

PART I. CAPITAL IMPROVEMENTS FY 2014 – FY 2018

A. PROJECT REQUESTS SUBMITTED

The capital projects identified by Town departments in this year's CIP process represent a total of **\$25,873,970** for FY14, and a combined total of **\$132,440,392** over a five-year period. Of the \$132 million, approximately \$63 million represents enterprise funds and \$69 million are general fund requests. The Capital Trust Fund's cash flow projections indicate that over the next five years approximately \$50 million will be available to finance projects from the fund; nearly three quarters of the project submissions received this year. This assumes approximately \$16 million will be financed with cash and \$34 million with borrowing authorizations.

A spreadsheet (Exhibit 1) is provided on pages 19-20 that lists the projects comprising the capital plan for FY14 – FY18; recommended funding sources for FY14; and project costs over the following five years. Part IV of this report includes a more detailed summary of each project.

The following is a summary of the total projects by fiscal year (all funds):

FY 2014	\$25,873,970
FY 2015	\$28,795,547
FY 2016	\$17,715,850
FY 2017	\$43,255,310
FY 2018	\$16,799,715
Five year total	\$132,440,392

B. TOWN MANAGER RECOMMENDATIONS

Having reviewed the scoring of projects by both my Senior Staff and the Comprehensive Finance Advisory Committee and the project recommendations of the latter, I am recommending that the Town Council approve a total of **\$22,805,500** in capital projects for FY 2014 as follows: **\$9,345,000** for the General Fund program and **\$13,460,500** for enterprise accounts. Funding for the general fund portion of the program consists of **\$3,316,000** in Capital Trust Fund (CTF) reserves; **\$414,000** from the Sale of Real Estate Special Revenue Fund and **\$5,615,000** in new borrowing authorizations. Funding for the enterprise fund programs consists of using **\$1,577,000** of enterprise fund reserves and **\$11,883,500** in new borrowing authorizations. The bonds issued for the enterprise fund projects are expected to be paid back with enterprise fund revenues.

The recommended projects for the Enterprise Funds are as follows:

	Enterprise Fund Reserves	Bond Issue	Total
AIRPORT:			
Test, Design, Construct Runway 6 Engineered Material Arresting System (EMAS)	\$200,000		\$200,000
Airfield Lighting Regulators & Runway Hold Position Signs		\$260,000	\$260,000
New Main Terminal Ramp & De-icing Pad		\$7,800,000	\$7,800,000
New Fuel Farm		\$810,000	\$810,000
East Ramp Sewer Extension		\$634,000	\$634,000
New Fixed Based Operations Facility	\$102,000		\$102,000
Terminal & ARFF Building Improvements	\$200,000		\$200,000
Airfield Access Control & Security Upgrades	\$90,000		\$90,000
Total Airport Enterprise Fund	\$592,000	\$9,504,000	\$10,096,000
SOLID WASTE:			
New Trash Truck	\$225,000		\$225,000
New Roll-Off Container Truck	\$190,000		\$190,000
Total Solid Waste Enterprise Fund	\$415,000		\$415,000
WATER SUPPLY:			
Pipe Replacement & Upgrade (Design & Const.)		\$1,050,000	\$1,050,000
Pump Station & Treatment Plant Upgrades	\$200,000		\$200,000
New Well Exploration Program		\$489,500	\$489,500
Air-stripper Upgrade		\$300,000	\$300,000
New Water Main Loop		\$540,000	\$540,000
Total Water Supply Enterprise Fund	\$200,000	\$2,379,500	\$2,579,500
SEWER:			
Staff Locker Room Construction	\$190,000		\$190,000
Backup Pump	\$80,000		\$80,000
Pretreatment Building & Clarifier Evaluation	\$50,000		\$50,000
Hydraulic Load Testing	\$50,000		\$50,000
Total Sewer Enterprise Fund	\$370,000		\$370,000
Total All Enterprise Funds	\$1,577,000	\$11,883,500	\$13,460,500

The recommended projects for the General Fund are as follows:

Project Name	Funding Source			
	Capital Trust Fund Reserves	Sale of Real Estate Special Revenue Fund	Bond Issue	Total
ROADWAYS & PARKING:				
Public Road Improvements	\$2,836,000	\$414,000		\$3,250,000
Drainage Study	\$50,000			\$50,000
Bumps River Bridge			\$120,000	\$120,000
Senior Center Parking Lot Design	\$35,000			\$35,000
Sidewalks & Guardrails			\$250,000	\$250,000
Total	\$2,921,000	\$414,000	\$370,000	\$3,705,000
MUNICIPAL FACILITIES:				
Marine & Environmental Affairs			\$131,000	\$131,000
Barnstable Police Station			\$168,000	\$168,000
Town Hall Interior			\$150,000	\$150,000
Highway Operations Facility Design			\$66,000	\$66,000
Structures & Grounds Operations			\$103,000	\$103,000
Osterville Community Building			\$200,000	\$200,000
West Barnstable Community Building			\$72,000	\$72,000
U.S. Custom House			\$263,000	\$263,000
Guyer Barn			\$148,000	\$148,000
46 & 50 Pearl St.			\$114,000	\$114,000
Comprehensive Beach Facility Design			\$115,000	\$115,000
Lombard Parking & Ball Field Design			\$101,000	\$101,000
Tennis Courts Improvements			\$500,000	\$500,000
Total			\$2,131,000	\$2,131,000
SCHOOL FACILITIES:				
Fire Intrusion & Communication Systems for Schools			\$200,000	\$200,000
School Network Access			\$189,000	\$189,000
Grade 4/5 Roof and Trim			\$600,000	\$600,000
School Underground Oil Tank Removal	\$100,000			\$100,000
Hot Water Circulating Pumps in Schools			\$85,000	\$85,000
School Gymnasium Bleachers			\$55,000	\$55,000
Barnstable Intermediate School Façade & Roof			\$100,000	\$100,000
A/C Units at Barnstable High School			\$450,000	\$450,000
Remove Modular Classrooms and Alternative Space Assessment	\$125,000			\$125,000
Total	\$225,000		\$1,679,000	\$1,904,000

Project Name	Funding Source			
	Capital Trust Fund Reserves	Sale of Real Estate Special Revenue Fund	Bond Issue	Total
SCHOOL EQUIPMENT:				
School Walk-in Coolers & Kitchen Equipment			\$110,000	\$110,000
School Grounds Maintenance Equipment			\$150,000	\$150,000
Total			\$260,000	\$260,000
WATERWAY IMPROVEMENTS:				
School St. Bulkhead			\$142,000	\$142,000
Millway Boat Ramp & Dock			\$133,000	\$133,000
Dredge East Bay			\$600,000	\$600,000
Total			\$875,000	\$875,000
WATER QUALITY IMPROVEMENTS:				
Hydrilla Remediation	\$45,000			\$45,000
Fanwort Remediation	\$35,000			\$35,000
Water Quality Evaluation & Sewer CAD Model			\$300,000	\$300,000
Total	\$80,000		\$300,000	\$380,000
Assessing Records Conversion	\$90,000			\$90,000
Grand Total	\$3,316,000	\$414,000	\$5,615,000	\$9,345,000

C. DESCRIPTIONS OF RECOMMENDED PROJECTS

ENTERPRISE FUND CAPITAL PROJECTS (Proposed Projects Totaling \$10,460,500)

1. \$200,000 FOR RUNWAY 6 ENGINEERED MATERIAL ARRESTING SYSTEM (EMAS)

This request is added to the \$800,000 received as part of the FY13 Capital Improvement Program. The original Runway 6 Engineered Material Arresting System (EMAS) bed was installed in 2003 to prevent concerns related to aircraft overshoots and undershoots on runways that do not meet FAA Runway Safety Area (RSA) requirements. The installation on Runway 6 primarily consists of light weight concrete blocks with a concrete cement top board. A field strength test and feasibility study was completed on October 14, 2012 and confirmed the need to replace selected blocks not suitable for retrofit tops and to retrofit the remaining blocks. The Barnstable Municipal Airport (BMA) EMAS is a "first generation" system with a projected 10-year lifespan. The BMA was visited by the Engineered Arresting Systems Corporation (ESCO), who originally installed Runway 6 EMAS bed, in 2009 and in 2012 as part of an FAA project to investigate and determine if airports which have EMAS beds are qualified to receive this new top board. It was determined that BMA is eligible for this replacement. This new top board will extend the life of the EMAS bed and provide better adherence of paint requiring less maintenance by the Airport. An inspection has confirmed this requirement and the need to completely replace selected blocks .

Source of Funding: FAA Airport Improvement Program and/or Discretionary grant funds (90%), Mass DOT grant (7.5%); and Airport Reserves (2.5%)

2. \$260,000 FOR THE REPLACEMENT AIRFIELD LIGHTING REGULATORS AND FAA MANDATORY RUNWAY HOLD POSITION SIGNS (RHPS)

The Airfield Lighting Regulators control mandated airfield lighting and navigational equipment and have reached the end of their useful life and must be replaced; and the mandated Runway Hold Position Signs must be replaced to meet revised Federal Aviation Administration (FAA) safety standards on airports. Airfield lighting regulators control and provide the means for required lighting for aircraft to navigate into and upon the airfield and for mandated airfield operating equipment associated with aircraft operations. The runway hold position signs are required on runways and taxiways to assist the control tower and aircraft in providing safe airfield operations and for "hold short" requirements to prevent aircraft runway incursions and prevent collisions. Airfield, runway and taxiway lighting and signage is a continuous program essential to maintaining our airport systems to meet safety and FAA FAR Part 91 mandated airport certification requirements.

Source of Funding: FAA Airport Improvement Program and/or Discretionary grant funds (90%), Mass DOT grant (7.5%); and Airport Reserves (2.5%)

3. \$7,800,000 FOR THE DESIGN; AND CONSTRUCT THE MAIN TERMINAL RAMP – PHASE 2; AND CONSTRUCT THE AIRCRAFT DEICING PAD; AND THE RELOCATION AND RECONSTRUCTION OF ALL OF TAXIWAY ALPHA FROM RUNWAY 33 END TO RUNWAY 15 END; AND MISCELLANEOUS AIRFIELD IMPROVEMENTS

This project includes: (1) Phase 2 of the design and reconstruction of the proposed main terminal aircraft parking apron of approximately 220,000 square feet and is sized to handle peak period activity, primarily by air carrier aircraft, various turbo-prop aircraft, and charter jet aircraft, including a portion of taxiway Alpha to and from the aircraft parking positions, which are now constrained, and will conform to FAA design standards in Advisory Circular No. 150/5300-13; (2) the construction of a 43,000 square foot de-icing area is being provided for the de-icing of aircraft

during winter conditions; and (3) the relocation and reconstruction of Taxiway Alpha which is not in compliance with airport design criteria.

