

## Fiscal Year 2018 Capital Program

### Capital Program Development

Every year the Town updates its five-year capital improvements plan (CIP). The plan requires every department to look ahead and anticipate their capital needs separate and apart from the operating budget. This includes projects that cost at least \$50,000 and the asset having a useful life of three or more years. Departments submit their requests that include cost estimates, justification, department priority, location, time to complete, previous funding received as well as other information. A task force comprised of senior level management across all departments using a matrix, which evaluates each submission against ten (10) criteria, then rates all project submissions. The projects are ranked according to the score they received which is used as one criterion to recommend project funding. The costs of projects submitted exceed the Town's ability to finance them over the next five years so projects must be prioritized and opportunities for grants and other resources are constantly evaluated to assist in addressing this area of the budget. During this process, the town will also review the status of prior capital appropriations to see if there are any remaining funds available due to project savings that could be reauthorized for another purpose.

### Submission Cost and Fiscal Year Summary

The capital projects identified by the Town departments in this year's CIP process represents a total of \$31,759,245 for FY 2018, and a combined total of \$183,834,788 over a five-year period. Of the \$183 million, approximately \$61.8 million represents enterprise funds and \$121.9 million are general fund requests.

Enterprise Fund projects are distributed by fund as follows:

Fund	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Totals
Airport	\$2,240,000	\$5,650,000	\$7,916,700	\$4,750,000	\$2,350,000	\$22,906,700
Golf	\$4,502,193	\$437,774	\$675,000	\$1,150,000	\$1,500,000	\$8,264,967
Water Pollution	\$382,000	\$5,155,000	\$400,000	\$4,000,000	\$1,470,000	\$11,407,000
Water Supply	\$2,168,840	\$5,844,500	\$1,286,000	\$3,250,000	\$1,288,000	\$13,837,340
Sandy Neck	\$376,000	-	-	-	-	\$376,000
Marina	-	\$5,047,250	-	-	-	\$5,047,250
<b>Totals</b>	<b>\$9,669,033</b>	<b>\$22,134,524</b>	<b>\$10,277,700</b>	<b>\$13,150,000</b>	<b>\$6,608,000</b>	<b>\$61,839,257</b>

General Fund projects are distributed as follows:

Department	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Totals
Police Dept.	\$158,226	-	\$846,600	-	-	\$1,004,826
Admin. Services	\$706,969	-	-	-	-	\$706,969
Comm. Services	\$4,508,704	\$6,989,401	\$9,824,088	\$692,620	\$539,432	\$22,554,245
Public Works	\$8,303,870	\$16,606,720	\$12,883,837	\$13,625,261	\$20,040,360	\$71,460,048
Reg. Services	\$82,443	\$93,000	\$93,000	\$93,000	\$93,000	\$454,443
Schools	\$8,330,000	\$4,635,000	\$3,000,000	\$4,850,000	\$4,600,000	\$25,815,000
<b>Totals</b>	<b>\$22,090,212</b>	<b>\$28,324,121</b>	<b>\$26,647,525</b>	<b>\$19,260,881</b>	<b>\$25,272,792</b>	<b>\$121,995,531</b>

**Recommended Projects for Fiscal Year 2018**

This list of projects totals \$17,816,363. The General Fund program totals \$12,700,363 and the Enterprise Funds total \$5,116,000. Funding for the General Fund portion of the program consists of \$3,865,000 in Capital Trust Fund (CTF) reserves, \$7,087,000 in new borrowing authorizations, \$40,000 from Community Development Block Grant funds, \$632,363 in transfers from closed appropriations, \$726,000 from the Community Preservation Fund, and \$350,000 from the school department’s share of General Fund savings.

Funding for the Enterprise Fund programs consists of using \$881,500 of enterprise fund reserves, \$2,249,000 in new borrowing authorizations, and \$1,985,500 is anticipated to be reimbursed from federal and state granting agencies for the Airport projects. The grant funds received will reduce the amount of any bonds issued or the reserves used to finance the enterprise fund’s capital program. The bonds issued for the enterprise fund projects are expected to be paid back with enterprise fund revenues.

**Enterprise Funds:**

Project Name and Council Order Number	Funding Source			
	Enterprise Fund Reserves	Bond Issue	Grants	Total
<b>AIRPORT:</b>				
Obstruction Mitigation Plan and Airspace Analysis <b>2017-090</b>	17,250	-	327,750	345,000
Comprehensive FAA Airport Layout Plan/FAA Master Plan Update <b>2017-091</b>	35,000	-	665,000	700,000
Airport Access Control and Security Improvements <b>2017-092</b>	37,250	-	707,750	745,000
Clear Vegetation and Obstruction Removal - Airport Perimeter <b>2017-093</b>	15,000	-	285,000	300,000
Runway and Taxiway Markings and Airport-Owned Roadways Annual Painting Contract <b>2017-094</b>	150,000	-	-	150,000
<b>Total Airport Enterprise Fund</b>	<b>254,500</b>	<b>-</b>	<b>1,985,500</b>	<b>2,240,000</b>
<b>GOLF:</b>				
Hyannis Golf Course Turf Maintenance and Equipment Replacement <b>2017-085</b>	-	325,000	-	325,000
<b>Total Golf Course Enterprise Fund</b>	<b>-</b>	<b>325,000</b>	<b>-</b>	<b>325,000</b>

**Enterprise Funds Continued:**

Project Name and Council Order Number	Funding Source			
	Enterprise Fund Reserves	Bond Issue	Grants	Total
<b>WATER POLLUTION CONTROL:</b>				
Pump Station Evaluation <b>2017-075</b>	200,000	-	-	200,000
New 3/4 Ton Pickup Truck <b>2017-076</b>	55,000	-	-	55,000
Treatment Plant Modeling - Biowin Model <b>2017-077</b>	55,000	-	-	55,000
Barnstable Road Sewer Evaluation, Design and Construction <b>2017-078</b>	72,000	-	-	72,000
<b>Total Water Pollution Control Enterprise Fund</b>	<b>382,000</b>	-	-	<b>382,000</b>
<b>WATER SUPPLY:</b>				
Lease Buy-out of (3) activated carbon filter units - Mary Dunn 1, 2 & 3 wells <b>2017-079</b>	-	491,000	-	491,000
Well Reactivation Project <b>2017-080</b>	-	295,000	-	295,000
Pipe Replacement and Upgrade Program <b>2017-081</b>	-	500,000	-	500,000
Wells, Pump Stations, Treatment Plant Repair & Upgrade Program <b>2017-082</b>	200,000	-	-	200,000
Water Storage Tank (Mary Dunn 1) New Roof, Appurtenances & Site Work Construction <b>2017-083</b>	-	638,000	-	638,000
New Pickup Truck <b>2017-084</b>	45,000	-	-	45,000
<b>Total Water Supply Enterprise Fund</b>	<b>245,000</b>	<b>1,924,000</b>	-	<b>2,169,000</b>
<b>Total All Enterprise Funds</b>	<b>881,500</b>	<b>2,249,000</b>	<b>1,985,500</b>	<b>5,116,000</b>

**General Fund:**

Project Name and Council Order Number	Funding Source						Total
	Capital Trust Fund Reserves	Bond Issue	Community Development Block Grant	Transfers	Community Preservation Funds	General Fund Savings	
<b>INFRASTRUCTURE:</b>							
Public Roads Maintenance <b>2017-071</b>	3,250,000	-	-	-	-	-	3,250,000
JFK Museum Plaza Replacement <b>2017-072</b>	-	-	-	235,000	-	-	235,000
Sidewalks & Guardrails & Cotuit Enhanced ADA Compliant Pedestrian Crossing <b>2017-073</b>	-	314,000	-	-	-	-	314,000
West Barnstable Shooting Range <b>2017-074</b>	-	350,000	-	-	-	-	350,000
Finance Dept-Tyler Content Manager <b>2017-095</b>	105,000	-	-	-	-	-	105,000
<b>Total</b>	<b>3,355,000</b>	<b>664,000</b>	<b>-</b>	<b>235,000</b>	<b>-</b>	<b>-</b>	<b>4,254,000</b>
<b>MUNICIPAL FACILITIES:</b>							
Town Hall Restroom Renovations <b>2017-069</b>	-	560,000	-	-	-	-	560,000
Town Hall & School Administration Building Masonry Sealer <b>2017-070</b>	116,000	-	-	-	-	-	116,000
Osterville Recreation Building & Field Design <b>2017-086</b>	-	675,000	-	-	434,000	-	1,109,000
Barnstable Senior Center Stand-by Generator <b>2017-087</b>	154,000	-	40,000	55,000	-	-	249,000
Barnstable Police Department Dispatch Center Renovations <b>2017-088</b>	158,000	-	-	-	-	-	158,000
Centerville Recreation Building Windows	-	-	-	-	292,000	-	292,000
<b>Total</b>	<b>428,000</b>	<b>1,235,000</b>	<b>40,000</b>	<b>55,000</b>	<b>726,000</b>	<b>-</b>	<b>2,484,000</b>

**General Fund Continued:**

Project Name and Council Order Number	Funding Source						
	Capital Trust Fund Reserves	Bond Issue	Community Development Block Grant	Transfers	Community Preservation Funds	General Fund Savings	Total
<b>WATER QUALITY:</b>							
Hydrilla Control - Mystic Lake, Middle Pond, and Long Pond (Centerville) <b>2017-089</b>	82,000	-	-	-	-	-	82,000
<b>Total</b>	<b>82,000</b>	-	-	-	-	-	<b>82,000</b>
<b>SCHOOL FACILITIES:</b>							
Unit Ventilator Upgrades <b>2017-062</b>	-	250,000	-	-	-	-	250,000
Barnstable High School 21st Century Learning Space Project <b>2017-063</b>	-	3,158,000	-	342,363	-	-	3,500,363
Network Infrastructure Upgrades <b>2017-064</b>	-	-	-	-	-	250,000	250,000
Communications and Security Network Upgrades <b>2017-065</b>	-	-	-	-	-	100,000	100,000
Barnstable Public Schools Asbestos Abatement <b>2017-066</b>	-	300,000	-	-	-	-	300,000
High School Stadium Bleachers <b>2017-067</b>	-	1,055,000	-	-	-	-	1,055,000
Barnstable High School Cafeteria Storefront and Window Replacement/Barnstable West Barnstable Roof Replacement <b>2017-068</b>	-	425,000	-	-	-	-	425,000
<b>Total</b>	-	<b>5,188,000</b>	-	<b>342,363</b>	-	<b>350,000</b>	<b>5,880,363</b>
<b>Grand Totals</b>	<b>3,865,000</b>	<b>7,087,000</b>	<b>40,000</b>	<b>632,363</b>	<b>726,000</b>	<b>350,000</b>	<b>12,700,363</b>

## Project Descriptions and Budget Impact

### GENERAL FUND:

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#### **#2017-062 Unit Ventilator Upgrades**

Replace original/outdated unit ventilators at five elementary schools, (106 units). Current units are 50+ years old, failing and not operating to current American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and Data Encryption Standards (DES) standards.

**Source of Funding:** Capital Trust Fund Bond Issue \$250,000

**Budget Impact** – Units that are more efficient should reduce energy consumption by at least 10%.

#### **#2017-063 Barnstable High School 21st Century Learning Space Project**

The HVAC units that service the Barnstable High School Library and adjacent spaces are at the end of life, undersized, inefficient, and no longer able to provide cooling and in jeopardy of losing the ability to provide heat. The existing distribution and return systems are not adequately designed or insulated for the 2-story space necessitating a system redesign with replacement of diffusers and the addition of low return air ducts to better circulate and distribute tempered air. The existing aluminum and single glazed curtain walls are over 40 years old and are nearing their life expectancy and do not meet modern standards. The single-pane glass panels block very little UV light and contribute to extreme heat gain in the summer, forcing the rooftop AC units to work harder and create an uncomfortable interior environment. The aluminum frame and glazing systems are also extremely inefficient at providing thermal resistance. In addition to the mechanical and solar improvements to the physical space, interior improvements to the space would include paint, flooring and furnishings.

**Source of Funding:** Capital Trust Fund Bond Issue \$3,158,000 & Transfer Closed Appropriations \$342,363 Council Orders 2013-105, 2013-106, 2014-092, 2014-093, 2014-096, 2015-045, 2015-115, 2015-116, 2015-119, and 2015-121

**Budget Impact** – HVAC & Curtainwall replacement expected to yield approximately 20% increase in annual energy savings.

#### **#2017-064 Barnstable Public Schools District-wide**

The Network Infrastructure Plan is a three (3) year plan that is designed to perform power and data capacity upgrades to the network infrastructure for the entirety of Barnstable Public Schools (BPS). These upgrades are essential to be able to support future Voice over Internet Protocol (VOIP) telephony and security system (security camera, radio frequency identification (RFID) security, etc.) projects. Additionally, included in this plan are labor costs associated with network engineering labor to implement recommended network design changes (from 2016 Harbor Networks Network Assessment), labor and parts to rewire BPS offices at the School Administration Building and the purchase of network monitoring software.

**Source of Funding:** School Savings Account \$250,000

**Budget Impact** – Routine maintenance to remain the same.

**#2017-065 Communications and Security Network Upgrades**

District-wide Upgrade and Design of Existing Phone, Security Camera and Electronic Entry Systems. The current BPS telephony and security system consists of multiple platforms and technologies that are local systems and are not network compatible. The existing systems are older technologies and are becoming increasingly difficult to maintain. This project phase would include technical consultation and engineering to identify system deficiencies, recommend solutions, and develop schedules and costs. System improvements would be performed in following year (s) as required.

