Capital Improvements Program

PURPOSE

The Capital Improvements Program (CIP) is the County's plan for investing in facilities, infrastructure and large-scale equipment and vehicles over the next five years. The CIP includes capital and capital-related expenditures and a plan to fund those expenditures. The following guidelines established in the County's Finance & Management Services Policies are used for qualifying expenditures under the CIP:

1. Facilities, equipment and vehicles with a unit cost greater than $50,000; and
2. Purchases for multiple departments that are generally:
    a. Managed by a single department or agency; or,
    b. More than $50,000 annually in aggregate.

The CIP is guided by the County's Comprehensive Plan, which is a long-term guide for growth and development within the County and outlines goals, objectives and projections of the County's needs for the next twenty-year horizon. The Code of Virginia requires that a CIP be prepared to carry out policies adopted through the Comprehensive Plan. The CIP performs this function by outlining anticipated projects by year, cost and recommended funding source. Hanover County has maintained compliance with capital outlay programs as stated in Section 15.2-2239 of the Code of Virginia as follows:

> *"A local planning commission may, and at the direction of the governing body shall, prepare and revise annually a capital improvement program based on the comprehensive plan of the locality for a period not to exceed the ensuing five years. The commission shall submit the program annually to the governing body, or to the chief administrative officer or other official charged with preparation of the budget for the locality, at such time as it or he shall direct. The capital improvement program shall include the commission's recommendations, and estimates of cost of the facilities and life cycle costs, including any road improvement and any transportation improvement the locality chooses to include in its capital improvement plan and as provided for in the comprehensive plan, and the means of financing them, to be undertaken in the ensuing fiscal year and in a period not to exceed the next four years, as the basis of the capital budget for the locality. In the preparation of its capital budget recommendations, the commission shall consult with the chief administrative officer or other executive head of the government of the locality, the heads of departments and interested citizens and organizations and shall hold such public hearings as it deems necessary."*

The CIP is used to assess the County's existing condition and identify needs that must be addressed to accomplish planning goals set forth in the Comprehensive Plan. The CIP sets forth needs and priorities to coordinate the development of County facilities with anticipated revenues, growth and the community's ability to pay. By saying where public schools, water or sewer lines, drainage and other improvements should be constructed, the County can encourage development in appropriate areas. "Appropriate" is used here to mean consistent with adopted policies. This makes the CIP a key document in influencing and managing growth. The CIP is also an important tool in ensuring efficient use of limited financial resources. By reviewing anticipated revenues with anticipated capital needs, priorities can be established to ensure that essential public services can be continued and improved without interruption.

Capital Improvements Program

PROCESS

The CIP process occurs in conjunction with the County's budget process. Departments request individual projects based on their needs assessments. The County Administrator works with the Budget Division and County Administrator's senior staff to review and recommend projects based on an assessment of community needs and financial resources available. The Planning Commission reviews CIP projects related to the Comprehensive Plan and provides input to the Board of Supervisors. The Board of Supervisors conducts a public hearing and acts on the recommendations of the proposed budget.

FUNDING SOURCES

The Five-Year CIP forecasts the anticipated expenditures, timetable and source of funding for each project. The adoption of the CIP does not appropriate funds, nor commit the Board to any expenditure in fiscal years two through five. The first fiscal year is appropriated in conjunction with the Adopted Budget.

The relationship between the CIP and the operating budget is carefully considered during the budget process. The CIP has three direct impacts on the operating budget:

1. Projects funded with General Fund resources must be evaluated and prioritized with other competing needs for use of resources for that year;
2. Projects funded with long-term debt financing must be in compliance with the debt policy and must anticipate the impact of the repayment of debt service on current and future budget years; and
3. Operating impact life cycle costs from implementation, such as staffing and maintenance costs.

Typical CIP funding sources utilized by the County include, but are not limited to:

Fund Balance Assignment (FBA): Funds transferred from the General Fund that were classified as assigned fund balance and in excess of the unassigned fund balance required by County policy.

General Fund: Direct payments from the County's operating revenue.

Long-Term Debt: Money borrowed through financing mechanisms, such as bonds. The payment of principal and interest on borrowed money is through the Debt Service Fund.

Proffers: The Board adopted the *Business and Residential Development Road Improvements Transportation Policy* in March 2013. The policy supports the implementation of a road impact cash contribution for road improvements. Revenues received from the contribution are used to fund road improvements to address the increased traffic demand arising from residential development. The cash contribution is only negotiated for residential zoning requests and the actual value of the cash contribution is based on the *Road Improvement Cost Assumptions*.

Revenue Bonds: Payments from the proceeds of the sale of Revenue Bonds. These bonds pledge the revenue generating potential of a facility or utility system.

Public Utilities: Revenue generated by the Department of Public Utilities and used for capital projects.

State and Federal Aid: Payments from state and federal governments to support projects promoted by state and federal agencies.

Capital Improvements Program

PROJECT PAGES

Each CIP project page contains the following information:

Fund Name: There are four capital improvements funds. The fund name for each CIP project is located at the top-right of the page.

Department: For the County Improvements Fund, this represents the department with oversight responsibility for the project. If applicable, other departments will provide assistance to ensure that the capital improvement meets all specifications, laws and budgetary controls.

For School and Airport improvements, the fund name is listed. Public Utilities includes three categories under Department for purposes of distinguishing project areas: PU CIP Other, PU CIP Sewer and PU CIP Water.

Project Type: CIP projects fall under one of the following categories: Construction, Equipment, Facility Improvements, Land Acquisition, Reserve, Roads & Public Works, Technology, Utility Infrastructure, Utility Service Agreement or Vehicles.

Functional Area: The functional area is a group of related departments aimed at accomplishing a major service or regulatory program for which a government is responsible, such as General Government, Public Safety or Human Services.

Location: The physical location (building, complex, etc.) of the capital improvement. Projects will reflect "Countywide" as a location if the capital improvement is not physically set or maintained in one location.

Project Description: A brief description addressing the need for the project and providing other pertinent information.

Useful Life: The estimated amount of time before an asset will need to be replaced based on the expected quality, application and environment of that asset.

Timetable: When the project is anticipated to be completed. If construction of a capital improvement is required, the estimated starting and ending dates are noted.

Operating Impact: Operating impact describes what effect, if any, the capital improvement will have on the operating budget. Impacts may include an increase or decrease in salaries & benefits, operating and/or capital outlay. Operating impacts to the General Fund are incorporated into the Five-Year General Fund Financial Plan. Debt service impacts are shown in the Five-Year General Fund Financial Plan and the Debt Service Fund section of the budget. Any reduced expenditures or increased revenues are noted when applicable.

Funding Sources: Funding sources are categorized by revenue type and are shown by plan year as well as in total.

Funding Uses: Funding uses are categorized by the type of expenditure(s) and are shown by plan year as well as in total.

Years: For reference, the fiscal years in the Five-Year CIP are as follows:

Year 1 represents FY21; Year 2 represents FY22; Year 3 represents FY23; Year 4 represents FY24; and Year 5 represents FY25.

Capital Improvements Program

SAMPLE CAPITAL IMPROVEMENT PROJECT

Capital Improvements Program **County Improvements Fund**

Firing Range Lead Removal

DEPARTMENT
Sheriff

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Public Safety

LOCATION
Sheriff's Firing Range

PROJECT DESCRIPTION
Lead removal is an EPA Best Practice for outdoor firing ranges and should be done every 10 to 12 years. This process will prevent the Sheriff's Firing Range from becoming a hazardous environment.

USEFUL LIFE
10 to 12 years

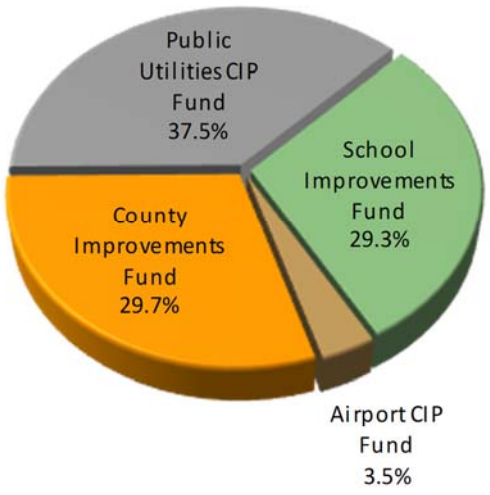
TIMETABLE
Project to be completed in FY21 (Year 1) in coordination with the Firing Range Target System project.

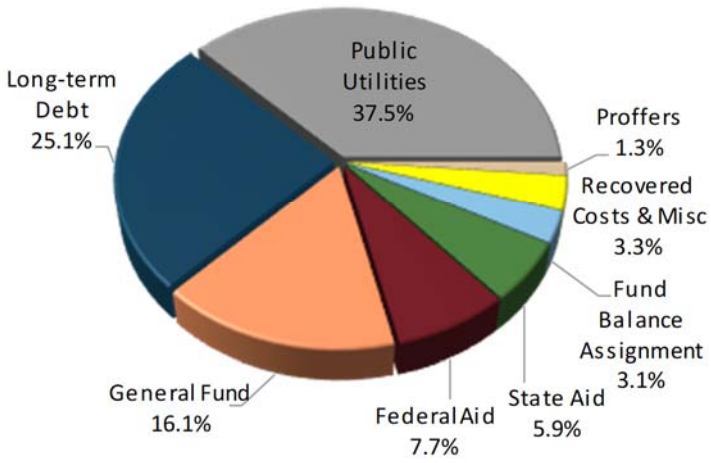
OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**100,000**	**-**	**-**	**-**	**-**	**100,000**
Transfer from General Fund	100,000	-	-	-	-	100,000
Funding Uses	**100,000**	**-**	**-**	**-**	**-**	**100,000**
Alterations to Grounds	100,000	-	-	-	-	100,000

Capital Improvements Program At a Glance

FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM: ALL FUNDS ($292,426,734)

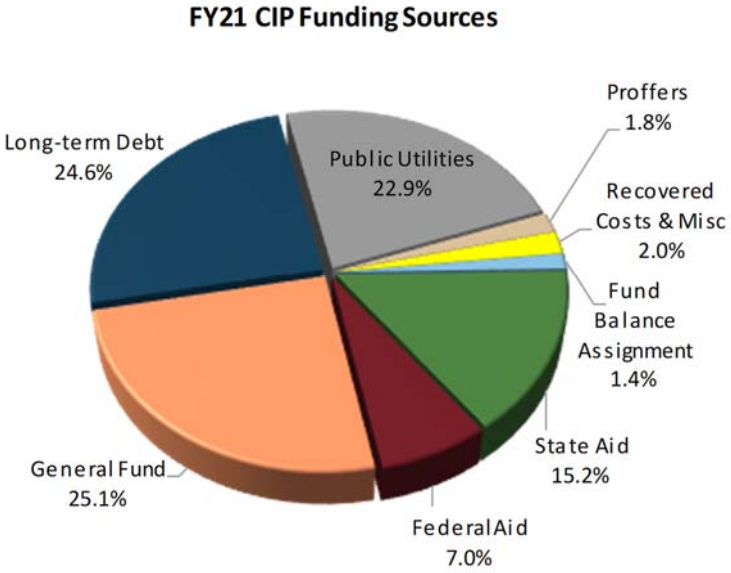




FY21 CIP PROJECTS: ALL FUNDS ($40,689,436)

The first fiscal year of the CIP is appropriated in conjunction with the annual operating budget. The following is a summary of the CIP funding distribution for FY21– Year 1 of the five-year plan.

Functional Area	FY21 (Millions)
Education	13.0
Public Utilities	9.3
Public Works	8.7
Public Safety	3.1
Airport	2.9
General Government	1.8
Judicial Administration	1.2
Nondepartmental	0.7
Total (In Millions)	**40.7**



CIP Projects by Department

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Airport CIP Fund	**2,950,000**	**1,200,120**	**401,000**	**728,130**	**5,000,000**	**10,279,250**
Airport CIP	**2,950,000**	**1,200,120**	**401,000**	**728,130**	**5,000,000**	**10,279,250**
East Side Taxiway Parallel	-	-	-	728,130	5,000,000	5,728,130
Land Acquisition	-	1,050,120	-	-	-	1,050,120
Safety Improvements	2,950,000	150,000	401,000	-	-	3,501,000
County Improvements Fund	**15,404,123**	**21,590,860**	**16,481,380**	**13,803,820**	**19,447,428**	**86,727,611**
Animal Control	**-**	**-**	**-**	**-**	**50,000**	**50,000**
Animal Shelter Building	-	-	-	-	50,000	50,000
Circuit Court	**-**	**-**	**-**	**-**	**50,000**	**50,000**
Courtroom Renovation	-	-	-	-	50,000	50,000
Clerk of the Circuit Court	**310,000**	**-**	**-**	**-**	**-**	**310,000**
Land Records Management System	310,000	-	-	-	-	310,000
Commonwealth's Attorney	**250,000**	**-**	**-**	**-**	**-**	**250,000**
Attorney Case Management System	250,000	-	-	-	-	250,000
Community Services Board	**-**	**-**	**-**	**-**	**580,000**	**580,000**
RAFT House Project	-	-	-	-	500,000	500,000
Wheelchair Van Replacement	-	-	-	-	80,000	80,000
Court Services	**600,000**	**55,000**	**-**	**-**	**-**	**655,000**
Court Services Mobile Data Terminals	-	55,000	-	-	-	55,000
Courts Security Detention Center Upgrade	600,000	-	-	-	-	600,000
Emergency Communications	**-**	**-**	**750,000**	**-**	**300,000**	**1,050,000**
Public Safety Microwave Radio Repl	-	-	-	-	300,000	300,000
Public Safety Software Upgrade	-	-	750,000	-	-	750,000
Fire-EMS	**2,918,600**	**4,039,600**	**2,388,600**	**2,235,800**	**8,495,400**	**20,078,000**
ALS Cardiac Monitor	-	216,000	-	-	-	216,000
Ambulance Replacement	643,600	643,600	643,600	643,600	643,600	3,218,000
Diesel Exhaust Removal System	-	-	135,000	-	-	135,000
Fire Engine & Heavy Rescue Replacement	1,675,000	1,275,000	1,150,000	1,000,000	1,200,000	6,300,000
Fire Station #17	-	765,000	-	592,200	6,461,800	7,819,000
Fire-EMS Station Replacement	-	-	-	-	50,000	50,000
Station Alerting System Upgrade	600,000	1,140,000	460,000	-	-	2,200,000
Traffic Preemption	-	-	-	-	140,000	140,000
General Services	**1,140,000**	**675,000**	**540,000**	**410,000**	**690,000**	**3,455,000**
Admin Building Center Roof Replacement	-	-	-	-	150,000	150,000
Facility Security Upgrades	75,000	75,000	-	-	-	150,000
Fire-EMS Generator Replacement	-	60,000	-	60,000	-	120,000
Fleet & Facilities Software Systems Repl	-	-	200,000	-	-	200,000
Fleet Air Compressor Replacement	70,000	-	-	-	-	70,000
Fleet Garage Floor Top-Coat	300,000	-	-	-	-	300,000
General Vehicle Replacement	330,000	340,000	340,000	350,000	350,000	1,710,000
Human Services Complex Boiler Repl	-	-	-	-	55,000	55,000
Parks & Rec Window Replacement	65,000	-	-	-	-	65,000
Vaughan-Bradley Roof Replacement	-	-	-	-	135,000	135,000
Wickham Renovations	300,000	200,000	-	-	-	500,000

