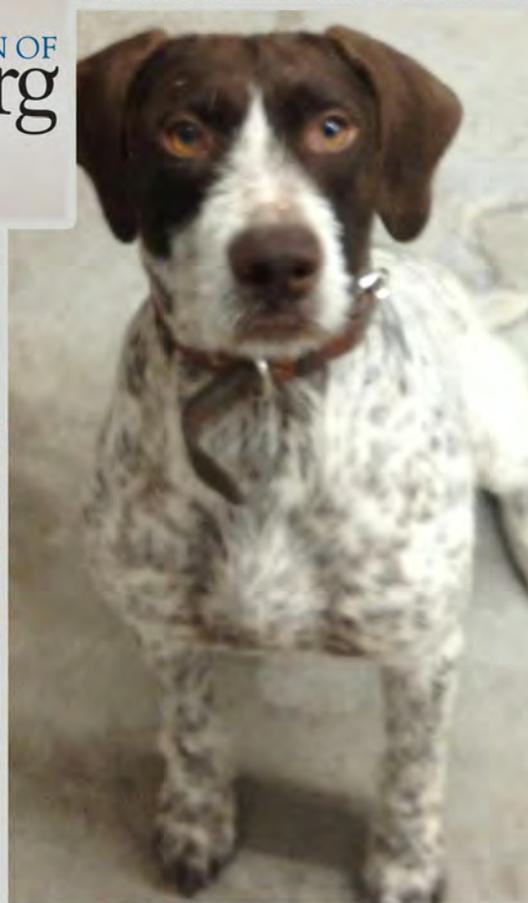


# Town of Blacksburg, Virginia



TOWN OF  
**Blacksburg**  
*a special place*



Adopted Capital Improvement Program  
Fiscal Years Ending 2016/2017 - 2020/2021

# Town of Blacksburg

**FY 2016/2017-2020/2021**

## **Adopted Capital Improvement Program**

### **Town Council**

Ron Rordam, Mayor  
Leslie Hager-Smith, Vice Mayor  
Susan Anderson  
John Bush  
Krisha Chachra  
Cecile Newcomb  
Michael Sutphin

### **Town Administrative Staff**

Town Manager - Marc A. Verniel  
Deputy Town Manager – Christopher S. Lawrence  
Deputy Town Manager – Steven F. Ross  
Assistant to the Town Manager and Housing Director- Matthew T. Hanratty  
Town Attorney – Lawrence S. Spencer, Jr.  
Town Clerk - Donna W. Boone-Caldwell  
Director of Financial Services - Susan H. Kaiser  
Fire Chief - B. Keith Bolte  
Director of Parks and Recreation - Dean B. Crane  
Director of Planning and Building – Anne L. McClung  
Director of Engineering and GIS – S. Randy Formica  
Chief of Police – Anthony S. Wilson  
Community Relations Manager - Heather D. Browning  
Human Resources Manager – M. Elaine Gill  
Director of Public Works - S. Kelly Mattingly  
Rescue Chief – David English  
Director of Technology - Steven B. Jones  
Transit Director – Thomas D. Fox

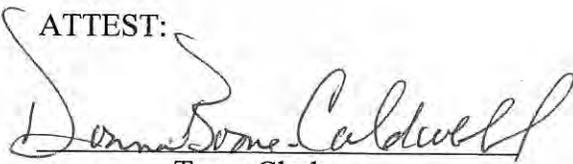
RESOLUTION 1-I-16

A RESOLUTION ADOPTING THE CAPITAL IMPROVEMENT  
PROGRAM FOR FY2016/2017 THROUGH FY2020/2021

BE IT RESOLVED by the Council of the Town of Blacksburg that this Council adopts the Capital Improvement Program for Fiscal Years 2016/2017 through 2020/2021, a copy of which is on file in the Office of the Town Clerk.

  
\_\_\_\_\_  
(Mayor)

ATTEST:

  
\_\_\_\_\_  
Town Clerk

Date of Adoption: January 26, 2016

November 24, 2015

The Honorable Mayor and Members of Town Council  
Members of the Planning Commission  
Town of Blacksburg  
300 South Main Street  
Blacksburg, VA 24060

Dear Mayor, Members of Town Council and Members of the Planning Commission:

It is our pleasure to present to you the *Recommended FY 2017-2021 Capital Improvement Program (CIP)* for your review and consideration. We are pleased to present to you a plan that focuses on the Town's five-year capital needs and balances the maintenance of existing infrastructure and equipment while keeping pace with technology and new facility requests.

The CIP is a multi-year financial and project planning document that provides a macro view of the Town's financial position for the next five years while also establishing a plan for future capital needs. This year an emphasis was again placed on ensuring capital maintenance needs were adequately funded to support the Town's investment in existing infrastructure. Meeting regulatory requirements and completing existing community initiatives were additional factors emphasized in prioritizing funding for projects. In addition to continuing the practice of ensuring projects are fully funded, providing appropriate contingency funding for large projects was also emphasized in developing the CIP.

The Town has a long-standing financial commitment to funding the Equipment Depreciation Fund and Building Systems Fund. In addition, dedicated funding is included in the CIP for roof replacements, rental property maintenance, sidewalk replacement, and major facility repairs.

Examples of funding for some of the capital maintenance projects funded in the CIP are in the chart below:

<b>Project</b>	<b>Amount</b>
Road & Sidewalk Maintenance	\$ 3,290,000
Facility Repair & Maintenance	844,000
Water & Sewer Maintenance	1,725,000
Storm Water Management	1,400,000
Equipment Depreciation	8,100,430
Building Systems Depreciations	660,010
	\$16,019,440

The Town's financial policies, "Principles of Sound Financial Management," provide the broad framework for the overall fiscal planning and management of Town resources. These policies guide the development of a fiscally responsible CIP and Budget. Town Council approved changes in November 2010 to the Financial Policies based on best practices. A copy of the "Principles of Sound Financial Management" can be found in the *Financial Analysis and Tables* section of this document.

### **Capital Improvement Program Overview**

The FY 2017-2021 Capital Improvement Program includes 99 projects over the next five years.

- Approximately \$5.5 million of projects reflect the growing, progressive community that makes Blacksburg "a special place". These projects include the new Hand-In-Hand playground, the Park at South Pointe, streetscapes, trail extensions, technology enhancements, and storm water improvements.
- Over \$5.8 million in maintenance and repair projects for buildings, roads, sidewalks, and the water and sewer system are funded in the CIP supporting the Town's commitment to maintaining the investment already made in infrastructure and equipment.
- Funding for the transit system includes approximately \$14.5 million dollars for replacement buses and equipment.
- An additional \$8.7 million is included to fund building systems and equipment depreciation funds.
- Of the \$58.6 million in CIP projects 50% of the funding is committed to funding depreciation, maintenance, and transit replacement projects.

While the CIP includes projects that enhance the quality of life in Blacksburg and maintain existing infrastructure, there are significant projects not included that have been identified as potential future projects. These projects require further discussion because of financial or political impacts requiring resolution before inclusion in the CIP. These projects include a new police station, a new recreation facility, a downtown parking garage, and renovation of the golf course. The magnitude of these projects would impact future revenue generation, debt capacity, and operating expenses.

Moderate revenue growth is expected over the next five years based on historical data, trends, and no projected rate increases. Some of the anticipated growth is based on the completion of development projects currently under construction. The commercial projects generating meals tax or hotel tax will have a greater impact on future revenue than residential projects which primarily generate revenue from property taxes. Expenditures are projected to increase 10% over the next five years. A significant portion of the increase in expenditures is related to health care and retirement costs because personnel costs account for over 70% of operating expenditures. An increase of \$320,000 in debt service due to the new rescue station and \$100,000 in annual operating costs also contribute to expenditure increases. This increase reduces the funds available for future capital projects.

The FY 2017-2021 CIP includes a number of projects that are matched with funds from the VDOT Revenue Sharing Program. The VDOT Program provides a 50% match for projects using local funds. Several projects are anticipated to be funded including Research Center Drive improvements, sidewalk replacement, and roadway repaving. If funds are not received from the VDOT Revenue Sharing Program some projects may need to be deferred or another

source of funding will need to be identified. Projects matched with funds from the VDOT Revenue Sharing Program are identified separately in the CIP.

In August 2010, Town Council received recommendations from the Storm Water Management Task Force. The Town's responsibilities for storm water management as identified by the Task Force are regulatory compliance, operation and maintenance of storm drainage infrastructure and responsiveness to community concerns. The Town is currently monitoring and enforcing erosion and sediment control, enforcing the storm water ordinance, and providing proactive operation and maintenance of storm water infrastructure on an as needed basis while meeting National Pollution Discharge Elimination Systems (NPDES) requirements in the Town's Municipal Separate Storm Sewer System (MS-4) permit. As of January 1, 2015, the Council established a Storm Water Utility Fund. The Task Force recommended a Storm Water Fee to provide funding for storm water management. The CIP includes approximately \$1,475,000 for storm water management projects

### **Revenue and Expenditure Assumptions**

As a multi-year financial and project planning document, revenues and expenditures in the CIP are evaluated on a macro level to ensure adequate funding is available to maintain current service levels and fund the recommended capital projects. Today's rapidly changing economic environment creates great challenges for projecting future revenues and expenditures. The assumptions used to develop this CIP are not as conservative as in prior years but are still based on historical data and trends. As always revenues and expenditures will be closely monitored as the preparation of the Annual Budget nears to determine if adjustments need to be made in the operating budget to reflect economic changes.

The Town's revenue base is projected to grow slightly at 2.0% to 5.0% annually for the next five years. This takes into consideration the revenue growth experienced in prior years and the current and projected economic environment. While projecting revenues for the five-year CIP period, a thorough analysis of revenues budgeted in prior years against those actually received indicates that the strength of the Town's revenues are in the category of Other Local Taxes. The Other Local Taxes category includes revenue sources such as meals taxes, sales taxes, and hotel taxes among others. This category is estimated to increase 4.8% from the actual revenue received in FY 2014-2015 due to the current economic environment in the nation, the state and the local area. Revenue estimates include the impact of state funding for higher education on Virginia Tech. The financial impact on local businesses and industries reflects the economic condition and are also reflected in the revenue projections. A 8.7% increase in property values from the 2015 reassessment is included in the projections.

While the Town is fortunate to rely on a very diverse revenue base, there is a need to constantly be aware of potential changes in taxing authority and changes in funding allocations generated by the General Assembly. Legislative proposals, such as a local share of state income taxes, distribution of telecommunication taxes, and continuing discussions on changes in the Business, Professional and Other Licenses (BPOL) tax, as well as the impact of the state budget, head the list of items that we will continue to monitor during the upcoming legislative session.

Operating expenditures are projected to increase 2.0% in FY 2016-2017 and a modest 1-2% each year thereafter. This increase is partially caused by rising costs in employer provided benefits such as health insurance and retirement. When debt service and recurring capital are included, operating expenditures are anticipated to increase approximately 2.1%.

It is important to note the challenges the Town faces in funding the CIP while continuing to provide municipal services. Operating expenses have been held steady or reduced for the last several years making it difficult to make additional reductions without impacting service levels. The ability to fund capital projects within existing financial resources will be the focus of Town management over the next few years.

### **Financing the Capital Improvement Program**

The *Recommended FY 2017-2021 Capital Improvement Program* relies upon General Fund revenue, water and sewer funds, general obligation bonds and Federal and State support for capital projects. Equipment replacement and infrastructure maintenance and replacement are funded with General Funds and/or Water and Sewer Funds while bond funds are used as a secondary funding source for projects that are more long-term in nature.

### **Water and Sewer Fund**

This CIP assumes continued implementation of the recommendations of the Ernst and Young Utility Rate Study conducted in FY 1993. We are pleased to report that we continue to be on track in meeting the goals identified in the Utility Rate Study. These goals include the following:

- 1) To maintain the integrity of the existing water and sewer infrastructure;
- 2) To decrease the dependency on one-time availability fee revenues for the day-to-day operations of each fund with an ultimate goal of dedicating availability fees to support capital construction needs;
- 3) To maintain a reserve cash balance in the water and sewer enterprise fund at a target level of six months of expenditures for operations and maintenance of the systems and a renewal and replacement reserve of 3% of fixed assets; and,
- 4) To manage debt to maintain a ratio of net revenues (revenues less operations not including depreciation) of at least 1.15 times debt service requirements.

It should be noted that any increase in the wholesale water and sewer rates by either the Water Authority or Sanitation Authority are not reflected in these funding recommendations. If such increase in wholesale rates should occur, in all likelihood a commensurate increase would be reflected in the Town's water and sewer rates.

Finally, we will continue to carefully monitor the fiscal condition of the Water and Sewer Fund particularly as it relates to the recommendations of the Utility Rate Study.

### **Blacksburg Transit**

Recommended capital projects to support the Transit system include: vehicle replacement, bus replacement/expansion; purchase of replacement and expansion items for the radio program, shelter and amenities program, and technology program; purchase of on-going maintenance items including spare parts and engine. Transit is financed from multiple funding sources including Federal and State grants, the Town of Christiansburg, Virginia Tech, and fare box revenue. No Town of Blacksburg generated tax revenue is used to support Transit operations. Projects that are not funded are generally deferred until the following year when grant funds will be requested again.

## **Summary**

In conclusion, we are pleased to present to you for your consideration the *Recommended FY 2017-2021 Capital Improvement Program* that is both fiscally responsible and responsive to the community. We will continue to examine and monitor our financial assumptions and review changing conditions to ensure this capital improvement program reflects the Town's Mission, Values, and Action Strategies from our Comprehensive Plan.

During the next several weeks, we look forward to reviewing and discussing these recommendations with you. Below is the schedule for Town Council's review and consideration of the *Recommended FY 2017-2021 Capital Improvement Program*:

### 2015

- December 1 Town Council Work Session
- December 8 Town Council Schedules Public Hearing on CIP for January 12, 2016
- December 15 Planning Commission reviews the CIP

### 2016

- January 12 Town Council Public Hearing on *Recommended CIP*
- January 26 Town Council consideration of resolution approving *Recommended FY 2017-2021 Capital Improvement Program*

Finally, special thanks to the Leadership Team, consisting of Steve Ross, Deputy Town Manager; Matt Hanratty, Assistant to the Town Manager; Elaine Gill, Human Resources Manager; Dean Crane, Director of Parks and Recreation; Anne McClung, Director of Planning and Building; Randy Formica, Interim Director of Engineering and GIS; Anthony Wilson, Chief of Police; Heather Browning, Community Relations Manger; Kelly Mattingly, Director of Public Works; Steve Jones, Director of Technology; Steve Ross, Acting Transit Director; Lawrence Spencer, Town Attorney; and Donna Boone-Caldwell, Town Clerk. Also, the assistance of Matt Hornby, Assistant Finance Director, Ann Vaught, MIS Manager, Terri Self, MIS Application Technician, and Rebekah Corso, Executive Assistant, is appreciated. Special recognition and heartfelt appreciation needs to go to Susan Kaiser, Finance Director, for all the time and effort she put into preparing the *FY 2017-2021 Capital Improvement Program* while at the same time coordinating the Town's annual audit.

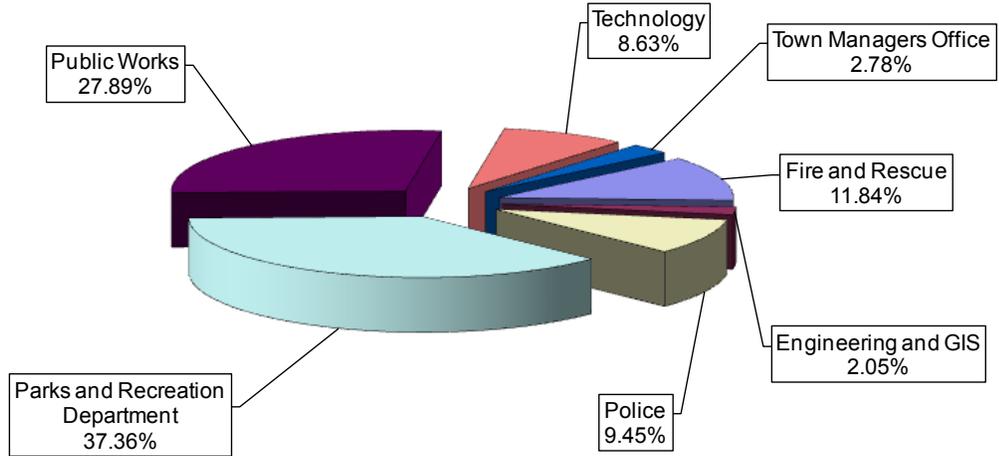
Thank you for your careful review and consideration of this document. We are prepared to work with you as you review these recommendations and create a five-year Capital Improvement Program for the community. Thank you for your continued support as we pursue capital improvements that will enhance the quality of life for citizens of Blacksburg.

Sincerely,

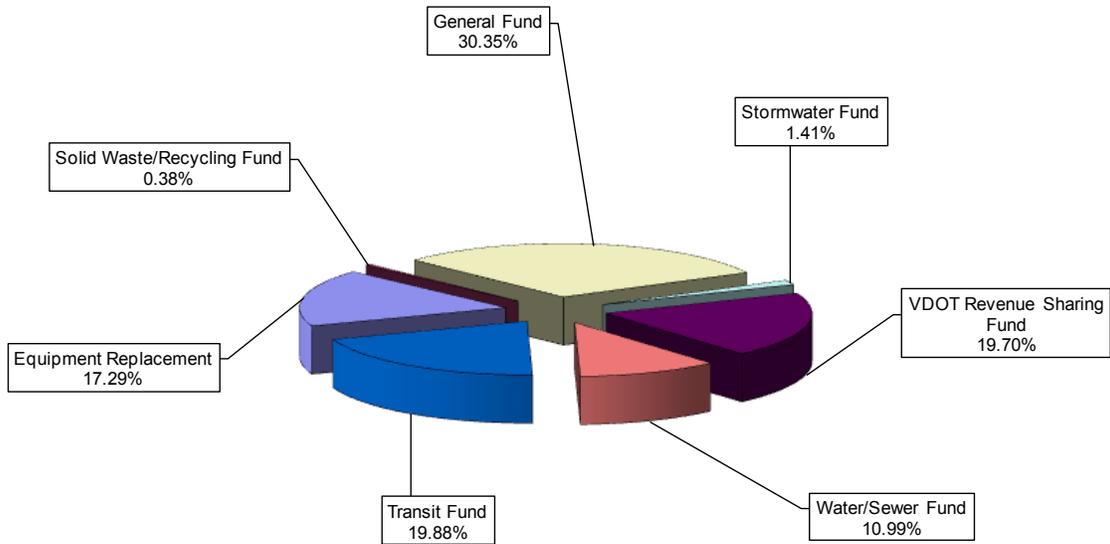


Marc A. Verniel  
Town Manager

### FY 2017 General Fund Projects



### FY 2017 Capital Improvement Program



# TABLE OF CONTENTS

<b>CAPITAL IMPROVEMENT PROGRAMMING</b> .....	1
Guidelines and Forms .....	8
<b>FINANCIAL ANALYSIS AND TABLES</b> .....	13
Principles of Sound Financial Management .....	14
Financial Indicators	
Indicator 1: Revenues Per Capita .....	17
Indicator 2: Sales Tax Revenues Per Capita .....	18
Indicator 3: Meals Tax Revenues Per Capita .....	19
Indicator 4: Intergovernmental Revenues .....	20
Indicator 5: Property Tax Revenues .....	21
Indicator 6: Operating Expenditures Per Capita .....	22
Indicator 7: Employees Per Capita .....	23
Indicator 8: Fund Balances .....	24
Indicator 9: Long-term Debt .....	25
Indicator 10: Capital Outlay .....	26
Indicator 11: Water and Sewer Rates .....	27
Indicator 12: Retained Earnings - Water and Sewer Fund .....	28
Indicator 13: Capital Outlay - Water and Sewer Fund .....	29
Indicator 14: Debt Service - Water and Sewer Fund .....	30
Table 1: History of Property Tax Revenue for the Last Six Fiscal Years .....	31
Table 2: History of General Fund Revenue Other Than Property Tax for the Last Six Fiscal Years .....	32
Table 3: History of General Fund Operating Expenditures/Encumbrances for the Last Six Fiscal Years .....	33
Table 4: Six-Year Projection of Property Tax Revenue .....	34
Table 5: Six-Year Projection of Total General Fund Revenue .....	35
Table 6: Six-Year Projection of General Fund Operating Expenditures .....	36
Table 7: Six-Year Projection of General Fund Obligated Debt Service .....	37
Table 8: General Fund Six-Year Projection of New Capital Financing Potential .....	38
Table 9: History of Water and Sewer Fund Revenue for the Last Six Fiscal Years .....	39
Table 10: History of Water and Sewer Fund Operating Expenditures for the Last Six Fiscal Years .....	40
Table 11: Six-Year Projection of Water and Sewer Operating Revenues .....	41
Table 12: Six-Year Projection of Water and Sewer Operating Expenditures .....	42
Table 13: Six-Year Projection of Water and Sewer Fund Obligated Debt Service Expenditures .....	43
Table 14: Water and Sewer Fund Six-Year Projection of New Capital Financing Potential .....	44
<b>SUMMARY OF PROJECTS</b>	
Adopted Capital Improvement Program Fiscal Years 2016/2017 - 2020/2021 .....	45
<b>PROJECT DESCRIPTIONS</b>	
<b>Financial Services</b>	
Analytical Reporting Application .....	48
I-Series Peripheral Equipment Replacement .....	49
I-Series Hardware Replacement .....	50
Grant Management Application .....	51
Sungard Online Business License Application .....	52
<b>Fire and Rescue</b>	
Cardiac Monitors/Defibrillators .....	53
Alleghany Water Tank Repeater .....	54
<b>Parks and Recreation</b>	
Picnic Shelter Replacement .....	55
Park Restrooms .....	56
Hand-In-Hand Park Playground Equipment Rebuild .....	57
Recreation Center and Campus Development .....	58
Transfer to Playground Depreciation Fund .....	59
Park at South Point Amenities .....	60

**Parks and Recreation (cont.)**

Aquatic Center Sand Filter Replacement ..... 61  
 Mountain Biking Skills Park ..... 62  
 Drain Replacement..... 63

**Planning and Building**

No Project Detail Sheets ..... 64

**Engineering and GIS**

Streetlight Installation ..... 65  
 2017 Aerial and Base Map Updates ..... 66  
 Vehicle Replacement..... 67  
 Progress Street Parking Study ..... 68  
 Non-FHWA Required Bridge Inspections..... 69  
 GIS Hardware Upgrades ..... 70

**Police**

Officer Body Cameras and Server Storage Upgrade ..... 71  
 Downtown Security Camera System ..... 72  
 Traffic Committee ..... 73  
 Police Department Vehicle Storage Building ..... 74

**Public Works**

Major Facilities Repair and Maintenance ..... 75  
 Parking Lot Repaving, Sealing and Striping ..... 76  
 Rental Property Maintenance ..... 77  
 Roof Replacement..... 78  
 Town Building Masonry Repair..... 79  
 Bucket Truck ..... 80  
 Custodial and General Services Equipment Cargo Van ..... 81  
 Pavement Condition Index Update..... 82  
 Message Board ..... 83  
 Public Works Lot Master Plan ..... 84  
 Automatic Vehicle Location Information System (AVL)..... 85  
 Bicycle Infrastructure Improvements ..... 86  
 Public Works Curb, Gutter and Sidewalk Construction Projects..... 87  
 Energy Efficiency Upgrades ..... 88  
 Transfers to Building Systems Depreciation Fund ..... 89  
 Transfers to Equipment Depreciation Fund..... 94

**Technology**

Technology Replacement..... 103  
 Server Replacement..... 104  
 10 Gigabit Network Switch Equipment ..... 105  
 Network Firewall Replacement..... 106  
 Fiber Optic Network..... 107  
 Microsoft Office 2016 Upgrade..... 108  
 Data/Video Storage System ..... 109  
 Licensing Update - Servers ..... 110  
 SAN Upgrade/Replacement ..... 111

**Town Manager**

Five Chimneys Landscaping Master Plan ..... 112  
 Emergency Preparedness Equipment..... 113  
 Progress Street Corridor Improvement Project (Visioning and Planning Phase) ..... 114

**Town Manager (cont.)**

Downtown Kiosk Panel Replacement..... 115  
 Council Chambers Equipment Upgrade..... 116

**CDBG Fund**

No Project Detail Sheets ..... 117

**VDOT Revenue Sharing Fund**

Road Hazard Mitigation ..... 118  
 Sidewalk Trip Hazard Removal ..... 119  
 Curb, Gutter and Sidewalk Rebuild ..... 120  
 Major Roadway Repaving..... 121  
 HAWK Pedestrian System ..... 122  
 Draper Road Streetscape Improvement Plan ..... 123  
 Sidewalk Infill Projects..... 124  
 Bicentennial Greenway Relocation – Connor House Property ..... 125  
 Heritage Park – Huckleberry Trail Extension Paving ..... 126  
 Drainage Improvements along Mt. Tabor Road ..... 127  
 Research Center Drive Improvements – Phase II..... 128  
 Golf Course Trail – Palmer Drive to Country Club Drive ..... 129  
 Huckleberry Trail Extension – to the Park at South Point ..... 130

**Storm Water Fund**

Storm Water Improvements ..... 131  
 Storm Water Quality Improvements ..... 132

**Water and Sewer Fund**

Meter Maintenance and Replacement ..... 133  
 Radio Read Vehicle Transceiver Unit (VXU) Replacement/Upgrade..... 134  
 Data Logging Equipment for Wastewater System ..... 135  
 Alleghany Water Tank Rehabilitation ..... 136  
 Draper Road Sewer Capacity Improvements..... 137  
 Fire Hydrant Replacement..... 138  
 Sanitary Sewer Lining and Pipe Bursting for I and I Abatement ..... 139  
 Water Main Replacements ..... 140  
 Wastewater Solids Dewatering Station ..... 142  
 Utility Trench Compactor Roller Machine ..... 143  
 Water Main Tapping Machine ..... 144

**Transit Fund**

Blacksburg Downtown Trolley ..... 145  
 BT Access Bus Replacement and Expansion Program ..... 146  
 Christiansburg Bus Replacement and Expansion Program ..... 147  
 Christiansburg Shelter and Amenities Replacement and Expansion Program ..... 148  
 Heavy Duty Bus Replacement and Expansion Program ..... 149  
 Radio Replacement and Expansion Program ..... 150  
 Regional Bus Replacement and Expansion Program ..... 151  
 Shelter and Amenities Replacement and Expansion Program ..... 152  
 Support Vehicle Replacement and Expansion Program ..... 153  
 Technology – BT4U Project..... 154  
 Technology – Fleet Communication Project..... 155  
 Technology Replacement and Expansion Program ..... 156  
 Transit Facility Maintenance Cost Program ..... 157  
 ITS Systems Replacement..... 158

**Transit Fund (cont.)**

Simulator Upgrade..... 159

**Equipment Replacement Fund**

Major Equipment Purchases ..... 160

Major Building System Replacement..... 171

**Solid Waste/Recycling Fund**

No Project Detail Sheets ..... 175

# CAPITAL IMPROVEMENT PROGRAMMING

## Introduction

Capital Improvement Programming is a method of planning for the effective and efficient provision of public facilities, infrastructure improvements, major maintenance requirements, and acquisition of property and equipment. The first year of the *Recommended Capital Improvement Program* represents the Town Manager's recommendations to the Town Council as the Capital Improvement Program (CIP) budget.

A five-year CIP allows the Town Council and the citizenry an opportunity to view both the short-term capital construction and the acquisition needs of the Town of Blacksburg. Viewing the short-term needs enables the Town to better plan its financing strategy for capital improvements and annual operating requirements.

## Organization of the CIP

The Town of Blacksburg's CIP is composed of three major sections. The introduction on Capital Improvement Programming provides an overview of why and how the Town's CIP is developed together with the benefits of Capital Improvement Programming.

The Financial Analysis section includes the Principles of Sound Financial Management, charts outlining five-year financial trend indicators, historical revenue and expenditure data, and projected revenue, expenditure and debt service for the CIP period.

Finally, Project Details are included by departmental areas for those projects recommended for funding in the CIP period. The General Fund departmental areas include Financial Services, Fire and Rescue, Planning and Building, Engineering and GIS, Parks and Recreation, Police, Public Works, Technology and Town Manager's Office. The other self-supporting funds include the Equipment Replacement, Transit, and Water and Sewer.

## Legal Basis for Capital Improvement Programming

The Town of Blacksburg is required to prepare a five-year CIP pursuant to Article VI, Section 6.05 of the *Town of Blacksburg Charter*.

### §6.05 Capital Program

- A. Submission to Council. The Manager shall prepare and submit to the Council a five-year capital program at least three months prior to the final date for submission of the budget.
- B. Contents. The capital program shall include:
  - A clear general summary of its contents;
  - A list of all capital improvements which are proposed to be undertaken during the five fiscal years next ensuing, with appropriate supporting information as to the necessity for such improvements;
  - Cost estimates, method of financing and recommended time schedules for each such improvement; and
  - The estimated annual cost of operating and maintaining the facilities to be constructed or acquired.

The above information may be revised and extended each year with regard to capital improvements still pending or in process of construction or acquisition.

## **Basis for Budgeting**

The first year of the CIP represents the Recommended Capital Improvement Budget for that year. Following adoption by the Town Council, the first year of the CIP should be viewed as the capital budget. Any changes to the capital budget during Council consideration of the fiscal year budget also alters the first year of the CIP. Alterations to the CIP during deliberations on the annual budget should be dependent primarily upon changed circumstances from when the CIP was originally adopted. The CIP is a proposed expenditure plan; the budget adopted by the Town Council provides the legal authorization to actually expend Town funds.

The CIP is based on a fiscal year calendar. The fiscal year calendar for the Town of Blacksburg begins July 1 and ends June 30.

## **Benefits of Capital Improvement Programming**

The principal benefit of Capital Improvement Programming is that it requires the Town to address the problem of balancing capital improvements with available financing. This process contributes to a responsible fiscal policy. Other benefits of Capital Improvement Programming include:

- Fostering a sound and stable financial program over a five-year period given a set of revenue and expenditure assumptions based on current economic trends;
- Coordinating various Town improvements so that informed decisions can be made and joint programs initiated among Town departments in an effort to avoid duplication;
- Enabling private businesses and citizens to have some assurances as to when certain public improvements will be undertaken so they can plan more efficiently and effectively;
- Assisting in the implementation of the *Comprehensive Plan* over an extended period of time;
- Focusing on the goals and needs of the community through the provision of new facilities and infrastructure improvements;
- Evaluating annually the infrastructure needs of the Town to provide for the public health and safety of the citizens of the Town; and
- Providing a logical process for assigning priorities to the various projects based on their overall importance to the Town.

These and other advantages make the CIP a practical necessity for the Town.

## **Definition of a Capital Improvement Project**

Capital improvements are major construction or acquisition efforts, which are non-reoccurring in nature. Generally, capital improvement projects are defined as follows:

- Studies pertaining to capital improvements that require the employment of outside professional consultants at a cost in excess of \$15,000;

- Construction of buildings or facilities; including design, engineering, and other preconstruction costs with an estimated cost in excess of \$15,000;
- Purchase of major equipment and vehicles, other than office and data processing equipment, valued in excess of \$15,000 with a life expectancy of five years or more;
- Major equipment or furnishings required for the utilization of new or renovated buildings; or,
- Major acquisition of land or other property.

## Capital Improvement Program Submission Process

In September of each year, the Director of Finance and the Town Manager distribute instructions to Department Heads requesting projects for consideration for the next five-year CIP period (copy follows this section). Each Department Head is responsible for reviewing the most recent CIP to determine the funding necessary for projects that are currently programmed in the CIP and the Action Strategies identified in the *Comprehensive Plan* (copy follows this section). Based on this review and a review of new requirements for capital improvements for the next five-year period, the Department Head completes a Cost Estimate Detail Form and a Project Detail Sheet.

## Cost Estimate Detail Form

Department Heads are also asked to complete a Cost Estimate Detail Form to determine the estimated cost of a project. This form outlines the costs of planning and design, land acquisition, construction, and the purchase of equipment. All costs are inflated to reflect the estimated cost in the year which the project and/or purchase is anticipated to be funded.

Planning and design consists of all costs for the planning and design of a project including both preliminary and final design and engineering.

Land acquisition costs include appraisals, legal fees, survey, recordation, and property costs.

Equipment costs may include the purchase of a new or replacement vehicle or furniture and fixtures to furnish a new or renovated building. The cost of equipment should exceed \$15,000 to be considered as a Capital Improvement Project.

