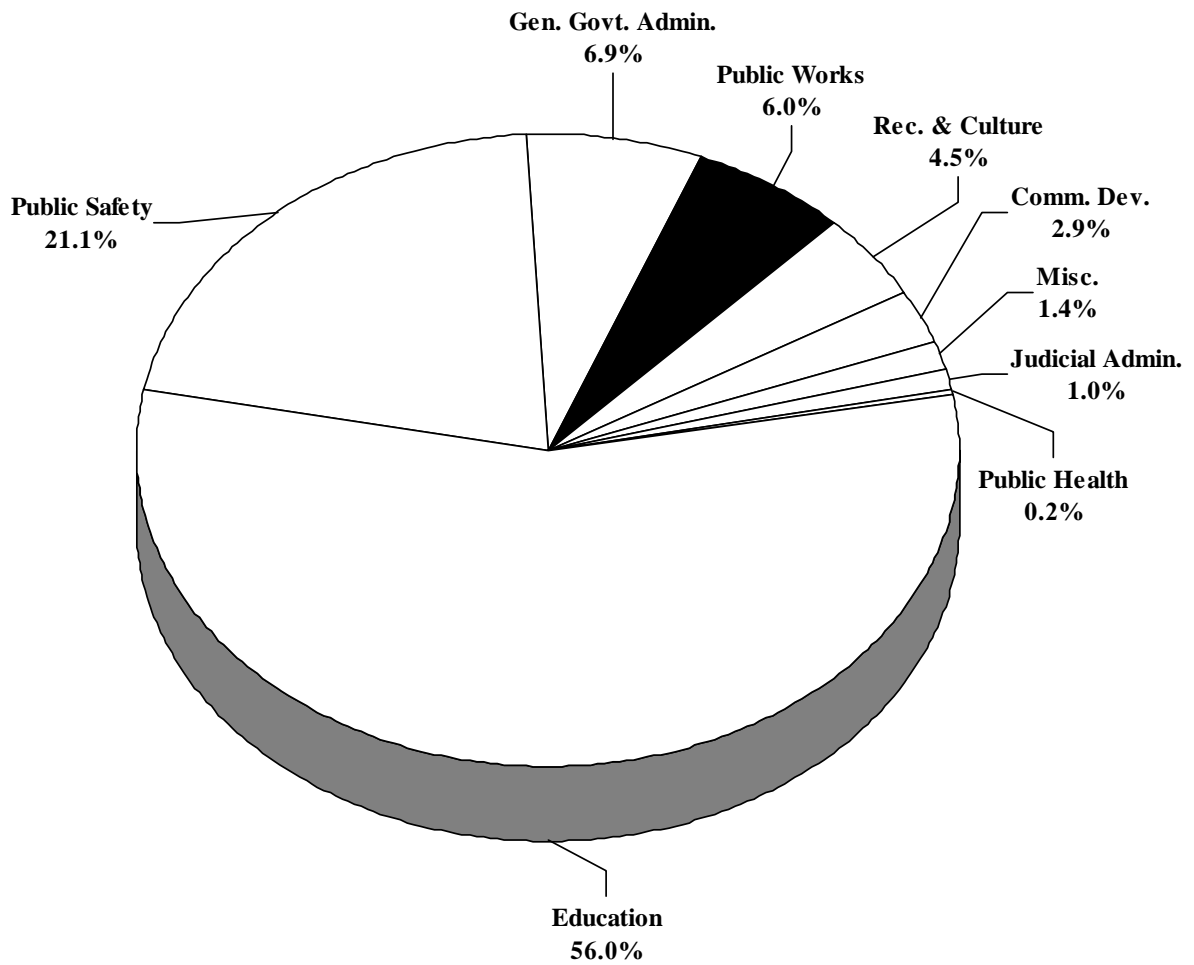


COUNTY OF HENRICO, VIRGINIA

Public Works
\$50,555,927



Total General Fund
\$839,675,080

**COUNTY OF HENRICO, VIRGINIA
PUBLIC WORKS - GENERAL FUND
FY 2017-18**

Division	FY 15-16 Actual	FY 16-17 Original	FY 17-18 Approved
Administration	\$1,669,329	\$1,244,364	\$1,303,804
Road Maintenance	28,488,980	30,541,337	30,917,172
Traffic Engineering	3,271,796	3,432,840	3,560,769
Construction	2,530,419	2,802,564	2,854,728
Design	1,686,950	1,964,091	2,033,333
Mass Transit	6,908,519	6,993,089	7,847,382
Environmental	1,639,900	1,568,632	1,612,536
Standing Water	391,542	418,337	426,203
Total Public Works	<u>\$46,587,435</u>	<u>\$48,965,254</u>	<u>\$50,555,927</u>

PUBLIC WORKS

Description

The Henrico County Department of Public Works maintains the third largest road network in the State of Virginia after the State of Virginia and the City of Virginia Beach. The Department is responsible for the construction and maintenance of all secondary roads in the County, storm water drainage, administration of Public Transit services, and enforcement of erosion and sedimentation laws and ordinances. The Department is organized into the following divisions: Administration, Design, Maintenance, Construction, Transportation Development, Traffic Engineering, Environmental Control, and Standing Water Initiative.

The majority of departmental services are funded by an allocation of gasoline tax revenues from the State of Virginia and license fee revenue collected in the County's General Fund. In addition, the General Fund provides funding for certain services in accordance with the Board of Supervisors' directives for various programs. These include the Environmental Control Program, Vacuum Leaf services, the JOBS transit service, the Standing Water Initiative, and supplemental funding for the Mass Transit Division.

Objectives

- To develop and maintain a safe and efficient road system.

- To develop and maintain an efficient and economical storm drainage system.
