



Town of Dunstable

Capital Plan

FY2018-FY2022

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1. Introduction

1.1. Background

In FY 2015, The Board of Selectmen, appointed an ad hoc Capital Planning Committee. This committee, working with the Board of Selectmen and Advisory Board (FinCom), will each year at the start of the budget process prepare a plan to financially forecast large improvement that the Town may need to invest in. At the Town Meeting in May 2016, the Town voted to approve the Capital Planning Committee bylaw to solidify this committee and its process.

1.2. Introduction to the Plan

The bylaw proposed to establish the Capital Planning Committee lays out the function of the committee to review the capital requirements of the Town and to make recommendations for Town Meeting approval. These recommendations are compiled in a 5 year CIP that will be updated annually and submitted to the annual Town Meeting.

The plan will include future projects, programs, improvements, and acquisitions having a useful life of at least five years and a cost of at least \$10,000. The Capital Planning Committee will work with the Department Heads as well as the various Town Boards and Commissions to identify these capital items for inclusion in the plan. The Capital Planning Committee will consider the need of each request in relation to the others and the cost of proposed capital expenditures with regard to its effect on the financial position of the Town.

In evaluating and scheduling the requests, the Capital Planning Committee shall consider risks to public safety and health, deterioration of Town facilities, compliance with state and federal requirements, coordination with other capital requests, improvement of efficiency, systematic replacement, protection and conservation of resources, and maintenance of the level of service.

1.3. Plan Components

- Each capital item to be included in the plan begins with a request form. The form, as you will see in the ensuing pages, is headed by basic project information. In some cases the description and/or justification for the capital item are provided on separate pages.
- There are the criteria by which the project will be evaluated to determine its priority with respect to other requests. There are five such evaluative criteria which ask the following: is there another means to satisfy the need, does the item improve the level of service provided by the municipality, is the item a legal or regulatory requirement, is there an impact to the recurring operating budget, and is the project ready for implementation.
- A schedule of expenditure must be prepared. This includes prior year costs on various aspects that may be present for a given project. Not every project will require all of the elements. This section provides the public an accurate picture of the entirety of the cost of a project from conception to implementation.
- There is a section detailing the impact to the operational budget, alluded to earlier. Here the Committee is looking to see if the capital item will generate revenue, impact personnel, or impact operating costs.

- The funding source must also be determined. This can range from borrowing to operational budgets, a description of which follows.

1.4. Funding Sources

Debt Financing

Debt financing is common in cities and towns. As with buying a house, a well-managed debt plan can allow one to buy large items (e.g. a house) when a purchase of that magnitude would not necessarily fit into a single year's annual budget.

Debt projects would be ones such as:

- Land acquisition
- Park improvements
- Information technology upgrades
- Public building improvements
- Street repaving

The Town Meeting authorizes the municipality to raise revenue for capital improvements. Interest rates on bond payments are based on market conditions and the Town bond rating, as determined by private rating agencies. The Town uses two different types of financial instruments when it debt finances any project. These instruments are General Obligation (GO) Bonds and Bond Anticipation Notes (BANs). Both mechanisms are commonly used by municipalities to fund capital project needs.

General Obligation (GO) Bonds and Bond Anticipation Notes (BANs)

GO bonds are long-term debt instruments that cities and towns may use to fund large projects. Funds are obtained through the sale of these instruments in the bond market. GO bonds are backed by the full faith and credit of the Town of Dunstable. As such, investors are guaranteed the Town will pay its obligation through the Town's taxes. Typically, bonds run for a period of twenty years. Bond Anticipation Notes (BANs) are short-term financing instruments the Town utilizes to borrow funds while projects are ongoing, or shortly thereafter. Generally, the Town pays only the interest on these funds, which runs around 2 percent or lower. BANs are usually utilized for one to two year periods.

Grants

The Town will seek to reduce bond funds wherever possible by looking to grants for projects such as fire engine replacements, the rehabilitation of roads, and energy efficiency projects. One source of grants is from other levels of government, for example the Environmental Protection Agency, MA Department of Health and Human Services, U.S. Housing and Urban Development, MA Department of Environmental Services, and the Department of Transportation. Generally, these Federal and State sources provide an outright grant or matching funds to go with locally raised funds. The Town will also pursue non-governmental private grants when applicable.

One-Time Revenue

One time revenue is not a good funding source for the Town's annual operating budget because operating costs recur year-to-year. In year two of any scenario, use of one time revenue leads to either budget cuts or increased reliance on property taxes. However, one-time revenue is an excellent funding source for capital projects. This would both reduce reliance on bond financing and eliminate potential future impacts on property taxes. In order to limit the long-term costs associated with the CIP, one-time revenue will be used wherever possible in lieu of debt financing.