Department Heads are also asked to identify the source of their estimate and possible funding options or alternatives.

## Project Detail Sheet

Finally, Department Heads are asked to complete a Project Detail Sheet to summarize the project which is requested for consideration. If a project is ultimately recommended by the Town Manager to the Planning Commission and Town Council for consideration, this form is used for presenting information on the project to Town Council, the Planning Commission, and the public. Included on the Project Detail Sheet is the planned source of funding for the project together with the fiscal year in which the project is expected to be funded. Also included on the Project Detail Sheet are pertinent data such as the Department administering the project, the project title, project location, project status, the project's relationship to the Town's Mission and Values and the Town Council Strategic Goals, and a description for each project.

## Capital Improvement Program Schedule

September	Deputy Town Manager and Finance Director send instructions to Department Heads
October	CIP submissions due to Deputy Town Manager
October	Town Manager's Office reviews submissions
Late October	Town Manager and the Leadership Team formulate Recommended CIP
Late November	Recommended CIP forwarded to Planning Commission and Town Council
Early December	Town Council and Planning Commission Sessions on Recommended CIP
Mid-January	Town Council Public Hearing on Recommended CIP
Late January	Town Council Adoption of CIP

## Conclusion

The CIP is a document dedicated to a process designed to identify both the capital improvement needs and priorities of the Town over a five-year period in concert with projected funding levels and the Action Strategies included in the *Comprehensive Plan*. Actual programming of projects is dependent upon the fiscal resources available. Funding constraints may preempt the actual inclusion of projects in the current CIP but may be listed as priorities for funding should resources become available.

The Project Detail Sheets on the following pages reflect those projects recommended to be funded in the *Fiscal Years 2016-2020 Capital Improvement Program*.

TO: Department Heads  
Larry Spencer, Town Attorney  
Donna Boone-Caldwell, Town Clerk  
Heather Browning, Community Relations Officer  
Elaine Gill, Human Resource Manager  
Matt Hanratty, Housing and Community Development Manager  
Keith Bolte, Fire Chief  
David English, Rescue Chief

FROM: Steve Ross, Deputy Town Manager  
Susan Kaiser, Director of Finance

SUBJECT: FY 2017-2021 Capital Improvement Program

DATE: September 16, 2015

Once again, it is time for the Capital Improvement Program (CIP) process.

**Status of Current CIP Projects**

A status of current CIP projects will be needed with a brief 1 or 2 sentence description. The status should be completed on the spreadsheet located on the "O" drive at O:\CIP 2016/Current CIP Project Status. A column is provided for the status such as closed, open, on hold or in progress with a line for the brief 1 or 2 sentence description. The status of current CIP projects is due September 25, 2015.

**Calendar**

September 25 <sup>th</sup>	Status of current CIP projects due.
October 2 <sup>nd</sup>	Deadline for submission of CIP project proposals.
October 12 <sup>th</sup> October 23 <sup>rd</sup>	Meeting with individual departments to discuss CIP projects.
October 30 <sup>th</sup>	Town Manager Finalizes <i>Recommended CIP</i> .
November 24 <sup>th</sup>	Town Manager's Proposed CIP presented to Town Council

**Reminders in the CIP Process**

- Remember this is the Town Manager's Recommended CIP. The Town Manager must consider the Town as a whole and the many competing needs and wants of the Town in making recommendations.
- This is a five year Capital Improvement Program.
- Look at last year's Adopted CIP to see what projects were funded and in what year. Last year's projects are on the "O drive" at O:\CIP FY2017\FY16 Adopted Projects. All projects from years FY2017 forward must be resubmitted. **No projects are automatically carried over.**

- **Previous CIP Projects** – *If submitting a project included in last year’s CIP please use the project detail form located on the “O drive” at O:\CIP FY2017\FY16 Adopted Projects. Make appropriate changes to years, dollar amounts, and narratives. Do not use a project detail form you may have saved on another drive or folder. Doing this helps to reduce the amount of editing.*
- **Project Status** – Each project should have a status. They are *New, Continuing, In Progress or Previously Requested.* Look at the prior year project in the CIP for the correct status. *Continuing* Should only be used on projects that are continuing beyond the five years such as replacement funds or ongoing maintenance funds.
- Do not submit all projects in the first year.
- Be realistic of funding and workload constraints.
- Future years should include **inflationary** impacts.
- The instructions and forms are being sent by email and are also located at O:\CIP FY2017.
- A copy of each project recommended should be put on the “O drive” at O:\CIP FY2017\Submitted Projects\<<department name>\. This is the Project Detail Form. Please be descriptive in the narratives. The narrative is what represents the project to the Council, the Planning Commission and the public. Please proof read all narrative before submission. E-mail Ann Vaught at [avaught@blacksburg.gov](mailto:avaught@blacksburg.gov) when all Project Detail Forms have been put on the “O drive”.
- Only **true capital projects** will be considered for funding. All other items will be handled under the Operating Budget.
- Remember to include requests for all capital projects even if they will be funded by grants or if they are continuing projects such as Building Maintenance funds.
- For large projects break the project into components such as land purchase, design/engineering services, and construction into appropriate years. DO NOT front load the entire project in the first year.
- Remember to include the operating impact of capital projects so they can be considered during the operating budget process. **Most projects should have an operating impact.**

### **Guidelines and Forms**

The FY2017-2021 guidelines and forms for use in preparing CIP projects are available on the “O drive” at O:\CIP FY2017\Forms:

- **Project Detail Form:** Must be submitted for every project. Includes a total project estimate, description of the project (narrative) and source of funding. Please use the format on the O Drive, as this form will be published in the document submitted to Town Council.

- **Cost Estimate Detail Form: This information is required.** The form includes an inflation factor, source of estimate and possible funding options or funding alternatives. If this form is not submitted, please submit supporting information to justify the project cost estimate.
- **Estimated New Annual Operating Costs:** This form includes the impact of a new project relative to additional positions, related personnel costs, and operating costs including capital equipment. This form needs to be completed if there are new operating costs associated with the project or the project will reduce operating costs. **Most capital projects will impact operating costs, so this form is required.** It will be given to departments as part of the operating budget.

### **Deadline for Submissions**

The deadline for submissions of proposed projects is **Friday, October 2, 2015**. Please provide **five (5) unstapled and hole-punched copies** to Ann Vaught as well as the copy on the O drive.

### **Future Year Documents**

For the Fiscal Year 2018 documents, we will be re-formatting the Capital Improvement Program as well as the Operating Budget. In the winter, a committee will be formed to assist with this process. Further information on this initiative will be discussed in a future leadership meeting.

### **Conclusion**

The intent this year, as always, is to make the CIP process as painless as possible. Hopefully the above instructions will provide you with the guidance you need to submit the necessary information. If you have any questions regarding the process, please contact Steve Ross, Deputy Town Manager, or Susan Kaiser, Director of Finance.

# Capital Improvement Program Guidelines

## Definition of a Capital Improvement

Capital Improvements are major construction or acquisition efforts that are nonrecurring in nature. Generally, capital improvement projects are defined as follows:

1. Studies pertaining to capital improvements that require the employment of outside professional consultants at a cost in excess of \$15,000.
2. Construction of buildings or facilities, including design, engineering and other pre-construction costs with an estimated cost in excess of \$15,000.
3. Purchase of major equipment and vehicles valued in excess of \$15,000 with a life expectancy of five years or more.
4. Major equipment or furnishings required for the utilization of new or renovated buildings.
5. Major acquisition of land or other property.

## Capital Improvement Program Submission Process

The Capital Improvement Program is designed as a budget document for the first year of the five-year plan and as a planning document for the remaining four years of the plan.

Each Department Head is responsible for reviewing the most recent Capital Improvement Program to determine the funding necessary for projects that are currently programmed in the Five-Year Capital Improvement Program. Based on this review and a review of new requirements for capital improvements for the next five-year period, the Department Head will complete a **Project Detail Sheet**.

## Project Detail Sheet

The **Project Detail Sheet** is used to summarize the project that is requested for consideration. If the CIP Committee ultimately recommends a project to the Town Council for consideration, this form is used for presenting information on the project to Council and the public.

Department: Department requesting funding for the project.

Project Title: Brief title of the proposed project.

**Project Location:** Street address or general location of proposed project. If the location is not known, this should say "To Be Determined".

**Project Status:** Indicate whether the project is a new project or currently in progress. The project is defined as "New" if it is the first year that the project is in the CIP. The project is "In Progress" if it is currently programmed in the CIP.

**Description and Justification:** This information should include a brief description of the project including such things as the size of the facility (square feet) or infrastructure improvement (linear feet), the kind of vehicle to be purchased, the number of facilities to be improved, the names of the facilities to be improved, and the constituency to be served by the project. A brief justification of the project should also be included.

**Planned Financing of Project:** The planned financing of the project should mirror the cost estimate identified on the **Cost Estimate Detail Form** or the cost estimate information provided. The Source of Funds should be identified. The sum of Prior Allocation, 2015/2016-2019/2020, and Future Years must add to the Total Project Estimate.

**Prior Allocation:** Can be found on most recent project printouts included with the instructions.

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:**

**Project Title:**

**Project Location:**

**Project Status:**

**Description and Justification:**

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
<b>Total</b>									

**BLACKSBURG CAPITAL IMPROVEMENT PROGRAM  
COST ESTIMATE DETAIL SHEET  
REQUIRED**

**Department:**

**Project Title:**

**Total Costs Current Dollars**

A. Planning, Engineering and Design	
B. Land Acquisition	
C. Construction (Sum of 1,2,3 below)	
1. Construction Cost	
2. Construction Contingency 5% New Construction x Construction Cost 10% Renovation x Construction Cost	
D. Equipment (Furnishings, Vehicles, etc.)	
E. Consultant Study	
<b>F. Inflation (1 + 2 x .025) (per year)</b>	
<b>Total Project Estimate</b>	

**Source of Estimate:**

**Funding Options/Alternatives:**

**Project Submitted:** \_\_\_\_\_

**Estimated New Annual Operating Expenses (if any):**

---

Additional Positions (F/T)	
Additional Positions (P/T)	
Capital Equipment	
Operating Costs Excluding Capital Equipment	
Total Costs	
Anticipated Revenue	
Net Costs	

**Departments Impacted:**

**Explanation:**

## **Financial Analysis**

As an aid to comprehensive financial planning, this section examines both historical and projected revenues and expenditures of the Town. This section also includes the "Principles of Sound Financial Management." A series of financial trend indicators are included to provide a gauge for evaluating the Town's financial condition.

Projected revenues and expenditures are based on assumptions given current economic trends, historical growth and anticipated State funding levels. Also included are tables reflecting the Town's debt service obligation and those obligations relative to total General Fund expenditures.

# Town of Blacksburg

## Principles of Sound Financial Management

### Introduction

These principles set forth the broad framework for overall fiscal planning and management of the Town's resources. In addition, these principles address both current activities and long-term planning. Every two years, following a Council election, these principles will be reviewed to assure the highest standards of fiscal management.

### Overall Goals

The financial goals of the Town of Blacksburg are designed to ensure the Town's sound financial condition at all times.

1. **Sound Financial Condition** may be defined as:
  - ✓ Cash Solvency - The ability to pay bills.
  - ✓ Budgetary Solvency - The ability to annually balance the budget.
  - ✓ Long Term Solvency - The ability to pay future costs.
  - ✓ Service Level Solvency - The ability to provide needed and desired services.
2. **Flexibility** is a goal that ensures that the Town is in a position to react and respond to changes in the economy and new service challenges without measurable financial stress.
3. **Adherence to Best Accounting and Management Practices** in conformance with generally accepted accounting procedures as applied to governmental units, and the standards of the Governmental Accounting Standards Board and the Government Finance Officers Association (GFOA).

### Financial Principles

1. **A balanced budget** should be prepared annually by the Town Manager and forwarded to the Town Council for consideration.
2. **Ongoing operating costs** should be funded by ongoing revenue sources. This protects the Town from fluctuating service levels and avoids concern when one-time revenues are reduced or removed. In addition:
  - a. **Cash balances** should be used only for one-time expenditures, such as land acquisition, capital improvements and capital equipment or special one-time expenditures.
  - b. **Federal grants** should not financially support essential Town services. Federal grant monies should be tied to programs and services with the understanding that those services delivered with grant funding may be revised and altered based on grant funding availability.
  - c. **New operating costs associated with capital projects** should be funded through the operating budget but identified and outlined in the capital improvement program.
3. The Town Manager should forward to the Town Council a quarterly financial report identifying meaningful trends in both revenues and expenditures for all major funds.

4. Department Heads are responsible for managing departmental budgets within the total appropriated budget.
5. Replacement of Town vehicles, including Fire, Rescue and Police vehicles, should be funded through the Equipment Replacement Fund.
6. Financial Trend Indicators should be prepared and reviewed annually to determine the Town's financial condition. Town Council will review these indicators prior to the development of the Capital Improvement Program and annual operating budget. The Financial Trend Monitoring System (FTMS) offers the following:
  - a. A method for quantifying a significant amount of information in relatively simple terms to gain better understanding of the Town's financial condition;
  - b. Places the events of a single year into a longer perspective and permits the Town to evaluate trends; and,
  - c. A straightforward picture of financial strengths and weaknesses.
7. General Fund *Unassigned Fund Balance* is targeted at no less than 10% of operating expenditures exclusive of capital improvements. However, the Town will strive to increase the level to a target of 15% of operating expenditures exclusive of capital improvements. Unassigned Fund Balances should only be used for one-time uses. *Bond Proceeds should be deposited and budgeted into the Capital Project Funds.*
8. The Town Council may, from time-to-time, appropriate fund balances that will reduce available fund balances below the 10% policy for the purposes of a declared fiscal emergency or other such global purpose as to protect the long-term fiscal security of the Town. In such circumstances, the Council will adopt a plan to restore the available fund balances to the policy level within 36 months from the date of the appropriation. If restoration cannot be accomplished within such time period without severe hardship to the Town, then the Council will establish a different but appropriate time period.
9. Tax-supported debt service should strive to be less than 10% and not exceed 15% of operating expenditures exclusive of capital improvements.
10. The Town intends to maintain its ten year tax-supported debt and lease payout ratio at or above 60% at the end of each adopted five year Capital Improvement Plan. The payout ratio shall be no less than 55% in any one year during that period.
11. Net Debt as a percentage of total assessed value of taxable property should not exceed 2.0%. Net Debt is defined as any and all debt that is tax-supported.
12. A five-year financial forecast should be developed annually to determine net capital financing potential, to react to changes in the economy, and to accommodate regulatory and legislative mandates.
13. Investment practices should be in accordance with the Town's Investment and Portfolio Policy. The Investment and Portfolio Policy should be reviewed by Town Council every two years.
14. The Town shall annually prepare a Comprehensive Annual Financial Report and should seek recognition from the GFOA by applying for and receiving the organization's Certificate of Excellence in Financial Reporting. In addition, the Town should seek recognition by applying for and receiving the GFOA Distinguished Budget Presentation Award.
15. The Town operates four enterprise funds: Water and Sewer, Solid Waste and Recycling, Stormwater and Transit. Enterprise Funds should be self-sufficient. Solid Waste and Recycling

and Stormwater Funds should include a reserve of at least three months expenditures for operations and maintenance. Transit should include a reserve of at least nine months expenditures for operations and maintenance. Enterprise Funds should be charged for indirect administrative costs performed by other Town departments. Revenue should be sufficient to fund operations, capital improvements, equipment replacement and department service.

16. To maintain the integrity of the Water and Sewer Fund the following goals should be achieved:
  - a. Maintain a cash balance in the Water and Sewer Fund at a target of six months expenditures for operations and maintenance of the systems plus 3% of fixed assets for a renewal and replacement reserve.
  - b. Maintain a ratio of Net Revenues (Revenues less Operations not including Depreciation) of at least 1.15x debt service requirements without taking new availability revenues into account.
17. User fees for all operations should be reviewed annually to ensure rates are market competitive and defray operating costs. In the case of Enterprise Funds and Internal Service Funds, fees should be reviewed annually to ensure that revenues generate sufficient funds to cover the total cost of services.
18. A five-year capital improvement program should be prepared each year at least three months prior to the submission of the budget.

Principles of Sound Financial Management

Adopted by Town Council: **April 23, 1996**

Revised by Town Council: **July 14, 1998**

Revised by Town Council: **August 24, 2004**

Revised by Town Council: **November 23, 2010**

Revised by Town Council: **February 23, 2016**

# INDICATOR 1

## Revenues Per Capita

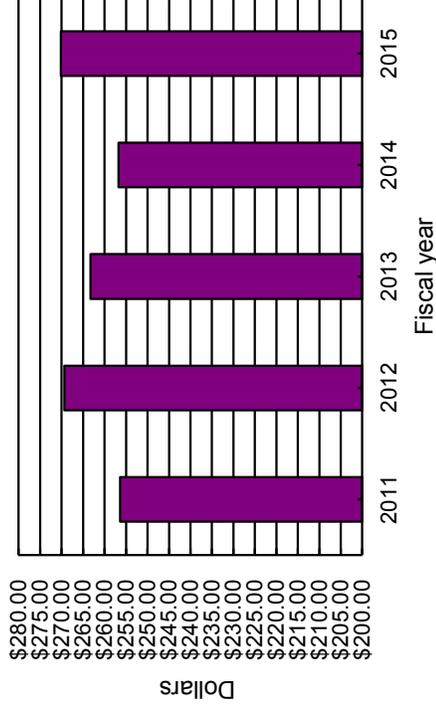
### Warning Trend:

Decreasing net operating revenues per capita (constant dollars)

### Formula:

Net operating revenues & transfers (constant dollars)  
 Population

## Revenues Per Capita



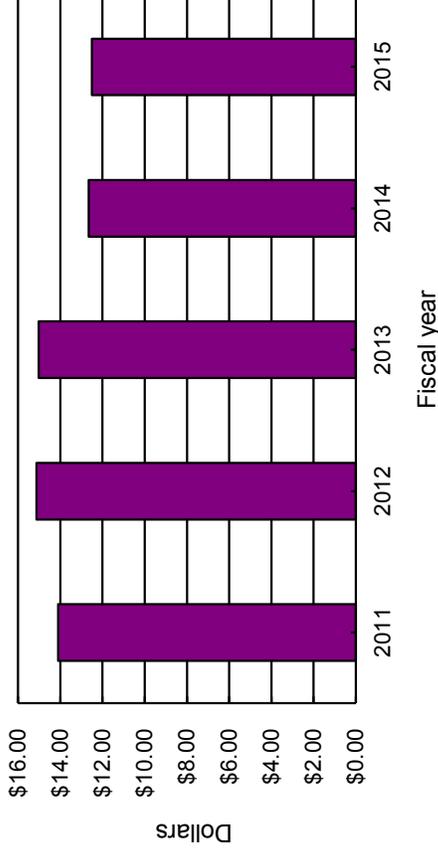
Fiscal year:	2011	2012	2013	2014	2015
Net operating revenues and transfers	\$24,563,028	\$26,242,325	\$26,301,609	\$26,808,431	\$28,176,359
Consumer price index	224.8	228.7	234.4	239.4	237.1
Net operating revenues & transfers (constant dollars)	\$10,926,614	\$11,474,563	\$11,220,823	\$11,198,175	\$11,883,745
Current population	42,620	42,600	42,620	43,609	43,985
<b>Net operating revenues &amp; transfers per capita (constant dollars)</b>	<b>\$256.37</b>	<b>\$269.36</b>	<b>\$263.28</b>	<b>\$256.79</b>	<b>\$270.18</b>

### Analysis:

Examining per capita revenues shows changes in revenues relative to changes in population size and rate of inflation (Consumer Price Index for Urban Wage Earners/Clerical with base years 1982-1984 equal to 100). FY 2011 thru FY 2015 shows the slow recovery in the local economy especially in the economic sensitive areas such as meals taxes and sales taxes and the reduction of state funding. In FY 2012, the per capita amount increase is mainly due to the full year of the 2011 reassessment and the recovery of economic sensitive taxes. FY 2014 reduction is due to the new definition of school age children and the loss of \$235,000 in sales tax revenue and inflationary growth in economic sensitive taxes such as meals taxes. In FY 2015, the per capita amount increase is mainly due to a half a year of the 2015 reassessment and the increase in the real estate tax rate from \$0.22 to \$0.25.

## INDICATOR 2

### Sales Tax Revenues Per Capita



### Sales Tax Revenues Per Capita

#### Warning Trend:

Decreasing net sales tax revenues per capita (constant dollars)

#### Formula:

$$\frac{\text{Net Sales Tax Revenues (constant dollars)}}{\text{Population}}$$

	2011	2012	2013	2014	2015
<b>Fiscal year:</b>					
Net Sales Tax Revenues	\$1,351,783	\$1,474,606	\$1,501,360	\$1,320,895	\$1,304,682
Consumer price index	224.8	228.7	234.4	239.4	237.1
Net Sales Tax Revenues (constant dollars)	\$601,327	\$644,777	\$640,512	\$551,752	\$550,267
Current population	42,620	42,600	42,620	43,609	43,985
<b>Net Sales Tax Revenues per Capita (constant dollars)</b>	<b>\$14.11</b>	<b>\$15.14</b>	<b>\$15.03</b>	<b>\$12.65</b>	<b>\$12.51</b>

#### Analysis:

Sales Tax is a major revenue category for the Town and is an indicator of the strength of the regional economy. FY 2011 and FY 2012 reflects the slow recovery in the overall economy. FY 2013 decrease is due to a decrease in the percentage of school age children from FY 2012. FY 2014 and FY 2015 decrease is due to the new state definition of school age population.

#### Basis for Distribution:

One percent of the State sales tax collected in Montgomery County is returned by the Commonwealth to Montgomery County. From this 1%, the County receives an automatic 50% and the remaining 50% is allocated, using school age population in the incorporated towns and in the surrounding County as the basis for distribution. There are three localities sharing in the one-half of one percent: Blacksburg, Christiansburg and Montgomery County. Blacksburg's share of the school age population was 27.69% in FY2012, 27.01% in FY 2013, 23.62% in FY 2014 and 22.36% in FY 2015. The decrease in FY 2014 is due to the new state definition of school age population. In FY 2016, the school age population is 22.73%.

## INDICATOR 3

### Meals Tax Revenues Per Capita

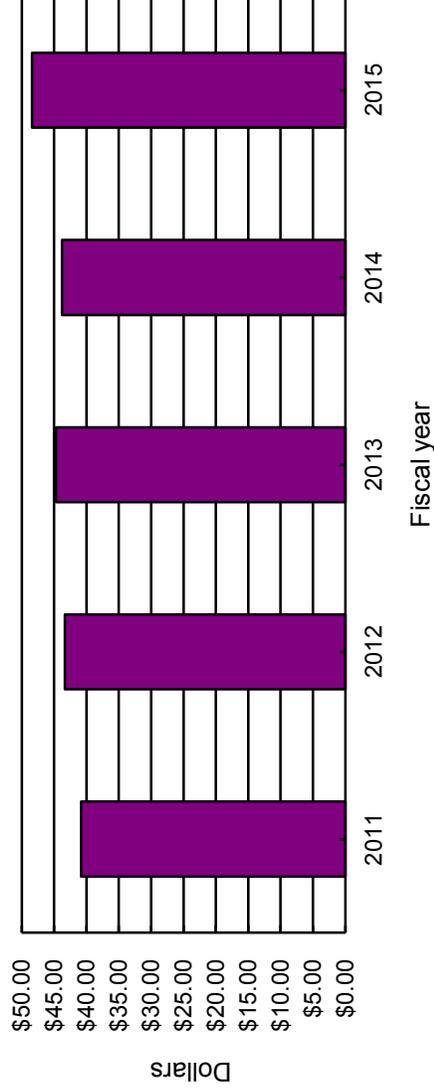
#### Meals Tax Revenues Per Capita

#### Warning Trend:

Decreasing meals tax revenues per capita (constant dollars)

#### Formula:

$$\frac{\text{Meals Tax Revenues (constant dollars)}}{\text{Population}}$$



Fiscal year:	2011	2012	2013	2014	2015
Meals Tax Revenues	\$3,910,019	\$4,221,389	\$4,464,685	\$4,572,653	\$5,048,802
Consumer price index	224.8	228.7	234.4	239.4	237.1
Meals Tax Revenues (constant dollars)	\$1,739,332	\$1,845,819	\$1,904,729	\$1,910,047	\$2,129,398
Current population	42,620	42,600	42,620	43,609	43,985
<b>Meals Tax Revenues (constant dollars)</b>	<b>\$40.81</b>	<b>\$43.33</b>	<b>\$44.69</b>	<b>\$43.80</b>	<b>\$48.41</b>

#### Analysis:

The increase in FY 2012 thru FY 2015 is mainly due to new restaurants that have opened during the last few years and the stabilization of the restaurant industry.

## INDICATOR 4

### Intergovernmental Revenues

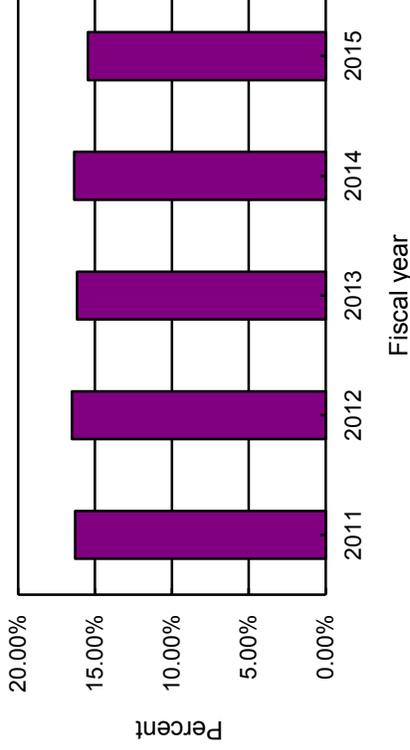
#### Intergovernmental Revenues

##### Warning Trend:

Decreasing amount of intergovernmental revenues as a percentage of gross operating revenues

##### Formula:

$$\frac{\text{Intergovernmental operating revenues}}{\text{Gross operating revenues}}$$



	2011	2012	2013	2014	2015
<b>Fiscal year:</b>					
Net Intergovernmental Revenues (less CDBG)	\$3,999,646	\$4,330,823	\$4,251,467	\$4,383,871	\$4,355,564
Gross Operating Revenues	\$24,563,028	\$26,242,325	\$26,301,609	\$26,808,431	\$28,176,359
<b>Intergovernmental Revenues as a Percent of Gross Operating Revenues</b>	<b>16.28%</b>	<b>16.50%</b>	<b>16.16%</b>	<b>16.35%</b>	<b>15.46%</b>

##### Analysis:

Intergovernmental revenues over the five-year period have been decreasing which corresponds with the State budget problems. The slight decrease in FY 2013 is due to FEMA funds and other small grants not repeated from FY 2012. The increase in FY 2014 is due to the receipt of FY 2013 fire fund revenues that were distributed late by the state. This area of revenue bears close scrutiny given the current economy and the state's budget problems.

## INDICATOR 5

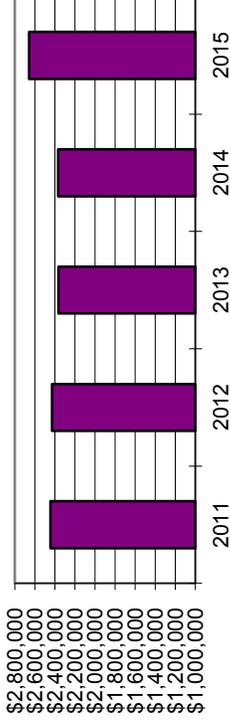
### Property Tax Revenues

### Property Tax Revenues

#### Warning Trend:

Decline in property tax revenues (constant dollars)

#### Formula:

$$\frac{\text{Property Tax Revenues}}{\text{(constant dollars)}}$$


Fiscal year:	2011	2012	2013	2014	2015
Property Tax Revenues	\$5,501,238	\$5,554,280	\$5,550,007	\$5,669,336	\$6,301,948
Consumer Price Index	224.8	228.7	234.4	239.4	237.1
CPI Converted to Decimal	2.248	2.287	2.344	2.394	2.371
<b>Net Property Tax Revenues (constant dollars)</b>	<b>\$2,447,170</b>	<b>\$2,428,631</b>	<b>\$2,367,750</b>	<b>\$2,368,144</b>	<b>\$2,657,928</b>

#### Analysis:

Trends indicate that real estate tax revenues were generally stronger than inflation. The reassessment is done every four years. The decrease in FY 2013 is due to lower Public Service assessments. The increase in FY 2014 is due to an increase in the Public Service assessments as determined by the State. The increase in 2015 in gross property tax revenue is due to the impact of the 2015 reassessment on the first half 2015 payment and the increase in the tax rate from \$0.22 to \$0.25.

# INDICATOR 6

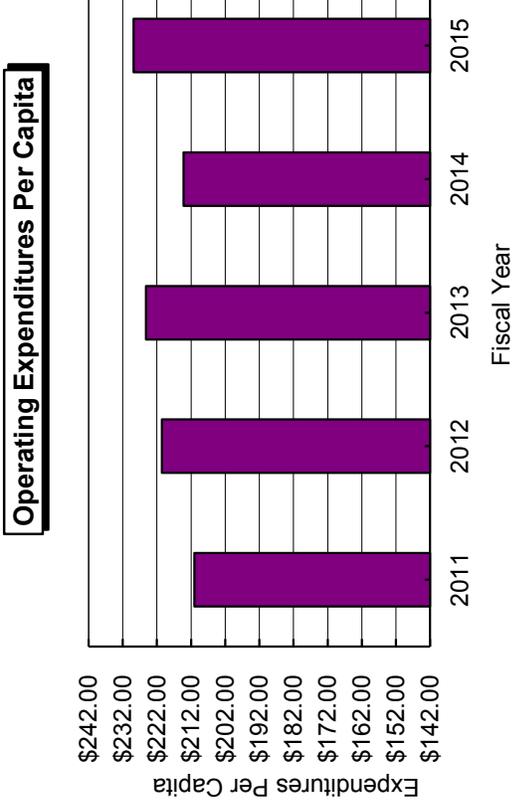
## Operating Expenditures Per Capita

### Warning Trend:

Increasing net operating expenditures per capita (constant dollars)

### Formula:

$$\frac{\text{Net operating expenditures (constant dollars)}}{\text{Population}}$$



Fiscal year:	2011	2012	2013	2014	2015
Net operating expenditures	\$20,218,469	\$21,404,690	\$22,500,952	\$22,362,315	\$23,865,160
Consumer price index	224.8	227.8	234.4	239.4	237.1
Net operating expenditures (constant dollars)	\$8,993,981	\$9,396,264	\$9,599,382	\$9,340,984	\$10,065,441
Estimated population	42,620	42,600	42,620	43,609	43,985
<b>Net operating expenditures per capita (constant dollars)</b>	<b>\$211.03</b>	<b>\$220.57</b>	<b>\$225.23</b>	<b>\$214.20</b>	<b>\$228.84</b>

### Analysis:

Per Capita Expenditures per 2014 Comparative Cost Report:  
(No Education or Welfare)

- Montgomery County
- Roanoke County
- Roanoke City
- Radford City

- Blacksburg
- Christiansburg
- Wytheville
- Leesburg
- Herndon
- Vinton
- Pulaski

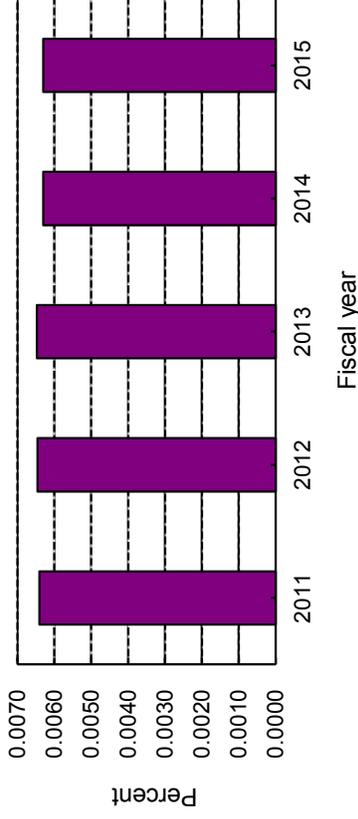
- \$418
- \$932
- \$1,285
- \$1,011

- \$418
- \$1,161
- \$1,451
- \$1,047
- \$1,373
- \$861
- \$848

# INDICATOR 7

## Employees Per Capita

### Number of Full-Time Municipal Employees Per Capita



### Warning Trend:

Increasing number of municipal employees per capita.