CIP Projects by Department

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Information Technology	**1,775,000**	**1,825,000**	**2,035,000**	**1,830,000**	**1,875,000**	**9,340,000**
Computer Replacement Program	175,000	150,000	150,000	160,000	175,000	810,000
Data Center Upgrades	-	-	75,000	-	-	75,000
Enterprise Licenses	675,000	700,000	710,000	720,000	750,000	3,555,000
Fiber Extension to County Facilities	-	-	100,000	-	-	100,000
Storage Area Network	175,000	175,000	175,000	200,000	200,000	925,000
Technology Infrastructure	750,000	800,000	825,000	750,000	750,000	3,875,000
Nondepartmental	**700,000**	**700,000**	**700,000**	**700,000**	**700,000**	**3,500,000**
Reserve for Revenue	700,000	700,000	700,000	700,000	700,000	3,500,000
Parks & Recreation	**-**	**-**	**235,000**	**200,000**	**-**	**435,000**
Park Enhancements	-	-	235,000	200,000	-	435,000
Public Works	**7,362,323**	**13,875,100**	**8,378,580**	**8,028,020**	**6,351,178**	**43,995,201**
Rdwy Impr Atlee Station Widening	5,750,000	5,864,980	864,980	864,980	4,364,980	17,709,920
Rdwy Impr Pole Green Widening	-	3,925,200	1,707,200	4,253,950	986,198	10,872,548
Rdwy Impr US Rt 360 / Lee Davis Rd	212,323	2,888,000	4,806,400	-	-	7,906,723
Reserve for Future Roadway Improvements	500,000	-	-	-	-	500,000
Stormwater Program	900,000	1,196,920	1,000,000	2,909,090	1,000,000	7,006,010
Public Works Operations	**148,200**	**201,160**	**154,200**	**400,000**	**355,850**	**1,259,410**
Solid Waste Equipment Replacement	148,200	201,160	154,200	400,000	355,850	1,259,410
Sheriff	**200,000**	**220,000**	**1,300,000**	**-**	**-**	**1,720,000**
Firing Range Lead Removal	100,000	-	-	-	-	100,000
Firing Range Target System	100,000	-	-	-	-	100,000
Investigations Mobile Data Terminals	-	220,000	-	-	-	220,000
Records Mgmt System & Mobile Client Repl	-	-	1,300,000	-	-	1,300,000
Public Utilities CIP Fund	**9,335,313**	**29,190,735**	**25,293,945**	**22,165,891**	**23,658,989**	**109,644,873**
PU CIP Other	**146,000**	**521,000**	**1,340,000**	**310,000**	**122,000**	**2,439,000**
Asset Management System	-	250,000	-	-	-	250,000
Bruce Center New Bay	-	-	960,000	-	-	960,000
Maintenance Equipment Replacement	-	-	115,000	-	-	115,000
Maintenance Vehicle Replacement	146,000	271,000	265,000	310,000	122,000	1,114,000
PU CIP Sewer	**1,976,000**	**12,738,000**	**13,952,000**	**12,117,000**	**18,371,000**	**59,154,000**
Ashland Sewerline Rehabilitation	-	200,000	800,000	-	-	1,000,000
AWWTP EQ Basin Centrifugal Blowers Repl	-	-	-	654,000	-	654,000
AWWTP EQ Basin Pumps Repl	-	-	-	372,000	-	372,000
AWWTP Motor Control Center Equip Rehab	-	108,000	-	-	-	108,000
AWWTP Orbal Drives Replacement	-	-	-	-	521,000	521,000
AWWTP Orbal Gate and Control Valve Repl	251,000	-	-	-	-	251,000
AWWTP Recycle PS Rehab	-	98,000	-	-	-	98,000
AWWTP Solids Handling Improvements	146,000	-	-	-	-	146,000
AWWTP Step Screen & Wash Press	702,000	-	-	-	-	702,000
Burnside Farms/Summer Walk Sewer Repl	-	1,448,000	-	-	-	1,448,000
BWWPS Asphalt Replacement	77,000	-	-	-	-	77,000
BWWPS Odor Control Replacement	-	-	-	-	762,000	762,000
BWWPS Pump Replacement	-	-	137,000	140,000	144,000	421,000
Courthouse WWPS & Force Main	-	-	-	-	5,629,000	5,629,000
Doswell Offload WWPS #2 & Force Main	-	-	9,870,000	-	-	9,870,000
DWWTP Belt Press Replacement	-	553,000	-	-	-	553,000

CIP Projects by Department

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
DWWTP Influent VFDs Replacement	-	-	-	-	177,000	177,000
DWWTP RAS Pump Replacement	-	72,000	-	-	-	72,000
Lee-Davis WWPS Grinder Replacement	-	225,000	-	-	-	225,000
Lee-Davis WWPS Upgrade	-	-	-	103,000	588,000	691,000
Mechanicsville Sewer Rehabilitation	-	-	-	200,000	800,000	1,000,000
Middle Chickahominy WWPS Upgrade	200,000	1,200,000	-	-	-	1,400,000
Shelton Pointe Force Main Upgrade	-	6,866,000	-	-	-	6,866,000
Shelton Pointe WWPS Grinder Replacement	-	-	-	180,000	-	180,000
Shelton Pointe WWPS Upgrade	-	200,000	707,000	-	-	907,000
Sledd Run WWPS Generator Installation	100,000	-	-	-	-	100,000
Snead Street WWPS Generator Replacement	-	-	-	78,000	-	78,000
Stony Run Phases 7 & 8	-	-	-	765,000	-	765,000
TWWTP PLC 3 Replacement	-	88,000	-	-	-	88,000
TWWTP Scrubber Overhaul	-	273,000	-	-	-	273,000
WIP III Upgrades AWWTP	-	-	2,438,000	-	9,750,000	12,188,000
WIP III Upgrades DWWTP	-	-	-	2,000,000	-	2,000,000
WIP III Upgrades TWWTP	500,000	1,407,000	-	7,625,000	-	9,532,000
PU CIP Water	**7,213,313**	**15,931,735**	**10,001,945**	**9,738,891**	**5,165,989**	**48,051,873**
Air Park Water Tank Rehabilitation	153,000	795,000	-	-	-	948,000
Cold Harbor Road W/L Replacement	-	-	187,000	633,000	-	820,000
Creighton Rd at Walnut Grove Rd Interconnect	-	-	-	-	150,000	150,000
Creighton Road WST Recoating & Rehab	264,000	500,000	-	-	-	764,000
Doswell Million Gallon Tank Rehab	-	-	297,000	-	-	297,000
Dow Gil Rd to Harley Club Dr Waterline	-	-	-	457,000	-	457,000
DWTP Lagoon Rehabilitation	-	-	92,000	979,000	-	1,071,000
DWTP Raw Water Pumphouse Rehabilitation	-	-	-	118,000	680,000	798,000
DWTP to Railroad Crossing Waterline	1,620,000	-	-	-	-	1,620,000
Georgetown Electrical	-	-	58,000	-	-	58,000
Georgetown Well Replacement	-	-	-	-	105,000	105,000
Hanover-Richmond Joint Cap Contract	3,372,313	6,226,735	7,719,945	6,959,891	1,870,989	26,149,873
Harris Court WST Rehabilitation	-	393,000	-	-	-	393,000
Hill Carter WST & Pump Station	-	7,210,000	-	-	-	7,210,000
Hill View Drive Waterline Replacement	-	-	-	-	158,000	158,000
I-95 Waterline Crossing at Long Road	1,000,000	-	-	-	-	1,000,000
Jackson Avenue WST Demolition	207,000	-	-	-	-	207,000
Kings Dominion Entrance Rd W/L	-	110,000	730,000	-	-	840,000
Maple Street Waterline Replacement	-	-	-	-	100,000	100,000
Pamunkey Regional Jail Waterline	-	-	-	255,000	1,224,000	1,479,000
Pleasant Street WST & PS Generator Repl	-	-	201,000	-	-	201,000
Pleasant Street WST Rehabilitation	-	79,000	-	115,000	-	194,000
Pole Green Road Western W/L Improvements	-	-	235,000	-	672,000	907,000
Quarles Rd WST Demolition	-	-	-	-	138,000	138,000
Route 1 from Elletts Crossing	-	-	-	-	68,000	68,000
Route 1 Waterline Improvements	262,000	526,000	-	-	-	788,000
Sinclair Manor Estates Tank Replacement	185,000	-	-	-	-	185,000
Sinclair Manor Well Replacement	-	-	-	102,000	-	102,000
Stonewall Parkway W/L Replacement	-	92,000	482,000	-	-	574,000
Water System Valve Improvements	150,000	-	-	120,000	-	270,000

CIP Projects by Department

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
School Improvements Fund	**13,000,000**	**7,000,000**	**46,525,000**	**6,000,000**	**13,250,000**	**85,775,000**
School CIP	**13,000,000**	**7,000,000**	**46,525,000**	**6,000,000**	**13,250,000**	**85,775,000**
Auditorium Renovations	250,000	-	700,000	-	-	950,000
Bathroom Renovations	445,000	-	790,000	-	-	1,235,000
Gymnasium Repairs	50,000	-	800,000	-	-	850,000
HVAC Repairs & Upgrades	6,075,000	-	1,200,000	-	150,000	7,425,000
Kitchen Renovations	280,000	-	75,000	-	405,000	760,000
Painting	400,000	85,000	100,000	159,562	200,000	944,562
Roof Repairs & Replacements	720,000	100,000	593,000	200,000	755,000	2,368,000
Safety & Security	1,075,000	-	865,000	-	1,980,000	3,920,000
School Building Upgrades	125,000	-	620,000	-	1,545,000	2,290,000
School Buses	1,000,000	1,200,000	1,500,000	1,500,000	1,500,000	6,700,000
School Grounds Upgrades	1,380,000	-	1,045,000	-	1,515,000	3,940,000
School Renovation	-	4,000,000	36,000,000	-	-	40,000,000
School Site	-	-	-	3,000,000	-	3,000,000
Technology Enhancements	1,200,000	1,615,000	2,237,000	1,140,438	5,200,000	11,392,438
Grand Total	**40,689,436**	**58,981,715**	**88,701,325**	**42,697,841**	**61,356,417**	**292,426,734**

Five-Year CIP Funding Sources

	Federal Aid	Fund Balance Assignment	General Fund	Long-term Debt	Proffers	Public Utilities	Recovered Costs & Misc	State Aid	Grand Total
Airport CIP Fund	**8,606,358**	**64,000**	**403,082**	**-**	**-**	**-**	**-**	**1,205,810**	**10,279,250**
Airport CIP	**8,606,358**	**64,000**	**403,082**	**-**	**-**	**-**	**-**	**1,205,810**	**10,279,250**
East Side Taxiway Parallel	5,006,250	64,000	212,880	-	-	-	-	445,000	5,728,130
Land Acquisition	945,108	-	21,002	-	-	-	-	84,010	1,050,120
Safety Improvements	2,655,000	-	169,200	-	-	-	-	676,800	3,501,000
County Improvements Fund	**13,878,521**	**4,061,840**	**31,723,410**	**7,554,000**	**3,750,000**	**-**	**9,600,000**	**16,159,840**	**86,727,611**
Animal Control	**-**	**-**	**50,000**	**-**	**-**	**-**	**-**	**-**	**50,000**
Animal Shelter Building	-	-	50,000	-	-	-	-	-	50,000
Circuit Court	**-**	**-**	**50,000**	**-**	**-**	**-**	**-**	**-**	**50,000**
Courtroom Renovation	-	-	50,000	-	-	-	-	-	50,000
Clerk of the Circuit Court	**-**	**-**	**210,000**	**-**	**-**	**-**	**100,000**	**-**	**310,000**
Land Records Management System	-	-	210,000	-	-	-	100,000	-	310,000
Commonwealth's Attorney	**-**	**-**	**250,000**	**-**	**-**	**-**	**-**	**-**	**250,000**
Attorney Case Management System	-	-	250,000	-	-	-	-	-	250,000
Community Services Board	**-**	**-**	**80,000**	**500,000**	**-**	**-**	**-**	**-**	**580,000**
RAFT House Project	-	-	-	500,000	-	-	-	-	500,000
Wheelchair Van Replacement	-	-	80,000	-	-	-	-	-	80,000
Court Services	**-**	**-**	**655,000**	**-**	**-**	**-**	**-**	**-**	**655,000**
Court Services Mobile Data Terminals	-	-	55,000	-	-	-	-	-	55,000
Courts Security Detention Center Upgrade	-	-	600,000	-	-	-	-	-	600,000
Emergency Communications	**-**	**-**	**1,050,000**	**-**	**-**	**-**	**-**	**-**	**1,050,000**
Public Safety Microwave Radio Repl	-	-	300,000	-	-	-	-	-	300,000
Public Safety Software Upgrade	-	-	750,000	-	-	-	-	-	750,000

Five-Year CIP Funding Sources

	Federal Aid	Fund Balance Assignment	General Fund	Long-term Debt	Proffers	Public Utilities	Recovered Costs & Misc	State Aid	Grand Total
Fire-EMS	**-**	**1,305,000**	**11,719,000**	**7,054,000**	**-**	**-**	**-**	**-**	**20,078,000**
ALS Cardiac Monitor	-	-	216,000	-	-	-	-	-	216,000
Ambulance Replacement	-	-	3,218,000	-	-	-	-	-	3,218,000
Diesel Exhaust Removal System	-	-	135,000	-	-	-	-	-	135,000
Fire Engine & Heavy Rescue Replacement	-	-	6,300,000	-	-	-	-	-	6,300,000
Fire Station #17	-	765,000	-	7,054,000	-	-	-	-	7,819,000
Fire-EMS Station Replacement	-	-	50,000	-	-	-	-	-	50,000
Station Alerting System Upgrade	-	540,000	1,660,000	-	-	-	-	-	2,200,000
Traffic Preemption	-	-	140,000	-	-	-	-	-	140,000
General Services	**-**	**500,000**	**2,955,000**	**-**	**-**	**-**	**-**	**-**	**3,455,000**
Admin Building Center Roof Replacement	-	-	150,000	-	-	-	-	-	150,000
Facility Security Upgrades	-	-	150,000	-	-	-	-	-	150,000
Fire-EMS Generator Replacement	-	-	120,000	-	-	-	-	-	120,000
Fleet & Facilities Software Systems Repl	-	-	200,000	-	-	-	-	-	200,000
Fleet Air Compressor Replacement	-	-	70,000	-	-	-	-	-	70,000
Fleet Garage Floor Top-Coat	-	-	300,000	-	-	-	-	-	300,000
General Vehicle Replacement	-	-	1,710,000	-	-	-	-	-	1,710,000
Human Services Complex Boiler Repl	-	-	55,000	-	-	-	-	-	55,000
Parks & Rec Window Replacement	-	-	65,000	-	-	-	-	-	65,000
Vaughan-Bradley Roof Replacement	-	-	135,000	-	-	-	-	-	135,000
Wickham Renovations	-	500,000	-	-	-	-	-	-	500,000
Information Technology	**-**	**-**	**9,340,000**	**-**	**-**	**-**	**-**	**-**	**9,340,000**
Computer Replacement Program	-	-	810,000	-	-	-	-	-	810,000
Data Center Upgrades	-	-	75,000	-	-	-	-	-	75,000
Enterprise Licenses	-	-	3,555,000	-	-	-	-	-	3,555,000
Fiber Extension to County Facilities	-	-	100,000	-	-	-	-	-	100,000
Storage Area Network	-	-	925,000	-	-	-	-	-	925,000
Technology Infrastructure	-	-	3,875,000	-	-	-	-	-	3,875,000
Nondepartmental	**-**	**-**	**-**	**-**	**-**	**-**	**3,500,000**	**-**	**3,500,000**
Reserve for Revenue	-	-	-	-	-	-	3,500,000	-	3,500,000

Five-Year CIP Funding Sources

	Federal Aid	Fund Balance Assignment	General Fund	Long-term Debt	Proffers	Public Utilities	Recovered Costs & Misc	State Aid	Grand Total
Parks & Recreation	**-**	**-**	**435,000**	**-**	**-**	**-**	**-**	**-**	**435,000**
Park Enhancements	-	-	435,000	-	-	-	-	-	435,000
Public Works	**13,878,521**	**1,656,840**	**2,550,000**	**-**	**3,750,000**	**-**	**6,000,000**	**16,159,840**	**43,995,201**
Rdwy Impr Atlee Station Widening	2,000,000	459,920	-	-	3,750,000	-	1,000,000	10,500,000	17,709,920
Rdwy Impr Pole Green Widening	4,971,798	-	-	-	-	-	4,000,000	1,900,750	10,872,548
Rdwy Impr US Rt 360 / Lee Davis Rd	6,906,723	-	-	-	-	-	1,000,000	-	7,906,723
Reserve for Future Roadway Improvements	-	-	-	-	-	-	-	500,000	500,000
Stormwater Program	-	1,196,920	2,550,000	-	-	-	-	3,259,090	7,006,010
Public Works Operations	**-**	**-**	**1,259,410**	**-**	**-**	**-**	**-**	**-**	**1,259,410**
Solid Waste Equipment Replacement	-	-	1,259,410	-	-	-	-	-	1,259,410
Sheriff	**-**	**600,000**	**1,120,000**	**-**	**-**	**-**	**-**	**-**	**1,720,000**
Firing Range Lead Removal	-	-	100,000	-	-	-	-	-	100,000
Firing Range Target System	-	-	100,000	-	-	-	-	-	100,000
Investigations Mobile Data Terminals	-	-	220,000	-	-	-	-	-	220,000
Records Mgmt System & Mobile Client Repl	-	600,000	700,000	-	-	-	-	-	1,300,000
Public Utilities CIP Fund	**-**	**-**	**-**	**-**	**-**	**109,644,873**	**-**	**-**	**109,644,873**
PU CIP Other	**-**	**-**	**-**	**-**	**-**	**2,439,000**	**-**	**-**	**2,439,000**
PU CIP Sewer	**-**	**-**	**-**	**-**	**-**	**59,154,000**	**-**	**-**	**59,154,000**
PU CIP Water	**-**	**-**	**-**	**-**	**-**	**48,051,873**	**-**	**-**	**48,051,873**

Five-Year CIP Funding Sources

	Federal Aid	Fund Balance Assignment	General Fund	Long-term Debt	Proffers	Public Utilities	Recovered Costs & Misc	State Aid	Grand Total
School Improvements Fund	**-**	**5,000,000**	**15,000,000**	**65,775,000**	**-**	**-**	**-**	**-**	**85,775,000**
School CIP	**-**	**5,000,000**	**15,000,000**	**65,775,000**	**-**	**-**	**-**	**-**	**85,775,000**
Auditorium Renovations	-	-	-	950,000	-	-	-	-	950,000
Bathroom Renovations	-	-	-	1,235,000	-	-	-	-	1,235,000
Gymnasium Repairs	-	-	-	850,000	-	-	-	-	850,000
HVAC Repairs & Upgrades	-	-	-	7,425,000	-	-	-	-	7,425,000
Kitchen Renovations	-	-	-	760,000	-	-	-	-	760,000
Painting	-	-	944,562	-	-	-	-	-	944,562
Roof Repairs & Replacements	-	-	963,000	1,405,000	-	-	-	-	2,368,000
Safety & Security	-	-	-	3,920,000	-	-	-	-	3,920,000
School Building Upgrades	-	-	-	2,290,000	-	-	-	-	2,290,000
School Buses	-	-	6,700,000	-	-	-	-	-	6,700,000
School Grounds Upgrades	-	-	-	3,940,000	-	-	-	-	3,940,000
School Renovation	-	-	-	40,000,000	-	-	-	-	40,000,000
School Site	-	-	-	3,000,000	-	-	-	-	3,000,000
Technology Enhancements	-	5,000,000	6,392,438	-	-	-	-	-	11,392,438
Grand Total	**22,484,879**	**9,125,840**	**47,126,492**	**73,329,000**	**3,750,000**	**109,644,873**	**9,600,000**	**17,365,650**	**292,426,734**

