

PUBLIC WORKS

DESCRIPTION

The Henrico County Department of Public Works maintains the third largest road network in the State 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 Board of Supervisors' directives including 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.

FISCAL YEAR 2020 SUMMARY

| Description | Annual Fiscal Plan | | | |
|----------------------|----------------------|----------------------|----------------------|-------------|
| | FY18 | FY19 | FY20 | Change |
| | Actual | Original | Approved | 19 to 20 |
| Personnel | \$ 17,007,854 | \$ 17,478,305 | \$ 18,497,489 | 5.8% |
| Operation | 31,925,810 | 33,407,244 | 32,964,950 | (1.3%) |
| Capital | 1,603,074 | 1,815,610 | 3,146,000 | 73.3% |
| Total | <u>\$ 50,536,738</u> | <u>\$ 52,701,159</u> | <u>\$ 54,608,439</u> | <u>3.6%</u> |
| Personnel Complement | 262 | 263 | 267 * | 0 |

* Two Construction Division Inspectors and a Construction Specialist to help manage Capital projects and a Traffic Division Signal Service worker for preventative maintenance, utility and traffic detector work.

PERFORMANCE MEASURES

| | <u>FY18</u> | <u>FY19</u> | <u>FY20</u> | <u>Change 19 to 20</u> |
|-------------------------------|-------------|-------------|-------------|----------------------------|
| Workload Measures | | | | |
| Lane Miles of Road Maintained | 3,524 | 3,526 | 3,536 | 10 |
| Traffic Signals Maintained | 155 | 156 | 157 | 1 |
| Development Plans Reviewed | 2,315 | 2,350 | 2,375 | 25 |

BUDGET HIGHLIGHTS

The Department's budget for FY2019-20 is \$54,608,439, representing an increase of \$1,907,280 or 3.6 percent from the FY2018-19 approved budget. Within this budget, which combines both Gas Tax and General Fund supported programs, the personnel component is budgeted to increase by a net difference of \$1,019,184 or 5.8 percent. The increase in the personnel component is due to revised salaries, the addition of four positions, as well as rising health care costs.

The operating component is forecasted to decrease by \$442,294 or 1.3 percent. This decrease is primarily attributable to the reduction of \$985,102 to the contractual services offset by increases of \$465,000 for purchases from other governments, \$39,435 for the automotive motor pool and \$21,600 for road materials.

Capital outlay expenditures are projected to increase by \$1,330,390 or 73.3 percent compared to the FY2018-19 approved budget. This increase is due to several planned large equipment purchases.

The FY2019-20 budget includes funding of \$43,843,435 from the State's Gas Tax maintenance allocation, \$10,358,804 from the County's General Fund subsidy, and \$406,200 from miscellaneous departmental revenue. The total projected Gas Tax for FY2019-20 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 used for approximately 80 percent of the operating budget. In other words, the gas tax allocation will support all Department of Public Works' divisions except 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 \$10,358,804. The General Fund supports 100 percent of expenses related to the Standing Water Initiative and Environmental Inspection divisions which combined total \$2,149,317. The Standing Water Initiative is budgeted at \$423,966 and the Environmental Inspection Division is budgeted at \$1,725,351 for the FY2019-20 budget.

General Fund support is also provided for Mass Transit services, feasibility studies for the new road construction funding application process tied to VDOT smart scale, and Leaf Collection services. Specifically, General Fund support of \$7,642,800 in FY2019-20 will subsidize the GRTC and JOBS services costs in the Mass Transit budget. The General Fund support for Mass Transit increased by \$465,000 or 6.5 percent when compared to last fiscal year, for a 3.0 percent increase in GRTC operating costs, and for full-year support of the mid-September 2018 service enhancements to three routes: Seven Pines (Route 7), Laburnum Connector (Route 91), and Pemberton (Route 19).

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General fund support will also be provided for feasibility studies in the amount of \$200,000. This funding will assist with the VDOT smart scale application process which determines eligibility for additional funding for transportation projects.