### Formula:

$$\frac{\text{Number of municipal employees}}{\text{Population}}$$

	2011	2012	2013	2014	2015
<b>Fiscal year:</b>					
Number of full-time municipal employees	273	275	276	275	277
Current population	42,620	42,600	42,620	43,609	43,985
<b>Number of full-time municipal employees per capita</b>	<b>0.0064</b>	<b>0.0065</b>	<b>0.0065</b>	<b>0.0063</b>	<b>0.0063</b>

### Analysis:

This indicator compares the number of full-time employees to the population. The number of employees has increased slightly each year over the five-year period. This reflects the new positions added to more efficiently cover service areas. Municipal employees include all full-time personnel contained in the General Fund, Equipment Operations, Solid Waste & Recycling, Blacksburg Transit (not including wage bus operators) and Water and Sewer Funds. The 2011 thru 2015 number of employees does not include the five to nine vacant positions that were frozen due to the economic environment.

## INDICATOR 8

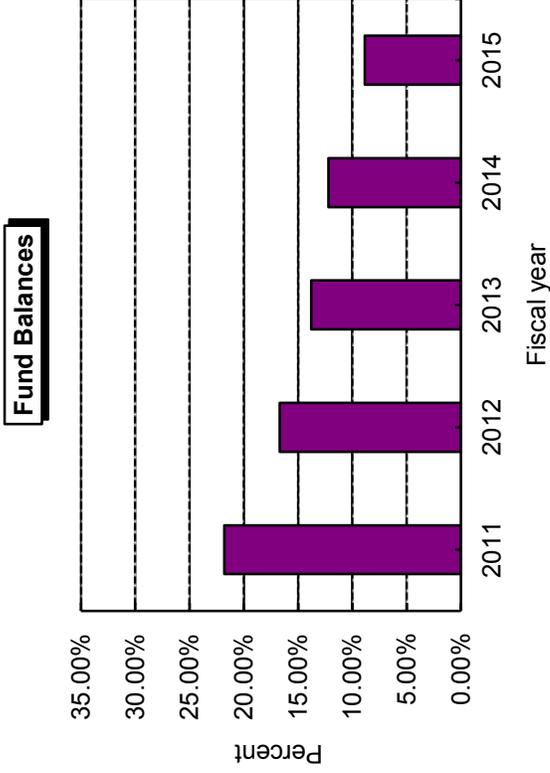
### Fund Balances

#### Warning Trend:

Declining unreserved fund balances as a percentage of net operating expenditures.

#### Formula:

$$\frac{\text{Unreserved fund balances}}{\text{Net operating expenditures}}$$



Fiscal year:	2011	2012	2013	2014	2015
Unreserved General Fund Balance	\$4,828,469	\$3,701,112	\$3,397,008	\$2,980,761	\$2,314,742
Net Operating Expenditures with debt svc	\$22,154,730	\$22,176,891	\$24,650,777	\$24,437,175	\$26,094,470
<b>Unreserved General Fund Balance as a Percentage of Net Operating Expenditures</b>	<b>21.79%</b>	<b>16.69%</b>	<b>13.78%</b>	<b>12.20%</b>	<b>8.87%</b>

#### Analysis:

This indicator reflects the Town's capacity to deal with the unexpected or emergency situations. Town Council's policy is to target a minimum undesignated fund balance equal between 10% and 15% of net operating expenditures exclusive of capital improvements. The declines in fund balance, while still maintaining the Town Council policy, are due to the use of fund balance for one-time capital purchases and the spending of bond proceeds.

## INDICATOR 9

### Long-term Debt

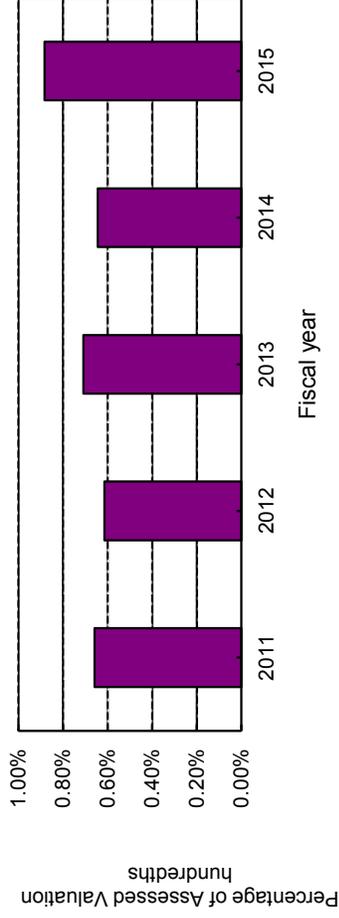
#### Warning Trend:

Increasing net direct bonded long-term debt as a percentage of assessed valuation.

#### Formula:

$$\frac{\text{Net direct bonded long-term debt}}{\text{Assessed Valuation}}$$

### Long-term Debt as a Percentage of Assessed Valuation



	2011	2012	2013	2014	2015
<b>Fiscal year:</b>					
Assessed Valuation	\$2,521,083,927	\$2,531,882,327	\$2,532,699,273	\$2,558,500,545	\$2,779,569,200
Net Direct Long-term General Fund Debt	\$16,623,950	\$15,568,492	\$17,953,098	\$16,471,609	\$24,557,786
<b>Net Direct Long-term Debt as a Percentage of Assessed Valuation</b>	<b>0.66%</b>	<b>0.61%</b>	<b>0.71%</b>	<b>0.64%</b>	<b>0.88%</b>

#### Analysis:

The State mandated legal maximum debt the Town may incur is 10% of assessed valuation. Low debt percentages are an indication of a locality's ability to finance future bond issues coupled with the indicator that measures net debt against net operating revenues. The Town is well within the legal debt maximum of 10% of assessed real estate valuation.

# INDICATOR 10

## Capital Outlay

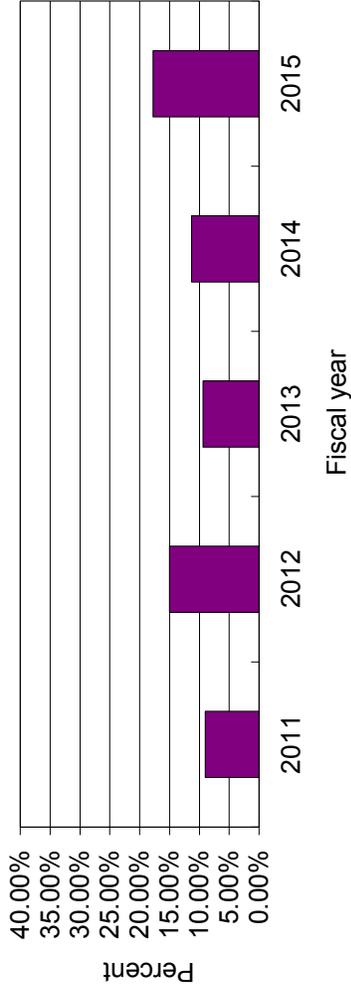
### Capital Outlay

#### Warning Trend:

A three or more year decline in capital outlay as a percentage of net operating expenditures

#### Formula:

$$\frac{\text{Capital outlay}}{\text{Net operating expenditures}}$$



Fiscal year:	2011	2012	2013	2014	2015
Total capital outlay	\$1,819,248	\$3,208,663	\$2,117,397	\$2,528,204	\$4,236,060
Operating expenditures and transfers	\$20,218,469	\$21,404,690	\$22,500,952	\$22,362,315	\$23,865,160
<b>Capital outlay as a percentage of expenditures</b>	<b>9.00%</b>	<b>14.99%</b>	<b>9.41%</b>	<b>11.31%</b>	<b>17.75%</b>

#### Analysis:

Yearly fluctuations in this indicator are the result of the timing and magnitude of different capital projects. The decreases in FY 2011 thru FY 2014 are due to the tight operating budget environment. The increase in FY 2012 is due to the purchase of a parking lot for \$650,000. The increase in FY 2015 is due to the purchase of property impacted by a transportation project for \$910,000 and land for a recreational trail for \$142,000.

# INDICATOR 11

## Water and Sewer Rates

Fiscal Year	Water Rate	Water Fixed	Sewer Rate	Sewer Fixed
2012	\$3.92	\$2.62	\$4.65	\$2.65
2013	\$4.22	\$2.94	\$4.70	\$2.97
2014	\$4.55	\$3.03	\$4.85	\$3.06
2015	\$4.88	\$3.05	\$5.17	\$3.08
2016	\$5.21	\$3.09	\$5.43	\$3.12

### Analysis:

In FY 1994 the billing structure changed based on a consultant's study from a declining volume rate with a minimum bill system to a fixed billing charge and one volume rate. The rate increases are consistent with the consultant's recommendation.

# INDICATOR 12

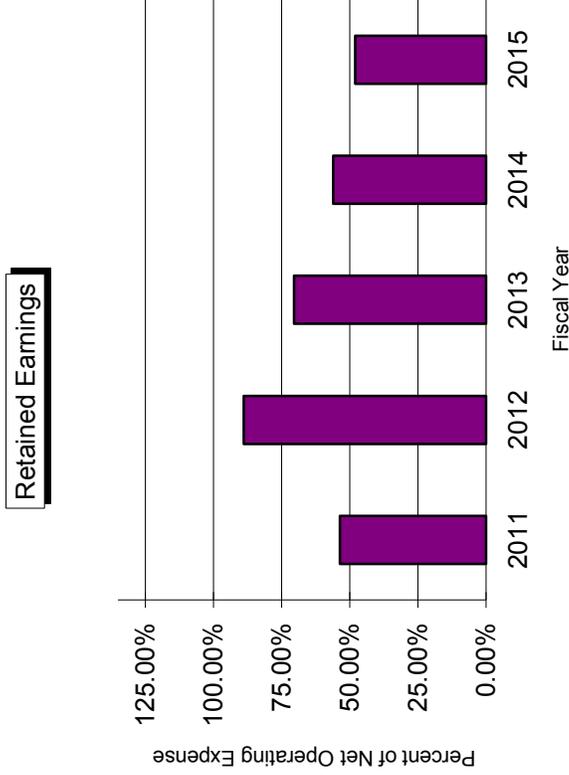
## Retained Earnings - Water and Sewer Fund

### Warning Trend:

Declining unreserved retained earnings as a percentage of net operating expenses

### Formula:

$$\frac{\text{Unreserved retained earnings}}{\text{Net operating expenses}}$$



Fiscal year:	2011	2012	2013	2014	2015
Unreserved Water & Sewer Fund Retained Earnings	\$3,707,925	\$6,126,898	\$5,336,884	\$4,322,668	\$3,790,119
Net Operating Expenses	\$6,920,905	\$6,895,989	\$7,580,841	\$7,710,245	\$7,894,474
<b>Unreserved Water &amp; Sewer Retained Earnings as a Percentage of Net Operating Expenses</b>	<b>53.58%</b>	<b>88.85%</b>	<b>70.40%</b>	<b>56.06%</b>	<b>48.01%</b>

### Analysis:

The declines in retained earnings are consistent with the comprehensive consultant study on water/sewer rates. The trend had been reversed as the higher rates are building retained earnings. The declines in retained earnings is due to capital projects and in line with the study to use retained earnings to fund capital projects.

## INDICATOR 13

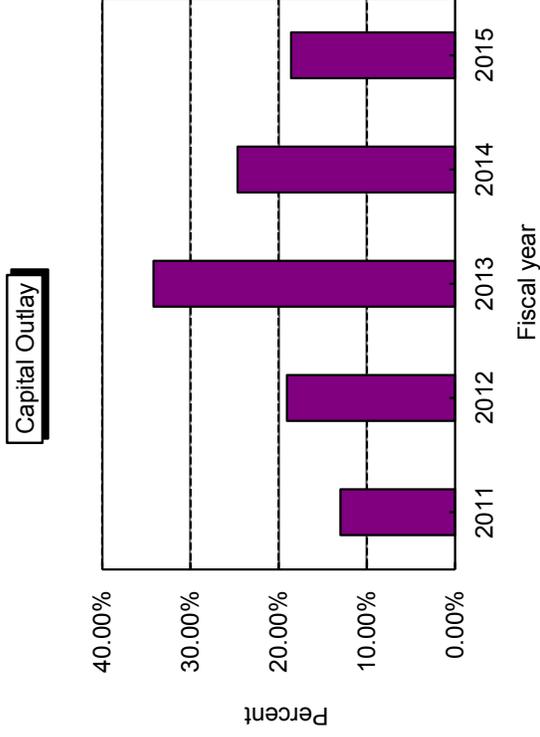
### Capital Outlay - Water and Sewer Fund

#### Warning Trend:

A three or more year decline in capital outlay as a percentage of net operating expenses and transfers.

#### Formula:

$$\frac{\text{Capital outlay}}{\text{Net operating expenditures}}$$



Fiscal year:	2011	2012	2013	2014	2015
Total capital outlay	\$900,041	\$1,315,017	\$2,590,167	\$1,900,284	\$1,468,504
Operating expenses and transfers	\$6,920,905	\$6,895,989	\$7,580,841	\$7,710,245	\$7,894,474
<b>Capital outlay as a percentage of expenses and transfers</b>	<b>13.00%</b>	<b>19.07%</b>	<b>34.17%</b>	<b>24.65%</b>	<b>18.60%</b>

#### Analysis:

Yearly fluctuations in this indicator are the result of the timing and magnitude of different capital projects. The lower amount in FY 2011 was due to the tight operating budget environment.

## INDICATOR 14

### Debt Service - Water and Sewer Fund

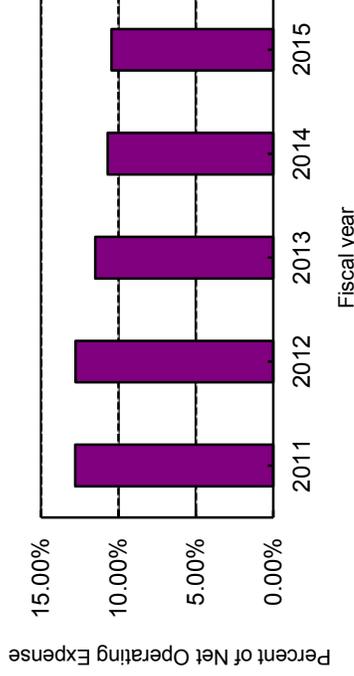
### Debt Service as a Percent of Net Operating Expense

#### Warning Trend:

Increasing debt service as a percentage of net operating expenses.

#### Formula:

$$\frac{\text{Debt Service}}{\text{Net operating Expenses}}$$



Fiscal year:	2011	2012	2013	2014	2015
Debt Service	\$884,940	\$881,378	\$871,159	\$824,454	\$824,949
Net Operating Expenses	\$6,920,905	\$6,895,989	\$7,580,841	\$7,710,245	\$7,894,474
<b>Debt Service as a Percentage of Net Operating Expenses</b>	<b>12.79%</b>	<b>12.78%</b>	<b>11.49%</b>	<b>10.69%</b>	<b>10.45%</b>

#### Analysis:

This analysis shows a favorable trend of debt service expenses as a percentage of net operating expenses over the five year period. This trend is caused by stable debt service payments.

# History of Property Tax Revenue for the Last Six Fiscal Years

(TABLE 1)

Fiscal Year	Assessed Value			Current Levy			Total Revenue from Property Taxation <sup>1</sup>		
	Amount	Percent Change	Tax Rate	Amount	Percent Change	Current Collections	Total Collections as a % of Levy <sup>1</sup>	Amount	Percent Change
2015	\$2,779,569,200 <sup>3</sup>	8.64%	\$0.2210.25 <sup>4</sup>	\$6,273,944	12.33%	\$6,264,457	99.85%	\$6,301,940	11.16%
2014	\$2,558,500,545	1.02%	\$0.22	\$5,585,423	0.77%	\$5,658,231	101.30%	\$5,669,336	2.15%
2013	\$2,532,699,273	0.03%	\$0.22	\$5,542,953	0.06%	\$5,482,597	98.91%	\$5,550,007	(0.08)%
2012	\$2,531,882,327	0.43%	\$0.22	\$5,539,489	2.24%	\$5,518,850	99.63%	\$5,554,280	0.96%
2011	\$2,521,083,927 <sup>2</sup>	3.59%	\$0.22	\$5,417,877	2.17%	\$5,471,930	101.00%	\$5,501,238	4.11%
2010	\$2,433,753,736	2.06%	\$0.22	\$5,302,922	2.74%	\$5,247,220	99.65%	\$5,284,193	2.01%

<sup>1</sup>Includes current taxes, delinquent taxes, and interest on delinquent taxes.

<sup>2</sup>Increase due to reassessment of real property effective January 1, 2011.

<sup>3</sup>Increase due to reassessment of real property effective January 1, 2015.

<sup>4</sup>Increase in tax rate from \$0.22 to \$0.25 effective for the second billing in FY 2015.

History of  
**General Fund Revenue  
 Other Than Property Tax**  
 for the Last Six Fiscal Years

(TABLE 2)

Fiscal Year	Intergovernmental Revenues		Other Local Taxes and Licenses		Charges for Rental of Properties and Current Services		All Other Revenue Including Interfund Transfers		Total Revenue	
	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change
2015	\$4,220,537	2.09%	\$13,270,478	2.94%	\$1,264,904	(4.45)%	\$6,876,659 <sup>4</sup>	172.74%	\$25,632,578	22.82%
2014	\$4,134,315	(2.83)%	\$12,891,028	2.55%	\$1,323,850	2.38%	\$2,521,335	(6.01)%	\$20,870,528	0.42%
2013	\$4,251,458	3.63%	\$12,570,552	2.27%	\$1,293,123	(11.13)%	\$2,672,989	(66.33)%	\$20,788,122	(19.39)%
2012	\$4,102,631	2.57%	\$12,291,633	6.35%	\$1,455,041	31.70%	\$7,939,843 <sup>3</sup>	46.00%	\$25,789,145	16.69%
2011	\$3,999,646	0.50%	\$11,557,458	7.40%	\$1,104,793	(5.48)%	\$5,438,243 <sup>2</sup>	(7.15)%	\$22,100,140	1.53%
2010	\$3,979,743	2.81%	\$10,761,456	2.11%	\$1,168,873	21.82%	\$5,857,252 <sup>1</sup>	142.54%	\$21,767,324	22.39%

<sup>1</sup>Receipt of bond proceeds of \$1,080,140 for use in FY2011; receipt of refunding bond proceeds of \$1,335,750 and historic tax credit revenue of \$968,036.

<sup>2</sup>Receipt of bond proceeds of \$1,070,000 in FY 2011 for use in FY2011 and FY2012; receipt of refunding bond proceeds of \$1,715,535.

<sup>3</sup>Receipt of refunding bond proceeds of \$5,387,540 in FY2012.

<sup>4</sup>Receipt of refunding bond proceeds of \$3,813,690 in FY 2015 and interfund transfers of \$370,900 from the new Stormwater Fund.

History of  
**General Fund Operating  
 Expenditures/Encumbrances**  
 for the Last Six Fiscal Years

(TABLE 3)

Fiscal Year	Public Works Expenditures		Public Safety Expenditures		Parks/Recreation Expenditures		All Other Operating Expenditures <sup>1</sup>		Total Operating Expenditures <sup>2</sup>	
	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change
2015	\$4,996,082	5.85%	\$8,602,348	4.78%	\$2,105,376	1.91%	\$7,205,861	3.64%	\$22,909,667	4.38%
2014	\$4,720,093	0.74%	\$8,210,248	(4.15)%	\$2,065,887	0.70%	\$6,952,806	6.34%	\$21,949,034	0.56%
2013	\$4,685,609	8.55%	\$8,550,794	6.29%	\$2,051,610	3.93%	\$6,538,242	8.88%	\$21,826,255	7.31%
2012	\$4,316,492	(7.12)%	\$8,044,580	4.75%	\$1,974,109	21.41%	\$6,004,980	2.15%	\$20,340,161	2.57%
2011	\$4,647,203	2.58%	\$7,679,669	(0.02)%	\$1,625,937	5.00%	\$5,878,483	0.55%	\$19,831,292	1.15%
2010	\$4,530,104	9.63%	\$7,681,206	7.81%	\$1,548,529	(5.68)%	\$5,846,175	(5.99)%	\$19,606,014	2.56%

<sup>1</sup> Includes Legislative, Executive, Finance, Technology, Legal, Judicial, Planning & Building Safety, and Engineering & GIS.  
<sup>2</sup> Does not include expenditures for debt service or capital outlay.

## Six-Year Projection of Property Tax Revenue

(TABLE 4)

Fiscal Year	Projected Assessed Value <sup>1</sup>	Projected Tax Rate Per \$100 of Assessed Value	Projected Tax Levy	Current Collection As Percentage of Levy	Projected Current Tax Revenue	Total Projected Current and Delinquent Tax Revenue (assume \$50,000)
2016	\$2,853,400,000	\$0.25	\$7,133,500	98.5%	\$7,026,500	\$7,126,500
2017	\$2,851,248,000	\$0.25	\$7,128,120	98.5%	\$7,021,200	\$7,121,200
2018	\$2,894,092,000	\$0.25	\$7,235,230	98.5%	\$7,126,700	\$7,226,700
2019	\$2,982,536,000	\$0.25	\$7,456,340	98.5%	\$7,344,500	\$7,444,500
2020	\$3,056,240,000	\$0.25	\$7,640,600	98.5%	\$7,526,000	\$7,626,000
2021	\$3,071,720,000	\$0.25	\$7,679,300	98.5%	\$7,564,100	\$7,664,100

<sup>1</sup>Reassessment occurs every four years. FY 2016 reflects a full year impact of the re-assessment of 8.74%. Assumes an annual growth of 1.0% for new construction for FY 2017-2018 and an estimated reassessment of 5% for a half-year in 2019 and full-year impact in 2020.

# Six Year Projection of Total General Fund Revenue

(TABLE 5)

Fiscal Year	Property Tax <sup>1</sup>	Intergovernmental Revenues <sup>2</sup>	Other Local Taxes and Licenses <sup>3</sup>	Charges for Rental/Current Services <sup>4</sup>	All Other Revenue <sup>5</sup>	Total Revenue
2016	\$7,126,500	\$4,373,200	\$12,769,800	\$3,415,000	\$1,235,000	\$28,919,500
2017	\$7,121,200	\$4,504,396	\$13,500,592	\$3,542,450	\$2,357,050	\$31,025,688
2018	\$7,226,700	\$4,639,528	\$14,040,616	\$3,648,724	\$1,310,211	\$30,865,779
2019	\$7,444,500	\$4,778,714	\$14,602,240	\$3,758,185	\$1,349,481	\$31,933,120
2020	\$7,626,000	\$4,922,075	\$15,186,330	\$3,870,931	\$1,390,003	\$32,995,339
2021	\$7,664,100	\$5,069,737	\$15,793,783	\$3,987,059	\$1,431,737	\$33,946,416

<sup>1</sup> Reflects an average annual growth rate of 1.5%.

<sup>2</sup> Reflects an average annual growth rate of 3.2%.

<sup>3</sup> Reflects an average annual growth rate of 4.7%.

<sup>4</sup> Reflects an average annual growth rate of 3.3%.

<sup>5</sup> Reflects an average annual growth rate of 3.5%.

# Six- Year Projection of General Fund Operating Expenditures

(TABLE 6)

Fiscal Year	Public Works Expenditures		Public Safety Expenditures		Parks/Recreation Expenditures		All Other Operating Expenditures <sup>1</sup>		Total Amount <sup>3</sup>
	Amount	Percent Change <sup>2</sup>	Amount	Percent Change <sup>2</sup>	Amount	Percent Change	Amount	Percent Change <sup>2</sup>	
2016	\$5,072,037	-	\$9,317,423	-	\$2,233,294	-	\$7,719,616	-	\$24,342,370
2017	\$5,156,380	1.66%	\$9,511,439	2.08%	\$2,304,503	3.19%	\$7,866,017	1.90%	\$24,838,339
2018	\$5,241,218	1.65%	\$9,680,241	1.77%	\$2,312,469	0.35%	\$7,990,173	1.58%	\$25,224,101
2019	\$5,344,587	1.97%	\$9,887,309	2.14%	\$2,346,991	1.49%	\$8,145,560	1.94%	\$25,724,447
2020	\$5,434,844	1.69%	\$10,066,313	1.81%	\$2,376,650	1.26%	\$8,277,076	1.61%	\$26,154,861
2021	\$5,545,242	2.03%	\$10,286,990	2.19%	\$2,413,447	1.55%	\$8,442,612	2.00%	\$26,688,291

<sup>1</sup> Includes Legislative, Executive, Finance, Legal, Technology, and Planning & Building Safety and Engineering & GIS.

<sup>2</sup> Growth factors used for FY 2017 through FY 2021 average approximately 1.9%.

<sup>3</sup> Does not include projections for debt service or capital outlay.

# Six-Year Projection of General Fund Obligated Debt Service

(TABLE 7)

Fiscal Year	Bond Issuance Costs	Leases	2005 Refunding Bond	2007 Bond Sale	2009 Bond Sale	2009 Refunding Bond	2011C Refunding Bond	2012 Bond Sale	2015 Bond Sale & Refunding Bond <sup>1</sup>	FY 2016/17 Bond Sale (1.3m) <sup>1</sup>	FY 2018/19 Bond Sale (0.3m) <sup>1</sup>	Total Debt Service
2016	--	\$121,874	\$166,328	\$153,091	\$220,654	\$160,074	\$522,390	\$235,881	\$887,235	--	--	\$2,467,527
2017	\$150,000	\$68,696	\$165,468	\$152,309	\$222,144	\$165,253	\$506,184	\$234,131	\$882,168	--	--	\$2,546,353
2018	--	\$68,696	--	--	\$223,163	\$165,998	\$524,776	\$237,381	\$1,025,665	\$221,865	--	\$2,467,544
2019	\$150,000	\$68,696	--	--	\$218,922	\$166,352	\$523,015	\$235,581	\$1,025,295	\$218,960	--	\$2,606,821
2020	--	\$68,696	--	--	\$219,563	--	\$521,102	\$238,331	\$1,041,792	\$213,149	\$34,100	\$2,336,733
2021	--	\$68,696	--	--	\$219,883	--	\$523,986	\$235,556	\$1,028,493	\$207,338	\$33,635	\$2,317,587

<sup>1</sup> Future bond sales reflect a projected 5.5% interest rate for 20 years.

# General Fund Six-Year Projection of New Capital Financing Potential

(TABLE 8)

Fiscal Year	2016	2017	2018	2019	2020	2021
General Fund Item						
Projected Operating Revenue	\$28,919,500	\$31,025,688	\$30,865,779	\$31,933,120	\$32,995,339	\$33,946,416
New Bond Issue	\$670,000	\$1,837,100	\$275,625	\$180,000	\$130,000	--
Use/(Return) of Fund Balance	--	\$623,255	\$266,547	\$(353,135)	\$(1,357,077)	\$(2,187,887)
Less Projected Operating Expenditures	\$24,342,370	\$24,838,339	\$25,224,101	\$25,724,447	\$26,154,861	\$26,688,291
Less Projected Reoccurring Capital Expenditures	\$2,365,344	\$2,414,151	\$2,414,151	\$2,414,151	\$2,414,151	\$2,414,151
Less Debt Service	\$2,467,527	\$2,546,353	\$2,467,544	\$2,606,821	\$2,336,733	\$2,317,587
Net Capital Financing Potential	\$414,259	\$3,687,200	\$1,302,155	\$1,014,566	\$862,517	\$338,500
Debt Service as % of Operating Expenditure	9.20%	9.30%	8.91%	9.20%	8.20%	7.99%
Total Debt as a Percentage of Assessed Value	0.52%	0.53%	0.47%	0.41%	0.34%	0.29%

Note: Ten-year principal payout ratio for 2025 is 57.9%

History of  
**Water and Sewer Fund Revenue**  
 for the Last Six Fiscal Years

(TABLE 9)

Fiscal Year Ending	Water Service Charges		Sewer Service Charges		Availability Fees, Connections, Line Extensions, & Meter Installations		Interest & Other Miscellaneous Revenues		Total Revenue	
	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change
2015	\$4,597,874	6.42%	\$4,342,224	4.90%	\$553,139	(27.95)%	\$162,141	(15.98)%	\$9,655,378	2.49%
2014	\$4,320,630	4.25%	\$4,139,446	1.45%	\$767,720	61.48%	\$192,972	(8.45)%	\$9,420,768	5.84%
2013	\$4,144,489	5.73%	\$4,080,082	1.10%	\$475,423	14.42%	\$209,273	7.17%	\$8,909,267	3.98%
2012	\$3,919,948	4.84%	\$4,035,748	(1.90)%	\$415,513	49.79%	\$195,275	(8.16)%	\$8,568,484	2.67%
2011	\$3,738,974	2.84%	\$4,114,077	0.05%	\$277,402	(20.29)%	\$214,809	(25.52)%	\$8,345,262	0.46%
2010	\$3,635,598	2.91%	\$4,112,064	6.76%	\$348,016	(46.86)%	\$288,424	(55.41)%	\$8,384,102	(3.48)%

History of  
**Water and Sewer Fund Operating Expenditures**  
for the Last Six Fiscal Years

(TABLE 10)

Fiscal Year Ending	Water Division Other Operating		Payment to Water Authority		Sewer Division Other Operating		Payment to Sewer Authority		All Other <sup>1</sup> Operating		Total Operating Expenditures <sup>2</sup>	
	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change
2015	\$582,415	1.46%	\$1,871,577	5.12%	\$635,293	6.37%	\$2,489,847	3.60%	\$2,315,342	(1.69)%	\$7,894,474	2.39%
2014	\$574,028	4.01%	\$1,780,479	(6.94)%	\$597,262	4.63%	\$2,403,247	2.31%	\$2,355,229	6.84%	\$7,710,245	1.71%
2013	\$551,873	17.69%	\$1,904,023	6.54%	\$570,831	3.89%	\$2,348,860	12.43%	\$2,204,478	10.14%	\$7,580,065	9.92%
2012	\$468,921	9.79%	\$1,787,077	3.46%	\$549,431	3.00%	\$2,089,089	(7.97)%	\$2,001,471	1.95%	\$6,895,989	(0.36)%
2011	\$427,100	2.31%	\$1,727,353	(1.23)%	\$533,451	2.90%	\$2,269,894	(7.95)%	\$1,963,107	0.80%	\$6,920,905	(2.92)%
2010	\$417,470	(6.83)%	\$1,748,797	1.29%	\$549,369	14.41%	\$2,465,804	6.64%	\$1,947,602	1.21%	\$7,129,042	3.45%

<sup>1</sup>Includes Administration, Utility Billing and Pump Station Maintenance.

<sup>2</sup>Does not include expenditures for debt service or capital outlay.

**Six-Year Projection of  
Water and Sewer Operating Revenues**

(TABLE 11)

Fiscal Year Ending	Water Segment				Sewer Segment				Fund Total	
	Service Charges	Fixed Charges	Other <sup>1</sup>	Total Water	Service Charges	Fixed Charges	Other <sup>2</sup>	Total Sewer		
2016	\$4,537,969	\$362,321	\$265,000	\$5,165,290	\$4,316,472	\$336,289	\$13,800	\$4,666,561	\$113,200	\$9,945,051
2017	\$4,592,425	\$373,190	\$272,420	\$5,238,035	\$4,368,270	\$346,378	\$14,186	\$4,728,834	\$114,112	\$10,080,981
2018	\$4,647,534	\$382,147	\$278,686	\$5,308,367	\$4,420,689	\$354,690	\$14,513	\$4,789,892	\$115,048	\$10,213,307
2019	\$4,703,304	\$391,319	\$285,095	\$5,379,718	\$4,473,737	\$363,203	\$14,847	\$4,851,787	\$116,007	\$10,347,512
2020	\$4,759,744	\$400,710	\$291,653	\$5,452,107	\$4,527,422	\$371,920	\$15,188	\$4,914,530	\$116,989	\$10,483,626
2021	\$4,816,861	\$410,327	\$298,361	\$5,525,549	\$4,581,751	\$380,847	\$15,537	\$4,978,135	\$99,996	\$10,603,680

<sup>1</sup>Other Revenue includes Connection Charges, Meter Installations, Service Transfer Fees, Line Extensions and the Sale of Outside Watering Meters.

<sup>2</sup>Other Revenue includes Connection Charges and Line Extensions.

<sup>3</sup>Other Miscellaneous Revenue includes Sale of Materials and Labor, Reconnection Fees, Interest, Collection and Penalties related to Delinquent Bills and Miscellaneous Revenue.