Source of Funding: FAA Airport Improvement Program and/or Discretionary grant funds (90%), Mass DOT grant (7.5%); and Airport Reserves (2.5%)

4. \$810,000 FOR THE CONSTRUCTION OF NEW FUEL FARM AT AIRPORT

This project will install three 20,000 gallon above ground jet fuel storage tanks. The existing 20,000 gallon jet fuel underground storage tank (UST) (circa 1993) does not contain enough capacity to meet the fuel sales demand. Fuel demand has increased at the airport and is projected to continue to grow. Installation of the three (3) new storage tanks will meet the growing aviation demand and enhance service to airlines and general aviation customers. More importantly, these tanks will greatly reduce potential threat of ground water pollution, which is always a paramount environmental concern. The existing 20,000 gallon jet fuel UST was converted to jet fuel service in 1992. Following construction of the new storage tanks, the existing 20,000 gallon jet fuel UST will be removed from the ground. The project has already been 100% permitted through the Cape Cod Commission Development of Regional Impact approved in January 2007.

Source of Funding: Mass DOT grant (80%); and Airport Reserves (20%)

5. \$634,000 FOR THE CONSTRUCTION OF THE EAST RAMP SEWER EXTENSION

The proposed project will provide municipal sewer service to existing buildings located on the East Ramp, and accommodate future growth in this area. The Airport will require existing facilities on the East Ramp that use an on-site septic system to connect to the Town sewer at the time of lease renewal. Installation of municipal sewer will remove these discharges from within the Zone of Contribution (Zone 2) to the Maher well field municipal drinking water wells. The proposed project will include the installation of approximately 5,700 feet of gravity fed sewer line extending to each existing structure, and along the East Ramp to accommodate future growth. Gravity fed sewer lines will discharge to a 7,000 gallon pumping station located approximately 200 feet southeast of the Hexagon hangar. Approximately 2,350 feet of 4-inch force main will connect the pumping station to existing gravity sewer, located on the southern side of the Runway 15/33 runway protection zone (Figure 1). The proposed 7,000 gallon pumping station will feature a natural gas/propane fired emergency backup generator and system alarm station. The proposed project will eliminate the need for six on-site septic systems and accommodate future growth on the East Ramp. Completion of the proposed project will allow the Airport to meet the Cape Cod Commission Regional Policy Plan (RPP) performance requirements for both Potential Public Water Supply Areas (< 1 part per million (ppm) nutrient loading), and Wellhead Protection Areas (< 5 ppm nutrient loading) for proposed future growth. The project will also meet the Marine Water Recharge Area and Water Quality Improvement Area performance standards of the RPP.

Source of Funding: Mass DOT grant (80%); and Airport Reserves (20%)

6. \$102,000 FOR THE DESIGN AIRPORT FIXED BASE OPERATIONS (FBO) BUILDING

This request is for the design portion only of a new Fixed Base Operations (FBO) facility to be manned and operated by the Airport. The new facility will either be an addition to the existing Aircraft Rescue and Firefighting Building (ARFF) or a new stand-alone building on a location to be determined on the East Ramp. The estimated size of the building/addition is approximately 2,500 square feet, single story, wood frame, asphalt shingle roof structure. The FBO facility will provide general aviation passenger lounges; pilot and crew rest areas; flight planning capability; kitchen and

catering food storage areas; bathrooms; office spaces; a general reception area and waiting area; and other services as needed. In accordance with a recently completed Environmental Impact Report approved by MEPA, and a soon to be completed Development Agreement with the Cape Cod Commission and the Town of Barnstable, the facility will also be required to connect to the Town sewer system regardless of its location. As a result of Airport Commission strategic planning, and customer requests for enhanced services for general aviation aircraft, including corporate and charter jet services, it has been determined that the Airport must provide enhanced high quality facilities and services to generate better customer relations and meet demands, better pilot and passenger services, and better business management in order to retain and increase general aviation business and revenues for the airport.

Source of Funding: Airport Enterprise Fund Reserves

7. \$200,000 FOR AIRPORT TERMINAL ENHANCEMENTS AND AAFF BUILDING ENGINEERING REVIEW

The new Airport passenger terminal is a fully operational structure, built on a limited budget, and is in need of new additional enhancements to ensure that we continue to operate a safe, comfortable and efficient facility for the benefit of our customers. During the design and construction phases of the new passenger terminal, many items in the original design were either eliminated or reduced in size in order for the project to remain within budget. This request is for the design for a new baggage carousel, a secure passenger arrival gate canopy, radiant heat at the exterior baggage canopy, a new Flight Information Display system, and a new lighting control system to reduce lighting costs. In addition, the Airport Rescue and Fire Fighting Building (ARFF) is 20 years old and has suffered from deferred maintenance and is in need of various upgrades to be determined by a complete engineering and architectural review of the building. The ARFF building structural and system review will become the basis for a new long range preventative maintenance and capital plan for the structure; however, several building systems now appear to be in jeopardy of imminent failure.

Source of Funding: FAA Airport Improvement Program and/or Discretionary grant funds (90%), Mass DOT grant (7.5%); and Airport Reserves (2.5%)

8. \$90,000 FOR INSTALLATION OF ENHANCED AIRFIELD ACCESS CONTROL AND SECURITY UPGRADES

The BMA 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, including computer based software and hardware systems, fiber optic cables, remote transmitters, special locks and surveillance systems, and the use of trained, qualified, and certified personnel. The Airport needs to upgrade such access control security measures throughout the airport to provide consistent standardized high quality systems; and to prevent breaches of security. In addition, all airport personnel are trained to monitor all aspects of airport security, including the use of the Barnstable Police Department on the airfield, and random inspections by TSA Inspectors. We are constantly upgrading systems to improve security and meet reporting requirements of the TSA. Violations of any aspect of the airport security plan are reported immediately to the TSA and may have impact on the National Airspace System.

Source of Funding: Airport Enterprise Fund Reserves

9. \$225,000 FOR REAR LOADING TRASH TRUCK

This is for the purchase of one rear loading packer truck, which services municipal buildings, beaches, docks, parking lots, etc. The existing packer truck was purchased in 2003 and is entering into its tenth year of operation. The vehicle has had a history of repetitive mechanical problems.

Source of Funding: Solid Waste Enterprise Fund Reserves

10. \$190,000 FOR A CONTAINER ROLL-OFF TRUCK

This is for the purchase of one roll-off truck to replace the one which is used to transport containers on and off site. The existing roll-off truck was purchased in 1992 and can no longer service its basic function in a safe or efficient manner.

Source of Funding: Solid Waste Enterprise Fund Reserves

11. \$190,000 FOR UPGRADING/REPLACING STAFF LOCKER-ROOM AT WPCD

The locker room serves as a changing, showering, lunch and division meeting center. Given the nature of wastewater operations, the staff needs a facility in order to clean up after work. The present locker room is a trailer put into service in the early 1980's and moved in 1997. The trailer is a conglomeration of parts and is of dubious construction. At 25 years old, it is at the end of its serviceable life. During the summer of 2010, the entire front exterior wall was replaced, including its siding, plywood, studs, insulation and interior wallboard, all of which had rotted away. The main steel I beams supporting the structure were damaged and twisted in the 1997 move and cannot be repaired. Rebuilding on the present frame cannot be done.

Source of Funding: Sewer Enterprise Fund Reserve

12. \$80,000 FOR A BACK-UP PUMP AT THE BEARSE'S WAY VACUUM PUMP STATION

The present pump station is now eight years old and is in good operating order. However, there is no back up pump. During peak flows, the two pumps, now in operation, are both forced to run together at times to maintain the necessary vacuum. If one vacuum pump should fail a spare pump that is stored on site, would need to be installed. This procedure is problematic to maintain reliable service to the customer base. The Cape Codder, Holiday Inn, Cape Crossroads Condominiums, Christmas Tree complex and Marriott Hotel are all on this system and therefore demand a reliable disposal system.

Source of Funding: Sewer Enterprise Fund Reserve

13. \$50,000 TO DESIGN COATING PROTECTION FOR WALLS AND TANKS AT THE WPCF

During the plant upgrade, the Pretreatment building walls were briefly evaluated and found to be in fair condition. Previous resurfacing is still in place but will need upgrading. The clarifier steel work and several of the clarifiers have moderate to severe rusting. 4 of the 5 clarifiers have been repainted, several twice. However, the rust is prevalent and persistent. Repainting the clarifiers has proved to be a questionable exercise, like car rust, it perseveres. This evaluation would look at alternatives to save the substantial investments in the clarifier steel work.

Source of Funding: Sewer Enterprise Fund Reserve

14. \$50,000 HYANNIS WPCF HYDRAULIC LOAD TESTING

This effort is needed to determine the infiltration capacity of the sand infiltration beds at the Hyannis WPCF. This is a requirement of the Massachusetts Executive office of Energy and Environmental Affairs (EOEEA) on the Town's Nutrient Management Planning (NMP) Project as part of that project's regulatory review. This is needed information as the Town decides the needed wastewater facilities at that site.

Source of Funding: Sewer Enterprise Fund Reserve

15. \$1,050,000 FOR WATER PIPE REPLACEMENT PROGRAM

This 30-year phased improvement program is a continuous 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 appropriate 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 capital funded water works project manager, to oversee and implement this program in coordination with the Town roads program and other public utilities. This project would ensure the long term ability and viability of the Hyannis Water System to provide sufficient drinking water and fire readiness protection for all of our customers.

Source of Funding: Water Enterprise Fund Bond Issue

16. \$200,000 FOR WELL PUMP STATION, TREATMENT PLANT REPAIR AND UPGRADES

This capital improvement program is a continuation of the repairs and upgrades commenced in FY2007. With the exception of the Straightway well #2, all of the wells were constructed in the early to mid-1970's. The prior year's monies were used to install emergency generators, lighting, fencing and pavement improvements. Starting in FY14, 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 are buildings, process control equipment, safety & security and electrical equipment. Project management and oversight will be provided by a Junior Engineer, partially funded out of this program. It is appropriate to implement a structured program to repair and upgrade the wells, many of which are approximately 40 years old. This program is in addition to, and may supplement, the routine maintenance program to be performed by the contracted water system operator.