General Fund Revenue

The Town's General Fund Budget will ultimately pay a portion of the annual debt costs associated with this project. The Town has made substantial reductions in expenses in the past. These reductions make it very difficult to procure large, needed capital improvements. It should be noted that general fund expenditures can reduce the need for future capital improvement projects. For example, funding for custodial and maintenance staff reduces the need for major building renovations necessitated by unaddressed building issues. Vehicle maintenance staff can, and has, substantially prolonged the life of Town vehicles. Proper funding of these program areas is essential in the preservation of Town assets. In addition, some items that would aid in this maintenance, and are too small in value to be considered a true capital improvement, should be paid for from the Town's annual budget. For example, custodial and maintenance equipment that aids in facility upkeep would fall under this category. Regular software updates also reduce the need for major file conversion projects that can occur when systems are out of date.

1.5. Community Preservation Committee

The Community Preservation Act (CPA) is a funding tool that helps communities preserve open space and historic sites, create affordable housing, and develop outdoor recreational facilities. CPA allows communities to create a local fund for open space protection, historic preservation, affordable housing and outdoor recreation. CPA funds are raised locally through a surcharge of 3% of the tax levy against real property.

Projects are only eligible for CPA funding if they fit in a **green** box below.

	Open Space	Historic	Recreation	Housing
Acquire	Yes	Yes	Yes	Yes
Create	Yes	No	Yes	Yes
Preserve	Yes	Yes	Yes	Yes
Support	No	No	No	Yes
Rehabilitate and/or Restore	Yes, if acquired or created with CPA funds	Yes	Yes (new 7/8/2012)	Yes, if acquired or created with CPA funds

Chart adapted from "Recent Developments in Municipal Law", Massachusetts Department of Revenue, October 2012. <http://www.communitypreservation.org/content/chart-allowable-uses>

Some of the Town of Dunstable CPA projects to date include:

- Ferrari Farm - "Purchase of Ferrari Farm, a ""keystone"" parcel containing five existing protected areas.
- Blanchard Hill Clearing and Stone Arched Bridge "Creation of a Picnic Area and scenic vista. Preservation of Historic Stone Arched Bridge through the creation of emergency access for police/fire vehicles.
- National Register Project "To finalize Town Center Historic District Project.
- Union School windows "To supplement cost of replacement windows in order to upgrade to use of historically accurate replacement windows.
- McGovern's Farm Wall Additional Engineering costs to preserve and enhance the Historic nature of the retainer wall on Rt. 113.
- Central Cemetery monuments restoration "18th and 19th century monuments of Central Cemetery restoration and repair.
- Town Records Preservation Project "This project will fund the preservation of Town Records, specifically to disband, clean, de-acidify, repair, and rebind Town Vital Records, Town Meeting Records, and Selectmen's Records for 18th, 19th and 20th Centuries. Records will be scanned, microfilmed and digitized.

1.6.Glossary of Terms

Capital Improvement Plan (CIP): The document setting forth in both dollars and narrative form the recommended and proposed capital projects the Town should be undertaking over the ensuing five-year period.

Capital Improvement: A project, undertaking or acquisition having a cost (either singularly or in aggregate) of \$10,000 or more and a useful life of (5) years or more.

Capital Planning Committee: The three (3) member committee, appointed by the Board of Selectmen, charged with the responsibility for developing the CIP.

Project Description: A title and/or narrative of moderate length describing in greater detail what is entailed in the proposed undertaking including background information on the need/rational for the proposal.

Prior Year Costs: Certain Projects identified in the five-year plan which have, either because of earlier initiation or planning action on the part of the Town, a prior year's costs associated with them. Where such was applicable, the prior year's cost (s) already incurred by the Town have been identified.

Plan Years: The five-year period represented by the Plan is July 1, 2017 through June 30, 2022.

Funding Source: The proposed method or means for funding the CIP item listed as recommended by the committee.

Operating Cost: The Committee's best estimate of the annual operating cost to be associated with a particular CIP item proposed to be carried out.

Engineering (Feasibility) Study: Certain Projects, while identified in the plan require more detailed professional examination upon which to make informed decisions. In such instances, the Committee has identified funding for such as an initial or preparatory step to be carried out before final recommendation/decisions are made on proposed funding for the entire undertaking.

Design: As the description would indicate, design is utilized in the plan to identify the step the Committee is proposing to be followed next for a particular project, i.e. the next step necessary to be in a position to actually go to bid and/or construction on the undertaking.

Total Cost: The total estimated cost to bring to completion a proposed CIP item including any prior year costs incurred in applicable.

2. FY2018 Capital Project Request Analysis

The table below is a 5-year roll-up of the capital requests by department. The subsequent sections in this report provide additional detail and analysis for those projects slated for 2018 expenditures.