# Six-Year Projection of Water and Sewer Operating Expenditures

(TABLE 12)

Fiscal Year	Payments to Water & Sanitation Authorities <sup>1</sup>	Operating Expenditures	Equipment Replacement	Total Operating Expenditures <sup>2</sup>	Percent Change
2016	\$4,889,409	\$3,605,143	\$236,829	\$8,731,381	--
2017	\$4,948,082	\$3,650,659	\$266,937	\$8,865,678	1.54%
2018	\$5,007,457	\$3,709,623	\$266,937	\$8,984,017	1.33%
2019	\$5,067,548	\$3,775,216	\$266,937	\$9,109,701	1.40%
2020	\$5,128,359	\$3,842,406	\$266,937	\$9,237,702	1.41%
2021	\$5,189,899	\$3,911,242	\$266,937	\$9,368,078	1.41%

<sup>1</sup> Based on wholesale water rates of \$2.22 per 1,000 gallons purchased for FY 2016-2021. Based on wholesale sewer rates of \$1.87 per 1,000 gallons purchased for FY 2016-2021 and an annual growth of 1.2%.

<sup>2</sup> Does not include appropriations for debt service or capital outlay.

Six-Year Projection of  
**Water and Sewer Fund**  
**Obligated Debt Service Expenditures**

(TABLE 13)

Fiscal Year	2005 Refunding Bond	2007 Bond Sale	2009 Refunding Bond	2015 Refunding Bond	2011C Refunding Bond	Total Debt Service	Net Revenue Coverage Of Debt Service
2016	\$55,443	\$91,854	\$34,663	\$179,562	\$369,569	\$731,091	2.47
2017	\$55,156	\$91,386	\$35,785	\$177,564	\$370,772	\$730,663	2.34
2018	--	--	\$35,946	\$266,866	\$371,830	\$674,642	2.21
2019	--	--	\$36,023	\$266,586	\$372,741	\$675,350	2.22
2020	--	--	--	\$272,489	\$368,553	\$641,042	2.34
2021	--	--	--	\$267,388	\$369,270	\$636,658	2.23

**Water & Sewer Fund  
Six-Year Projection of  
New Capital Financing Potential**

(TABLE 14)

Water & Sewer Fund Item	2016	2017	2018	2019	2020	2021
Projected Operating Revenue	\$9,945,051	\$10,080,981	\$10,213,307	\$10,347,512	\$10,483,626	\$10,603,680
Availability Fees	\$594,100	\$492,650	\$262,300	\$262,400	\$253,600	\$185,500
New Bond Issue	--	--	--	--	--	--
Use/(Return) of Cash Reserves	\$367,169	\$237,810	\$(310,508)	\$(301,541)	\$(370,282)	\$(249,444)
Less Projected Operating Expenditures	\$8,731,381	\$8,865,678	\$8,984,017	\$9,109,701	\$9,237,702	\$9,368,078
Less Debt Service	\$731,091	\$730,663	\$674,642	\$675,350	\$641,042	\$636,658
Net Capital Financing Potential	\$1,443,848	\$1,215,100	\$506,440	\$523,320	\$488,200	\$535,000

Adopted  
CAPITAL IMPROVEMENT PROGRAM

	2016/17		2017/18		2018/19		2019/20		2020/21	
	Prior Allocation	Bonds	Non-bonded	Bonds	Non-bonded	Bonds	Non-bonded	Bonds	Non-bonded	TOTAL
<b>General Fund</b>										
<i>Finance Department:</i>										
Analytical Reporting Application			40,000							40,000
I-Series Peripheral Equipment Replacement	Continuing				35,000					35,000
I-Series Hardware Replacement	Continuing		50,000							50,000
Grant Management Application							35,000			35,000
Sungard Online Business License Application							40,000			40,000
Subtotal		0	0	0	90,000	0	35,000	0	75,000	200,000
<i>Fire Department:</i>										
Transfers to Equipment Depreciation Fund	Continuing	283,500	283,500	283,500	283,500	283,500	283,500	283,500	283,500	1,417,500
Subtotal		0	283,500	0	283,500	0	283,500	0	283,500	1,417,500
<i>Rescue:</i>										
Cardiac Monitors/Defibrillators					350,000					350,000
Alephany Water Tank Repeater		42,000								42,000
Transfers to Equipment Depreciation Fund	Continuing	158,958	158,958	158,958	158,958	158,958	158,958	158,958	158,958	794,790
Subtotal		0	200,958	0	508,958	0	158,958	0	158,958	1,186,790
<i>Parks and Recreation Department:</i>										
Picnic Shelter Replacement	100,000			20,000						20,000
Park Restrooms	91,375	93,500	95,625							189,125
Hand-in-Hand Park Playground Equipment Rebuild*		315,000								350,000
Recreation Center and Campus Development					100,000					100,000
Transfer to Playground Depreciation Fund	Continuing	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	175,000
Park at South Point Amenities*	276,731	750,000								750,000
Aquatic Center Sand Filter Replacement			300,000				25,000			25,000
Mountain Biking Skills Park*										300,000
Drain Replacement							37,600			37,600
Subtotal	468,106	408,500	1,120,000	95,625	55,000	0	197,600	0	35,000	1,946,725
<i>Planning and Building</i>										
No projects requested		0	0	0	0	0	0	0	0	0
Subtotal		0	0	0	0	0	0	0	0	0
<i>Engineering and GIS:</i>										
Streetlight Installation	Continuing	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	25,000
2017 Aerial and Base Map Updates		85,000	45,000	25,000	25,000	25,000	25,000	25,000	25,000	115,000
Vehicle Replacement				30,000						30,000
Progress Street Parking Study									100,000	100,000
Non-FHWA Required Bridge Inspections		8,000	19,000							19,000
GIS Hardware Upgrades		83,000	84,000	0	60,000	0	5,000	0	105,000	15,000
Subtotal		0	84,000	0	60,000	0	5,000	0	50,000	304,000
<i>Police Department:</i>										
Officer Body Cameras and Server Storage Upgrade			36,000							36,000
Downtown Security Camera System			20,000							20,000
Traffic Committee	Continuing			15,000	15,000	15,000	15,000	15,000	15,000	60,000
Police Department Vehicle Storage Building										150,000
Transfers to Equipment Depreciation Fund	Continuing	330,775	330,775	330,775	330,775	330,775	330,775	330,775	330,775	1,653,875
Subtotal		0	386,775	150,000	381,775	0	345,775	0	345,775	1,955,875
<i>Public Works Department:</i>										
Major Facilities Repair and Maintenance	Continuing	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	500,000
Parking Lot Repaving, Sealing and Striping	Continuing	35,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	60,000
Rental Property Maintenance	Continuing	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	150,000
Roof Replacement	Continuing	58,000								58,000
Town Building Masonry Repair	200,000	46,000	30,000				131,000			76,000
Bucket Truck										131,000
Custodial and General Services Equipment Cargo Van	Continuing	28,000	40,000							28,000
Pavement Condition Index Update										40,000
Message Board							17,000			17,000
Public Works Lot Master Plan			16,600							16,600
Automatic Vehicle Location Information System (AVL)										31,000
Bicycle Infrastructure Improvements	20,000	35,000	20,000				20,000			95,000
Public Works Curb, Gutter and Sidewalk Construction Projects	Continuing	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	45,000
Energy Efficiency Upgrades	40,000	40,700	30,030	31,774	27,845	27,845	27,845	27,845	27,845	130,349
Transfers to Building Systems Depreciation Fund	Continuing	132,002	132,002	132,002	132,002	132,002	132,002	132,002	132,002	660,010
Transfers to Equipment Depreciation Fund	Continuing	579,916	579,916	579,916	579,916	579,916	579,916	579,916	579,916	2,899,580
Subtotal	260,000	58,000	1,083,218	0	992,948	0	1,056,692	0	904,763	4,937,539
<i>Technology Department:</i>										
Technology Replacement	Continuing	43,500	63,000	63,000	63,000	63,000	63,000	63,000	63,000	295,500
Server Replacement		30,000								30,000
10 Gigabit Network Switch Equipment		15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Network Firewall Replacement		15,000								15,000

Adopted  
CAPITAL IMPROVEMENT PROGRAM

Fiber Optic Network	270,200	157,500										157,500
Microsoft Office 2016 Upgrade			63,000									48,000
Data/Video Storage System				79,000								79,000
Licensing Update - Servers	48,000										30,000	30,000
SAN Upgrade/Replacement	86,000		29,000									29,000
Subtotal	434,200	157,500	195,500	0	142,000	0	93,000	0	63,000	0	111,000	762,000
<b>Town Manager's Office:</b>												
Five Chimneys Landscaping Master Plan	25,837		58,000									58,000
Emergency Preparedness Equipment	37,000						100,000		70,000			170,000
Subtotal	62,837	0	58,000	0	0	0	100,000	0	70,000	0	0	228,000
<b>Housing and Neighborhood Services:</b>												
Progress Street Corridor Improvement Project (Visioning & Planning Phase)	0	0	0	0	0	0	30,000	0	0	0	0	30,000
Subtotal	0	0	0	0	0	0	30,000	0	0	0	0	30,000
<b>Community Relations:</b>												
Downtown Kiosk Replacement	24,490		55,800				16,692					16,692
Council Chambers Equipment Upgrade	24,490	0	55,800	0	0	0	16,692	0	0	0	0	55,800
Subtotal	1,342,633	624,000	3,467,751	245,625	2,514,181	0	2,322,217	0	2,040,996	0	1,826,151	13,040,921
<b>Total General Fund Projects</b>												
<b>CDBG Entitlement Fund*</b>												
<i>Housing and Neighborhood Services:</i>												
No projects requested	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total CDBG Entitlement Projects</b>												
<b>VDOT Revenue Sharing Program*</b>												
<i>Public Works:</i>												
Road Hazard Mitigation**	Continuing			70,000					70,000			210,000
Sidewalk Trip Hazard Removal	Continuing		25,000		25,000				25,000		25,000	125,000
Curb, Gutter and Sidewalk Rebuild	Continuing	40,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	60,000	280,000
Major Roadway Repaving**	Continuing		325,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	2,325,000
Subtotal	0	40,000	350,000	30,000	625,000	30,000	625,000	30,000	625,000	0	585,000	2,940,000
<i>Engineering and GIS:</i>												
HAWK Pedestrian System	50,000	182,500	182,500						100,000			365,000
Draper Road Streetscape Improvement Plan				30,000					30,000			150,000
Sidewalk Infill Projects	Continuing			40,000					40,000			40,000
Bicentennial Greenway Relocation - Connor House Property		40,000	40,000									80,000
Heritage Park - Huckleberry Trail Extension Paving			150,000									150,000
Drainage Improvements along Mt. Tabor Road*	600,000	743,600	743,606									1,487,206
Research Center Drive Improvements - Phase II	650,000	986,100	1,186,106	0	30,000	0	30,000	0	130,000	0	30,000	2,372,206
Subtotal	114,000	57,000	57,000						100,000			114,000
<i>Parks &amp; Recreation:</i>												
Golf Course Trail - Palmer Drive to County Club Drive				100,000					100,000			200,000
Huckleberry Trail Extension - to the Park at South Point	114,000	57,000	57,000	0	100,000	100,000	100,000	0	0	0	0	314,000
Subtotal	764,000	1,063,100	1,593,106	30,000	655,000	130,000	755,000	30,000	755,000	0	615,000	5,626,206
<b>VDOT Revenue Sharing Program</b>												
<b>Storm Water Fund</b>												
<i>Engineering and GIS:</i>												
Storm Water Improvements	85,000		90,000	190,000					200,000		210,000	900,000
Storm Water Quality Improvements	100,000		100,000	100,000					100,000		100,000	500,000
Subtotal	185,000	0	190,000	0	290,000	0	300,000	0	310,000	0	310,000	1,400,000
<b>Water/Sewer Fund</b>												
<i>Finance Department:</i>												
Meter Maintenance and Replacement	Continuing		105,000	105,000					105,000		105,000	525,000
Radio Read Vehicle Transceiver Unit (VXU) Replacement/Upgrade	28,000								35,000			35,000
Subtotal	28,000	0	105,000	0	105,000	0	140,000	0	105,000	0	105,000	560,000
<i>Engineering and GIS:</i>												
Data Logging Equipment for Wastewater System	60,600		10,000									10,000
Allegheny Water Tank Rehabilitation	30,000		355,000									355,000
Draper Road Sewer Capacity Improvements	90,600	0	580,250	0	0	0	0	0	0	0	0	215,250
Subtotal	181,200	0	945,250	0	0	0	0	0	0	0	0	580,250
<i>Public Works Department:</i>												
Fire Hydrant Replacement	Continuing			30,000					30,000		30,000	120,000
Sanitary Sewer Lining and Pipe Bursting for Land   Abatement	Continuing		250,000		250,000				250,000		250,000	1,250,000
Water Main Replacements	Continuing		143,850	121,440	103,320				103,320		150,000	621,810
Wastewater Solids Dewatering Station	30,000		75,000									75,000



# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Finance

**Project Title:** Analytical Reporting Application

**Project Location:** Finance

**Project Status:** New

**Description and Justification:**

This project establishes funding for the acquisition of the replacement of Cognos, our current data management and reporting application for Sungard Public Sector NaviLine with the new Cognos Business Intelligence solution. This application

- streamlines everything from researching data to accessing reports on the Web.
- allows dynamic reports and personalized dashboards with real-time information.
- analyzes complex data and creates eye catching reports without sacrificing reliability and functionality.
- operates in the cloud based and is available for all users without having to install software on each user's device.
- allows reports to be automatically scheduled and directly emailed to users.

The security over the data will be maintained and enhanced while allowing real time analysis of data and personalized reporting with less administration by staff.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$40,000		\$40,000					\$40,000	
<b>Total</b>	<b>\$40,000</b>		<b>\$40,000</b>					<b>\$40,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Finance

**Project Title:** I-Series Peripheral Equipment Replacement

**Project Location:** Finance

**Project Status:** Continuing

**Description and Justification:**

This project establishes funding for replacement of the peripheral equipment, such as the laser MICR printers, pressure sealer, cash receipts printers, automated remittance system and console display. The majority of this equipment was replaced in FY 2012. The average life of this type of equipment is five years.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing			\$35,000			\$35,000	Continuing
<b>Total</b>	Continuing	Continuing			\$35,000			\$35,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Finance

**Project Title:** I-Series Hardware Replacement

**Project Location:** Finance

**Project Status:** Continuing

**Description and Justification:**

The I-Series houses the Town's integrated financial applications such as payroll, real estate taxes, meals taxes, utility billing, fleet management, purchasing and inventory, budgeting and general ledger functions. The I-Series was last replaced at the end of FY 2010. The I-Series has a useful life of five to seven years and is a stable and flexible platform for the integrated financial application and will need to be replaced due to its useful life, the growth of data history and new applications, such as internet applications.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing		\$50,000				\$50,000	Continuing
<b>Total</b>	Continuing	Continuing		\$50,000				\$50,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Finance

**Project Title:** Grant Management Application

**Project Location:** Finance

**Project Status:** Previously Requested

**Description and Justification:**

This project establishes funding for the acquisition of an integrated Grant Financial and Performance Management application. This application tracks grants with an easily accessible comprehensive repository that includes submitted and issued grants along with an audit trail conforming to the requirements of the issuing entity. This application will also help standardize the process for grant performance reporting that is becoming increasingly important in the current grant environment. This application should also integrate with a grant research tool to assist in the notification of grants the Town is eligible for. As the Town applies and receives more grants this will enable efficient tracking and management without an increase in staff time.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$35,000				\$35,000			\$35,000	
<b>Total</b>	<b>\$35,000</b>				<b>\$35,000</b>			<b>\$35,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Finance

**Project Title:** Sungard Online Business License Application

**Project Location:** Finance

**Project Status:** New

**Description and Justification:**

This project establishes funding for the acquisition of the Click2Gov Business License application. This application meets the ever-growing demand for electronic transactions. It is a fully integrated internet filing and payment solution which enables the customer to file, renew and pay their business license, meals tax and/or hotel tax filings online. This will join the other online payment applications the Town currently offers its customers.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$40,000				\$40,000			\$40,000	
<b>Total</b>	<b>\$40,000</b>				<b>\$40,000</b>			<b>\$40,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Blacksburg Volunteer Rescue Squad

**Project Title:** Cardiac Monitors/Defibrillators

**Project Location:** Rescue Station

**Project Status:** Previously Requested

**Description and Justification:**

One of the most important, life-saving interventions a rescue squad can provide for a victim of cardiac arrest is rapid, effective defibrillation. Defibrillators shock the heart of a cardiac arrest patient with the hope of restarting the heart and restoring a pulse. This project aims to replace the current “E Series” monitor/defibrillators with the newest available technology in FY 2017. It is imperative to stay up to date with emerging EMS trends and technologies to provide the best pre-hospital emergency care for the citizens of the Town of Blacksburg and Montgomery County. Research has shown that five to six years is the appropriate time to upgrade these critical pieces of life saving equipment. The current monitors were purchased in July of 2009.

This involves the purchase of eight full cardiac monitors (automatic and manual defibrillation, cardiac monitoring, twelve lead analysis and transmission, End-Tidal CO2 Monitoring, Pacing, Pulse Oximetry, Non-invasive Blood Pressure). Each of the six ambulances will be equipped in addition to one Advanced Life Support (ALS) response vehicle and one training/back-up unit. The other Rescue vehicles will be equipped with an Automated External Defibrillator (AED) to provide initial treatment until an ambulance or Advanced Life Support (ALS) chase vehicle arrives. This includes three command vehicles, two first response vehicles and one marked utility vehicle that would bare the expectation to respond to a scene and provide stabilizing assessment and care.

The Blacksburg Rescue Squad is licensed by the Commonwealth of Virginia as an Advanced Life Support (ALS) agency. Equipping ambulances and first response units with Monitors/Defibrillators are necessary for maintaining such licensure and providing top-quality care to our citizens.

Current pricing does not reflect any possible discounts that may be realized at the actual time of purchase.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$350,000			\$350,000				\$350,000	
<b>Total</b>	\$350,000			\$350,000				\$350,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Blacksburg Volunteer Rescue Squad

**Project Title:** Alleghany Water Tank Repeater

**Project Location:** Alleghany Street Water Tank

**Project Status:** Previously Requested

**Description and Justification:**

This project supplements the ongoing rescue squad conversion to the UHF spectrum to meet standards established for public safety agencies in the Town of Blacksburg and surrounding areas. This specific project will replace an existing VHF repeated frequency (Ch. 2) with a UHF repeated frequency and associated equipment. Additionally, this project will address previously noted poor coverage areas with a UHF voter site for the south end of Blacksburg around Montgomery Regional Hospital as well as retirement facilities in the area where significant radio traffic occurs. Establishment of these key infrastructure sites on the Alleghany Water Tank not only enhances communication considerations, it will also supply additional backup should problems arise at the primary repeater site. This project is timed to coincide with the water tank being taken off-line for maintenance and associated police department radio infrastructure installation.

Since hardened, non-commercial communication is an essential part of providing lifesaving emergency services to the community as well as providing member safety, these ongoing system changes will help meet those goals and additionally enhance interoperability.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$42,000		\$42,000					\$42,000	
<b>Total</b>	\$42,000		\$42,000					\$42,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Parks & Recreation

**Project Title:** Picnic Shelter Replacement

**Project Location:** Nellies Cave Park

**Project Status:** In Progress

**Description and Justification:**

This project continues the replacement of picnic shelters throughout the park system to create a uniformed look and to provide a better experience for people using the park. This shelter is over 25 years old and is used on a daily basis.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$120,000	\$100,000		\$20,000				\$20,000	
<b>Total</b>	<b>\$120,000</b>	<b>\$100,000</b>		<b>\$20,000</b>				<b>\$20,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Parks & Recreation

**Project Title:** Park Restrooms

**Project Location:** Municipal, Nellies Cave, Toms Creek Parks

**Project Status:** In Progress

**Description and Justification:**

This project is to construct the new standard park restroom in the Town parks. These restrooms will be available for year round use to better serve users of the parks. The style of the restroom would be similar to the restrooms at the Kipps Elementary site.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Obligation Bonds	\$280,500	\$91,375	\$93,500	\$95,625				\$189,125	
<b>Total</b>	<b>\$280,500</b>	<b>\$91,375</b>	<b>\$93,500</b>	<b>\$95,625</b>				<b>\$189,125</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Parks & Recreation

**Project Title:** Hand-In-Hand Playground Equipment Rebuild

**Project Location:** Municipal Park

**Project Status:** Previously Requested

**Description and Justification:**

This project will remove the original Hand-In Hand playground structure that continually has maintenance issues and replace it with a new metal and plastic structure that will meet national standards. The theme of the playground will stay the same castle scope and the picket fence with the children’s names will remain in place. Funding for this project includes \$35,000 received from the original Hand-In-Hand board when the playground was given to the Town. If private donations are received for this project, those donations will be used to acquire additional playground pieces which will compliment the new structure.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Obligation Bonds	\$315,000		\$315,000					\$315,000	
Donations	\$ 35,000		\$ 35,000					\$ 35,000	
<b>Total</b>	<b>\$350,000</b>		<b>\$350,000</b>					<b>\$350,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Parks & Recreation

**Project Title:** Recreation Center and Campus Development

**Project Location:** Old Blacksburg High School

**Project Status:** Previously Requested

**Description and Justification:**

This project provides initial funding for a new recreation center and campus design process. The Town responded to Montgomery County’s Request for Proposal for the old Blacksburg High School property with a proposal that included constructing a new recreation on the site.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$100,000				\$100,000			\$100,000	
<b>Total</b>	\$100,000				\$100,000			\$100,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Parks & Recreation

**Project Title:** Transfer to Playground Depreciation Fund

**Project Location:** All Parks

**Project Status:** Continuing

**Description and Justification:**

This project is to assist with the replacement of playgrounds & picnic shelters throughout the entire park system. This account would help offset the final replacement cost requested in the future.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$175,000	Continuing
<b>Total</b>	Continuing	Continuing	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$175,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Parks & Recreation

**Project Title:** Park at South Point Amenities

**Project Location:** Park at South Point

**Project Status:** In Progress

**Description and Justification:**

This project uses proceeds from the sale of a second parcel of land at the former Interchange property to fund more improvements at the Park at South Point. Improvements are expected to include athletic fields, open space and restrooms

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Obligation Bonds	\$100,000	\$100,000							
Developer	\$906,731	\$156,731	\$750,000					\$750,000	
Donation	\$20,000	\$20,000							
<b>Total</b>	<b>\$1,026,731</b>	<b>\$276,731</b>	<b>\$750,000</b>					<b>\$750,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Parks & Recreation  
**Project Title:** Aquatic Center Sand Filter Replacement  
**Project Location:** Aquatic Center

**Project Status:** New

**Description and Justification:**

This project replaces the two original sand filters with six smaller sand filters that will be more efficient for water treatment and can be individually isolated if issues occur.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$25,000				\$25,000			\$25,000	
<b>Total</b>	\$25,000				\$25,000			\$25,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Parks & Recreation  
**Project Title:** Mountain Biking Skills Park  
**Project Location:** Gateway Park

**Project Status:** New

**Description and Justification:**

This project funds the construction of a Mountain Biking Skills Park in Gateway Park. The park will enable participants to increase their mountain biking skills. The park will include a pump track and a series of trails with obstacles and elements of varying difficulty. The park will be for the beginner and intermediate riders.

If grant funds are unavailable, the project will be deferred.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Grant			\$280,000					\$280,000	
Donations			\$ 20,000					\$ 20,000	
<b>Total</b>			\$300,000					\$300,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Parks & Recreation

**Project Title:** Drain Replacement

**Project Location:** Aquatics

**Project Status:** Previously Requested

**Description and Justification:**

This project enhances the drainage system around the pool. New drains will reduce the number of broken/loose grates as well as allow for better drainage of water.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$37,600				\$37,600			\$37,600	
<b>Total</b>	<b>\$37,600</b>				<b>\$37,600</b>			<b>\$37,600</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Planning and Building

**Project Title:**

**Project Location:** Planning and Building

**Project Status:** There are no projects for Planning and Building in this Recommended Capital Improvement Program.

**Description and Justification:**

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
<b>Total</b>									

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Engineering and GIS Department

**Project Title:** Streetlight Installation

**Project Location:** Town of Blacksburg

**Project Status:** Continuing

**Description and Justification:**

This project is to fund the installation of new streetlights as requested by citizens that submit petitions meeting the streetlight policy criteria and recommendations from the Town’s Traffic Committee. Lights are installed to address safety concerns for drivers, pedestrians, and homeowners.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000	Continuing
<b>Total</b>	Continuing	Continuing	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS Department

**Project Title:** 2017 Aerial and Base Map Updates

**Project Location:** Engineering and GIS Department

**Project Status:** Continuing

**Description and Justification:**

Funding in FY 2016/17 and 2017/18 is for the next scheduled four-year update of the Town's aerials and other base map features. These updates are needed to keep up with the development changes in town, maintaining the accuracy of the GIS, and supporting the new storm water utility. Funding can be spread over two fiscal years as scheduled flights will be in the winter months of 2016/2017 and some of the product delivery will be in FY 2017/18.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	\$85,000	\$45,000	\$25,000			\$45,000	\$115,000	Continuing
<b>Total</b>	Continuing	\$85,000	\$45,000	\$25,000			\$45,000	\$115,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS

**Project Title:** Vehicle Replacement

**Project Location:** Engineering and GIS Department

**Project Status:** New

**Description and Justification:**

The Transportation Program Manager’s vehicle was purchased with project funds from the Tom’s Creek Interchange Project. It was not placed in the vehicle replacement fund at that time. The vehicle is used every day by the manager while managing the Town’s projects. The vehicle is over ten years old and is approaching 50,000 miles and is due for replacement. In the future it will be placed in the vehicle replacement program.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$30,000			\$30,000				\$30,000	
<b>Total</b>	\$30,000			\$30,000				\$30,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS

**Project Title:** Progress Street Parking Study

**Project Location:** Progress Street

**Project Status:** In Progress

**Description and Justification:**

Properties were purchased by the Town in 2012 and 2014 to preserve the ability for the Town to construct structured parking in the downtown core at some time in the future. This funding is for a study on structured parking.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$100,000					\$100,000		\$100,000	
<b>Total</b>	\$100,000					\$100,000		\$100,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS

**Project Title:** Non-FHWA Required Bridge Inspections

**Project Location:** Various Locations Townwide

**Project Status:** New

**Description and Justification:**

This project will provide for safety inspection services for bridges located throughout the Town that are not required by the Federal Highway Administration (FHWA) and VDOT to be inspected every two years. These bridges do not meet the FHWA and VDOT length of span (20 feet) requirement; however, due to the fact that they carry either high volumes of vehicular or pedestrian traffic they should receive some type of safety inspection periodically. Included are pedestrian bridges located on the Huckleberry Trail and various box culverts under Town streets.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$19,000		\$19,000					\$19,000	
<b>Total</b>	\$19,000		\$19,000					\$19,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS Department

**Project Title:** GIS Hardware Upgrades

**Project Location:** Engineering & GIS Department

**Project Status:** Continuing

**Description and Justification:**

The large format plotter, scanner, and GPS (Global Positioning System) support all departments. These components provide large format graphic production, digital document storage and accurate collection of critical infrastructure. These technologies change rapidly and require maintenance and updates to maintain efficient service levels. Funding is being requested for FY 2016 and FY 2017 for these equipment replacements and upgrades.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	\$8,000	\$15,000					\$15,000	Continuing
<b>Total</b>	Continuing	\$8,000	\$15,000					\$15,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Police

**Project Title:** Officer Body Cameras and Server Storage Upgrade

**Project Location:** Blacksburg Police Department

**Project Status:** New

**Description and Justification:**

This request will allow the Blacksburg Police Department to use body-worn cameras. Body cameras provide a useful tool for law enforcement. The benefits that body-worn cameras offer include: capturing a video recording of critical incidents and encounters with the public, strengthening police accountability (transparency with the community), reducing complaints, resolving officer involved incidents and providing a valuable new type of evidence documentation. An upgrade to existing storage servers will be required due to the changing technology and the volume of the data recorded that will be required to be stored. The entire system will consist of 64 body-worn cameras and the upgrade to the current data storage server. Policy development, equipment acquisition and police training will be completed before the Police Department begins using the body cameras.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$72,000		\$36,000	\$36,000				\$72,000	
<b>Total</b>	<b>\$72,000</b>		<b>\$36,000</b>	<b>\$36,000</b>				<b>\$72,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Police

**Project Title:** Downtown Security Camera System

**Project Location:** Town of Blacksburg

**Project Status:** New

**Description and Justification:**

This project will allow the Blacksburg Police Department to enhance the current downtown security camera system to expand coverage and capabilities. The system is used for real-time monitoring of special events in the downtown public areas as well as assisting in the investigation of criminal activity.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$20,000		\$20,000					\$20,000	
<b>Total</b>	<b>\$20,000</b>		<b>\$20,000</b>					<b>\$20,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Police  
**Project Title:** Traffic Committee  
**Project Location:** Town of Blacksburg

**Project Status:** Continuing

**Description and Justification:**

This project will allow the Traffic Committee to respond in a timely manner to Citizen and Staff concerns regarding potentially hazardous traffic conditions and evaluate the potential impact of new development/infill on established traffic patterns and volumes. These identified conditions are often time sensitive and cannot await resolution through the regular Capital Improvement Program (CIP) process, or they require additional research to support the successful acquisition of CIP funds. These funds will be administered by the Traffic Committee with oversight and direction from the Town Manager's Office. An illustrative list of possible expenditures would include: measuring/counting equipment, consultant costs and/or professional assistance and matching funds for grant specific applications.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing		\$15,000	\$15,000	\$15,000	\$15,000	\$60,000	Continuing
<b>Total</b>	Continuing	Continuing		\$15,000	\$15,000	\$15,000	\$15,000	\$60,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Police

**Project Title:** Police Department Vehicle Storage Building

**Project Location:** 2700 Prosperity Road

**Project Status:** Previously Requested

**Description and Justification:**

This project would encompass constructing a storage facility for the majority of marked police vehicles currently stored at the Public Works Facility. With the increasing cost of police vehicles and inundation of technological features associated with them, it has become imperative to adequately protect and house them. The current fleet of vehicles is parked outside and exposed to all weather conditions and environmental impacts. Completion of the Public Works Lot Master Plan will identify a location for the building on the site.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Obligation Bonds	\$150,000			\$150,000				\$150,000	
<b>Total</b>	<b>\$150,000</b>			<b>\$150,000</b>				<b>\$150,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Major Facilities Repair and Maintenance

**Project Location:** Town Owned Buildings

**Project Status:** Continuing

**Description and Justification:**

This project provides funding for annual miscellaneous improvements to Town owned buildings in accordance with annual safety, security and condition inspections by the Building Department and Public Works staff. The FY 2016/2017 list of typical and current project priorities include the following:

- Groundwater intrusion issues on the Blacksburg Motor Company Building.
- Internal Ductwork improvements on first and second floors of Municipal Building.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	Continuing
<b>Total</b>	Continuing	Continuing	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Public Works  
**Project Title:** Parking Lot Repaving, Sealing and Striping  
**Project Location:** Various Locations

**Project Status:** Continuing

**Description and Justification:**

This project provides funding for repaving, sealing, and striping parking lots at properties maintained by the Town of Blacksburg.

**FY 2016/17**

- Recreational Building Parking Lot
- Public Works Department Parking Lot

**FY 2017/18**

- Progress Street Parking Lot

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing	\$35,000	\$25,000				\$60,000	Continuing
<b>Total</b>	Continuing	Continuing	\$35,000	\$25,000				\$60,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Rental Property Maintenance

**Project Location:** Thomas-Conner House / Armory Building / Price House / Black House / Odd Fellows

**Project Status:** Continuing

**Description and Justification:**

This project provides funding to handle major maintenance and unexpected repairs to rental properties owned by the Town. Examples of projects funded in past years include fire escape replacement, floor refinishing, interior and exterior painting, shutter replacement and porch repairs.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$150,000	Continuing
<b>Total</b>	Continuing	Continuing	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$150,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Roof Replacement

**Project Location:** Town Wide

**Project Status:** Continuing

**Description and Justification:**

This project provides funding for the replacement of membrane, metal, or shingle roofs on town-owned buildings that have exceeded their useful life. The roofs identified in need of replacement over the next five years include:

**FY 2016/2017:** Old Town Hall \$ 58,000

All funding requests include associated engineering fees where required to accomplish the roof replacement and all work will be performed by an outside contractor. All roof replacement projects will incorporate sustainable building techniques where practicable to enhance the energy performance of the new roof system and lower life cycle costs of the building.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/2019	2019/2020	2020/21	Current 5-Year Total	Future Years
General Obligation Bonds	Continuing	Continuing	\$58,000					\$58,000	Continuing
<b>Total</b>	Continuing	Continuing	\$58,000					\$58,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Public Works  
**Project Title:** Town Building Masonry Repair  
**Project Location:** Town Owned Buildings

**Project Status:** In Progress

**Description and Justification:**

This project provides funding to restore masonry and brick at Town buildings:

**FY 2016/17**

- Recreation Center – nonstructural interior cracks currently monitored will need repair.

