# **PUBLIC WORKS**

# DESCRIPTION

The Henrico County Department of Public Works maintains 3,635.78 lane miles, one of the top three road networks in the Commonwealth, with the City of Virginia Beach and the Commonwealth of Virginia. 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, Real Property, and the Standing Water Initiative.

Most departmental services are funded from highway maintenance (gasoline tax) revenues from the Virginia Department of Transportation (VDOT) and license fee revenue collected in the County's General Fund. In addition, the General Fund provides 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.

The Central Virginia Transportation Authority (CVTA) provides additional funding for transportation and mobility projects in the County and across the Richmond region through additional sales and gas taxes. Fifty percent of the revenues are sent directly to the member localities, thirty-five percent of the revenues are targeted for regionally significant projects, and fifteen percent of the revenues are dedicated to public transit and regional mobility. The Department of Public Works has representation on the CVTA Technical Advisory Committee and is responsible for programming the County's allocation of CVTA funds, as well as project development, programming, and construction.

# OBJECTIVES

- Develop and maintain a safe and efficient road system.
- Develop and maintain an efficient and economical storm drainage system.
- Ensure that road and drainage facility construction is accomplished in accordance with appropriate standards and in an environmentally correct manner.

# FISCAL YEAR 2025 SUMMARY

	FY23	FY24	FY25	Change
Description	Actual	Original	Approved	24 to 25
Personnel	\$ 23,366,574	\$ 26,502,406	\$ 29,400,876	10.9%
Operation	31,554,180	30,913,035	33,213,096	7.4%
Capital	2,152,416	1,998,831	1,998,831	0.0%
Total	\$ 57,073,170	\$ 59,414,272	\$ 64,612,803	8.7%
Personnel Complement	295	300	313 *	13

\*Includes the addition of 1 Senior Controller, 1 Assistant Division Director, and 1 Capital Project Manager for the Transportation Division, 2 Engineers for the Design Division, and 8 Project Specialists for the Construction and Engineering Inspections division.

PERFORMANCE MEASURES				
	FY23	FY24	FY25	Change 24 to 25
Workload Measures				
Lane Miles of Road Maintained	3,575	3,583	3,592	9
Traffic Signals Maintained	179	190	196	6
Development Plans Reviewed	1,325	1,400	1,450	50

# **OBJECTIVES (CONTINUED)**

- Review and provide the most cost-effective public transit system for county residents.
- Provide prompt responses to citizen inquiries or requests for service.
- Enforce Chesapeake Bay Act regulations along with current erosion and sedimentation control ordinances and policies.

# **BUDGET HIGHLIGHTS**

The Department's budget, which combines Gas Tax and General Fund supported programs, is \$64,612,803, an increase of \$5,198,531, or 8.7%. The personnel component is \$29,400,876, an increase of \$2,898,470, or 10.9% due to the addition of a Senior Controller, an Assistant Division Director, and a Capital Projects Manager for the Transportation Development Division, two engineers for the Design Division, and 8 Project Specialists for the new Construction and Engineering Inspection division, as well as increases to salary and benefit rates. Throughout the department, salaries for Engineer, Assistant Division Director, and Division Director positions were increased due to market-based adjustments.

The operating component is \$33,213,096, an increase of \$2,300,061, or 7.4%, which includes an additional \$1,394,009 for road materials and \$60,459 for monthly automotive charges. Additionally, contractual services saw a major increase of \$704,191, or 5.9% as well as janitorial at \$84,000, a 4.0% increase. Savings were found in refuse service and other accounts. The capital component is unchanged.

The Public Works budget is funded by \$52,759,820 from the State's Highway Maintenance (Gas Tax) allocation, \$12,749,983 from Henrico's General Fund subsidy, and \$133,500 from miscellaneous departmental revenue. The total projected Gas Tax for FY25 is based on the allocation for operations and maintenance and does not include a construction allocation.

The State's Gas Tax maintenance allocation, a revenue restricted to roadway maintenance activities, is used for 81.3% of the operating budget. The gas tax allocation supports all Department of Public Works' divisions except the Standing Water Initiative and Environmental Inspection, which are completely supported by the general fund.

Public Works has several projects included in Henrico County's FY25 Capital Budget. Stormwater/MS4 improvements of \$2,348,000, and BMP Maintenance of \$1,000,000 are supported by the general fund. Countywide land acquisitions (drainage), countywide drainage, countywide dam repair and maintenance, minor drainage improvements, countywide alley improvements, and countywide creeks and streams projects have a combined

budget of \$2,750,000 and are funded by revenues from motor vehicle license fees. The FY25 Capital Budget includes the second installment of bonds for drainage improvements totaling \$7,500,000. Finally, \$5,000,000 is included in the Capital Budget for countywide pedestrian improvements and \$25,000,000 for CVTA funded projects.