- To ensure that the construction of road and drainage facilities is accomplished in accordance with appropriate standards and in an environmentally correct manner.
- To review and provide for the most cost-effective system of Public Transit for the residents of the County.
- To provide prompt responses to citizen inquiries or requests for service.
- To enforce Chesapeake Bay Act regulations along with current erosion and sedimentation control ordinances and policies.

Budget Highlights

The Department's approved budget for FY2017-18 is \$50,555,927, representing an increase of \$1,590,673 or 3.2 percent from the FY2016-17 approved budget. Within this overall approved budget, which combines both Gas Tax and General Fund supported programs, the personnel component is budgeted to increase by a net difference of \$987,429 or 6.3 percent.

Annual Fiscal Plan

Description	FY16 Actual	FY17 Original	FY18 Approved	Change 17 to 18
Personnel	\$ 15,454,437	\$ 15,759,899	\$ 16,747,328	6.3%
Operation	29,296,821	31,608,805	32,128,489	1.6%
Capital	1,836,177	1,596,550	1,680,110	5.2%
Total	<u>\$ 46,587,435</u>	<u>\$ 48,965,254</u>	<u>\$ 50,555,927</u>	<u>3.2%</u>
Personnel Complement	257	259 *	262 **	3

*The personnel complement includes an Engineer II position and Construction Specialist II position which were added in FY2015-16 to enhance the permit review process.

** Two Capital Project Managers added to the Mass Transit & Transportation Division in FY2017-18 in order to assist with locally administered capital projects. A Management Specialist I added to the Environmental Division in FY2017-18 for the inspection of BMPs.

Performance Measures

	FY16	FY17	FY18	Change 17 to 18
Workload Measures				
Lane Miles of Road Maintained	3,498	3,505	3,515	10
Traffic Signals Maintained	150	153	153	0
Development Plans Reviewed	1,828	1,875	1,925	50

This increase in the personnel component is due to a 2.5 percent salary increase for FY2017-18, the addition of two Capital Project Managers to the Transportation Division, the addition of a Management Specialist I to the Environmental Division as well as rising health care costs.