CIP Summary by Functional Area

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Airport CIP Fund	**2,950,000**	**1,200,120**	**401,000**	**728,130**	**5,000,000**	**10,279,250**
County Improvements Fund	**15,404,123**	**21,590,860**	**16,481,380**	**13,803,820**	**19,447,428**	**86,727,611**
General Government	1,775,000	1,825,000	2,035,000	1,830,000	1,875,000	9,340,000
Human Services	-	-	-	-	580,000	580,000
Judicial Administration	1,160,000	55,000	-	-	50,000	1,265,000
Nondepartmental	700,000	700,000	700,000	700,000	700,000	3,500,000
Parks, Recreation & Cultural	-	-	235,000	200,000	-	435,000
Public Safety	3,118,600	4,259,600	4,438,600	2,235,800	8,845,400	22,898,000
Public Works	8,650,523	14,751,260	9,072,780	8,838,020	7,397,028	48,709,611
Public Utilities CIP Fund	**9,335,313**	**29,190,735**	**25,293,945**	**22,165,891**	**23,658,989**	**109,644,873**
School Improvements Fund	**13,000,000**	**7,000,000**	**46,525,000**	**6,000,000**	**13,250,000**	**85,775,000**
Grand Total	**40,689,436**	**58,981,715**	**88,701,325**	**42,697,841**	**61,356,417**	**292,426,734**

CIP Project Type by Fund

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Airport CIP Fund	**2,950,000**	**1,200,120**	**401,000**	**728,130**	**5,000,000**	**10,279,250**
Facility Improvements	2,950,000	150,000	401,000	728,130	5,000,000	9,229,130
Land Acquisition	-	1,050,120	-	-	-	1,050,120
County Improvements Fund	**15,404,123**	**21,590,860**	**16,481,380**	**13,803,820**	**19,447,428**	**86,727,611**
Construction	-	765,000	-	592,200	6,561,800	7,919,000
Equipment	818,200	1,557,160	749,200	400,000	795,850	4,320,410
Facility Improvements	940,000	335,000	235,000	260,000	890,000	2,660,000
Reserve	700,000	700,000	700,000	700,000	700,000	3,500,000
Roads & Public Works	7,362,323	13,875,100	8,378,580	8,028,020	6,351,178	43,995,201
Technology	2,935,000	2,100,000	4,285,000	1,830,000	1,875,000	13,025,000
Vehicles	2,648,600	2,258,600	2,133,600	1,993,600	2,273,600	11,308,000
Public Utilities CIP Fund	**9,335,313**	**29,190,735**	**25,293,945**	**22,165,891**	**23,658,989**	**109,644,873**
Equipment	146,000	359,000	380,000	310,000	122,000	1,317,000
Technology	-	250,000	-	-	-	250,000
Utility Infrastructure	5,817,000	22,355,000	17,194,000	14,896,000	21,666,000	81,928,000
Utility Service Agreement	3,372,313	6,226,735	7,719,945	6,959,891	1,870,989	26,149,873
School Improvements Fund	**13,000,000**	**7,000,000**	**46,525,000**	**6,000,000**	**13,250,000**	**85,775,000**
Construction	-	4,000,000	36,000,000	-	-	40,000,000
Equipment	2,075,000	1,200,000	2,365,000	1,500,000	3,480,000	10,620,000
Facility Improvements	9,725,000	185,000	5,923,000	359,562	4,570,000	20,762,562
Land Acquisition	-	-	-	3,000,000	-	3,000,000
Technology	1,200,000	1,615,000	2,237,000	1,140,438	5,200,000	11,392,438
Grand Total	**40,689,436**	**58,981,715**	**88,701,325**	**42,697,841**	**61,356,417**	**292,426,734**

CIP Summary by Funding Source

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Local Revenue	1,550,000	3,450,000	3,450,000	2,450,000	2,450,000	13,350,000
Long-term Debt	10,000,000	4,000,000	42,525,000	3,592,200	13,211,800	73,329,000
Intergovernmental	9,053,323	11,462,318	5,334,400	5,114,290	8,886,198	39,850,529
Use of Planned Surpluses	300,000	311,900	114,980	178,980	114,980	1,020,840
Transfers In	19,786,113	39,757,497	37,276,945	31,362,371	36,693,439	164,876,365
Grand Total	**40,689,436**	**58,981,715**	**88,701,325**	**42,697,841**	**61,356,417**	**292,426,734**

CIP Funding Sources by Fund

Funding Sources by Fund	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Airport CIP Fund	**2,950,000**	**1,200,120**	**401,000**	**728,130**	**5,000,000**	**10,279,250**
Federal Aid	2,655,000	945,108	-	506,250	4,500,000	8,606,358
Fund Balance Assignment	-	-	-	64,000	-	64,000
General Fund	59,000	51,002	80,200	112,880	100,000	403,082
State Aid	236,000	204,010	320,800	45,000	400,000	1,205,810
County Improvements Fund	**15,404,123**	**21,590,860**	**16,481,380**	**13,803,820**	**19,447,428**	**86,727,611**
Federal Aid	212,323	4,168,000	4,112,000	2,400,000	2,986,198	13,878,521
Fund Balance Assignment	550,000	1,696,900	1,084,980	614,980	114,980	4,061,840
General Fund	7,141,800	6,130,760	6,932,800	5,583,600	5,934,450	31,723,410
Long-term Debt	-	-	-	592,200	6,961,800	7,554,000
Proffers	750,000	750,000	750,000	750,000	750,000	3,750,000
Recovered Costs & Misc	800,000	2,700,000	2,700,000	1,700,000	1,700,000	9,600,000
State Aid	5,950,000	6,145,200	901,600	2,163,040	1,000,000	16,159,840
Public Utilities CIP Fund	**9,335,313**	**29,190,735**	**25,293,945**	**22,165,891**	**23,658,989**	**109,644,873**
Public Utilities	9,335,313	29,190,735	25,293,945	22,165,891	23,658,989	109,644,873
School Improvements Fund	**13,000,000**	**7,000,000**	**46,525,000**	**6,000,000**	**13,250,000**	**85,775,000**
Fund Balance Assignment	-	-	1,000,000	-	4,000,000	5,000,000
General Fund	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	15,000,000
Long-term Debt	10,000,000	4,000,000	42,525,000	3,000,000	6,250,000	65,775,000
Grand Total	**40,689,436**	**58,981,715**	**88,701,325**	**42,697,841**	**61,356,417**	**292,426,734**

Funding Analysis of County & School Capital Projects

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Total Debt Funding	**35.2%**	**14.0%**	**67.5%**	**18.1%**	**40.4%**	**42.5%**
Total Non-Debt Funding	**64.8%**	**86.0%**	**32.5%**	**81.9%**	**59.6%**	**57.5%**
General Fund Support	35.7%	31.9%	15.8%	43.3%	27.3%	27.1%
Support from Other Sources	29.1%	54.1%	16.7%	38.5%	32.3%	30.4%

Five-Year CIP Operating Impact

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Airport CIP Fund	**-**	**-**	**-**	**-**	**1,200**	**1,200**
Airport CIP						
East Side Taxiway Parallel	-	-	-	-	1,200	1,200
County Improvements Fund	**-**	**60,000**	**74,600**	**318,700**	**319,000**	**772,300**
Clerk of the Circuit Court						
Land Records Management System	-	15,000	15,000	15,000	15,000	60,000
Commonwealth's Attorney						
Attorney Case Management System	-	40,000	40,000	40,000	40,000	160,000
Court Services						
Court Services Mobile Data Terminals	-	-	1,000	1,000	1,000	3,000
Fire-EMS						
ALS Cardiac Monitor	-	-	9,600	9,600	9,600	28,800
Station Alerting System Upgrade	-	-	-	105,000	105,000	210,000
General Services						
Fleet & Facilities Software Systems Repl	-	-	-	5,000	5,000	10,000
Information Technology						
Fiber Extension to County Facilities	-	-	-	7,500	7,500	15,000
Parks & Recreation						
Park Enhancements	-	-	-	1,600	1,900	3,500
Sheriff						
Firing Range Target System	-	5,000	5,000	5,000	5,000	20,000
Investigations Mobile Data Terminals	-	-	4,000	4,000	4,000	12,000
Records Mgmt System & Mobile Client Rep	-	-	-	125,000	125,000	250,000
Public Utilities CIP Fund	**-**	**5,000**	**70,000**	**134,500**	**634,500**	**844,000**
PU CIP Other						
Asset Management System	-	-	30,000	30,000	30,000	90,000
Bruce Center New Bay	-	-	-	5,000	5,000	10,000
Maintenance Vehicle Replacement	-	-	-	1,500	1,500	3,000
PU CIP Sewer						
Ashland Sewerline Rehabilitation	-	-	-	(5,000)	(5,000)	(10,000)
Doswell Offload WWPS #2 & Force Main	-	-	-	50,000	50,000	100,000
Middle Chickahominy WWPS Upgrade	-	-	5,000	5,000	5,000	15,000
Shelton Pointe Force Main Upgrade	-	-	-	8,000	8,000	16,000
Shelton Pointe WWPS Upgrade	-	-	-	5,000	5,000	10,000
Sledd Run WWPS Generator Installation	-	5,000	5,000	5,000	5,000	20,000
WIP III Upgrades TWWTP	-	-	-	-	500,000	500,000
PU CIP Water						
Hill Carter WST & Pump Station	-	-	30,000	30,000	30,000	90,000
Grand Total	**-**	**65,000**	**144,600**	**453,200**	**954,700**	**1,617,500**

All financial impacts noted above are under the Operating category.

Operating impacts to the General Fund are reflected in the Five-Year General Fund Financial Plan. Year 1 Life Cycle Costs are included in FY21 operating budgets. Debt service impacts are not detailed under this table but are included in the Five -Year General Fund Financial Plan and the Debt Service Fund section of the Budget document.

County Project Locations

The following are specific locations referenced within the project pages of the Airport CIP and County Improvements Funds, including the corresponding address and departments located at each building, as applicable. Projects that serve multiple locations are generally identified in the project pages as "Countywide" or by the type of facility impacted, such as such as Fire-EMS stations and solid waste convenience centers.

CSB Day Health Building	7179 Stonewall Parkway, Mechanicsville, VA 23111
Fleet Building *General Services*	11375 N. Lakeridge Parkway, Ashland, VA 23005
Hanover County Airport	11152 Airpark Road, Ashland, VA 23005
Human Services Complex *Community Services Board, Community Resources, Health, Social Services*	12300-12312 Washington Highway, Ashland, VA 23005
Sheriff's Firing Range	7532 Courtland Farm Road, Hanover, VA 23069

Courthouse Complex

Administration Building *Board of Supervisors meeting room, Building Inspections, County Administrator, County Attorney, Planning, Public Utilities, Public Works*	7516 County Complex Road, Hanover, VA 23069
Courthouse *Circuit Court, Clerk of the Circuit Court, Commonwealth's Attorney, General District Court, Juvenile & Domestic Relations Court, Juvenile Court Services*	7530 County Complex Road, Hanover, VA 23069
Emergency Communications Center	7501 Library Drive, Hanover, VA 23069
Vaughan-Bradley Building *Sheriff*	7522 County Complex Road, Hanover, VA 23069
Wickham Building *Human Resources, Information Technology, Registrar*	7497 County Complex Road, Hanover, VA 23069

Taylor Complex

Parks & Recreation Maintenance Facility	12454 Taylor Complex Lane, Ashland, VA 23005

Airport CIP Fund Summary

FY21-FY25 Funding Sources by Project Type

	Facility Improvements	Land Acquisition	Total
Categorical State Aid	1,121,800	84,010	1,205,810
Fed Aviation Administration	7,661,250	945,108	8,606,358
Prior Years Balance	64,000	-	64,000
Transfer from General Fund	382,080	21,002	403,082
Total	**9,229,130**	**1,050,120**	**10,279,250**

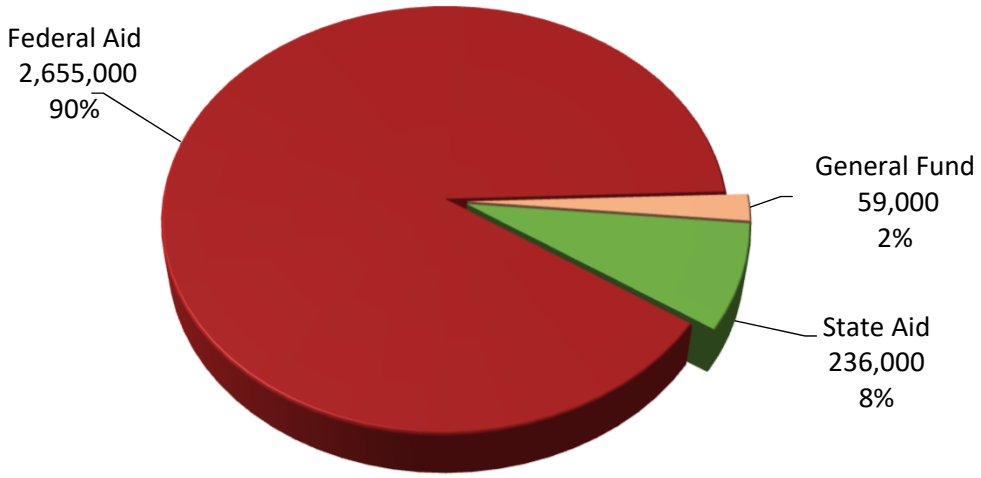
FY21-FY25 Projects Funded by the General Fund

	Facility Improvements	Land Acquisition	Total
East Side Taxiway Parallel	212,880	-	212,880
Land Acquisition	-	21,002	21,002
Safety Improvements	169,200	-	169,200
Total	**382,080**	**21,002**	**403,082**

FY21 Projects by Project Type

	Year 1
Facility Improvements	**2,950,000**
Safety Improvements	2,950,000
Grand Total	**2,950,000**

FY21 Airport CIP Funding Sources



East Side Taxiway Parallel

DEPARTMENT
Airport CIP

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Airport

LOCATION
Hanover County Airport

PROJECT DESCRIPTION
Design and construction of a parallel taxiway on the East side to conform with FAA Category B-II Design Standards. Taxiway is needed in accordance with the approved Airport Master Plan to achieve desired wing-tip clearance.

USEFUL LIFE
20 years

TIMETABLE
Design in FY24 (Year 4) and Construction in FY25 (Year 5)

OPERATING IMPACT
Electrical taxiway lighting

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**728,130**	**5,000,000**	**5,728,130**
Categorical State Aid	-	-	-	45,000	400,000	445,000
Fed Aviation Administration	-	-	-	506,250	4,500,000	5,006,250
Prior Years Balance	-	-	-	64,000	-	64,000
Transfer from General Fund	-	-	-	112,880	100,000	212,880
Funding Uses	**-**	**-**	**-**	**728,130**	**5,000,000**	**5,728,130**
Construction	-	-	-	-	5,000,000	5,000,000
Professional Services	-	-	-	728,130	-	728,130
Operating Impact	**-**	**-**	**-**	**-**	**1,200**	**1,200**
Electrical Services	-	-	-	-	1,200	1,200

Land Acquisition

DEPARTMENT
Airport CIP

PROJECT TYPE
Land Acquisition

FUNCTIONAL AREA
Airport

LOCATION
Hanover County Airport

PROJECT DESCRIPTION
The Airport Master Plan identifies the need to purchase 58 acres of land and avigation easements to the north and east of the runway to meet FAA airport safety criteria. Purchase of this land or easement is required to remove airspace obstructions and complete the east side expansion project. The County will give priority for acquisition of required land when it is on the market.

USEFUL LIFE
N/A

TIMETABLE
Purchase of land or easements in FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**1,050,120**	**-**	**-**	**-**	**1,050,120**
Categorical State Aid	-	84,010	-	-	-	84,010
Fed Aviation Administration	-	945,108	-	-	-	945,108
Transfer from General Fund	-	21,002	-	-	-	21,002
Funding Uses	**-**	**1,050,120**	**-**	**-**	**-**	**1,050,120**
Land Purch & Development Addtl	-	1,050,120	-	-	-	1,050,120

Safety Improvements

DEPARTMENT
Airport CIP

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Airport

LOCATION
Hanover County Airport

PROJECT DESCRIPTION
Airport safety improvements include milling and resurfacing the runway in FY21 (Year 1), overlaying of the original ramp apron in FY22 (Year 2) and installing omni-directional approach lighting for Runway 16 in FY23 (Year 3). Resurfacing is needed to replace aging asphalt to maintain the usability of the runway. The last runway resurface was performed in 1993 and has exceeded its useful life. This project also includes new runway striping, increase to runway lighting elevations and modernization of the runway electrical system.

