improvements (Cricket Field)					35,000	4		
Boat Launch Design			30,000	4				
Emery Grover Feasibility Study Refresh+						70,000	70,000	
Memorial Park Buildings and Grounds Improvements+		35,000	T		310,000	4	3,701,800	TBD
Mills Field Improvements	40,000	3		510,000	4			
Newman Preschool Playground Surfacing	60,000	T						
Newman School Fields Renovation			1,527,000	4				
Open Space Purchase						1,000,000		
Public Playgrounds+						300,000	300,000	
Rail Trail Improvements			100,000	4				
Ridge Hill Reservation Footbridge Repairs		213,219	3					
Rosemary Complex			450,000	4	550,000	4	12,000,000	CDT 4
Rosemary Lake Camp and Trail+						50,000	50,000	
Rosemary Lake Sediment Removal+					118,000	4	2,400,000	2,400,000
Town Common Historic Redesign		20,000	3					
Trail Improvement Project - Needham Reservoir	85,000	3			860,000	4		
Trail Improvement Project - Newman Eastman	248,000	T		800,000	4			

Town of Needham
Capital Improvement Plan
January 2018

**Community Preservation Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019
Williams Elementary School Walking Trails					210,000	4	

Notes

+ Subject to approval by the Community Preservation Committee

<p>Funding Source A = Transfer from another Financial Warrant Article B = Operating Budget C = CPA Fund Cash D = Debt E = Enterprise Fund Cash G = General Fund Cash O = Overlay Surplus R = Retained Earnings S = Stabilization Fund T = CPA General Reserve 1 = Community Housing Reserve 2 = Historic Reserve 3 = Open Space Reserve 4 = CPA Free Cash X = Excluded Debt</p>
--

Town of Needham
Capital Improvement Plan
January 2018

**RTS Enterprise Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019
Current Year Requests						990,360	990,360
Cash							
Current Receipts & Retained Earnings	108,100	321,095		215,927	725,342		345,360
Other Available Funds	144,000			22,073			
Total - Cash	252,100	321,095		238,000	725,342		345,360
Debt							
Fee Supported		324,400		269,000			645,000
Total - Debt				269,000			645,000
Total	576,500	321,095		507,000	725,342	990,360	990,360

Town of Needham
Capital Improvement Plan
January 2018

**RTS Enterprise Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019	
Big Belly Trash Cans						100,000	100,000	R
Fleet - Collection Packer Unit 80					211,256			R
Fleet - Front End Loader Unit 104				269,000				D
Fleet - Front End Loader Unit 143						245,360	245,360	R
Fleet - Grinder Unit 67					43,086			R
Fleet - Semi Tractor Unit 42	218,100							AR
Fleet - Swap Loader Truck Unit 5				120,000				R
Fleet - Trommel Screener Unit 93		215,316						R
Fuel Island Relocation and Upgrade					15,000			R
Message Board		30,000						R
RTS Property Improvements				68,000		290,000	645,000	AR R D
RTS Stormwater Plan				50,000				R
Transfer Station Floor Replacement					166,000			R
Transfer Station Office Trailer		75,779						R
Waste Containers	34,000							A
Waste Handler	324,400							D

Town of Needham
 Capital Improvement Plan
 January 2018

**RTS Enterprise Fund Capital
 Current and Prior
 Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019
-------------	------------------	------------------	------------------	------------------	------------------	---------------------	--------------------

- Funding Source
- A = Transfer from another Financial Warrant Article
 - B = Operating Budget
 - C = CPA Fund Cash
 - D = Debt
 - E = Enterprise Fund Cash
 - G = General Fund Cash
 - O = Overlay Surplus
 - R = Retained Earnings
 - S = Stabilization Fund
 - T = CPA General Reserve
 - 1 = Community Housing Reserve
 - 2 = Historic Reserve
 - 3 = Open Space Reserve
 - 4 = CPA Free Cash
 - X = Excluded Debt

Town of Needham
Capital Improvement Plan
January 2018

**Sewer Enterprise Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019
Current Year Requests						1,357,111	2,301,111
Cash							
Current Receipts & Retained Earnings	647,900	398,000	554,357	63,525	87,000		2,301,111
Other Available Funds			116,143	10,335			
Total - Cash	647,900	398,000	670,500	73,860	87,000		2,301,111
Debt							
Fee Supported					600,000		
Total - Debt					600,000		
Total	647,900	398,000	670,500	73,860	687,000	1,357,111	2,301,111

Town of Needham
Capital Improvement Plan
January 2018

**Sewer Enterprise Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019	
DPW Central Avenue Storage Facility						Refer to General	944,000	R
Fleet - Work Truck Class 2b Unit 94						67,864	67,864	R
Fleet - Work Truck Class 3 Unit 28						64,247	64,247	R
Fleet - Utility Truck Unit 94	47,900	R						
Fuel Island Relocation and Upgrade					87,000			R
Sewer Main Extension Zone I and II				73,860	AR	690,000	690,000	R
Sewer Main Replacements						330,000	330,000	R
Sewer Pump Station (Alden Road)					600,000			D
Sewer Pump Station Improvements (Reservoir A)			550,000	AR				
Sewer Pump Station Improvements (West Street)		90,000	R					
Sewer SCADA System		258,000	R					
Sewer Service Connections		50,000	R	50,000	R			
Sewer System Infiltration & Inflow Removal Program	600,000	R				205,000	205,000	R
Specialty Equipment Sewer Easement Machine to Clean Sewer Lines			70,500	R				

Funding Source
A = Transfer from another Financial Warrant Article
B = Operating Budget
C = CPA Fund Cash
D = Debt
E = Enterprise Fund Cash
G = General Fund Cash

Town of Needham
Capital Improvement Plan
January 2018

**Sewer Enterprise Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019
-------------	------------------	------------------	------------------	------------------	------------------	---------------------	--------------------

O = Overlay Surplus
R = Retained Earnings
S = Stabilization Fund
T = CPA General Reserve
1 = Community Housing Reserve
2 = Historic Reserve
3 = Open Space Reserve
4 = CPA Free Cash
X = Excluded Debt

Town of Needham
Capital Improvement Plan
January 2018

**Water Enterprise Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019
Current Year Requests						1,925,048	3,311,048
Cash							
Current Receipts & Retained Earnings	1,563,100	729,050	980,179	345,679	433,074		3,311,048
Other Available Funds			181,925				
Total - Cash	1,563,100	729,050	1,162,104	345,679	433,074		3,311,048
Debt							
Fee Supported	5,565,100		635,000		2,300,000		
Total - Debt	5,565,100		635,000		2,300,000		
Total	7,128,200	729,050	1,797,104	345,679	2,733,074	1,925,048	3,311,048