**Source of Funding:** School Savings Account \$100,000

**Budget Impact** – Routine maintenance to remain the same.

**#2017-066 Barnstable Public Schools Asbestos Abatement**

Remove known remaining isolated areas of asbestos throughout the district, (crawlspaces, hot water pipes, floor tiles, etc.)

**Source of Funding:** Capital Trust Fund Bond Issue \$300,000

**Budget Impact** – Routine maintenance to remain the same.

**#2017-067 Barnstable High School Stadium Bleachers**

Replace existing home side bleachers and add visitor's side bleachers. Current bleachers are becoming structurally unsound and unsafe. Floor planks are showing signs of fatigue, bolts fasteners and structural members are rusting and deteriorating. Current configuration is not code compliant and due to design and age, retrofitting for compliancy is not possible.

**Source of Funding:** Capital Trust Fund Bond Issue \$1,055,000

**Budget Impact** - Routine maintenance should be minimized.

**#2017-068 Barnstable High School Cafeteria Storefront and Window Replacement**

Replace existing cafeteria storefront unit. Existing units are failing and becoming inoperable. Side rectangular windows are exhibiting air/water infiltration and original storefront/door assembly is becoming inoperable and creating a safety issue for egress.

**Source of Funding:** Combined Projects Capital Trust Fund Bond Issue \$225,000 + \$200,000 = \$425,000

**Budget Impact** - Energy cost savings will be realized by replacing current thermally inefficient window and door assemblies.

**#2017-068 Barnstable West Barnstable Roof Replacement**

Replacement of existing of sloped shingle roof. Postponement of this project may cause damage to building interior, furniture and educational materials. Localized repair and patching is no longer an effective option since the failure area has expanded to multiple large areas.

**Source of Funding:** Combined Projects Capital Trust Fund Bond Issue \$225,000 + \$200,000 = \$425,000

**Budget Impact** – Roof replacement will improve energy efficiencies by alleviating current leak and infiltration areas.

**#2017-069 Town Hall Restroom Renovations**

This project continues the work needed to upgrade the existing toilet facilities within the building. This funding request relates directly to public health, safety and code issues that need immediate attention. The Town Hall is the public image of the Town. The building requires continual upgrades and improvements. The public areas in Town Hall, which include the toilet rooms, are in poor condition and give a negative impression of the Town of Barnstable. In addition, there are limited toilet facilities, much of which does not meet ADA standards. Conditions exist where toilets are limited by gender on specific floor levels. The work of this CIP will correct this problem and bring the Town Hall into compliance.

**Source of Funding:** Capital Trust Fund Bond Issue \$560,000

**Budget Impact** – There may be potential savings from decrease water usage from more efficient fixtures.

**#2017-070 Town Hall & School Administration Building Masonry Sealer**

This project protects previously completed masonry restoration work for both the Town Hall and School Administration Buildings (SAB). The Town Hall is the public image of the Town of Barnstable. Exterior restoration work was completed using Community Preservation Act (CPA) funds, during which masonry sealer was installed to protect the soft brick from water absorption. The masonry on both the Town Hall and SAB buildings is West Barnstable Brick from 1897, which is known to be soft and porous. This masonry coating protects for between 5 and 8 years before the masonry needs recoating.

**Source of Funding:** Capital Trust Fund Reserves \$116,000

**Budget Impact** - There is no direct operating budget impact but performing this work at the required intervals will result in the preservation of the asset reducing or eliminating future costly repairs.

**#2017-071 Public Roads Maintenance**

Road rehabilitation work, milling and/or repaving of Rolling Hitch Road and Bay Lane in Centerville, Nickerson Road in Cotuit, Mitchell's Way and Megan Road in Hyannis, Osterville - West Barnstable Road in Marstons Mills, Lombard Avenue in West Barnstable, and Sea View Avenue in Osterville. Major drainage improvements are planned for Mitchell's Way in Hyannis. Smaller drainage projects, cracksealing and preventive maintenance are also planned for various roads town-wide (approx. 28 miles) to extend their service life. Associated costs are included in this project.

**Source of Funding:** Capital Trust Fund Reserves \$3,250,000

**Budget Impact** – The purpose of this project is primarily to maintain the existing roadway network and reduce the impacts of deferred maintenance on future capital budgets.

**#2017-072 JFK Museum Plaza Replacement**

This project would fund needed replacement of the failing bluestone plaza. These funds would provide for design, demolition, and construction. The JFK Hyannis Museum is one of the most highly used leased properties owned by the Town of Barnstable. 65,000 people visit the facility over the course of an average year. The existing Bluestone plaza is of low quality stone. The stone is degrading and creating trip hazards. There have been falls by pedestrians at this location due to deteriorated and displaced plaza stones. It is the intent to replace the failing plaza stone with a stamped concrete surface.

**Source of Funding:** Transfer from Closed Appropriations \$235,000 Council Order 2014-101 & 2013-115

**Budget Impact** – It is anticipated that there will be fewer repair work orders for the site.



**#2017-073 Sidewalk Overlay and Guardrail & Cotuit Enhanced ADA Compliant Pedestrian Crossing**

Construction of Americans with Disabilities (ADA) compliant and traffic calming designed pedestrian crossings in Cotuit. In addition, remove and replace 6,000 linear feet of old deteriorated concrete post and steel cable guardrails. Remove old broken asphalt and vegetation within existing footprint of sidewalk. Install a new 1.5" layer of new asphalt.

**Source of Funding:** Capital Trust Fund Bond Issue \$314,000

**Budget Impact** - This is existing infrastructure, which is already being maintained. This work should reduce the impacts from deferred maintenance on future capital budgets.

**#2017-074 Barnstable Shooting Range**

The first phase includes lead reclamation, reconfiguration, shooting position improvements and safety improvements to the existing cleared shotgun and pistol/rifle ranges. Future phases will include a comprehensive site assessment of the entire range area and remediation of the 5,000 parts per million lead shot area.

**Source of Funding:** Capital Trust Fund Bond Issue \$350,000

**Budget Impact** – This project has no impact on the operating budget as the range remains closed. An operating budget for the reopening of the range will be developed in FY18 and brought forward for a funding request when the condition of the range is suitable.

**#2017-086 Osterville Recreation Building Design & Construction**

Demolition of existing buildings and construction of a new recreation building and recreation fields. The existing recreation building and the former Osterville Bay Elementary School have reached the end of their useful life and are beyond repair. Funds were appropriated in FY17 for demolition of the buildings. This request begins the process of designing improvements for the new facility. Parking is inadequate as the building and grounds are heavily used. The existing ball field has deep holes and ruts and is at the end of its useful life.

**Source of Funding:** Capital Trust Fund Bond Issue \$675,000 & Community Preservation Fund \$434,000

**Budget Impact** – Funding for the design portion of this project will include estimates of operating costs for the new fields and building.

**#2017-087 Barnstable Senior Center Stand-by Generator**

Installation of a new stand-by generator at the Senior Center to handle the electrical demands during a power outage. Being able to operate the Senior Center during power outage conditions with back-up power is very important as many seniors seek shelter during inclement weather. An emergency generator at the Senior Center would also allow for the safe evacuation of the Adult Supportive Day clients whose space is located in the Garden (lower) Level of the Senior Center. When there is a power outage, the staff must escort the clients, most of who have cognitive and/or mobility impairments, through a long, winding and steep pathway to reach the main level of the building. Having an emergency generator onsite would allow power to be restored so the elevator and lights would be functional, thereby ensuring the safety of all users of the facility. The Hyannis Fire Department has recommended the installation of the generator during Senior Center annual safety inspections.

**Source of Funding:** Capital Trust Fund Reserves \$154,000, Community Development Block Grant (CDBG) \$40,000, and Transfer from Closed Appropriations \$55,000 Council Order 2014-101

**Budget Impact** – Annual testing and maintenance should amount to less than \$1,000.

**#2017-088 Barnstable Police Department Dispatch Center Renovation**

The dispatch center console furniture and equipment will be removed and replaced with furniture and equipment that meets current industry standards. The current dispatch console will be replaced with custom-made console and infrastructure storage. The carpeted flooring will be replaced by a commercial grade vinyl floor. The computer systems will be replaced with systems that meet the current industry standards, including additional larger monitors and upgraded technology. The chairs for the four workstations will be replaced with four new commercial grade dispatch chairs designed for 24/7 use.

**Source of Funding:** Capital Trust Fund Reserves \$158,000

**Budget Impact** – This project is to stabilize an existing Town building and would require a marginal increase in utility costs.

**#2017-089 Hydrilla Control – Mystic Lake, Middle Pond, and Long Pond (Centerville)**

Perform whole lake Sonar herbicide treatment to control the hydrilla, a relentless aquatic invasive weed, in Long Pond, Centerville. Perform a whole lake liquid Sonar (AS and Genesis) treatment at Mystic Lake and an area specific liquid Sonar (AS and Genesis) treatment in Middle Pond, Marstons Mills (3-5 acres) to continue to control expanding pioneer growth of hydrilla. Conduct DASH, diver hand-pulling and benthic barrier deployment to supplement the liquid Sonar treatment in the three waterbodies if determined it is needed. In addition, multiple aquatic vegetation surveys of the non-native hydrilla and dominant native plant growth in Long Pond, Mystic and Middle Pond will be completed.

**Source of Funding:** Capital Trust Fund Reserves \$82,000

**Budget Impact** – Routine maintenance to remain the same.

**#2017-095 Tyler Content Manager (TCM)**

This project will automate the Town's vendor payment system. Currently, every town and school location manually enters their invoices into the Munis system, makes a copy of the invoice for their files, and delivers the original invoice to the Accounts Payable Office in the School Administration Building. TCM will allow every location to scan the original invoice into the Munis system and electronically deliver it to the accounts payable staff. In addition, original invoices will no longer need to be copied saving time and paper, and they will be stored at its originating site eliminating storage space needs in the accounting operations. TCM is scalable and can be used to automate other paper processes. This project will be initiated by automating one of the most paper intensive processes we have being vendor invoices.

**Source of Funding:** Capital Trust Fund Reserves \$105,000

**Budget Impact** – \$8,100/yearly maintenance

Two foreseeable cost savings.

1. Annual employee time cost savings = \$25,000
2. Annual expense cost savings (paper) = \$2,000

**WATER POLLUTION CONTROL ENTERPRISE FUND:**

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**#2017-075 Pump Station Evaluations**

The Water Pollution Control Division maintains twenty-seven pump stations in the Town of Barnstable. The purpose of this project is to evaluate the structural, electrical, and mechanical components of twenty-two pump of those pump stations. These evaluations will also examine the emergency backup power options for each pump station, the vulnerability of the Town's shoreline pump stations to sea level rise, and the remaining available capacity for each pump station. This study will serve as a road map for future pump station upgrade projects.

**Source of Funding:** Water Pollution Control Enterprise Fund Reserves \$200,000

**Budget Impact** – Future budgetary impacts are yet to be determined, pending the results of the evaluation.

**#2017-076 New ¾ Ton Pickup Truck**

Purchase of a new ¾ ton pickup truck with a utility bed and snowplow attachments. The Water Pollution Control Division (WPCD) has thirteen employees and only five routine work vehicles. At times, work needs to be scheduled around vehicle availability. By adding a sixth vehicle, WPCD staff will not have to wait until vehicles become available in order to complete necessary tasks. Furthermore, the WPCD is anticipating that the sewer collection system will be expanding in future years, resulting in the need for more work vehicles to perform required maintenance.

**Source of Funding:** Water Pollution Control Enterprise Fund Reserves \$55,000

**Budget Impact** - Annual maintenance will be performed in-house and the annual operating costs are estimated at \$4,000.

**#2017-077 Wastewater Treatment Plant Modeling – Biowin Model**

This purpose of this project is to hire a consultant to develop a computerized wastewater treatment plant simulation model for the Hyannis Water Pollution Control Facility. This model will analyze the chemical, biological, and mechanical components of the system. Included in this project is a laboratory sampling program in order to develop and calibrate the model.

**Source of Funding:** Water Pollution Control Enterprise Fund Reserves \$55,000

**Budget Impact** - The model could result in potential savings due to process optimization. This will be identified in the model.

**#2017-078 Barnstable Road Sewer Evaluation, Design and Construction**

This project funds the evaluation and design of the Barnstable Road sewer system upgrades. Construction of the recommended improvements will occur in conjunction with water department water line improvements in a future fiscal year. The Water Department's 2007 Master Plan calls for the replacement of 3200 feet of water main, valves, hydrants, and service connections on Barnstable Road. These funds will allow the Water Pollution Control Division (WPCD) to hire a consultant to identify end design improvements to the sewer system on Barnstable Road. Certain stretches of sewer on Barnstable Road are 80 years old and the need to repair these lines is becoming imminent. This project will coordinate these repairs with other utilities in order to save on overall project costs and minimize any inconvenience to the public that would be caused by frequent road openings.

**Source of Funding:** Water Pollution Control Enterprise Fund Reserves \$72,000

**Budget Impact** - Normal levels of preventative maintenance would continue with no impact on operating budget or staffing.

**WATER SUPPLY ENTERPRISE FUND:****#2017-079 Lease Buy-out of (3) Activated Carbon Filter Units - Mary Dunn 1, 2 & 3 Wells**

Buy-out two (2) existing leases for the filter equipment. One lease agreement with the Calgon Company covering the filter units at the Mary Dunn 1 and 2 wells, another lease agreement with the TIGG Company, covering the filter unit at the Mary Dunn 3 well. The need for the activated carbon filter units is projected to last at least another five to seven years. The total costs of the leases are approximately \$210,000 per year while the buy-out cost is \$490,840. The payback time is a little more than two years.