**FY 2017/18**

- Five Chimneys – exterior rehabilitation of mortar and exterior bricks repaired.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$276,000	\$200,000	\$46,000	\$30,000				\$76,000	
<b>Total</b>	<b>\$276,000</b>	<b>\$200,000</b>	<b>\$46,000</b>	<b>\$30,000</b>				<b>\$76,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Bucket Truck

**Project Location:** Town Wide

**Project Status:** Previously Requested

**Description and Justification:**

This project provides funding for the replacement of the bucket truck used by the Horticulture division and Town electrician for tree maintenance, hanging of seasonal decorations, seasonal lights, parking lot lighting systems, building lights, and response to emergency call-outs from storm related events. The existing equipment is 16+ years old and requires annual maintenance costs in excess of \$5,000 to keep the equipment running at a reliable level of service.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$131,000				\$131,000			\$131,000	
<b>Total</b>	<b>\$131,000</b>				<b>\$131,000</b>			<b>\$131,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Custodial and General Services Equipment Cargo Van

**Project Location:** Town Wide

**Project Status:** Previously Requested

**Description and Justification:**

This project will fund a cargo van with shelving and locking cabinets to be used jointly by the evening custodial and General Services small projects group to transport tools and equipment to facilities and project sites. Currently a hand-me-down vehicle is being used that requires substantial maintenance, does not allow for transport of supplies, does not have a locking storage system to secure tools and is not optimal for the transportation of floor waxing/buffer cleaning equipment and tools that are required to maintain existing facilities.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$28,000		\$28,000					\$28,000	
<b>Total</b>	\$28,000		\$28,000					\$28,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Pavement Condition Index Update

**Project Location:** Town Wide

**Project Status:** Continuing

**Description and Justification:**

This request is to update the Town’s pavement imagery and paving condition assessment scoring for all town streets to meet the five year indexing identified by VDOT. In 2013, the Public Works Department contracted the asset inventory firm, ERoads, to collect and analyze pavement data to compile a condition assessment score (CPI) to prioritize paving and preventative maintenance projects throughout the Town’s road system. The Pavement Condition Index (PCI) is used to qualify streets to be resurfaced under the VDOT Revenue Sharing program. Without this updated PCI, the Town’s revenue sharing funds from VDOT will be limited to only arterial roadways.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing	\$40,000					\$40,000	Continuing
<b>Total</b>	Continuing	Continuing	\$40,000					\$40,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Message Board

**Project Location:** Public Works Lot

**Project Status:** New

**Description and Justification:**

Public Works and the Police Department both need to use portable message boards for outdoor festivals, emergencies, road closures, and other times when communicating with the public is necessary. This additional message board will fill a gap that is becoming increasingly apparent with the ongoing construction and increase in festivals in town.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$17,000				\$17,000			\$17,000	
<b>Total</b>	\$17,000				\$17,000			\$17,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Public Works Lot Master Plan

**Project Location:** 2700 Prosperity Road

**Project Status:** New

**Description and Justification:**

This project will result in the development of a conceptual master plan for the 10+ acres of the existing public works lot and facilities. The Master plan will be divided into phased projects that can be implemented in a controlled fashion over time horizons of 5, 10, and 20 years to allow the Public Works operation to grow in a manageable and efficient manner. This project will develop a master plan that can be used for years to come to efficiently utilize space on the property and allow for the flexibility of the space for future expansions.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2021/22	Current 5-Year Total	Future Years
General Fund	\$16,600		\$16,600					\$16,600	
<b>Total</b>	\$16,600		\$16,600					\$16,600	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Automatic Vehicle Location Vehicle Information System (AVL)

**Project Location:** Public Works Fleet

**Project Status:** New

**Description and Justification:**

In conjunction and coordination with the Departments of Information Technology, GIS, and BT, Public Works started a pilot program on AVL fleet management. This is an industry best practice for risk management, safety, and fleet and asset protection. The AVL system includes a global positioning system (GPS) receiver and sensors mounted on a few trucks that record and communicate the truck's location and speed. The AVL tracks the completion of fall clean-up, leaf removal, and snow removal routes as well as routine operations. The truck's information is transmitted via a web-based program to the public works office for analysis. This system benefits staff and department efficiency by allowing staff to see when a route is falling behind as well as identifying streets that may have been missed.

Industry-wide, up to 30 percent fuel savings are realized with the implementation of AVL because "side trips" are curtailed, take home vehicles are not used to run errands, and employees take the most direct route between jobs. Eventually it is anticipated the department will be able to adjust the fleet to more accurately reflect day-to-day use based on data collected from public works operations as measured by AVL.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$31,000			\$31,000				\$31,000	
<b>Total</b>	\$31,000			\$31,000				\$31,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Bicycle Infrastructure Improvements

**Project Location:** Town Wide

**Project Status:** Continuing

**Description and Justification:**

This project provides funding to improve bicycle infrastructure town wide. Examples include updating existing bicycle facilities to current standards with appropriate pavement markings, racks, and signage as well as marking new facilities in accordance with the Town of Blacksburg Bicycle Master Plan to encourage alternative modes of travel.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	\$20,000	\$35,000	\$20,000	\$20,000	\$20,000		\$95,000	Continuing
<b>Total</b>	Continuing	\$20,000	\$35,000	\$20,000	\$20,000	\$20,000		\$95,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Public Works Curb, Gutter and Sidewalk Construction Projects

**Project Location:** Town Wide

**Project Status:** Continuing

**Description and Justification:**

This project funds the construction of curb, gutter, and sidewalk that is not funded through the VDOT Revenue Sharing Fund curb, gutter and sidewalk replacement and infill projects.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing		\$15,000	\$15,000	\$15,000		\$45,000	Continuing
<b>Total</b>	Continuing	Continuing		\$15,000	\$15,000	\$15,000		\$45,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Energy Efficiency Upgrades

**Project Location:** Town Properties

**Project Status:** New

**Description and Justification:**

Energy audits have been conducted on several town facilities by two local energy efficiency contractors. The funds pay for the following improvements to the facilities, as recommended by the audits. Projects are prioritized by estimated return on investment:

- 1) Five Chimneys – Cost: \$11,900 Annual Energy Savings: \$1,218**  
Insulation and air-sealing in basement, crawlspace and attic; duct air-sealing.
- 2) Boatwright House – Cost: \$28,000 Annual Energy Savings: \$2,100**  
Insulation and air-sealing in basement and attic. Duct air-sealing.

In future years the following projects will be evaluated:

- **Price House** – Insulation and air-sealing in basement and attic.
- **Bennett House** – Insulation and air-sealing in basement and attic.
- **Old Town Hall** – Insulation and air-sealing in basement, crawlspace, attic and exterior walls; duct air-sealing.
- **Thomas Conner House** – Insulation and air-sealing in basement and attic. Duct replacement for occupant health and safety.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$170,349	\$40,000	\$40,700	\$30,030	\$31,774	\$27,845		\$130,349	
<b>Total</b>	<b>\$170,349</b>	<b>\$40,000</b>	<b>\$40,700</b>	<b>\$30,030</b>	<b>\$31,774</b>	<b>\$27,845</b>		<b>\$130,349</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Transfers to Building Systems Depreciation Fund

**Project Location:** Various Town Buildings

**Project Status:** Continuing

**Description and Justification:**

This project supports the Major Building System replacement project by transferring funds to a depreciation fund, which is used to replace major building systems prior to their failure.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing	\$132,002	\$132,002	\$132,002	\$132,002	\$132,002	\$660,010	Continuing
<b>Total</b>	Continuing	Continuing	\$132,002	\$132,002	\$132,002	\$132,002	\$132,002	\$600,010	Continuing

## Transfers to Building Systems Depreciation Fund

Description	Installation Date	Life	Replacement Cost	Depreciation	FY Replacement
<b>Aquatic Center</b>					
Heat Exchanger - Spa	2005	20	\$13,200	\$660	2025
Heat/cool roof top package unit - Lobby Area	2005	15	\$11,000	\$733	2020
Z pack duct energy recovery system heat w/ duct heater	2016	20	\$60,000	\$3,000	2036
1 gas fired domestic water heater	2015	20	\$20,000	\$1,000	2035
1 gas fired boiler	1992	26	\$75,000	\$2,885	2018
Energy Recovery Unit/ heat-air-dem-Pool Area (Dectron)	2003	15	\$330,000	\$22,000	2018
A - Heat Exchangers - Pool	2015	20	\$8,000	\$400	2035
B - Heat Exchangers - Pool	1993	24	\$8,000	\$333	2017
			<b>\$525,200</b>	<b>\$31,011</b>	
<b>Armory</b>					
6 A/C units with gas heat	2007	20	\$75,000	\$3,750	2027
1 a/c split system w/ gas furnace	2007	20	\$4,400	\$220	2027
			<b>\$79,400</b>	<b>\$3,970</b>	
<b>Bennett</b>					
1 ea forced air electric furnace w/ heat pump	2004	20	\$3,000	\$150	2024
1 ea forced air gas furnace w/ A/C	2004	20	\$3,300	\$165	2024
2 ea a/c split system	2004	20	\$8,800	\$440	2024
			<b>\$15,100</b>	<b>\$755</b>	
<b>Cemetery</b>					
Gas fired furnace with A/C	2015	20	\$8,000	0	2035
A/C Condensor	2015	20	\$5,500	0	2035
Gas Fired Unit Heater	2015	15	\$4,000	\$267	2030
			<b>\$17,500</b>	<b>\$267</b>	
<b>Five Chimneys</b>					
1 a/c split system	2016	15	\$5,000	\$333	2031
1 gas fired furnace	2016	15	\$5,000	\$333	2031
			<b>\$10,000</b>	<b>\$667</b>	
<b>Golf Course Pro Shop</b>					
Heat Pump with backup electric heat	1995	22	\$5,500	\$250	2017
			<b>\$5,500</b>	<b>\$250</b>	
<b>Golf Course Maintenance Shop</b>					
3 Gas Furnace	2011	20	\$9,000	450	2031
			<b>\$9,000</b>	<b>\$450</b>	
<b>Municipal Building</b>					
1 A/C ductless split system computer room	2012	15	\$11,000	\$733	2027
1 A/C ductless split system computer room	2012	15	\$11,000	\$733	2027
roof top package HVAC-1st and 2nd floor	2012	20	\$145,000	\$7,250	2032
VRF A/C system w/ ERV 3rd floor	2012	15	\$75,000	\$5,000	2027
A/C split system Town Hall Conference Room 1st floor	2016	15	\$4,000	\$267	2031
Roof top package w/ gas heat council chambers	2016	20	\$22,000	\$1,100	2036
Roof top A/C unit council chambers	2016	20	\$4,000	\$200	2036
A/C condenser split system court offices	2001	16	\$7,700	\$481	2017
indoor air handler court offices	1992	25	\$5,000	\$200	2017
indoor duct heater court offices	1992	25	\$9,000	\$360	2017
control system court offices	1992	25	\$5,000	\$200	2017
Packaged Terminal Heat Pump break room 1st floor	2008	10	\$1,500	\$150	2018
Domestic hot water heater 1st floor	2007	15	\$12,100	\$807	2022
Elevator	2012	30	\$98,000	\$3,267	2042
			<b>\$410,300</b>	<b>\$20,748</b>	

**Transfers to Building Systems Depreciation Fund**

<b>Old Town Hall</b>													
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>								
1 forced air gas furnace	2005	15	\$6,600	\$440	2020								
1 split a/c system / heat pump	2005	15	\$6,600	\$440	2020								
			<b>\$13,200</b>	<b>\$880</b>									
<b>Parks &amp; Rec Administration</b>													
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>								
3 forced air furnaces	1998	19	\$9,900	\$521	2017								
3 split a/c systems	1998	19	\$16,500	\$868	2017								
			<b>\$26,400</b>	<b>\$1,389</b>									
<b>Police Department Building</b>													
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>								
roof top cooling & heating unit - Chief Area	2003	20	\$15,000	\$750	2023								
roof top cooling & heating unit - Training Room	2003	20	\$10,000	\$500	2023								
1 roof top cooling & heat unit - Jail	1999	20	\$12,000	\$600	2019								
1 pneumatic control system	1982	35	\$16,500	\$471	2017								
1 gas fired boiler	1982	35	\$27,500	\$786	2017								
2 a/c condenser split systems	1998	19	\$8,800	\$463	2017								
1 VAV Controller	1992	25	\$8,800	\$352	2017								
2 custom built air handler w/hot water heat	1982	35	\$12,000	\$343	2017								
a/c system heat w/electric furnace - evidence area	2000	20	\$4,000	\$200	2020								
2 a/c split ductless for record room / dispatch	2002	20	\$13,200	\$660	2022								
			<b>\$127,800</b>	<b>\$5,125</b>									
<b>Police Storage Building</b>													
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>								
1 gas fired furnace	1999	20	\$3,850	\$193	2019								
			<b>\$3,850</b>	<b>\$193</b>									
<b>Police Communication Building - Clay Street</b>													
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>								
4 a/c units w/electric heat	1997	20	\$24,000	\$1,200	2017								
			<b>\$24,000</b>	<b>\$1,200</b>									
<b>Police Communication Building - North main Street</b>													
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>								
2 a/c units w/electric heat	2000	20	\$13,000	\$650	2020								
			<b>\$13,000</b>	<b>\$650</b>									
<b>Price House</b>													
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>								
2 a/c split ductless heat pumps	2009	15	\$20,000	\$1,333	2024								
			<b>\$20,000</b>	<b>\$1,333</b>									
<b>Price's Fork Rd. Fire House</b>													
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>								
2 split a/c systems	2005	15	\$17,600	\$1,173	2020								
2 forced air furnaces	1991	29	\$8,800	\$303	2020								
2 infrared tube heaters	1991	30	\$8,800	\$293	2021								
2 a/c & heat pump systems	2014	15	\$12,500	\$833	2029								
			<b>\$47,700</b>	<b>\$2,603</b>									
<b>Progress St. Fire House</b>													
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>								
1 pneumatic control system	1986	31	\$16,500	\$532	2017								
1 gas fired boiler - main level and basement	1986	31	\$38,500	\$1,242	2017								
3 roof top a/c package units	1991	26	\$33,000	\$1,269	2017								
2 split a/c systems	1996	21	\$17,600	\$838	2017								
ductless heat pump dual zone unit	2007	20	\$5,000	\$250	2027								
2 hanging air handler - bay area	1983	35	\$10,000	\$286	2018								
Exterior Vertical Lift	2012	15	\$15,000	\$1,000	2027								
			<b>\$135,600</b>	<b>\$5,417</b>									

## Transfers to Building Systems Depreciation Fund

Purchasing Warehouse		Installation Date	Life	Replacement Cost	Depreciation	FY Replacement
<b>Description</b>						
	Horizontal Furnace forced gas	2016	21	\$1,650	\$79	2037
	1 split a/c system	2016	10	\$8,800	\$880	2026
	Exhaust Fan warehouse area	2016	20	\$880	\$44	2036
	a/c window - wall	2016	10	\$600	\$60	2026
	2 large gas fired hanging heater - carpenter shop	2011	15	\$15,000	\$1,000	2026
	ductless split system - technology	2006	20	\$5,000	\$250	2026
	small unit gas fired hanging heater - meter room	1999	20	\$4,000	\$200	2019
	2 large gas fired hanging heater - warehouse	2012	21	\$10,000	\$476	2033
	A/C window (controlled temperature room)	2016	15	\$2,000	\$133	2031
				<b>\$47,930</b>	<b>\$3,122</b>	

PW Administration Building		Installation Date	Life	Replacement Cost	Depreciation	FY Replacement
<b>Description</b>						
	1 forced air gas fired furnace - training	2004	16	\$4,950	\$309	2020
	1 forced air gas fired furnace - training	2004	16	\$3,300	\$206	2020
	1 forced air gas horizontal furnace admin	1998	20	\$3,300	\$165	2018
	1 split a/c system - admin	1998	20	\$4,950	\$248	2018
	1 forced air gas fired furnace - lunchroom	2000	17	\$3,300	\$194	2017
	1 split a/c system - lunchroom	2000	17	\$4,950	\$291	2017
				<b>\$24,750</b>	<b>\$1,413</b>	

PW Storage Buildings		Installation Date	Life	Replacement Cost	Depreciation	FY Replacement
<b>Description</b>						
	1 gas fired furnace - sign shop	2011	15	\$3,200	\$213	2026
	1 gas fired unit heat - green shed	2012	15	\$3,200	\$213	2027
	1 gas fired unit heat - New PW shed	2012	15	\$3,200	\$213	2027
	1 gas fire unit heat - landscape shed	2000	17	\$3,200	\$188	2017
				<b>\$12,800</b>	<b>\$828</b>	

Recreation Center		Installation Date	Life	Replacement Cost	Depreciation	FY Replacement
<b>Description</b>						
	6 hot water air handlers - gym & locker room	2015	34	\$11,000	\$324	2049
	1 pneumatic temperature control system	2015	34	\$16,500	\$485	2049
	3 gas fired boiler	2005	30	\$33,000	\$1,100	2035
	1 roof top a/c package unit computer lab & office	2012	20	\$8,500	\$425	2032
	1 ERV computer & office area	2012	20	\$9,000	\$450	2032
	2 roof top package unit gas - art room & senior	1998	20	\$16,000	\$800	2018
	4 LG Split Systems - multipurpose room	2013	20	\$21,000	\$1,050	2033
	1 ERV multipurpose room	2013	20	\$13,000	\$650	2033
	1 roof top package - program room	2014	20	\$13,000	\$650	2034
	1 roof top package - social room	2014	20	\$8,100	\$405	2034
	1 ERV program and social room	2014	20	\$9,000	\$450	2034
	1 roof top package with dehumidifier weight/exercise room	2009	20	\$12,000	\$600	2029
	1 ERV in weight/exercise room	2009	20	\$4,000	\$200	2029
				<b>\$174,100</b>	<b>\$7,589</b>	

Thomas Conner House		Installation Date	Life	Replacement Cost	Depreciation	FY Replacement
<b>Description</b>						
	2 a/c split systems w/gas furnace	1994	25	\$22,000	\$880	2019
	1 gas fired boiler	1994	30	\$5,500	\$183	2024
	2 a/c units window	2016	15	\$4,000	\$267	2031
				<b>\$31,500</b>	<b>\$1,330</b>	

PW - Town Garage		Installation Date	Life	Replacement Cost	Depreciation	FY Replacement
<b>Description</b>						
	1 waste oil fired furnace	2006	20	\$8,800	\$440	2026
	4 gas fired tube heaters	2004	20	\$9,900	\$495	2024
	2 window a/c unit	2016	16	\$1,200	\$75	2032
	5 infrared heating units	1997	20	\$2,750	\$138	2017
	2 electric heating units ceiling	2000	20	\$1,200	\$60	2020
	Exhaust evacuation system	2012	20	\$50,000	\$2,500	2032
				<b>\$73,850</b>	<b>\$3,708</b>	

**Transfers to Building Systems Depreciation Fund**

<b>Blacksburg Motor Company</b>									
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>				
14 Water Source Heat Pumps	2008	20	\$56,000	\$2,800	2028				
1 Geothermal Loop	2008	30	\$90,000	\$3,000	2038				
4 Building Sump Pumps	2008	10	\$4,200	\$420	2018				
5 Ductless Split A/C Units	2008	15	\$12,500	\$833	2023				
1 Subsurface Ventilation System	2011	10	\$5,000	\$500	2021				
1 Engine Generator	2008	20	\$55,000	\$2,750	2028				
1 elevator system	2008	40	\$95,000	\$2,375	2048				
			<b>\$317,700</b>	<b>\$12,678</b>					
<b>Kipps Restroom</b>									
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>				
1 ERV with Heat	2013	20	\$10,500	\$525	2033				
3-ceiling mounted unit heaters	2013	10	\$6,000	\$600	2023				
			<b>\$16,500</b>	<b>\$1,125</b>					
<b>Odd Fellows Hall and Annex</b>									
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>				
1 Daikin heat pump with 2 indoor fan coils	2009	15	\$10,000	\$667	2024				
1 split system heat pump with electric heat	2009	15	\$6,000	\$400	2024				
			<b>\$16,000</b>	<b>\$1,067</b>					
<b>Alexander Black House</b>									
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>				
2 Heat Pump systems	2014	20	\$25,000	\$1,250	2034				
1 HVAC Dehumidifier	2014	15	\$5,000	\$333	2029				
			<b>\$30,000</b>	<b>\$1,583</b>					
<b>Fire House III</b>									
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>				
4 Gas Furnaces w/ AC	2009	20	\$44,000	\$2,200	2029				
4 Tube type gas heat	2008	15	\$16,000	\$1,067	2023				
1 VFR system (12 indoor units & 2 outdoor units)	2015	15	\$85,000	\$5,667	2030				
1 ERV unit	2015	15	\$15,000	\$1,000	2030				
1 Elevator	2015	30	\$65,000	\$2,167	2045				
1 Compressor/Dryer	2008	10	\$10,500	\$1,050	2018				
			<b>\$235,500</b>	<b>\$13,150</b>					
<b>New Rescue</b>									
<b>Description</b>	<b>Installation Date</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>FY Replacement</b>				
new HVAC system in progress - cost are estimated	2016	20	\$150,000	\$7,500	2036				
			<b>\$150,000</b>	<b>\$7,500</b>					
<b>Total Existing Equipment in Program</b>			<b>\$2,614,180</b>						<b>\$132,002</b>

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Transfer to Equipment Depreciation Fund

**Project Location:** Not Applicable

**Project Status:** Continuing

**Description and Justification:**

This fund was established in FY 1977/78 to set aside each year, on a cumulative basis, enough funding to allow for the replacement of equipment that has reached its useful life. This list on the following pages contains equipment presently included in the replacement fund. Funding in this manner eliminates instances in which a large equipment purchase for the General Fund, Water and Sewer Fund, CDBG Fund, and Solid Waste Fund would require an increase in taxes, fees or utility service rates. An itemized listing of vehicles and equipment is included in the following pages.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Fire Fund	Continuing	Continuing	\$283,500	\$283,500	\$283,500	\$283,500	\$283,500	\$1,417,500	Continuing
General Fund	Continuing	Continuing	\$579,916	\$579,916	\$579,916	\$579,916	\$579,916	\$2,899,580	Continuing
Police Fund	Continuing	Continuing	\$330,775	\$330,775	\$330,775	\$330,775	\$330,775	\$1,653,875	Continuing
Rescue Fund	Continuing	Continuing	\$158,958	\$158,958	\$158,958	\$158,958	\$158,958	\$794,790	Continuing
Waste Mtg.	Continuing	Continuing	\$51,683	\$51,683	\$51,683	\$51,683	\$51,683	\$258,415	Continuing
W/S Fund	Continuing	Continuing	\$266,937	\$266,937	\$266,937	\$266,937	\$266,937	\$1,334,685	Continuing
<b>Total</b>	Continuing	Continuing	\$1,671,769	\$1,676,769	\$1,671,769	\$1,671,769	\$1,671,769	\$8,358,845	Continuing

TRANSFER TO EQUIPMENT DEPRECIATION FUND

Equip. #	Ref. #	Description	FY Acquired	Life	Replacement Cost	Depreciation	Recommended Replacement
<b>Fire Fund</b>							
830	FD-09	Pumper	2007	10	700,000	70,000	2017
559	FD-11	Truck-Brush	2002	15	85,000	5,667	2017
50010	FD-10	Pumper	1998	20	700,000	35,000	2018
402	FD-02	Truck-Ladder-Platform	1999	20	1,200,000	60,000	2019
891	FD-28	Sedan, Full Size	2009	10	35,000	3,500	2019
914	FD-29	SUV, Full Size	2009	10	62,000	6,200	2019
771	FD-17	Truck-Pick-up, F-550 4WD	2006	15	62,000	4,133	2021
1092	FD-21	Truck-Pickup, 1/2 ton 4WD CC	2013	8	60,000	7,500	2021
1154	FD-13	Truck-Brush	2015	8	100,000	12,500	2023
1124	FD-14	Box Truck -Special Purpose	2014	10	90,000	9,000	2024
829	FD-03	Truck-Ladder	2007	20	900,000	45,000	2027
1117	FD-05	Mobile Air Unit (Chasis)	2013	20	500,000	25,000	2033
			<b>Fund Total:</b>		<b>\$4,494,000</b>	<b>\$283,500</b>	
<b>General Fund</b>							
791	HD-101	SUV, Economy 2WD	2007	10	25,000	2,500	2017
858	HD-201	Sedan, Economy	2008	10	20,000	2,000	2018
775	GC-401	Truck-Pickup, 1 ton 4WD	2007	10	35,000	3,500	2017
667	GC-802	Tractor, 40 HP	2004	13	50,000	3,846	2017
430	GC-805	Mower-Greens	1999	18	35,000	1,944	2017
910	HT-402	Truck-Pickup, 1 ton 4WD, util bed	2009	8	50,000	6,250	2017
911	HT-404	Truck-Pickup, 1 ton 4WD, util bed	2009	8	50,000	6,250	2017
93	MP-402	Truck-Traffic Message Board	2001	16	45,000	2,813	2017
889	PK-809	JD Ballfield Rake 3 Wheel	2009	8	22,000	2,750	2017
	PW-06	Mowers (3)	2010	7	36,000	5,143	2017
788	TE-402	Truck-Pickup, 1 ton 4WD, util bed	2007	10	50,000	5,000	2017
865	BD-403	Truck-Pickup, 1 ton 4WD, util bed	2008	10	50,000	5,000	2018

TRANSFER TO EQUIPMENT DEPRECIATION FUND

847	GC-04	5 Gang Mower	2000	18	35,000	1,944	2018
	GS-101	Sedan, Economy	2008	10	20,000	2,000	2018

Equip. #	Ref. #	Description	FY Acquired	Life	Repl. Cost	Depreciation	Replacement
<b>General Fund - continued</b>							
869	HT-403	Truck-Pickup, F550 4WD	2008	10	50,000	5,000	2018
845	IN-101	SUV, Economy 2WD	2008	10	25,000	2,500	2018
846	IN-103	SUV, Economy 4WD	2008	10	30,000	3,000	2018
844	IN-104	SUV, Economy 4WD	2008	10	30,000	3,000	2018
877	MP-102	SUV, Economy 2WD	2008	10	25,000	2,500	2018
868	PK-401	Truck-Pickup, 1 ton 4WD, util bed	2008	10	50,000	5,000	2018
669	PK-403	Truck-Pickup, 1 ton 4WD, util bed	2005	13	50,000	3,846	2018
	PW-01	Mowers (2)	2011	7	24,000	3,429	2018
843	PW-101	Sedan, Economy	2008	10	20,000	2,000	2018
848	RC-101	SUV, Economy 2WD	2008	10	25,000	2,500	2018
859	RC-201	Sedan, Economy	2008	10	20,000	2,000	2018
879	RC-303	Van, 23-Passenger	2008	10	80,000	8,000	2018
878	RC-306	Van, Mini Passenger	2008	10	30,000	3,000	2018
955	AS-502	Truck-Dump, Standard	2010	9	120,000	13,333	2019
960	AS-503	Truck-Dump, 4WD	2010	9	130,000	14,444	2019
894	BD-405	Truck-Pickup, 1 ton 4WD, util bed	2009	10	50,000	5,000	2019
446	EO-901	Trailer, Low Boy	2001	18	45,000	2,500	2019
750	GC-810	Sprayer	2006	13	30,000	2,308	2019
777	GC-901	Leaf Vac w/Yard Hopper	2001	18	30,000	1,667	2019
	PW-02	Mowers (2)	2012	7	24,000	3,429	2019
895	PW-102	Sedan, Economy	2009	10	20,000	2,000	2019
957	SD-501	Truck-Dump, Standard	2010	9	120,000	13,333	2019
959	SD-502	Truck-Dump, Standard	2010	9	120,000	13,333	2019
953	SW-501	Truck-Dump, Standard	2010	9	120,000	13,333	2019
1029	TE-901	Message Board, Solar Powered	2012	7	20,000	2,857	2019

**TRANSFER TO EQUIPMENT DEPRECIATION FUND**

<b>Equip. #</b>	<b>Ref. #</b>	<b>Description</b>	<b>FY Acquired</b>	<b>Life</b>	<b>Repl. Cost</b>	<b>Depreciation</b>	<b>Replacement</b>
1013	TM-101	SUV, Economy 4WD	2012	7	30,000	4,286	2019
941	CE-808	Gator Toolcat	2010	10	50,000	5,000	2020
447/825	MP-502	Truck-Dump, Tandem	2007	13	135,000	10,385	2020
1015	SW-401	Truck-Pickup, 1 ton 4WD, util bed	2012	8	50,000	6,250	2020
1035	TE-401	Truck, Bucket	2012	8	150,000	18,750	2020
1054	CC-401	Truck-Pickup, 1 ton 4WD, util bed	2013	8	50,000	6,250	2021
1053	CE-401	Truck-Pickup, 1 ton 4WD	2013	8	35,000	4,375	2021
<b>General Fund - continued</b>							
947	HT-405	Truck-F550 Flatbed	2009	12	50,000	4,167	2021
	PW-03	Mowers (2)	2014	7	30,000	4,286	2021
1044	RC-302	Van, 15-Passenger	2013	8	30,000	3,750	2021
1055	SD-401	Truck-Pickup, 1 ton 4WD, util bed	2013	8	50,000	6,250	2021
1121	AS-903	Asphalt Patching Equipment	2014	8	80,000	10,000	2022
1016	CE-701	Backhoe	2012	10	125,000	12,500	2022
1108	EG-101	SUV, Economy 2WD	2014	8	25,000	3,125	2022
	GC-01	Mowers (2) - Golf Course	2015	7	30,000	4,286	2022
9274	GC-801	Tractor	1994	28	20,000	714	2022
1155	GC-811	Mower-Greens	2015	7	35,000	5,000	2022
1095	HT-401	Truck-Pickup, 1/2 ton 4WD	2014	8	30,000	3,750	2022
940	HT-801	Bobcat Toolcat	2010	12	50,000	4,167	2022
1116	HT-802	ATV	2014	8	15,000	1,875	2022
1101	MP-401	Truck-Pickup, F550 4WD	2014	8	50,000	6,250	2022
1125	PI-301	Van, Standard Cargo	2014	8	30,000	3,750	2022
1115	PK-402	Truck-Pickup, 1 ton EC 4WD	2014	8	35,000	4,375	2022
	PW-04	Mowers (2)	2015	7	30,000	4,286	2022
1098	PW-201	Sedan, Economy	2014	8	25,000	3,125	2022
1107	ST-101	SUV, Economy 4WD	2014	8	30,000	3,750	2022
807	SW-701	Backhoe	2007	15	125,000	8,333	2022
1162	AS-401	Truck-Pickup, F550 4WD, util bed	2015	8	60,000	7,500	2023
1147	BD-401	Truck-Pickup, 1/2 ton 4WD	2015	8	30,000	3,750	2023