Town of Needham
Capital Improvement Plan
January 2018

**Water Enterprise Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019	
Birds Hill Water Tank						340,000	340,000	R
DPW Central Avenue Storage Facility						Refer to General Fund	1,786,000	R
Filter Media Replacement	115,000	R 238,050	R					
Fire Flow Improvement Study				20,000	R			
Fleet - Heavy Duty Truck Class 7 Unit 14						239,404	239,404	R
Fleet - Medium Work Truck Class 4 Unit 22						115,644	115,644	R
Fleet - Pickup Truck Unit 21			41,604	R				
Fleet - Pickup Truck Unit 26				43,679	R			
Fleet - SUV Hybrid Unit 20					34,729	R		
Fleet - Tractor Excavator Unit 115					132,000	R		
Fleet - Trailer Unit 160	57,300	R						
Fleet - Van Unit 24					29,345	R		
Fuel Island Relocation and Upgrade					162,000	R		
Irrigation Supply Facility Design	80,000	R						
Mobile Record Keeping Devices GIS			35,000	R				
SCADA System Upgrade	435,000	R						
St Mary's Pump Station	5,565,100	D						

Town of Needham
Capital Improvement Plan
January 2018

**Water Enterprise Fund Capital
Current and Prior
Funding Sources**

Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019
Trail Improvement Project - Needham Reservoir					75,000		
Water Distribution System Improvements						830,000	830,000
Water Service Connections	160,000	R 200,000	R 200,000	R 200,000	R 1,000,000		D
Water Supply Development						400,000	
Water Supply Development		200,000	R 700,000	R			
Water System Rehabilitation Program					1,300,000		D
Water System Rehabilitation Program					82,000		R
Water System Rehabilitation Program		91,000	R 820,500	ADR			
Water System Rehabilitation Program	715,800	R					

- Funding Source**
- A = Transfer from another Financial Warrant Article
 - B = Operating Budget
 - C = CPA Fund Cash
 - D = Debt
 - E = Enterprise Fund Cash
 - G = General Fund Cash
 - O = Overlay Surplus
 - R = Retained Earnings
 - S = Stabilization Fund
 - T = CPA General Reserve
 - 1 = Community Housing Reserve
 - 2 = Historic Reserve
 - 3 = Open Space Reserve
 - 4 = CPA Free Cash
 - X = Excluded Debt

Town of Needham
Capital Improvement Plan
January 2018

All Capital Funds							
Funding Sources							
Description	Funded FY2014	Funded FY2015	Funded FY2016	Funded FY2017	Funded FY2018	Requested FY2019	Proposed FY2019
Current Year Requests						94,802,724	92,972,388
Cash							
Cash	5,566,941	2,667,260	2,432,606	2,729,117	6,468,467		9,183,869
Retained Earnings	2,319,100	1,448,145	1,534,536	625,131	1,245,416		5,957,519
Other Available Funds	1,152,000	268,219	4,035,373	1,312,408	7,963,000		4,675,000
Total - Cash	9,038,041	4,383,624	8,002,515	4,666,656	15,676,883		19,816,388
Debt							
Operating Revenues	9,847,500	1,700,000	5,735,000	769,000	21,725,000		7,751,000
CPA Surcharge					8,000,000		
Debt Excluded			7,000,000	58,305,000			65,405,000
Total - Debt	9,847,500	1,700,000	12,735,000	59,074,000	29,725,000		73,156,000
Total	18,885,541	6,083,624	20,737,515	63,740,656	45,401,883	94,802,724	92,972,388

Town of Needham
Capital Improvement Plan
January 2018

**Debt Service to Revenue
Issued, Authorized and Proposed
FY2019 - FY2023**

Description	2018	2019	2020	2021	2022	2023
Revenue						
General Fund Within the Levy *	\$146,959,701	\$153,016,108	\$159,758,460	\$167,173,818	\$173,421,791	\$179,916,953
General Fund Excluded from Levy **	\$7,019,086	\$9,177,378	\$10,933,867	\$12,015,087	\$13,730,670	\$14,149,565
CPA Revenue	\$2,681,539	\$2,597,274	\$2,662,206	\$2,728,761	\$2,796,980	\$2,866,905
RTS Revenue	\$1,219,607	\$1,230,303	\$1,269,856	\$1,283,727	\$1,284,737	\$1,284,858
Sewer Revenue	\$8,520,415	\$8,590,620	\$7,757,642	\$8,054,147	\$8,108,845	\$8,164,218
Water Revenue	\$5,845,584	\$5,888,539	\$5,931,925	\$5,975,288	\$6,018,258	\$6,064,274
Total Revenue	\$172,245,932	\$180,500,223	\$188,313,957	\$197,230,829	\$205,361,281	\$212,446,772
Debt Service						
General Debt (Table I)	\$4,362,022	\$4,590,483	\$5,368,853	\$6,048,548	\$5,669,739	\$5,236,444
CPA Debt (Table II)	\$449,163	\$441,494	\$1,195,525	\$1,425,150	\$1,249,716	\$1,214,581
RTS Debt (Table III)	\$150,000	\$150,000	\$178,750	\$181,710	\$171,700	\$160,690
Sewer Debt (Table IV)	\$1,500,000	\$1,500,000	\$596,117	\$821,006	\$803,373	\$785,691
Water Debt (Table V)	\$1,550,000	\$1,550,000	\$1,550,000	\$1,549,544	\$1,548,256	\$1,549,572
Gross Excluded Debt (Table VI)	\$7,762,773	\$9,872,526	\$11,629,015	\$12,710,235	\$14,425,818	\$14,844,713
Total Debt Service	\$15,773,958	\$18,104,504	\$20,518,260	\$22,736,192	\$23,868,601	\$23,791,691
Total Debt Service to Total Revenue	9.2%	10.0%	10.9%	11.5%	11.6%	11.2%
Total Debt Service to Total Revenue (less MSBA) **	8.8%	9.7%	10.6%	11.2%	11.3%	10.9%
General Debt Service to General Revenue	3.0%	3.0%	3.4%	3.6%	3.3%	2.9%