**Source of Funding:** Water Enterprise Fund Bond Issue \$491,000

**Budget Impact** – The operating expense budget will be decreased by \$210,000 for the annual lease payment. This will be partially offset by the new annual loan payment.

**#2017-080 Well Reactivation Project**

This well reactivation project is an effort to increase the water production capacity for the Hyannis Water System on an accelerated basis by reactivating the Straightway 1 and Mary Dunn 4 wells. The combination of recent UCMR3 sampling and testing and the lowering of the Environmental Protection Agency (EPA) health advisory for PFOS / PFOA have resulted in a water production deficiency for the Hyannis Water System. This project will have the ability to add two wells and approximately 1.2 MGD to the system without a lengthy, five-year new well permit process. The same amount of water purchased from Yarmouth was \$4,300 dollars per day.

**Source of Funding:** Water Enterprise Fund Bond Issue \$295,000

**Budget Impact** – This project, if successful, could eliminate the need to purchase water from other water providers saving close to \$1 million in the operating budget.

**#2017-081 Pipe Replacement and Upgrade Program**

This is a continuation of a 30-year, phased, pipe replacement and upgrade program for the Hyannis Water System; as recommended by Weston & Sampson Engineering, Inc. in their April 2007 Master Plan. It is important to implement a structured program to replace and upgrade the water pipes in the distribution system, some of which are over 100 years old. This program is in addition to the routine maintenance and repair program to be performed by the contracted water system operator. The proposed capital budget for this pipe replacement and upgrade program is \$1,050,000 per year, and includes a capially funded water works project manager to oversee and implement this program. This continuing project will ensure the long-term ability of the Hyannis Water System to provide sufficient drinking water and fire readiness protection for all its customers.

**Source of Funding:** Water Enterprise Fund Reserves Bond Issue \$500,000

**Budget Impact** – The upgrades will be to the existing distribution piping which are already maintained by the DPW. Replacing these pipes will likely result in less maintenance cost and should not result in the need for additional personnel.

**#2017-082 Wells, Pump Stations, Treatment Plant Repair & Upgrade Program**

This CIP is a continuation of the repairs and upgrades program started in FY2007. With the exception of the Straightway well #2, all of the wells were constructed in the early to mid-1970. The prior year's monies were used to install emergency generators, lighting, and fencing and implement pavement improvements. Starting in FY2014 the Hyannis Water Board approved the recommendation to implement a structured rehabilitation program dealing with major facility components needing upgrades or replacements. These facility components and cost allocations are: \$45,000 for buildings, \$40,000 for process control equipment, \$40,000 for safety and security components, and \$45,000 for electrical equipment. Project management and oversight will be provided by a project engineer, partially funded out of this program in the amount of \$30,000.

**Source of Funding:** Water Enterprise Fund Reserves \$200,000

**Budget Impact** – The upgrades will be to the existing well buildings, treatment and other facilities that are currently maintained by the DPW. Some operating budget savings may be realized by replacing existing equipment with more energy efficient equipment, and a reduction in maintenance cost.

**#2017-083 Water Storage Tank (Mary Dunn 1) new roof, appurtenances & site work construction**

Construction of a new foundation repair, climbing ladder, and overflow rehabilitation on the Mary Dunn 1 water storage tank. Repairs and upgrades will also be made to the security fencing, gates and access road. These requested monies are for construction services. This project was recommended by Weston & Sampson Engineering, Inc. in their April 2007 Master Plan. A detailed tank evaluation was done in July 2015 by Weston & Sampson Engineers, Inc. based on inspections by Merithew / Utility Services Corporation, which resulted in this proposed work.

**Source of Funding:** Water Enterprise Fund Bond Issue \$638,000

**Budget Impact** – Funding this project will reduce future capital costs associated with deferred upgrades.

**#2017-084 New pickup truck**

The existing Water Division truck is a 1999 Ford pickup truck with approximately 153,000 miles. This seventeen-year-old truck was part of the asset acquisition from the Barnstable Water Company by the Town in 2005. The DPW Fleet manager has stated that the truck is badly corroded and will not be able to receive an inspection sticker. He recommends replacement.

**Source of Funding:** Water Enterprise Fund Reserves \$45,000

**Budget Impact** – There is no operating budget impact as this is replacing an existing vehicle that will more likely than not need significant repairs in the near future.

**GOLF COURSE ENTERPRISE FUND:**

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**#2017-085 Hyannis Golf Course Turf Maintenance and Equipment Replacement**

Replace several key pieces of turf maintenance equipment. (2-green mowers, 2-tee mowers, 2-fairway mowers, 1-large area rough mower and 1-intermediate area rough mower).

**Source of Funding:** Golf Enterprise Fund Bond Issue \$325,000

**Budget Impact** – Replacing older equipment will save approximately \$5,000 in annual maintenance costs.

**AIRPORT ENTERPRISE FUND:**

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**#2017-090 Obstruction Mitigation Plan and Airspace Analysis**

All airports need to manage their surrounding obstructions that exist near the airfield. The last time an analysis was completed was approximately 15 years ago and development along with tree growth has continued to occur through the years. An airspace analysis would bring in data to determine which obstructions would require either removal or some type of mitigation. The resulting obstruction mitigation plan and vegetation management plan will allow the airport to strategically formulate a process to correct known obstructions.

**Source of Funding:** Airport Enterprise Fund Reserves \$17,250, FAA AIP reimbursable Grant funds at 90% & MassDOT at 5%; BMA at 5% \$327,750. Potential for inclusion of the VMP portion within a MDOT Statewide Program.

**Budget Impact** – This will be included as part of the analysis to be performed.

**#2017-091 Comprehensive FAA Airport Layout Plan/FAA Master Plan Update including Underground GIS Utilities Survey; Runway 15/33 Safety Enhancements and Improvements; Taxiway Echo Reconstruction; Engineered Material Arresting System (EMAS) Replacement**

The Airport's required Federal Aviation Administration (FAA) Airport Layout Plan (ALP) and Master Plan (per FAA Advisory Circular AC150/5070-6) is a comprehensive long-term plan for the airport development that should be revisited and updated periodically, particularly upon completion of the Town and Cape Cod Commission mandated Master Plan and Development Agreement process. Development items that improve an airport for the primary purpose of accommodating aircraft operations would also be included in the update and are considered to be "capacity projects," which would include the possible safety enhancements and improvements by the extension of Runway 15/33 by approximately 926 feet to provide a better margin of safety for regional and longer range private and commercial jet aircraft; and to determine the potential need for Terminal expansion to accommodate use of jetways for larger air carrier aircraft using this airport.

**Source of Funding:** Airport Enterprise Fund Reserves \$35,000, FAA Airport Improvement Project (AIP) reimbursable Grant funds at 90% & MassDOT at 5%; BMA at 5% \$665,000

**Budget Impact** - This project has no direct impact on future operating budgets.

**#2017-092 Airport Access Control and Security Improvements**

The Barnstable Municipal Airport has a security program approved by the Transportation Security Administration (TSA) under Part 1542 of 49CFR Chapter XII; and as such is required to provide approved airport security measures over designated portions of the airport including the airport perimeter; in areas where passengers are enplaned or deplaned; where baggage is sorted, loaded and unloaded; and includes any adjacent areas that are not separated by other adequate security measures. Access to all entry control points to all of the aforementioned areas must be controlled by approved access control systems of various degrees of technology to prevent any penetration into secure areas, including state of the art surveillance cameras, recording systems, fiber optics and/or cloud-based connectivity, and so forth. At this time, by adding several layers of security, the industry standard has moved forward by utilizing dual prong control which uses an access control proxy card ID and either a key pad or biometrics (fingerprint, palm print or retina scan), and the use of trained, qualified, and certified personnel. This project will be Phase 2 of this continuing effort.

**Source of Funding:** Airport Enterprise Fund Reserves \$37,250, FAA Airport Improvement Project (AIP) reimbursable Grant funds at 90% & MassDOT at 5%; BMA at 5% \$707,750 approved by the TSA FSD.

**Budget Impact** – To be determined

**#2017-093 Clear Vegetation and Obstruction Removal along the Airport Perimeter Fence Line Buffer Zone and in FAA Airspace (Part 77) Offending Areas**

Design, permit and clear vegetation that has regrown along most of the Airport perimeter fence line buffer zone creating potential Transportation Security Administration (TSA) security violations; and in places where the vegetation has regrown in certain areas of the airfield where it is creating an airspace flight obstruction – sometimes called an Federal Aviation Administration (FAA) FAR Part 77 airspace obstruction or an offending area.

**Source of Funding:** Airport Enterprise Fund Reserves \$15,000, FAA Airport Improvement Project (AIP) reimbursable Grant funds at 90% & MassDOT at 5%; BMA at 5% \$285,000

**Budget Impact** – Routine maintenance will continue unabated to maintain the clear zones. This project will prevent a future increase in annual maintenance, which cannot be managed by existing staff levels.

**#2017-094 Runway and Taxiway Markings and Airport-Owned Roadways Annual Painting Contract**

Airport Runway and Taxiway Markings require annual operational and maintenance painting in order to meet FAA 14 CFR Part 139 Inspection requirements to maintain the Airport FAA Certification. In addition, all Airport-owned roadways require annual maintenance painting for roadway and pedestrian safety. This project combines both recurring painting requirements into one annual recurring contract.

**Source of Funding:** Airport Enterprise Fund Reserves \$150,000

**Budget Impact** – Labor and materials savings will be used for other required projects and help to eliminate work backlog.

**Capital Trust Fund Cash Flow Analysis**

The Capital Trust Fund (CTF) is used as a mechanism to finance the Town's General Fund capital improvements program within the limitations of Proposition 2½. Annually, the Town transfers a sum of money from the General Fund into the CTF. The resources within the CTF are then used to make the annual loan payments on the bonds issued to finance the Town's capital program. The CTF operates essentially as a debt service fund. Some of the Town's capital appropriations are financed using the reserves within the CTF as opposed to bond issues. Annually, the Town reviews the projected cash flows in and out of the CTF for the prospective 20-year period in order to measure the level of additional capital appropriations the fund can absorb.

For the most part, this fund is not the funding source for Enterprise Fund capital improvements. Most enterprise funds pay 100% of their capital cost, which is recovered through their respective user fees. Enterprise Fund capital improvements may be funded from the CTF, which is a policy decision. The two current exceptions are the bond issues for the construction of the Hyannis Youth & Community Center (HYCC) and the bond issue for the Barnstable Harbor Marina bulkhead replacement.

The FY18 General Fund Capital Improvements Program includes a combination of "pay-as-you-go" or cash financing and new bond issues. The cash-financing portion of the program is funded from the Capital Trust fund reserves and balances remaining in appropriations from completed projects. This "pay-as-you-go" financing approach saves the Town thousands of dollars in the form of bond issuance and interest cost. It also provides the opportunity to have some capital program on an annual basis, and provides flexibility within the budget. With just a debt service program, the CTF can become saturated with loan payments and prohibit the approval of any new projects until the debt service from other projects expire. This would also reduce the Town's flexibility in its resource allocation as future cash flows are committed to fixed annual loan payments.

In the event of absolute necessity, the cash portion of the program could be converted to a debt program to allow for a larger capital program up front. For example, the Town could allocate \$1 million in cash per year for capital improvements or allocate \$1 million per year towards new debt service. \$1 million in new debt service could pay for a bond issue of approximately \$8 million with an amortization period of 10 years.

Furthermore, the cash program portion \$3.25 million could decrease the annual contribution from the general fund to the CTF, if the need for funding general fund operations is determined to be greater than the need for the capital expenditure. Countless scenarios can be created to allocate the annual cash flow of the CTF between cash and borrowing program.

The annual contribution to the CTF has grown to \$8.6 million in FY18. This amount is projected to increase by 2.5 percent per year in order to allocate more funds to the capital program. Even as more funds are allocated to the capital



program, the Town's capital needs require a higher contribution level. Opportunities to increase this contribution are examined every year. In FY16, an additional \$4 million was transferred from the general fund reserves to provide for a greater level of capital funding over the next five years and another \$1 million is anticipated by the end of FY19.

Table A on page 75 illustrates the CTF cash flow for the next 10 years incorporating all existing loan payments and the FY18 proposed capital improvements program. Table B illustrates the potential capacity within the CTF over the next ten years, and Table C provides the detailed amortization of all existing loans to be paid out of the CTF.

**Major Assumptions Used In Table A:**

- Investment earnings will average 1.1% per year;
- The transfer from the general fund will increase 2.5% per year;
- Loan amortization on the FY17 & FY18 bond issues will include:
  - \$363,000 and \$314,000 over 5 years,
  - \$1,455,000 and \$900,000 over 10 years,
  - \$3,159,000 and \$1,730,000 over 15 years,
  - \$4,526,000 and \$4,143,000 over 20 years;
- The coupon rates on the bonds are estimated to range from 2.5% to 4.0% with the longer the amortization period the higher the interest rate;
- The FY17 bonds will be issued at a time so that the first loan payments will not be made until FY18 and the first payment on the FY18 bond issue will be in FY19;
- There are no estimated savings from bond refinancing included in the projection;
- The Federal government will not make any changes and the tax advantages of municipal bonds will remain intact;
- No other major changes will take place in the municipal bond market; and
- The cash funded portion of the capital program will total \$3.7 million per year.