Source of Funding: Water Enterprise Fund Reserve

17. \$489,500 FOR NEW WELL EXPLORATION PROGRAM

These funds will be used to evaluate the possibility of permitting, designing and constructing two or more new wells for the Hyannis Water System. The new well exploration program is set-up in four phases. The first phase will consist of exploratory test wells, environmental notifications, evaluations and recommendations. The second phase will deal with DEP new source approvals, 8" test wells construction, 5 day pumping tests. The third phase will consist of the design and permitting of the new well buildings and appurtenances with all environmental impact reporting requirements. The fourth phase is the construction phase. Over a period of two years, one new well building, driveway and appurtenances will be constructed and tested. The project is anticipating at minimum two new wells to be constructed. Project management will be provided by a Junior Engineer, partially funded out of this program. The need for this program became more urgent

since the preliminary water quality study results became known. Three (3) of our eleven (11) wells do have water quality issues with iron and manganese that can't be addressed with our current sequestering treatment. The Mary Dunn 4 well is under the influence of surface water and can't be used. This means that 4 out of 11 wells should be replaced or treated.

Source of Funding: Water Enterprise Fund Bond Issue

18. \$300,000 FOR MAHER TREATMENT PLANT, AIR-STRIPPER UPGRADES

The air-stripper removes low levels of volatile organic compounds out of the well water. It was installed in 1990. In 2009, the Haley & Ward Engineering firm did an inspection and recommended a series of repairs and improvements with a time table. In FY2010, a portion of the improvements were accomplished and during FY2011 emergency repairs dealt with the media replacement. This capital request will accomplish the remaining outstanding items, like the distributor tray and demister, tower sump, air blower and carbon filter system. The proper maintenance and repair of this equipment is critical to insure the safety and reliability of the water treatment plant. The Maher Water Treatment Plant currently produces between 40% and 70% of the Hyannis Water System's drinking water. Without the air-stripper, we cannot run the plant.

Source of Funding: Water Enterprise Fund Bond Issue

19. \$540,000 FOR THE CONSTRUCTION OF THE WATER MAIN LOOPING BETWEEN HIGHLAND STREET AND COOK CIRCLE IN HYANNIS

This water works project will provide for looping the water main from Highland Street to Cook Circle with approximately 2,000 feet of new cement lined, ductile iron water main, gates and fire hydrants. This project was recommended by Weston & Sampson Engineering, Inc. in their April 2007 Master Plan.

Source of Funding: Water Enterprise Fund Bond Issue

GENERAL FUND CAPITAL PROJECTS (Proposed Projects Totaling \$9,345,000)

1. \$3,250,000 FOR PUBLIC ROADS MAINTENANCE

This is a continuing essential program aimed at combating the deterioration of the Town's roadway assets and provision of new storm water handling capacity. Depending on physical conditions and analysis using the Pavement Management software, the repairs may include one of several methods of repair including: full depth reconstruction, asphalt overlay, milling and paving or applying a chip seal surface layer. In addition to surface repair, improvement projects usually include installation of upgraded or new drainage systems as well as sidewalk rehabilitation wherever practicable. The condition of the Town's road system is deteriorating each year. Adequate maintenance and reconstruction where necessary is essential to preserve this major capital asset. Through the use of the Pavement Management System, we have identified a backlog of over \$30,000,000 of needed road repairs. This equates to over 100 miles of Town roads that need more than routine maintenance or repair. In addition, the Town has a backlog of approximately 250 locations where drainage improvements are required to protect public safety or prevent property damage.

Repair projects for FY 2014 are as follows:

- Reconstruction of Main Street from the south end of Ocean View Avenue to Vineyard Road in Cotuit
- Resurfacing of the entire lengths of: Althea Drive, Country Club Drive and Cypress Point in Barnstable
- Preventive maintenance chipseal of various roads town wide to maintain their service life
- Preventive maintenance crackseal of various roads town wide to maintain their service life
- Engineering Design and Permitting Services for the Road Rehabilitation of Lincoln Road in Hyannis and Osterville-West Barnstable Road from Route 28 to Race Lane in Marstons Mills
- Design services for various construction quality control measures such as roadwork inspection of road contracts, soil tests, pavement corings, concrete cylinder samples, etc.
- Construction and repair of multiple road drainage sites town wide in known problem areas

Source of Funding: Capital Trust Fund Reserves \$2,836,000 and \$414,000 from Sale of Real Estate Special Revenue Fund

2. \$50,000 FOR DRAINAGE STUDY

The study includes the area near Cummaquid Golf Course and headwaters of Maraspin Creek. This engineering study involves a review of existing GIS Mapping, field reconnaissance and measurement, analysis and report preparation detailing the storm water flowage patterns, conveyance systems and restrictions for an area of approximately 750 acres at the northeast sector of Town. Flooding issues have been identified affecting Town roadways and other properties in the area. Identification of the problems will enable funds to be spent effectively in the future to address these issues.

Source of Funding: Capital Trust Fund Reserves \$50,000

3. \$370,000 FOR ROADWAY IMPROVEMENTS

This proposal consists of the following two projects:

- a. Bumps River Bridge Repairs.** Work involves repair of various deficiencies as identified by the Massachusetts Department of Transportation in their field report dated July 9, 2010. Items to be addressed include cracks in the deck surface, open joints in the sidewalk, delamination of the concrete railings, deficient or non-existent guardrail systems and broken brace supports in the sub-structure. This request is for project construction. As with all our assets, attention to deteriorating conditions in a timely manner will save money in the long run. The Bumps River Bridge is vital to the transportation needs of the community and deficiencies have been identified by professionals at the State level. **Total cost is \$120,000.**
- b. Sidewalk Overlay and Guardrail Replacement.** Sidewalk project includes prepping the existing footprint of the sidewalk, removing grass, dirt, and edging back then spraying a tack coat of special oil for adhesion, and lastly, installing a new layer of asphalt. The sidewalk overlays include Prince Hinckley Road, Centerville, Osterville West Barnstable Road between Bumps River Rd and Lumbert Mill Road, bike path on Old Stage Road between the Service Road and Rte 149, and other sidewalks as funding allows. The sidewalks on these roads are in a state of disrepair. They have cracks and depressions where ice forms in cold weather, all leading to possible tripping or falling hazards. They are also in very heavy pedestrian areas including a school; fire station, church and a library. **Total cost is \$190,000.**

Guardrails are important to vehicle safety program and are in desperate need of replacement throughout the town. The guardrail replacements include North Street, Hyannis, Main Street Osterville, Huckins Neck Road, Centerville, and other guard rails as funding allows. Without a town wide effort to replace damaged guardrail, the public safety will be compromised and the Town may be subject to legal action if an accident occurs because of the lack of appropriate safety barriers. **Total cost is \$60,000.**

Source of Funding: Capital Trust Fund borrowing authorization of \$370,000

4. \$35,000 FOR SENIOR CENTER PARKING LOT EXPANSION DESIGN

This request is for design funds only for expanding the Senior Center's parking lot. The Senior Center has a very successful program and as such has developed a significant need for additional visitor parking. The size of the existing lot is too small to accommodate the additional parking needed at many of their events.

Source of Funding: Capital Trust Fund Reserves \$35,000

5. \$2,131,000 FOR MUNICIPAL FACILITY IMPROVEMENTS

This proposal consists of the following thirteen projects:

- a. **Marine & Environmental Affairs Facility Upgrades.** The existing Marine and Environmental Affairs building was constructed over 20 years ago and is in need of renovations and upgrades to extend its useful life. This program will focus on improving life safety systems and code issues. There are currently 20 employees working out of this facility not counting seasonal staff. The Marine and Environmental Affairs facility has seen no major renovation work since its construction in 1979. An ongoing program of renovations is necessary in order to protect the Town's building assets and assure reliability in the future for this unit's operation. This project includes constructing an enclosure around the facility's generator with a separate intake and exhaust; installing a new fire alarm system; providing permanent piped electrical outlets to the center of the garage area; installing 2 hour wall and UL rated doors; providing code compliant means of egress; installing handicapped accessible rest rooms; interior painting, carpet replacement, ceiling tile and lighting. **Total cost is \$131,000.**
- b. **Barnstable Police Facility Improvements.** The Police Department facility is one of the most heavily used buildings we have. Utilized 24/7, this building needs more attention and maintenance and repairs than any of our other facilities. It was constructed over 30 years ago and the original building equipment and systems are coming to the end of their useful life and are in need of upgrading. To keep this building from degrading in function or operation in the near future, these necessary improvements and changes should occur. This project includes the complete replacement and upgrade of the dedicated dispatch area AC system and ductwork; the replacement of the speaker, sound and lighting system within the cells and cell block halls; replacement of outside entry doors at the rear of building; and installation of a new sewer line tie-in to a new sewer line under design. **Total cost is \$168,000.**
- c. **Town Hall Interior Improvements.** This project continues the interior work needed to maintain the existing building. The exterior restoration work has been completed via CPA funds which now allow for the interior renovation work to begin. Many of these improvements are public health, safety and code issues needing immediate attention. These improvements will increase the value and effectiveness of this highly utilized and

busy facility. This funding will allow for completion of stairwell restoration and renovation work, including architectural, mechanical, electrical, sprinkler, fire safety, space enclosure with new rated doors and hold open devices, related finishes and improvements which will bring the public stair into code compliance and repair the water damage. **Total cost is \$150,000.**

- d. **Highway Facility Improvements.** This is part of a six phase project to correct serious deficiencies in working conditions within the Department of Public Works. Two phases have been completed. Phase I, the construction of an Emergency Response Center (ERC) is completed and occupied. Phase II, DPW administration and engineering offices, is completed and occupied. This request is to fund Phase III which will involve the design and construction of Highway Division manager offices, employee lockers, showers and toilet rooms, which will allow for the removal of the remaining old temporary staff trailer facility and an increase in needed additional parking. It will also fund the re-roofing of the remaining older garage. **Total cost is \$66,000.**
- e. **Structures & Grounds Facility Upgrades.** The existing Structures & Grounds building was constructed over 25 years ago and is in need of renovations and upgrades to extend its useful life. There are currently 34 employees working out of this facility not counting seasonal staff. An ongoing program of renovations is necessary in order to protect the investments the Town has made in its capital assets. Many improvements identified are life safety and code compliance issues. This request is to fund the installation of a roofing membrane over the existing roof system and replace the asphalt shingle roof on the pole barn. **Total cost is \$103,000.**
- f. **Osterville Community Building Improvements.** The Osterville Community Center building is a facility that is used by Recreation Division programs, with its adjoining playground and ball field, and is used by our residents and other groups. This facility is in need of renovation in order to maintain this town asset. Funding the improvements would stabilize the building as it is subject to significant water intrusion through the exterior walls. Given the heavy use of this facility the interior needs a significant amount of upkeep and maintenance. Our intention is to bring the building up to standard for safe use by all the citizenry. The exterior of the building is in need complete exterior waterproofing, painting, caulking of expansion joints and replacement of doors. The interior needs selective repairs, improvements and finish upgrades. This project also includes funds for analyzing the improvements needed for the entire complex including the building and adjoining recreational fields and courts. **Total cost is \$200,000.**
- g. **West Barnstable Community Building Interior Improvements.** This request is for interior hallway painting, ADA toilet renovations, exterior railing replacement, hallway floor replacement and new window blinds. In the past four years, the West Barnstable Community Center building has seen an increase in its utilization and public interest. The residents have been attracted to this facility and continued repairs and improvements are requested. These interior renovations continue to bring this Town asset back to a well maintained and useful public facility. The hallway floor is the last floor to be taken care of with both the main rooms being completed. The ADA toilet renovations will allow for ADA access by users of the ball field and playground. **Total cost is \$72,000.**
- h. **U.S. Custom House Improvements.** Erected in 1856 the building has been patched, repaired and painted but heavier renovations are now necessary. Masonry and exterior metal deterioration continues to allow moisture penetration into the structure. This project would fund needed masonry, cast iron & exterior door repairs of the building. **Total cost is \$263,000.**