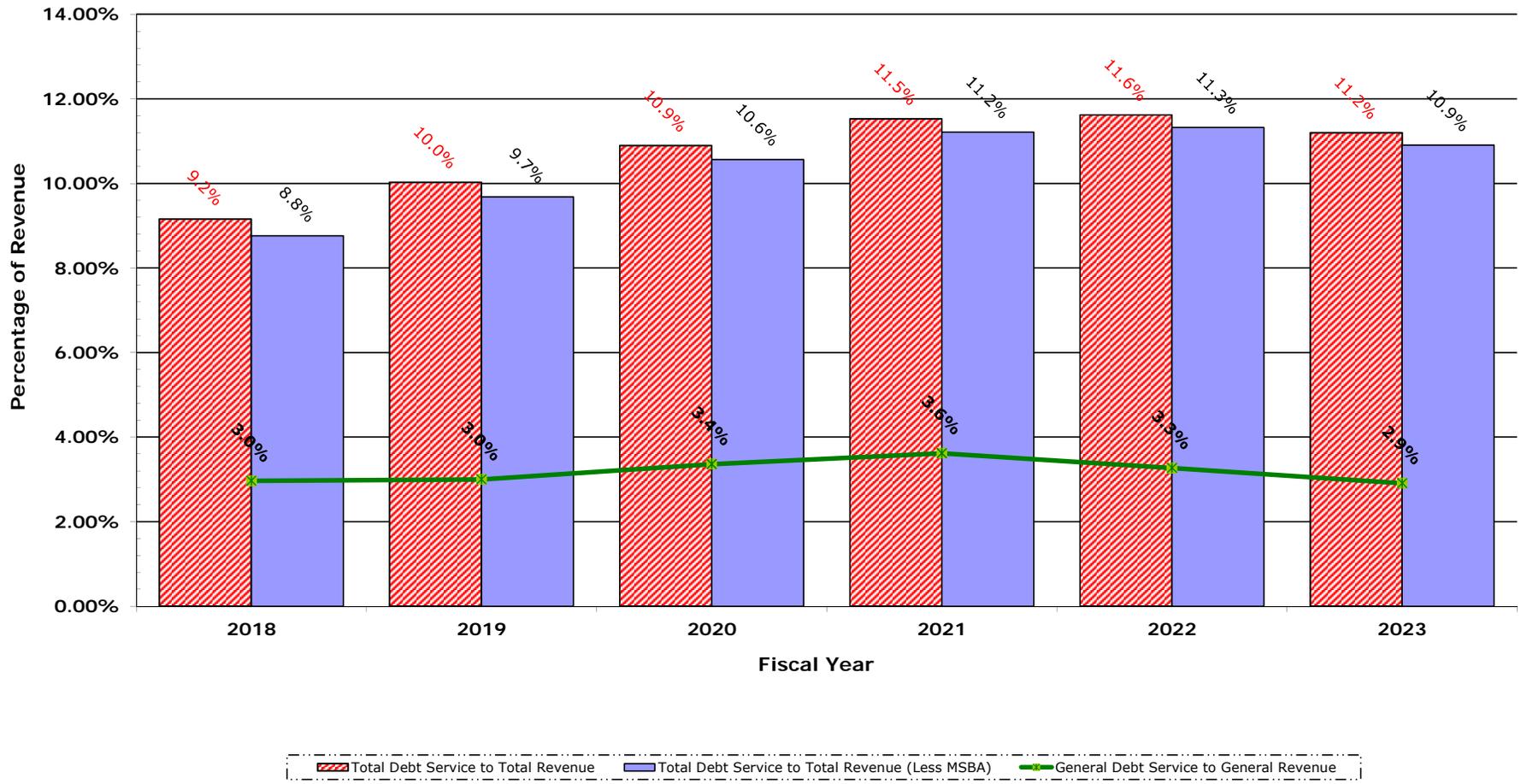
* General Fund revenue is based on the FY2019 - FY2023 ProForma

** Excludes Massachusetts School Building Assistance (MSBA) Revenue.

*** Uses net general fund debt excluded figure (or actual debt to be paid by Town after MSBA payment) see table VI.

Town of Needham
 Capital Improvement Plan
 January 2018

Projected Debt Service as a Percentage of Revenue



Town of Needham
Capital Improvement Plan
January 2018

Table I
General Fund Capital Projects
Proposed Funding by Debt
FY2019

Project	Budget	Estimated Debt Service Schedule				
	2018	2019	2020	2021	2022	2023
<u>General Fund Within the Levy</u>						
Public Works Infrastructure Program (2019)			\$67,500	\$64,000	\$60,500	\$57,000
Memorial Park Building and Grounds Improvements (2019)			\$107,380	\$527,760	\$502,850	\$481,150
DPW Seasonal Storage Facility (2019)			\$132,580	\$523,160	\$502,100	\$484,250
Projected New General Fund Debt Service#			\$307,460	\$1,114,920	\$1,065,450	\$1,022,400
General Fund Debt						
Authorized & Issued (refer to schedule)	\$2,962,171	\$2,522,886	\$2,080,968	\$1,953,378	\$1,751,439	\$1,563,594
Authorized Not Yet Issued & Short Term Proposed	\$1,399,851	\$2,067,597	\$2,980,425	\$2,980,250	\$2,852,850	\$2,650,450
			\$307,460	\$1,114,920	\$1,065,450	\$1,022,400
Total General Fund Debt Service Within the Levy	\$4,362,022	\$4,590,483	\$5,368,853	\$6,048,548	\$5,669,739	\$5,236,444
General Fund Within the Levy Revenue *	\$146,959,701	\$153,016,108	\$159,758,460	\$167,173,818	\$173,421,791	\$179,916,953
Debt Service % of General Fund Revenue^	3.0%	3.0%	3.4%	3.6%	3.3%	2.9%

^ Funding from the Debt Service Stabilization Fund is anticipated to pay the debt expense that is above the three percent measure.

Town of Needham
 Capital Improvement Plan
 January 2018

Table II
CPA Capital Projects
Proposed Funding by Debt
FY2019

Project	Budget	Estimated Debt Service Schedule				
	2018	2019	2020	2021	2022	2023
CPA Fund Debt						
No New Authorizations Proposed for FY2019						
Projected New CPA Fund Debt Service						
CPA Fund Debt						
Authorized & Issued	\$449,163	\$441,494	\$430,525	\$416,675	\$405,041	\$395,256
Authorized Not Yet Issued & Short Term Proposed	\$1	\$0	\$765,000	\$1,008,475	\$844,675	\$819,325
Total CPA Fund Debt Service	\$449,163	\$441,494	\$1,195,525	\$1,425,150	\$1,249,716	\$1,214,581

Town of Needham
Capital Improvement Plan
January 2018

Table III
Recycling & Solid Waste Disposal Capital Projects
Proposed Funding by Debt
FY2019