#### ADMINISTRATION DIVISON

The total budget for the Administration Division is \$2,580,263, an increase of \$398,117, or 18.2%. The personnel component increased by \$248,117, due to the addition of a Senior Controller position to better manage the variety of funding sources now utilized for capital projects including CVTA revenues, as well as changes to salary and benefits. The operating component increased by \$150,000 due to computer equipment and software moving to Administration from the other cost centers to provide better management of these funds. The capital component is unchanged.

## ROAD MAINTENANCE DIVISION

The total budget for the Road Maintenance Division is \$34,203,070, which is an increase of \$2,734,756, or 8.7%. The personnel component increased by \$627,835 due to position changes and increases in salary and benefits. The operating component increased by \$2,208,206. This increase is highlighted by \$737,757 in contractual services for litter pickup and street sweeping, \$84,000 for janitorial, and \$1,394,009 for road materials. The capital component is \$1,551,955, a decrease of \$101,285 reflecting a lower anticipated need for new machinery and equipment.

#### TRAFFIC ENGINEERING DIVISION

The total budget for the Traffic Engineering Division is \$5,145,004, an increase of \$460,876, or 9.8%. The personnel component increased by \$268,076 due to position changes and increases in salary and benefits. The operating component decreased by \$4,700 due to computer software funds moving to Administration. The capital component increased by \$197,500 to support motor vehicles and equipment replacement.

#### CONSTRUCTION DIVISION

The total budget for the Construction Division is \$4,532,513, an increase of \$388,290, or 9.4%. The personnel component increased by \$390,789 with the addition of 2 Engineers, position changes, and increases in salary and benefits. The operating component increased by \$60,001, and is driven by changes in automotive, telecommunications, and education and training totaling \$110,417. These increases are offset by reductions totaling \$50,416 in maintenance and repair, computer software and contractual services. The capital component reduced by \$62,500 in furniture and computer equipment.

#### DESIGN DIVISION

The total budget for the Design Division is \$3,597,708, an increase of \$611,947, or 20.5%. The personnel component increased by \$681,748, due to position changes and increases in salary and benefits. The operating component decreased by \$37,086 and the capital component decreased by \$32,715, both mainly due to computer software moving to Administration.

## MASS TRANSIT AND TRANSPORTATION DEVELOPMENT, AND MOBILITY DIVISIONS

The total budget for the Mass Transit Division is \$6,382,816, an increase of \$301,487, or 5.0%. The personnel component increased by \$404,237 due to the addition of an Assistant Division Director and a Capital Projects Manager, position changes, and increases in salary and benefits. The operating component decreased by \$101,750 due to moving computer software to Administration. The capital component is reduced by \$1,000 due to a reduced need for telecommunications equipment.

The total budget for Transportation and Mobility is \$4,246,400, which is unchanged.

## ENVIRONMENTAL DIVISION

The total budget for the Environmental Division is \$2,353,099, an increase of \$110,643, or 4.7%. The personnel component increased by \$85,235 due to position changes and increases in salary and benefits. The operating component increased by \$25,390 with an increase of \$16,000 to environmental expenses, and \$9,390 to automotive expenses.

#### STANDING WATER AND MOSQUITO CONTROL

The total budget for Standing Water and Mosquito Control is \$539,304, an increase of \$838, which is found in the personnel component due to position changes and increases in salary and benefits. The operating component is unchanged.

## TRANSPORTATION AND MOBILITY DIVISION

The total budget for Transportation and Mobility is \$4,246,400, which is unchanged.

#### **REAL PROPERTY DIVISION**

The total budget for Real Property is \$900,796, an increase of \$59,747, or 7.1% due to position changes and increases in salary and benefits. The operating component is unchanged.

#### CONSTRUCTION AND ENGINEERING INSPECTIONS

A new division has been created for FY25, to track personnel costs associated with construction and engineering inspections. The net total budget for this new division is \$131,829, and is projected to recover 80% of the cost for eight new positions.

# DEPARTMENTAL HIGHLIGHTS

In 2023, the Department of Public Works accepted 61 lane miles of new roads into the county road network. In addition, the department completed over 25,000 inspections of active construction projects and reviewed plans for over 450 construction projects. Public Works also secured over \$21.0 million in grant funding for roadway and pedestrian capital projects through the Virginia Department of Transportation's SMART SCALE program.

#### COMMUNITY OUTREACH

Public Works staff conducted citizen information meetings and public hearings for new roadway, sidewalk, and stream restoration projects. They provided information at community association events and hosted interactive booths at Earth Day, Spring Energy Fair, National Night Out, Fall Energy Fair, Native Plant Festival, and the Henrico Bug Bizarre, where attendees were educated on environmental health compliance related to mosquitoes, proper pet waste disposal, vehicle washing, and proper leaf disposal methods. They also facilitated programs and taught classes in the virtual platform during events such as the Central and Southern Virginia Mosquito Identification and information classes, which are now available on YouTube. Public Works participated in the County's Public Works Job Fair to highlight employment opportunities within the department, and Mission Tomorrow, which is the region's interactive career exploration event for 8<sup>th</sup> graders.