- i. **Guyer Barn Improvements.** As part of the continuing arts program in the Town of Barnstable, the Guyer Barn is utilized for artist's studios and gallery space. The building is currently seasonal in use. The Town would like to extend the buildings usefulness by upgrading mechanical systems and insulating the building. This project would fund the needed plumbing, electrical, HVAC, and interior improvements to the historic barn. As part of the project an exterior display area is proposed. **Total cost is \$148,000.**

- j. **46 and 50 Pearl St. Building Improvements.** As part of the continuing arts program in the Town of Barnstable, these buildings are utilized for artist studios and gallery spaces and artist housing. This project would fund needed exterior and interior improvements to the main buildings and accessory structures. 46 Pearl St. improvements include: spot repair of existing roof shingles, limited exterior trim replacement, chimney pointing, basement moisture resolution, electrical and plumbing improvements and a heating system upgrade. 50 Pearl St. includes: window restoration, exterior trim, basement moisture resolution, electric modifications and pottery shed water, heating and plumbing. **Total cost is \$114,000.**

- k. **Beach Facility Planning and Design.** Our beach facilities are one of our most important structural assets in town. Attractive, well maintained and functional facilities add to the quality of life for our residents and visitors and enhance our local economy. This project would fund a comprehensive beach house planning effort and the preliminary design for renovating/replacing the Craigville beach house. This is a continuation of our beach house renovation program that will update the interior and exterior of the facilities and keep them fully operational. The buildings have been patched, repaired and painted but are now in need of more substantial long-term renovations. This request does not include any funds for construction. Construction cost estimates will be one product of the comprehensive planning process and future capital improvement plans will include requests for construction funds. **Total cost is \$115,000.**

- l. **Design Lombard Parking and Field Improvements.** These funds would provide for the design of an expanded parking lot with bituminous paving, storm water management; roadway to the Old Selectmen's Building; site lighting and landscaping; new bleachers, renovated press box and baseball field. The access driveway should be widened to improve sightlines onto busy Route 149 and ADA parking located adjacent to the ADA ramp into the building and other relative site improvements. The parking lot is too small to handle the regular use of the WBCB and ball field. Additional storm water control for the expanded lot is required. With the use this facility gets, site lighting (dark sky fixtures) for the safety of visitors within the parking area is needed while keeping the light from offending the neighbors. The existing old and rusted bleachers need to be relocated and be replaced. The press box is termite and carpenter ant ridden and has become a safety issue because of its decay and deteriorating electrical system. It must be torn down and rebuilt with the electrical capability to power up proper field lighting. **Total cost is \$101,000.**

- m. **Tennis Court Reconstruction.** This request is for the reconstruction of six tennis courts; two located in Osterville, two in Cotuit and two at the BWB Elementary School. The Osterville and Cotuit courts are used often by the general public and the Recreation Division for their youth tennis program. The BWB courts are not often used by the general public or the Recreation Division due to their current poor condition. The courts have ruts and cracks throughout the surface that presents difficulty in playing but more importantly the facilities become a liability for the Town of Barnstable. **Total cost is \$500,000.**

Source of Funding: Capital Trust Fund borrowing authorization of \$2,131,000

\$380,000 for Water Quality Improvements

This proposal consists of the following three projects:

- n. Hydrilla Control in Long Pond (Centerville) and Mystic Lake (Marstons Mills).** This is a continuing effort to control the invasive hydrilla. Hydrilla is capable of causing devastating impacts to freshwater ponds, due to its rapid growth rate. It can spread from pond to pond. The Town and MA DCR are partnering on this control project to help Long Pond and to reduce the chance of hydrilla spreading to other ponds in Barnstable. As a result, hydrilla has been drastically reduced. A smaller-scale hydrilla infestation was discovered in Mystic Lake in 2010. With MA DCR and Indian Ponds Assoc. assistance, the plants have been hand-pulled and the areas covered in opaque plastic screens. Halting the spread of the hydrilla in Mystic Lake has proven difficult. More extensive suction harvesting by divers will be required in FY2014. Our efforts have resulted in a drastic decline of hydrilla in Long Pond and the slowing of the expansion of hydrilla Mystic Lake. In both cases, our efforts have discouraged its spread to other ponds. **Total cost is \$45,000.**
- o. Fanwort Control in Wequaquet Lake.** Fanwort is very invasive, and without control will spread throughout the lake, impacting recreational use. This project consists of Sonar treatment at suitable hot spots. Our effort in 2012 was limited to suction harvesting, due to endangered plant habitat. **Total cost is \$35,000.**
- p. Quantitative Water Quality Evaluations and Sewer CAD Model.** This effort is envisioned to integrate and supplement water quality monitoring data to address issues related to potential contaminants of emerging concern (CEC's), nitrogen, and pathogens in the Towns' groundwater system and public water supplies. This project continues groundwater evaluations initiated in the 1990's; and will integrate the information into the Town's ongoing Nutrient Management Planning Project and Comprehensive Wastewater Management Planning Project. This is a requirement of the Cape Cod Commission as part of a 2007 approval of the Wastewater Facilities Plan as well as a Cape Cod Commission recommendation as part of a 2012 regulatory review (MEPA) on the Town's ongoing Nutrient Management Planning Project and Comprehensive Wastewater Management Planning (CWMP) Project. These water quality evaluations are needed to understand the issues of contaminants of emerging concern in the groundwater system and potentially in the Town's drinking water system. This project also includes an effort to extend an existing Sewer CAD computer model of the downtown portion of the collection system which will include the complete collection system. This is a requirement of the Massachusetts Executive Office of Energy and Environmental affairs (EOEEA) on the Town's Nutrient Management Planning (NMP) Project as part of that project's regulatory review. This is needed information as the Town decides the best way to connect additional users to the system to improve water quality problems in Town and lower unit costs of the WPCF as more users connect. **Total cost is \$300,000.**

Source of Funding: Capital Trust Fund borrowing authorization of \$300,000 and Capital Trust Fund reserves of \$80,000.

6. \$875,000 For Waterway Improvements

This proposal consists of the following three projects:

- a. Hyannis Harbor Bulkhead - School Street.** This project consists of construction of a new steel bulkhead and associated rails and drainage. The area of steel bulkhead under consideration is showing signs of distress with flaking of the steel sheets and actual penetration of the steel where old drainage ways have eroded the backfill behind the steel.

In addition, surface collapse has occurred requiring Highway Division staff to do repair work immediately above the bulkhead. Lack of corrective action will result in a continued deterioration of the bulkhead, potentially resulting in a future collapse with extreme costs. **Total cost is \$142,000.**

- b. Millway Boat Ramp and Dock.** The Millway boat ramp and dock is extensively used and as such, significantly deteriorated and requires replacement. Currently several piles are severely decayed, the guard rail is not secure and many planks are in a deteriorated condition. The structure has fulfilled its useful life expectancy. This project includes the replacement of piles, rails and decking as well as the substructure and bracing. **Total cost is \$133,000.**
- c. Dredge East Bay.** This project request has two components. The first component requests funding for the dredging, construction and related costs of the East Bay entrance channel (new project); the second component requests additional funds needed to dredge the stretch from the East Bay boat ramp to the existing channel. The East Bay entrance channel is suffering from severe shoaling. It is become more difficult to navigate the channel during mid to low water conditions. The water quality in East Bay and the Centerville River depends on good water inter-change with Nantucket Sound. In addition, the channel from the bay to the boat ramp is currently being permitted and has been funded to dredge so this is the appropriate time to complete the dredging of the East Bay. This corrective work continues to be a high priority to keep navigational water ways accessible. **Total cost is \$600,000.**

Source of Funding: Capital Trust Fund borrowing authorization of \$875,000

7. \$1,904,000 For School Facility Improvements

This proposal consists of the following nine projects:

- a. Fire, Intrusion & Communication System Upgrades.** This is part of a multi-year plan to replace the existing Simplex system. The current system is obsolete, (panel, smokes, heats, pull, horn strobes, PA speakers, etc.) This cost estimate considers complete parallel installation of a new system. Upgrades to existing system using Simplex hardware and existing wiring could reduce cost estimate by 50%. Due to the size and complexity of this project, we are recommending performing the work in four (4) phases over a period of 4 years. We are consistently experiencing significant faults and issues with the existing fire, intrusion, and communication system(s). Some areas of the building do not have sufficient audible/visual coverage. Due to the proprietary nature of the existing system, maintenance of the system has presented a challenge for private contractors (past and present). The Hyannis Fire Department has strongly recommended upgrades and/or replacement with concerns for reliability and compliance to standards. **Total cost is \$200,000.**
- b. Network Infrastructure Installation.** This is part of a three year plan that will allow all of the Main Distribution Frame (MDF) closets and Intermediate Distribution Frame (IDF) closets in eight schools to be upgraded with switches that can handle bandwidth speeds up to 10 Gigabit. In addition, this project will also fund the construction of a managed wireless network in the district to support the demand for increases connectivity of mobile device and computers. The Town of Barnstable will complete the construction on the Barnstable Fiber Optic Network in FY13. This will connect every municipal and school building with fiber optic cable and provide one high end switch in each of the main closets for each of the school buildings; this capital improvement project requests the purchase of additional switches that the town project will not fund. Once we connect our buildings, we must allow

for those speeds and connections to flow internally across schools and classrooms to the end user. **Total cost is \$189,000.**