**Major Assumptions Used In Table B:**

In addition to all of the assumptions in Table A, bond issues of \$7 million per year are included for the FY19 through FY27 capital programs with the following amortization amounts:

- \$500,000 annually over 5 years
- \$1,000,000 annually over 10 years
- \$1,500,000 annually over 15 years
- \$4,000,000 annually over 20 years

TABLE A – Estimated Capital Trust Fund Cash Flow FY 2018 – FY 2027

ESTIMATED CAPITAL TRUST FUND CASH FLOW FY 2018 - FY 2027										
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
1 Beginning Trust Fund Balance	\$ 15,268,243	\$ 13,668,957	\$ 12,093,308	\$ 11,096,924	\$ 10,809,552	\$ 13,266,116	\$ 14,299,030	\$ 16,166,992	\$ 18,954,665	\$ 22,147,478
<b>Resources:</b>										
2 Investment Earnings	167,951	150,359	133,026	122,066	118,905	145,927	157,289	177,837	208,501	243,622
3 Private Road Betterments Collected	70,000	65,000	60,000	55,000	50,000	45,000	40,000	35,000	30,000	25,000
4 Transfer From General Fund	8,636,985	8,837,112	9,042,226	9,252,450	9,467,913	9,688,745	9,915,081	10,147,058	10,384,816	10,628,500
5 Additional Contribution From General Fund	-	-	-	-	2,000,000	-	-	-	-	1,000,000
6 Total Current Year Resources	8,874,936	9,052,471	9,235,252	9,429,516	11,636,818	9,879,672	10,112,370	10,359,895	10,623,317	11,897,122
7 Total Available Resources	24,143,178	22,721,428	21,328,560	20,526,441	22,446,370	23,145,788	24,411,400	26,526,886	29,577,982	34,044,600
<b>Commitments:</b>										
8 Existing Debt Service Payments	(5,716,646)	(5,399,462)	(5,031,234)	(4,544,744)	(4,036,367)	(3,788,159)	(3,264,730)	(2,619,903)	(2,494,343)	(2,032,619)
9 Estimated Debt Service on FY17 CIP (\$9.5M)	(892,575)	(876,200)	(859,825)	(843,450)	(827,075)	(753,670)	(737,654)	(721,638)	(716,824)	(699,352)
10 Estimated Debt Service on FY18 CIP (\$7.1M)	-	(652,458)	(640,576)	(628,694)	(616,812)	(604,930)	(542,024)	(530,681)	(519,338)	(516,677)
11 Public Roads Program	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)
12 Other Cash Program	(615,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)
13 Total Current Year Commitments	(10,474,221)	(10,628,120)	(10,231,635)	(9,716,888)	(9,180,254)	(8,846,759)	(8,244,408)	(7,572,222)	(7,430,504)	(6,948,648)
14 Increase (Decrease) in Trust Fund	(1,599,285)	(1,575,650)	(996,383)	(287,372)	2,456,564	1,032,914	1,867,962	2,787,673	3,192,813	4,948,474
15 Ending Trust Fund Balance	\$ 13,668,957	\$ 12,093,308	\$ 11,096,924	\$ 10,809,552	\$ 13,266,116	\$ 14,299,030	\$ 16,166,992	\$ 18,954,665	\$ 22,147,478	\$ 27,095,952
16 % of trust fund resources committed in CY (max = 80%)	44%	48%	50%	49%	43%	40%	35%	30%	26%	21%

This table illustrates the Capital Trust Fund’s (CTF) cash flow incorporating all existing loan payments on previously authorized projects as well as the recommended projects for FY18. Cash funded projects in FY18 total \$3,865,000 and bond funded projects total \$7.087 million. The bonds will be issued in FY18 and the first estimated loan payment of \$652,458 is anticipated to be made in FY19 as illustrated above on line 10. Line 8 in the table above includes all existing loan payments. Line 9 illustrates the estimate debt service payment on the Town’s FY17 bond issue which had not been sold at the time of writing this report. Lines 11 and 12 include estimates on future cash appropriations for capital to be financed from the trust fund’s reserves. One-time additional resources to be added to the fund in FY22 and FY27 are included on line 5. The percentage of the trust fund’s current year resources that are committed in any year are less than the Administrative Code limit of 80% (line 16) indicating that the fund has the capacity to absorb more debt financed projects in future years.

TABLE B – Capital Trust Fund Estimated Capacity for the Next 10 Years

ESTIMATED CAPITAL TRUST FUND CASH FLOW 10 Year Plan Projection											
		FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
1	Beginning Trust Fund Balance	\$ 15,268,243	\$ 13,833,957	\$ 12,260,123	\$ 10,590,574	\$ 8,967,557	\$ 9,438,497	\$ 7,848,307	\$ 6,468,185	\$ 5,484,047	\$ 4,392,319
	<b>Resources:</b>										
2	Investment Earnings	167,951	152,174	134,861	123,921	120,781	147,823	159,206	179,775	210,461	245,603
3	Private Road Betterments Collected	70,000	65,000	60,000	55,000	50,000	45,000	40,000	35,000	30,000	25,000
4	Transfer From General Fund	8,636,985	8,837,112	9,042,226	9,252,450	9,467,913	9,688,745	9,915,081	10,147,058	10,384,816	10,628,500
5	Additional Contribution From General Fund	-	-	-	-	2,000,000	-	-	-	-	1,000,000
6	Total Current Year Resources	8,874,936	9,054,286	9,237,087	9,431,371	11,638,694	9,881,568	10,114,287	10,361,833	10,625,277	11,899,103
7	Total Available Resources	24,143,178	22,888,243	21,497,210	20,021,946	20,606,251	19,320,065	17,962,594	16,830,018	16,109,324	16,291,422
	<b>Commitments:</b>										
8	Existing Debt Service Payments	(5,716,646)	(5,399,462)	(5,031,234)	(4,544,744)	(4,036,367)	(3,788,159)	(3,264,730)	(2,619,903)	(2,494,343)	(2,032,619)
9a	Estimated Debt Service on FY17 CIP	(892,575)	(876,200)	(859,825)	(843,450)	(827,075)	(753,670)	(737,654)	(721,638)	(716,824)	(699,352)
9b	Estimated Debt Service on FY18 CIP	-	(652,458)	(640,576)	(628,694)	(616,812)	(604,930)	(542,024)	(530,681)	(519,338)	(516,677)
9c	Estimated Debt Service on FY19 CIP	-	-	(675,000)	(662,500)	(650,000)	(637,500)	(625,000)	(523,750)	(512,750)	(501,750)
9d	Estimated Debt Service on FY20 CIP	-	-	-	(675,000)	(662,500)	(650,000)	(637,500)	(625,000)	(523,750)	(512,750)
9e	Estimated Debt Service on FY21 CIP	-	-	-	-	(675,000)	(662,500)	(650,000)	(637,500)	(625,000)	(523,750)
9f	Estimated Debt Service on FY22 CIP	-	-	-	-	-	(675,000)	(662,500)	(650,000)	(637,500)	(625,000)
9g	Estimated Debt Service on FY23 CIP	-	-	-	-	-	-	(675,000)	(662,500)	(650,000)	(637,500)
9h	Estimated Debt Service on FY24 CIP	-	-	-	-	-	-	-	(675,000)	(662,500)	(650,000)
9i	Estimated Debt Service on FY25 CIP	-	-	-	-	-	-	-	-	(675,000)	(662,500)
9j	Estimated Debt Service on FY26 CIP	-	-	-	-	-	-	-	-	-	(675,000)
10	Public Roads Program	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)
11	Other Cash Program	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)
12	Total Current Year Commitments	(10,309,221)	(10,628,120)	(10,906,635)	(11,054,388)	(11,167,754)	(11,471,759)	(11,494,408)	(11,345,972)	(11,717,004)	(11,736,898)
13	Increase (Decrease) in Trust Fund	(1,434,285)	(1,573,835)	(1,669,548)	(1,623,017)	470,939	(1,590,190)	(1,380,121)	(984,139)	(1,091,728)	162,205
14	Ending Trust Fund Balance	\$ 13,833,957	\$ 12,260,123	\$ 10,590,574	\$ 8,967,557	\$ 9,438,497	\$ 7,848,307	\$ 6,468,185	\$ 5,484,047	\$ 4,392,319	\$ 4,554,524
15	% of trust fund resources committed in CY (max = 80%)	44%	48%	53%	58%	57%	63%	69%	73%	80%	80%
	Bond Financed Program	7,087,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000
	Cash Funded Program	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000
	Total	10,787,000	10,700,000	10,700,000	10,700,000	10,700,000	10,700,000	10,700,000	10,700,000	10,700,000	10,700,000

Including the proposed FY18 capital program, it is estimated the Capital Trust Fund can absorb approximately \$96 million in projects over the next 10 years and stay within the maximum allowable commitment of 80% as shown on line 15. Cash financed capital is estimated at \$37 million and bond financed capital is estimated a \$63 million through FY27. The estimated annual loan payments on the bonds are illustrated on lines 9a through 9j.

TABLE C – Capital Trust Fund Debt Amortization Schedule

DEBT SERVICE PROGRAM		Issued	Maturity	Principal	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments
Purpose		Date	Date	Amount	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
CTF Building - Senior Center - Refunded	I	02/15/07	02/15/19	702,378	79,790	26,250	-	-	-	-	-	-	-	-
CTF MWPAT CW-04-31 Pool 11	I	11/09/07	07/15/20	389,216	33,999	33,999	33,999	33,999	-	-	-	-	-	-
CTF Coastal Water Quality Improvements	O	06/26/08	06/15/18	250,000	25,140	-	-	-	-	-	-	-	-	-
CTF Lake & Pond Improvements	I	06/26/08	06/15/18	250,000	25,140	-	-	-	-	-	-	-	-	-
CTF Bismore Park Visitor Center	I	06/26/08	06/15/23	465,000	32,473	-	-	-	-	-	-	-	-	-
CTF Bismore Park Visitor Center - CAP	I	06/26/08	06/15/23	150,000	10,475	-	-	-	-	-	-	-	-	-
CTF Boat Ramps - CAP	I	06/26/08	06/15/23	927,000	64,945	-	-	-	-	-	-	-	-	-
CTF Land Acquisition - CAP	I	06/26/08	06/15/23	365,200	25,140	-	-	-	-	-	-	-	-	-
CTF Pleasant St. Dock - 1	I	06/26/08	06/15/23	350,000	24,093	-	-	-	-	-	-	-	-	-
CTF Pleasant St. Dock - 2	I	06/26/08	06/15/23	350,000	24,093	-	-	-	-	-	-	-	-	-
CTF Private Road Repairs	I	06/26/08	06/15/23	1,607,900	112,083	-	-	-	-	-	-	-	-	-
CTF Municipal Building Improvements	I	06/26/08	06/15/28	297,000	5,238	-	-	-	-	-	-	-	-	-
CTF School Facility Improvements 1 (I)	I	06/26/08	06/15/28	916,600	31,425	-	-	-	-	-	-	-	-	-
CTF School Building Improvements	I	06/16/10	06/15/30	936,000	65,869	64,744	62,494	61,144	59,794	58,331	56,869	55,294	53,719	52,088
CTF Dredging	I	06/16/10	06/15/24	419,250	36,875	36,125	34,625	33,725	32,825	31,850	25,875	-	-	-
CTF Lake Treatment	I	06/16/10	06/15/25	275,000	24,575	24,075	23,075	17,475	17,025	16,538	16,050	15,525	-	-
CTF Municipal Facility Improvements	I	06/16/10	06/15/29	402,500	7,119	6,994	6,744	6,594	6,444	6,281	6,119	5,944	5,769	5,588
CTF Police Facility	I	06/16/10	06/15/30	508,000	36,594	35,969	34,719	33,969	33,219	32,406	31,594	30,719	29,844	28,938
CTF Nitrogen Management CW-04-31-A	I	03/15/11	07/15/20	211,460	23,330	23,330	23,330	23,330	-	-	-	-	-	-
CTF School Facilities Upgrades/Repairs V (I)	I	06/14/11	06/15/31	884,000	68,719	66,919	65,119	63,319	61,519	59,719	57,919	56,400	54,825	53,138
CTF Advance Refund 6/15/2002 Land Acquisitions BUTAPS	I	06/14/11	06/15/20	1,102,000	145,600	140,400	135,200	-	-	-	-	-	-	-
CTF Boat Ramp Renovations	I	06/14/11	06/15/21	250,000	29,000	28,000	27,000	26,000	-	-	-	-	-	-
CTF Bridge Repair	I	06/14/11	06/15/21	250,000	29,000	28,000	27,000	26,000	-	-	-	-	-	-
CTF Building - Town Hall Space - 00-110 Refunded	I	06/14/11	06/15/21	180,000	23,080	21,280	20,520	19,760	-	-	-	-	-	-
CTF Dredging East Bay & Blish Point	I	06/14/11	06/15/21	665,000	75,400	72,800	70,200	67,600	-	-	-	-	-	-
CTF Municipal Facility Improvement	I	06/14/11	06/15/21	300,000	34,800	33,600	32,400	31,200	-	-	-	-	-	-
CTF School Facilities Upgrades/Repairs IV	I	06/14/11	06/15/21	332,000	34,800	33,600	32,400	31,200	-	-	-	-	-	-
CTF School Parking Lot (I)	I	06/14/11	06/15/21	250,000	29,000	28,000	27,000	26,000	-	-	-	-	-	-
CTF Sidewalk Improvements	I	06/14/11	06/15/21	350,000	40,600	39,200	37,800	36,400	-	-	-	-	-	-
CTF Building - Town Hall Repairs - 01-087 Refunded	I	06/14/11	06/15/22	100,000	11,960	11,560	11,160	10,760	9,360	-	-	-	-	-
CTF School Remolding - Asbestos 00-110 Refunded	I	06/14/11	06/15/22	50,000	6,000	5,800	5,600	5,400	5,200	-	-	-	-	-
CTF Baxter Neck Road's - Private Way	I	06/14/11	06/15/26	350,000	32,725	31,725	30,725	29,725	23,725	22,925	22,125	21,450	20,750	-
CTF Prince Cove/Hayward Rd. Boat Ramp	I	06/14/11	06/15/26	600,000	53,850	52,250	50,650	49,050	47,450	45,850	44,250	42,900	41,500	-
CTF School Facilities Upgrades/Repairs II	I	06/14/11	06/15/26	179,000	13,463	13,063	12,663	12,263	11,863	11,463	11,063	10,725	10,375	-
CTF School Facilities Upgrades/Repairs III	I	06/14/11	06/15/26	190,000	18,863	18,263	17,663	17,063	11,863	11,463	11,063	10,725	10,375	-
CTF School Improvement (I)	I	06/14/11	06/15/26	487,000	45,588	39,188	37,988	36,788	35,588	34,388	33,188	32,175	31,125	-
CTF Advance Refund 6/15/2003 Main St. Hyannis Infr. Improv.	I	04/18/12	09/15/20	39,100	5,523	5,348	5,198	4,162	-	-	-	-	-	-
CTF Advance Refund 6/15/2003 Building Improvements	I	04/18/12	09/15/22	96,600	11,764	11,414	11,114	10,814	10,464	6,732	-	-	-	-
CTF Advance Refund 6/15/2003 Drainage 1 (i)	I	04/18/12	09/15/22	193,200	23,528	22,828	22,228	21,628	18,968	15,504	-	-	-	-
CTF Advance Refund 6/15/2003 Drainage 2 (i)	I	04/18/12	09/15/22	96,700	11,768	11,418	11,118	10,818	10,468	6,834	-	-	-	-
CTF Advance Refund 6/15/2003 Police Facility Addition	I	04/18/12	09/15/22	626,900	76,557	71,229	67,500	65,700	63,600	61,200	-	-	-	-
CTF Advance Refund 6/15/2003 School Remodel I	I	04/18/12	09/15/22	242,700	30,299	29,389	28,609	22,806	21,192	20,196	-	-	-	-
CTF Advance Refund 6/15/2003 School Remodel II	I	04/18/12	09/15/22	193,400	23,480	22,780	22,180	21,580	17,940	15,300	-	-	-	-
CTF Beach Facility Design	I	11/22/13	11/15/18	115,000	20,600	20,200	-	-	-	-	-	-	-	-
CTF Guardrail Replacements	I	11/22/13	11/15/18	60,000	10,300	10,100	-	-	-	-	-	-	-	-
CTF Intermediate School Roof & Façade Design	I	11/22/13	11/15/18	100,000	20,600	20,200	-	-	-	-	-	-	-	-
CTF Lombard Parking & Ballfield Design	I	11/22/13	11/15/18	101,000	20,600	20,200	-	-	-	-	-	-	-	-
CTF School Grounds Maintenance Equipment	I	11/22/13	11/15/18	150,000	30,900	30,300	-	-	-	-	-	-	-	-