**TRANSFER TO EQUIPMENT DEPRECIATION FUND**

Equip. #	Ref. #	Description	FY Acquired	Life	Repl. Cost	Depreciation	Replacement
1160	BD-402	Truck-Pickup, 1 ton 4WD, util bed	2015	8	50,000	6,250	2023
1059	BD-601	Scissor Lift with Trailer	2013	10	20,000	2,000	2023
870	CH-101	SUV, Economy 2WD	2008	15	20,000	1,333	2023
1172	GC-601	Sand Trap Rake	2015	8	30,000	3,750	2023
1093	HT-501	Truck- Dump, Water	2013	10	110,000	11,000	2023
875	HT-702	Loader, Skid Steer	2008	15	45,000	3,000	2023
1179	SW-601	Saw, Walk Behind	2015	8	27,000	3,375	2023
893	AS-602	Asphalt Maintainer	2009	15	200,000	13,333	2024
1168	AS-606	Sweeper-Street	2016	8	300,000	37,500	2024
1025	AS-703	Loader	2012	12	175,000	14,583	2024
<b>General Fund - continued</b>							
1087	CC-701	Excavator, Mini 50	2014	10	70,000	7,000	2024
1102	CC-901	Trailer, 28' Deckover Tilt	2014	10	20,000	2,000	2024
1084	EO-502	Truck, Service Crane	2014	10	180,000	18,000	2024
On Order	GC-02	Mowers (#1) - Golf Course	2016	8	15,000	1,875	2024
On Order	GC-02	Mowers (#2) - Golf Course	2016	8	15,000	1,875	2024
1023	GC-806	Mower-Fairway, 4WD	2012	12	50,000	4,167	2024
1126	GR-801	Tractor, Side Mower	2014	10	150,000	15,000	2024
1146	MP-503	Truck-Dump, Tandem	2015	9	150,000	16,667	2024
On Order	AS-501	Truck-Dump, Tandem	2016	9	185,000	20,556	2025
1150	AS-704	Loader, Compact Track	2015	10	80,000	8,000	2025
697	EO-501	Road Tractor	2005	20	100,000	5,000	2025
	TR-01	Trailers (7) - PW	2009	16	33,850	2,116	2025
1169	AS-701	Backhoe	2016	10	135,000	13,500	2026
1182	EG-103	SUV, Economy 4WD	2016	10	30,000	3,000	2026
1184	IN-105	SUV, Standard 4WD	2016	10	30,000	3,000	2026
1178	SD-701	Backhoe	2016	10	135,000	13,500	2026
						<b>\$579,916</b>	
<b>Police Fund</b>							
566	PD-031	Truck-Pickup, 1 ton 4WD, marked	2009	8	50,000	6,250	2017

TRANSFER TO EQUIPMENT DEPRECIATION FUND

Equip. #	Ref. #	Description	FY Acquired	Life	Repl. Cost	Depreciation	Replacement
887	PD-086	SUV, Standard	2009	8	35,000	4,375	2017
890	PD-0901	SUV, Standard	2009	8	35,000	4,375	2017
899	PD-0902	Sedan, Full Size-Marked, w/add ons	2009	8	50,000	6,250	2017
896	PD-0903	SUV, Standard	2009	8	35,000	4,375	2017
900	PD-0904	Sedan, Full Size-Marked, w/add ons	2009	8	50,000	6,250	2017
903	PD-0905	Sedan, Full Size-Marked, w/add ons	2009	8	50,000	6,250	2017
904	PD-0906	Sedan, Full Size-Marked, w/add ons	2009	8	50,000	6,250	2017
905	PD-0907	Sedan-Full Size-Unmarked w/add ons	2009	8	50,000	6,250	2017
898	PD-1001	Sedan, Full Size	2009	8	30,000	3,750	2017
973	PD-1003	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
974	PD-1004	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
975	PD-1005	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
988	PD-1006	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
<b>Police Fund - continued</b>							
989	PD-1007	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
990	PD-1008	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
991	PD-1009	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
1010	PD-1102	Sedan, Full Size-Marked, w/add ons	2011	8	50,000	6,250	2019
1012	PD-1104	Sedan, Full Size-Marked, w/add ons	2011	8	50,000	6,250	2019
1014	PD-1105	Sedan, Full Size	2011	8	30,000	3,750	2019
1024	PD-1201	Van - Jail	2012	8	50,000	6,250	2020
1063	PD-1301	Sedan, Full Size-Marked, w/add ons	2013	8	50,000	6,250	2021
1064	PD-1302	Sedan, Full Size-Marked, w/add ons	2013	8	50,000	6,250	2021
1065	PD-1303	Sedan, Full Size-Marked, w/add ons	2013	8	50,000	6,250	2021
1066	PD-1304	Sedan, Full Size-Marked, w/add ons	2013	8	50,000	6,250	2021
1067	PD-1305	Sedan, Full Size-Marked, w/add ons	2013	8	50,000	6,250	2021
1068	PD-1306	Sedan, Full Size-Marked, w/add ons	2013	8	50,000	6,250	2021
1071	PD-1307	SUV, Standard, K9, w/ add ons	2013	8	50,000	6,250	2021
1072	PD-1308	SUV, Standard, K9, w/ add ons	2013	8	50,000	6,250	2021
1061	PD-1309	SUV, Standard, K9, w/ add ons	2013	8	50,000	6,250	2021

TRANSFER TO EQUIPMENT DEPRECIATION FUND

Equip. #	Ref. #	Description	FY Acquired	Life	Repl. Cost	Depreciation	Replacement
1048	PD-1310	SUV, Standard	2013	8	35,000	4,375	2021
1049	PD-1311	SUV, Standard	2013	8	35,000	4,375	2021
1050	PD-1312	Sedan-Unmarked	2013	8	35,000	4,375	2021
1069	PD-1313	SUV, Standard-Marked w/add ons	2013	8	50,000	6,250	2021
1089	PD-1319	SUV, Standard-Marked w/add ons	2013	8	50,000	6,250	2021
1111	PD-1314	Sedan, Full Size-Marked, w/add ons	2014	8	50,000	6,250	2022
1112	PD-1315	Sedan, Full Size-Marked, w/add ons	2014	8	50,000	6,250	2022
1113	PD-1316	Sedan, Full Size-Marked, w/add ons	2014	8	50,000	6,250	2022
1114	PD-1317	Sedan, Full Size-Marked, w/add ons	2014	8	50,000	6,250	2022
1103	PD-1320	Motorcycle-Marked	2014	8	32,000	4,000	2022
1104	PD-1321	Motorcycle-Marked	2014	8	32,000	4,000	2022
1090	PD-1401	SUV, Standard	2014	8	35,000	4,375	2022
1091	PD-1402	SUV, Standard	2014	8	35,000	4,375	2022
1110	PD-1403	SUV, Standard-Marked w/add ons	2014	8	50,000	6,250	2022
1144	PD-1408	Sedan, Full Size-Marked, w/add ons	2014	8	50,000	6,250	2022
856	PD-085	Van - Rapid Deployment w/add ons	2008	15	51,000	3,400	2023
<b>Police Fund - continued</b>							
1140	PD-1404	Sedan, Full Size-Marked, w/add ons	2015	8	50,000	6,250	2023
1141	PD-1405	Sedan, Full Size-Marked, w/add ons	2015	8	50,000	6,250	2023
1142	PD-1406	Sedan, Full Size-Marked, w/add ons	2015	8	50,000	6,250	2023
1143	PD-1407	Sedan, Full Size-Marked, w/add ons	2015	8	50,000	6,250	2023
1145	PD-1409	SUV, Standard	2015	8	35,000	4,375	2023
On Order	PD-077	Sedan, Full Size	2016	8	30,000	3,750	2024
1173	PD-1601	SUV, Full Size-Marked, w/add ons	2016	8	53,000	6,625	2024
1174	PD-1602	SUV, Full Size-Marked, w/add ons	2016	8	53,000	6,625	2024
1175	PD-1603	SUV, Full Size-Marked, w/add ons	2016	8	53,000	6,625	2024
1176	PD-1604	SUV, Full Size-Marked, w/add ons	2016	8	53,000	6,625	2024
1177	PD-1605	SUV, Full Size-Marked, w/add ons	2016	8	53,000	6,625	2024
1180	PD-1606	SUV, Full Size-Unmarked	2016	8	35,000	4,375	2024
<b>Fund Total:</b>					<b>\$2,670,000</b>	<b>\$330,775</b>	

TRANSFER TO EQUIPMENT DEPRECIATION FUND

Equip. #	Ref. #	Description	FY Acquired	Life	Repl. Cost	Depreciation	Replacement
<b>Rescue Fund</b>							
946	RS-57	Ambulance, Type II	2009	8	215,000	26,875	2017
852	RS-C3	Suburban, 4WD	2008	10	75,000	7,500	2018
804	RS-R3	Truck-Pickup, 1 ton 4WD w/add ons	2007	12	70,000	5,833	2019
1094	RS-53	Ambulance	2013	8	215,000	26,875	2021
1156	RS-56	Ambulance-Type II	2015	8	215,000	26,875	2023
1157	RS-R1	Tahoe 4WD	2015	8	60,000	7,500	2023
1158	RS-R2	Tahoe 4WD	2015	8	60,000	7,500	2023
On Order	RS-54	Rescue Crash Truck	2015	20	1,000,000	50,000	2035
			<b>Fund Total:</b>		<b>\$1,910,000</b>	<b>\$158,958</b>	
<b>Waste Management Fund</b>							
773	WM-904	Leaf Machine	2006	12	25,000	2,083	2018
958	WM-501	Truck-Dump, Standard	2010	9	120,000	13,333	2019
952	WM-502	Truck-Dump, Standard	2010	9	120,000	13,333	2019
888	WM-201	Sedan, Economy	2009	12	20,000	1,667	2021
938	WM-905	Leaf Machine	2009	12	25,000	2,083	2021
939	WM-906	Leaf Machine	2009	12	25,000	2,083	2021
1139	WM-802	Sweeper-Sidewalk	2015	8	36,000	4,500	2023
On Order	WM-902	Leaf Machine	2016	8	30,000	3,750	2024
<b>Waste Management Fund - continued</b>							
On Order	WM-903	Leaf Machine	2016	8	30,000	3,750	2024
On Order	LB-01	Leaf Boxes (6) - PW	2015	10	51,000	5,100	2025
			<b>Fund Total:</b>		<b>\$482,000</b>	<b>\$51,683</b>	
<b>Water &amp; Sewer Fund</b>							
776	PS-403	Truck-Pickup, 1 ton 4WD, util bed	2007	10	50,000	5,000	2017
987	SE-904	Sewer Washer	2010	7	40,000	5,714	2017
677	WA-701	Backhoe	2005	12	125,000	10,417	2017
866	PS-402	Truck-Pickup, 1 ton 4WD, util bed	2008	10	50,000	5,000	2018
867	SE-403	Truck-Pickup, 1 ton 4WD, util bed	2008	10	50,000	5,000	2018
864	SE-702	Excavator, Mini with Trailer	2008	10	70,000	7,000	2018

TRANSFER TO EQUIPMENT DEPRECIATION FUND

897	SE-404	Truck-Pickup, 1 ton 4WD, util bed	2009	10	50,000	5,000	2019
822	SE-701	Backhoe	2007	12	125,000	10,417	2019
954	WA-501	Truck-Dump, Standard	2010	9	120,000	13,333	2019
579	WA-601	Asphalt Milling Machine	2004	15	71,000	4,733	2019
698	PS-902	Sewer Pump	2005	15	74,000	4,933	2020
	SE-404A	Sewer TV System	2012	8	100,000	12,500	2020
1051	UT-401	Truck-Pickup, 1/2 ton 4WD	2013	8	30,000	3,750	2021
1099	SE-401	Truck-Pickup, 1 ton 4WD, util bed	2014	8	50,000	6,250	2022
1096	UB-401	Truck-Pickup, 1/2 ton 4WD	2014	8	30,000	3,750	2022
1097	UT-402	Truck-Pickup, 1/2 ton 4WD	2014	8	30,000	3,750	2022
956	WA-502	Truck-Dump, Tandem	2010	12	130,000	10,833	2022
On Order	PS-401	Truck-Pickup, 1 ton 4WD, util bed	2015	8	50,000	6,250	2023
1062	SE-502	Sewer Truck-Combo Washer/Vax	2013	10	400,000	40,000	2023
1106	SE-703	Loader, Heavy Track	2013	10	300,000	30,000	2023
1159	WA-401	Truck-Pickup, 1 ton 4WD, util bed	2015	8	60,000	7,500	2023
1041	WA-706	Excavator, Mini with Trailer	2013	10	70,000	7,000	2023
On Order	SE-901	Light Tower	2016	8	22,000	2,750	2024
On Order	SE-501	Truck-Dump, 4WD	2016	9	185,000	20,556	2025
1148	WA-704	Loader, Skid Steer	2015	10	80,000	8,000	2025
On Order	WA-705	Backhoe, Heavy Track	2016	10	275,000	27,500	2026
			<b>Fund Total:</b>		<b>\$2,637,000</b>	<b>\$266,937</b>	
			<b>Grand Total:</b>		<b>\$17,799,850</b>	<b>\$1,671,769</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Technology

**Project Title:** Technology Replacement

**Project Location:** All except Transit

**Project Status:** Continuing

**Description and Justification:**

This project allocates funds to allow the Technology Department to replace 20% of the existing desktop and laptops used by staff. There are currently 160 computers in use by town departments that are targeted by this fund for replacement. In addition this will fund the replacement of printers, wireless equipment, and various components of the Town network. This fund does not cover computers for the Transit and Water and Sewer Funds, or the AS400 system or any AS400 peripherals.

**Cost Breakdown:**

Desktop computer: \$1,050 – replaced every 5 years  
 Laptop computer: \$1,300 – evaluated every 4 years  
 Printer: \$ 600 – replaced as needed

Below is the anticipated technology replacement schedule for the next five years:

Year	Desktop	Printer	Server	Other	Total
2017	\$34,000	\$3,000	0	\$6,500	\$43,500
2018	\$40,000	\$3,000	0	\$20,000	\$63,000
2019	\$40,000	\$3,000	0	\$20,000	\$63,000
2020	\$40,000	\$3,000	0	\$20,000	\$63,000
2021	\$40,000	\$3,000	0	\$20,000	\$63,000

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing	\$43,500	\$63,000	\$63,000	\$63,000	\$63,000	\$295,500	Continuing
<b>Total</b>	Continuing	Continuing	\$43,500	\$63,000	\$63,000	\$63,000	\$63,000	\$295,500	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Technology

**Project Title:** Server Replacement

**Project Location:** All except Transit

**Project Status:** Continuing

**Description and Justification:**

This project allocates funds to allow the Technology Department to replace existing servers every 5 years. This will build funds to replace servers in year two of this project. Servers deliver the main IT work load for the many applications that run across our organization to the end user computer devices.

**Cost Breakdown:**

Server: \$15,000 – replaced every 5 years

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	\$30,000	\$30,000					\$30,000	Continuing
<b>Total</b>	Continuing	\$30,000	\$30,000					\$30,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Technology

**Project Title:** 10 Gigabit Network Switch Equipment

**Project Location:** All

**Project Status:** New

**Description and Justification:**

This project allocates funds for the Technology Department to upgrade our Top of Rack network equipment to 10 or 40 Gigabit (GB) speed. Current switches are 1 GB in speed. New network, firewall, and storage technologies and the continuing demand for faster data transfer rates have necessitated the need for this equipment.

**Cost Breakdown:**

10 Gigabit Switch Upgrade \$15,000 – evaluate in 5th year

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund			\$15,000					\$15,000	
<b>Total</b>			\$15,000					\$15,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Technology

**Project Title:** Network Firewall Replacement

**Project Location:** All

**Project Status:** New

**Description and Justification:**

This project allocates funds for the Technology Department to replace the eight year old Internet firewall. Cyber security is more important than ever to the wellbeing of any organization. This firewall is the main Internet entry and exit point for Town Internet communications. There is a need to increase the speed and intelligence of the existing system to address the modern cyber threats and deal with new technologies such as video and other agency partnerships.

**Cost Breakdown:**

Firewall Replacement \$15,000 – evaluate in fifth year

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund			\$15,000					\$15,000	
<b>Total</b>			\$15,000					\$15,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Technology  
**Project Title:** Fiber Optic Network  
**Project Location:** All

**Project Status:** In Progress

**Description and Justification:**

This is an aggregation of fiber optic needs for all town departments for the next 2-3 years except Transit. These projects have a life of 20-30 years. Transit has a separate fund for building fiber to traffic signals and improving the Transit fleet communications system.

FY2017

Build fiber to Montgomery County 911 Center in Christainsburg. \$157,500

Future years

None identified at this time

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Obligation Bonds	\$427,700	\$270,200	\$157,500					\$157,500	
<b>Total</b>	<b>\$427,700</b>	<b>\$270,200</b>	<b>\$157,500</b>					<b>\$157,500</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Technology

**Project Title:** Microsoft Office 2016 Upgrade

**Project Location:** All

**Project Status:** New

**Description and Justification:**

This project upgrades the Town staff Microsoft Office Suite from the currently licensed 2007 to 2016. With the recent upgrade to Exchange 2013, the newer Outlook email client in Office 2016 will give staff added features that have been incorporated into the product in the last nine years. This will license the Town for 175 installations of the product. This request also includes \$15,000 for staff training on the new office products. This training is designed to bring in facilitated training on-site at a town building for all staff. It is anticipated an update to the Microsoft Office products will be needed every four years. Training will not be needed for each upgrade.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$111,000		\$63,000				\$48,000	\$111,000	Continuing
<b>Total</b>	<b>\$111,000</b>		<b>\$63,000</b>				<b>\$48,000</b>	<b>\$111,000</b>	<b>Continuing</b>

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Technology

**Project Title:** Data/Video Storage System

**Project Location:** All

**Project Status:** New

**Description and Justification:**

It is anticipated that the organization will need significant new data storage capacity in the next couple of years due to the expansion of video systems that are being planned by Police, Public Works, and other departments. There are some excellent Enterprise solutions for data retention of all data types, including video, for short-term, long-term, cloud, or permanent storage. The Technology Department would like to get ahead of this need and install a ubiquitous solution that can meet the needs of all agencies of the Town. A data storage solution such as this can save the Town money by decreasing the need for more expensive SAN storage and for unique, siloed storage systems that each application would require. This project included funds for a disk and tape storage system.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$79,000			\$79,000				\$79,000	
<b>Total</b>	<b>\$79,000</b>			<b>\$79,000</b>				<b>\$79,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Technology

**Project Title:** Licensing Update - Servers

**Project Location:** All except Transit

**Project Status:** In Progress

**Description and Justification:**

This project will allocate funding for Microsoft software and licensing as described below:

1. License the software running on virtual servers: Quantity 35
2. Purchase client licenses for computers and mobile devices for servers: Quantity 250
3. Purchase license to upgrade database servers to the latest version: Quantity 5
4. Purchase client licenses for database servers: Quantity 10

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$78,000	\$48,000			\$30,000			\$30,000	
<b>Total</b>	<b>\$78,000</b>	<b>\$48,000</b>			<b>\$30,000</b>			<b>\$30,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Technology  
**Project Title:** SAN Upgrade/Replacement  
**Project Location:** All

**Project Status:** In Progress

**Description and Justification:**

The growth of data in the organization is dictating the need for more and faster data storage. New technologies have necessitated a replacement of the current system that is five plus years old.

This is the second year of this project and expands storage with an additional, smaller system. SAN data storage systems have a five year life.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2015/16	2016/17	2017/18	2018/19	2019/20	Current 5-Year Total	Future Years
General Fund	\$115,000	\$86,000	\$29,000					\$29,000	
<b>Total</b>	\$115,000	\$86,000	\$29,000					\$29,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Town Manager's Office

**Project Title:** Five Chimneys Landscaping Master Plan

**Project Location:** Five Chimneys Property

**Project Status:** In Progress

**Description and Justification:**

This project funds the next phase in the Five Chimneys Landscape Master Plan. The project will include renovation of existing brick pathways, installation of new brick paver interior pathways, replacement of the existing pedestrian bridge, and new pathways to connect with the bicentennial Trail.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$83,837	\$25,837	\$58,000					\$58,000	
<b>Total</b>	<b>\$83,837</b>	<b>\$25,837</b>	<b>\$58,000</b>					<b>\$58,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Town Manager's Office  
**Project Title:** Emergency Preparedness Equipment  
**Project Location:** Various

**Project Status:** In Progress

**Description and Justification:**

This project provides funding for various needs identified by the Emergency Preparedness Committee. Funding is included for the installation of emergency generators at the Community Center and Public Works in FY 2019 and FY 2020, respectively. The generator for Public Works replaces an aging unit and the Community Center generator is a new one.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$207,000	\$37,000			\$100,000	\$70,000		\$170,000	
<b>Total</b>	\$207,000	\$37,000			\$100,000	\$70,000		\$170,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Housing and Neighborhood Services

**Project Title:** Progress Street Corridor Improvement Project (Visioning and Planning Phase)

**Project Location:** Bennett Hill/Progress Street Neighborhood

**Project Status:** Previously Requested

**Description and Justification:**

The Housing and Neighborhood Services Office in partnership with various other Town departments will begin a visioning and planning phase for a neighborhood improvement project along the Progress Street corridor between Main Street and Jackson Street.

Funding for this project will allow the initial visioning and planning process to begin with the identification of possible infrastructure and neighborhood improvements. The initial visioning and planning process will also define the scope and magnitude of the project. Improvements may include streetscape, curb and gutter, sidewalks, stormwater management, water, and sewer. This plan will be the foundation for a well thought out future CIP project along the Progress Street corridor.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$30,000				\$30,000			\$30,000	
<b>Total</b>	<b>\$30,000</b>				<b>\$30,000</b>			<b>\$30,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Town Manager/Community Relations Office

**Project Title:** Downtown Kiosk Panel Replacement

**Project Location:** Downtown

**Project Status:** New

**Description and Justification:**

This project will fund the design and fabrication of updated panels for the three downtown kiosks (Two on College Avenue and One on the Corner of Turner and Main.) Funding isn't necessary for a few years as the content and graphics contained on the panels are still current. There's also the possibility of expense sharing on one panel with Virginia Tech.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$16,692				\$16,692			\$16,692	
<b>Total</b>	\$16,692				\$16,692			\$16,692	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Town Manager/Community Relations Office

**Project Title:** Council Chambers Equipment Upgrade

**Project Location:** 300 South Main Street

**Project Status:** In Progress

**Description and Justification:**

This project concludes the High Definition (HD) upgrade of the production and broadcast equipment in the Town Council Chambers. Included in this upgrade are new HD cameras, an HD switcher, monitors, hardware/software, and an HD compatible video server, making the station fully HD capable.

High definition will be a broadcast standard in the next 5-10 years. This project would complete the necessary upgrades to make the system compatible at the time of transition, and would also replace aging equipment. Ultimately this upgrade would have a tremendous impact on televised production quality and in-chambers presentation.

**Breakdown of Costs by Priority:**

- High definition server and associated hardware/software, and installation - \$17,900
- Cameras, switcher, monitors, hardware/software, installation, and freight - \$37,900

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$80,290	\$24,490	\$55,800					\$55,800	
<b>Total</b>	\$80,290	\$24,490	\$55,800					\$55,800	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Housing and Neighborhood Services

**Project Title:**

**Project Location:** Housing and Neighborhood Services

**Project Status:** There are no projects for the CDBG Entitlement Fund in this Recommended Capital Improvement Program.

**Description and Justification:**

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
<b>Total</b>									

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Road Hazard Mitigation

**Project Location:** Town Wide

**Project Status:** Continuing

**Description and Justification:**

This project provides funding to correct serious traffic safety hazards in the right-of-way that include, but are not limited to, road shoulders with inadequate clear zones; road shoulders with drop-offs that exceed VDOT standards for the requirement for guardrails; and obstructions such as road humps, earthen banks, trees or other heavy vegetation that conceal oncoming vehicles approaching driveways and/or intersecting roadways. Many of these hazards are located in the more rural portions of Town; however, they are not limited to rural areas. Most of these hazards may be mitigated using Public Works department labor and equipment, and this funding will primarily be focused on materials such as guardrails and pavement. However, there may be instances where contracted labor and equipment will be required depending on the intensity and time sensitivity of the required mitigation work.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing		\$35,000	\$35,000	\$35,000		\$105,000	Continuing
Revenue Sharing	Continuing	Continuing		\$35,000	\$35,000	\$35,000		\$105,000	Continuing
<b>Total</b>	Continuing	Continuing		\$70,000	\$70,000	\$70,000		\$210,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Sidewalk Trip Hazard Removal

**Project Location:** Town Wide

**Project Status:** Continuing

**Description and Justification:**

This project provides funding for sidewalk trip hazard removal for “severe” and “most severe” classes of hazards by grinding down sidewalk or replacing brick sidewalk tripping hazards via acceptable VDOT methods, where settlement exceeds ½ inch to 2 ½ inches. Trip hazard removal projects bring sidewalks into compliance with ADA and OSHA standards at a lower cost than full replacement. This project is eligible for a VDOT Revenue Sharing match.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500	\$62,500	Continuing
Revenue Sharing	Continuing	Continuing	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500	\$62,500	Continuing
<b>Total</b>	Continuing	Continuing	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$125,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Curb, Gutter and Sidewalk Rebuild

**Project Location:** Town Wide

**Project Status:** In Progress

**Description and Justification:**

This project funds the replacement of old deteriorated, damaged or settled portions of curb, gutter, and sidewalk, construction of short segments of missing walk ways, and updates to curb ramps and driveways according to the attached schedule. Funds are not being requested in FY 2017 to leverage existing Revenue Sharing funds to replace the sidewalk along Main street that is currently narrow and requires ADA ramps.

In FY 2017 previously appropriated VDT Revenue Sharing Funds will be matched with funds from the General Fund to replace the sidewalk along Main Street in front of the Municipal Building. The sidewalk is currently narrow and requires ADA ramps.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Obligation Bonds	Continuing		\$40,000	\$30,000	\$30,000	\$30,000	\$30,000	\$160,000	Continuing
Revenue Sharing	Continuing	\$40,000		\$30,000	\$30,000	\$30,000	\$30,000	\$120,000	Continuing
<b>Total</b>	Continuing	Continuing	\$40,000	\$60,000	\$60,000	\$60,000	\$60,000	\$280,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Major Roadway Repaving

**Project Location:** Town Wide

**Project Status:** Continuing

**Description and Justification:**

Since 2013/14, roadway resurfacing is eligible for funding under the VDOT Revenue Sharing Program. The roads included must have a condition rating which indicates a significant enough deficiency to merit eligibility. The roadways identified are amongst the poorest condition in Town, and thus most eligible for this funding.

If the Town does not receive funds from the VDOT Revenue Sharing Program, this project may be deferred.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing	\$325,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,325,000	Continuing
Revenue Sharing	Continuing	Continuing	\$325,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,325,000	Continuing
<b>Total</b>	Continuing	Continuing	\$650,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$4,650,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS

**Project Title:** HAWK Pedestrian Signal

**Project Location:** Intersection of Webb Street and Prices Fork Road

**Project Status:** New

**Description and Justification:**

The Town has identified the existing crosswalk at the intersection of Webb Street and Prices Fork Road as a safety issue for pedestrian and bicycle traffic. Due to the full occupation of The Edge apartment complex, there is a large increase in pedestrian and bicycle usage due to the complex’s proximity to Virginia Tech. With the construction of The Edge complex, the number of bedrooms tripled from the original apartment complex. This increase in usage results in a large number of pedestrian queues utilizing the crosswalk at Prices Fork Road. Even though there is an existing system in place to alert drivers that there are pedestrians/bicyclists in the crosswalk, observations indicate that there are still multiple instances of near misses and conflicts between vehicular traffic and pedestrian/bicycle traffic.

This project will fund the design and the construction of a High Intensity Activated Crosswalk (HAWK) system to provide for a safer intersection for all users that will stop vehicular traffic and allow pedestrian/bicycle traffic to cross Prices Fork Road similar to a pedestrian crossing at a traffic signal. When the pedestrian crossing is not activated, vehicular traffic will proceed uninterrupted.

The design costs of this project (\$50,000) will be funded through the Town’s General Fund and the construction costs (\$365,000) will be funded through the VDOT Revenue Sharing Program and the Town’s General Fund. The use of the General Fund for design will allow the Town to expedite the construction to be prepared to bid as soon as Revenue Sharing funds are available.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Revenue Sharing	\$182,500		\$182,500					\$182,500	
General Fund	\$50,000	\$50,000							
General Obligation Bonds	\$182,500		\$182,500					\$182,500	
<b>Total</b>	<b>\$415,000</b>	<b>\$50,000</b>	<b>\$365,000</b>					<b>\$365,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS

**Project Title:** Draper Road Streetscape Improvement Plan

**Project Location:** Draper Road from the intersection of College Avenue to Washington Street

**Project Status:** New

**Description and Justification:**

The Virginia Department of Transportation administers a Revenue Sharing program under which local dollars are matched with state funds to accomplish eligible roadway and transportation improvements. The Town has received funding under this program to accomplish new construction and rebuilding of sidewalks, new construction and upgrade of traffic signals, Huckleberry Trail construction, roadway drainage improvements, and other related projects.

This project funds the design of widened sidewalks and streetscape improvements to include street lighting on Draper Road between College Avenue and Washington Street. This project is intended to enhance the pedestrian routes between the Kent Square parking garage and College Avenue with an eight-foot wide walkway with brick banding and downtown streetscape elements.

When complete, these projects and this streetscape will significantly enhance the pedestrian experience and the vibrancy of the downtown.

If the Town does not receive funds from the VDOT Revenue Sharing Program, this project may be deferred

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$50,000					\$50,000		\$50,000	
Revenue Sharing	\$50,000					\$50,000		\$50,000	
<b>Total</b>	<b>\$100,000</b>					<b>\$100,000</b>		<b>\$100,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS

**Project Title:** Sidewalk Infill Projects

**Project Location:** Various Locations

**Project Status:** Continuing

**Description and Justification:**

This project funds the construction of new sidewalk where short segments are missing along the public roads. This project is intended to provide funds for the Town to provide connections where sidewalk may be missing between maintenance projects or between new development and existing walk ways.

Requests for sidewalk infill locations are generally considered through the Corridor Committee prioritization process.

Projects funded would typically be constructed with contracted forces.

If the Town does not receive funds from the VDOT Revenue Sharing Program, this project may be deferred.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	Continuing	Continuing	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000	Continuing
Revenue Sharing	Continuing	Continuing	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000	Continuing
<b>Total</b>	Continuing	Continuing	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$150,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS

**Project Title:** Bicentennial Greenway Relocation - Connor House Property

**Project Location:** Draper Road and Wall Street

**Project Status:** New

**Description and Justification:**

This project will reconstruct the brick Bicentennial Greenway Trail along the rear of the Thomas Connor House property to the intersection of Wall Street and Draper Road. This reconstruction route is consistent with the comprehensive landscape plan that was developed for the Connor House, Black House property. The relocation of the Bicentennial Trail will route through-pedestrian traffic around the event spaces at this newly renovated cultural center.

If the Town does not receive funds from the VDOT Revenue Sharing Program, this project may be deferred.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$20,000		\$20,000					\$20,000	
Revenue Sharing	\$20,000		\$20,000					\$20,000	
<b>Total</b>	<b>\$40,000</b>		<b>\$40,000</b>					<b>\$40,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS

**Project Title:** Heritage Park - Huckleberry Trail Extension Paving

**Project Location:** 2200 Block of Glade Road

**Project Status:** New

**Description and Justification:**

This project will fund the completion of the Huckleberry Trail Extension from the Moore Farm to Linwood Lane. The project includes installing base stone and paving.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Obligation Bonds	\$40,000		\$40,000					\$40,000	
Revenue Sharing	\$40,000		\$40,000					\$40,000	
<b>Total</b>	<b>\$80,000</b>		<b>\$80,000</b>					<b>\$80,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering & GIS

**Project Title:** Drainage Improvements along Mt. Tabor Road

**Project Location:** Mt. Tabor Road from Mt. Tabor Village to Lombardi Drive

**Project Status:** New

**Description and Justification:**

This project funds a stormwater pipe connection from a pipe under Mt. Tabor road to an existing storm drainage network in Woodbine. This will direct the water into the natural drainage ways in the center of Woodbine and away from the residential structure.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Storm Water Fund	\$75,000		\$75,000					\$75,000	
Revenue Sharing	\$75,000		\$75,000					\$75,000	
<b>Total</b>	<b>\$150,000</b>		<b>\$150,000</b>					<b>\$150,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS

**Project Title:** Research Center Drive Improvements - Phase II

**Project Location:** Research Center Drive - 1700 to 2400 Block

**Project Status:** In Progress

**Description and Justification:**

This project involves constructing approximately 2,350 linear feet of road improvements from the terminus of the VDOT improvement project for Research Center Drive to the Town of Blacksburg/Virginia Tech limits. The improvements include construction of left turn lanes from Research Center Drive onto Kraft Drive and North Knollwood Drive, curb and gutter on the east and west sides of Research Center Drive, and an eight foot wide multi-use trail along the east and west sides of Research Center Drive that will provide connections to the existing trail system along Research Center Drive.

Match funding for Phase I of this revenue sharing project has been offered by VCOM, and has been requested of CRC. Partnership with these entities will enable a significant improvement to be made on this important roadway. Additional funds from the VDOT Revenue Sharing Program will be requested in FY 2017 for the remainder of the funding for this project.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Revenue Sharing	\$1,043,603	\$300,000	\$743,606					\$743,606	
VCOM, CRC	\$200,000	\$200,000							
General Obligation Bonds	\$843,603	\$100,000	\$743,600					\$743,600	
<b>Total</b>	<b>\$2,087,206</b>	<b>\$600,000</b>	<b>\$1,487,206</b>					<b>\$1,487,206</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Parks & Recreation

**Project Title:** Golf Course Trail – Palmer Drive to Country Club Drive

**Project Location:** Palmer Drive to Country Club Drive

**Project Status:** In Progress

**Description and Justification:**

This project will complete the asphalt walking trail from Palmer Drive to Country Club Drive. This 8' wide off road trail will act as a greenway connection for the neighbors of Graves Avenue area to the South Main Street shopping area.