#### ROAD PROJECTS

Public Works has over 115 road and drainage projects underway. There are also 39 transportation studies ongoing. Updates on several major projects include:

#### Creighton Road – Phase II

The Department of Public Works began this \$14.2 million construction project in March of 2023. Throughout the life of this project, 0.6 miles of Creighton Road and the Dabbs House Road connector will be realigned. In addition to new sidewalk and curb & gutter being installed, new waterline and sanitary sewer will be installed. As the project continues to progress, two triple box culverts have been installed under the proposed relocated Creighton Road and the proposed roadways have had the subgrade installed. This project is currently scheduled to be completed in Spring 2025.

#### Hungary Road Sidewalk

The Department of Public Works began the installation of new 4-foot sidewalk and ADA compliant ramps between Hungary Springs Road and Hardings Way Drive in August of 2023. In addition to the 3,700 linear foot of sidewalk, new pedestrian signals are being installed at the intersection of Hungary Road with Staples Mill Road and Hungary Springs Road. This \$1 million project is ahead of schedule and should be completed in Spring of 2024.

## Richmond-Henrico Turnpike

Construction of the Richmond-Henrico Turnpike from Hummingbird Road to the at-grade railroad crossing located approximately 0.7 miles north of Azalea Avenue was completed in October 2023 to support the Amazon Facility. 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 Hummingbird Road, just south 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. Utility relocation is scheduled to be completed by December 2024. Construction is expected to begin February 2025.

#### Automated Traffic Management Systems

The Department of Public Works began the installation of new traffic control equipment for 123 signalized intersections across the County. Construction started in June 2023. As of early December 2023, the contractor has completed 44% of the work by contract value within the first 34% of the anticipated contract duration.

## Fall Line Trail

The Fall Line Trail is a regional paved multi-use trail passing through urban, rural, and suburban terrain spanning approximately 43 miles in seven localities from Ashland and Petersburg and includes a portion of northern Henrico in the Fairfield and Brookland Magisterial Districts. The first section of Henrico's 7.5-mile-long segment, Park Street Pedestrian Accommodations, began construction in early 2024, and is anticipated to be completed in the fall of 2024. This section of the Fall Line Trail totals \$1M and will include installing new sidewalk, ADA compliant ramps, 1,400 linear feet of 12-foot-wide paved trail, a new pedestrian hybrid beacon with 75-foot mast arm and 5 signal heads. Henrico's second section, the beginning of the Lakeside Community Trail phases, is scheduled to begin construction in the late fall of 2024. Design is underway for the remaining Henrico sections, with a goal to complete all sections within 4-5 years.

## Short Pump Area Improvements

The Department of Public Works, the Virginia Department of Transportation, and Federal Highway Administration working together now have conditional approval for the final Interchange Access Report for the Short Pump Area Interchange. National Environmental Policy Act (NEPA) is underway. The County is applying for improvement funding.

# Sadler Road

A 1.9-mile section of Sadler Road between Dominion Boulevard and Cedar Forest Road is being widened and the alignment improved. The project includes curb and gutter, drainage, a 10-foot-wide shared use path, and two roundabouts. The right-of-way acquisition is complete with utility location scheduled. Construction is expected to begin April 2024 and proceed until April 2026.

#### Three Chopt Road

A project to improve a 2.1-mile section of Three Chopt Road between Gaskins Road and Barrington Hills Drive continues to advance with right-of-way acquisition. This project will widen the roadway to a four-lane divided section with curband-gutter, drainage improvements, and sidewalks. Utility relocation is scheduled to be completed by the end of 2024. Construction is expected to begin in April 2025 and proceed until April 2027.

This table represents a depiction of the variety of pedestrian, drainage, and safety capital improvement projects completed by the Department of Public Works in 2023, with a value of \$7,350,053.