TABLE C – Capital Trust Fund Debt Amortization Schedule – Continued

DEBT SERVICE PROGRAM		Issued	Maturity	Principal	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments
Purpose		Date	Date	Amount	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
CTF School Gym Bleacher Upgrades	I	11/22/13	11/15/18	55,000	10,300	10,100	-	-	-	-	-	-	-	-
CTF School Hot Water Pump Replacement	I	11/22/13	11/15/18	85,000	15,450	15,150	-	-	-	-	-	-	-	-
CTF School Kitchen equipment	I	11/22/13	11/15/18	110,000	20,600	20,200	-	-	-	-	-	-	-	-
CTF Sewer Expansion Analysis	I	11/22/13	11/15/18	70,000	15,350	10,100	-	-	-	-	-	-	-	-
CTF Bumps River Bridge Repair	I	11/22/13	11/15/23	120,000	16,750	11,500	11,250	10,950	10,650	10,375	10,125	-	-	-
CTF East Bay Dredging	I	11/22/13	11/15/23	600,000	70,200	69,000	67,500	65,700	63,900	62,250	60,750	-	-	-
CTF Guyer Barn Upgrades	I	11/22/13	11/15/23	148,000	17,425	17,125	16,750	16,300	15,850	15,438	10,125	-	-	-
CTF Highway Operations Facility Construction	I	11/22/13	11/15/23	66,000	5,850	5,750	5,625	5,475	5,325	5,188	5,063	-	-	-
CTF HS Library AC Units	I	11/22/13	11/15/23	450,000	52,650	51,500	50,625	49,275	47,925	46,688	45,563	-	-	-
CTF Hyannis Harbor Bulkhead Construction	I	11/22/13	11/15/23	142,000	17,150	16,850	16,475	16,025	10,650	10,375	10,125	-	-	-
CTF MEA Facility Upgrades	I	11/22/13	11/15/23	131,000	17,000	16,700	16,325	10,950	10,650	10,375	10,125	-	-	-
CTF Millway Boat Ramp & Dock Upgrades	I	11/22/13	11/15/23	133,000	17,000	16,700	16,325	10,950	10,650	10,375	10,125	-	-	-
CTF Osterville Community Building Upgrades	I	11/22/13	11/15/23	200,000	23,400	23,000	22,500	21,900	21,300	20,750	20,250	-	-	-
CTF Pearl St Building Upgrades	I	11/22/13	11/15/23	114,000	11,700	11,500	11,250	10,950	10,650	10,375	10,125	-	-	-
CTF Police Station Upgrades	I	11/22/13	11/15/23	168,000	17,550	17,250	16,875	16,425	15,975	15,563	15,188	-	-	-
CTF Private Road Repairs (I)	I	11/22/13	11/15/23	633,000	75,500	74,200	72,575	65,700	63,900	62,250	60,750	-	-	-
CTF S&G Facility Roof Repairs	I	11/22/13	11/15/23	103,000	11,700	11,500	11,250	10,950	10,650	10,375	10,125	-	-	-
CTF School Computer Network Infrastructure	I	11/22/13	11/15/23	189,000	23,000	22,600	22,100	21,500	15,975	15,563	15,188	-	-	-
CTF School Fire & Communications System	I	11/22/13	11/15/23	200,000	23,400	23,000	22,500	21,900	21,300	20,750	20,250	-	-	-
CTF School Roof Repairs	I	11/22/13	11/15/23	600,000	70,200	69,000	67,500	65,700	63,900	62,250	60,750	-	-	-
CTF Sidewalk Overlays	I	11/22/13	11/15/23	190,000	23,150	22,750	22,250	21,650	21,050	15,563	15,188	-	-	-
CTF Tennis Courts	I	11/22/13	11/15/23	500,000	58,500	57,500	56,250	54,750	53,250	51,875	50,625	-	-	-
CTF Town Hall Interior Upgrades	I	11/22/13	11/15/23	150,000	17,550	17,250	16,875	16,425	15,975	15,563	15,188	-	-	-
CTF US Custom House upgrades	I	11/22/13	11/15/23	263,000	29,250	28,750	28,125	27,375	26,625	25,938	25,313	-	-	-
CTF Water Quality Evaluation	I	11/22/13	11/15/23	230,000	28,700	28,200	27,575	21,900	21,300	20,750	20,250	-	-	-
CTF West Barnstable Community Building Upgrades	I	11/22/13	11/15/23	72,000	10,900	5,750	5,625	5,475	5,325	5,188	5,063	-	-	-
CTF Beach Facilities Improvements (I) \$270,000 Refunded	I	02/15/15	02/15/22	71,300	17,985	16,310	15,680	15,120	14,560	-	-	-	-	-
CTF Marstons Mills Fish Run Reconstruction	I	02/17/15	02/15/30	326,000	34,875	33,750	27,625	26,825	26,025	25,225	24,425	23,625	22,825	22,225
CTF Senior Center - Parking Lot Expansion	I	02/17/15	02/15/30	290,000	29,125	28,225	27,325	26,525	25,725	24,925	24,125	23,325	22,525	21,925
CTF Centerville Recreation Building	I	02/17/15	02/15/35	185,000	15,763	15,313	14,863	14,463	14,063	13,663	13,263	12,863	12,463	12,163
CTF Early Learning Center Modular Facility	I	02/17/15	02/15/35	2,000,000	162,125	157,625	153,125	149,125	145,125	141,125	137,125	133,125	129,125	126,125
CTF Police Facilities	I	02/17/15	02/15/35	288,000	23,869	23,194	22,519	21,919	21,319	20,719	20,119	19,519	18,919	18,469
CTF Blish Point Sand Management	I	02/17/15	02/15/20	215,000	50,425	43,400	41,600	-	-	-	-	-	-	-
CTF Dredge Permitting/Planning	I	02/17/15	02/15/20	341,000	78,675	70,525	67,600	-	-	-	-	-	-	-
CTF Sidewalk/Guardrail Improvements 1	I	02/17/15	02/15/20	200,000	45,200	43,400	41,600	-	-	-	-	-	-	-
CTF Sidewalk/Guardrail Improvements 2	I	02/17/15	02/15/20	85,000	16,950	16,275	15,600	-	-	-	-	-	-	-
CTF School Facilities Repair & Improvement (I) \$660,000 Refunded	I	02/17/15	02/15/22	199,700	51,390	49,455	42,520	41,000	38,480	-	-	-	-	-
CTF School Upgrades 1 (I) \$360,000 Refunded	I	02/17/15	02/15/22	104,700	28,127	27,360	21,280	20,520	19,760	-	-	-	-	-
CTF Police Station Construction (I) \$400,000 Adv Refunded 6-15-05	I	02/17/15	02/15/25	181,650	23,783	23,130	22,320	21,600	20,880	20,160	19,440	18,720	-	-
CTF Land Acquisition (I) - Hyannis Golf Course \$748,000 Refunded	I	02/17/15	02/15/26	325,200	52,065	49,310	47,600	46,080	44,560	43,040	35,520	34,240	32,960	-
CTF MME Roof Replacement (I) \$750,000 Refunded	I	02/17/15	02/15/26	329,800	52,056	49,510	47,800	46,280	44,760	43,240	40,720	34,240	32,960	-
CTF School Health & Safety Improvements \$478,000 Refunded	I	02/17/15	02/15/26	193,400	31,780	30,700	29,620	28,660	27,700	21,740	19,980	19,260	18,540	-
CTF BHMCS Roof (I) \$910,000 Refunded	I	02/17/15	02/15/27	426,900	60,581	57,705	55,770	54,050	52,330	50,610	48,890	46,170	44,490	42,230
CTF School Upgrades 2 (I) \$150,000 Refunded	I	02/17/15	02/15/27	47,400	6,766	6,645	6,420	6,220	6,020	5,820	5,620	4,920	4,240	4,120
CTF Senior Center - Garden Level \$457,000 Refunded	I	02/17/15	02/15/27	195,000	31,635	25,555	24,700	23,940	23,180	22,420	21,660	20,900	20,140	19,570
CTF Town Building Repairs & Renovations \$685,000 Refunded	I	02/17/15	02/15/27	317,600	46,470	44,940	43,410	41,050	39,730	38,410	37,090	30,770	29,650	27,810
CTF Nitrogen Management CW-04-31-B Series 16	I	05/14/15	07/15/20	157,531	27,842	27,882	27,922	27,963	-	-	-	-	-	-
CTF BCHMPCS Façade & Roof Improvements (#2015-117)	I	02/25/16	06/30/26	260,000	39,200	33,000	32,000	31,000	30,000	29,000	28,000	27,000	26,000	-