USEFUL LIFE
20 years

TIMETABLE
Construction in FY21 (Year 1), FY22 (Year 2) and FY23 (Year 3).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**2,950,000**	**150,000**	**401,000**	**-**	**-**	**3,501,000**
Categorical State Aid	236,000	120,000	320,800	-	-	676,800
Fed Aviation Administration	2,655,000	-	-	-	-	2,655,000
Transfer from General Fund	59,000	30,000	80,200	-	-	169,200
Funding Uses	**2,950,000**	**150,000**	**401,000**	**-**	**-**	**3,501,000**
Alt to Facility or Office	2,950,000	150,000	401,000	-	-	3,501,000

County Improvements Fund Summary

FY21-FY25 Funding Sources by Project Type

	Construction	Equipment	Facility Improvements	Reserve	Roads & Public Works	Technology	Vehicles	Total
Intergovernmental	**-**	**-**	**-**	**-**	**30,038,361**	**-**	**-**	**30,038,361**
Categorical State Aid	-	-	-	-	3,259,090	-	-	3,259,090
Fed FHWA Grant	-	-	-	-	13,878,521	-	-	13,878,521
State VDOT	-	-	-	-	12,900,750	-	-	12,900,750
Local Revenue	**-**	**-**	**-**	**3,500,000**	**9,750,000**	**100,000**	**-**	**13,350,000**
Miscellaneous Grants	-	-	-	-	6,000,000	-	-	6,000,000
Miscellaneous Revenue	-	-	-	-	-	100,000	-	100,000
Reserve for Revenue Transfers	-	-	-	3,500,000	-	-	-	3,500,000
Traffic Contribution	-	-	-	-	3,750,000	-	-	3,750,000
Long-term Debt	**7,054,000**	**-**	**500,000**	**-**	**-**	**-**	**-**	**7,554,000**
Bond Proceeds	7,054,000	-	500,000	-	-	-	-	7,554,000
Transfers In	**865,000**	**4,320,410**	**1,860,000**	**-**	**3,550,000**	**12,925,000**	**11,308,000**	**34,828,410**
Transfer fr GF FBA Stormwater	-	-	-	-	1,000,000	-	-	1,000,000
Transfer from General Fund	100,000	3,780,410	1,660,000	-	2,550,000	12,325,000	11,308,000	31,723,410
Transfer from GF - FBA Capital	765,000	540,000	200,000	-	-	600,000	-	2,105,000
Use of Planned Surpluses	**-**	**-**	**300,000**	**-**	**656,840**	**-**	**-**	**956,840**
FBA CIP Stormwater PYB	-	-	-	-	196,920	-	-	196,920
Use of Fund Balance	-	-	300,000	-	-	-	-	300,000
Use of Fund Balance - Proffers	-	-	-	-	459,920	-	-	459,920
Total	**7,919,000**	**4,320,410**	**2,660,000**	**3,500,000**	**43,995,201**	**13,025,000**	**11,308,000**	**86,727,611**

FY21-FY25 Functional Areas by Project Type

	Construction	Equipment	Facility Improvements	Reserve	Roads & Public Works	Technology	Vehicles	Total
General Government	-	-	-	-	-	9,340,000	-	9,340,000
Human Services	-	-	500,000	-	-	-	80,000	580,000
Judicial Administration	-	-	50,000	-	-	1,215,000	-	1,265,000
Nondepartmental	-	-	-	3,500,000	-	-	-	3,500,000
Parks, Recreation & Cultural	-	-	435,000	-	-	-	-	435,000
Public Safety	7,919,000	2,991,000	200,000	-	-	2,270,000	9,518,000	22,898,000
Public Works	-	1,329,410	1,475,000	-	43,995,201	200,000	1,710,000	48,709,611
Total	**7,919,000**	**4,320,410**	**2,660,000**	**3,500,000**	**43,995,201**	**13,025,000**	**11,308,000**	**86,727,611**

Animal Shelter Building

DEPARTMENT
Animal Control

PROJECT TYPE
Construction

FUNCTIONAL AREA
Public Safety

LOCATION
To be determined

PROJECT DESCRIPTION
Begin preparations to replace the Animal Shelter Building. The existing shelter was built in 1989, with an addition in 2004. The current location has limited capacity for further expansion or improvements to improve security and health of the animals. The initial funding is provided to explore options for replacing or enhancing the existing shelter. Design and construction costs are outside the scope of the five-year plan.

USEFUL LIFE
30 to 40 years

TIMETABLE
Study in FY25 (Year 5).

OPERATING IMPACT
Operating impact from shelter expansion or construction will occur outside the scope of the five-year plan.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**50,000**	**50,000**
Transfer from General Fund	-	-	-	-	50,000	50,000
Funding Uses	**-**	**-**	**-**	**-**	**50,000**	**50,000**
Professional Services	-	-	-	-	50,000	50,000

Courtroom Renovation

DEPARTMENT
Circuit Court

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Judicial Administration

LOCATION
Courthouse

PROJECT DESCRIPTION
During the design phase of the Courthouse, the decision was made to include an unfinished space on the upper level to allow for growth and the need for future courtrooms. Based on discussions with the Circuit Court, General District Court and Juvenile & Domestic Relations Court judges, the County recognizes the need to identify potential uses for that space. This project will study growth trends and recommend the best possible use for the space along with any necessary accompanying changes.

USEFUL LIFE
20 to 30 years

TIMETABLE
Study in FY25 (Year 5).

OPERATING IMPACT
There are no anticipated operational increases as a result of the study. Operational impacts associated with the recommendations in the study will be included in the study findings.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**50,000**	**50,000**
Transfer from General Fund	-	-	-	-	50,000	50,000
Funding Uses	**-**	**-**	**-**	**-**	**50,000**	**50,000**
Professional Services	-	-	-	-	50,000	50,000

Land Records Management System

DEPARTMENT
Clerk of the Circuit Court

PROJECT TYPE
Technology

FUNCTIONAL AREA
Judicial Administration

LOCATION
Courthouse

PROJECT DESCRIPTION
Replace the current Land Records Management System (LRMS), which stores and enables access to public records including land records, court orders, wills, fiduciary accounts and marriage licenses. The LRMS also provides secure remote access to land records for paid subscribers and government employees. The current system has been in use since 2002. Project funding includes hardware and software needed to operate the new system. The new system will operate parallel to current system throughout FY22 (Year 2).

USEFUL LIFE
10 years

TIMETABLE
Release RFP in FY20; Issue contract & purchase hardware in FY21 (Year 1); Go-live in early FY22 (Year 2).

OPERATING IMPACT
Recurring software maintenance beginning in FY22 (Year 2).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**310,000**	**-**	**-**	**-**	**-**	**310,000**
Miscellaneous Revenue	100,000	-	-	-	-	100,000
Transfer from General Fund	210,000	-	-	-	-	210,000
Funding Uses	**310,000**	**-**	**-**	**-**	**-**	**310,000**
Information System Equip Repl	20,000	-	-	-	-	20,000
Software Services	290,000	-	-	-	-	290,000
Operating Impact	**-**	**15,000**	**15,000**	**15,000**	**15,000**	**60,000**
Software Services	-	15,000	15,000	15,000	15,000	60,000

Attorney Case Management System

DEPARTMENT
Commonwealth's Attorney

PROJECT TYPE
Technology

FUNCTIONAL AREA
Judicial Administration

LOCATION
Courthouse

PROJECT DESCRIPTION
Replace the current case management system. All court documents, subpoenas for witnesses, restitution, etc. are generated and maintained in the case management system. The Commonwealth's Attorney's office and Information Technology department will identify a replacement product with a prosecutor module to replace and enhance services provided by the current system.

USEFUL LIFE
10 years

TIMETABLE
System implementation in FY21 (Year 1).

OPERATING IMPACT
Recurring software maintenance beginning in FY22 (Year 2).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**250,000**	**-**	**-**	**-**	**-**	**250,000**
Transfer from General Fund	250,000	-	-	-	-	250,000
Funding Uses	**250,000**	**-**	**-**	**-**	**-**	**250,000**
Software Services	250,000	-	-	-	-	250,000
Operating Impact	**-**	**40,000**	**40,000**	**40,000**	**40,000**	**160,000**
Software Services	-	40,000	40,000	40,000	40,000	160,000

RAFT House Project

DEPARTMENT
Community Services Board

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Human Services

LOCATION
To be determined

PROJECT DESCRIPTION
This project will provide a facility for the RAFT (Recovery Acceptance Friendship Teamwork) House program that meets the needs of the Community Services Board (CSB) psychosocial rehabilitation program, while also eliminating the last remaining CSB-leased facility. The current facility does not allow for needed expansion and configuration for optimum programming.

USEFUL LIFE
20 years

TIMETABLE
Establish new building requirements and research potential sites in FY25 (Year 5).

OPERATING IMPACT
Transition from lease to ownership costs will occur outside the scope of the five-year plan.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**500,000**	**500,000**
Bond Proceeds	-	-	-	-	500,000	500,000
Funding Uses	**-**	**-**	**-**	**-**	**500,000**	**500,000**
Construction	-	-	-	-	250,000	250,000
Land Purch & Development Addtl	-	-	-	-	250,000	250,000

Wheelchair Van Replacement

DEPARTMENT
Community Services Board

PROJECT TYPE
Vehicles

FUNCTIONAL AREA
Human Services

LOCATION
CSB Day Health Building

PROJECT DESCRIPTION
Replace a passenger van with a wheelchair lift serving the CSB's Day Health and Rehabilitation program. It transports over 2,600 clients and staff per year. The current wheelchair van was purchased in 2007 and has a projected 18 to 20 year useful life.

USEFUL LIFE
18 to 20 years

TIMETABLE
Purchase and receipt of vehicle in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated. New vehicle will have fewer repairs and better gas mileage.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**80,000**	**80,000**
Transfer from General Fund	-	-	-	-	80,000	80,000
Funding Uses	**-**	**-**	**-**	**-**	**80,000**	**80,000**
Motor Vehicle & Equipment Repl	-	-	-	-	80,000	80,000

Court Services Mobile Data Terminals

DEPARTMENT
Court Services

PROJECT TYPE
Technology

FUNCTIONAL AREA
Judicial Administration

LOCATION
Vaughan-Bradley Building

PROJECT DESCRIPTION
Outfit all Mobile Data Terminals (MDTs) assigned to Court Services with the mobile software needed to clear subpoenas in the field when served. This will also upgrade the MDT device from the current platform to the next generation MDT including the vehicle dock.

USEFUL LIFE
Devices replaced every 5 years, software licenses are perpetual.

TIMETABLE
Project to be completed in FY22 (Year 2).

OPERATING IMPACT
Recurring software maintenance beginning in FY23 (Year 3).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**55,000**	**-**	**-**	**-**	**55,000**
Transfer from General Fund	-	55,000	-	-	-	55,000
Funding Uses	**-**	**55,000**	**-**	**-**	**-**	**55,000**
Information System Equip Addtl	-	39,000	-	-	-	39,000
Software Services	-	16,000	-	-	-	16,000
Operating Impact	**-**	**-**	**1,000**	**1,000**	**1,000**	**3,000**
Software Services	-	-	1,000	1,000	1,000	3,000

Courts Security Detention Center Upgrade

DEPARTMENT
Court Services

PROJECT TYPE
Technology

FUNCTIONAL AREA
Judicial Administration

LOCATION
Courthouse

PROJECT DESCRIPTION
Upgrade or replace the security detention center in the basement of the Courthouse. This detention center is a secure location for the transition of individuals from jail to the court room. A highly customized system operates the detention center as well as associated cameras, elevators and door locks. The system will need to be substantially replaced when it nears end of life. This project funds replacement of the system, which includes the software system, security for the detention area, cameras, door locks, servers, monitors and network equipment.

USEFUL LIFE
5 to 7 years

TIMETABLE
Implementation will take 18 to 24 months.

OPERATING IMPACT
Increased operational costs are not anticipated. Funds for maintenance of the existing system should be sufficient for any new system.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**600,000**	**-**	**-**	**-**	**-**	**600,000**
Transfer from General Fund	600,000	-	-	-	-	600,000
Funding Uses	**600,000**	**-**	**-**	**-**	**-**	**600,000**
Information System Equip Addtl	600,000	-	-	-	-	600,000

Public Safety Microwave Radio Repl

DEPARTMENT
Emergency Communications

PROJECT TYPE
Equipment

FUNCTIONAL AREA
Public Safety

LOCATION
Emergency Communications Center

PROJECT DESCRIPTION
Replace the current microwave radio system software and hardware to include microwave radio indoor and outdoor units, dehydrators, DC power plant, equipment spares and a fault monitoring solution.

USEFUL LIFE
Major upgrades necessary every 15 to 20 years

TIMETABLE
Equipment replacement to begin in FY25 (Year 5) with anticipated completion in FY26 (Year 6).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**300,000**	**300,000**
Transfer from General Fund	-	-	-	-	300,000	300,000
Funding Uses	**-**	**-**	**-**	**-**	**300,000**	**300,000**
Communications Equipment Repl	-	-	-	-	300,000	300,000

Public Safety Software Upgrade

DEPARTMENT
Emergency Communications

PROJECT TYPE
Technology

FUNCTIONAL AREA
Public Safety

LOCATION
Emergency Communications Center

PROJECT DESCRIPTION
Upgrade or replace Computer Aided Dispatch (CAD) hardware and software, mobile apps, high availability solution, connectivity improvements, data analytics, extended agency inclusion, mobile device management and routable streets.

USEFUL LIFE
Major software upgrades necessary every 5 to 7 years

TIMETABLE
Project to be initiated in FY23 (Year 3). Anticipating a 2 year implementation process to conclude in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**750,000**	**-**	**-**	**750,000**
Transfer from General Fund	-	-	750,000	-	-	750,000
Funding Uses	**-**	**-**	**750,000**	**-**	**-**	**750,000**
Computer Equip Non-Cyc Repl	-	-	750,000	-	-	750,000

ALS Cardiac Monitor

DEPARTMENT
Fire-EMS

PROJECT TYPE
Equipment

FUNCTIONAL AREA
Public Safety

LOCATION
Fire-EMS Stations

PROJECT DESCRIPTION
Cardiac monitors for select Engines and Reserve Ambulances so paramedics can have the required equipment to provide advanced life support. This enhanced service will improve performance measures and patient outcome.

USEFUL LIFE
10 years

TIMETABLE
To be delivered in FY22 (Year 2).

OPERATING IMPACT
Recurring Increase to maintenance service contract beginning in FY23 (Year 3).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**216,000**	**-**	**-**	**-**	**216,000**
Transfer from General Fund	-	216,000	-	-	-	216,000
Funding Uses	**-**	**216,000**	**-**	**-**	**-**	**216,000**
Machinery & Equipment Addtl	-	216,000	-	-	-	216,000
Operating Impact	**-**	**-**	**9,600**	**9,600**	**9,600**	**28,800**
Maintenance Service Contracts	-	-	9,600	9,600	9,600	28,800

Ambulance Replacement

DEPARTMENT
Fire-EMS

PROJECT TYPE
Vehicles

FUNCTIONAL AREA
Public Safety

LOCATION
Fire-EMS Stations

PROJECT DESCRIPTION
The County currently operates 22 ambulances from 16 stations. This project will replace ambulances based on estimated maintenance costs, mileage and age. All ambulances will be outfitted to advanced life support standards. This plan also incorporates the replacement of 1 quick response vehicle per year.

USEFUL LIFE
10 years

TIMETABLE
Annual purchase of 2 ambulances & 1 quick response vehicle.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**643,600**	**643,600**	**643,600**	**643,600**	**643,600**	**3,218,000**
Transfer from General Fund	643,600	643,600	643,600	643,600	643,600	3,218,000
Funding Uses	**643,600**	**643,600**	**643,600**	**643,600**	**643,600**	**3,218,000**
Fire Trucks & Ambulances Repl	643,600	643,600	643,600	643,600	643,600	3,218,000

Diesel Exhaust Removal System

DEPARTMENT
Fire-EMS

PROJECT TYPE
Equipment

FUNCTIONAL AREA
Public Safety

LOCATION
Fire-EMS Stations

PROJECT DESCRIPTION
Install an apparatus-mounted, direct-source capture diesel exhaust filtering system on 15 units of apparatus. This exhaust removal system works to protect firefighter and EMS personnel from the dangers of breathing diesel exhaust. This system is intended to minimize the exposure to known carcinogens and particulates that cause lung cancer. The product will meet and exceed industry standard requirements.

USEFUL LIFE
Varies based upon the vehicle

TIMETABLE
Purchase in FY23 (Year 3).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**135,000**	**-**	**-**	**135,000**
Transfer from General Fund	-	-	135,000	-	-	135,000
Funding Uses	**-**	**-**	**135,000**	**-**	**-**	**135,000**
Alt to Facility or Office	-	-	135,000	-	-	135,000

Fire Engine & Heavy Rescue Replacement

DEPARTMENT
Fire-EMS

PROJECT TYPE
Vehicles

FUNCTIONAL AREA
Public Safety

LOCATION
Fire-EMS Stations

PROJECT DESCRIPTION
The County operates a Fire apparatus fleet of 20 engines, 9 tankers, 3 ladder trucks, 4 heavy rescue units, an air utility vehicle with trailer, brush trucks, first response units and a mobile command unit. The engines in this rotation are the first-line engines for fire and medical response from County fire stations. They have a capacity of 750 gallons of water, 2,000 gallon per minute pump, 2,000 feet of assorted hose, breathing apparatus and the capability of transporting 6 firefighters to emergency scenes.

USEFUL LIFE
Varies based upon the vehicle: command vehicles - 4 years; Fire Marshal vehicles - 7 years; engines - 20 years; ladder trucks and heavy rescue units - 15 years; tankers - 20 years; brush trucks - 20 years

TIMETABLE
Annual purchases in accordance with the 20-year apparatus replacement plan.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**1,675,000**	**1,275,000**	**1,150,000**	**1,000,000**	**1,200,000**	**6,300,000**
Transfer from General Fund	1,675,000	1,275,000	1,150,000	1,000,000	1,200,000	6,300,000
Funding Uses	**1,675,000**	**1,275,000**	**1,150,000**	**1,000,000**	**1,200,000**	**6,300,000**
Fire Trucks & Ambulances Repl	1,675,000	1,275,000	1,150,000	1,000,000	1,200,000	6,300,000

Fire Station #17

DEPARTMENT
Fire-EMS

PROJECT TYPE
Construction

FUNCTIONAL AREA
Public Safety

LOCATION
Laurel Meadows area

PROJECT DESCRIPTION
Construct a new, 17th fire station in the area of the Pole Green and Lee Davis corridor. Current data shows an increased service demand in this area consistent with local growth. This project includes funding of a fire engine in FY22 (Year 2) in anticipation of opening a new station.