Further backup material on these requests can be found in the appendix.

Capital Projects Requests	FY 18	FY 19	FY 20	FY 21	FY 22
Highway Department	\$165,000	\$110,000	\$65,000	\$169,000	\$0
Backhoe		\$110,000			
1 TON DUMP			\$65,000		
48K gvw Plow Truck/equipment	\$165,000				
Loader				\$169,000	
Library	\$100,000	\$0	\$0	\$0	\$0
Roof/Portico Repair	\$100,000				
Town Hall	\$68,000	\$140,000	\$0	\$0	\$0
Roofs/Windows Doors		\$140,000			
Stormwater Compliance	\$68,000	\$87,000	\$77,500	\$87,000	\$39,500
Water	\$200,000	\$0	\$0	\$0	\$0
Eng. Replacement Hydro-pneumatic Tanks	\$95,000				
Engineering - Rehabilitate Well #1	\$65,000				
Engineering - Well Site Access	\$40,000				
Fire	\$387,000	\$110,000	\$0	\$0	\$225,000
Engine Replacement	\$360,000				
Polaris Off Road Fire Fighting & Rescue	\$27,000				
Rescue Truck					\$225,000
Breathing Apparatus(SCBA)		\$110,000			
Communicatrions					
Police	\$16,000	\$59,000	\$0	\$20,500	\$0
Speed trailer	\$16,000				
New Roof		\$10,000			
Mechanical System (AC and furnace)				\$10,000	
Cruiser Tough books		\$10,500			
New Unmarked Police Utility Vehicle		\$38,500			
Parking lot expansion and repair				\$10,500	
Total	\$936,000	\$419,000	\$65,000	\$189,500	\$225,000

2.1.Fire Department

The Fire Department provides multiple services for the town. Firefighting services requires reliable and well equipped vehicles for the basic mission of putting out fires. These include trucks specially designed for structure fire, others designed for forest fires. The Fire Department relies on trucks with extra capacity water tanks, and trucks designed specifically for pumping water. The mission of the fire department extend beyond traditional firefighting, providing the town with first responders for medical emergency services, response to motor vehicle accidents, specifying and maintaining communication services, and providing the necessary training for personnel (both town employees and volunteers) to safely perform these duties and effectively deliver these services to the town.

Below is a table of Fire Department's major capital equipment

ID #	Make / Model	Purchase Year/ In service yr	Yr of Chassis	PURCHASE COST	Description of use	mileage/hours	Expected year to replace	Replacement Cost
Engine-2 (Note 1)	Ford F700	1986/1987	1986	\$60K	Engine/Forestry	7601 miles	2016	\$360
Rescue 1 (Note 2)	Ford F450	1999/2000	1999	\$45K	Rescue	6749 miles	2022	
Forestry 1 (Note 3)	Chevy	2008/2009	1986		Forestry	78975 miles	2022	
Engine-6	HME Custom	2006	2005	\$217K	Engine	14809 miles 1040hrs	2030-2035	
Tank 1	International	2010		\$284K	Tanker	5597 miles	2040	
Car 1	Ford Police Utility	2015		\$35K	Chief Car / Command Vehicle	17575 miles 1110hrs	2025-2030	

Note 1: Will become Forestry until not cost effective.

Note 2: Will replace Forestry 1 Chassis

Note 3: Will become a service truck until not cost effective

Below is a table showing which vehicles and order are dispatched based on call type.

Dunstable Fire Department Current Order of Primary Vehicle Response						
	Engine 6	Tank 1	Engine 2	Rescue 1	Forestry 1	Mutual Aid Ladder 4
Building/Structure Fire	1	2	3			4
Chimney Fire	1	2	3			
Car Fire	1	2				
Carbon Monoxide Alarm Activation	1			2		
Odor of Gas in the Building	1	2	3			
Order of Gas Outside	1	2				
Brush Fire – (Off Road)			2	3	1	
Brush Fire – (Area of a Roadway or Driveway)		3	2	4	1	
Brush Fire with Exposure – (Near Building)	3	2	1		4	
Motor Vehicle Crash	2			1		
Missing Person	2			1	3	
Off Road Rescue	3			1	2	
Water/Ice Rescue	2			1	3	
Hazmat	1	3	4	2		
Telephone Pole/Wires Burning	1				2	
Medical	1*			1		
Fire Alarm Activation	1	2	3			
Lockout				1		
Unauthorized Burn					1	
Trouble Alarm	1					
Smoke Investigation outside– (Spring-Fall)	1	3	4		2	
Smoke Investigation outside– (Winter)	1	2	3			
Mutual Aid - Engine 6	1**					

*Engine 6 will respond if Rescue 1 not available

** Engine 6 unless specific truck is specified

To address capital needs, the Fire Department reviews its capital assets, and projects near and far term expenditures required to maintain or improve the current level of services. There are two requests for FY18 that are considered here for funding in next year's budget.