- c. **High School Library Air Conditioning Unit Replacement.** This project will replace three (3) existing Nesbitt HVAC units. These units provide all HVAC service to the BHS Library, are over 40 years old, and are at the end of their useful life. The compressor equipment in all units is failing and spring/summer/fall conditions in the space are becoming uncomfortable. **Total cost is \$450,000.**
- d. **Heat and Hot Water Circulating Pump Replacement at West Villages.** This project will replace the current hot water circulating pump sets and reconfigure the pump station for more efficient flow and use of space. The current pump set is obsolete; one pump has failed and is beyond repair and parts are not available. The entire pump set needs replacement. Continual failure of pumps and dependency on remaining capacity creates the risk for a major failure and the loss of flow with a loss of heating in entire building. **Total cost is \$85,000.**
- e. **Gym Bleachers Upgrades.** This project will provide for the modification and upgrades to gym bleachers at Barnstable High School and the United 4/5 Elementary School. BHS improvements include upgrades to mechanisms used for the extension, retraction, and locking of bleachers and safety upgrades for railings and safety barriers. The United 4/5 bleacher improvements include upgrades to extension/retraction mechanisms, safety barriers and the replacement of undersized drive motors used to open and close units. The bleachers at both locations require upgrades for state/federal mandated safety compliance, operational modifications and preventative maintenance. Failure to perform these measures will result in both inoperable units and a safety liability. **Total cost is \$55,000.**
- f. **United 4/5 Elementary Roofing and Trim Replacement.** This project will replace the failing roof system and associated trim at the 4/5 school and school's waste water treatment facility. Existing roof and trim are rapidly deteriorating and in need of replacement. During the "Hurricane Sandy" storm we lost many shingles. It is now very likely that we will continue to loose shingles at a higher than usual rate increasing the likelihood for interior leaks. **Total cost is \$600,000.**
- g. **Design Barnstable Intermediate School Façade & Roof Improvements.** This project includes funds for design only. A request for the construction cost estimate of approximately \$4 - \$5 million is anticipated in the next fiscal year. The extensive exterior repairs needed have been identified in an exterior evaluation study performed by Gale Associates in December 2009. If allowed to go unchecked and unrepaired, the building envelope will continue to deteriorate, allow leakage and create the opportunity for water damage and the potential health and environmental quality issues. **Total cost is \$100,000.**
- h. **Removal of Modular Classrooms and Alternative Space Assessment.** This project includes the removal of all remaining modular classrooms in the district and the assessment of alternative space. The existing modulares are all greater than 20 years old and have sustained water damage and are becoming unsuitable for occupancy. The alternative space assessment will fund a study for a permanent modular facility for an early childhood center. **Total cost is \$125,000.**
- i. **Removal of Underground Storage Tanks at HY West and Centerville.** This project includes funds for the removal and disposal of 1-500 gallon and 2-10,000 gallon underground storage tanks. The request includes services of for a licensed UST operator for removal and compliance. Both schools have been converted to natural gas and the tanks need to be removed. **Total cost is \$100,000.**

Source of Funding: Capital Trust Fund borrowing authorization of \$1,679,000 and Capital Trust fund reserves of \$225,000.

8. \$260,000 For School Equipment Replacement

This proposal consists of the following two projects:

- a. Walk-in Coolers and Kitchen Equipment.** This project will replace and upgrade existing walk-in cooler systems at BHS, HYW, and Centerville elementary school. All units will require new boxes and mechanicals. The existing units are poorly insulated and cooling systems are water cooled and inefficient. We have been experiencing numerous failures with existing systems which have resulted in the loss of food. Replacement with new and more efficient equipment will reduce food loss and energy consumption. The kitchen equipment replacement is part a multi-year effort to perform a campus wide replacement and upgrade of kitchen equipment. The existing equipment in most schools is nearing their 20 year end of service life. Additionally, menu requirements are changing, necessitating the need for updated equipment sets. **Total cost is \$110,000.**
- b. Grounds Equipment Upgrades.** This request is for facilities equipment required to maintain and service Barnstable Public School facilities including a mower, a tractor, an aerator and a broadcast spreader. The existing mower is 14 years old and the tractor and attachments are needed for routine field maintenance. **Total cost is \$150,000.**

Source of Funding: Capital Trust Fund borrowing authorization of \$260,000.

9. \$90,000 for Assessing Records Conversion

This project includes funds for the conversion of current form of permanent historical assessing records dating back to 1861 from microfiche cards and 35mm film to General Code laserfiche format to conform with State law on permanent record keeping. The assessing operations must stay in compliance with State law regarding accessibility of permanently kept historical valuation records. Current microfiche records require viewing & printing machine combinations that are obsolete and have been broken for over a year. Repair parts are no longer available and we are unable to access the records for printing at all in the current format. Conversion to laserfiche would satisfy the state's permanent record retention requirement and greatly improve the time to search & produce taxpayer requested documents, as required by law. The current data storage medium of 233 rolls of 35 mm film is also degrading and deteriorating to the point of making the records inaccessible and/or unreadable. **Total cost is \$90,000**

Source of Funding: Capital Trust Fund reserves of \$90,000

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D - EXHIBIT 1 (page 1)

INSERT

D - EXHIBIT 1 (page 2)

PART II. CAPITAL TRUST FUND CASH FLOW ANALYSIS

The Capital Trust Fund (CTF) is used as a mechanism to finance the Town's general fund capital improvement 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. 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 finance.

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 a portion of the bond issues for the Barnstable Harbor Marina bulkhead replacement.

The FY14 general fund Capital Improvement 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 a special revenue fund established from the sale of town owned property. This "pay-as-you-go" financing approach saves the Town thousands of dollars in the form of bond issuance costs and interest cost. It also provides the opportunity to have some capital program on an annual basis, and provides flexibility in its budgeting. 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 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 over 10 years.

Furthermore, the annual contribution from the general fund to the CTF could be decreased by the cash program portion (\$3.25M), if the need for funding general fund operations is determined to be greater than the need for the capital expenditure. There are countless scenarios that can be created to allocate the annual cash flow of the CTF between a cash and borrowing program.

The annual contribution to the CTF has grown from \$1.9 million per year to \$7.146 million in FY14. 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. For FY14, an additional \$7 million will be transferred from the general fund reserves and \$414,000 from a special revenue fund so as to provide for a greater level of capital funding over the next five years.

Table A demonstrates the CTF cash flow for the next 10 years incorporating all existing loan payments and the FY14 proposed capital improvement 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 2% per year
- The transfer from the general fund will increase 2.5% per year
- Loan amortization on the FY14 bond issue will include:
 - \$637,000 over 5 years
 - \$2,484,000 over 10 years
 - \$750,000 over 15 years
 - \$1,744,000 over 20 years
- The interest rate on the bonds will range from 2.5% to 4.0% with the longer the amortization period the higher the interest rate
- No additional enterprise fund debt is included
- No additional general fund or special revenue fund resources are included beyond FY14
- The FY14 bonds will be issued at a time so that the first loan payments will not be made until FY15
- There are no 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
- The funding for the public roads program of \$3.25 million is repeated every year for the next 10 years
- Additional cash funded capital of \$100,000 per year is included

Major Assumptions Used In Table B:

In addition to all of the assumptions in Table A, the following additional assumptions are included in Table B:

- Bond issues of \$7 million per year are included for the FY15 through FY18 capital program with the following amortization amounts:
 - \$500,000 over 5 years
 - \$1,000,000 over 10 years
 - \$2,500,000 over 15 years
 - \$3,000,000 over 20 years
- No additional bond issues are included beyond FY18

TABLE A – EXISTING LOAN AMORTIZATION AND FY14 PROPOSED PROJECTS

ESTIMATED CAPITAL TRUST FUND CASH FLOW										
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
1 Beginning Trust Fund Balance	\$ 5,309,408	\$ 11,463,169	\$ 10,730,177	\$ 10,320,749	\$ 10,605,799	\$ 11,322,753	\$ 12,485,647	\$ 14,149,694	\$ 16,294,322	\$ 19,144,211
Resources:										
2 Investment Earnings	106,188	229,263	214,604	206,415	212,116	226,455	249,713	282,994	325,886	382,884
3 Private Road Betterments Collected	69,000	66,000	63,000	60,000	57,000	54,000	51,000	48,000		
4 Transfer From General Fund	7,146,603	7,325,268	7,508,399	7,696,109	7,888,511	8,085,723	8,287,866	8,495,063	8,707,439	8,925,125
5 Transfer From Special Revenue Funds	414,000	-	-	-	-	-	-	-	-	-
6 Additional Contribution From General Fund	7,000,000	-	-	-	-	-	-	-	-	-
7 Total Current Year Resources	14,735,791	7,620,531	7,786,003	7,962,524	8,157,627	8,366,178	8,588,579	8,826,057	9,033,325	9,308,009
8 Total Available Resources (Lines 1 + 7)	20,045,199	19,083,700	18,516,180	18,283,273	18,763,426	19,688,931	21,074,226	22,975,751	25,327,647	28,452,220
Commitments:										
9 Existing Debt Service Payments	(4,852,031)	(4,350,148)	(4,204,880)	(3,699,749)	(3,475,773)	(3,251,209)	(3,105,057)	(2,872,558)	(2,385,170)	(2,200,712)
10 Estimated Debt Service on FY14 CIP (\$5.615M)	-	(653,375)	(640,550)	(627,725)	(614,900)	(602,075)	(469,475)	(458,871)	(448,267)	(442,396)
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	(480,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)
13 Total Current Year Commitments	(8,582,031)	(8,353,523)	(8,195,430)	(7,677,474)	(7,440,673)	(7,203,284)	(6,924,532)	(6,681,429)	(6,183,437)	(5,993,108)
14 Increase (Decrease) in Trust Fund (Line 8 - 13)	6,153,760	(732,991)	(409,428)	285,050	716,954	1,162,894	1,664,047	2,144,628	2,849,889	3,314,901
15 Ending Trust Fund Balance (Lines 1 + 14)	\$ 11,463,169	\$ 10,730,177	\$ 10,320,749	\$ 10,605,799	\$ 11,322,753	\$ 12,485,647	\$ 14,149,694	\$ 16,294,322	\$ 19,144,211	\$ 22,459,112
16 % of trust fund resources committed in CY (max = 80%)	43%	45%	45%	43%	41%	38%	34%	30%	26%	22%

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 FY14. Projects funded from the CTF’s reserves in FY14 total \$3,730,000 and those funded from bond issues total \$5,615,000. The bonds will be issued in FY14 and the first loan payments will be made in FY15. The estimated new loan payments on the FY14 bond issue are illustrated on line 10. Line 9 includes the loan payments for all existing bond issues. 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 FY14 from the special revenue fund and general fund are included on lines 5 and 6, respectively. The projected balance in the fund reaches a low of \$10.3 million at the end of FY16 and begins to grow thereafter. This indicates that the fund can absorb more annual loan payments which will allow for more bond issues beyond FY14 to fund additional capital expenditures.