TABLE C – Capital Trust Fund Debt Amortization Schedule – Continued

DEBT SERVICE PROGRAM		Issued	Maturity	Principal	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments
Purpose		Date	Date	Amount	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
CTF Channel Dredging- Barnstable Harbor (#2016-035)	I	02/25/16	06/30/26	490,000	67,600	65,600	63,600	61,600	59,600	57,600	55,600	48,600	46,800	-
CTF High School & Middle School Boiler Upgrades (#2015-119)	I	02/25/16	06/30/26	350,000	47,600	46,200	44,800	43,400	42,000	40,600	39,200	37,800	36,400	-
CTF Paving: Bay Stree Boat Ramp (#2015-099)	I	02/25/16	06/30/26	142,000	20,000	19,400	18,800	18,200	17,600	17,000	16,400	10,800	10,400	-
CTF W Village Elementary A/C Replacement (#2015-120)	I	02/25/16	06/30/26	250,000	34,000	33,000	32,000	31,000	30,000	29,000	28,000	27,000	26,000	-
CTF Hamblin Pond Alum Treatment (#2015-112)	I	02/25/16	06/30/31	300,000	29,725	28,925	28,125	27,325	26,525	25,725	24,925	24,125	23,325	22,525
CTF Joshua's Pond Recreational Facility (#2015-111)	I	02/25/16	06/30/31	282,000	29,194	28,394	27,594	26,794	25,994	25,194	24,394	23,594	22,794	21,994
CTF Road Repairs - Governors Way (#2016-037)	I	02/25/16	06/30/31	304,000	29,725	28,925	28,125	27,325	26,525	25,725	24,925	24,125	23,325	22,525
CTF Road Repairs (#2015-102)	I	02/25/16	06/30/31	518,000	51,719	50,319	48,919	47,519	46,119	44,719	43,319	41,919	40,519	39,119
CTF BIS Façade & Roof Improvements (#2015-116)	I	02/25/16	06/30/36	3,353,000	276,781	269,981	263,181	256,381	249,581	242,781	235,981	229,181	222,381	210,581
CTF Craigville Beach Bathhouse (#2016-031)	I	02/25/16	06/30/36	450,000	39,525	38,525	37,525	36,525	35,525	34,525	33,525	32,525	31,525	25,525
CTF Elementary School Modular Classroom (#2015-115)	I	02/25/16	06/30/36	3,720,000	308,306	300,706	293,106	280,506	273,106	265,706	258,306	250,906	243,506	236,106
CTF Guardrail Improvements (#2015-098)	I	02/25/16	06/30/36	170,000	26,000	25,200	24,400	18,600	18,000	17,400	16,800	16,200	15,600	-
CTF Police Station Remodeling (#2015-100)	I	02/25/16	06/30/36	355,000	31,444	30,644	29,844	29,044	28,244	27,444	26,644	25,844	25,044	24,244
CTF Sidewalk Improvements (#2015-098)	I	02/25/16	06/30/36	230,000	33,200	32,200	31,200	30,200	29,200	23,200	22,400	21,600	20,800	-
CTF Town Hall Remodeling (#2015-101)	I	02/25/16	06/30/36	939,000	79,831	77,831	75,831	73,831	71,831	69,831	67,831	65,831	63,831	57,831
CTF Bismore Park Visitor Center - CAP \$150,000	I	06/21/16	06/30/23	48,000	1,920	11,920	11,120	10,400	9,720	9,040	8,360	7,680	7,000	-
CTF Bismore Park Visitor Center \$465,000 Refunded	I	06/21/16	06/30/23	147,500	5,900	35,900	34,200	33,520	32,840	29,120	-	-	-	-
CTF Boat Ramps - CAP \$927,000 Refunded	I	06/21/16	06/30/23	290,000	11,600	66,600	69,400	67,000	64,600	57,200	-	-	-	-
CTF Land Acquisition - CAP \$365,200 Refunded	I	06/21/16	06/30/23	115,000	4,600	28,600	27,640	26,680	23,720	21,840	-	-	-	-
CTF Pleasant St. Dock - 1 \$350,000 Refunded	I	06/21/16	06/30/23	109,500	4,380	27,380	25,960	24,560	22,680	21,840	-	-	-	-
CTF Pleasant St. Dock - 2 \$350,000 Refunded	I	06/21/16	06/30/23	110,000	4,400	27,400	26,480	24,560	22,680	21,840	-	-	-	-
CTF Private Road Repairs \$1,607,900	I	06/21/16	06/30/23	509,000	20,360	125,360	120,160	112,000	108,000	104,000	-	-	-	-
CTF Municipal Building Improvements \$297,000 Refunded	I	06/21/16	06/30/28	49,300	1,572	6,572	5,672	6,200	6,000	5,800	5,600	5,400	5,300	5,200
CTF School Facility Improvements 1 (I) \$916,600 Refunded	I	06/21/16	06/30/28	295,700	9,428	39,428	36,928	34,080	36,000	34,800	33,600	32,400	31,800	31,200
<b>TOTAL GENERAL FUND DEBT SERVICE</b>					<b>4,462,479</b>	<b>4,181,931</b>	<b>3,861,053</b>	<b>3,410,003</b>	<b>2,940,066</b>	<b>2,734,177</b>	<b>2,250,789</b>	<b>1,643,583</b>	<b>1,557,868</b>	<b>1,130,836</b>
CTF HYCC 4	I	06/26/08	06/15/28	6,765,000	354,055	-	-	-	-	-	-	-	-	-
CTF Marina Bulkhead Repair I	I	06/14/11	06/15/30	725,000	58,831	57,231	55,631	54,031	52,431	50,831	44,231	43,050	41,825	40,513
CTF HYCC 1 (I) \$1,000,000 Refunded	I	02/17/15	02/15/27	474,900	66,446	64,390	62,230	60,310	58,390	56,470	53,550	51,670	49,790	47,380
CTF HYCC 2 (I) \$8,000,000 Refunded	I	02/17/15	02/15/27	3,794,400	535,190	515,775	495,450	480,170	463,890	447,650	430,450	413,330	396,290	380,070
CTF HYCC 3 (I) \$1,600,000 Refunded	I	02/17/15	02/15/27	759,000	107,645	103,135	98,670	95,630	92,590	89,550	86,510	82,470	79,470	76,220
CTF HYCC 4 (I) \$6,765,000 Refunded	I	06/21/16	06/30/28	3,320,000	107,000	452,000	433,200	419,600	404,000	384,480	374,200	360,800	344,100	332,600
<b>TOTAL ENTERPRISE FUND DEBT SERVICE</b>					<b>1,229,167</b>	<b>1,192,531</b>	<b>1,145,181</b>	<b>1,109,741</b>	<b>1,071,301</b>	<b>1,028,981</b>	<b>988,941</b>	<b>951,320</b>	<b>911,475</b>	<b>876,783</b>
Temporary interest on bond anticipation notes					25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
<b>GRAND TOTAL ALL DEBT SERVICE</b>					<b>5,716,646</b>	<b>5,399,462</b>	<b>5,031,234</b>	<b>4,544,744</b>	<b>4,036,367</b>	<b>3,788,159</b>	<b>3,264,730</b>	<b>2,619,903</b>	<b>2,494,343</b>	<b>2,032,619</b>

# Sewer Construction and Private Way Maintenance and Improvements Fund

Chapter 355 of the Acts of 2014 enacted by the General Court allows the Town of Barnstable to establish a special fund that may be used for the construction of sewers and the maintenance and improvements of private ways.

Dedicated revenue sources for this fund include 100% of the local meals excise tax and one-third of the local rooms excise tax. In addition, any betterment assessed to property abutters on sewer construction and private way improvements will also be credited to this fund if the fund is used to finance the improvements.

The Stewart's Creek sewer construction, West Main Street Pump Station and FY16 private way improvement projects are the only projects to date that have been accounted for within this special fund. The Town borrowed money from the Massachusetts Clean Water Trust to finance the construction of the sewer projects. The Town received low interest loans and principal subsidies on the loans. The loans will be paid back from the resources credited to this special fund. Betterments on the Stewarts Creek project were assessed to property abutters in the amount of 50% of the project costs. The betterments collected are credited to this fund.

The Fiscal Year 2018 Capital Program does not include any projects to be financed from this fund. On the following page is a 10 year projection for the fund's activity. With no additional projects included in the projection the fund is estimated to accumulated available resources amounting to \$36 million by fiscal year 2027.

	Projected									
	2018P	2019P	2020P	2021P	2022P	2023P	2024P	2025P	2026P	2027P
INT.PENALT.SEWER	\$ 24,000	\$ 22,000	\$ 20,000	\$ 18,000	\$ 16,000	\$ 14,000	\$ 12,000	\$ 10,000	\$ 8,000	\$ 6,000
HOTEL/MOTEL TAX	952,748	962,275	971,898	981,617	991,433	1,001,348	1,011,361	1,021,475	1,031,689	1,042,006
MEALS TAX	1,480,280	1,480,280	1,480,280	1,480,280	1,480,280	1,480,280	1,480,280	1,480,280	1,480,280	1,480,280
SEWER ASSESSMENT	128,391	121,391	114,391	107,391	100,391	93,391	86,391	79,391	72,391	65,391
EARNINGS ON INVESTMENT	91,534	105,229	121,478	137,835	154,320	170,934	187,679	204,556	221,568	238,715
<b>Total Revenues:</b>	<b>2,676,953</b>	<b>2,691,176</b>	<b>2,708,048</b>	<b>2,725,124</b>	<b>2,742,425</b>	<b>2,759,953</b>	<b>2,777,711</b>	<b>2,795,702</b>	<b>2,813,928</b>	<b>2,832,393</b>
	-0.45%	0.53%	0.63%	0.63%	0.63%	0.64%	0.64%	0.65%	0.65%	0.66%
PRINCIPAL LONG-TERM DEBT	372,642	380,507	388,541	396,742	405,117	413,669	422,402	431,320	440,426	449,724
INTEREST LONG TERM DEBT	128,259	120,728	113,037	105,184	97,166	88,978	80,617	72,080	63,363	54,461
DEBT ISSUANCE EXPENSES	9,500	9,000	8,500	8,000	7,500	7,000	6,500	6,000	5,500	5,000
<b>Total Expenses:</b>	<b>510,402</b>	<b>510,235</b>	<b>510,078</b>	<b>509,926</b>	<b>509,783</b>	<b>509,647</b>	<b>509,519</b>	<b>509,400</b>	<b>509,288</b>	<b>509,185</b>
<b>Surplus Generated (Used)</b>	<b>2,166,552</b>	<b>2,180,941</b>	<b>2,197,970</b>	<b>2,215,197</b>	<b>2,232,642</b>	<b>2,250,306</b>	<b>2,268,192</b>	<b>2,286,302</b>	<b>2,304,640</b>	<b>2,323,207</b>
<b>Beginning Surplus</b>	<b>14,030,556</b>	<b>16,197,108</b>	<b>18,378,049</b>	<b>20,576,019</b>	<b>22,791,216</b>	<b>25,023,858</b>	<b>27,274,164</b>	<b>29,542,356</b>	<b>31,828,659</b>	<b>34,133,299</b>
<b>Ending Surplus</b>	<b>\$ 16,197,108</b>	<b>\$ 18,378,049</b>	<b>\$ 20,576,019</b>	<b>\$ 22,791,216</b>	<b>\$ 25,023,858</b>	<b>\$ 27,274,164</b>	<b>\$ 29,542,356</b>	<b>\$ 31,828,659</b>	<b>\$ 34,133,299</b>	<b>\$ 36,456,506</b>

# Debt Position Analysis

## Type and Purpose of Debt

The Town sells bonds to finance major capital improvements that require large cash outlays. General Obligation Bonds (G.O.B) have been sold to fund capital improvements managed by various municipal operations such as schools, public works, recreation, conservation, and the Town's enterprise fund operations. General Obligation Debt, (G.O.D), is supported by the full faith and credit of the Town and is repaid from property taxes collected from both current and future property owners throughout the term of the debt, except for the bonds issued to fund most capital improvements for enterprise fund operations. Although property taxes are pledged as collateral for enterprise fund GOB's, most of the bonds are repaid with revenue generated by the enterprise funds and not property taxes. This arrangement provides for more favorable borrowing rates for enterprise fund debt and is required by Massachusetts General Laws. Alternatively, enterprise funds would have to issue what are referred to as "Revenue Bonds", which would typically carry much higher interest rates, as the collateral is enterprise fund revenue as opposed to property taxes.

Properly structured municipal debt is tax exempt. This feature is attractive to many investors who, in turn, require less interest than they would from non-tax-exempt investments. Typical rates for municipal bonds over the past several years have been in the 1.5% to 4% range. Rates remain low in FY17 as the economy is making municipal bonds more attractive for highly rated communities. When netted out against inflation, municipal borrowing costs, especially for strong credit worthy Towns such as Barnstable is enviable.

The Town operates several enterprise funds including the airport, two golf courses, a wastewater treatment facility, a solid waste transfer station, water supply operations, four marinas, Sandy Neck Beach Park, and the Hyannis Youth & Community Center. These funds are expected to repay their debt from the revenues that they generate unless it is determined that a General Fund contribution is necessary to provide for some fee mitigation. In addition, the Town has borrowed on behalf of the Community Preservation Fund (CPF) that was created by general legislation to enable towns in the Commonwealth to acquire open space and to finance recreation, community housing, and historic preservation projects. The CPF, a special revenue fund, is funded with three percent surtax on each real estate tax bill. The Commonwealth provides a partial matching program for the surtax billed from a state trust account, which is funded by real estate transfer taxes. The matching program is expected to decline as more communities adopt the CPF, real estate transactions declining, as well as a decline in the State's trust fund balance.

## Current Debt Position

As of June 30, 2016, the Town of Barnstable had \$107 million of outstanding long-term debt. New debt issued in FY16 was \$19 million and existing debt retired was \$12 million, representing a \$7 million net increase in the outstanding long-term debt level from June 30, 2015. These debt figures include all debt incurred on behalf of the governmental funds and enterprise funds.



**Projected Debt Payments by Project and Fund**

The following four tables set forth the projected General Obligation Debt (G.O.D.) payments by issue for both the Town’s governmental funds and the enterprise funds. It is significant to note the State reimburses for school construction projects at the rate of 64% including interest costs incurred, as well as several Massachusetts Clean Water Trust (MCWT) loans for sewer construction, water system improvements and landfill capping loans.