If the Town does not receive funds from the VDOT Revenue Sharing Program, this project may be deferred.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Fund	\$ 57,000	\$57,000							
General Obligation Bonds	\$ 57,000		\$57,000					\$57,000	
Revenue Sharing	\$114,000	\$57,000	\$57,000					\$57,000	
<b>Total</b>	<b>\$228,000</b>	<b>\$114,000</b>	<b>\$114,000</b>					<b>\$114,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Parks & Recreation

**Project Title:** Huckleberry Trail Extension – to the Park at South Point

**Project Location:** Along Hightop Road from the Huckleberry Trail Crossing to South Point Drive

**Project Status:** New

**Description and Justification**

This project will extend the asphalt Huckleberry Trail from the newly constructed South Point Drive, where a park and walking trail are being developed, to connect with the Huckleberry Trail crossing of High Top Road. This segment will connect a significant recreation amenity of the Town to the Huckleberry Trail system.

If the Town does not receive funds from the VDOT Revenue Sharing Program, this project may be deferred.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
General Obligation Bonds	\$100,000				\$100,000			\$100,000	
Revenue Sharing	\$100,000				\$100,000			\$100,000	
<b>Total</b>	<b>\$200,000</b>				<b>\$200,000</b>			<b>\$200,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering & GIS

**Project Title:** Storm Water Improvements

**Project Location:** Town Wide

**Project Status:** Previously Requested

**Description and Justification:**

This project provides funding to correct serious drainage problems in the right-of-way that include, but are not limited to; culvert replacement, storm water pipe extension, pipe size upgrades, pipe repair, inlet installation, ditch installation and manhole replacement. Many of these improvements will be constructed using Public Works forces and this funding will primarily be focused on materials such as new pipes, manholes, inlets and other supporting storm drainage structures. There may be instances where contracted labor and equipment will be required depending on the need for a specialist or the time sensitivity of the required repair work.

Funding in FY 2017 through FY 2021 is maintained at an appropriate level to be available to address the proposed projects below. VDOT Revenue Sharing program funding may be pursued for 50% of the annual construction costs. Opportunities to use Public Works department labor and equipment resources as the Town's 50% match will be pursued to reduce the Storm Water fund allocation requirement.

1. Harding Avenue Drainage Improvements
2. Clay Street and Willard Intersection
3. Palmer Drive Drainage Improvements
4. Toms Creek Road Flooding
5. Penn Street Culvert Repair
6. Box Culvert at Police Station

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Storm Water Fund	\$985,000	\$85,000	\$90,000	\$190,000	\$200,000	\$210,000	\$210,000	\$900,000	
<b>Total</b>	\$985,000	\$85,000	\$90,000	\$190,000	\$200,000	\$210,000	\$210,000	\$900,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Engineering & GIS  
**Project Title:** Storm Water Quality Improvements  
**Project Location:** Town Wide

**Project Status:** Previously Requested

**Description and Justification:**

This project provides funding to construct water quality improvements. These projects include but are not limited to; stream restoration projects, Town stormwater facility retrofits to enhance water quality benefits, watershed studies to determine long term improvements to address TDML requirements. There may be instances where professional services or contracted labor and equipment will be required depending on the need for specialist or time sensitivity of the proposed project.

Funding in FY 2017 through FY 2021 is maintained at an appropriate level to be available to address the proposed projects below:

1. Toms Creek Stream Restoration Downstream of Toms Creek Road Crossing
2. Maple Ridge Stormwater Pond Improvements
3. Stream Restoration behind Scott Alan Circle
4. Study for Location of Stormwater Retrofits for TMDL Requirements
5. Construction of Demonstration Projects and TMDL Improvements

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Storm Water Fund	\$600,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	
<b>Total</b>	\$600,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Finance (Utility Billing)

**Project Title:** Meter Maintenance and Replacement

**Project Location:** Town Wide

**Project Status:** Continuing

**Description and Justification:**

The purpose of this project is to set aside funding to maintain and replace utility meters and the necessary electronic components. A water meter, like any other mechanical device, is subject to wear and deterioration with usage. With very few exceptions, meter accuracy decreases with age, resulting in under-registration and loss of accountability. This loss of accuracy also means a loss of water revenue. The system is almost twenty years old and the need to be pro-active in maintenance is vital. This funding would include a coordinated replacement of the residential meters with new technology and the replacement for erosion and environmental stressors for the ECR (encoded communications register) and also replacement of one and two inch commercial meters. The replacement of the MXU's (meter transceiver unit) was accomplished in FY 2015 and allows more accurate and efficient reading capabilities and will enable the Town to upgrade to FlexNet when needed. The annual amount has been reviewed to allow the replacement of the meters with the newest models that are available.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Water/Sewer Fund	Continuing	Continuing	\$105,000	\$105,000	\$105,000	\$105,000	\$105,000	\$525,000	Continuing
<b>Total</b>	Continuing	Continuing	\$105,000	\$105,000	\$105,000	\$105,000	\$105,000	\$525,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Finance (Utility Billing)

**Project Title:** Radio Read Vehicle Transceiver Unit (VXU) Replacement/Upgrade

**Project Location:** Town Wide

**Project Status:** Continuing

**Description and Justification:**

The purpose of this project is to fund the replacement of the VXU (Vehicle Transceiver Unit). This vehicle-based device is used to read meters by radio signals. The current unit was replaced at the end of FY 2012. As technology advances are seemingly ceaseless and changes occur daily, this project would allow for the upgrading and advancement of our Automated Meter Reading System in accordance with its replacement schedule.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Water/Sewer Fund	Continuing	\$28,000			\$35,000			\$35,000	Continuing
<b>Total</b>	Continuing	\$28,000			\$35,000			\$35,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS

**Project Title:** Data Logging Equipment for Wastewater System

**Project Location:** Town Wide

**Project Status:** In Progress

**Description and Justification:**

This project is to continue the installation of remote logging equipment throughout the Town’s wastewater pump stations and collection system as identified by the Town’s wastewater working group for the upcoming fiscal year initiatives. To date loggers have been installed at 12 out of the 25 wastewater pump stations, capital funds from the 2012/2013 are still being expended in this installation effort. The funds being requested will be used to install remote loggers in the remaining wastewater pump stations: Karr Heights, Shawnee, Shenandoah #2, Sturbridge Square, Toms Creek #1, Toms Creek #2, Westover Hills, and Windsor Hills. Loggers will be installed by the Public Works Licensed Electrician and will interface with the Town’s existing data warehouse that is housed in the Engineering and GIS department and allow continuous capacity monitoring and is being incorporated into the Public Works Department alarming system.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Water/Sewer Fund	\$70,600	\$60,600	\$10,000					\$10,000	
<b>Total</b>	\$70,600	\$60,600	\$10,000					\$10,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS Department

**Project Title:** Alleghany Water Tank Rehabilitation

**Project Location:** 905 Clay Street

**Project Status:** Previously Requested

**Description and Justification:**

An evaluation of the Alleghany Water Tank was performed by Tank Industry Consultants as part of the five year inspection cycle recommended by the Virginia Department of Health. The evaluation concluded the tank interior requires recoating to address corrosion concerns, the exterior requires spot cleaning and topcoat application, and the deteriorating foundation needs repair. The typical life cycle for a properly applied coating system is 15-20 years; Alleghany Tank was last repainted in 1996.

Additional safety deficiencies were identified during Health Department and Internal inspections. This will include new railings and ladder standardization to ensure safety when accessing the top of the tank hatch.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Water/Sewer Fund	\$355,000		\$355,000					\$355,000	
<b>Total</b>	\$355,000		\$355,000					\$355,000	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Engineering and GIS

**Project Title:** Draper Road Sewer Capacity Improvements

**Project Location:** Draper Road

**Project Status:** In Progress

**Description and Justification:**

The Draper Road sewer capacity study is investigating the capacity of the existing sewer infrastructure along Draper Road and determining where capacities are inadequate. The study is focusing on the sanitary sewer that contributes to the Roanoke Street flow-meter, focusing on the Draper Road main. This main collects flow from Roanoke Street, Clay Street, and South Main Street, including the Old BMS site. Capacity improvements will be provided where infrastructure lacks capacity for future growth.

This project funds the design and implementation of the results of the study.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Water/Sewer Fund	\$245,250	\$30,000	\$215,250					\$215,250	
<b>Total</b>	\$245,250	\$30,000	\$215,250					\$215,250	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Public Works  
**Project Title:** Fire Hydrant Replacement  
**Project Location:** Town Wide

**Project Status:** In Progress

**Description and Justification:**

This project provides on-going funding to upgrade aging fire hydrants. Old hydrants are at high risk during exercising and flushing activities for potential water main breaks and leaks. With over 1000 hydrants currently in service, under this project, hydrants will be evaluated for replacement annually as determined by their age and maintenance record. No additional money is being requested in 2016/17 due to the back log of work that is scheduled to be done and the limited manpower.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Water/Sewer Fund	Continuing	Continuing		\$30,000	\$30,000	\$30,000	\$30,000	\$120,000	Continuing
<b>Total</b>	Continuing	Continuing		\$30,000	\$30,000	\$30,000	\$30,000	\$120,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Sanitary Sewer Lining and Pipe Bursting for I and I Abatement

**Project Location:** Town Wide

**Project Status:** In Progress

**Description and Justification:**

This project provides on-going annual funding for the repair, replacement, pipe bursting, and lining of old and/or broken sanitary sewer lines that do not provide adequate service and are at high-risk for inflow and infiltration.

Specific locations for inflow and infiltration abatement measures are as prioritized in the Sewer Work Group and as identified through maintenance and operations.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Water/Sewer Fund	Continuing	Continuing	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000	Continuing
<b>Total</b>	Continuing	Continuing	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Public Works  
**Project Title:** Water Main Replacements  
**Project Location:** Town Wide

**Project Status:** Continuing

**Description and Justification:**

This project provides funding to upgrade undersized water lines that restrict flow, reduce pressure, and do not provide adequate fire protection at various locations in the Town's water system. The smaller lines account for the majority of leaks experienced throughout the year. The lines will be replaced with standard 8-inch mains. Many of these small lines are galvanized pipe, are more than 15 years of age, and have corroded to a stage that severely restricts the flow. In many cases, over half of the inside diameter is blocked by corrosion. A project list is attached.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/019	2019/20	2020/21	Current 5-Year Total	Future Years
Water/Sewer Fund	Continuing	Continuing	\$143,850	\$121,440	\$103,320	\$103,200	\$150,000	\$621,810	Continuing
<b>Total</b>	Continuing	Continuing	\$143,850	\$121,440	\$103,320	\$103,200	\$150,000	\$621,810	Continuing

**Water Main Replacement Projects  
FY 2016/17-2020/21**

Streets to be Effected	From	To	(feet) Length	Cost	Comments
<b>FY 2016/17</b>					
Laurel Drive	High Ridge	End	2050	\$86,100	
High Ridge Drive	Laurel	End	925	\$38,850	Replace 4-inch line
East Ridge Drive	Laurel	End	2500	\$105,000	
<b>TOTAL</b>			<b>3425</b>	<b>\$143,850</b>	
<b>FY 2017/2018</b>					
Elizabeth Dr	Broce Dr	Broce Dr	2130	\$89,460	
Golfview Dr	Broce Dr	Cul-de-sac	360	\$14,760	
Summit Dr	Broce Dr	Cul-de-sac	420	\$17,220	
			<b>2910</b>	<b>\$121,440</b>	
<b>FY 2018/2019</b>					
Greenwood Drive	Forest Hills	Shelor Lane	935	\$39,270	
Nellies Cave Road	Shelor Lane	Town Limits	900	\$37,800	
Cranwell Circle	Grissom lane	Cul-da-sac	625	\$26,250	
			<b>2460</b>	<b>\$103,320</b>	
<b>FY 2019/2020</b>					
Hadening Ave	Appartment Hights	from Hardening ave	450	\$19,350	Replace 2" line
Alleghany st.	414 Alleghany	519 Alleghany	1000	\$43,000	
Piedmount St.	Knob Hill dr.	Jefferson st.	950	\$40,850	
				<b>\$103,200</b>	
<b>FY 2020/2021</b>					
Streets to be determined				<u>\$150,000</u>	
<b>TOTAL FY 2016/17 TO FY 2020/21</b>				<b>\$621,810</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Wastewater Solids Dewatering Station

**Project Location:** Cedar Run Pump Station

**Project Status:** In Progress

**Description and Justification:**

This project provides a solids dewatering/grit disposal station to be installed at the Cedar Run sewer pump station site. In order to clean and maintain solids from the Town's 25 wastewater pumping stations and 300 STEP/STEG tanks the Town generates approximately 1600 gallons per year of solids. This project will construct a solids dewatering station at the Town's existing Cedar Run pump station that will include a passive dewatering box, concrete pad, and drainage piping into the existing Cedar Run pump station. This project will allow the solids collected in the Town's sewer vacuum truck to be more efficiently dewatered to reduce handling and disposal costs.

Previous funding for this project financed engineering design, survey, and construction documents. The current request is to cover the final costs for construction at the Cedar Run Pump Station site.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Water/Sewer Fund	\$105,000	\$30,000	\$75,000					\$75,000	
<b>Total</b>	<b>\$105,000</b>	<b>\$30,000</b>	<b>\$75,000</b>					<b>\$75,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Public Works  
**Project Title:** Utility Trench Compactor Roller Machine  
**Project Location:** Town Wide

**Project Status:** New

**Description and Justification:**

This project provides costs to purchase a utility trench roller compactor machine to facilitate more timely backfilling and compaction of utility trenches to minimize settlement under paved roadways. The equipment is specifically designed to be of a narrow width to fit into larger utility trenches where handheld compaction equipment is ineffective in achieving necessary compaction.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Water/Sewer Fund	\$35,000		\$35,000					\$35,000	
<b>Total</b>	<b>\$35,000</b>		<b>\$35,000</b>					<b>\$35,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Water Main Tapping Machine

**Project Location:** Town Wide

**Project Status:** New

**Description and Justification:**

This project provides costs to replace the existing water main tapping machine that has been in use by the water service construction crew for more than twenty years. The current tapping machine requires a back hoe machine and operator to lower the equipment into the construction trench and two additional crewmembers to maneuver the machine to make routine connections. This project would fund the purchase of a newer machine that is considerably lighter and designed to reduce the number of crew members to make an efficient water main tap.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Water/Sewer Fund	\$26,000		\$26,000					\$26,000	
<b>Total</b>	<b>\$26,000</b>		<b>\$26,000</b>					<b>\$26,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** Blacksburg Downtown Trolley

**Project Location:** Town of Blacksburg

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Blacksburg (local)

**Project Status:** Previously Requested

**Description and Justification:**

This project provides funding for a future trolley service connecting major commercial cores in Blacksburg. It is anticipated the service will transport passengers between Downtown Blacksburg, the First and Main Shopping Center and University Mall. A Public/Private partnership will be pursued to fund at least a portion of the local match and operating costs. Any balance for the local match will need to come from the Town's General Fund.

The anticipated annual cost to operate the trolley service is expected to range from \$270,000 to \$540,000 depending on the amount of service provided. Local match is determined based on the availability of federal and state funds at the time of request. Local funding to support both the capital and operating costs will be identified prior to the project's launch.

As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Federal	\$1,433,055					\$1,433,055		\$1,433,055	Continuing
State	\$179,132					\$179,132		\$179,132	Continuing
Local	\$179,132					\$179,132		\$179,132	Continuing
<b>Total</b>	<b>\$1,791,319</b>					<b>\$1,791,319</b>		<b>\$1,791,319</b>	<b>Continuing</b>

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** BT Access Bus Replacement and Expansion Program

**Project Location:** Blacksburg Transit Facility

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Blacksburg & Virginia Tech (local)

**Project Status:** Continuing

**Description and Justification:**

Blacksburg Transit (BT) has developed a replacement/expansion program for its paratransit medium duty buses (MD Bus – 500 Series), body on chassis (BOC – 50 Series) and raised roof vans, which meets local, state and federal regulations that govern public safety. The proposed schedule for paratransit bus replacement/expansion per fiscal year is as follows:

<u>Year</u>	<u>Description</u>	<u>Number</u>	<u>Type</u>
FY2017	Body on Chassis	3	Replacement
FY2018	Body on Chassis	3	Replacement
	Body on Chassis	4	Expansion per Transit Development Plan
FY2019	None scheduled		
FY2020	None scheduled		
FY2021	Body on Chassis	2	Replacement

BT may extend the replacement schedule for certain BT Access vehicles if warranted, based on a periodic review of the following factors: mileage, condition and age.

As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

<u>Source of Funds</u>	<u>Total Project Estimate</u>	<u>Prior Allocation</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>	<u>2019/20</u>	<u>2020/21</u>	<u>Current 5-Year Total</u>	<u>Future Years</u>
Federal	Continuing	Continuing	\$266,964	\$590,893			\$194,130	\$1,051,987	Continuing
State	Continuing	Continuing	\$33,370	\$73,862			\$24,266	\$131,498	Continuing
Local	Continuing	Continuing	\$33,370	\$73,862			\$24,266	\$131,498	Continuing
<b>Total</b>	Continuing	Continuing	\$333,704	\$738,617			\$242,662	\$1,314,983	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** Christiansburg Bus Replacement and Expansion Program

**Project Location:** Town of Christiansburg

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Christiansburg (local)

**Project Status:** Continuing.

**Description and Justification:**

Blacksburg Transit (BT) began new expanded service in the Town of Christiansburg in 2009. Current services within the Christiansburg Town limits include the Explorer, Go Anywhere and Commuter routes. BT has developed a replacement/expansion program for the bus fleet associated with this service which meets local, state and federal regulations that govern public safety. The proposed schedule for bus replacement/expansion per fiscal year is as follows:

<u>Year</u>	<u>Description</u>	<u>Number</u>	<u>Type</u>
FY2017	Body On Chassis	1	Replacement
FY2018	None scheduled		
FY2019	None scheduled		
FY2020	Body On Chassis	4	Replacement
FY2021	None scheduled		

BT may extend the replacement schedule for some vehicles if warranted, based on a periodic review of the following factors: mileage, condition and age.

As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

<u>Source of Funds</u>	<u>Total Project Estimate</u>	<u>Prior Allocation</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>	<u>2019/20</u>	<u>2020/21</u>	<u>Current 5-Year Total</u>	<u>Future Years</u>
Federal	Continuing	Continuing	\$93,426			\$408,355		\$501,781	Continuing
State	Continuing	Continuing	\$11,678			\$51,044		\$62,722	Continuing
Local	Continuing	Continuing	\$11,678			\$51,044		\$62,722	Continuing
<b>Total</b>	Continuing	Continuing	<b>\$116,782</b>			<b>\$510,443</b>		<b>\$627,225</b>	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** Christiansburg Shelter & Amenities Replacement and Expansion Program

**Project Location:** Town of Christiansburg

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Christiansburg (local)

**Project Status:** Continuing

**Description and Justification:**

Blacksburg Transit has developed a replacement/expansion amenities program to provide for the needs of riders. The project provides funding for amenities in Christiansburg. The program includes: replacement parts and glass for shelters, new bus stops and shelters based on prioritized needs, and the replacement of bike racks that are needed each year due to damage and age. Outsourcing of installation has been included in the cost per shelter or amenity.

<u>Year</u>	<u>Description</u>	<u>Location</u>	<u>Type</u>
FY2017	Two 4' x 12' solar shelters & pads Sidewalk improvements	Laurel/Sycamore & Walmart Walmart	Expansion Improvement
FY2018	Two 4' x 8' solar shelters & pads	Electric Way & Spradlin Farm	Expansion
FY2019	Two 4' x 8' solar shelters & pads	Roanoke/Hungate & Farmview	Expansion
FY2020	Two 4' x 8' solar shelters & pads	Radford/College & Tudor Sq.	Expansion
FY2021	None scheduled		

As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

<u>Source of Funds</u>	<u>Total Project Estimate</u>	<u>Prior Allocation</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>	<u>2019/20</u>	<u>2020/21</u>	<u>Current 5-Year Total</u>	<u>Future Years</u>
Federal	Continuing	Continuing	\$22,178	\$15,780	\$16,110	\$16,448		\$70,516	Continuing
State	Continuing	Continuing	\$2,772	\$1,972	\$2,013	\$2,056		\$8,813	Continuing
Local	Continuing	Continuing	\$2,772	\$1,972	\$2,013	\$2,056		\$8,813	Continuing
<b>Total</b>	Continuing	Continuing	\$27,722	\$19,724	\$20,136	\$20,560		\$88,142	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** Heavy Duty Bus Replacement and Expansion Program

**Project Location:** Blacksburg Transit Facility

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Blacksburg & Virginia Tech (local)

**Project Status:** Continuing

**Description and Justification:**

A replacement/expansion program for the bus fleet has been developed and updated which meets the local, state and federal regulations that govern public safety. This project also includes funding for battery kits used on hybrid buses. The proposed schedule for bus replacements/expansion per fiscal year is as follows:

<u>Year</u>	<u>Description</u>	<u>Number</u>	<u>Type</u>
FY2017	60' Bus	1	Expansion per Transit Development Plan (TDP)
	Hybrid Bus Batteries	4	Refresh kits for hybrid batteries
FY2018	60' Bus	1	Expansion per TDP
FY2019	40' Bus	3	Replacement
	60' Bus	1	Expansion per TDP
FY2020	40' Bus	1	Expansion per TDP
FY2021	40' Bus	14	Replacement
	40' Bus	1	Expansion per TDP

Each bus purchase includes a spare parts package. Changes in service arising from the upcoming Transit Route Analysis may alter future capital improvement needs.

As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project**

<u>Source of Funds</u>	<u>Total Project Estimate</u>	<u>Prior Allocation</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>	<u>2019/20</u>	<u>2020/21</u>	<u>Current 5-Year Total</u>	<u>Future Years</u>
Federal	Continuing	Continuing	\$855,680	\$763,663	\$2,144,424	\$461,098	\$7,123,958	\$11,348,823	Continuing
State	Continuing	Continuing	\$106,960	\$95,458	\$268,053	\$57,637	\$890,495	\$1,418,603	Continuing
Local	Continuing	Continuing	\$106,960	\$95,458	\$268,053	\$57,637	\$890,495	\$1,418,603	Continuing
<b>Total</b>	Continuing	Continuing	\$1,069,600	\$954,579	\$2,680,530	\$576,372	\$8,904,948	\$14,186,029	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** Radio Replacement and Expansion Program

**Project Location:** Blacksburg Transit Facility

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Blacksburg & Virginia Tech (local)

**Project Status:** Continuing

**Description and Justification:**

Blacksburg Transit has developed a maintenance and expansion program for radios which includes updating the equipment to meet federal digital standards. The proposed schedule for radio replacement per fiscal year is as follows:

<b><u>Year</u></b>	<b><u>Description</u></b>
FY2017	One recorder power supply and one multi-unit charger.
FY2018	One repeater with pre-selector and one multi-charger.
FY2019	One repeater, one recorder power supply, eleven handheld radio replacements with remote speakers and battery upgrades, microphones, nine ear-bud devices, and one headset.
FY2020	One radio recorder, one mobile power supply, two radio power supplies, one mobile radio power supply, eleven handheld radio replacements with battery upgrades, ten remote speakers and one headset.
FY2021	Eleven handheld radio replacements with battery upgrades, eleven spare batteries, and one remote speaker microphone.

As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

<b>Source of Funds</b>	<b>Total Project Estimate</b>	<b>Prior Allocation</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>	<b>2019/20</b>	<b>2020/21</b>	<b>Current 5-Year Total</b>	<b>Future Years</b>
Federal	\$55,741	\$11,461	\$635	\$3,257	\$12,829	\$18,063	\$9,496	\$44,280	Continuing
State	\$7,828	\$2,292	\$80	\$407	\$1,604	\$2,258	\$1,187	\$5,536	Continuing
Local	\$6,109	\$573	\$80	\$407	\$1,604	\$2,258	\$1,187	\$5,536	Continuing
<b>Total</b>	<b>\$69,678</b>	<b>\$14,326</b>	<b>\$795</b>	<b>\$4,071</b>	<b>\$16,037</b>	<b>\$22,579</b>	<b>\$11,870</b>	<b>\$55,352</b>	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** Regional Bus Replacement and Expansion Program

**Project Location:** New River Valley

**Project Funding Source:** FTA (federal) / DRPT (state) / New River Valley Regional Partners (local)

**Project Status:** Continuing

**Description and Justification:**

Blacksburg Transit (BT) completed a six year Transit Development Plan (TDP) which was presented and adopted by regional partners. The TDP provides an outline of potential future regional expansions that are being planned in the area.

<u>Year</u>	<u>Description</u>	<u>Number</u>	<u>Type</u>
FY2017	None scheduled		
FY2018	Body On Chassis	3	Expansion
FY2019	Body On Chassis	2	Replacement
	Body On Chassis	1	Expansion
FY2020	Body On Chassis	1	Expansion
FY2021	None scheduled		

These purchases will be used to support expanded commuter service in the New River Valley in accordance with the TDP.

As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

<u>Source of Funds</u>	<u>Total Project Estimate</u>	<u>Prior Allocation</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>	<u>2019/20</u>	<u>2020/21</u>	<u>Current 5-Year Total</u>	<u>Future Years</u>
Federal	Continuing	Continuing		\$279,216	\$310,745	\$94,238		\$684,199	Continuing
State	Continuing	Continuing		\$34,902	\$38,843	\$11,780		\$85,525	Continuing
Local	Continuing	Continuing		\$34,902	\$38,843	\$11,780		\$85,525	Continuing
<b>Total</b>	Continuing	Continuing		\$349,020	\$388,431	\$117,798		\$855,249	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** Shelter and Amenities Replacement and Expansion Program

**Project Location:** Town of Blacksburg

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Blacksburg & Virginia Tech (local)

**Project Status:** Continuing

**Description and Justification:**

Blacksburg Transit has developed a bus stop safety and accessibility update program for bus stops identified in a recently completed Bus Stop Safety and Accessibility Study (July 2015). This project provides funding for bus stop improvements in Blacksburg. The program includes replacement shelters, new pads and sidewalks based on prioritized needs, bike racks and trash receptacles. Outsourcing of installation has been included into the cost per shelter.

<u>Year</u>	<u>Description</u>	<u>Location</u>	<u>Type</u>
FY2017	Two 4'x 12' solar shelters Shelter / Sidewalk improvement	Litton Reeves & McComas Hall Stop #1326	Replacement Improvement
FY2018	Two 4'x 12' solar shelters Shelter / Sidewalk improvement	Oak Lane Stop #1305	Replacement Improvement
FY2019	Two 4'x 12' solar shelters Bus Stop Improvements	Newman Library Stops #1404 & #1405	Replacement Improvement
FY2020	Two 4'x 12' solar shelters Bus Stop Improvements	I-Lot and Overflow Lot TBD	Replacement Improvement
FY2021	Bus Stop Improvements	TBD	Improvement

As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

<u>Source of Funds</u>	<u>Total Project Estimate</u>	<u>Prior Allocation</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>	<u>2019/20</u>	<u>2020/21</u>	<u>Current 5-Year Total</u>	<u>Future Years</u>
Federal	Continuing	Continuing	\$30,375	\$32,156	\$28,601	\$28,944	\$12,400	\$132,476	Continuing
State	Continuing	Continuing	\$3,797	\$4,019	\$3,576	\$3,618	\$1,550	\$16,560	Continuing
Local	Continuing	Continuing	\$3,797	\$4,019	\$3,576	\$3,618	\$1,550	\$16,560	Continuing
<b>Total</b>	Continuing	Continuing	\$37,969	\$40,194	\$35,753	\$36,180	\$15,500	\$165,596	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** Support Vehicle Replacement and Expansion Program

**Project Location:** Blacksburg Transit Facility

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Blacksburg & Virginia Tech (local)

**Project Status:** Continuing

**Description and Justification:**

Blacksburg Transit (BT) has developed a replacement program for vehicles, which meets the local, state and federal regulations that govern public safety. The proposed schedule for vehicle replacement/expansion per fiscal year is as follows:

<u>Year</u>	<u>Description</u>	<u>Number</u>	<u>Type</u>
FY2017	Operations Vehicle	1	Replacement
	Maintenance Vehicle	1	Replacement
	Administrative Vehicles	3/1	Replacement / Expansion
FY2018	Operations Vehicles	3	Replacement
	Maintenance Vehicles	2	Replacement
FY2019	Operations Vehicles	1	Replacement
	Maintenance Vehicles	2	Replacement
FY2020	Maintenance Support	1	Replacement
FY2021	None scheduled		

BT may extend the replacement schedule for some vehicles if warranted, based on a periodic review of the following factors: mileage, condition and age. The standard replacement schedule has been extended to six years for all light duty support vehicles and eight years for heavy duty trucks (previously four years). As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate		2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
		Prior Allocation							
Federal	Continuing	Continuing	\$167,777	\$207,220	\$130,756	\$12,336		\$518,089	Continuing
State	Continuing	Continuing	\$20,972	\$25,903	\$16,345	\$1,542		\$64,762	Continuing
Local	Continuing	Continuing	\$20,972	\$25,903	\$16,345	\$1,542		\$64,762	Continuing
<b>Total</b>	Continuing	Continuing	\$209,721	\$259,026	\$163,446	\$15,420		\$647,613	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** Technology – BT4U Project

**Project Location:** Blacksburg Transit Facility

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Blacksburg & Virginia Tech (local)

**Project Status:** Continuing

**Description and Justification:**

BT's Transit Ridership Information Program, otherwise known as BT4U, is an ITS program centered on taking real-time bus location information collected and delivering it to riders in an easily usable format. For more detailed information, please see the BT4U Roadmap completed in October 2014 and amended annually. The proposed schedule for BT4U system development per fiscal year is as follows:

<b><u>Year</u></b>	<b><u>Description</u></b>
FY2017	BT4U Mobile application enhancements; BT Website enhancements; BT4U system code documentation and evaluation.
FY2018	BT4U Mobile application enhancements; BT Website enhancements; BT4U system code documentation and evaluation.
FY2019	BT4U Mobile application enhancements; BT4U Central system upgrades.
FY2020	Project guided by BT4U plan and user expectations.
FY2021	Project guided by BT4U plan and user expectations.

As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

<b>Source of Funds</b>	<b>Total Project Estimate</b>	<b>Prior Allocation</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>	<b>2019/20</b>	<b>2020/21</b>	<b>Current 5-Year Total</b>	<b>Future Years</b>
Federal	Continuing	Continuing	\$60,000	\$61,200	\$42,435	\$43,708	\$45,019	\$252,362	Continuing
State	Continuing	Continuing	\$7,500	\$7,650	\$5,305	\$5,464	\$5,628	\$31,547	Continuing
Local	Continuing	Continuing	\$7,500	\$7,650	\$5,305	\$5,464	\$5,628	\$31,547	Continuing
<b>Total</b>	Continuing	Continuing	\$75,000	\$76,500	\$53,045	\$54,636	\$56,275	\$315,456	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** Technology – Fleet Communication Project

**Project Location:** Blacksburg Transit Facility

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Blacksburg & Virginia Tech (local)

**Project Status:** In Progress

**Description and Justification:**

Blacksburg Transit (BT) relies on accurate and timely data being delivered from the vehicles to support operations management and the ridership information system (BT4U). To meet system demands, a need for faster data transmission to and from the fleet is necessary. BT has recently completed a series of studies to develop an implementation plan for a Transit Data Wireless Network. These studies have led BT to engineer, design, and build a fiber optic network connecting the traffic signals along the BT routes in the TOB network. Once these fiber optic connections are finished, wireless access points will be installed at the traffic signals, extending the TOB's wireless network to these locations to bring back data from the fleet. This system is more cost-effective and durable than the other technologies evaluated. The proposed implementation schedule per fiscal year is as follows:

<u>Year</u>	<u>Description</u>
FY2017	Continued installation in the Hethwood service area along Tall Oaks Drive, Heather Drive, and Hethwood Boulevard; installation along University City Boulevard from Prices Fork to Toms Creek Road.
FY2018	Installation along Harding Road from Roanoke St. to Ascot Lane.