2.1.1. Procure new Fire Engine

Project Description	Amount Requested	Funding Source	Committee Recommends
New Engine	\$360,000	Borrowing/Cash Capital	Approve(2) Disapprove(1)

New Engine would increase effectiveness of Fire Department

The Fire Department is requesting the procurement of a new structural fire engine to replace the existing Engine-2. Engine-2 is now over 30 years old and is primarily a vehicle more suitable for fighting forest fires; it has a high wheel base and has four wheel drive, but does not have the tank or pump capacity needed to effectively fight structural fires. The limited 750 G.P.M pump rate is not compatible with current firefighting equipment (requires smaller hose size, etc) precluding the undersized pump to work in tandem with Engine 2 or other towns trucks, often sitting on the side unable to assist the firefighting effort. Currently, Engine-2 is used as the backup truck for fighting structural fires in town when Engine-6 is away supporting Mutual Aid. Engine-2 is the secondary truck (after Forestry 1) for fighting forest fires. With the procurement of a new structural fire engine, the fire department would have a properly equipped engine in town at all times should Engine-6 be unavailable, e.g. on call with mutual aid, responding to another town emergency, or not in service due to a maintenance activity. A new engine would also increase the safety of the town residents and fire department by equipping the town with newer firefighting equipment, such as larger water tank, higher capacity pump, new foam system, adequate hose load for structural fires, roof saw, and modern thermal imaging equipment. A new engine would change the order of Primary Vehicle Response where the new engine will become the first response engine and Engine 6 would then become the second response engine. Our mutual aid response would be unchanged; Engine 6 would still be the first vehicle to respond.

There are other considerations to factor into this procurement decision. Trucks require maintenance, and when Engine-6 is out for maintenance, Dunstable is left with a 30 year old truck as the primary structural firefighting engine. And finally, Engine 2 has a standard transmission. Fewer and fewer firefighters in the ranks are able to drive standard, and this problem will only get worse as time goes on with newer recruits. Currently Dunstable has 8 out of 25 firefighters who do not drive standard, and 6 that do drive will be soon aging out of the force. Today's modern firefighting trucks have automatic transmissions.

Likelihood we have insufficient equipment to respond to emergency

One metric for analyzing the need for this procurement is to review the statistics for the town's recent fires and compute various probabilities that are relevant to the procurement of this new engine. Historical data was examined for the period between Jan 1, 2015 through Sept 28, 2016 (a total of 635 days). The fire department's history logs were reviewed, and dates where Engine-6 was supporting Mutual Aid (truck not in town) were highlighted. Also highlighted were the days Dunstable had a fire call where both Engine-2 and Engine-6 had responded. The following statistics were derived from this data:

- 635 Total days in this analysis (Jan 1, 2015 - Sep 28, 2016)
- 9.3% Probability of fire in Dunstable (both Engine-2 and Engine-6 respond)
- 3.3% Probability Engine-6 responded to Mutual Aid (leaves Engine-2 as only resource for Dunstable)

- 0.9% Probability we have 2nd fire in Dunstable.
- 0.3% Probability we have responded to mutual aid, and we get fire call in Dunstable

The last two statistics are of interest for this analysis. (These probabilities assume each event occupied the entire day which is a worse-case scenario.)

- 0.9% indicates we have about a 1 in 100 chance of having both Engine-2 and Engine-6 out on a call in Dunstable when a 2nd call (from Dunstable) comes into the station.
- 0.3% indicates that we have about a 3 in 1000 chance of Engine-6 being out on Mutual Aid and a call (from Dunstable) comes into the station.