USEFUL LIFE
35 Years

TIMETABLE
Engine purchase in FY22 (Year 2); Design and engineering in FY24 (Year 4); Construction in FY25 (Year 5).

OPERATING IMPACT
Marginal relative increase to fuel and maintenance.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**765,000**	**-**	**592,200**	**6,461,800**	**7,819,000**
Bond Proceeds	-	-	-	592,200	6,461,800	7,054,000
Transfer from GF - FBA Capital	-	765,000	-	-	-	765,000
Funding Uses	**-**	**765,000**	**-**	**592,200**	**6,461,800**	**7,819,000**
Construction	-	-	-	-	6,461,800	6,461,800
Motor Vehicle & Equip Addtl	-	765,000	-	-	-	765,000
Professional Services	-	-	-	592,200	-	592,200

Fire-EMS Station Replacement

DEPARTMENT
Fire-EMS

PROJECT TYPE
Construction

FUNCTIONAL AREA
Public Safety

LOCATION
Fire-EMS Stations

PROJECT DESCRIPTION
Study of the locations and conditions of four fire stations - Montpelier, Doswell, Rockville and Chickahominy - to develop a master plan for renovations and replacements. These four stations were constructed in the early 1980's to accommodate small groups of volunteer firefighters who responded from home. It was not intended for firefighters to live in these stations on a 24 hour basis; cooking, showering and sleeping in the facility. Today, 18 firefighters live in these facilities around the clock, along with volunteer responders. The department has made modifications to the buildings to the extent possible, but the infrastructure in the older stations does not accommodate 24-hour-a-day living.

USEFUL LIFE
10 Years

TIMETABLE
Facilities study to be conducted in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**50,000**	**50,000**
Transfer from General Fund	-	-	-	-	50,000	50,000
Funding Uses	**-**	**-**	**-**	**-**	**50,000**	**50,000**
Professional Services	-	-	-	-	50,000	50,000

Station Alerting System Upgrade

DEPARTMENT
Fire-EMS

PROJECT TYPE
Equipment

FUNCTIONAL AREA
Public Safety

LOCATION
Fire-EMS Stations

PROJECT DESCRIPTION
Replace the current station alerting system with modern technology that is capable of alerting all units simultaneously via direct line and provides a much more reliable platform for this critical task. The station alerting system is the method used to inform firefighters of an emergency call 24 hours a day. The current system is based on 1950's technology that broadcasts tones in real time for each unit to respond. This can create a delay in response, as it is common for multiple units to respond to serious incidents. The older technology is also subject to failure, which is unacceptable in emergency services. The replacement system will be capable of alerting all units simultaneously via direct line and will provide a more reliable platform for this critical task. The replacement system will also provide "soft" alerting which improves responder safety and health.

USEFUL LIFE
20 years

TIMETABLE
Installation in FY21 (Year 1), FY22 (Year 2) and FY23 (Year 3).

OPERATING IMPACT
Recurring software maintenance beginning in FY24 (Year 4).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**600,000**	**1,140,000**	**460,000**	**-**	**-**	**2,200,000**
Transfer from General Fund	600,000	970,000	90,000	-	-	1,660,000
Transfer from GF - FBA Capital	-	170,000	370,000	-	-	540,000
Funding Uses	**600,000**	**1,140,000**	**460,000**	**-**	**-**	**2,200,000**
Communications Equipment Addtl	600,000	1,140,000	460,000	-	-	2,200,000
Operating Impact	**-**	**-**	**-**	**105,000**	**105,000**	**210,000**
Software Services	-	-	-	105,000	105,000	210,000

Traffic Preemption

DEPARTMENT
Fire-EMS

PROJECT TYPE
Equipment

FUNCTIONAL AREA
Public Safety

LOCATION
Various VDOT Traffic Intersections

PROJECT DESCRIPTION
Traffic signal preemption provides emergency fire service vehicles with the ability to preempt a traffic signal in order to have a green light in the direction of the responding vehicle. This project will enhance the response of over 60 primary apparatus at 40 intersections that will result in reduced response times and safer responses for both apparatus and the community.

USEFUL LIFE
20 Years

TIMETABLE
Install receiver on several intersection signals and apparatus each year beginning in FY25 (Year 5) until all primary intersections and apparatus are complete.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**140,000**	**140,000**
Transfer from General Fund	-	-	-	-	140,000	140,000
Funding Uses	**-**	**-**	**-**	**-**	**140,000**	**140,000**
Machinery & Equipment Addtl	-	-	-	-	140,000	140,000

Admin Building Center Roof Replacement

DEPARTMENT
General Services

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Public Works

LOCATION
Administration Building

PROJECT DESCRIPTION
Replace the center section of the Administration Building's roof. The current roof is reaching the end of its useful life. This is the largest section of the building's roof. Separate repairs have and will continue to be done on smaller sections to keep roof maintenance up to date.

USEFUL LIFE
20 years

TIMETABLE
Project to be completed in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**150,000**	**150,000**
Transfer from General Fund	-	-	-	-	150,000	150,000
Funding Uses	**-**	**-**	**-**	**-**	**150,000**	**150,000**
Alt to Facility or Office	-	-	-	-	150,000	150,000

Facility Security Upgrades

DEPARTMENT
General Services

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Public Works

LOCATION
Countywide

PROJECT DESCRIPTION
A FY20 Security Evaluation Study resulted in security enhancements for county buildings. No major renovations are expected.

USEFUL LIFE
Varies based upon the enhancements recommended.

TIMETABLE
Project to be completed in FY21 (Year 1) and FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**75,000**	**75,000**	**-**	**-**	**-**	**150,000**
Transfer from General Fund	75,000	75,000	-	-	-	150,000
Funding Uses	**75,000**	**75,000**	**-**	**-**	**-**	**150,000**
Alt to Facility or Office	75,000	75,000	-	-	-	150,000

Fire-EMS Generator Replacement

DEPARTMENT
General Services

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Public Works

LOCATION
Fire-EMS Stations

PROJECT DESCRIPTION
Replace and upgrade existing aging generators at fire stations. Existing generators are sized only for partial facility power. Stations now house crews 24 hours a day and need full operational capacity during power outages. Upgraded generators will meet these needs.

USEFUL LIFE
20 years

TIMETABLE
Replacement of one station generator every other year.

OPERATING IMPACT
Increased utility costs are anticipated with generators operating at full power.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**60,000**	**-**	**60,000**	**-**	**120,000**
Transfer from General Fund	-	60,000	-	60,000	-	120,000
Funding Uses	**-**	**60,000**	**-**	**60,000**	**-**	**120,000**
Building Accessory Equip Repl	-	60,000	-	60,000	-	120,000

Fleet & Facilities Software Systems Repl

DEPARTMENT
General Services

PROJECT TYPE
Technology

FUNCTIONAL AREA
Public Works

LOCATION
Countywide

PROJECT DESCRIPTION
Replace the current Fleet and Facilities software systems. The existing Fleet software system has been in use since 1996. The current Facilities software system has been in use for more than 10 years and lacks user-friendly reporting and data collection features. The selected replacement system(s) will be web-based with enhanced reporting capabilities.

USEFUL LIFE
10 years

TIMETABLE
Project to be completed in FY23 (Year 3).

OPERATING IMPACT
Recurring software maintenance beginning in FY24 (Year 4).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**200,000**	**-**	**-**	**200,000**
Transfer from General Fund	-	-	200,000	-	-	200,000
Funding Uses	**-**	**-**	**200,000**	**-**	**-**	**200,000**
Software Services	-	-	200,000	-	-	200,000
Operating Impact	**-**	**-**	**-**	**5,000**	**5,000**	**10,000**
Software Services	-	-	-	5,000	5,000	10,000

Fleet Air Compressor Replacement

DEPARTMENT
General Services

PROJECT TYPE
Equipment

FUNCTIONAL AREA
Public Works

LOCATION
Fleet Building

PROJECT DESCRIPTION
Replace air compressors that are part of a system that supplies air to Fleet service bays for tire inflation and operating air tools and equipment. The current air compressors are reaching the end of their useful life.

USEFUL LIFE
15 to 20 years

TIMETABLE
Project to be completed in FY21 (Year 1).

OPERATING IMPACT
Project should decrease maintenance repair expenses with new system.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**70,000**	**-**	**-**	**-**	**-**	**70,000**
Transfer from General Fund	70,000	-	-	-	-	70,000
Funding Uses	**70,000**	**-**	**-**	**-**	**-**	**70,000**
Machinery & Equipment Repl	70,000	-	-	-	-	70,000

Fleet Garage Floor Top-Coat

DEPARTMENT
General Services

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Public Works

LOCATION
Fleet Building

PROJECT DESCRIPTION
Provide top-coat application to the concrete floor in all bay areas to protect and extend the working life of the Fleet garage floor. Dropped tools, spills and the weight of vehicles combine to destroy, split and crack the concrete surface over time.

USEFUL LIFE
10 to 15 years

TIMETABLE
Project to be completed in FY21 (Year 1).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**300,000**	**-**	**-**	**-**	**-**	**300,000**
Transfer from General Fund	300,000	-	-	-	-	300,000
Funding Uses	**300,000**	**-**	**-**	**-**	**-**	**300,000**
Alt to Facility or Office	300,000	-	-	-	-	300,000

General Vehicle Replacement

DEPARTMENT
General Services

PROJECT TYPE
Vehicles

FUNCTIONAL AREA
Public Works

LOCATION
Countywide

PROJECT DESCRIPTION
Replace vehicles as required to maintain the County's fleet. This project will replace vehicles based on factors including estimated maintenance costs, mileage and age.

USEFUL LIFE
Varies based upon the vehicle. Most vehicles are 7 to 10 years.

TIMETABLE
Annual purchase of vehicles.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**330,000**	**340,000**	**340,000**	**350,000**	**350,000**	**1,710,000**
Transfer from General Fund	330,000	340,000	340,000	350,000	350,000	1,710,000
Funding Uses	**330,000**	**340,000**	**340,000**	**350,000**	**350,000**	**1,710,000**
Motor Vehicle & Equipment Repl	330,000	340,000	340,000	350,000	350,000	1,710,000

Human Services Complex Boiler Repl

DEPARTMENT
General Services

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Public Works

LOCATION
Human Services Complex

PROJECT DESCRIPTION
Replace the boiler in the Human Services Complex. The current boiler has been re-tubed once and is reaching the end of its useful life.

USEFUL LIFE
20 years

TIMETABLE
Project to be completed in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**55,000**	**55,000**
Transfer from General Fund	-	-	-	-	55,000	55,000
Funding Uses	**-**	**-**	**-**	**-**	**55,000**	**55,000**
Building Accessory Equip Repl	-	-	-	-	55,000	55,000

Parks & Rec Window Replacement

DEPARTMENT
General Services

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Public Works

LOCATION
Parks & Recreation Maintenance Facility

PROJECT DESCRIPTION
Replace original, single-pane windows installed in 1974 with energy-efficient windows. Current windows are in poor condition and difficult to operate.

USEFUL LIFE
25 years

TIMETABLE
Project to be completed in FY21 (Year 1).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**65,000**	**-**	**-**	**-**	**-**	**65,000**
Transfer from General Fund	65,000	-	-	-	-	65,000
Funding Uses	**65,000**	**-**	**-**	**-**	**-**	**65,000**
Alt to Facility or Office	65,000	-	-	-	-	65,000

Vaughan-Bradley Roof Replacement

DEPARTMENT
General Services

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Public Works

LOCATION
Vaughan-Bradley Building

PROJECT DESCRIPTION
Replace the roof of the Vaughan-Bradley Building. The current 20-year old ballasted roof system has received repairs in areas of heavy traffic due to communication and HVAC equipment installation. The replacement roof will be the same type of Ethylene Propylene Diene Monomer (EPDM) material. Roof gutters will also be relined with EPDM as part of the total roof replacement.

USEFUL LIFE
20 years

TIMETABLE
Project to be completed in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**135,000**	**135,000**
Transfer from General Fund	-	-	-	-	135,000	135,000
Funding Uses	**-**	**-**	**-**	**-**	**135,000**	**135,000**
Alt to Facility or Office	-	-	-	-	135,000	135,000

Wickham Renovations

DEPARTMENT
General Services

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Public Works

LOCATION
Wickham Building

PROJECT DESCRIPTION
Provide additional funding to complete renovation of the multi-story front section of the Wickham Building for the Information Technology department. This project will also evaluate and determine the best disposition of the single-story section of the Wickham Building to allow continued use through major repairs or demolition if required repairs are not cost effective.

USEFUL LIFE
20 years

TIMETABLE
Project to be completed in FY21 (Year 1) and FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**300,000**	**200,000**	**-**	**-**	**-**	**500,000**
Transfer from GF - FBA Capital	-	200,000	-	-	-	200,000
Use of Fund Balance	300,000	-	-	-	-	300,000
Funding Uses	**300,000**	**200,000**	**-**	**-**	**-**	**500,000**
Alt to Facility or Office	300,000	200,000	-	-	-	500,000

Computer Replacement Program

DEPARTMENT
Information Technology

PROJECT TYPE
Technology

FUNCTIONAL AREA
General Government

LOCATION
Countywide

PROJECT DESCRIPTION
This program allows for the replacement of computers when they are no longer functioning in an efficient manner. Computers that are not in places where they are used 100% of the time (conference rooms, spares, interns, etc.) are recycled as other computers are replaced. Funds have been maximized by adjusting warranty periods as appropriate while still providing maximum usability and performance for the County workforce. These funds do not replace mobile data computers or any computers in Public Utilities, the Department of Social Services or the Pamunkey Regional Jail.

USEFUL LIFE
The target replacement schedule is 5 years, with some specific models replaced more frequently. Communication dispatch computers used for E911 services are replaced every 3 years.

TIMETABLE
Annual replacement of computers.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**175,000**	**150,000**	**150,000**	**160,000**	**175,000**	**810,000**
Transfer from General Fund	175,000	150,000	150,000	160,000	175,000	810,000
Funding Uses	**175,000**	**150,000**	**150,000**	**160,000**	**175,000**	**810,000**
Computer Equip Cyclical Repl	175,000	150,000	150,000	160,000	175,000	810,000

Data Center Upgrades

DEPARTMENT
Information Technology

PROJECT TYPE
Technology

FUNCTIONAL AREA
General Government

LOCATION
Countywide

PROJECT DESCRIPTION
With the new IT data center planned for 2020, these funds will be used for required maintenance to ensure that existing cooling and uninterruptable power supply (UPS) systems continue to operate properly. Funding is primarily for UPS battery replacements and other component upgrades and replacements.

USEFUL LIFE
5 years for UPS batteries and major components of the cooling system; 3 to 5 years for major components of the UPS such as capacitors and filtering circuits.

TIMETABLE
Enhancements and maintenance will take place in FY23 (Year 3).

OPERATING IMPACT
Project was created to provide ongoing maintenance.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**75,000**	**-**	**-**	**75,000**
Transfer from General Fund	-	-	75,000	-	-	75,000
Funding Uses	**-**	**-**	**75,000**	**-**	**-**	**75,000**
Information System Equip Addtl	-	-	75,000	-	-	75,000

Enterprise Licenses

DEPARTMENT
Information Technology

PROJECT TYPE
Technology

FUNCTIONAL AREA
General Government

LOCATION
Countywide

PROJECT DESCRIPTION
The County utilizes enterprise software license agreements to keep and maintain systems with up-to-date software that provide users and customers extended functionality, corrections for known issues and key security upgrades. Licenses do not have to be purchased with new computers and the management of licenses are simplified and efficient. This project provides funding for software licensing and product access for all County computers, as well as operating systems for servers, computers and other devices. Funds are also included for SQL Server database instances. The enterprise agreement is renegotiated with the vendor every 3 years. The escalation of these support fees is to move some operations to hosted/cloud services.

USEFUL LIFE
Varies based upon the product. All product upgrades are included with the license agreement.

TIMETABLE
Purchase of licenses and services in 3 year periods.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**675,000**	**700,000**	**710,000**	**720,000**	**750,000**	**3,555,000**
Transfer from General Fund	675,000	700,000	710,000	720,000	750,000	3,555,000
Funding Uses	**675,000**	**700,000**	**710,000**	**720,000**	**750,000**	**3,555,000**
Software Services	675,000	700,000	710,000	720,000	750,000	3,555,000

Fiber Extension to County Facilities

DEPARTMENT
Information Technology

PROJECT TYPE
Technology

FUNCTIONAL AREA
General Government

LOCATION
Countywide

PROJECT DESCRIPTION
As the County deploys more web-based applications and technologies there will be an increased reliance on adequate internet service.
• The establishment of fiber connectivity to the Doswell Fire Station (presently served by a T-1 10mb circuit) will allow for the full deployment of the station alerting system, efficient connectivity for emergency service personnel and Office365 deployment.

USEFUL LIFE
20 years

TIMETABLE
Doswell Fire Station in FY23 (Year 3).