With the completion of the work scheduled for FY2018, BT will reassess coverage and plan for additional system build out based on future needs and anticipated system development. As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Federal	\$88,800		\$40,800	\$48,000				\$88,800	
State	\$11,100		\$5,100	\$6,000				\$11,100	
Local	\$11,100		\$5,100	\$6,000				\$11,100	
<b>Total</b>	<b>\$111,000</b>		<b>\$51,000</b>	<b>\$60,000</b>				<b>\$111,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** Technology Replacement and Expansion Program

**Project Location:** Blacksburg Transit Facility

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Blacksburg & Virginia Tech (local)

**Project Status:** Continuing

**Description and Justification:**

In conjunction with the Technology Department, Blacksburg Transit has developed a replacement and expansion program for computers, laptops, software, and infrastructure related technology. Infrastructure includes such components as servers, storage area network (SAN) back-up systems, Voice Over Internet Protocol (VOIP) equipment, networking devices, cabling, power supply/surge protectors, wiring costs, peripherals, and storage cases. The proposed schedule for technology replacement per fiscal year is as follows:

<b><u>Year</u></b>	<b><u>Description</u></b>
FY2017	Two laptops, twelve computers, three network switches, conference room audio visual equipment, 30 VOIP phone replacements and SAN system upgrades.
FY2018	Two laptops, twelve computers, two servers, 20 VOIP phone replacements.
FY2019	Two laptops, twelve computers, five network switch replacements.
FY2020	Two laptops, twelve computers, five wireless data system replacements and SAN system upgrades.
FY2021	Two laptops, twelve computers, five wireless data systems, ten VOIP phone replacements.

As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

<b>Source of Funds</b>	<b>Total Project Estimate</b>	<b>Prior Allocation</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>	<b>2019/20</b>	<b>2020/21</b>	<b>Current 5-Year Total</b>	<b>Future Years</b>
Federal	Continuing	Continuing	\$138,132	\$90,964	\$49,421	\$215,104	\$59,213	\$552,834	Continuing
State	Continuing	Continuing	\$17,267	\$11,371	\$6,178	\$26,888	\$7,402	\$69,106	Continuing
Local	Continuing	Continuing	\$17,267	\$11,371	\$6,178	\$26,888	\$7,402	\$69,106	Continuing
<b>Total</b>	Continuing	Continuing	\$172,666	\$113,706	\$61,777	\$268,880	\$74,017	\$691,046	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** Transit Facility Maintenance Cost Program

**Project Location:** Blacksburg Transit Facility

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Blacksburg & Virginia Tech (local)

**Project Status:** Continuing

**Description and Justification:**

Each year there are several regular maintenance requirements for the transit facility which are eligible for capital funding. In addition, to maintain a state-of-the-art maintenance facility, a plan has been developed to purchase new and improved equipment. Larger upcoming projects scheduled include:

<b><u>Year</u></b>	<b><u>Description</u></b>
FY2017	Induction or LED garage lighting, garage door roller and springs replacements, diesel sump containment equipment, diesel & gas in-ground pump replacement, welder fume extraction unit, hybrid insulated tool kit, wheel lift adapter set, and heavy duty shop work benches.
FY2018	Stainless steel hand rails, replacement of two exterior entrance doors, replacement of five shop doors, two tire carousels, Bridgeport mill, and nitrogen tire inflation system.
FY2019	Storage container and concrete pad, and one A/C unit replacement.
FY2020	One A/C unit replacement and projects to be determined by facility assessment plan.
FY2021	Projects to be determined by facility assessment plan.

Upon completion of the FY2015 funded facility maintenance assessment, a more detailed long-term facility maintenance plan will be available to facilitate scheduling of repair and replacement projects in later years.

As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

<b>Source of Funds</b>	<b>Total Project Estimate</b>	<b>Prior Allocation</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>	<b>2019/20</b>	<b>2020/21</b>	<b>Current 5-Year Total</b>	<b>Future Years</b>
Federal	Continuing	Continuing	\$241,886	\$179,383	\$168,790	\$185,485	\$191,048	\$966,592	Continuing
State	Continuing	Continuing	\$30,236	\$22,423	\$21,099	\$23,185	\$23,881	\$120,824	Continuing
Local	Continuing	Continuing	\$30,236	\$22,423	\$21,099	\$23,185	\$23,881	\$120,824	Continuing
<b>Total</b>	Continuing	Continuing	<b>\$302,358</b>	<b>\$224,229</b>	<b>\$210,988</b>	<b>\$231,855</b>	<b>\$238,810</b>	<b>\$1,208,240</b>	Continuing

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** ITS Systems Replacement

**Project Location:** Blacksburg Transit Facility

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Blacksburg & Virginia Tech (local)

**Project Status:** New

**Description and Justification:**

Blacksburg Transit has made extensive investments in Intelligent Transportation Systems (ITS) over the past decade. Blacksburg Transit has deployed a variety of systems including: Computer Aided Dispatch, Automatic Vehicle Location, Ridership Information, Demand Response Scheduling\Dispatching and Data collection systems. These systems are nearing end of life and will need to be replaced in the coming years. A schedule of specific systems to be replaced including a timeline will be developed in a consultant led ITS needs assessment in FY2017. Following the FTA's System Engineering guidelines, BT will use the same consultants to develop functional specification and testing plans for each of the next three phases of the deployment.

As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Federal	\$1,520,000		\$200,000	\$440,000	\$440,000	\$440,000		\$1,520,000	
State	\$190,000		\$25,000	\$55,000	\$55,000	\$55,000		\$190,000	
Local	\$190,000		\$25,000	\$55,000	\$55,000	\$55,000		\$190,000	
<b>Total</b>	<b>\$1,900,000</b>		<b>\$250,000</b>	<b>\$550,000</b>	<b>\$550,000</b>	<b>\$550,000</b>		<b>\$1,900,000</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Transit

**Project Title:** Simulator Upgrade

**Project Location:** Blacksburg Transit Facility

**Project Funding Source:** FTA (federal) / DRPT (state) / Town of Blacksburg & Virginia Tech (local)

**Project Status:** New

**Description and Justification:**

The current simulator requires updates to replace computer hardware/software which has reached the end of the support cycle. These upgrades are strongly recommended for optimal performance. The bus simulator assists training staff in identifying relevant objects and proper scanning techniques in the classroom environment. The upgrades to software will provide realistic scenarios which require safe decision and rapid reactions in a fast paced environment. In the virtual environment instructors are able to provide hands on feedback for dealing with stressful situations like mechanical failures, sudden changes to traffic flow, road rage, and selecting the path of least resistance. During post accident training, instructors are able to address performance issues by replicating and repeating scenarios to develop safe driving habits.

Upgrades include: one Instructor's workstation, four graphic computers, two 55" LED front panel displays, updated bus scenarios, and a one year warranty.

As with all transit capital projects, if grants are unavailable the project may be deferred.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Federal	\$26,240		\$26,240					\$26,240	
State	\$3,280		\$3,280					\$3,280	
Local	\$3,280		\$3,280					\$3,280	
<b>Total</b>	<b>\$32,800</b>		<b>\$32,800</b>					<b>\$32,800</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Major Equipment Purchases

**Project Location:** Town Wide

**Project Status:** Continuing

**Description and Justification:**

The following pages list the equipment scheduled to be purchased over the next five years. Pieces fully depreciated will be purchased from the Equipment Depreciation Fund instead of the various operating funds. Each piece of equipment is inspected prior to being included on the upcoming years' lists to determine if the piece of equipment can provide additional service life. See attached pages for the Detailed Depreciation Schedule.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Equipment Replacement Fund	Continuing	Continuing	\$2,048,000	\$1,904,000	\$2,962,000	\$609,000	\$1,337,000	\$8,860,000	Continuing
<b>Total</b>	Continuing	Continuing	\$2,048,000	\$1,904,000	\$2,962,000	\$609,000	\$1,337,000	\$8,860,000	Continuing

MAJOR EQUIPMENT REPLACEMENT PURCHASES FY 2017-2021

Deferred Replacement

Equip. #	Ref. #	Description	FY Acquired	Life	Replacement Cost	Depreciation	Recommended Replacement
<b>General Fund</b>							
511	MP-104	SUV, Economy	2002	7	25,000	0	2009
606	IN-102	SUV, Economy 4WD	2004	10	30,000	0	2014
676	PN-101	SUV, Economy 2WD	2005	10	25,000	0	2015
850	EG-102	SUV, Economy 2WD	2008	8	25,000	0	2016
752	EG-401	Truck-Pickup, 1/2 ton 4WD	2006	10	25,000	0	2016
871	GR-402	Truck-Pickup, 1 ton 4WD, util bed	2008	8	50,000	0	2016
849	MP-101	SUV, Economy 2WD	2008	8	25,000	0	2016
	PW-05	Mowers (2)	2009	7	24,000	0	2016
583	SD-901	Vaxcavator	2004	12	40,000	0	2016
			<b>Fund Total:</b>		<b>\$269,000</b>	<b>\$0</b>	
<b>Water &amp; Sewer Fund</b>							
806	SE-402	Truck-Pickup, 1 ton 4WD, util bed	2007	8	50,000	0	2015
796	UB-402	Truck-Pickup, 1/2 ton 4WD	2007	8	25,000	0	2015
455	WA-703	Loader	2000	15	150,000	0	2015
428	WA-902	Air Compressor	2001	15	20,000	0	2016
			<b>Fund Total:</b>		<b>\$245,000</b>	<b>\$0</b>	
		<b>Total Deferred Replacement</b>			<b>\$514,000</b>		

MAJOR EQUIPMENT REPLACEMENT PURCHASES FY 2017-2021

FY Replacement 2017

Equip. #	Ref. #	Description	FY Acquired	Life	Replacement Cost	Depreciation	Recommended Replacement
<b>CDGB Fund</b>							
791	HD-101	SUV, Economy 2WD	2007	10	25,000	2,500	2017
			<b>Fund Total:</b>		<b>\$25,000</b>	<b>\$2,500</b>	
<b>Fire Fund</b>							
830	FD-09	Pumper	2007	10	700,000	70,000	2017
559	FD-11	Truck-Brush	2002	15	85,000	5,667	2017
			<b>Fund Total:</b>		<b>\$785,000</b>	<b>\$75,667</b>	
<b>General Fund</b>							
775	GC-401	Truck-Pickup, 1 ton 4WD	2007	10	35,000	3,500	2017
667	GC-802	Tractor, 40 HP	2004	13	50,000	3,846	2017
430	GC-805	Mower-Greens	1999	18	35,000	1,944	2017
910	HT-402	Truck-Pickup, 1 ton 4WD, util bed	2009	8	50,000	6,250	2017
911	HT-404	Truck-Pickup, 1 ton 4WD, util bed	2009	8	50,000	6,250	2017
93	MP-402	Truck-Traffic Message Board	2001	16	45,000	2,813	2017
889	PK-809	JD Ballfield Rake 3 Wheel	2009	8	22,000	2,750	2017
	PW-06	Mowers (3)	2010	7	36,000	5,143	2017
788	TE-402	Truck-Pickup, 1 ton 4WD, util bed	2007	10	50,000	5,000	2017
			<b>Fund Total:</b>		<b>\$373,000</b>	<b>\$37,496</b>	
<b>Police Fund</b>							
887	PD-086	SUV, Standard	2009	8	35,000	4,375	2017
890	PD-0901	SUV, Standard	2009	8	35,000	4,375	2017
899	PD-0902	Sedan, Full Size-Marked, w/add ons	2009	8	50,000	6,250	2017
896	PD-0903	SUV, Standard	2009	8	35,000	4,375	2017
900	PD-0904	Sedan, Full Size-Marked, w/add ons	2009	8	50,000	6,250	2017
903	PD-0905	Sedan, Full Size-Marked, w/add ons	2009	8	50,000	6,250	2017
904	PD-0906	Sedan, Full Size-Marked, w/add ons	2009	8	50,000	6,250	2017
905	PD-0907	Sedan-Full Siza-Unmarked w/add ons	2009	8	50,000	6,250	2017
566	PD-031	Truck-Pickup, 1 ton 4WD, marked	2009	8	50,000	6,250	2017
898	PD-1001	Sedan, Full Size	2009	8	30,000	3,750	2017
			<b>Fund Total:</b>		<b>\$435,000</b>	<b>\$54,375</b>	
<b>Rescue Fund</b>							
946	RS-57	Ambulance, Type II	2009	8	215,000	26,875	2017
			<b>Fund Total:</b>		<b>\$215,000</b>	<b>\$26,875</b>	
<b>Water &amp; Sewer Fund</b>							
776	PS-403	Truck-Pickup, 1 ton 4WD, util bed	2007	10	50,000	5,000	2017
987	SE-904	Sewer Washer	2010	7	40,000	5,714	2017

MAJOR EQUIPMENT REPLACEMENT PURCHASES FY 2017-2021

677	WA-701 Backhoe	2005	12	125,000	10,417	2017
		<b>Fund Total:</b>		<b>\$215,000</b>	<b>\$21,131</b>	
	<b>Total FY 2017 Replacement</b>			<b>\$2,048,000</b>	<b>\$218,044</b>	

MAJOR EQUIPMENT REPLACEMENT PURCHASES FY 2017-2021

FY Replacement 2018

Equip. #	Ref. #	Description	FY Acquired	Life	Replacement Cost	Depreciation	Recommended Replacement
<b>CDGB Fund</b>							
858	HD-201	Sedan, Economy	2008	10	20,000	2,000	2018
	<b>Fund Total:</b>				<b>\$20,000</b>	<b>\$2,000</b>	
<b>Fire Fund</b>							
50010	FD-10	Pumper	1998	20	700,000	35,000	2018
	<b>Fund Total:</b>				<b>\$700,000</b>	<b>\$35,000</b>	
<b>General Fund</b>							
865	BD-403	Truck-Pickup, 1 ton 4WD, util bed	2008	10	50,000	5,000	2018
	GC-04	5 Gang Mower	2000	18	35,000	1,944	2018
847	GS-101	Sedan, Economy	2008	10	20,000	2,000	2018
869	HT-403	Truck-Pickup, F550 4WD	2008	10	50,000	5,000	2018
845	IN-101	SUV, Economy 2WD	2008	10	25,000	2,500	2018
846	IN-103	SUV, Economy 4WD	2008	10	30,000	3,000	2018
844	IN-104	SUV, Economy 4WD	2008	10	30,000	3,000	2018
877	MP-102	SUV, Economy 2WD	2008	10	25,000	2,500	2018
868	PK-401	Truck-Pickup, 1 ton 4WD, util bed	2008	10	50,000	5,000	2018
669	PK-403	Truck-Pickup, 1 ton 4WD util bed	2005	13	50,000	3,846	2018
	PW-01	Mowers (2)	2011	7	24,000	3,429	2018
843	PW-101	Sedan, Economy	2008	10	20,000	2,000	2018
848	RC-101	SUV, Economy 2WD	2008	10	25,000	2,500	2018
859	RC-201	Sedan, Economy	2008	10	20,000	2,000	2018
879	RC-303	Van, 23-Passenger	2008	10	80,000	8,000	2018
878	RC-306	Van, Mini Passenger	2008	10	30,000	3,000	2018
	<b>Fund Total:</b>				<b>\$564,000</b>	<b>\$54,719</b>	
<b>Police Fund</b>							
973	PD-1003	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
974	PD-1004	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
975	PD-1005	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
988	PD-1006	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
989	PD-1007	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
990	PD-1008	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
991	PD-1009	Sedan, Full Size-Marked, w/add ons	2010	8	50,000	6,250	2018
	<b>Fund Total:</b>				<b>\$350,000</b>	<b>\$43,750</b>	
<b>Rescue Fund</b>							
852	RS-C3	Suburban, 4WD	2008	10	75,000	7,500	2018
	<b>Fund Total:</b>				<b>\$75,000</b>	<b>\$7,500</b>	

**MAJOR EQUIPMENT REPLACEMENT PURCHASES FY 2017-2021**

**Waste Management Fund**

773	WM-904	Leaf Machine	2006	12	25,000	2,083	2018
<b>Fund Total:</b>					<b>\$25,000</b>	<b>\$2,083</b>	

continued

**FY Replacement 2018 - continued**

<b>Equip. #</b>	<b>Ref. #</b>	<b>Description</b>	<b>FY Acquired</b>	<b>Life</b>	<b>Replacement Cost</b>	<b>Depreciation</b>	<b>Recommended Replacement</b>
866	PS-402	Truck-Pickup, 1 ton 4WD, util bed	2008	10	50,000	5,000	2018
867	SE-403	Truck-Pickup, 1 ton 4WD, util bed	2008	10	50,000	5,000	2018
864	SE-702	Excavator, Mini with Trailer	2008	10	70,000	7,000	2018
<b>Fund Total:</b>					<b>\$170,000</b>	<b>\$17,000</b>	

**Total FY 2018 Replacement**

**\$1,904,000**      **\$162,053**

MAJOR EQUIPMENT REPLACEMENT PURCHASES FY 2017-2021

FY Replacement 2019

Equip. #	Ref. #	Description	FY Acquired	Life	Replacement Cost	Depreciation	Recommended Replacement
<b>Fire Fund</b>							
402	FD-02	Truck-Ladder-Platform	1999	20	1,200,000	60,000	2019
891	FD-28	Sedan, Full Size	2009	10	35,000	3,500	2019
914	FD-29	SUV, Full Size	2009	10	62,000	6,200	2019
			<b>Fund Total:</b>		<b>\$1,297,000</b>	<b>\$69,700</b>	
<b>General Fund</b>							
955	AS-502	Truck-Dump, Standard	2010	9	120,000	13,333	2019
960	AS-503	Truck-Dump, 4WD	2010	9	130,000	14,444	2019
894	BD-405	Truck-Pickup, 1 ton 4WD, util bed	2009	10	50,000	5,000	2019
446	EO-901	Trailer, Low Boy	2001	18	45,000	2,500	2019
750	GC-810	Sprayer	2006	13	30,000	2,308	2019
777	GC-901	Leaf Vac w/Yard Hopper	2001	18	30,000	1,667	2019
	PW-02	Mowers (2)	2012	7	24,000	3,429	2019
895	PW-102	Sedan, Economy	2009	10	20,000	2,000	2019
957	SD-501	Truck-Dump, Standard	2010	9	120,000	13,333	2019
959	SD-502	Truck-Dump, Standard	2010	9	120,000	13,333	2019
953	SW-501	Truck-Dump, Standard	2010	9	120,000	13,333	2019
1029	TE-901	Message Board, Solar Powered	2012	7	20,000	2,857	2019
1013	TM-101	SUV, Economy 4WD	2012	7	30,000	4,286	2019
			<b>Fund Total:</b>		<b>\$859,000</b>	<b>\$91,824</b>	
<b>Police Fund</b>							
1010	PD-1102	Sedan, Full Size-Marked, w/add ons	2011	8	50,000	6,250	2019
1012	PD-1104	Sedan, Full Size-Marked, w/add ons	2011	8	50,000	6,250	2019
1014	PD-1105	Sedan, Full Size	2011	8	30,000	3,750	2019
			<b>Fund Total:</b>		<b>\$130,000</b>	<b>\$16,250</b>	
<b>Rescue Fund</b>							
804	RS-R3	Truck-Pickup, 1 ton 4WD w/add ons	2007	12	70,000	5,833	2019
			<b>Fund Total:</b>		<b>\$70,000</b>	<b>\$5,833</b>	
<b>Waste Management Fund</b>							
958	WM-501	Truck-Dump, Standard	2010	9	120,000	13,333	2019
952	WM-502	Truck-Dump, Standard	2010	9	120,000	13,333	2019
			<b>Fund Total:</b>		<b>\$240,000</b>	<b>\$26,667</b>	
<b>Water &amp; Sewer Fund</b>							
897	SE-404	Truck-Pickup, 1 ton 4WD, util bed	2009	10	50,000	5,000	2019
822	SE-701	Backhoe	2007	12	125,000	10,417	2019
954	WA-501	Truck-Dump, Standard	2010	9	120,000	13,333	2019

MAJOR EQUIPMENT REPLACEMENT PURCHASES FY 2017-2021

579	WA-601	Asphalt Milling Machine	2004	15	71,000	4,733	2019
			<b>Fund Total:</b>		<b>\$366,000</b>	<b>\$33,483</b>	
		<b>Total FY 2019 Replacement</b>			<b>\$2,962,000</b>	<b>\$243,757</b>	

MAJOR EQUIPMENT REPLACEMENT PURCHASES FY 2017-2021

FY Replacement 2020

Equip. #	Ref. #	Description	FY Acquired	Life	Replacement Cost	Depreciation	Recommended Replacement
<b>General Fund</b>							
941	CE-808	Gator Toolcat	2010	10	50,000	5,000	2020
447/825	MP-502	Truck-Dump, Tandem	2007	13	135,000	10,385	2020
1015	SW-401	Truck-Pickup, 1 ton 4WD util bed	2012	8	50,000	6,250	2020
1035	TE-401	Truck, Bucket	2012	8	150,000	18,750	2020
		<b>Fund Total:</b>			<b>\$385,000</b>	<b>\$40,385</b>	
<b>Police Fund</b>							
1024	PD-1201	Van - Jail	2012	8	50,000	6,250	2020
		<b>Fund Total:</b>			<b>\$50,000</b>	<b>\$6,250</b>	
<b>Water &amp; Sewer Fund</b>							
698	PS-902	Sewer Pump	2005	15	74,000	4,933	2020
	SE-404A	Sewer TV System	2012	8	100,000	12,500	2020
		<b>Fund Total:</b>			<b>\$174,000</b>	<b>\$17,433</b>	
<b>Total FY 2020 Replacement</b>					<b>\$609,000</b>	<b>\$64,068</b>	

MAJOR EQUIPMENT REPLACEMENT PURCHASES FY 2017-2021

FY Replacement 2021

Equip. #	Ref. #	Description	FY Acquired	Life	Replacement Cost	Depreciation	Recommended Replacement
<b>Fire Fund</b>							
771	FD-17	Truck-Pick-up, F-550 4WD	2006	15	62,000	4,133	2021
1092	FD-21	Truck-Pickup, 1/2 ton 4WD CC	2013	8	60,000	7,500	2021
			<b>Fund Total:</b>		<b>\$122,000</b>	<b>\$11,633</b>	
<b>General Fund</b>							
1054	CC-401	Truck-Pickup, 1 ton 4WD util bed	2013	8	50,000	6,250	2021
1053	CE-401	Truck-Pickup, 1 ton 4WD	2013	8	35,000	4,375	2021
947	HT-405	Truck-F550 Flatbed	2009	12	50,000	4,167	2021
	PW-03	Mowers (2)	2014	7	30,000	4,286	2021
1044	RC-302	Van, 15-Passenger	2013	8	30,000	3,750	2021
1055	SD-401	Truck-Pickup, 1 ton 4WD util bed	2013	8	50,000	6,250	2021
			<b>Fund Total:</b>		<b>\$245,000</b>	<b>\$29,077</b>	
<b>Police Fund</b>							
1063	PD-1301	Sedan, Full Size-Marked, w/add ons	2013	8	50,000	6,250	2021
1064	PD-1302	Sedan, Full Size-Marked, w/add ons	2013	8	50,000	6,250	2021
1065	PD-1303	Sedan, Full Size-Marked, w/add ons	2013	8	50,000	6,250	2021
1066	PD-1304	Sedan, Full Size-Marked, w/add ons	2013	8	50,000	6,250	2021
1067	PD-1305	Sedan, Full Size-Marked, w/add ons	2013	8	50,000	6,250	2021
1068	PD-1306	Sedan, Full Size-Marked, w/add ons	2013	8	50,000	6,250	2021
1071	PD-1307	SUV, Standard, K9, w/ add ons	2013	8	50,000	6,250	2021
1072	PD-1308	SUV, Standard, K9, w/ add ons	2013	8	50,000	6,250	2021
1061	PD-1309	SUV, Standard, K9, w/ add ons	2013	8	50,000	6,250	2021
1048	PD-1310	SUV, Standard	2013	8	35,000	4,375	2021
1049	PD-1311	SUV, Standard	2013	8	35,000	4,375	2021
1050	PD-1312	Sedan-Unmarked	2013	8	35,000	4,375	2021
1069	PD-1313	SUV, Standard-Marked w/add ons	2013	8	50,000	6,250	2021
1089	PD-1319	SUV, Standard-Marked w/add ons	2013	8	50,000	6,250	2021
			<b>Fund Total:</b>		<b>\$655,000</b>	<b>\$81,875</b>	
<b>Rescue Fund</b>							
1094	RS-53	Ambulance	2013	8	215,000	26,875	2021
			<b>Fund Total:</b>		<b>\$215,000</b>	<b>\$26,875</b>	
<b>Waste Management Fund</b>							
888	WM-201	Sedan, Economy	2009	12	20,000	1,667	2021
938	WM-905	Leaf Machine	2009	12	25,000	2,083	2021
939	WM-906	Leaf Machine	2009	12	25,000	2,083	2021
			<b>Fund Total:</b>		<b>\$70,000</b>	<b>\$5,833</b>	

MAJOR EQUIPMENT REPLACEMENT PURCHASES FY 2017-2021

Water & Sewer Fund			2013	8	30,000	3,750	2021
1051	UT-401	Truck-Pickup, 1/2 ton 4WD					
					<b>\$30,000</b>	<b>\$3,750</b>	
		<b>Total FY 2021 Replacement</b>			<b>\$1,337,000</b>	<b>\$159,044</b>	

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM

## PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:** Major Building System Replacement

**Project Location:** Town Wide

**Project Status:** Continuing

**Description and Justification:**

This project provides for the systematic replacement of major building systems equipment at the end of their useful life. Funds will be set aside each year based on the projected replacement cost and useful life just like we do for vehicles and equipment. The building systems listed on the attached schedule are only those systems due for replacement in the next five years. The implementation of this building system replacement program will eliminate the need to use operational funds to replace system equipment, which fails unexpectedly during the fiscal year.

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
Building Depreciation Fund	Continuing	Continuing	\$284,000	\$455,450	\$41,850	\$77,050	\$13,800	\$872,150	Continuing
<b>Total</b>	Continuing	Continuing	\$284,000	\$455,450	\$41,850	\$77,050	\$13,800	\$872,150	Continuing

## Major Building System Replacement, FY 2016/17 to 2020/21

### FY to be Replaced: 2017

<u>Location</u>	<u>Description</u>	<u>Installation Date</u>	<u>Life</u>	<u>Replacement Cost</u>	<u>Depreciation</u>
Aquatic Center	B-heat exchanger - Pool	1993	24	\$8,000	\$333
Golf Course Pro Shop	Heat Pump with backup electric heat	1995	22	\$5,500	\$250
Municipal Building	1 A/C condenser split system court offices	2001	16	\$7,700	\$481
Municipal Building	indoor air handler - court offices	1992	25	\$5,000	\$200
Municipal Building	indoor duct heater - court offices	1992	25	\$9,000	\$360
Municipal Building	control system - court offices	1992	25	\$5,000	\$200
Parks & Rec Administration	3 forced Air furnace	1998	19	\$9,900	\$521
Parks & Rec Administration	3 split A/C systems	1998	19	\$16,500	\$868
Police Department	1 pneumatic temperature control system	1982	35	\$16,500	\$471
Police Department	2 a/c condenser split systems	1998	19	\$8,800	\$463
Police Department	2 custom built air handlers w/ hot water	1982	35	\$12,000	\$343
Police Department	1 Gas fired boiler	1982	35	\$27,500	\$786
Police Department	1 VAV Controller	1992	25	\$8,800	\$352
Police Comm Bldg - Clay Street	4 a/c units w/ electric heat	1997	20	\$24,000	\$1,200
Progress St. Fire House	1 pneumatic control system	1986	31	\$16,500	\$532
Progress St. Fire House	1 gas fired boiler - Main level & Basement	1986	31	\$38,500	\$1,242
Progress St. Fire House	3 roof top a/c package units	1991	26	\$33,000	\$1,269
Progress St. Fire House	2 split a/c systems	1996	21	\$17,600	\$838
PW Admin Building	1 forced air gas fired furnace - lunchroom	2000	17	\$3,300	\$194
PW Admin Building	1 split A/C system - lunchroom	2000	17	\$4,950	\$291
PW Storage Building	1 gas fire unit heat - landscape shed	2000	17	\$3,200	\$188
PW Town Garage	5 infrared heating units	1997	20	\$2,750	\$138
<b>FISCAL YEAR TOTAL:</b>				<b>\$284,000</b>	<b>\$11,522</b>

**FY to be Replaced: 2018**

<u>Location</u>	<u>Description</u>	<u>Installation Date</u>	<u>Life</u>	<u>Replacement Cost</u>	<u>Depreciation</u>
Aquatic Center	1 gas fired boiler	1992	26	\$75,000	\$2,885
Aquatic Center	engy Rec/heat-air-dem-Pool Pack-Pool Area	2003	15	\$330,000	\$22,000
Municipal Building	Packaged Terminal HP break rm 1st floor	2008	10	\$1,500	\$150
Progress St. Fire House	2 hanging air handlers - bay area	1983	35	\$10,000	\$286
PW Admin Building	1 forced air gas horizontal furnace - admin	1998	20	\$3,300	\$165
PW Admin Building	1 split a/c system - admin	1998	20	\$4,950	\$248
Recreation Center	2 roof top package units - art room & senior	1998	20	\$16,000	\$800
Blacksburg Motor Company	4 Building Sump Pumps	2008	10	\$4,200	\$420
Fire House III	1 Compressor/Dryer	2008	10	\$10,500	\$1,050
<b>FISCAL YEAR TOTAL:</b>				<b>\$455,450</b>	<b>\$28,003</b>

**FY to be Replaced: 2019**

<u>Location</u>	<u>Description</u>	<u>Installation Date</u>	<u>Life</u>	<u>Replacement Cost</u>	<u>Depreciation</u>
Police Dept. Building	1 roof top unit w gas heat - jail	1999	20	\$12,000	\$600
Police Dept. Storage Building	1 gas fired Furance	1999	20	\$3,850	\$193
PW Purchasing Warehouse	1 Small unit gas fired Unit heater - meter rm	1999	20	\$4,000	\$200
Thomas Conner House	2 a/c split systems w/gas furnace	1994	25	\$22,000	\$880
<b>FISCAL YEAR TOTAL:</b>				<b>\$41,850</b>	<b>\$1,873</b>

**FY to be Replaced: 2020**

<u>Location</u>	<u>Description</u>	<u>Installation Date</u>	<u>Life</u>	<u>Replacement Cost</u>	<u>Depreciation</u>
Aquatic Center	Heat/cool roof top package unit - Lobby area	2005	15	\$11,000	\$733
Old Town Hall	1 forced air gas furnace	2005	15	\$6,600	\$440
Old Town Hall	1 split a/c system - heat pump	2005	15	\$6,600	\$440
Police Dept. Building	a/c system w/electric furnace - evidence	2000	20	\$4,000	\$200
Police Comm. Bldg. - North Main	2 A/C units w/electric heat	2000	20	\$13,000	\$650
Price's Fork Fire House	2 split a/c systems	2005	15	\$17,600	\$1,173
Price's Fork Fire House	2 forced air furnaces	1991	29	\$8,800	\$303
PW Admin Building	1 forced air gas horizontal furnace - training	2004	16	\$4,950	\$309
PW Admin Building	1 split a/c system - training	2004	16	\$3,300	\$206
PW Town Garage	2 electric heating units - office ceiling	2000	20	\$1,200	\$60
<b>FISCAL YEAR TOTAL:</b>				<b>\$77,050</b>	<b>\$4,516</b>

**FY to be Replaced: 2021**

<u>Location</u>	<u>Description</u>	<u>Installation Date</u>	<u>Life</u>	<u>Replacement Cost</u>	<u>Depreciation</u>
Price's Fork Rd. fire House	2 infrared tube heaters	1991	30	\$8,800	\$293
Blacksburg Motor Company	1 Subsurface Ventilation System	2011	10	\$5,000	\$500
<b>FISCAL YEAR TOTAL:</b>				<b>\$13,800</b>	<b>\$793</b>

**5 year total \$872,150 \$46,706**

# BLACKSBURG CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL SHEET

**Department:** Public Works

**Project Title:**

**Project Location:** Public Works

**Project Status:** There are no projects for the Solid Waste and Recycling Fund in this Recommended Capital Improvement Program.

**Description and Justification:**

**Project Costs and Planned Financing of Project:**

Source of Funds	Total Project Estimate	Prior Allocation	2016/17	2017/18	2018/19	2019/20	2020/21	Current 5-Year Total	Future Years
<b>Total</b>									



TOWN OF  
**Blacksburg**  
*a special place*