The Leaf Collection services budget totals \$488,700. Within this total budget, the General Fund will support \$301,500, Leaf Collection Fees will total \$185,000, 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).

Litter is an increasing problem throughout the County and conflicts with basic priorities for enhancing the quality of life and economic opportunities for all citizens. A position has been added within Road Maintenance to manage available litter control resources.

The following table depicts the General Fund support for the Department of Public Works:

| General Fund Support | FY2019-20 |
|-----------------------------|---------------------|
| Environmental Inspection | \$1,725,351 |
| Standing Water Initiative | \$423,966 |
| Leaf Collection services | \$301,500 |
| Feasibility Studies | \$200,000 |
| Litter Control | \$65,187 |
| GRTC and JOBS services | \$7,642,800 |
| Total | \$10,358,804 |

The third and final source of funding is generated from miscellaneous fees, which total \$406,200. 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.

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

ROADWAY MAINTENANCE AND ADMINISTRATION

The total approved budget for the divisions that fall within this group is \$52,459,122. 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 \$43,843,435 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 \$7,642,800 subsidy to support Mass Transit Services. The personnel component is forecasted to increase by a net difference of \$973,997 or 6.2 percent which reflects salary investments and increasing health care costs. The operating component reflects a net decrease of \$442,504 or 1.3 percent compared to the prior fiscal year.

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The capital outlay component increased by \$1,330,600 compared to the prior fiscal year. There are several noteworthy capital purchases forecasted within the \$3,144,600 capital component. The capital outlay items include: three additional and two replacement Grandall Excavators, four replacement single axle dump trucks, an additional dump trailer, an air compressor, a spare traffic detection system, a crash cushion truck, a walk behind concrete saw, and a traffic signal conflict monitor tester.

STANDING WATER INITIATIVE DIVISION

The Standing Water Initiative Division is a program funded solely through the General Fund at a total cost of \$423,966. The personnel component is 79.8 percent or \$338,266 of the 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 \$1,725,351. The Division's budget is forecast to increase by \$56,168 or 3.4 percent from the FY2018-19 approved budget. This budgetary increase is entirely due to an increase in the personnel component and reflects rising personnel and health care costs in FY2019-20. The operating and capital components remain flat compared to the prior fiscal year.

DEPARTMENTAL HIGHLIGHTS

In 2018, the Department of Public Works accepted over 4 miles of new roads into the County road network. In addition, the Department completed over 10,000 inspections of active construction projects. Public Works also secured over \$19.6 million in grant funding for roadway and pedestrian capital projects in FY2018-19.

SUPPORTING ECONOMIC DEVELOPMENT

Public Works continued facilitating economic development in the County by improving access to the road system. The Department constructed an extension of the westbound Nuckols Road ramp onto I-295 to facilitate traffic flow in the Innsbrook area and is designing an extension of the off-ramp on the eastbound side. In addition, the Department secured a \$650,000 Economic Development Access Program grant from VDOT to extend Engineered Wood Way to accommodate future development.

COMMUNITY OUTREACH

Public Works conducted eleven citizen information meetings and public hearings for new roadway, sidewalk, and stream restoration projects. The Department also partnered with GRTC to hold two stakeholder meetings and three public meetings across the County to present proposed changes to GRTC transit service and receive input as part of GRTC's Transit Development Plan.

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ROAD PROJECTS

Public Works has 66 road and drainage projects underway. Updates on several major projects include:

Dabbs House Road

A 0.8-mile section of Dabbs House Road between Nine Mile Road and East Richmond Road will be widened with curb-and-gutter, drainage improvements, a sidewalk, and a right-turn lane. All necessary right-of-way has been acquired and construction of the relocated utility lines has begun.

N. Gayton Road Interchange at I-64

The Department of Public Works is working with the Virginia Department of Transportation to complete an engineering study supporting a new interchange at N. Gayton Road and I-64 in Short Pump. Upon approval by the Federal Highway Administration, the County will work to fund and design the interchange.