**Bonds Payable Schedule – Governmental Funds (Excludes Enterprise Fund Debt)**

Projects	Maturities Through	Original Loan Amount	Coupon Rate (%)	Outstanding at June 30, 2015	Issued	Redeemed	Outstanding at June 30, 2016
MCWT Title V Bond of 1997.....	2021	\$ 200,000	0.00	\$ 62,203	\$ -	\$ (10,403)	\$ 51,800
MCWT Title V Bond of 2002.....	2023	200,000	0.00	80,240	-	(9,972)	70,268
MCWT Title V Bonds of 2006.....	2026	400,000	0.00	220,000	-	(20,000)	200,000
MCWT Title V Bond of 2007.....	2027	200,000	0.00	120,000	-	(10,000)	110,000
Municipal Purpose Bonds of 2007.....	2027	43,910,388	3.38 - 4.75	17,480,000	-	(4,245,000)	13,235,000
MCWT Bond of 2008 (CW-04-31).....	2021	389,216	2.00	192,238	-	(30,460)	161,778
Municipal Purpose Bonds of 2008.....	2028	5,928,700	3.75 - 4.50	2,839,000	-	(2,113,000)	726,000
MCWT Bond of 2009.....	2021	887,454	2.00	289,444	-	(45,766)	243,678
Municipal Purpose Bonds of 2010.....	2030	3,873,270	2.00 - 5.00	2,550,000	-	(200,000)	2,350,000
Municipal Purpose Bonds of 2011.....	2031	15,451,000	2.00 - 4.00	9,310,000	-	(1,715,000)	7,595,000
Municipal Purpose Refunding of 2012.....	2023	10,037,900	2.00 - 4.00	6,879,500	-	(910,000)	5,969,500
Municipal Purpose Bonds of 2014.....	2024	6,248,000	2.00 - 3.00	5,455,000	-	(750,000)	4,705,000
Municipal Purpose Refunding of 2015.....	2027	5,265,500	2.00 - 4.50	5,265,500	-	(299,100)	4,966,400
Municipal Purpose Bonds of 2015.....	2035	3,930,000	2.00 - 4.50	3,930,000	-	(355,000)	3,575,000
Municipal Purpose Bonds of 2016.....	2036	12,113,000	2.00 - 4.00	-	12,113,000	-	12,113,000
Municipal Purpose Refunding of 2016.....	2028	1,674,000	2.00 - 4.00	-	1,674,000	-	1,674,000
<b>Total Bonds Payable.....</b>				<b>54,673,125</b>	<b>13,787,000</b>	<b>(10,713,701)</b>	<b>57,746,424</b>
Add: unamortized premium.....				871,649	1,000,312	(167,402)	1,704,559
<b>Total Bonds Payable, net.....</b>				<b>\$ 55,544,774</b>	<b>\$ 14,787,312</b>	<b>\$ (10,881,103)</b>	<b>\$ 59,450,983</b>

Debt service requirements for principal and interest for **Governmental Bonds Payable** in future fiscal years are as follows:

Year	Principal	Interest	Total
2017.....	\$ 9,374,178	\$ 2,317,042	\$ 11,691,220
2018.....	9,269,185	1,896,535	11,165,720
2019.....	9,249,430	1,500,056	10,749,486
2020.....	5,647,108	1,091,694	6,738,802
2021.....	4,468,615	869,870	5,338,485
2022.....	3,998,204	692,056	4,690,260
2023.....	3,367,704	526,844	3,894,548
2024.....	2,278,000	403,468	2,681,468
2025.....	1,730,000	326,005	2,056,005
2026.....	1,438,000	257,263	1,695,263
2027.....	1,016,000	203,176	1,219,176
2028.....	900,000	175,378	1,075,378
2029.....	865,000	149,128	1,014,128
2030.....	845,000	126,550	971,550
2031.....	680,000	99,456	779,456
2032.....	555,000	78,600	633,600
2033.....	545,000	61,950	606,950
2034.....	545,000	45,600	590,600
2035.....	545,000	29,250	574,250
2036.....	430,000	12,900	442,900
Total.....	\$ <u>57,746,424</u>	\$ <u>10,862,821</u>	\$ <u>68,609,245</u>

The Commonwealth of Massachusetts has approved school construction assistance to the Town. The assistance program, which is administered by the Massachusetts School Building Authority, provides resources for construction costs and debt service interest of general obligation bonds outstanding. The Town is currently receiving annual payments for 64% of eligible costs in relation to the construction of the new Middle School and the renovation and addition to the High School. During 2016, approximately \$3,019,000 of such assistance was received. Approximately \$9,916,000 will be received in future years. Of this amount, \$586,000 represents reimbursement of future long-term interest costs and \$9,330,000 represents reimbursement of approved construction cost and interest costs previously paid.

**Bonds Payable Schedule – Enterprise Funds**

Projects	Maturities Through	Original Loan Amount	Coupon Rate (%)	Outstanding at June 30, 2015	Issued	Redeemed	Outstanding at June 30, 2016
Golf Course.....	2026	\$ 6,915,500	2.00 - 5.00	\$ 2,701,500	\$ 314,000	\$ (310,500)	\$ 2,705,000
Add: unamortized premium.....				314,768	-	(54,221)	260,547
<b>Total Golf Course Bonds Payable, net.....</b>				<b>3,016,268</b>	<b>314,000</b>	<b>(364,721)</b>	<b>2,965,547</b>
Wastewater.....	2036	28,606,319	0.00 - 4.75	16,093,639	1,569,000	(1,593,048)	16,069,591
Water.....	2036	25,766,872	2.00 - 5.00	11,332,888	4,313,547	(693,781)	14,952,654
Add: unamortized premium.....				810,683	148,308	(108,438)	850,553
<b>Total Water Bonds Payable, net.....</b>				<b>12,143,571</b>	<b>4,461,855</b>	<b>(802,219)</b>	<b>15,803,207</b>
Solid Waste Transfer Station.....	2027	8,145,600	0.00 - 4.50	2,276,000	-	(470,900)	1,805,100
Sandy Neck.....	2031	1,265,000	4.00	1,065,000	-	(55,000)	1,010,000
Marinas.....	2036	3,122,000	3.00 - 5.00	1,764,000	1,008,000	(165,000)	2,607,000
Add: unamortized premium.....				-	90,143	-	90,143
<b>Total Marinas Bonds Payable, net.....</b>				<b>1,764,000</b>	<b>1,098,143</b>	<b>(165,000)</b>	<b>2,697,143</b>
Hyannis Youth and Community Center.....	2028	25,713,300	3.375 - 5.00	10,477,300	3,320,000	(4,243,400)	9,553,900
Add: unamortized premium.....				720,384	343,699	(111,417)	952,666
<b>Total Hyannis Youth and Community Center Bonds Payable, net.....</b>				<b>11,197,684</b>	<b>3,663,699</b>	<b>(4,354,817)</b>	<b>10,506,566</b>
Airport.....	2031	730,000	2.00 - 4.12	620,000	-	(30,000)	590,000
<b>Total Bonds Payable, net.....</b>				<b>\$ 48,176,162</b>	<b>\$ 11,106,697</b>	<b>\$ (7,835,705)</b>	<b>\$ 51,447,154</b>

Debt service requirements for principal and interest for **Enterprise Bonds Payable** in future fiscal years are as follows:

Year	Principal	Interest	Total
2017.....	\$ 4,580,472	\$ 2,212,820	\$ 6,793,292
2018.....	4,261,965	1,548,650	5,810,615
2019.....	4,348,498	1,307,620	5,656,118
2020.....	3,951,298	1,142,814	5,094,112
2021.....	3,804,463	998,772	4,803,235
2022.....	3,549,219	859,602	4,408,821
2023.....	3,598,967	729,479	4,328,446
2024.....	3,523,222	600,725	4,123,947
2025.....	3,421,492	480,517	3,902,009
2026.....	3,189,288	366,817	3,556,105
2027.....	3,167,620	274,013	3,441,633
2028.....	2,000,497	185,260	2,185,757
2029.....	1,254,708	131,546	1,386,254
2030.....	1,236,823	102,584	1,339,407
2031.....	1,175,549	72,160	1,247,709
2032.....	692,445	48,057	740,502
2033.....	704,454	32,737	737,191
2034.....	281,002	20,646	301,648
2035.....	284,066	13,625	297,691
2036.....	267,197	6,544	273,741
<b>Total.....</b>	<b>\$ 49,293,245</b>	<b>\$ 11,134,986</b>	<b>\$ 60,428,231</b>

The Town is scheduled to be subsidized by the MCWT on a periodic basis for principal in the amount of \$941,328 and interest costs for \$337,100 for a portion of the enterprise fund debt. The principal subsidies are guaranteed.

The Town issued \$5,245,000 in General Obligation Refunding Bonds on June 21, 2016, for an advance debt, refunding of \$5,375,000 in outstanding General Obligation Bonds originally issued in 2008. The \$5,375,000 of General Obligation Bonds was refunded by placing the proceeds of the refunding bonds plus a net bond premium for a total of \$5,740,080 in an irrevocable trust to refund the outstanding debt when they are callable on June 15, 2018. As a result, the refunded bonds are considered deceased and the liability have been removed from the statement of net position. The reacquisition price exceeded the net carrying amount of the old debt by \$2,454,045. This refunding was undertaken to reduce total debt service payments by \$536,776 and resulted in an economic gain of \$588,662.

The Town is subject to various debt limits by statute and may issue additional general obligation debt under the normal debt limit. At September 15, 2016, the Town had the following authorized and unissued debt:

<b>Purpose</b>	<b>Amount Authorized Unissued</b>
Sewer Projects	\$11,192,246
Water Projects	5,094,480
Guardrail, Sidewalks & Road Improvements	910,000
Airport Projects	28,446,215
Golf Projects	565,000
Community Services Projects	2,171,000
Dredging Projects	1,488,000
School Projects	4,961,000
Solid Waste Transfer Station	2,000,000
Administration Projects	363,000
Marstons Mills Parking Lot Acquisition	290,000
Fish Run Reconstruction	500
<b>Total Authorized Unissued</b>	<b>\$57,481,441</b>

## General Obligation Debt – Credit Ratings

Several factors determine the amount of debt the Town can afford to maintain. These include the strength of the local economy, the wealth of the community, and the amount of debt sold by overlapping jurisdictions (Barnstable County Government, Cape Cod Regional Transit Authority and Cape Cod Regional Technical High School), future capital needs, the local economy as well as the Town's financial position, administrative capabilities, and level of planning. These factors, as well as many others, influence the Town's bond rating - an evaluation of the Town's ability to repay debt as determined by the rating agencies. System improvements such as programmatic budgeting, an administrative code, policy planning based on a ten-year forecast, and financial fund management have helped the Town's position.

In February 2017, the Town Treasurer conducted a \$11.259 million bond sale, which required a rating to be assigned to it prior to the sale. In their most recent bond rating analysis dated February 7, 2017 Standard & Poor's (S&P) affirmed the 'AAA' rating on the Town's outstanding debt with a stable outlook. S&P cited the following reasons for their rating and stable outlook:

- Very strong economy, with access to a broad and diverse metropolitan statistical area (MSA);
- Very strong management, with "strong" financial policies and practices under our Financial Management Assessment methodology;
- Strong budgetary performance, with a slight operating surplus in the general fund and an operating surplus at the total governmental fund level in fiscal 2016;
- Very strong budgetary flexibility, with an available fund balance in fiscal 2016 of 23% of operating expenditures;
- Very strong liquidity, with total government available cash at 24.0% of total governmental fund expenditures and 3.7x governmental debt service, and access to external liquidity we consider strong;
- Strong debt and contingent liability profile, with debt service carrying charges at 6.4% of expenditures and net direct debt that is 48.9% of total governmental fund revenue, as well as low overall net debt at less than 3% of market value and rapid amortization, with 78.1% of debt scheduled to be retired in 10 years, but a large pension and other postemployment benefit (OPEB) obligation and the lack of a plan to sufficiently address the obligation; and
- Strong institutional framework score.

The descriptor used by S&P for this rating is "Prime Investment Grade". Strong bond ratings generally reduce interest expense to service the debt as well as bond insurance costs. Additionally, strong bond ratings enhance the prestige of the community within the financial markets and are a vote of confidence by the rating agency that the municipality is pursuing a sound financial course. This AAA rating reflects sound credit quality with associated very low risk and should result in future low borrowing costs for the Town. In August 2007, Moody's Rating Services upgraded its bond rating for the Town from Aa3 to Aa1, a two-step increase.

It is important to understand that no single ratio or factor determines a General Obligation Bond rating or fully encompasses the fiscal health of a municipality. The factors must be taken as a group. Other debt ratios, as well as economic and administrative factors account for the differences in ratings. A growing community can afford more debt than a non-growth community, and a community with more income wealth can afford more debt than a poorer community can.

Generally, bond ratings do not change suddenly but respond more to long-range trends. The stable outlook reflects S&P's view of the town's very strong budgetary flexibility and liquidity, further supported by a strong economy. As such, they do not expect to change the rating in the next two years. However, dramatic changes are key indicators of fiscal health and can result in an immediate rating change. In projecting bond ratios, it is important to review the sensitivity of the ratios to changes in the economy.

**Extract from Standard & Poor’s Credit Profile of Barnstable Printed November 8, 2013**

“The stable outlook reflects our view of the town’s very strong budgetary flexibility and liquidity, further supported by a very strong economy. As such, we do not expect to change the rating in the next two years. Although Barnstable maintains a strong debt and liability profile, and despite pension and OPEB costs that are expected to continue rising through the medium term, we do not anticipate weakened performance or liquidity measures, due to the town’s very strong management practices. Steady economic development in recent years should aid tax base stability and provide additional tax revenue. While unlikely, a prolonged period of structural imbalance resulting in significant deterioration of available reserves could result in a lower rating.”

**General Obligation Debt – Limitations**

There are legal limitations that govern the issuance of municipal debt. Under Massachusetts statutes, the debt limit of the Town of Barnstable is 5 percent of the valuation of taxable property as last equalized by the State Department of Revenue. The Town can authorize debt up to this amount without State approval. The current debt limitation for the Town of Barnstable is close to \$674 million, which is significantly higher than the Town’s outstanding general obligation debt that is subject to this limitation. It should be pointed out that much of the existing Town debt does not factor into this limitation. There are categories of general obligation debt that are exempt from, and do not count against the debt limit such as certain school bonds, water bonds, solid waste disposal facility bonds, and water pollution abatement revenue bonds.