TABLE B – CAPITAL TRUST FUND ESTIMATED CAPACITY FOR THE NEXT 10 YEARS

ESTIMATED CAPITAL TRUST FUND CASH FLOW										
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
1 Beginning Trust Fund Balance	\$ 5,309,408	\$ 11,463,169	\$ 10,730,177	\$ 9,629,082	\$ 8,529,882	\$ 7,169,068	\$ 5,559,722	\$ 4,447,750	\$ 3,901,464	\$ 4,145,787
Resources:										
2 Investment Earnings	106,188	229,263	214,604	192,582	170,598	143,381	111,194	88,955	78,029	82,916
3 Private Road Betterments Collected	69,000	66,000	63,000	60,000	57,000	54,000	51,000	48,000		
4 Transfer From General Fund	7,146,603	7,325,268	7,508,399	7,696,109	7,888,511	8,085,723	8,287,866	8,495,063	8,707,439	8,925,125
5 Transfer From Special Revenue Funds	414,000	-	-	-	-	-	-	-	-	-
6 Additional Contribution From General Fund	7,000,000	-	-	-	-	-	-	-	-	-
7 Total Current Year Resources	14,735,791	7,620,531	7,786,003	7,948,691	8,116,109	8,283,104	8,450,060	8,632,018	8,785,468	9,008,041
8 Total Available Resources (Lines 1 + 7)	20,045,199	19,083,700	18,516,180	17,577,773	16,645,991	15,452,173	14,009,782	13,079,768	12,686,932	13,153,828
Commitments:										
9 Existing Debt Service Payments	(4,852,031)	(4,350,148)	(4,204,880)	(3,699,749)	(3,475,773)	(3,251,209)	(3,105,057)	(2,872,558)	(2,385,170)	(2,200,712)
10 Estimated Debt Service on FY14 CIP (\$5.615M)	-	(653,375)	(640,550)	(627,725)	(614,900)	(602,075)	(469,475)	(458,871)	(448,267)	(442,396)
11 Additional Capacity Available (FY15) - \$7M bond	-	-	(691,667)	(678,750)	(665,833)	(652,917)	(640,000)	(538,125)	(526,667)	(515,208)
12 Additional Capacity Available (FY16) - \$7M bond	-	-	-	(691,667)	(678,750)	(665,833)	(652,917)	(640,000)	(538,125)	(526,667)
13 Additional Capacity Available (FY17) - \$7M bond	-	-	-	-	(691,667)	(678,750)	(665,833)	(652,917)	(640,000)	(538,125)
14 Additional Capacity Available (FY18) - \$7M bond	-	-	-	-	-	(691,667)	(678,750)	(665,833)	(652,917)	(640,000)
15 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)
16 Other Cash Program	(480,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)
17 Total Current Year Commitments	(8,582,031)	(8,353,523)	(8,887,097)	(9,047,891)	(9,476,923)	(9,892,451)	(9,562,032)	(9,178,304)	(8,541,145)	(8,213,108)
18 Increase (Decrease) in Trust Fund (Line 8 - 17)	6,153,760	(732,991)	(1,101,095)	(1,099,200)	(1,360,814)	(1,609,347)	(1,111,971)	(546,286)	244,323	794,933
19 Ending Trust Fund Balance (Lines 1 + 18)	\$ 11,463,169	\$ 10,730,177	\$ 9,629,082	\$ 8,529,882	\$ 7,169,068	\$ 5,559,722	\$ 4,447,750	\$ 3,901,464	\$ 4,145,787	\$ 4,940,720
20 % of trust fund resources committed in CY (max = 80%)	43%	45%	49%	53%	59%	67%	73%	76%	74%	69%

In addition to proposed \$9,345,000 FY14 capital program it is estimated the CTF can absorb approximately \$58 million more in capital expenditures over the next 10 years for a total of \$67 million. Cash financed capital is estimated at \$3.35 million per year through FY23 as illustrated on lines 15 and 16. Bond financed capital is estimated a \$7 million per year for FY15 through FY18. The estimated annual loan payments on the bonds are illustrated on lines 11 through 14. The size of this capital program will draw the reserves down in the CTF every year until FY22 as illustrated on line 18. After the FY18 bond issue, it is estimated that the next bond issue won't be until FY21, as the available resources begin to exceed the current year commitments in FY22.

TABLE C – CAPITAL TRUST FUND DEBT AMORTIZATION SCHEDULE FOR ALL ISSUED DEBT THROUGH FY23

Purpose	Issue Date	Maturity Date	Original Amount	P&I Payments FY 2014	P&I Payments FY 2015	P&I Payments FY 2016	P&I Payments FY 2017	P&I Payments FY 2018	P&I Payments FY 2019	P&I Payments FY 2020	P&I Payments FY 2021	P&I Payments FY 2022	P&I Payments FY 2023
Building - Police Station Construction - 2004-011	06/15/05	06/15/25	400,000	29,720	28,720	27,720	27,020	26,320	25,580	24,820	24,044	23,245	22,445
Drainage - Refunded	02/15/07	02/15/14	152,100	31,200	-	-	-	-	-	-	-	-	-
Public Wharves-Dredging-Refunded	02/15/07	02/15/15	155,800	32,400	31,200	-	-	-	-	-	-	-	-
School Facilities Repair	02/15/07	02/15/17	339,000	40,000	33,600	32,400	31,200	-	-	-	-	-	-
BHS Cogeneration	02/15/07	02/15/17	500,000	58,000	56,000	54,000	52,000	-	-	-	-	-	-
Old Town Hall	02/15/07	02/15/17	295,000	34,600	33,400	32,200	26,000	-	-	-	-	-	-
Building - Senior Center - Refunded	02/15/07	02/15/19	702,378	95,109	93,709	92,309	90,909	89,309	37,759	11,009	9,609	8,209	6,765
School Upgrades 1	02/15/07	02/15/22	360,000	33,925	32,925	31,925	30,925	29,925	28,675	22,425	21,625	20,825	-
School Facilities Repair & Improvement	02/15/07	02/15/22	660,000	61,550	59,750	57,950	56,150	54,350	52,100	44,850	43,250	41,650	-
Beach Facilities	02/15/07	02/15/22	270,000	36,990	33,990	30,990	22,990	19,990	16,250	15,000	15,000	15,000	-
Land Acquisition - Hya nnis Golf Course	02/15/07	02/15/26	748,000	61,375	59,775	58,175	56,575	54,975	52,975	50,975	49,375	47,775	46,125
School Health & Safety Improvements	02/15/07	02/15/26	478,000	37,911	36,911	35,911	34,911	33,911	32,661	31,411	30,411	29,411	23,380
MME Roof Replacement	02/15/07	02/15/26	750,000	61,585	59,985	58,385	56,785	55,185	53,185	51,185	49,585	47,985	46,335
School Upgrades 2	02/15/07	02/15/27	150,000	13,764	13,364	12,964	12,564	7,164	6,914	6,664	6,464	6,264	6,058
BHMCS Roof	02/15/07	02/15/27	910,000	71,674	69,874	68,074	66,274	64,474	62,224	59,974	58,174	56,374	54,518
Senior Center - Garden Level	02/15/07	02/15/27	457,000	31,319	30,519	29,719	28,919	28,319	22,569	21,819	21,219	20,619	20,000
Town Building Repairs & Renovations	02/15/07	02/15/27	685,000	47,905	46,905	45,905	44,905	43,905	42,655	41,655	40,855	40,055	39,230
MWPAT CW-04-31	11/09/07	07/15/20	389,216	33,999	33,999	33,999	33,999	33,999	33,999	33,999	33,999	-	-
Coastal Water Quality Improvements	06/15/08	06/15/18	250,000	28,800	27,960	27,120	26,040	25,140	-	-	-	-	-
Lake & Pond Improvements	06/15/08	06/15/18	250,000	28,800	27,960	27,120	26,040	25,140	-	-	-	-	-
Land Acquisition -CAP	06/15/08	06/15/23	365,200	33,690	32,850	32,010	30,930	30,030	28,890	27,930	26,970	26,010	25,020
Private Road Repairs	06/15/08	06/15/23	1,607,900	150,201	146,456	142,711	137,896	133,884	128,801	124,521	120,241	115,961	111,548
Bismore Park Visitor Center - CAP	06/15/08	06/15/23	150,000	14,038	13,688	13,338	12,888	12,513	12,038	11,638	11,238	10,838	10,425
Bismore Park Visitor Center	06/15/08	06/15/23	465,000	43,516	42,431	41,346	39,951	38,789	37,316	36,076	34,836	33,596	32,318
Pleasant St. Dock - 1	06/15/08	06/15/23	350,000	32,286	31,481	30,676	29,641	28,779	27,686	26,766	25,846	24,926	23,978
Pleasant St. Dock - 2	06/15/08	06/15/23	350,000	32,286	31,481	30,676	29,641	28,779	27,686	26,766	25,846	24,926	23,978
Boat Ramps - CAP	06/15/08	06/15/23	927,000	86,829	84,659	82,489	79,699	77,374	73,429	70,989	68,549	66,109	63,593
School Facility Improvements	06/15/08	06/15/28	916,600	54,213	52,988	51,763	45,188	44,063	42,638	41,438	40,238	39,038	37,800
Municipal Building Improvements	06/15/08	06/15/28	297,000	13,456	13,106	7,756	7,531	7,344	7,106	6,906	6,706	6,506	6,300
School Building Improvements	06/15/10	06/15/30	800,000	66,554	65,700	64,845	62,708	56,298	55,337	53,413	52,260	51,106	49,856
Highway Facility	06/15/10	06/15/30	136,000	11,314	11,169	11,024	10,660	9,571	9,407	9,080	8,884	8,688	8,475
School Facility Improvements	06/15/10	06/15/14	1,000,000	255,000	-	-	-	-	-	-	-	-	-
Bismore Park Improvements	06/15/10	06/15/14	74,000	15,300	-	-	-	-	-	-	-	-	-
Dredging	06/15/10	06/15/24	419,250	41,075	40,475	39,875	38,375	36,875	36,125	34,625	33,725	32,825	31,850
Lake Treatment	06/15/10	06/15/25	275,000	27,375	26,975	26,575	25,575	24,575	24,075	23,075	17,475	17,025	16,538
Municipal Facility Improvements	06/15/10	06/15/29	402,500	84,319	7,719	7,619	7,369	7,119	6,994	6,744	6,594	6,444	6,281
Police Facility	06/15/10	06/15/30	508,000	40,094	39,594	39,094	37,844	36,594	35,969	34,719	33,969	33,219	32,406
Nitrogen Management CW-04-31-A	03/15/11	07/15/20	211,460	23,330	23,330	23,330	23,330	23,330	23,330	23,330	23,330	-	-
School Facilities Upgrades/Repairs V	06/14/11	06/15/31	884,000	73,669	72,769	71,419	70,069	68,719	66,919	65,119	63,319	61,519	59,719
School Facilities Upgrades/Repairs I	06/14/11	06/15/16	65,000	15,900	10,600	10,300	-	-	-	-	-	-	-
School Equipment	06/14/11	06/15/16	193,000	42,900	37,100	36,050	-	-	-	-	-	-	-
Traffic Calming	06/14/11	06/15/16	50,000	10,800	10,600	10,300	-	-	-	-	-	-	-
Municipal Facility Upgrades/Repairs - MEA Building	06/14/11	06/15/16	114,000	21,600	21,200	20,600	-	-	-	-	-	-	-
Police Dept. Emergency Generator	06/14/11	06/15/16	271,000	59,250	58,150	51,500	-	-	-	-	-	-	-