Project	Budget	Estimated Debt Service Schedule				
	2018	2019	2020	2021	2022	2023
<u>Recycling & Solid Waste Disposal Enterprise (RTS)</u>						
RTS Property Improvement (2019)			\$137,150	\$181,710	\$171,700	\$160,690
Projected New RTS Debt Service			\$137,150	\$181,710	\$171,700	\$160,690
RTS Enterprise Fund Debt						
Authorized & Issued (refer to schedule)	\$143,654	\$58,800	\$41,600			
Authorized Not Yet Issued & Short Term Proposed	\$6,346	\$91,200	\$137,150	\$181,710	\$171,700	\$160,690
Total RTS Debt Service	\$150,000	\$150,000	\$178,750	\$181,710	\$171,700	\$160,690

Town of Needham
 Capital Improvement Plan
 January 2018

Table IV
Sewer Fund Capital Projects
Proposed Funding by Debt
FY2019

Project	Budget	Estimated Debt Service Schedule				
	2018	2019	2020	2021	2022	2023
<u>Sewer Enterprise</u>						
No New Authorizations Proposed for FY2019						
Sewer System Inflow & Infiltration Removal (2020)				\$272,000	\$260,800	\$249,600
Projected New Sewer Debt Service				\$272,000	\$260,800	\$249,600
Sewer Enterprise Fund Debt						
Authorized & Issued (refer to schedule)	\$1,025,700	\$953,472	\$549,917	\$505,256	\$501,273	\$497,241
Authorized Not Yet Issued & Short Term Proposed	\$474,300	\$546,528	\$46,200	\$43,750	\$41,300	\$38,850
				\$272,000	\$260,800	\$249,600
Total Sewer Debt Service	\$1,500,000	\$1,500,000	\$596,117	\$821,006	\$803,373	\$785,691

Town of Needham
Capital Improvement Plan
January 2018

Table V
Water Fund Capital Projects
Proposed Funding by Debt
FY2019

Project	Budget	Estimated Debt Service Schedule				
	2018	2019	2020	2021	2022	2023
<u>Water Enterprise</u>						
No New Authorizations Proposed for FY2019						
Water Pressure Improvements (2021)					\$84,000	\$146,000
Water Main Replacement Project (2020)				\$517,400	\$469,963	\$452,100
Projected New Water Debt Service				\$517,400	\$553,963	\$598,100
Water Enterprise Fund Debt						
Authorized & Issued (refer to schedule)	\$1,291,376	\$1,104,550	\$557,731	\$533,994	\$520,994	\$503,022
Authorized Not Yet Issued & Short Term Proposed	\$258,624	\$445,450	\$992,269	\$498,150	\$473,300	\$448,450
				\$517,400	\$553,963	\$598,100
Total Water Debt Service	\$1,550,000	\$1,550,000	\$1,550,000	\$1,549,544	\$1,548,256	\$1,549,572

Town of Needham
Capital Improvement Plan
January 2018

Table VI
Capital Projects
Proposed Funding by Debt Exclusion
FY2019

Project	Budget	Estimated Debt Service Schedule				
	2018	2019	2020	2021	2022	2023
General Fund Debt Excluded						
Public Safety Buildings (2019) - Series One			\$950,000	\$929,000	\$908,000	\$887,000
Public Safety Buildings (2019) - Series Two				\$350,000	\$2,100,000	\$2,300,000
Public Safety Buildings (2019) - Series Three				\$350,000	\$700,000	\$1,294,175
Projected New General Fund Debt Service Excluded			\$950,000	\$1,629,000	\$3,708,000	\$4,481,175
General Fund Debt Excluded						
Authorized & Issued (refer to schedule)	\$7,160,884	\$6,930,914	\$6,467,365	\$5,377,585	\$5,196,868	\$5,025,288
Authorized Not Yet Issued & Short Term Proposed	\$601,889	\$2,941,613	\$4,211,650	\$5,703,650	\$5,520,950	\$5,338,250
			\$950,000	\$1,629,000	\$3,708,000	\$4,481,175
Total General Fund Excluded Debt Service	\$7,762,773	\$9,872,526	\$11,629,015	\$12,710,235	\$14,425,818	\$14,844,713
Projected SBA Payments/Other Adjustments	\$743,687	\$695,148	\$695,148	\$695,148	\$695,148	\$695,148
Net General Fund Excluded Debt Service *	\$7,019,086	\$9,177,378	\$10,933,867	\$12,015,087	\$13,730,670	\$14,149,565

* Before other offsets and credits

Town of Needham
Capital Improvement Plan
January 2018

**Previously Approved Debt Funded Capital
Open Authorizations
Balances Not Yet Issued**

Approved	Project	Town Meeting	Art	Authorized	Balance
2008	Sewer System Rehabilitation I/I Work	16-May-07	45	\$1,806,800	\$59,159
2014	St Mary's Pumping Station	13-May-13	47	\$5,565,100	\$135,000
2015	Central Avenue/Elliot Street Bridge	12-May-14	39	\$900,000	\$440,000
2016	Central Avenue/Elliot Street Bridge	11-May-15	43	\$2,000,000	\$440,000
2016	Water System Rehabilitation Program	11-May-15	47	\$635,000	\$307,000
2016	High School Cafeteria Construction	02-Nov-15	11	\$2,100,000	\$85,000
2017	RTS Front-End Loader	02-May-16	46	\$269,000	\$6,000
2017	Property Acquisition - 609 Central Avenue	09-May-16	7	\$762,500	\$32,500
2017	Public Works Infrastructure Program	11-May-16	44	\$500,000	\$340,000
2017	Central Avenue Elementary School	05-Oct-16	2	\$57,542,500	\$56,542,500
2018	Water Service Connections	01-May-17	50	\$1,000,000	\$1,000,000
2018	Water Distribution System Improvements	01-May-17	51	\$1,300,000	\$1,300,000
2018	Rosemary Recreational Complex - CPA	08-May-17	33	\$8,000,000	\$8,000,000
2018	Rosemary Recreational Complex - GF	08-May-17	33	\$3,000,000	\$3,000,000
2017	High School Expansion Design	10-May-17	43	\$950,000	\$950,000
2018	Wastewater System Rehabilitation	10-May-17	48	\$600,000	\$600,000
2017	Public Safety Building & Station 2 Design	02-Oct-17	11	\$3,750,000	\$3,750,000
2017	High School Expansion Construction	02-Oct-17	13	\$11,125,000	\$11,125,000
Total				\$101,805,900	\$88,112,159

The above projects are in various stages of completion and therefore the amount and timing of each Note and Bond issue has not yet been determined. The debt retirement will be structured to fit within the proposed budget allocation shown in the debt tables.