The operating component is forecasted to increase by \$519,684 or 1.6 percent. This increase is primarily due to addition of funds to support the GRTC and JOBS service. Capital outlay expenditures are projected to increase by \$83,560 or 5.2 percent compared to the FY2016-17 approved budget.

The FY2017-18 approved budget is to be funded by \$41,467,724 from the State's Gas Tax maintenance allocation, \$8,518,039 from the County's General Fund subsidy, and \$570,164 from miscellaneous departmental revenue. The total projected Gas Tax for FY2017-18 is based on the allocation for operations and maintenance and does not include a construction allocation. If gas tax were allocated for construction it would be included in the capital budget section of this document. There has not been a construction allocation funded by gas tax since FY2008-09.

The State's Gas Tax maintenance allocation is utilized for approximately 82.0 percent of the operating budget. In other words, the gas tax allocation will support the Department of Public Works' divisions with the exception of the Standing Water Initiative and Environmental Inspection. This revenue source is restricted to roadway maintenance activities.

The functions supported by the General Fund subsidy total \$8,518,039. The General Fund supports 100 percent of expenses related to the Standing Water Initiative and Environmental Inspection divisions which combined total \$2,038,739. The Standing Water Initiative is budgeted at \$426,203 and the Environmental Inspection Division is budgeted at \$1,612,536 for the approved FY2017-18 budget.

General Fund support is also provided for Mass Transit services, feasibility studies for the new road

construction funding application process tied to House Bill Two (HB2), and Leaf Collection services. Specifically, General Fund support of \$5,977,800 in FY2017-18 will subsidize the GRTC and JOBS services costs in the Mass Transit budget. The General Fund support for GRTC and JOBS services increased by \$628,000 compared to the FY2016-17 approved budget. This increase will provide \$397,000 to cover existing usage of this service, \$186,000 to cover the County's portion of the Bus Rapid Transit (BRT) service, and \$45,000 to support the expansion of an existing GRTC local route on Route 93, the Azalea Connector.

General fund support will also be provided for feasibility studies in the amount of \$200,000. This funding will assist with the HB2 application process which determines eligibility for additional funding for transportation projects. The Leaf Collection services budget totals \$473,700. Within this total budget, the General Fund will support \$301,500, Leaf Collection Fees will total \$170,000, and the remaining \$2,200 will be provided by miscellaneous revenues. It is important to note that this budget includes free leaf vacuum service for all County residents that currently participate in the Real Estate Tax Advantage Program (REAP). The following table depicts the General Fund support for the Department of Public Works:

General Fund Support	FY2018
Environmental Inspection	\$1,612,536
Standing Water Initiative	\$426,203
Leaf Collection services	\$301,500
House Bill Two	\$200,000
GRTC and JOBS services	\$5,977,800
Total	\$8,518,039

The third and final source of funding is generated from miscellaneous fees, which total \$570,164 for the approved budget. These charges/fees are used as enhancements to the Gas Tax revenue for all divisions with the exception of the Standing Water Initiative and Environmental Inspection divisions.

Public Works (cont'd)

What follows is a discussion of each of the divisions within the approved budget for Public Works.

Roadway Maintenance and Administration

The total approved budget for the divisions that fall within this group is \$48,517,188. Except for Mass Transit, the Roadway Maintenance and Administration divisions represent the core services to maintain the existing roadway system provided by Public Works and therefore utilize \$41,467,724 of State Gas Tax maintenance allocation in providing these services. The remainder of funding is provided by other revenue in the General Fund, including a \$5,977,800 subsidy to support Mass Transit Services. The personnel component is forecasted to increase by a net difference of \$979,536 or 7.0 percent which reflects a 2.5 percent salary increase in FY2017-18, the addition of two Capital Project Managers to the Transportation Division, the addition of \$27,333 to temporary salaries to help with field data collection as well as rising health care costs. The operating component reflects a net increase of \$514,79 or 1.7 percent compared to the prior fiscal year which is primarily due to the addition of funds to support GRTC and JOBS services.