COMPLETED CIP PROJECTS IN 2023							
PROJECT	SCOPE	DATE COMPLETED	FINAL COST				
Three Chopt Sidewalk (Freeman High School)	Sidewalk	June 2023	\$ 599,784				
Church Road Sidewalk & Refuge	Sidewalk	July 2023	\$ 342,511				
Charles Glen Roundabouts (Phases 1-4)	Roundabouts	August 2023	\$ 1,019,748				
St. Claire Lane	Drainage	August 2023	\$ 2,963,315				
Mill Road - Mill & Overlay	Bike Lane	August 2023	\$ 315,630				
N. Gayton Road Safety & ADA Improvements	Sidewalk & Bike Lane	September 2023	\$ 291,015				
Turner-Darbytown Modular Roundabout	Roundabouts	October 2023	\$ 531,318				
Woodman Road & Magnolia Ridge Roundabout	Roundabouts	November 2023	\$ 488,855				
Old Sellers Way Parking, Speed Cushions & Drainage	Park & Safety	November 2023	\$ 286,414				
Gaskins Park & Ride Lighting Projects	Safety	December 2023	\$ 511,463				

#### PEDESTRIAN AND COMMUTER IMPROVEMENTS

The Department is continuing an initiative to improve bicycle and pedestrian accommodation across the county. In total, the Department has 61 programmed projects scheduled to be completed or under construction over the next three years that will add over 26 miles of sidewalks and over 17 miles of paved multi-use trials.

#### BRIDGE PROJECTS

The Department has six bridge and culvert repair or replacement projects with two replacement/repair bridge projects currently under construction. Preliminary structural steel repairs are currently underway for the Parham Road Bridge over CSX railroad tracks with an anticipated completion in early 2024. Repairs to the Greenwood Road Bridge and additional repairs to the Parham Road Bridge over the CSX railroad tracks are both currently in the design phase and are anticipated to be advertised for construction in late 2024. The Lakeside Avenue Bridge Replacement project is currently in the utility relocation phase and is anticipated to be advertised for construction in October 2024. The Meadow Road Culvert Replacement project has National Environmental Policy Act (NEPA) related activities currently underway and is anticipated to be advertised for construction in February of 2025. The new Magellan Parkway over I-95 Bridge and Approaches project is currently in the utility relocation in June of 2024.

Construction of the Wilkinson Road Bridge Replacement project began in September 2023. This project consists of replacing a triple 114-inch culvert and two additional culverts with prestressed concrete box beam spans, all roadway approach work, related drainage improvements, and associated work and improvements. Construction completion of this \$5.9 million project is anticipated in early 2025.

#### MUNICIPAL SEPARATE STORM SEWER SYSTEM PERMIT (MS4)

Work is ongoing to comply with the state permit, which requires pollution reductions over a 13-year period. The Department has already achieved approximately 90% of the total required pollution reductions to date. This progress puts the county ahead of schedule, as 100% reduction is required by 2028.

The Hidden Creek Park and Adams Elementary School Stream Restoration projects are underway and will be completed in 2024. Deitrick Outfall Restoration, Wilder Middle School Stream Restoration, and Ridgefield Pkwy BMP and Stream Restoration will begin construction in 2024. Projects listed above have received DEQ grant funding totaling over \$1.3 million (approximately 50% of the total project costs).

Several improvements were made to the private stormwater BMP inspection and maintenance program. Thirteen BMPs that are part of the County's long-term maintenance program underwent major restoration throughout the five magisterial districts. BMPs throughout the County, 358 in total, were inspected by staff and designated consultants to ensure the County is compliant with the MS4 permit and state regulations. The BMP APEX database underwent several changes to improve its functionality and use for new MS4 annual report features.

## MOSQUITO CONTROL

Public Works standing water initiative (SWI) continues to perform adult mosquito surveillance operations and monitoring for the presence of mosquito borne diseases. This past year (2023) included responding to 90 resident complaints as well as sustained biweekly monitoring of 100 sites throughout the County. The SWI section collected 25,289 mosquitoes, which included 26 different species. SWI also documented 1,522 mosquito larviciding site visits. West Nile virus (WNV) and mosquito surveillance revealed WNV Polymerase Chain Reaction (PCR), which is a laboratory technique used to amplify DNA sequences, confirmed positive at ten (10) mosquito collections (pools). Henrico Health Department reported 2 Neuroinvasive Human WNV cases in Henrico in 2023. SWI embarked on a new Elementary Outreach Program for the Spring of 2023 giving 78 presentations to 108 classes in 19 schools throughout Henrico County reaching roughly 2,150 students. The program continued into the fall with another 48 presentations given at 7 schools reaching an estimated 980 students. SWI was tasked in the spring of 2023 with creating a Low Mow Pollinator Enhancement Habitat program in County rights-of-way (ROW). Nine sites were selected across the county and progress continues with an expected planting date of Spring 2024.

# CENTRAL VIRGINIA TRANSPORTATION AUTHORITY

The Central Virginia Transportation Authority (CVTA) was created by the General Assembly in the 2020 legislative session. CVTA provides funding for local and regional transportation projects along with additional funds for Mass Transit for Henrico and Central Virginia. In FY23, Henrico County received \$105.2 million in CVTA Regional funds for nine projects: The Fall Line Trail, Garden City Connector Project, Magellan Parkway, North Gayton at I-64, and West Broad Street at Parham, West Broad Street – Short Pump, Brook Road, Staples Mill Road, and Woodman Road improvements.