Town of Needham
Capital Improvement Plan
January 2018

**Town of Needham
Current Long Term Debt Service Obligations
Inclusive of the January 17, 2017 Bond Issue**

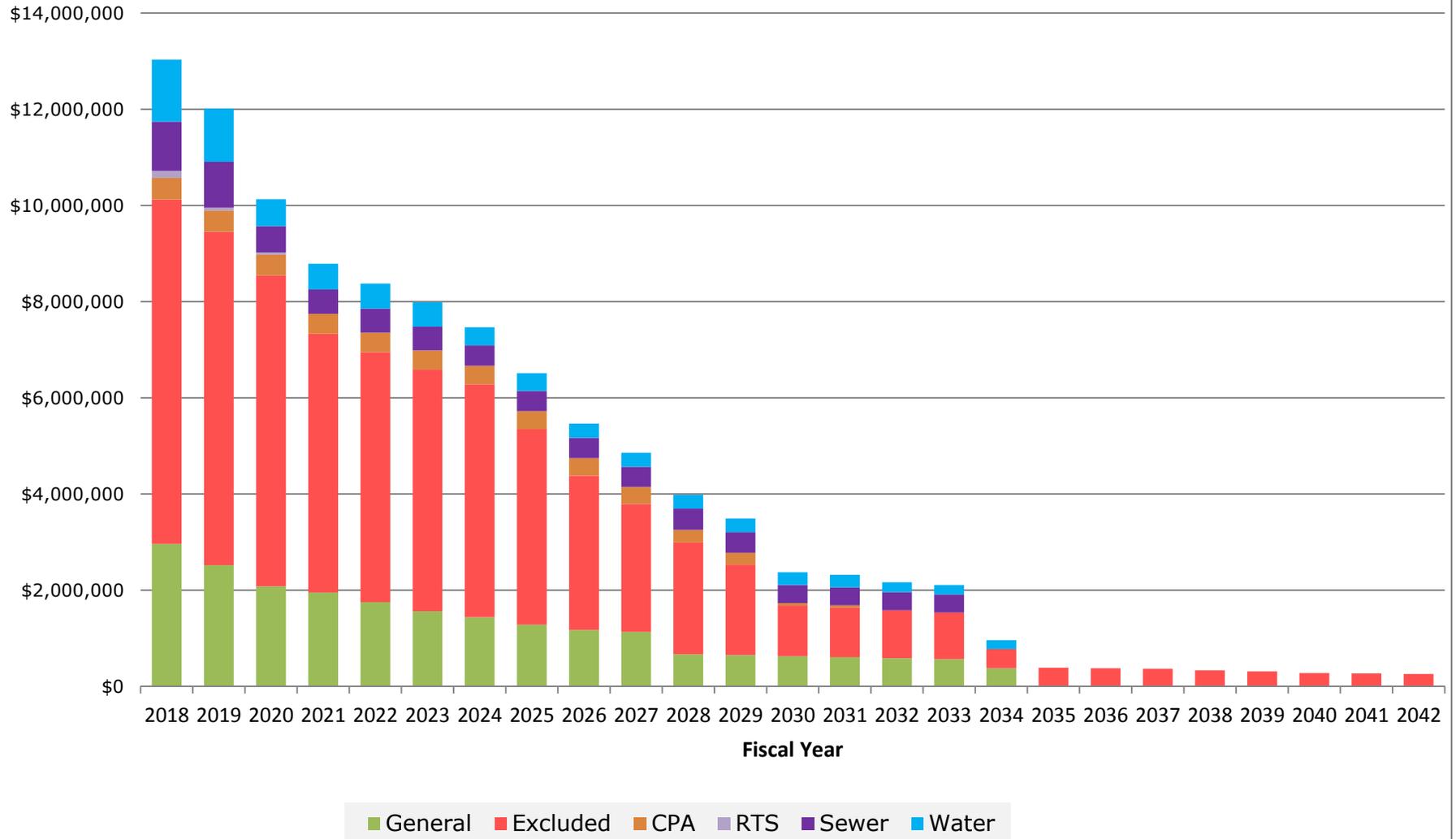
Fiscal Year	General	Excluded	CPA	RTS	Sewer	Water	Total
2018	\$2,962,170.81	\$7,160,884.30	\$449,162.50	\$143,654.44	\$1,025,700.33	\$1,291,376.31	\$13,032,948.69
2019	\$2,522,886.17	\$6,930,913.75	\$441,493.75	\$58,800.00	\$953,472.34	\$1,104,549.64	\$12,012,115.65
2020	\$2,080,968.22	\$6,467,365.00	\$430,525.00	\$41,600.00	\$549,916.96	\$557,731.18	\$10,128,106.36
2021	\$1,953,377.52	\$5,377,585.00	\$416,675.00		\$505,256.32	\$533,993.60	\$8,786,887.44
2022	\$1,751,438.77	\$5,196,867.50	\$405,040.63		\$501,272.93	\$520,993.56	\$8,375,613.39
2023	\$1,563,593.77	\$5,025,287.50	\$395,256.26		\$497,240.95	\$503,022.42	\$7,984,400.90
2024	\$1,437,680.02	\$4,843,295.00	\$384,906.26		\$424,559.50	\$377,413.08	\$7,467,853.86
2025	\$1,282,977.52	\$4,062,835.00	\$374,762.51		\$423,230.66	\$368,595.41	\$6,512,401.10
2026	\$1,172,002.52	\$3,208,210.00	\$364,681.26		\$421,802.39	\$296,002.26	\$5,462,698.43
2027	\$1,132,584.39	\$2,659,650.00	\$354,306.26		\$420,276.63	\$289,632.26	\$4,856,449.54
2028	\$667,601.26	\$2,327,367.50	\$259,996.88		\$443,252.24	\$283,785.00	\$3,982,002.88
2029	\$649,915.64	\$1,885,768.75	\$241,637.50		\$430,929.00	\$283,288.06	\$3,491,538.95
2030	\$626,611.27	\$1,053,907.50	\$51,812.50		\$374,907.65	\$267,663.04	\$2,374,901.96
2031	\$607,438.76	\$1,027,148.75	\$50,625.00		\$374,987.84	\$261,387.51	\$2,321,587.86
2032	\$587,577.50	\$996,697.50			\$375,070.14	\$206,775.00	\$2,166,120.14
2033	\$567,080.00	\$969,613.76			\$375,154.05	\$195,650.00	\$2,107,497.81
2034	\$377,800.00	\$397,856.26				\$184,600.00	\$960,256.26
2035		\$387,943.76					\$387,943.76
2036		\$377,650.00					\$377,650.00
2037		\$366,975.00					\$366,975.00