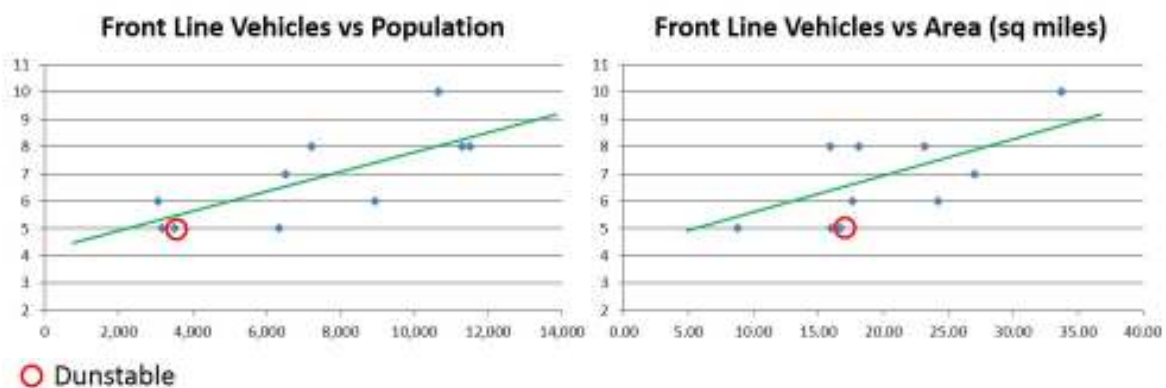
It would appear the concern of Dunstable having a fire while Engine-6 is out on Mutual Aid is significantly low (3 in a 1000) and that alone would not justify the procurement of a new engine. The 1 in 100 chance that we have two fires at the same time in town, however, seems like a relatively more concerning scenario. One concern the Committee considered is that of personnel. Should we procure this new vehicle solely for the purpose of providing backup equipment to support two simultaneous fires, does the department have adequate personnel to man two fires?

Comparing Dunstable's equipment to other towns

When leveraging Dunstable's reliance on Mutual Aid, the town also needs to assess how Dunstable staffs and equips our department relative to nearby towns scaled as appropriate for differences in town population or town area. Point here is that Mutual Aid is fair as long as participating towns invest in their departments in an equitable manner. Below is a table comparing Dunstable's front line vehicles with other towns:

Town	Pop (2010)	Area sq. mi.	Stations	Engines	Ladders	Rescue	Tankers	Forestry	Service	UTV/ATV	Age oldest Engine
Dunstable	3,179	16.70	1	2	0	1-light	1	1	0	0	1986
Essex	3,504	15.95	1	2	1	0	1	1	0	0	2002
Groton	10,646	33.71	3	4	1	1-heavy	1	3	2	1	1989
Harvard	6,520	27.00	2	4	1	0	1	1	0	0	2002
Littleton	8,924	17.60	1	3	1	0	0	2	2	1	2007
Merrimac	6,338	8.80	1	2	1	1-medium	0	1	1	0	1995
Pepperell	11,497	23.20	2	3	1	1-heavy	1	2*	0**	1	1994
Ashby	3,074	24.2	1	3	1	0	1	1	0	0	1991
Shirley	7,211	15.9	1	2	1	0	2*	3	0	0	1997
Tyngsboro	11,292	18.1	3	5*	1	0	1	1**	1	0	1987

Below we plot Dunstable's Front Line vehicle count vs Population and Area relative to other surrounding towns. While we do fall slightly below the norm, the plots show that our investment in firefighting equipment is in family with neighboring towns, and therefore conclude that from a front line vehicle count perspective, we have a defensible position to show that Dunstable's investment in firefighting equipment is on par with other towns normalized to population and area. However, this analysis does not factor in the age of the equipment across the towns where Engine 6 is oldest truck, and has limited capability due to age and firefighting equipment on board.



	Population (2010)	total equip vs Population		Area sq. mi.	total equip vs Area (sq miles)
Dunstable	3,179	5		16.70	5
Essex	3,504	5		15.95	5
Groton	10,646	10		33.71	10
Harvard	6,520	7		27.00	7
Littleton	8,924	6		17.60	6
Merrimac	6,338	5		8.80	5
Pepperell	11,497	8		23.20	8
Ashby	3,074	6		24.20	6
Shirley	7,211	8		15.90	8
Tyngsboro	11,292	8		18.1	8

Summary

Below is a summary of the fire department's concerns that would be mitigated through the purchase of a new engine. After reviewing our research, Capital Planning has assigned a score to each concern, 1 no concern through 4 major concern:

1
2

No concern
Some concern

3
4

Moderate concern
Major concern

Issue	Concern	Details
Front Line Vehicle vs size/population relative to neighboring towns.	1	• On par with other towns. No concern regarding compliance with mutual aid.
Engine 2 Vehicle and Equipment Technology	4	• No on-truck foam system • Pump undersized to work with other structural apparatus. • Inadequate hose load for structural fires • Inadequate water tank size • Crew Safety Jeopardized
Age of Equipment	3	• Engine-2 30 yrs old, not reliable. Typical life expectancy 20 yrs.
Insufficient number of Front Line Vehicles to protect our town	2	• 1 in 100 chance we are not protected

As a final note, should we decide to purchase new engine, there is a 16 month build time, then another 6 months before 1st payment is due, which is around FY19/20 timeframe. Delaying the purchase of this new engine will cost the town about \$7000 per year of delay due to expected cost increase (per NFPA).

The committee has reviewed this request and voted in favor of this procurement.