Town’s Equalized Valuation (EQV)	<u>\$13,476,184,100</u>
Debt Limit – 5% of EQV	\$673,809,205
Less:	
Outstanding Debt Applicable to Limit	\$72,346,608
Authorized and Unissued Debt	<u>\$33,058,354</u>
Legal Debt Margin	<u>\$568,404,243</u>

**General Obligation Debt – Affordability**

Debt analysis, future debt projections and general obligation bond ratios help determine the amount of general obligation debt the Town can afford to issue and support. The table on the following page illustrates the various debt ratios compared to national medians reported by Standard and Poor’s. As shown, Barnstable’s ratios show moderate amounts of debt. There are a number of factors not directly under the control of the Town that influence key General Obligation (G.O.) bond ratios. Several of the G.O. bond ratios are very sensitive to these uncontrollable factors, and the assumptions used to project their growth can play an important role in future debt policy. Some of these factors are:

*Overlapping Debt.* Overlapping debt is the G.O. debt that is issued by other government entities whose jurisdictions include the citizens of Barnstable. The Town also has to be aware of the debt management practices of overlapping jurisdictions. The primary entities that have an impact on the Town are Barnstable County, Cape Cod Regional Vocational Technical School District and the regional transportation authority. Overlapping debt combined with the Town’s own direct debt is a true measure of the G.O. debt burden placed on the citizens. To determine an issuer’s overall G.O. debt burden, overlapping debt is added to the issuer’s own outstanding G.O. debt. If other overlapping jurisdictions pursue aggressive capital improvements programs, some of the Town’s debt ratios will increase. Therefore, it is important to be aware of not only our G.O. debt issuance plans, but also those of other surrounding jurisdictions.

<u>Jurisdiction</u>	<u>Debt Outstanding</u>	<u>Applicable Percentage</u>	<u>Share of Overlapping Debt</u>
Barnstable County	\$ 25,043,156	17.40%	\$ 4,357,509
Barnstable Fire District	1,070,000	100.00%	1,070,000
Centerville-Osterville-Marstons Mills Fire Dist.	2,965,293	100.00%	2,965,293
Cotuit Fire District	1,510,000	100.00%	<u>1,510,000</u>
Subtotal overlapping debt			9,902,802
Town direct debt			<u>59,450,983</u>
Total direct and overlapping debt			<u>\$ 69,353,785</u>

*Property Assessments.* Several key debt ratios use property valuations in the calculation of debt burden. If the Town's property values were to rise, debt ratios will continue to improve.

**Town of Barnstable Debt Ratios**

**Current Status**

0.13876%

**Criteria**

Direct Debt - General Fund debt as a % of the Town's FY16 equalized property valuation as calculated by the state.

Formula – Overall general fund debt ÷ Equalized valuation

**Standard & Poor's rates this as low (favorable)**

7.30%

Municipal Debt Burden – Current Year

Definition - Town's general fund debt service ÷ Total General Fund expenditures

**Standard & Poor's rates this as moderate**

\$1,315

Net Direct Debt Per Capita

Definition – Governmental fund net debt ÷ Town population

**Standard & Poor's rates this as low (favorable)**

\$ 298,192

Per Capita Market Value

Definition – Equalized valuation ÷ Population

**Standard & Poor's rates this as very high (favorable)**

## **Administrative Polices In Relation To Debt**

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This section provides policies governing the management of debt for the Town that are included in the Town's Administrative Code.

### **Debt Refinancing**

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An advance refunding of outstanding debt shall only be considered when present value savings of at least 3% of the principal amount of the refunded bonds are produced, unless: (1) a debt restructuring is necessary or (2) bond covenant revisions are necessary in order to facilitate the ability to provide services or to issue additional debt. The Town, in collaboration with its Financial Advisor, continually monitors municipal bond market conditions to identify refinancing opportunities. An analysis shall be conducted when necessary to determine whether debt financing, cash purchase, or leasing is the most cost effective method of financing for the Town.

### **General Obligation Debt**

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1. All debt shall be financed within the limitations of Proposition 2½ with the exception of debt related to enterprise funds, gifts, and betterments. The requirements for such financing shall be an expenditure of at least \$250,000 and a useful life in excess of five years.
2. The term of long-term debt generally shall not exceed the expected useful life of the capital asset being financed and, in no case, shall it exceed twenty years.
3. The ratio of Net Debt (Total outstanding Town of Barnstable General Obligation debt less reimbursements) to Total Assessed Valuation shall not exceed 1.5%. This excludes debt of overlapping jurisdictions.

**The debt-to- assessed value ratio for the Town of Barnstable is 0.82%.**

4. The ratio of Debt Service to Total Expenditures (operating expenditures and debt service combined) shall not exceed 15%.

**The Town's debt coverage ratio is 7.33%.**

5. The Town shall target a Standard and Poor's (S&P) debt to income ratio of 8%. The S&P ratio is calculated by dividing Overall Net Debt per Capita by Income per Capita.

**The Town's debt-to-income per capita ratio is 6.75%.**

6. Current revenue should be committed annually to provide sufficient "Pay-as-you-go" financing so that at the end of five years, annual contributions from current revenues amount to 10% of new debt to be issued.

**The Town currently exceeds this requirement by a significant margin. The Town intends to spend over \$19 million in the next five years as "pay-as-you-go" financing and anticipates financing about \$35 million in capital with new debt issues resulting in a 35/65 ratio.**



7. Excess appropriated bond issues shall be placed into a "bond repayment fund account" at the end of a project completion. The only purpose of the "bond repayment fund account" shall be 1) to make bulk principal pay-downs against general bond debt, or 2) to be used to pay down the principal on any bond issue at the time of refinancing as provided for in Section 1.04C herein.

**The Town currently has no balance in this fund.**

### **Capital Trust Fund**

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A Capital Trust Fund has been established for the purpose of financing debt service for recommended Capital Improvements Program projects, as contained within the Town's five-year Capital Improvements Plan.

1. The Capital Trust Fund will be funded through a general operation set aside of at least \$1.9 million annually. The estimated commitment for FY 2018 is approximately \$8.6 million. This is expected to be repeated for the next 5 years.
2. The Capital Trust Fund shall not be utilized for any purpose other than that stated herein.
3. The criteria for reviewing capital project eligibility for Capital Trust Fund borrowing include the following:
  - a. The capital project shall have a financing term of 20 years or less;
  - b. The capital project shall have a minimum project cost of \$250,000; and
  - c. The capital project is approved by the Town Council for funding through an appropriation and loan order submitted by the Town Manager.
4. The Capital Trust Fund will have a debt service restriction on the fund, such that debt service estimates from authorized loan orders shall not exceed, at any one time, more than 80% of the amount in the fund as of the close of the fiscal year prior to the next debt service authorization, unless recommended by the Town Manager.
5. The Capital Trust Fund shall otherwise function in accordance with related financial policies of the Town.

### **Debt Summarized**

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A responsible debt management program is an integral part of municipal finance. A Town's debt must be structured to reflect the underlying, long-term economic prospects of the community. There are statutory requirements and market forces at work to regulate a community's ability to borrow. Continuing disclosure, as required on an annual basis to the bond markets, provides a powerful incentive for a municipality to keep its financial house in order. This analysis has emphasized the importance of credit ratings because, in effect, these are municipal finance report cards. A good credit rating should be guarded jealously, since it is not easily obtained, but can be lost quickly without vigilance and sound financial management.

## Other Funds Not Part of the Budget Process

### Capital Projects Funds

The General Fund Capital Improvements Plan proposed for FY17 totals \$15,598,449. Funding for the General Fund capital will be provided from reserves within the Town's Capital Trust Fund, remaining balances from previously approved and completed projects, the Community Preservation Fund and borrowing authorizations. The general fund capital program is required by State law to be accounted for in a separate "Capital Projects Fund". The capital project accounting requirement allows for the segregation of capital related expenditures from operating expenses for a clearer presentation. The amounts list in the *Consolidated Resource/Appropriation Summary* on page 60 AND 61 includes not only the FY17 proposed capital plan for the General Fund but also the activity projected to occur from existing borrowing authorizations and appropriations approved in prior years for the general fund capital program.

### Special Revenue Funds

#### Purpose and Description

The Special Revenue Funds are used to account for revenue sources that are legally restricted for specific purposes. The funds received by the Town are under the control of the Town Manager as they pertain to the general government and the School Committee as they pertain to School Department. Most funds may be expended without further appropriation. Some require Town Council authorization to expend. There are several sub-categories of special revenue funds. These include the following:

#### Revolving Funds

These are used to account for receipts from specific activities that are used to cover the cost of operating specific activities. The municipal and school operations have several revolving type activities. The municipal activities require Town Council action which approves a spending ceiling every year. The School Department revolving activities are under the School Committee's governance and do not require Town Council approval. The largest municipal revolving fund is the Recreation Revolving Fund which generates approximately \$475,000 of program activity per year.

The largest school revolving fund is the School Lunch Revolving Fund. Other notable school revolving funds include School Choice Tuition. Tuition received from other communities who send their children to Barnstable Schools is credited to this account and the School Committee is allowed to expend the funds for school related purposes, particularly to offset the costs of educating the out-of-town students.

#### Receipts Reserved for Appropriation

Certain revenues collected by the town are restricted under state laws as to their use and require the Town Council's approval in order to expend. These must be kept separate from other receipts that are credited to the General Fund.

Revenue for the Barnstable Disability Commission (BDC) is derived from receipts on handicap parking fines collected by the town. The Town Council has authorized the BDC to expend up to \$3,000 per year on administrative costs. Any additional expenditure out of the fund must be approved by the Town Council.

Receipts from the sale of Town-owned property can only be expended on purposes for which the Town can borrow funds. In other words, these receipts cannot be used to pay for operating costs. They can only be used for capital related expenditures.

Parking meter receipts are derived from the parking activities at Bismore Park. Special legislation enacted by the state upon petition from the town restricts these receipts for being used to maintain and improve the Bismore Park area. The FY16 and FY17 expenditures include debt service on the visitor center in Bismore Park as well as the maintenance costs of the facility and park area.

Wetland protection fees are assessed by the Conservation Commission in accordance with the Wetland Protection Act and are used to cover the cost of administering the act, which is part of the Conservation Division's operating budget.

Embarkation fees are derived from a \$0.50 fee added to every ferry passenger ticket. These receipts are used to mitigate the cost of having ferry operations in the harbor area, which are incurred by the Police and Public Works Departments. This is also used to pay the debt service on some pier reconstruction at the harbor.

Mooring fees are credited to the Waterways Improvement Fund (WWIF) in accordance with state law. The WWIF can be used for administering the mooring program, maintaining, and improving the Town's waterways. Expenditures are currently used to offset the mooring operations and a portion of the Harbormaster operating budget within the General Fund.

### **Gifts**

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Similar to grants, gifts must be kept separate from General Fund operations and accounted for within the special revenue fund structure unless it is an enterprise fund gift, which can be combined within the enterprise fund accounting records. Authorization to expend gifts received by municipal operations is performed by the Town Council, and the School Committee authorizes the expenditure of School Department gifts.

The Town receives an entitlement allocation from the federal government every year as part of the Community Development Block Grant Program (CDBG). These allocations have been declining due to cuts at the federal level as well as the Town's population decline. The Town pays for approximately 1 FTE's out of this program for administering the program as well as conducting program activities.

### **Other Designated Revenue**

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This category includes certain receipts received by the Town that must be spent on specific designated purposes. These receipts must be kept separate from general fund resources. The two largest types of receipts in this category include cable license fees and Community Preservation Fund surtaxes.

The Community Preservation Fund is funded from a 3% surtax on real estate bills. In accordance with state laws, these receipts must be accounted for separately from other General Fund revenues. The revenue can be used to finance open space land acquisitions, recreation improvements, and historic preservation and community housing projects. Expenditure activity levels will be determined by the level of project requests brought forward to the committee throughout the year. Revenue will track with the real estate tax levy change every year.

### **Grants**

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Federal, state and other grants must be accounted for separately from the general fund and enterprise fund grants are included within the enterprise funds. Grants can be accepted by any department but grants received by the municipal operations must be brought forward to the Town Council for their authorization to expend. Grants received by the School Department must receive School Committee approval. The greatest impact in the Town's grant activity is in the School Department which receives several federal and state grants. Some are entitlement grants and many are competitive.

## Trust and Agency Funds

The Town uses the trust funds to account for assets held in a trustee capacity. Normally, the principal assets remain intact, and income that is generated can be used in accordance with the terms and conditions of the will or gift.

The Town Treasurer, in conjunction with the Trust Fund Advisory Committee, work to formulate a plan that will provide the Town with the maximum amount of resources possible while simultaneously protecting the integrity of the principal investments. In accordance with the Town's Charter, the Town Manager is trustee of all trust funds except those administered by a court appointed trustee, and those under the School Committee.

All revenues from trust funds are generated primarily from investment income, and each year, expenditures from these funds are based on anticipated expendable income. As a matter of policy or for legal reasons, trust fund principal is not utilized for general expenditures with the exception of the Pension Reserve Fund. The trusts generated approximately \$1.5 million in investment income annually. Future earnings will depend upon interest rates and investment appreciation.

Expenditures are based on the current year needs and anticipated expendable income. Notable trust funds are the Pension Reserve, Cobb Fund and Kirkman Fund.

The Pension Reserve Fund is used to offset tax support for the county retirement assessment. As of June 30, 2016, the fund had a market value of almost \$2.3 million. The Pension Reserve Fund will transfer \$260,000 in FY18 to the general fund to offset the cost of funding the county retirement assessment.

The Cobb Trust Fund is managed by a Town Council appointed Trustee and had a market value of over \$9 million at the end of FY15. The Trustee sold some real estate in FY14 which should result in higher award levels in the future since the Trust has more invested cash now. The annual awards from this fund have been around \$150,000 per year. All awards are for the benefit of Barnstable school children.

The Kirkman Fund, with a market value of more than \$5 million as of June 30, 2015, will be used to provide beautification projects first at the Mosswood Cemetery and then all other town cemeteries. This fund is also used for the Cotuit Library and finally, all other public libraries. Proposals will be solicited from DPW's Structures and Grounds Division and the seven village libraries for project funding. No operating expenses of the public works department, which maintains the cemeteries, are paid for out of this fund. Approximately \$150,000 to \$300,000 has been awarded annually out of this fund for the past few years.