TABLE C – CAPITAL TRUST FUND DEBT AMORTIZATION SCHEDULE FOR ALL ISSUED DEBT THROUGH FY23 - CONTINUED

Purpose	Issue Date	Maturity Date	Original Amount	P&I Payments FY 2014	P&I Payments FY 2015	P&I Payments FY 2016	P&I Payments FY 2017	P&I Payments FY 2018	P&I Payments FY 2019	P&I Payments FY 2020	P&I Payments FY 2021	P&I Payments FY 2022	P&I Payments FY 2023
Dredging - 98-097 Refunded	06/14/11	06/15/16	144,000	38,820	37,100	36,050	-	-	-	-	-	-	-
Mill Pond Dredge & Lake Wequaquet Planning	06/14/11	06/15/16	430,000	91,800	90,100	87,550	-	-	-	-	-	-	-
Wastewater Management Planning	06/14/11	06/15/16	600,000	129,600	127,200	123,600	-	-	-	-	-	-	-
Advance Refund 6/15/2002 Land Acquisitions BUTAPS	06/14/11	06/15/20	1,102,000	175,950	168,050	163,850	154,650	145,600	140,400	135,200	-	-	-
School Parking Lot	06/14/11	06/15/21	250,000	31,750	31,250	30,500	29,750	29,000	28,000	27,000	26,000	-	-
School Facilities Upgrades/Repairs IV	06/14/11	06/15/21	332,000	43,650	42,950	41,900	40,850	34,800	33,600	32,400	31,200	-	-
Bridge Repair	06/14/11	06/15/21	250,000	31,750	31,250	30,500	29,750	29,000	28,000	27,000	26,000	-	-
Sidewalk Improvements	06/14/11	06/15/21	350,000	44,450	43,750	42,700	41,650	40,600	39,200	37,800	36,400	-	-
Building - Town Hall Space - 00-110 Refunded	06/14/11	06/15/21	180,000	26,300	24,880	24,280	23,680	23,080	21,280	20,520	19,760	-	-
Municipal Facility Improvement	06/14/11	06/15/21	300,000	38,100	37,500	36,600	35,700	34,800	33,600	32,400	31,200	-	-
Boat Ramp Renovations	06/14/11	06/15/21	250,000	31,750	31,250	30,500	29,750	29,000	28,000	27,000	26,000	-	-
Dredging East Bay & Blish Point	06/14/11	06/15/21	665,000	87,650	81,250	79,300	77,350	75,400	72,800	70,200	67,600	-	-
School Remolding - Asbestos 00-110 Refunded	06/14/11	06/15/22	50,000	6,550	6,450	6,300	6,150	6,000	5,800	5,600	5,400	5,200	-
Building - Town Hall Repairs - 01-087 Refunded	06/14/11	06/15/22	100,000	13,060	12,860	12,560	12,260	11,960	11,560	11,160	10,760	9,360	-
School Facilities Upgrades/Repairs II	06/14/11	06/15/26	179,000	19,963	19,663	19,213	13,763	13,463	13,063	12,663	12,263	11,863	11,463
School Facilities Upgrades/Repairs III	06/14/11	06/15/26	190,000	20,513	20,213	19,763	19,313	18,863	18,263	12,663	12,263	11,863	11,463
School Improvement	06/14/11	06/15/26	487,000	49,438	48,738	47,688	46,638	45,588	39,188	37,988	36,788	35,588	34,388
Baxter Neck Road's Neck Road - Private Way	06/14/11	06/15/26	350,000	35,475	34,975	34,225	33,475	32,725	31,725	30,725	29,725	23,725	22,925
Prince Cove/Hayward Rd. Boat Ramp	06/14/11	06/15/26	600,000	58,250	57,450	56,250	55,050	53,850	52,250	50,650	49,050	47,450	45,850
Advance Refund 6/15/2003 Main St. Hyannis Infr. Improv.	04/18/12	09/15/20	39,100	6,198	6,048	5,898	5,723	5,523	5,348	5,198	4,162	-	-
Advance Refund 6/15/2003 School Remodel II	04/18/12	09/15/22	193,400	27,601	25,580	24,980	24,280	23,480	22,780	22,180	21,580	17,940	15,300
Advance Refund 6/15/2003 School Remodel I	04/18/12	09/15/22	242,700	33,809	33,029	32,249	31,339	30,299	29,389	28,609	22,806	21,192	20,196
Advance Refund 6/15/2003 Drainage	04/18/12	09/15/22	193,200	26,228	25,628	25,028	24,328	23,528	22,828	22,228	21,628	18,968	15,504
Advance Refund 6/15/2003 Rink Improvements	04/18/12	09/15/22	96,600	12,965	13,114	12,814	12,514	12,164	11,764	11,414	11,114	10,814	7,064
Advance Refund 6/15/2003 Police Facility Addition	04/18/12	09/15/22	626,900	85,332	83,382	81,432	79,157	76,557	71,229	67,500	65,700	63,600	61,200
Advance Refund 6/15/2003 Drainage	04/18/12	09/15/22	96,700	13,118	12,818	12,518	12,168	11,768	11,418	11,118	10,818	10,468	6,834
Nitrogen Management CW-04-31-B Series 16	06/13/12	07/15/20	539,860	72,687	72,781	72,879	72,977	73,078	73,182	73,288	73,395		
TOTAL GENERAL FUND DEBT SERVICE				3,372,376	2,904,324	2,793,286	2,325,765	2,136,863	1,955,956	1,851,423	1,655,244	1,204,176	1,057,123
Marina Bulkhead Repair I	06/14/11	06/15/30	725,000	63,231	62,431	61,231	60,031	58,831	57,231	55,631	54,031	52,431	50,831
HYCC 1	02/15/07	02/15/27	1,000,000	79,138	77,138	75,138	73,138	71,138	69,138	66,638	64,638	62,638	60,575
HYCC 2	02/15/07	02/15/27	8,000,000	637,100	621,100	605,100	589,100	573,100	553,100	533,100	517,100	501,100	484,600
HYCC 3	02/15/07	02/15/27	1,600,000	127,420	124,220	121,020	117,820	114,620	110,620	106,620	103,420	100,220	96,920
HYCC 4	06/15/08	06/15/28	6,765,000	547,765	535,935	524,105	508,895	496,220	480,165	466,645	453,125	439,605	425,663
TOTAL ENTERPRISE FUND DEBT SERVICE				1,454,654	1,420,824	1,386,594	1,348,984	1,313,909	1,270,254	1,228,634	1,192,314	1,155,994	1,118,589
Tempoary 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
GRAND TOTAL ALL DEBT SERVICE				4,852,031	4,350,148	4,204,880	3,699,749	3,475,773	3,251,209	3,105,057	2,872,558	2,385,170	2,200,712

PART III. DEBT POSITION ANALYSIS

A. TYPE AND PURPOSE OF DEBT

The Town sells bonds to finance major capital improvements that require large cash outlays. General Obligation Bonds (GOB) 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, (GOD), 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 2% to 4% range. Rates remain low in FY13 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 – are 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 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 community housing and historic preservation projects. The CPF, a special revenue fund, is funded with a 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.

B. CURRENT DEBT POSITION

As of June 30, 2012, the Town of Barnstable had \$129.3 million of outstanding long-term debt. New debt issued in FY12 was \$18 million and existing debt retired was \$25.7 million, representing a \$7.7 million net decrease in the outstanding long-term debt level from June 30, 2011. These debt figures include all debt incurred on behalf of the enterprise funds (\$56 million) and Community Preservation Fund (\$20.3 million).

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, the amount of debt sold by overlapping jurisdictions (the County, Cape Cod Regional Transit Authority and Cape Cod Regional Technical High School), and future capital needs. These factors influence the Town's bond rating - an evaluation of the Town's ability to repay debt as determined by the rating agencies. Rating agencies examine the local economy as well as the Town's financial position, administrative capabilities, and level of planning. 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 their most recent bond rating analysis dated April 3, 2012, Standard & Poor's affirmed the 'AAA' rating on the

Town's outstanding debt. This included a stable outlook. The rating reflects S&P's assessment of the Town's demonstrated market access and strong financial position and fiscal management, good income levels and high per capita market value and a primarily residential property tax base that is among the largest in Massachusetts.

Projected Debt Payments by Project and Fund

The following four tables set forth the projected General Obligation Debt (G.O.D.) payments by project for both the Town's governmental funds and the enterprise funds.

It is significant to note that the State reimburses for school construction projects at the rate of 64% including interest costs incurred, as well as several MWPAT loans for sewer construction, water system improvements and landfill capping loans. The State will contribute \$26.5 million in school building assistance grants and MWPAT subsidies over the remaining life of the outstanding bonds.