Town of Needham
 Capital Improvement Plan
 January 2018

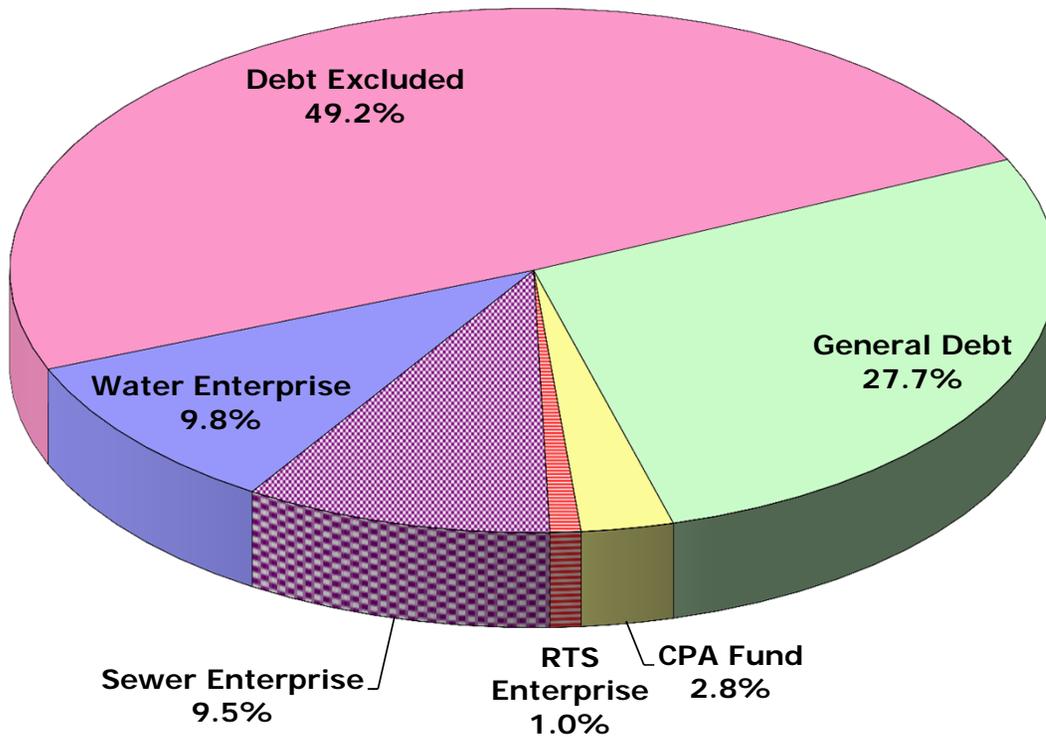
Town of Needham
Current Long Term Debt Service Obligations
Inclusive of the January 17, 2017 Bond Issue

Fiscal Year	General	Excluded	CPA	RTS	Sewer	Water	Total
2038		\$334,775.00					\$334,775.00
2039		\$313,375.00					\$313,375.00
2040		\$278,750.00					\$278,750.00
2041		\$270,000.00					\$270,000.00
2042		\$260,000.00					\$260,000.00
2043							

Current Total Annual Long Term Debt Service
 By Category
 FY2018 - FY2043



**FY2018
Debt Service
Share of Total**



- General Debt
- CPA Fund
- ▨ RTS Enterprise
- ▨ Sewer Enterprise
- ▨ Water Enterprise
- ▨ Debt Excluded

**Projected Gross Debt Service
\$15,773,958**

Town of Needham
Capital Improvement Plan
January 2018

TOWN OF NEEDHAM SCHEDULE OF ISSUED LONG TERM DEBT SERVICE						DEBT SERVICE							
Project	TM Vote	Art	Amount Issued	Final Maturity	Average Rate*	2018	2019	2020	2021	2022	2023	2024 - 2028	After 2028
Central Ave & Elliot Street Bridge Construction	May-15	43	\$500,000	Jan-27	4.00%	69,889	68,000	66,000	64,000	62,000	60,000	220,000	
Central Ave & Elliot Street Bridge Design	May-14	39	\$250,000	Nov-18	3.67%	66,250	63,750						
DPW Garage Bays	May-13	42	\$800,000	May-24	2.09%	91,600	90,000	88,400	86,800	85,200	83,600	82,000	
High School Cafeteria Construction	Nov-15	11	\$1,500,000	Jan-27	4.00%	209,667	204,000	198,000	192,000	186,000	180,000	660,000	
Kendrick Street Bridge Repair	May-10	35	\$750,000	Aug-21	2.21%	82,688	81,188	79,594	77,813	75,938			
MWPAT 98-92 (Stormwater)	May-98	7	\$364,979	Aug-19	(see note)	31,149	29,874	28,567					
Pollard School Boiler Replacement	May-13	40	\$95,000	May-18	2.00%	20,400							
Pollard School Boiler Replacement	May-13	40	\$565,000	Jul-21	3.22%	80,150	78,050	75,950	73,500	71,050			
Pollard School Roof Replacement	Nov-10	10	\$725,000	Jul-22	3.67%	90,125	82,600	79,800	77,000	74,200	71,400		
Property Acquisition - 37-39 Lincoln Street	May-12	31	\$25,000	May-18	2.00%	5,100							
Property Acquisition - 37-39 Lincoln Street	May-12	31	\$605,000	Nov-32	3.39%	45,750	44,550	43,350	42,300	41,400	40,500	188,963	164,138
Property Acquisition - 51 Lincoln Street	Nov-12	17	\$150,000	May-18	2.00%	35,700							
Property Acquisition - 51 Lincoln Street	Nov-12	17	\$950,000	Nov-32	3.39%	74,575	72,575	70,575	68,825	67,325	65,825	283,444	246,206
Property Acquisition - 59 Lincoln & 89 School Streets	May-12	8	\$117,500	May-18	2.00%	25,500							
Property Acquisition - 59 Lincoln & 89 School Streets	May-12	8	\$1,005,000	Nov-32	3.39%	76,250	74,250	72,250	70,500	69,000	67,500	314,938	273,563
Property Acquisition - 66 - 70 Chestnut Street	Nov-13	22	\$1,330,000	Nov-33	3.35%	110,950	108,150	105,350	102,550	99,750	96,950	443,275	457,800