OPERATING IMPACT
Recurring fees for Doswell Fire Station site beginning in FY24 (Year 4).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**100,000**	**-**	**-**	**100,000**
Transfer from General Fund	-	-	100,000	-	-	100,000
Funding Uses	**-**	**-**	**100,000**	**-**	**-**	**100,000**
Information System Equip Addtl	-	-	100,000	-	-	100,000
Operating Impact	**-**	**-**	**-**	**7,500**	**7,500**	**15,000**
Software Services	-	-	-	7,500	7,500	15,000

Storage Area Network

DEPARTMENT
Information Technology

PROJECT TYPE
Technology

FUNCTIONAL AREA
General Government

LOCATION
Countywide

PROJECT DESCRIPTION
The existing Storage Area Network (SAN) is a combination of appliances, software and equipment that provides storage. The SAN allows multiple system access, which provides more efficient and effective storage than traditional server storage. The SAN provides greater advance fault detection, allowing staff the ability to identify potential issues and correct them before the problems cause catastrophic system failures and service outages. Funding is for data storage growth and system enhancements.

USEFUL LIFE
Major upgrades for system growth are planned every 5 years with replacement typically every 10 to 15 years.

TIMETABLE
System capacity will be enhanced and upgraded annually as data storage needs arise.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**175,000**	**175,000**	**175,000**	**200,000**	**200,000**	**925,000**
Transfer from General Fund	175,000	175,000	175,000	200,000	200,000	925,000
Funding Uses	**175,000**	**175,000**	**175,000**	**200,000**	**200,000**	**925,000**
Small Capital Outlay	175,000	175,000	175,000	200,000	200,000	925,000

Technology Infrastructure

DEPARTMENT
Information Technology

PROJECT TYPE
Technology

FUNCTIONAL AREA
General Government

LOCATION
Countywide

PROJECT DESCRIPTION
Maintain and enhance the County's technology infrastructure. This includes the County's network, Windows server, SQL database infrastructure, as well as the County's security & network protection methods and back-up solutions. Project costs include equipment, software licenses and their warranty coverage. These upgrades are required as shifts in technology occur in order to provide current support and warranty coverage, as well as system enhancements. These funds ensure the continuity of operations for all technology services within the County. This project includes hardware to operate infrastructure in County locations.

USEFUL LIFE
Varies based upon the product.

TIMETABLE
Annual purchases for enhancements to major systems and infrastructure.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**750,000**	**800,000**	**825,000**	**750,000**	**750,000**	**3,875,000**
Transfer from General Fund	750,000	800,000	825,000	750,000	750,000	3,875,000
Funding Uses	**750,000**	**800,000**	**825,000**	**750,000**	**750,000**	**3,875,000**
Information System Equip Addtl	750,000	800,000	825,000	750,000	750,000	3,875,000

Park Enhancements

DEPARTMENT
Parks & Recreation

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Parks, Recreation & Cultural

LOCATION
Various

PROJECT DESCRIPTION
This project provides continued funding for enhancements to current parks. The five-year plan includes:
• Athletic Field Lighting for Pole Green Park. Replacing the outdated lighting system on Pole Green Park multi-purpose field #3 will bring light levels to a point where tournament soccer and lacrosse could be played on this field. Upgraded lighting will also be more efficient. Existing lights were installed in 2000.
• Hard Courts at a park to be identified.
• Playground Resurfacing for Pole Green Park and Poor Farm Park Dana Nelson-Operation Hope Playgrounds. The rubberized surfacing is nearing the end of its 10-15 year lifespan.

USEFUL LIFE
20 years

TIMETABLE
Construction in FY23 (Year 3) and FY24 (Year 4).

OPERATING IMPACT
Athletic Field Lighting – Electrical and repair & maintenance services beginning in FY24 (Year 4).
Hard Courts - Electrical and repair & maintenance services as well as supplies beginning in FY24 (Year 4).
Playground Resurfacing- No operating impact anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**235,000**	**200,000**	**-**	**435,000**
Transfer from General Fund	-	-	235,000	200,000	-	435,000
Funding Uses	**-**	**-**	**235,000**	**200,000**	**-**	**435,000**
Alterations to Grounds	-	-	235,000	200,000	-	435,000
Operating Impact	**-**	**-**	**-**	**1,600**	**1,900**	**3,500**
Electrical Services	-	-	-	800	1,100	1,900
Repair & Maintenance Services	-	-	-	500	500	1,000
Supplies Repair & Maint	-	-	-	300	300	600

Park Enhancements
Summary by Type

Project	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Athletic Field Lighting	**-**	**-**	**125,000**	**-**	**-**	**125,000**
Pole Green Park	-	-	125,000	-	-	125,000
Hard Courts	**-**	**-**	**110,000**	**-**	**-**	**110,000**
Location To Be Determined	-	-	110,000	-	-	110,000
Playground Resurfacing	**-**	**-**	**-**	**200,000**	**-**	**200,000**
Pole Green Park	-	-	-	110,000	-	110,000
Poor Farm Park	-	-	-	90,000	-	90,000
TOTAL	**-**	**-**	**235,000**	**200,000**	**-**	**435,000**

Roadway Improvements

DEPARTMENT
Public Works

PROJECT TYPE
Roads & Public Works

FUNCTIONAL AREA
Public Works

LOCATION
Various

PROJECT DESCRIPTION
Hanover County relies heavily on state and federal funding to address its transportation needs. Over time, funding allocated from these sources has shifted from formula-based to merit-based processes, such as the Commonwealth's SMART SCALE, which prioritize state funds for state transportation priorities. The same is true for funding through the Regional Transportation Authority. This has resulted in greater uncertainty in terms of funding, making local budget planning more speculative. Staff continue to pursue funding for projects based on the Board's adopted Transportation Policy. The County maintains a candidate project list that prioritizes projected road needs and is annually reviewed and updated by the Roads Committee. Funding in the first year of the CIP is detailed by project, whereas the out-years are estimates of potential grants which will be identified over time. The CIP only lists projects receiving new funding. For a list of previously-funded projects, consult the Quarterly Road Project Status Report provided to the Board of Supervisors.

• Pole Green Widening – Widen from 2 to 4 lane divided section.
• Atlee Station Widening Phase I – Widen from 2 to 4 lanes from Warren Avenue to Kings Charter Dr.
• 360 - Lee Davis Intersection – Widen Route 360 to 8 lanes and expand the intersection at Lee Davis.
• Roadway Contingencies – A contingency fund to enable receipt of state funding for secondary roads or other sources that can be used to fund minor adjustments in project budgets.

USEFUL LIFE
N/A

TIMETABLE
Continuous improvements in all years.

OPERATING IMPACT
Roadway contingencies fund stated in project description.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**6,462,323**	**12,678,180**	**7,378,580**	**5,118,930**	**5,351,178**	**36,989,191**
Fed FHWA Grant	212,323	4,168,000	4,112,000	2,400,000	2,986,198	13,878,521
Miscellaneous Grants	-	2,000,000	2,000,000	1,000,000	1,000,000	6,000,000
State VDOT	5,500,000	5,645,200	401,600	853,950	500,000	12,900,750
Traffic Contribution	750,000	750,000	750,000	750,000	750,000	3,750,000
Use of Fund Balance - Proffers	-	114,980	114,980	114,980	114,980	459,920
Funding Uses	**6,462,323**	**12,678,180**	**7,378,580**	**5,118,930**	**5,351,178**	**36,989,191**
Roadway Mgmt Projects	6,462,323	12,678,180	7,378,580	5,118,930	5,351,178	36,989,191

Roadway Improvements
FY21 Summary by Project

The table below shows projects slated for funding with FY21 (Year 1) funds.

Project	Prior Expenditures	Remaining Allocation	FY21 Budget	Future Funding	Total
Pole Green Widening	**-**	**9,663,000**	**-**	**10,872,548**	**20,535,548**
Categorical Federal Aid	-	5,376,000	-	4,971,798	10,347,798
Categorical State Aid	-	1,987,000	-	1,900,750	3,887,750
General Fund	-	1,500,000	-	-	1,500,000
Local Revenue	-	-	-	4,000,000	4,000,000
Proffers	-	800,000	-	-	800,000
Atlee Station Widening Phase I	**-**	**3,224,822**	**5,750,000**	**22,554,417**	**31,529,239**
Categorical Federal Aid	-	-	-	8,703,071	8,703,071
Categorical State Aid	-	-	5,000,000	7,826,168	12,826,168
General Fund	-	-	-	2,000,000	2,000,000
Proffers	-	3,224,822	750,000	4,025,178	8,000,000
US Rt 360	**2,493,291**	**13,782,426**	**212,323**	**7,694,400**	**24,182,440**
Categorical Federal Aid	1,703,105	11,560,344	212,323	6,694,400	20,170,172
Categorical State Aid	790,186	1,994,582	-	-	2,784,768
General Fund	-	227,500	-	1,000,000	1,227,500
Roadway Contingencies	**-**	**-**	**500,000**	**-**	**500,000**
Categorical State Aid	-	-	500,000	-	500,000
Total FY21 Budget	**-**	**-**	**6,462,323**	**-**	**-**
Categorical Federal Aid	-	-	212,323	-	-
Categorical State Aid	-	-	5,500,000	-	-
Proffers	-	-	750,000	-	-

Stormwater Program

DEPARTMENT
Public Works

PROJECT TYPE
Roads & Public Works

FUNCTIONAL AREA
Public Works

LOCATION
Countywide for MS4 Permit Compliance;
Suburban Service Area for nutrient reductions

PROJECT DESCRIPTION
This program includes projects for nutrient reductions that assist the County in meeting the requirements of the State's Municipal Separate Storm Sewer System (MS4) General Permit including the Chesapeake Bay Total Maximum Daily Load. Stream restorations, stormwater pond upgrades and other nutrient reducing projects will be completed through FY21 (Year 1) to protect the environment, solve local erosion problems and meet the Chesapeake Bay Total Maximum Daily Load (TMDL) stormwater requirements. As a condition of the County's MS4 permit, the County is required to reduce pollutants from previously developed lands. A special condition in the MS4 permit requires the County to develop and implement a Chesapeake Bay TMDL action plan to reduce pollutants discharged from the County's public storm sewer system. The State requires localities to address 35% of the required reduction in the second 5-year permit cycle (FY19-FY23) and the remaining 60% reductions in the third 5-year cycle (FY24-FY28). This portion of the Stormwater Program includes funding through grant and matching Stormwater Local Assistance Funding (SLAF). Project locations are reviewed and initiated based on nutrient reductions and cost efficiency in conjunction with community benefit. This project includes modifying and upgrading stormwater facilities to reduce sediment, phosphorus and nitrogen. Funding from the General Fund is to address projected needs in the second permit cycle and beyond.

USEFUL LIFE
N/A

TIMETABLE
Nutrient reduction projects completed annually.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**900,000**	**1,196,920**	**1,000,000**	**2,909,090**	**1,000,000**	**7,006,010**
Categorical State Aid	450,000	500,000	500,000	1,309,090	500,000	3,259,090
FBA CIP Stormwater PYB	-	196,920	-	-	-	196,920
Transfer fr GF FBA Stormwater	250,000	250,000	-	500,000	-	1,000,000
Transfer from General Fund	200,000	250,000	500,000	1,100,000	500,000	2,550,000
Funding Uses	**900,000**	**1,196,920**	**1,000,000**	**2,909,090**	**1,000,000**	**7,006,010**
Stormwater Management Projects	900,000	1,196,920	1,000,000	2,909,090	1,000,000	7,006,010

Solid Waste Equipment Replacement

DEPARTMENT
Public Works Operations

PROJECT TYPE
Equipment

FUNCTIONAL AREA
Public Works

LOCATION
Convenience Centers & County Transfer Station

PROJECT DESCRIPTION
Purchase replacement equipment to handle solid waste at the County solid waste convenience centers, transfer station and waste-to-compost. This is necessary to maintain a viable fleet of solid waste handling equipment. Aging equipment will be taken out of service and replaced with more modern and reliable equipment. Acquisition of new equipment will provide for more efficient operations with less maintenance and repair downtime.

USEFUL LIFE
Varies based upon the equipment: Hooklift Truck - 15 Years, Wheeled Loader - 20 Years, Road Tractor - 25 Years, Roll-off Trailer - 30 Years, Scales - 40 Years

TIMETABLE
FY21 (Year 1) - Road Tractor; FY22 (Year 2) - Scales Rebuild and Hooklift Truck; FY23 (Year 3) - Hooklift Truck; FY24 (Year 4) - Road Tractor and Wheeled Loader; FY25 (Year 5) - Hooklift Truck and Transfer Trailers.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**148,200**	**201,160**	**154,200**	**400,000**	**355,850**	**1,259,410**
Transfer from General Fund	148,200	201,160	154,200	400,000	355,850	1,259,410
Funding Uses	**148,200**	**201,160**	**154,200**	**400,000**	**355,850**	**1,259,410**
Machinery & Equipment Repl	148,200	201,160	154,200	400,000	355,850	1,259,410

Firing Range Lead Removal

DEPARTMENT
Sheriff

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Public Safety

LOCATION
Sheriff's Firing Range

PROJECT DESCRIPTION
Lead removal is a U.S. Environmental Protection Agency (EPA) Best Practice for outdoor firing ranges and should be done every 10 to 12 years. This process will prevent the Sheriff's Firing Range from becoming a hazardous environment.

USEFUL LIFE
10 to 12 years

TIMETABLE
Project to be completed in FY21 (Year 1) in coordination with the Firing Range Target System project.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**100,000**	**-**	**-**	**-**	**-**	**100,000**
Transfer from General Fund	100,000	-	-	-	-	100,000
Funding Uses	**100,000**	**-**	**-**	**-**	**-**	**100,000**
Alterations to Grounds	100,000	-	-	-	-	100,000

Firing Range Target System

DEPARTMENT
Sheriff

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Public Safety

LOCATION
Sheriff's Firing Range

PROJECT DESCRIPTION
The current target system is 20 years old and has reached its end-of-life. Repairs continue to support the equipment in place but parts are becoming difficult to find. The new target system will be a state-of-the-art electric system rather than an obsolete pneumatic-based system.

USEFUL LIFE
15 to 20 years

TIMETABLE
Project to be completed in FY21 (Year 1) in coordination with the Firing Range Lead Removal project.

OPERATING IMPACT
Increased recurring maintenance contract beginning in FY22 (Year 2).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**100,000**	**-**	**-**	**-**	**-**	**100,000**
Transfer from General Fund	100,000	-	-	-	-	100,000
Funding Uses	**100,000**	**-**	**-**	**-**	**-**	**100,000**
Alterations to Grounds	100,000	-	-	-	-	100,000
Operating Impact	**-**	**5,000**	**5,000**	**5,000**	**5,000**	**20,000**
Maintenance Service Contracts	-	5,000	5,000	5,000	5,000	20,000

Investigations Mobile Data Terminals

DEPARTMENT
Sheriff

PROJECT TYPE
Technology

FUNCTIONAL AREA
Public Safety

LOCATION
Vaughan-Bradley Building

PROJECT DESCRIPTION
Equip all investigators with a Mobile Data Terminal (MDT) with Virginia Criminal Information Network (VCIN), wireless access and mobile software for reporting.

USEFUL LIFE
Devices replaced every 5 years, software licenses are perpetual.

TIMETABLE
Project to be completed in FY22 (Year 2).

OPERATING IMPACT
Recurring software maintenance beginning in FY23 (Year 3).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**220,000**	**-**	**-**	**-**	**220,000**
Transfer from General Fund	-	220,000	-	-	-	220,000
Funding Uses	**-**	**220,000**	**-**	**-**	**-**	**220,000**
Information System Equip Addtl	-	140,000	-	-	-	140,000
Software Services	-	80,000	-	-	-	80,000
Operating Impact	**-**	**-**	**4,000**	**4,000**	**4,000**	**12,000**
Software Services	-	-	4,000	4,000	4,000	12,000

Records Mgmt System & Mobile Client Repl

DEPARTMENT
Sheriff

PROJECT TYPE
Technology

FUNCTIONAL AREA
Public Safety

LOCATION
Vaughan-Bradley Building

PROJECT DESCRIPTION
Replace the current Records Management System (RMS) and mobile software for field reporting. This project is anticipated to include software, hardware, mobile apps, data conversion, reporting, interfaces, high availability solution, connectivity improvements, training, project management, data analytics, extended agency inclusion, mobile device management and routable streets.

USEFUL LIFE
15 to 20 years

TIMETABLE
Project to begin in FY23 (Year 3).