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

Project	Maturities Through	Original Loan Amount	Coupon Rate (%)	Outstanding at June 30, 2011	Issued	Redeemed	Outstanding at June 30, 2012
MWPAT Title V Bond of 1997	2021	\$200,000	0.00	\$103,803		(\$10,000)	\$93,403
Municipal Purpose Refunding of 2012	2012	8,340,062	4.00	2,786,903		(2,780,690)	-
MWPAT Title V Bond of 2002	2023	200,000	0.00	119,928		(10,020)	109,908
Municipal Purpose Bonds of 2002	2022	20,949,000	4.00 – 5.00	1,160,000		(1,160,000)	-
Municipal Purpose Bonds of 2003	2013	7,014,000	2.00 - 4.00	3,310,000		(2,955,000)	355,000
Municipal Purpose Bonds of 2004	2014	11,783,000	3.00 – 5.00	7,415,000		(6,175,000)	1,240,000
Municipal Purpose Bonds of 2005	2025	6,280,000	3.25 – 5.00	4,390,000		(315,000)	4,075,000
MWPAT Title V Bond of 2006	2026	400,000	0.00	300,000		(20,000)	280,000
MWPAT Title V Bond of 2007	2027	200,000	0.00	160,000		(10,000)	150,000
Municipal Purpose Bonds of 2007	2027	46,664,000	3.38 – 4.75	36,805,000		(4,460,000)	32,345,000
MWPAT Bond of 2008 (CW-04-31)	2021	389,216	2.00	308,161		(28,117)	280,044
Municipal Purpose bonds of 2008	2028	6,861,000	3.75 – 4.50	4,859,000		(637,000)	4,222,000
MAPAT Bond of 2009	2021	1,059,374	2.00	751,320		(19,294)	732,026
Municipal Purpose bonds of 2010	2030	4,959,000	2.00 – 5.00	4,380,000		(550,000)	3,830,000
Municipal Purpose bonds of 2011	2031	16,176,000	2.00 – 4.00	16,176,000		(876,000)	15,300,000
Municipal Purpose Refunding of 2012	2023	11,715,000	2.00 – 4.00		\$10,037,900	-	10,037,900
Total Bonds Payable				\$83,025,115	\$10,037,900	(\$20,012,734)	\$73,050,281

Debt service requirements for principal and interest for Governmental bonds payable in future fiscal years are as follows:

Fiscal Year	Principal	Interest	Total
2013	\$9,298,893	\$3,105,832	\$12,404,725
2014	9,025,234	2,701,093	11,726,327
2015	8,197,588	2,124,371	10,321,959
2016	7,954,994	1,836,324	9,791,318
2017	7,642,450	1,541,326	9,183,776
2018	7,594,957	1,253,186	8,848,143
2019	7,613,519	915,164	8,528,683
2020	4,172,133	577,593	4,749,726
2021	3,188,605	425,148	3,613,753
2022	2,693,204	308,910	3,002,114
2023	2,073,704	203,045	2,276,749
2024	970,000	137,578	1,107,578
2025	935,000	101,223	1,036,223
2026	610,000	65,719	675,719
2027	365,000	42,856	407,856
2028	250,000	28,478	278,478
2029	215,000	18,650	233,650
2030	210,000	10,052	220,052
2031	40,000	1,656	41,656
Total	\$73,050,281	\$15,398,204	\$88,448,485

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 Grade 4/5 School in Marstons Mills and the renovation and expansion of the Barnstable Intermediate School and Barnstable High School. During fiscal year 2012, \$3,509,000 of such assistance was received. Approximately \$23,462,000 will be received in future years. Of this amount, \$2,528,000 represents reimbursement of future long-term interest costs and \$20,934,000 represents reimbursement of approved construction cost.

Bonds Payable Schedule – Enterprise Funds

Project	Maturities Through	Original Loan Amount	Coupon Rate (%)	Outstanding at June 30, 2011	Issued	Redeemed	Outstanding at June 30, 2012
Golf Course	2025	\$4,450,000	5.00	\$3,620,000	\$ -	(\$220,000)	\$3,390,000
Wastewater	2032	34,940,442	0.00 – 4.75	17,201,545	5,919,680	(2,341,574)	20,779,651
Water	2032	13,699,618	2.00 – 5.00	11,378,911	910,707	(504,552)	11,785,066
Marinas	2030	3,774,000	3.00 – 5.00	1,675,000	864,000	(975,000)	1,564,000
Solid Waste	2027	8,405,700	0.00 – 4.50	3,907,900	241,500	(691,900)	3,457,500
Sandy Neck	2031	1,365,000	4.00	1,280,000	-	(65,000)	1,215,000
Hyannis Youth & Community Center	2028	17,365,000	3.375 – 5.00	14,223,000	-	(869,000)	13,354,000
Airport	2031	730,000	2.00 – 4.12	730,000	-	(25,000)	705,000
Total Bonds Payable				\$54,016,356	\$7,935,887	(\$5,702,026)	\$56,250,217

Debt service requirements for principal and interest for enterprise bonds payable in future fiscal years are as follows:

Fiscal Year	Principal	Interest	Total
2013	\$3,706,637	\$2,068,847	\$5,775,484
2014	3,880,725	1,777,730	5,658,455
2015	3,900,573	1,601,165	5,501,738
2016	3,796,234	1,463,124	5,259,358
2017	3,857,197	1,322,533	5,179,730
2018	3,601,988	1,174,183	4,776,171
2019	3,677,941	1,041,145	4,719,086
2020	3,302,482	908,520	4,211,002
2021	3,193,311	802,212	3,995,523
2022	3,219,649	699,202	3,918,851
2023	3,284,895	592,146	3,877,041
2024	3,209,562	484,640	3,694,202
2025	3,116,158	385,456	3,501,614
2026	2,873,188	284,383	3,157,571
2027	2,930,663	193,456	3,124,119
2028	1,678,591	100,742	1,779,333
2029	898,752	62,235	960,987
2030	886,722	41,429	928,151
2031	861,201	20,157	881,358
2032	373,748	3,736	377,484
Total	\$56,250,217	\$15,027,041	\$71,277,258

The Town is scheduled to be subsidized by the Massachusetts Water Pollution Abatement Trust (MWPAT) on a periodic basis for principal in the amount of \$1,759,408 and interest costs for \$1,252,594. Since the Town is legally obligated for the total amount of the debt, such amounts are included in the tables above. The fiscal year 2012 principal and interest subsidies totaled \$297,845 and \$243,038, respectively.

The Town is subject to various debt limits by statute and may issue additional general obligation debt under the normal debt limit. On June 30, 2012, the Town had the following authorized and un-issued debt:

Wastewater Treatment & Expansion	\$14,049,813
Water Projects	4,827,156
Dredging Projects	\$329,000
Road Projects	\$6,827
Airport Projects	\$32,203,989
Security Fencing at Landfill	\$160,000
Effluent mitigation	\$1,393,950
Refunding bonds	\$13,258,000
Land Acquisitions	\$655,000
Energy Improvements	\$3,704,000
Facility Improvements	\$428,275
Total	\$71,016,010

C. GENERAL OBLIGATION DEBT – CREDIT RATINGS

In June 2012, the Treasurer conducted a \$11.7 million bond refunding. This sale required a rating agency analysis of the Town’s financial condition and resulted in the Town maintaining its **AAA** credit from Standard and Poor’s on all of its outstanding debt obligations. The descriptor used by S&P for this rating is “Prime Investment Grade”. Only twenty other communities in Massachusetts have an AAA rating from S&P. 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. To achieve this rating upgrade, the Town has been following a prudent course of conservative financial management. Reserves are deemed so important by S&P (listed first of the ten most important factors that they examine) that a quote from their public finance literature is provided. “A formalized financial reserve policy is a consistent feature of most of S&P’s highly rated credits. As economic trends have weakened over the past year, the importance of reserves from a credit standpoint is again highlighted. It clearly provides a measure of financial flexibility to react to budget shortfalls in a timely fashion”. This AAA rating reflects sound credit quality with associated very low risk and should result in 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 area and a community with more income wealth can

afford more debt than a poor community. The following is a list of additional factors that the financial community uses in evaluating an issuer's credit rating:

- Economic health and diversification
- Fund balances (free cash and other reserves)
- Evidence of regular planning for capital improvements by the issuer
- Review of the issuer's Capital Improvements Program for its effect on future debt needs
- The willingness of the community, from time to time, to approve Proposition 2½ overrides and/or debt exclusions
- Consideration of projected debt requirements
- The issuer's financial controls related to budgetary matters
- The issuer's long-range planning, particularly zoning and land-use planning
- The range and level of services provided by the issuer in relation to its capacity to provide services
- Flexibility in the ability to raise revenue.

Generally, bond ratings do not change suddenly but respond more to long-range trends. However, dramatic changes are key indicators of fiscal health and can result in a more 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 April 3, 2012

"Barnstable's financial management practices are considered strong under Standard & Poor's Financial Management Assessment (FMA) methodology, indicating that the town's financial practices are strong, well-embedded, and likely sustainable. The FMA is designed to measure management's policies and procedures as it oversees day-to-day operations. Much of Barnstable's debt and financial management practices are embedded in its town code or charter."

D. GENERAL OBLIGATION DEBT - LIMITATIONS

There are several legal limitations that govern the issuance of municipal debt. Under Massachusetts statutes, the General Debt Limit of the Town of Barnstable consists of a Normal Debt Limit and a Double Debt Limit. The Normal Debt Limit for the Town is 2½ 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. It can authorize debt up to twice this amount (Double Debt Limit) with the approval of the State's Municipal Oversight Board. The current debt limitation for the Town of Barnstable is close to \$700 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 many categories of general obligation debt that are exempt from, and do not count against, the General Debt Limit. To name a few among many; certain school bonds, water bonds, solid waste disposal facility bonds, and water pollution abatement revenue bonds are not subject to these debt limits.

Proposition 2 ½ (Chapter 580 of the Acts of 1980) also impacts the amount of municipal debt that can be issued. These limiting factors are the Primary Levy Limit and the Maximum Levy Limit and restrict the permitted amount of tax levy increase from year to year. In order to exceed these legal limits, an override initiative would need to be voted to exclude a particular debt issue or a portion of a debt issue from the effects of these limitations. The Town's primary levy limit for FY2013 was calculated as follows:

FISCAL YEAR 2012 PRIMARY LEVY			\$94,853,893
Add:			
2.5% of FY12 primary levy		\$2,371,347	
FY 2013 New Building Growth		757,411	
FY 2013 Debt Payments Excluded		1,961,784	
FY 2013 Cape Cod Commission Assessment		528,700	
Total Additions		\$5,619,242	
FISCAL YEAR 2013 TAX LEVY LIMIT			\$100,473,135

E. 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 impact 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 improvement 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.

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

0.53%

Criteria

Direct Debt - General fund debt as a % of the town's FY12 equalized property valuation as calculated by the state.
Formula – Overall general fund debt ÷ Equalized valuation

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

8.4%

Municipal Debt Burden – Current Year
Definition - Town's general fund debt service ÷ Total general fund expenditures

Standard & Poor's rates this as moderate

\$1,474

Net Direct Debt Per Capita
Definition – Governmental fund net debt ÷ Town population

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

\$306,780

Per Capita Market Value
Definition – Equalized valuation ÷ Population

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

F. ADMINISTRATIVE POLICES IN RELATION TO DEBT

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

Debt Refinancing

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

1. All debt shall be financed within the limitations of Proposition 2 1/2 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 current ratio for the Town of Barnstable is 0.77%.

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

The Town's current ratio is 8.4%.

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 current ratio is 4%.

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 \$16 million in the next five years as "pay-as-you-go" financing and anticipates financing about \$30 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

A capital trust fund has been established for the purpose of financing debt service for recommended Capital Improvement Program projects, as contained within the Town's five-year capital improvement plan.

1. The Capital Trust Fund will be funded through a general operation set aside of at least \$1.9 million annually. The annual commitment for FY 2013 was approximately \$7 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,
 - 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.

G. DEBT SUMMARIZED

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.