The capital outlay component increased by \$82,000 compared to the prior fiscal year. There are several noteworthy capital purchases forecasted within the \$1,668,000 approved capital component. The Capital outlay items include the following: 2 Backhoes, a diesel chemical spreader, 2 pavers, 2 Leeboy pavers, pipe camera trailer, 2 rubber tire loader, track loader, tandem chemical spreaders, Single axle chemical spreaders, 20 new traffic counters, Cable Locator, batteries for the Uninterruptible Power Supplies for the traffic signals, and a new Chemical Pump Station.

Standing Water Initiative Division

The Standing Water Initiative Division is a program that is funded solely through the General Fund at a total cost of \$426,203. The personnel component comprises 80.0 percent or \$340,503 of the total budget. The operating component remains flat compared to the prior fiscal year.

Environmental Inspection Division

The Environmental Inspection Division is funded solely through the General Fund at a total cost of \$1,612,536. Expenditures are forecasted to increase

by \$43,904 or 2.8 percent from the FY2016-17 approved budget. This budgetary increase is due to a 2.5 percent salary increase in FY2017-18, the addition of a Management Specialist I to assist with BMP inspection as well as rising health care costs. The operating component reflects an increase of \$4,905 compared to last fiscal year. This increase is due to the addition of \$3,465 for a vehicle for a Capital Projects Manager and the movement of \$1,440 from the capital outlay component into the operating budget. These budget adjustments were made to more accurately reflect planned expenditures in FY2017-18.

Departmental Highlights

In 2016, the Department of Public Works accepted over 28 miles of new roads into the county road network. In addition, the department completed over 10,000 inspections of active construction projects. Public Works has also secured approximately \$9.4 million in grant funding for roadway and pedestrian capital projects for FY2017-18.

Supporting Economic Development

Public Works plays an important role in facilitating economic development in the county by helping meet businesses' needs to access the road system. Recently, the department constructed an extension of Engineered Wood Way to accommodate a French company moving to the United States with their first US operation. Additionally, the department participated in the construction cost of the extension to Scott Road for the new Dominion Virginia Power Operations Center and thus helped to secure 100 new industry jobs for the county.

Community Outreach

The Department of Public Works has been numerous points of contact with the community through its various services. As such, it is important that the department keep the community informed about these services and respond to customer feedback and concerns. A few examples of the department's efforts in this area include the four county-wide training sessions which were provided on storm water pollution. Public Works also conducted four citizen information meetings and public hearings for new road construction projects. In addition, the department responded to over 2,250 environmental resident concerns through field inspections and follow up.

Public Works (cont'd)

Road Projects

Public Works has numerous road projects that are either planned or underway.

Richmond-Henrico Turnpike

The Richmond-Henrico Turnpike project of \$14 million was overwhelmingly approved in 2016 bond referendum to help fund this \$41 million project.

The cost estimate for the Northern Section of Richmond-Henrico Turnpike Improvement Project is \$11,425,000. The project is 0.8 mile in length between Hummingbird Rd and the Railroad Crossing 0.4 mile south of the Hanover County line and involves widening the road from two lanes to a four-lane divided roadway with a raised median. The roadway will have a sidewalk on the west side and a 10-foot shared use path on the east side.

The County leveraged bond funds to receive \$3,567,000 in Virginia Department of Transportation's State SMART SCALE. This is in addition to \$1,645,000 in Federal funds previously awarded by the Richmond Regional Transportation Planning Organization for intersection improvements at Richmond-Henrico Turnpike and Azalea Avenue.

North Gayton I-64 Interchange

To alleviate traffic and reducing safety concerns in the Short Pump area, the department is conducting an engineering study to request an interchange be added to I-64 at North Gayton Road. The engineering study is anticipated to be completed within the first quarter of 2017.