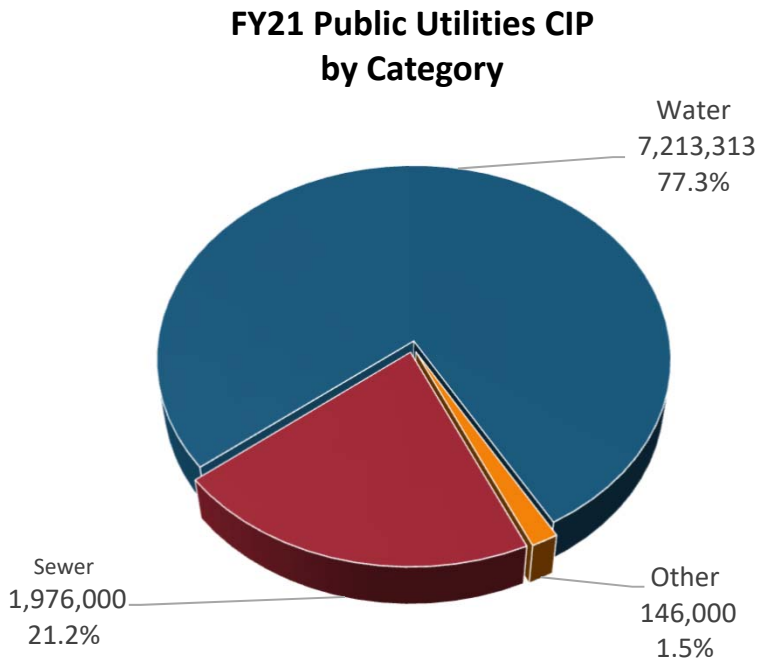
OPERATING IMPACT
Recurring software maintenance beginning in FY24 (Year 4).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**1,300,000**	**-**	**-**	**1,300,000**
Transfer from General Fund	-	-	700,000	-	-	700,000
Transfer from GF - FBA Capital	-	-	600,000	-	-	600,000
Funding Uses	**-**	**-**	**1,300,000**	**-**	**-**	**1,300,000**
Software Repl	-	-	1,300,000	-	-	1,300,000
Operating Impact	**-**	**-**	**-**	**125,000**	**125,000**	**250,000**
Software Services	-	-	-	125,000	125,000	250,000

Public Utilities CIP Fund Summary

FY21-FY25 Category by Project Type

	Equipment	Technology	Utility Infrastructure	Utility Service Agreement	Total
PU CIP Other	1,229,000	250,000	960,000	-	2,439,000
PU CIP Sewer	88,000	-	59,066,000	-	59,154,000
PU CIP Water	-	-	21,902,000	26,149,873	48,051,873
Total	**1,317,000**	**250,000**	**81,928,000**	**26,149,873**	**109,644,873**



Asset Management System

DEPARTMENT
PU CIP Other

PROJECT TYPE
Technology

FUNCTIONAL AREA
Public Utilities

LOCATION
N/A

PROJECT DESCRIPTION
This project is the purchase of an asset management system to assist Public Utilities with activities related to the management, planning and budgeting of maintenance activities for its water distribution system and wastewater collection system.

USEFUL LIFE
20 years

TIMETABLE
Purchase system in FY22 (Year 2).

OPERATING IMPACT
Recurring maintenance costs beginning in FY23 (Year 3).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**250,000**	**-**	**-**	**-**	**250,000**
Transfer from Public Utilities	-	250,000	-	-	-	250,000
Funding Uses	**-**	**250,000**	**-**	**-**	**-**	**250,000**
Information System Equip Addtl	-	250,000	-	-	-	250,000
Operating Impact	**-**	**-**	**30,000**	**30,000**	**30,000**	**90,000**
Maintenance Service Contracts	-	-	30,000	30,000	30,000	90,000

Bruce Center New Bay

DEPARTMENT
PU CIP Other

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
James T. Bruce Operations Center

PROJECT DESCRIPTION
This project is for the construction of additional space for personnel, vehicles and equipment at the Bruce Operations Center.

USEFUL LIFE
40 years

TIMETABLE
Design and construction in FY23 (Year 3).

OPERATING IMPACT
Recurring facility costs beginning in FY24 (Year 4).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**960,000**	**-**	**-**	**960,000**
Transfer from Public Utilities	-	-	960,000	-	-	960,000
Funding Uses	**-**	**-**	**960,000**	**-**	**-**	**960,000**
Construction	-	-	864,000	-	-	864,000
Professional Services	-	-	96,000	-	-	96,000
Operating Impact	**-**	**-**	**-**	**5,000**	**5,000**	**10,000**
Alt to Facility or Office	-	-	-	5,000	5,000	10,000

Maintenance Equipment Replacement

DEPARTMENT
PU CIP Other

PROJECT TYPE
Equipment

FUNCTIONAL AREA
Public Utilities

LOCATION
James T. Bruce Operations Center

PROJECT DESCRIPTION
Purchase of maintenance equipment: FY23 (Year 3) - new sewer easement closed circuit television (CCTV) system.

USEFUL LIFE
10 to 20 years

TIMETABLE
Equipment purchase in FY23 (Year 3).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**115,000**	**-**	**-**	**115,000**
Transfer from Public Utilities	-	-	115,000	-	-	115,000
Funding Uses	**-**	**-**	**115,000**	**-**	**-**	**115,000**
Machinery & Equipment Addtl	-	-	115,000	-	-	115,000

Maintenance Vehicle Replacement

DEPARTMENT
PU CIP Other

PROJECT TYPE
Equipment

FUNCTIONAL AREA
Public Utilities

LOCATION
Countywide

PROJECT DESCRIPTION
Purchase of maintenance vehicles: FY21 (Year 1) - replace backhoe ($146K); FY22 (Year 2) - replace dump truck ($180K) & new mini excavator & trailer ($91K); FY23 (Year 3) - new utility body truck ($65K), replace construction utility body diesel truck ($120K) & replace utility body truck ($80K); FY24 (Year 4) - replace crane truck ($310K); FY25 (Year 5) - replace construction utility body diesel truck ($122K).

USEFUL LIFE
10 years

TIMETABLE
Annual purchase of vehicles.

OPERATING IMPACT
Recurring vehicle maintenance costs beginning in FY24.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**146,000**	**271,000**	**265,000**	**310,000**	**122,000**	**1,114,000**
Transfer from Public Utilities	146,000	271,000	265,000	310,000	122,000	1,114,000
Funding Uses	**146,000**	**271,000**	**265,000**	**310,000**	**122,000**	**1,114,000**
Motor Vehicle & Equip Addtl	-	91,000	65,000	-	-	156,000
Motor Vehicle & Equipment Rep	146,000	180,000	200,000	310,000	122,000	958,000
Operating Impact	**-**	**-**	**-**	**1,500**	**1,500**	**3,000**
Supplies Veh & Pwr Equip Fleet	-	-	-	1,500	1,500	3,000

Ashland Sewerline Rehabilitation

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

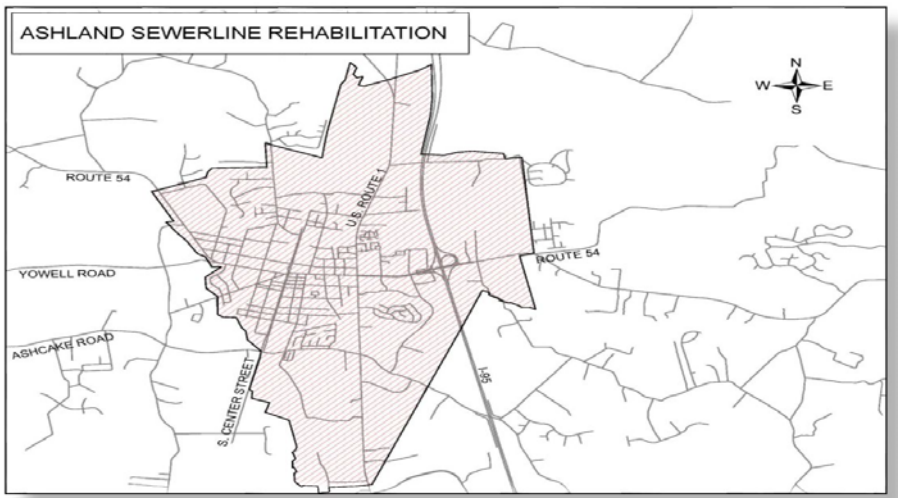
LOCATION
Town of Ashland and areas in the County near Ashland

PROJECT DESCRIPTION
This project provides for sewerline rehabilitation within the Ashland Wastewater Treatment Plant drainage basin. This project consists of sewerline, lateral and manhole rehabilitation and replacement. These repairs are needed to correct structural defects in the sewer pipes and to reduce the volume of inflow and infiltration to the sanitary sewer system.

USEFUL LIFE
50 years

TIMETABLE
Design in FY22 (Year 2); Construction in FY23 (Year 3).

OPERATING IMPACT
Decreased operational costs beginning in FY24 (Year 4).



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**200,000**	**800,000**	**-**	**-**	**1,000,000**
Transfer from Public Utilities	-	200,000	800,000	-	-	1,000,000
Funding Uses	**-**	**200,000**	**800,000**	**-**	**-**	**1,000,000**
Professional Services	-	200,000	-	-	-	200,000
Utilities Infrastruct Improve	-	-	800,000	-	-	800,000
Operating Impact	**-**	**-**	**-**	**(5,000)**	**(5,000)**	**(10,000)**
Repair & Maintenance Services	-	-	-	(5,000)	(5,000)	(10,000)

AWWTP EQ Basin Centrifugal Blowers Repl

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION
This project provides for the replacement of three centrifugal blowers that will have reached the end of their useful life.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY24 (Year 4).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**654,000**	**-**	**654,000**
Transfer from Public Utilities	-	-	-	654,000	-	654,000
Funding Uses	**-**	**-**	**-**	**654,000**	**-**	**654,000**
Professional Services	-	-	-	46,000	-	46,000
Utilities Infrastruct Improve	-	-	-	608,000	-	608,000

AWWTP EQ Basin Pumps Repl

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION
This project provides for the replacement of the two equalization basin pumps. The pumps were installed in 1992 and have reached the end of their useful life.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY24 (Year 4).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**372,000**	**-**	**372,000**
Transfer from Public Utilities	-	-	-	372,000	-	372,000
Funding Uses	**-**	**-**	**-**	**372,000**	**-**	**372,000**
Professional Services	-	-	-	49,000	-	49,000
Utilities Infrastruct Improve	-	-	-	323,000	-	323,000

AWWTP Motor Control Center Equip Rehab

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION
This project includes the replacement of all motor control center components in the blower building as they have reached the end of their useful life.

USEFUL LIFE
30 years

TIMETABLE
Design and construction in FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**108,000**	**-**	**-**	**-**	**108,000**
Transfer from Public Utilities	-	108,000	-	-	-	108,000
Funding Uses	**-**	**108,000**	**-**	**-**	**-**	**108,000**
Professional Services	-	15,000	-	-	-	15,000
Utilities Infrastruct Improve	-	93,000	-	-	-	93,000

AWWTP Orbal Drives Replacement

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION
This project provides for the replacement of existing orbal drives and motors as they have reached the end of their useful life.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**521,000**	**521,000**
Transfer from Public Utilities	-	-	-	-	521,000	521,000
Funding Uses	**-**	**-**	**-**	**-**	**521,000**	**521,000**
Professional Services	-	-	-	-	48,000	48,000
Utilities Infrastruct Improve	-	-	-	-	473,000	473,000

AWWTP Orbal Gate and Control Valve Repl

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION
This project provides for the replacement of the submerged control gate with a water level control weir and removing the existing weir structure.

USEFUL LIFE
30 years

TIMETABLE
Design and construction in FY21 (Year 1).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**251,000**	**-**	**-**	**-**	**-**	**251,000**
Transfer from Public Utilities	251,000	-	-	-	-	251,000
Funding Uses	**251,000**	**-**	**-**	**-**	**-**	**251,000**
Professional Services	33,000	-	-	-	-	33,000
Utilities Infrastruct Improve	218,000	-	-	-	-	218,000

AWWTP Recycle PS Rehab

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION
This project provides for the replacement of two pumps, rail system and other equipment that has reached the end of its useful life.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**98,000**	**-**	**-**	**-**	**98,000**
Transfer from Public Utilities	-	98,000	-	-	-	98,000
Funding Uses	**-**	**98,000**	**-**	**-**	**-**	**98,000**
Professional Services	-	17,000	-	-	-	17,000
Utilities Infrastruct Improve	-	81,000	-	-	-	81,000

AWWTP Solids Handling Improvements

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION
This project provides for the replacement of the motorized winch as well as control upgrades.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY21 (Year 1).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**146,000**	**-**	**-**	**-**	**-**	**146,000**
Transfer from Public Utilities	146,000	-	-	-	-	146,000
Funding Uses	**146,000**	**-**	**-**	**-**	**-**	**146,000**
Professional Services	29,000	-	-	-	-	29,000
Utilities Infrastruct Improve	117,000	-	-	-	-	117,000

AWWTP Step Screen & Wash Press

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION
This project provides for the replacement of the existing auger/grinder with a step screen, a washer/compactor and a building. The existing auger/grinder will have reached the end of its useful life.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY21 (Year 1).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**702,000**	**-**	**-**	**-**	**-**	**702,000**
Transfer from Public Utilities	702,000	-	-	-	-	702,000
Funding Uses	**702,000**	**-**	**-**	**-**	**-**	**702,000**
Professional Services	92,000	-	-	-	-	92,000
Utilities Infrastruct Improve	610,000	-	-	-	-	610,000

Burnside Farms/Summer Walk Sewer Repl

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

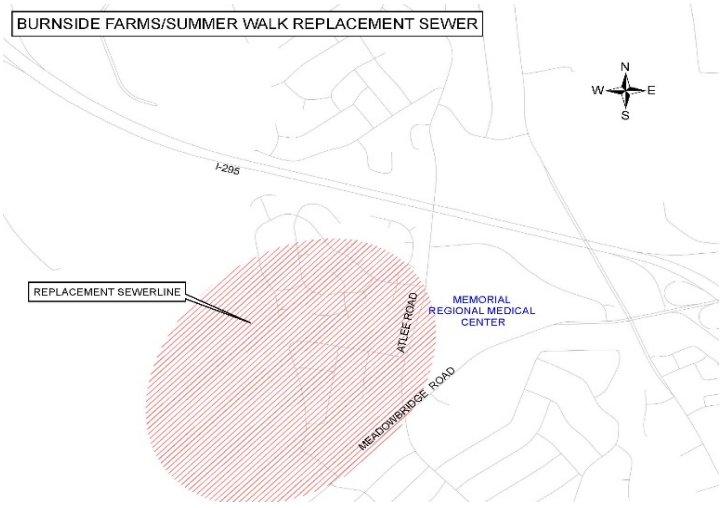
LOCATION
Burnside Farms and Summer Walk Subdivisions

PROJECT DESCRIPTION
This project provides for the design, easement acquisition and construction to replace 6,000’ of existing 8” and 10" sanitary sewer with a new 12” sanitary sewer through the Burnside Farms and Summer Walk subdivisions to provide capacity for growth in the vicinity of Memorial Regional Medical Center.

USEFUL LIFE
50 years

TIMETABLE
Construction in FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**1,448,000**	**-**	**-**	**-**	**1,448,000**
Transfer from Public Utilities	-	1,448,000	-	-	-	1,448,000
Funding Uses	**-**	**1,448,000**	**-**	**-**	**-**	**1,448,000**
Utilities Infrastruct Construc	-	1,448,000	-	-	-	1,448,000

BWWPS Asphalt Replacement

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Beaverdam Wastewater Pump Station

PROJECT DESCRIPTION
The asphalt is deteriorating. This project includes the replacement of the existing asphalt driveway and parking area.

USEFUL LIFE
20 years

TIMETABLE
Construction in FY21 (Year 1).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**77,000**	**-**	**-**	**-**	**-**	**77,000**
Transfer from Public Utilities	77,000	-	-	-	-	77,000
Funding Uses	**77,000**	**-**	**-**	**-**	**-**	**77,000**
Utilities Infrastruct Improve	77,000	-	-	-	-	77,000

BWWPS Odor Control Replacement

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Beaverdam Wastewater Pump Station

PROJECT DESCRIPTION
This project includes the removal and replacement of the existing odor control system.

USEFUL LIFE
30 years

TIMETABLE
Design and construction in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**762,000**	**762,000**
Transfer from Public Utilities	-	-	-	-	762,000	762,000
Funding Uses	**-**	**-**	**-**	**-**	**762,000**	**762,000**
Professional Services	-	-	-	-	110,000	110,000
Utilities Infrastruct Improve	-	-	-	-	652,000	652,000

BWWPS Pump Replacement

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Beaverdam Wastewater Pump Station

PROJECT DESCRIPTION
This project provides for the replacement of the station's pumps, as they have reached the end of their useful life.

USEFUL LIFE
20 years

TIMETABLE
Construction in FY23 (Year 3), FY24 (Year 4) and FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**137,000**	**140,000**	**144,000**	**421,000**
Transfer from Public Utilities	-	-	137,000	140,000	144,000	421,000
Funding Uses	**-**	**-**	**137,000**	**140,000**	**144,000**	**421,000**
Utilities Infrastruct Improve	-	-	137,000	140,000	144,000	421,000

Courthouse WWPS & Force Main

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

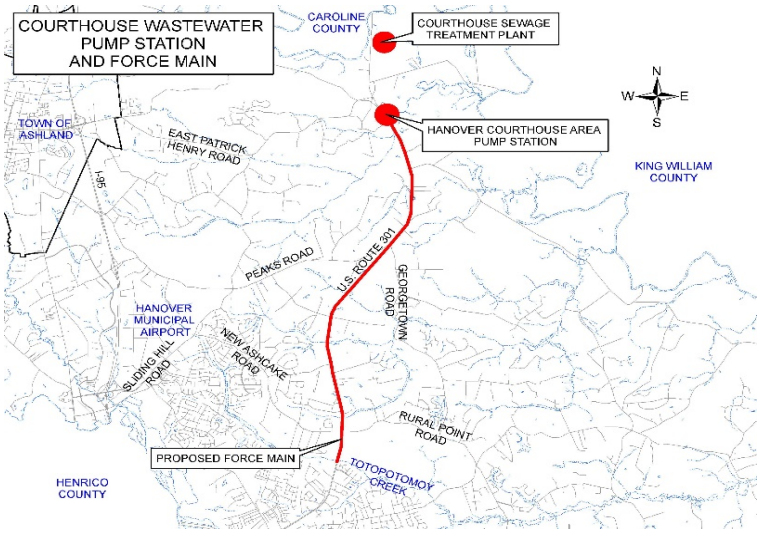
LOCATION
Wastewater pump station near Courthouse Area Pump Station along Route 301. Force main is from this pump station to the interceptor sewer located at Totopotomoy Creek.