2.1.2. Procure 6X6 Off Road ATV for Rescue and Fire Suppression.

Project Description	Amount Requested	Funding Source	Committee Recommends
6x6 Off Road ATV	\$27,000	Borrowing/Cash Capital	Approve(3) Disapprove(0)

The Fire Department is requesting the procurement for a 6X6 ATV to support off road firefighting and rescue. The vehicle cost is \$17K, and an additional \$10K for the skid and ancillary firefighting and rescue equipment that would remain with the ATV. The vehicle would be used for brush fires, missing persons, and other off road incidence.

The fire chief requested this procurement to occur during FY19 (ATV) and FY20 (skid/equipment). The Committee discussed the importance of this capability for our town and is recommending the town move up this procurement to FY18. For a town with many miles of active trails in densely wooded areas, having this capability now will greatly improve the fire departments ability to respond to such emergencies. The new ATV will be stored at the Fire Station.

The committee has reviewed this request and voted in favor of this procurement.

2.2.Stormwater Management

Project Description	Amount Requested	Funding Source	Committee Recommends
Stormwater Management	\$58,000	Operating Budget	Approve(3) Disapprove(0)

The National Pollutant Discharge Elimination System (NPDES) permit program, created in 1972 by the Clean Water Act (CWA), helps address water pollution by regulating point sources that discharge pollutants to waters of the United States. The permit provides two levels of control: technology-based limits and water quality-based limits. Under the CWA, EPA authorizes the NPDES permit program to state, tribal, and territorial governments, enabling them to perform many of the permitting, administrative, and enforcement aspects of the NPDES program. Currently 46 states and one territory are authorized to implement the NPDES program (Massachusetts is not one of them).

As a result EPA has issued a series of permits to regulate stormwater discharge in the Commonwealth. In May 2003, EPA Region 1 issued its Final General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems. The 2016 Massachusetts Small MS4 General Permit was signed April 4, 2016 and will become effective July 1, 2017. Until this time Dunstable has not been subject to these regulations. The Nashua River and Massapoag Pond are both considered impaired water and under the definition of the new permit portions of Dunstable are considered to be urbanized areas.

In order for a small MS4 operator, like Dunstable, to obtain authorization to discharge, it must submit a complete and accurate Notice of Intent (NOI). A small MS4 operator must meet the eligibility requirements of the general permit found prior to submission of its NOI. A small MS4 operator will be authorized to discharge under the permit upon receipt of written notice from EPA following a public notice of the submitted NOI. EPA will authorize the discharge, request additional information, or require the small MS4 to apply for an alternative permit or an individual permit.

The town's Stormwater Engineer has developed a 5-year compliance program. While some of the compliance expense is eligible for grants, grants will not fund all of the engineering necessary to comply with the MS4 permit. To-date \$30,000 has been received in grant funding to purchase equipment and software tools to assist in IDDE detection and mapping. The bulk of the engineering is for creating bylaws, rules, and regulations that support compliance with the permit. These documents will have an extended life span, only needing updates as the permit evolves. The table below itemizes costs by topic area.

Dunstable Storm Water Estimate Costs (from final Storm permit 2016)

Estimated Costs	Year 1	Year 2	Year 3	Year 4	Year 5	Total for 5 years*
Public Education	\$2,000.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$8,000.00
Public Involvement	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
IDDE	\$43,166.67	\$43,166.67	\$43,166.67	\$40,000.00	\$20,000.00	\$189,500.00
Construction	\$16,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16,000.00
Post-Construction	\$0.00	\$0.00	\$16,000.00	\$36,000.00	\$8,000.00	\$60,000.00
Good House Keeping	\$0.00	\$35,500.00	\$10,000.00	\$3,000.00	\$3,000.00	\$51,500.00
Annual Report	\$6,600.00	\$6,600.00	\$6,600.00	\$6,600.00	\$6,600.00	\$33,000.00
Total	\$67,766.67	\$86,766.67	\$77,266.67	\$87,100.00	\$39,100.00	\$358,000.00

The committee has reviewed this request and voted in favor of the Stormwater Management procurement.

2.3. Police Department

Below is a table of Police Department's major capital equipment:

Cruiser Number	MAKE/MODEL	PURCHASED	PURCHASE COST	MILEAGE	REPLACE BY	REPLACEMENT COST
55 MARKED	2016 FORD INTERCEPTOR SUV	7/16/2015	36,220	38,450	2019	40,000 *
52 MARKED	2015 FORD INTERCEPTOR SEDAN	8/6/2015	34,543	27,031	2018	40,000 *
50 UNMARKED	2013 FORD INTERCEPTOR SEDAN	1/30/2013	31,325	46,351	2019	33,000
53 MARKED	2013 FORD INTERCEPTOR SEDAN	9/12/2012	34,765	99,720	2016	40,000 *
54 MARKED	2013 FORD INTERCEPTOR SEDAN	11/14/2012	32,240	75,501	2017	40,000 *
56 UNMARKED	2006 FORD EXPLORER	2/5/2008		61,709	2018	35,000
ATV TRAILER	2003 LOAD TRAILER	4/7/2003	4,000		2025	
UTILITY TRAILER	2011 UTILITY TRAILER	9/3/2010	GRANT		2025	
BUS	CHEVY	9/30/2016	DONATED	50,524		