Town of Needham
Capital Improvement Plan
January 2018

TOWN OF NEEDHAM SCHEDULE OF ISSUED LONG TERM DEBT SERVICE						DEBT SERVICE							
Project	TM Vote	Art	Amount Issued	Final Maturity	Average Rate*	2018	2019	2020	2021	2022	2023	2024 - 2028	After 2028
Property Acquisition 59 Lincoln Street & 89 School Street	May-12	8	\$52,500	Jul-32	2.93%	4,210	4,105	3,985	3,865	3,745	3,625	13,893	10,695
Public Services Administration Building	Oct-08	5	\$100,000	Jul-22	3.69%	12,150	11,800	11,400	11,000	10,600	10,200		
Public Services Administration Building (Series I)	Oct-08	5	\$4,000,000	Aug-26	3.16%	312,525	306,225	299,325	292,125	284,625	276,825	946,388	
Public Services Administration Building (Series II)	Oct-08	5	\$1,000,000	Dec-24	3.07%	82,356	80,488	78,538	86,438	84,094	81,563	155,250	
Public Works Infrastructure Program	May-10	36	\$306,500	Jul-17	2.72%	10,150							
Public Works Infrastructure Program	May-11	39	\$600,000	Jul-17	2.82%	121,800							
Public Works Infrastructure Program	May-13	41	\$100,000	May-18	2.00%	25,500							
Public Works Infrastructure Program	May-12	33	\$210,000	May-18	2.00%	51,000							
Public Works Infrastructure Program	May-10	36	\$129,000	May-18	2.00%	30,600							
Public Works Infrastructure Program	May-11	39	\$150,000	May-18	2.00%	35,700							
Public Works Infrastructure Program	May-12	33	\$190,000	Nov-18	3.67%	50,350	48,450						
Public Works Infrastructure Program	May-13	41	\$500,000	Nov-18	3.60%	132,500	127,500						
Public Works Infrastructure Program	May-14	38	\$580,000	Nov-18	3.67%	153,700	147,900						
Public Works Infrastructure Program	May-15	42	\$750,000	Jan-21	4.00%	229,833	222,000	214,000	156,000				
Senior Center (Series I)	Nov-11	14	\$1,000,000	Nov-32	3.38%	75,506	73,506	71,506	69,756	68,256	66,756	311,219	251,291
Senior Center (Series II)	Nov-11	14	\$5,050,000	Jul-33	3.54%	398,575	390,925	383,275	374,350	365,425	357,775	1,642,444	1,676,406

Town of Needham
Capital Improvement Plan
January 2018

TOWN OF NEEDHAM SCHEDULE OF ISSUED LONG TERM DEBT SERVICE						DEBT SERVICE							
Project	TM Vote	Art	Amount Issued	Final Maturity	Average Rate*	2018	2019	2020	2021	2022	2023	2024 - 2028	After 2028
Senior Center (Series III)	Nov-11	14	\$1,050,500	May-34	2.83%	78,200	77,100	76,000	74,900	73,800	72,700	324,925	336,325
Street & Traffic Light Improvements	May-08	42	\$25,000	Nov-17	3.34%	5,100							
Title V Loans	May-97	64	\$85,894	Aug-19	(see note)	5,391	5,120	4,854					
Town Hall	May-09	35	\$385,000	Aug-26	2.63%	31,281	30,781	30,250	29,656	29,031	28,375	106,109	
TOTAL GENERAL FUND						2,962,171	2,522,886	2,080,968	1,953,378	1,751,439	1,563,594	5,692,846	3,416,423
Broadmeadow School	May-00	31	\$8,400,000	Nov-23	3.00%	828,300	801,325	771,225	741,425	708,700	678,000	642,600	
Eliot School	May-00	32	\$2,562,000	Nov-24	3.94%	346,840	314,400	304,400	294,400	284,400	269,500	509,600	
High Rock & Pollard School Projects	May-07	41	\$429,470	Aug-26	4.00%	80,760	78,285	75,660	68,360	66,160	63,960	212,010	
High Rock & Pollard School Projects (Series III)	May-07	41	\$2,253,010	Aug-27	4.00%	370,216	358,623	342,460	327,160	312,060	297,160	1,298,110	
High Rock & Pollard School Projects (Series IV)	May-07	41	\$10,500,000	Aug-28	3.35%	772,600	758,031	742,075	720,500	703,313	685,438	3,129,500	561,000
High Rock School Design	Nov-06	9	\$187,770	Aug-26	4.00%	33,965	32,934	31,840	30,840	29,840	28,840	89,790	
High School (Series IIA)	May-03	31	\$2,991,900	Aug-24	4.00%	682,050	660,188	602,700	582,900	558,200	538,600	1,008,800	
High School (Series IIB)	Feb-05	1	\$782,850	Aug-26	4.00%	142,565	138,234	128,740	124,740	115,840	112,040	408,690	
High School (Series III)	Feb-05	1	\$3,850,000	Jun-28	3.42%	275,450	267,450	259,450	253,450	247,200	240,450	1,001,000	
High School Series 1	May-03	31	\$4,775,000	Nov-25	3.97%	674,300	653,700	589,000	560,400	542,000	523,600	1,441,400	
Library Project	May-03	30	\$6,510,000	Dec-19	3.00%	870,550	830,475	796,775					