Woodman Road Extension

Design is underway for the Woodman Road Extension from Greenwood Road to Route 1. This project will provide a connection between Woodman Road north of Greenwood Road and Brook Road via an extension of Woodman Road/JEB Stuart Parkway. This will provide better access to the Virginia Center Commons area and Interstate 295.

Sidewalk Projects

The Department of Public Works is undergoing an effort to significantly improve the County's walkability. Henrico County has dedicated \$2.5 million annually in the Department of Public Works' Capital Budget for sidewalks. This annual funding source will provide local match funding for Virginia Department of Transportation Revenue Share Funds

and for other funding sources that require a match. The County currently has approximately 18 miles of sidewalk that are completed or in the works. The Department of Public Works has four and a half more miles of sidewalk planned throughout the county for the next four years. In addition, the Department has also completed a GIS-based county-wide sidewalk inventory.

Pedestrian and Commuter Improvements

The Department of Public Works completed \$3.3 million in projects to improve driver and pedestrian safety at six intersections in 2016. The work occurred at Parham's intersections with Shrader Road, Three Chopt Road, Villa Park Drive, Woodman Road and Ackley Avenue and at Darbytown Road and Laburnum Avenue.

Commuter users of the Glenside Park and Ride have noted significant improvements as the lighting was completely replaced with a new modern high efficiency LED system. Public Works also upgraded and improved disabled access at both the Glenside and the Gaskins Park and Rides and repaved much of the Glen Side facility.

Bridge Projects

The Department of Public Works is tasked with maintaining the aging bridges within the county's road system. The Upham Creek bridge on the 301 Access Road has been rehabilitated. In addition, the Creighton Road bridge replacement was opened to traffic on March 3, two months ahead of schedule and within project budget of \$3.5 million.

Storm Cleanup

Henrico crews worked around the clock to help residents clean up after a severe storm in late June toppled trees and snapped branches. Employees of the departments of Public Works and Public Utilities spent about four weeks clearing more than 200 downed trees from roads and removing debris from residential and other properties. Overall, the county collected debris from more than 10,000 homes at no charge to the residents. Henrico spent more than \$3 million on the effort.

Similarly, crews sprang into action to clear the county-maintained streets when a snowstorm barreled through the area in January 2017 bringing 8 inches of snow and extreme cold. The county devoted more than \$2.0 million to this snow event and used 10,000 tons of

Public Works (cont'd)

salt, almost half of the Department of Public Works' total salt inventory.

Municipal Separate Storm Sewer System Permit (MS4)

Work is ongoing to comply with the state permit which requires pollution reductions over a 15-year time horizon. The department has achieved 12 percent to date of the pollution reduction that is required by year 15. A 40 percent reduction is required in the first 10 years of the program.

Some examples of the work done to date include:

Level Spreader and Energy Dissipater

The Woodman Park Stream Energy Dissipater Project was completed which provides pollution reductions. This project was partially funded with a grant from the Virginia Department of Environmental Quality's Stormwater Local Assistance Fund (SLAF).

Stream Restoration

A stream restoration project improved a 1,750-foot section of Hungary Creek, near Lakefront Drive. Construction started in August 2015 and was completed in May 2016. The \$935,000 project,

partially funded by a SLAF grant, relocated and stabilized the stream. This stream had been eroding and allowing phosphorus, nitrogen and other pollutants to flow to the James River and ultimately the Chesapeake Bay.

Two other stream restoration projects are under construction at the Belmont Golf Course and at the Duncroft Castle Point Park.

Mosquito Control

The Environmental Division monitored for the presence of mosquito borne disease through 2,669 mosquito inspections and the collection of 42,000 mosquito samples from 97 different locations in the county. Out of the 42,000 mosquito samples, only 3 tested positive for West Nile Virus and none were positive for the Zika Virus. Additionally, the Division treated 87 acres for mosquitoes with benign mosquito larvicides.

Together with the Virginia Department of Health, Public Safety and the State, the Environmental Division collaborated on a task force for the Henrico County Zika Preparedness & Response Plan.