NOTES: * REPLACEMENT COST HIGHER AS EQUIPMENT BEING TRANSFERRED NEED TO BE REPLACED WITH NEW (OVER 10 YRS OLD)

PURCHASE VALUE DOES NOT REFLECT EQUIPMENT SUCH AS CRUISER RADIOS, RADAR UNITS COMPUTERS, ETC (\$10,000 PER VEHICLE)

In 2015, Capital Planning provided an analysis for schedule of patrol car replacement and concluded that patrol cars should be replaced at about 90K miles. The above mileage rates average to 20.4K miles per year. As such, patrol cars should be scheduled for replacement every 4 years.

2.3.1. Speed Trailer

Project Description	Amount Requested	Funding Source	Committee Recommends
Speed Trailer	\$16,000	Operating Budget	Approve(1) Disapprove(2)

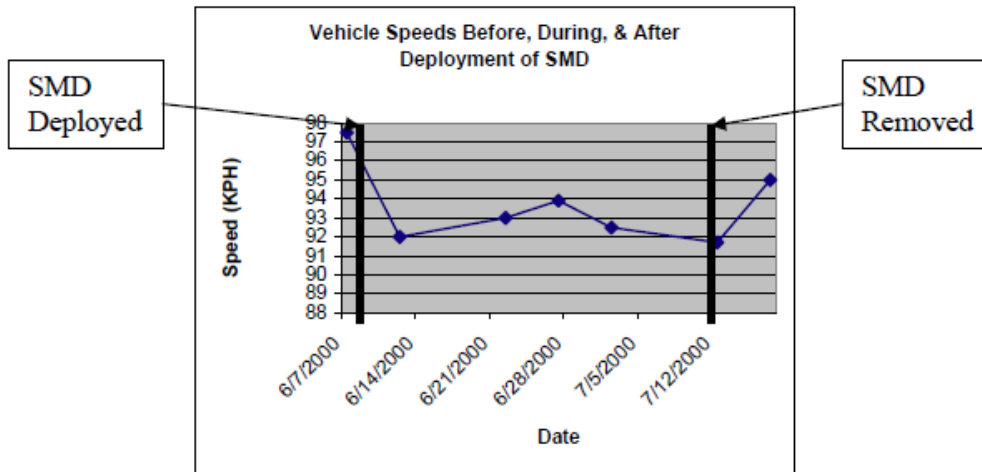
The police department is requesting the procurement of a speed trailer to help deter speeding and

From the Road Injury Prevention & Litigation, Journal Volume 1973:

Results of the study revealed "that both speed display boards and photo-radar effectively reduce vehicle speeds while deployed" and are "particularly effective in reducing the number of vehicles traveling ten or more miles over the speed limit." However, "only the display boards demonstrated carry-over effects," particularly in the long term. Already the most cost-effective of the speed control devices, the speed reduction capabilities of display boards can be greatly enhanced with "intermittent police enforcement." The un-enforced speed display board was the most cost-effective device on both an hourly and daily basis, and photo-radar was the least cost-effective of the three speed control devices.

However, in a study on long-term effectiveness of speed monitoring displays, they found that speeds went up again after the speed monitoring devices were removed, thus concluding they are best deployed as a permanent sign.

Plot showing speeds before sign is installed, during sign operation, and after sign is removed:



The committee has reviewed this request and voted with a split decision not to recommend this procurement. Dissenters were not convinced there would be an overall net improvement to safety on the roads. The Committee has recommended that the Police Department look into a permanently mounted speed sign as the evidence suggests a permanent sign reduces overall speeding in the posted area.

2.4.Library

2.4.1. Roof/Portico Repair

Project Description	Amount Requested	Funding Source	Committee Recommends
Modify roof/ build portico to address emergency egress	\$100,000	Operating Budget	

The Dunstable Free Public Library's mission statement states:***"provide equal access to information and ideas through a wide variety of materials and programs for community members of all ages"***.

Its current hours of operation are:

Tues: 3:00PM - 8:00PM 5 hrs
Wed: 10:00AM - 2:00PM 4 hrs
Thurs: 10:00AM - 8:00PM 6 hrs
Fri: 10:00AM - 2:00PM 4 hrs
Sat: (to start July 1st)

With these limited hours, access is important, but this can be additionally limited in the winter time when ice, snow and water block emergency and regular entrances and exits (which is the current condition) necessitating closure of the building per fire code. Current situation is resulting in excessive erosion and deterioration of the building structure.