Richmond-Henrico Turnpike

The County leveraged \$14.0 million in bond funds to receive \$11.7 million in Virginia Department of Transportation SMART SCALE funding for the Richmond-Henrico Turnpike Improvement Project. This project will widen and improve the existing 1.9-mile section of roadway between Laburnum Avenue and the at-grade railroad crossing located approximately 0.7 mile north of Azalea Avenue. The road will be reconstructed as a four-lane divided roadway with turn lanes, curb-and-gutter, drainage improvements, a 10-foot multi-use trail, and sidewalk. The contract for engineering design has been awarded.

Three Chopt Road

A project to improve a 2.1-mile section of Three Chopt Road between Gaskins Road and Barrington Hills Drive has advanced to the right-of-way acquisition phase. This project will widen the roadway to a four-lane divided section with curb-and-gutter, drainage improvements, and sidewalks. This project is scheduled to be advertised for construction in late 2019.

Woodman Road Extension

Design is underway for the extension of Woodman Road between Greenwood and Brook Road. A 2-lane roadway will be constructed with a 12 foot paved multi-use trail connecting to the River Mill Development. The project includes a 2-lane roundabout at the intersection of Greenwood and Woodman Road. Construction is anticipated to begin in early 2019.

PEDESTRIAN AND COMMUTER IMPROVEMENTS

The Department of Public Works is continuing an initiative to improve bicycle and pedestrian accommodations across the County. In addition to the \$2.5 million allocation included in the Capital Improvement Program annually, the Department received \$15.3 million in grant funding in 2017 for 10 bicycle and pedestrian related projects. In total, the Department has 28 programmed projects scheduled to be completed or under construction over the next three years that will add over 20 miles of sidewalks and paved multi-use trails.

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BRIDGE PROJECTS

The Department of Public Works has four additional bridge repair or replacement projects under design. Repairs to the Greenwood Road bridge over the CSX railroad tracks is under construction and repairs to the Parham Road bridge over the CSX railroad tracks is anticipated to be advertised for construction in 2019.

STORM CLEANUP

Calendar year 2018 was the second wettest year on record in Henrico. The Department received over 3,000 drainage related work orders and cleaned-out numerous ditches and culverts because of the significant rainfall. Also, a late developing early December snow event dropped almost 12 inches of snow in the County. The Department worked diligently to clear the roads and the cost of this one storm was over \$1.0 million.

MUNICIPAL SEPARATE STORM SEWER SYSTEM PERMIT (MS4)

Work is ongoing to comply with the state permit, which requires watershed restoration and pollution reductions over a 15-year time horizon. The Department has already achieved 16 percent of the total required reductions to date, with 40 percent required by the year 2025. The Department must achieve 100 percent of the pollution reductions by the year 2030.

Two stream restoration projects, the Virginia Home for Boys and Girls and Quarter Mill Apartments are scheduled for construction in 2019. Three more stream restoration projects are being designed; the Bretton Woods subdivision, the Old Nine Mile Road Landfill, and the Water Reclamation Facility. These three projects are scheduled to be complete by the end of 2021. Completion of all five projects will take the County past its 40 percent removal requirement before 2025 for phosphorus and nitrogen. Public Works is partnering with Public Utilities' Water Reclamation Facility to obtain sediment credits to achieve the 40 percent sediment reduction goal in case the Department is not able to complete enough additional stream restoration projects by 2025.

MOSQUITO CONTROL

Public Works monitors for the presence of mosquito borne diseases. This past year, monitoring included responding to 550 residential calls as well as monitoring 95 sites throughout the County on a regular basis. The Department collected 75,000 mosquitos, which included 28 different species. This collection yielded 102 positive test results for West Nile virus from 40 of the monitored sites. This is the highest and most prolonged positive mosquito collection since the programs' inception and potentially indicates an increased virus amplification within the mosquito population. The Department also performed 1,243 individual mosquito larvicide applications on County-maintained property.

County-wide collaboration continued with the Henrico Arboviral Working Group, which shifted focus to all potential mosquito borne diseases for the area. The group conducted 11 events reaching approximately 400 individuals, along with three media-initiated interviews coordinated through the Department of Public Relations and Media Services.