Town of Needham
Capital Improvement Plan
January 2018

TOWN OF NEEDHAM SCHEDULE OF ISSUED LONG TERM DEBT SERVICE						DEBT SERVICE	DEBT SERVICE						
Project	TM Vote	Art	Amount Issued	Final Maturity	Average Rate*	2018	2019	2020	2021	2022	2023	2024 - 2028	After 2028
Newman School Extraordinary Repairs (Series I)	Nov-09	14	\$1,000,000	Dec-19	2.62%	107,375	104,500	101,500					
Newman School Extraordinary Repairs (Series III)	Nov-09	14	\$5,000,000	Oct-28	3.35%	389,700	383,750	373,600	359,600	348,925	341,050	1,570,325	244,800
Newman School Extraordinary Repairs (Series IV)	Nov-09	14	\$9,000,000	Jul-32	2.82%	662,240	646,420	628,340	610,260	592,180	574,100	2,659,420	2,384,480
Newman School Extraordinary Repairs (Series V)	Nov-09	14	\$2,200,000	Nov-32	3.39%	167,750	163,350	158,950	155,100	151,800	148,500	692,863	601,838
Owens Farm Land Purchase	Nov-15	13	\$7,000,000	Jan-42	3.70%	613,428	600,900	516,900	505,700	494,500	483,300	2,248,500	4,794,500
Property Acquisition - 609 Central Street	May-16	7	\$730,000	Jan-39	3.68%	142,795	138,350	43,750	42,750	41,750	40,750	188,750	333,844
TOTAL GENERAL FUND EXCLUDED						7,160,884	6,930,914	6,467,365	5,377,585	5,196,868	5,025,288	17,101,358	8,920,461
Town Hall (Series II)	May-09	35	\$3,500,000	Oct-28	3.36%	272,113	267,969	260,900	251,150	243,716	238,231	1,097,191	188,700
Town Hall (Series III)	May-09	35	\$1,225,000	Aug-26	2.63%	100,100	98,500	96,800	94,900	92,900	90,800	339,550	
Town Hall (Series IV)	May-09	35	\$970,000	Jul-30	2.80%	76,950	75,025	72,825	70,625	68,425	66,225	301,913	155,375
TOTAL COMMUNITY PRESERVATION FUND						449,163	441,494	430,525	416,675	405,041	395,256	1,738,653	344,075
Front-End Loader	May-16	46	\$205,000	Jan-20	4.00%	118,154	58,800	41,600					
Soil Remediation	Nov-12	16	\$140,000	Nov-17	3.31%	25,500							
TOTAL RTS ENTERPRISE						143,654	58,800	41,600					
MWPAT 97-13	Oct-96	8	\$67,700	Aug-18	(see note)	6,107	6,150						
MWPAT 97-33	Oct-96	7	\$180,300	Aug-18	(see note)	16,208	16,195						

Town of Needham
Capital Improvement Plan
January 2018

TOWN OF NEEDHAM SCHEDULE OF ISSUED LONG TERM DEBT SERVICE						DEBT SERVICE							
Project	TM Vote	Art	Amount Issued	Final Maturity	Average Rate*	2018	2019	2020	2021	2022	2023	2024 - 2028	After 2028
MWPAT 97-63	May-97	46	\$1,019,778	Aug-18	(see note)	91,683	91,840						
MWPAT 98-10	May-97	42	\$130,200	Aug-18	(see note)	11,683	11,685						
Sewer - West Street Force Main	May-98	59	\$568,400	May-19	3.98%	70,233	67,600						
Sewer - West Street Pumping Station	May-98	58	\$1,252,300	May-19	3.98%	149,269	147,680						
Sewer Pump Station Design Reservoir B	May-09	54	\$90,000	Jul-17	2.79%	15,225							
Sewer Pump Station GPA	May-05	49	\$500,000	Jun-19	3.17%	54,000	52,000						
Sewer Pump Station GPA	May-08	45	\$550,000	Aug-28	3.36%	41,225	40,438	39,575	33,750	32,969	32,156	161,950	35,700
Sewer Pump Station Reservoir B	Nov-11	15	\$6,034,290	Jan-33	2.15%	374,066	374,129	374,192	374,256	374,323	374,391	1,873,021	1,874,949
Sewer Pump Station Reservoir B	Nov-11	15	\$78,491	Jan-18	2.15%	40,520							
Sewer Rehabilitation - Rte. 128 Area	Nov-05	9	\$145,000	Dec-19	2.59%	15,956	15,525	10,150					
Sewer Rehabilitation - Rte. 128 Area	Nov-05	9	\$500,000	Nov-22	4.00%	118,000	109,100	105,300	77,000	74,200	71,400		
Sewer Rehabilitation - Rte. 128 Area	Nov-05	9	\$320,000	Aug-28	3.39%	21,525	21,131	20,700	20,250	19,781	19,294	98,150	20,400
TOTAL SEWER ENTERPRISE						1,025,700	953,472	549,917	505,256	501,273	497,241	2,133,121	1,931,049
MWPAT Water DWS-08-24	May-08	47	\$765,335	Jul-30	2.00%	49,289	49,230	49,169	49,106	49,044	48,979	243,878	145,464
St Mary's Pump Station	May-13	47	\$1,700,000	Nov-33	3.36%	142,350	138,750	135,150	131,550	127,950	124,350	568,425	577,100
St Mary's Pump Station	May-13	47	\$1,995,000	May-34	2.85%	144,775	142,775	140,775	138,775	136,775	134,775	638,725	666,600

Town of Needham
Capital Improvement Plan
January 2018

TOWN OF NEEDHAM SCHEDULE OF ISSUED LONG TERM DEBT SERVICE						DEBT SERVICE	DEBT SERVICE	DEBT SERVICE	DEBT SERVICE	DEBT SERVICE	DEBT SERVICE	DEBT SERVICE	DEBT SERVICE
Project	TM Vote	Art	Amount Issued	Final Maturity	Average Rate*	2018	2019	2020	2021	2022	2023	2024 - 2028	After 2028
Water Distribution System Improvements	May-09	56	\$400,000	Dec-24	3.02%	31,031	30,313	29,563	28,813	28,031	27,188	51,750	
Water Main Improvements	May-08	47	\$400,000	Nov-20	3.95%	52,000	50,400	48,800	47,200	45,600	44,000	83,200	
Water Service Connections	May-06	70	\$55,000	Aug-19	2.51%	5,350	5,219	5,075					
Water Storage Tank Rehabilitation	May-08	48	\$655,000	Jun-19	3.16%	70,200	67,600						
Water System Rehabilitation	May-15	47	\$260,000	Jan-20	4.00%	210,342	32,400	31,200					
Water System Rehabilitation - Rte. 128 Area	May-06	71	\$212,000	Jun-19	3.16%	21,600	20,800						
Water System Rehabilitation - Rte. 128 Area	May-06	71	\$638,000	Nov-22	4.00%	116,660	114,900	111,100	131,800	127,000	117,300		
Water System Rehabilitation - Rte. 128 Area	May-06	71	\$100,000	Aug-28	3.41%	7,175	7,044	6,900	6,750	6,594	6,431	29,450	10,200
Water Treatment Facility	May-96	47	\$1,710,000	May-19	3.98%	201,393	204,360						
Water Treatment Facility	Nov-97	18	\$1,994,300	May-19	3.98%	239,211	240,760						
TOTAL WATER ENTERPRISE						1,291,376	1,104,550	557,731	533,994	520,994	503,022	1,615,428	1,399,364
TOTAL DEBT SERVICE						13,032,948	12,012,116	10,128,106	8,786,887	8,375,613	7,984,401	28,281,406	16,011,372

Note: Massachusetts Water Pollution Abatement Trust (MWPAT) loans include many communities and multiple loans and are restructured from time to time by the Trust. The program provides grants and other financial assistance which in some instances results in a low or no interest rate loan.

* Rate reflects the average coupon rate over the life of the loan.