These problems can be remediated by the redesign of the West facing emergency exit roof, the addition of two separate entrance roofs (currently there are none) on the south facing side of the building and incorporating the appropriate rain gutters and down spouts on each including a redesign of the gutter system on the main entrance.

The committee has reviewed this request and recommended the town go out for bids on this project to get an improved estimate of the cost to validate engineers' budget.

2.5.Highway Department

Below is a table of Highway Department's major capital equipment

ID / Plate	Make / Model	Purchase Date	Value	Description of use	Current Mileage or Hours	Expected year to retire	Cost to replace
	Freightliner 108SD	2016		11' plow with 9' wing and sander		2026	
#8	Ford LN8000	1992	\$36K ACV	Truck/Sander	147168		
5	Ford L8000	1996	\$66K ACV	Truck	90989.8 77355Hr	2018	\$165K
33	Freightliner 180SD	2016	\$160K ACV	Truck	1365 90.5hr	2026	
310SG	John Deere	2002	\$67K ACV	Backhoe	3845.1hr	2017	125K
544J	John Deere 544J	2006	\$110K ACV	Loader (large bucket)	4366.1hr	2019	\$130k
6	Ford F550	2008	\$56K ACV	Dump Truck	74630	2018	55K
4	Mack	2012	\$151K ACV	Dump Truck	22512.8 1505hr	2022	
7	Chevy Silverado	2013	\$45K ACV	Pickup Truck	14885	2025	
	sullair	2007		air compressor			
	Brush Bandit			wood chipper			

2.5.1. Procure new truck (replaces 1996 Ford L8000)

Project Description	Amount Requested	Funding Source	Committee Recommends
New truck	\$165,000	Operating Budget	No vote taken

Dunstable Highway Department has proposed purchasing a new truck with the FY2018 budget. The cost of the truck would be \$165,000.00. The current 1996 Ford L8000 has exceeded its lifespan and is beyond reasonable repair. The L8000 recently experienced an electrical burn out of the harness, and most of the controls have been melted. In addition, the doors and floors have rot and need to be replaced. The motor has a cracked block, and the crew must add 4 quarts of oil every 6 hours of run time. The air compressor and transmission also have issues and the plow is past its life span.

As a whole, the timely purchase of a new truck would reduce repair costs, offer immediate services to the Dunstable Highway Department while enhancing the crew's ability to complete tasks.

2.6. Water Department

The Water Department provides water to ~100 residences. As a municipal entity, the town is responsible for maintaining water to these residences and must adhere to state and federal testing and regulations. There are 3 areas of concern:

1. Pond Street site issues
2. Rehabilitation of well # 1 - Outdated machinery with trouble obtaining spare parts. Preference for complete overhaul.
3. Pipe diameter along streets need to be 12". Getting this pipe diameter would enhance water service, fire prevention, and set-up Dunstable for potential Senior Housing development within Mud District.

4-5 years ago, money was allocated for a study / research of water storage plans - Around \$60k of \$120k allocation has been spent to date.

Last year the Water Department proposed a project which was defeated at town meeting by residents because of lack of details and support from town selectmen.

Goal was to purchase two pneumatic tanks with larger capacity than we have now and create a way to relocate water services to the "Mud District" in hopes of setting up town for Senior Housing Project that is moving along in its approval process.

2.6.1. Engineering Design

Project Description	Amount Requested	Funding Source	Committee Recommends
Design shovel-ready plans for water system improvements	\$200K	Operating Budget	No vote taken

The Water Department put out a request for an Engineering Services Budget to obtain scope and budgetary numbers. The projects are as follows:

- Project No. 1 - MUD District Hydropneumatic Tanks
- Project No. 2A - Well Site – Well No. 1 Cleaning/Electrical Service/ Chemical Feed
- Project No. 2B - Well Site - Access Road Improvements
- Project No. 3 - USDA Funding Application Assistance

The town received a budgetary memorandum from Tighe & Bond providing rationale on the importance of each project, the details for implementation, and budget recommendations for the above tasks.

The following table provides a breakdown of our recommended budget for engineering design, permitting, and bidding services (where included):

<u>Project Description</u>		<u>Budget</u>
1	MUD District Hydropneumatic Tanks	\$80,000
2A	Well Site – Well No. 1 Cleaning/ Electrical Service/Chemical Feed	\$65,000
2B	Well Site - Access Road Improvements	\$40,000
3	USDA Funding Application Assistance	\$15,000
TOTAL BUDGET		\$200,000

Appendix

Capital Pan Request Sheets from the Departments