PROJECT DESCRIPTION
This project is for the design, land, easement acquisition and construction of a new wastewater pump station with an ultimate capacity of 8-12 million gallons per day (MGD) and approximately 37,000' of 24" force main. It also includes the abandonment of the existing Hanover Courthouse Sewage Treatment Plant. This project is part of a series of projects that will increase sewage capacity to the planned business area through which Hickory Hill Road passes and the Doswell area.

USEFUL LIFE
5 to 50 years

TIMETABLE
Design and easement acquisition in FY25 (Year 5).

OPERATING IMPACT
Recurring costs of $50,000 to begin outside the scope of the five-year plan.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**5,629,000**	**5,629,000**
Transfer from Public Utilities	-	-	-	-	5,629,000	5,629,000
Funding Uses	**-**	**-**	**-**	**-**	**5,629,000**	**5,629,000**
Land Purch & Development Addtl	-	-	-	-	3,602,000	3,602,000
Professional Services	-	-	-	-	2,027,000	2,027,000

Doswell Offload WWPS #2 & Force Main

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

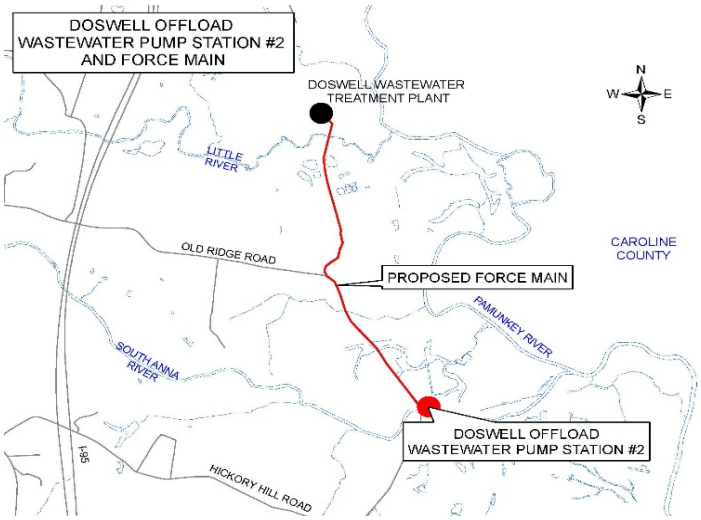
LOCATION
Wastewater pump station near Old Ridge Road in the vicinity of the South Anna River

PROJECT DESCRIPTION
This project is for the construction of a new wastewater pump station with an ultimate capacity of 8-12 million gallons per day (MGD) and approximately 13,000' of 12" force main. The pump station will initially pump to the Doswell Wastewater Treatment Plant. In the future, the station will be modified and it will send wastewater to the Totopotomoy Wastewater Treatment Plant. This pump station will serve the planned business area through which Hickory Hill Road passes. The initial project will provide average sewer capacity of approximately 0.25 MGD.

USEFUL LIFE
5 to 50 years

TIMETABLE
Construction in FY23 (Year 3).

OPERATING IMPACT
Recurring operating costs beginning in FY24 (Year 4).



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**9,870,000**	**-**	**-**	**9,870,000**
Transfer from Public Utilities	-	-	9,870,000	-	-	9,870,000
Funding Uses	**-**	**-**	**9,870,000**	**-**	**-**	**9,870,000**
Utilities Infrastruct Construc	-	-	9,870,000	-	-	9,870,000
Operating Impact	**-**	**-**	**-**	**50,000**	**50,000**	**100,000**
Repair & Maintenance Services	-	-	-	50,000	50,000	100,000

DWWTP Belt Press Replacement

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Doswell Wastewater Treatment Plant

PROJECT DESCRIPTION
This project is for the replacement of the belt press as it will have reached the end of its useful life.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**553,000**	**-**	**-**	**-**	**553,000**
Transfer from Public Utilities	-	553,000	-	-	-	553,000
Funding Uses	**-**	**553,000**	**-**	**-**	**-**	**553,000**
Professional Services	-	80,000	-	-	-	80,000
Utilities Infrastruct Improve	-	473,000	-	-	-	473,000

DWWTP Influent VFDs Replacement

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Doswell Wastewater Treatment Plant

PROJECT DESCRIPTION
This project provides for the replacement of the existing variable frequency drives (VFDs). The existing VFDs have reached the end of their useful life.

USEFUL LIFE
10 years

TIMETABLE
Design and construction in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**177,000**	**177,000**
Transfer from Public Utilities	-	-	-	-	177,000	177,000
Funding Uses	**-**	**-**	**-**	**-**	**177,000**	**177,000**
Professional Services	-	-	-	-	23,000	23,000
Utilities Infrastruct Improve	-	-	-	-	154,000	154,000

DWWTP RAS Pump Replacement

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Doswell Wastewater Treatment Plant

PROJECT DESCRIPTION
This project includes the replacement of the return activated sludge (RAS) pumps as they will have reached the end of their useful life.

USEFUL LIFE
20 years

TIMETABLE
Construction in FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**72,000**	**-**	**-**	**-**	**72,000**
Transfer from Public Utilities	-	72,000	-	-	-	72,000
Funding Uses	**-**	**72,000**	**-**	**-**	**-**	**72,000**
Utilities Infrastruct Improve	-	72,000	-	-	-	72,000

Lee-Davis WWPS Grinder Replacement

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Lee Davis Road Wastewater Pump Station

PROJECT DESCRIPTION
This project includes the replacement of the grinder. The existing grinder will have reached the end of its useful life.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**225,000**	**-**	**-**	**-**	**225,000**
Transfer from Public Utilities	-	225,000	-	-	-	225,000
Funding Uses	**-**	**225,000**	**-**	**-**	**-**	**225,000**
Professional Services	-	10,000	-	-	-	10,000
Utilities Infrastruct Improve	-	215,000	-	-	-	215,000

Lee-Davis WWPS Upgrade

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Lee Davis Road Wastewater Pump Station

PROJECT DESCRIPTION
This project upgrades the capacity of the pump station from approximately 2 million gallons per day (MGD) to approximately 5 MGD.

USEFUL LIFE
5 to 20 years

TIMETABLE
Design in FY24 (Year 4); Construction in FY25 (Year 5).

OPERATING IMPACT
Recurring costs of $5,000 to begin outside the scope of the five-year plan.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**103,000**	**588,000**	**691,000**
Transfer from Public Utilities	-	-	-	103,000	588,000	691,000
Funding Uses	**-**	**-**	**-**	**103,000**	**588,000**	**691,000**
Professional Services	-	-	-	103,000	-	103,000
Utilities Infrastruct Construc	-	-	-	-	588,000	588,000

Mechanicsville Sewer Rehabilitation

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

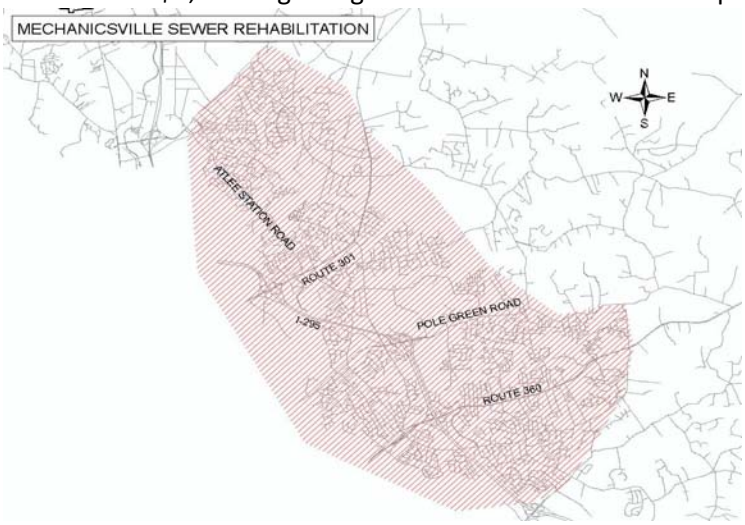
LOCATION
Mechanicsville

PROJECT DESCRIPTION
This project provides for sewerline rehabilitation within the Mechanicsville area. It consists of sewerline, lateral and manhole rehabilitation and replacement. These repairs are needed to correct structural defects in the sewer pipes and to reduce the volume of inflow and infiltration to the sanitary sewer system.

USEFUL LIFE
50 years

TIMETABLE
Design in FY24 (Year 4); Construction in FY25 (Year 5).

OPERATING IMPACT
Decreased operational costs of $5,000 beginning in FY26 occur outside the scope of the five-year plan.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**200,000**	**800,000**	**1,000,000**
Transfer from Public Utilities	-	-	-	200,000	800,000	1,000,000
Funding Uses	**-**	**-**	**-**	**200,000**	**800,000**	**1,000,000**
Professional Services	-	-	-	200,000	-	200,000
Utilities Infrastruct Improve	-	-	-	-	800,000	800,000

Middle Chickahominy WWPS Upgrade

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Middle Chickahominy Wastewater Pump Station

PROJECT DESCRIPTION
This project provides for the design and construction of improvements to the Middle Chickahominy Wastewater Pump Station to increase capacity to approximately 5.9 million gallons per day (MGD).

USEFUL LIFE
5 to 20 years

TIMETABLE
Design in FY21 (Year 1); Construction in FY22 (Year 2).

OPERATING IMPACT
Recurring operating costs beginning in FY23 (Year 3).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**200,000**	**1,200,000**	**-**	**-**	**-**	**1,400,000**
Transfer from Public Utilities	200,000	1,200,000	-	-	-	1,400,000
Funding Uses	**200,000**	**1,200,000**	**-**	**-**	**-**	**1,400,000**
Professional Services	200,000	-	-	-	-	200,000
Utilities Infrastruct Construc	-	1,200,000	-	-	-	1,200,000
Operating Impact	**-**	**-**	**5,000**	**5,000**	**5,000**	**15,000**
Repair & Maintenance Services	-	-	5,000	5,000	5,000	15,000

Shelton Pointe Force Main Upgrade

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

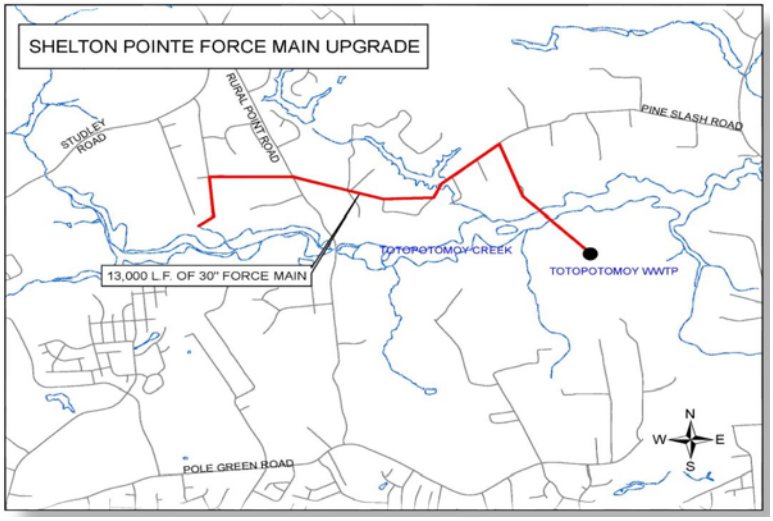
LOCATION
Shelton Pointe Force Main (FMP S66)

PROJECT DESCRIPTION
This project provides for the design, easement acquisition and construction of 13,000' of 30" force main beginning at the Shelton Pointe Wastewater Pump Station and extending northeast to the Totopotomoy Wastewater Treatment Plant. This project will allow additional wastewater from Shelton Pointe Wastewater Pump Station to be conveyed to the Totopotomoy Wastewater Treatment Plant.

USEFUL LIFE
50 years

TIMETABLE
Construction in FY22 (Year 2).

OPERATING IMPACT
Recurring operating costs beginning in FY24 (Year 4).



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**6,866,000**	**-**	**-**	**-**	**6,866,000**
Transfer from Public Utilities	-	6,866,000	-	-	-	6,866,000
Funding Uses	**-**	**6,866,000**	**-**	**-**	**-**	**6,866,000**
Utilities Infrastruct Construc	-	6,866,000	-	-	-	6,866,000
Operating Impact	**-**	**-**	**-**	**8,000**	**8,000**	**16,000**
Repair & Maintenance Services	-	-	-	8,000	8,000	16,000

Shelton Pointe WWPS Grinder Replacement

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Shelton Pointe Wastewater Pump Station

PROJECT DESCRIPTION
This project provides for the replacement of the existing wastewater grinder. The existing grinder will have reached the end of its useful life.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY24 (Year 4).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**180,000**	**-**	**180,000**
Transfer from Public Utilities	-	-	-	180,000	-	180,000
Funding Uses	**-**	**-**	**-**	**180,000**	**-**	**180,000**
Professional Services	-	-	-	24,000	-	24,000
Utilities Infrastruct Improve	-	-	-	156,000	-	156,000

Shelton Pointe WWPS Upgrade

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Shelton Pointe Wastewater Pump Station

PROJECT DESCRIPTION
This project upgrades the capacity of the pump station from approximately 5 million gallons per day (MGD) to approximately 12 MGD.

USEFUL LIFE
5 to 20 years

TIMETABLE
Design in FY22 (Year 2); Construction in FY23 (Year 3).

OPERATING IMPACT
Recurring operating costs beginning in FY24 (Year 4).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**200,000**	**707,000**	**-**	**-**	**907,000**
Transfer from Public Utilities	-	200,000	707,000	-	-	907,000
Funding Uses	**-**	**200,000**	**707,000**	**-**	**-**	**907,000**
Professional Services	-	200,000	-	-	-	200,000
Utilities Infrastruct Construc	-	-	707,000	-	-	707,000
Operating Impact	**-**	**-**	**-**	**5,000**	**5,000**	**10,000**
Repair & Maintenance Services	-	-	-	5,000	5,000	10,000

Sledd Run WWPS Generator Installation

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Sledd Run #1 Wastewater Pump Station

PROJECT DESCRIPTION
This project includes the purchase and installation of a new backup generator. This station has limited storage capacity, making it susceptible to overflows. The generator will provide backup power, which will improve reliability.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY21 (Year 1).

OPERATING IMPACT
Recurring maintenance costs beginning in FY22 (Year 2).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**100,000**	**-**	**-**	**-**	**-**	**100,000**
Transfer from Public Utilities	100,000	-	-	-	-	100,000
Funding Uses	**100,000**	**-**	**-**	**-**	**-**	**100,000**
Professional Services	20,000	-	-	-	-	20,000
Utilities Infrastruct Improve	80,000	-	-	-	-	80,000
Operating Impact	**-**	**5,000**	**5,000**	**5,000**	**5,000**	**20,000**
Repair & Maintenance Services	-	5,000	5,000	5,000	5,000	20,000

Snead Street WWPS Generator Replacement

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Snead Street Wastewater Pump Station

PROJECT DESCRIPTION
This project provides for the replacement of the backup generator. The existing backup generator was installed in 1992 and will have reached the end of its useful life.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY24 (Year 4).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**78,000**	**-**	**78,000**
Transfer from Public Utilities	-	-	-	78,000	-	78,000
Funding Uses	**-**	**-**	**-**	**78,000**	**-**	**78,000**
Professional Services	-	-	-	10,000	-	10,000
Utilities Infrastruct Improve	-	-	-	68,000	-	68,000

Stony Run Phases 7 & 8

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

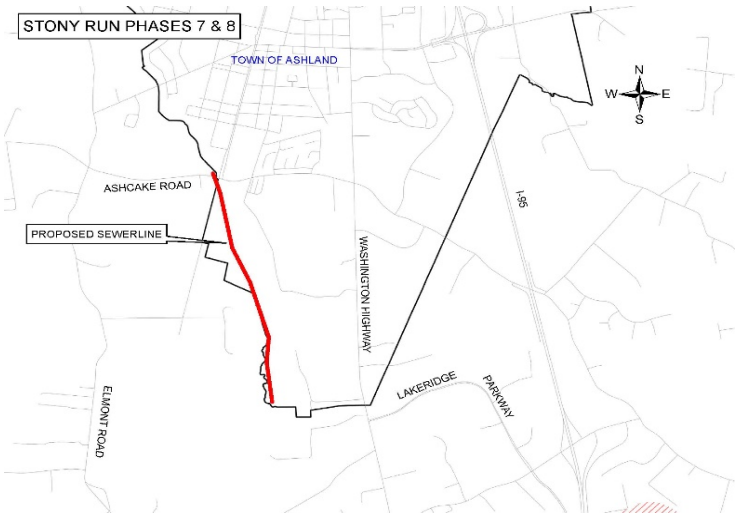
LOCATION
Town of Ashland Limits to the South Center Street Wastewater Pump Station (FMP S25 & S26)

PROJECT DESCRIPTION
This project provides for the design, easement acquisition and construction of 7,550' of 24" and 12" sanitary sewer from the Town of Ashland limits to the South Center Street Pump Station.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY24 (Year 4).

OPERATING IMPACT
Recurring costs of $3,000 to begin outside the scope of the five-year plan.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**765,000**	**-**	**765,000**
Transfer from Public Utilities	-	-	-	765,000	-	765,000
Funding Uses	**-**	**-**	**-**	**765,000**	**-**	**765,000**
Land Purch & Development Addtl	-	-	-	306,000	-	306,000
Professional Services	-	-	-	459,000	-	459,000

TWWTP PLC 3 Replacement

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Equipment

FUNCTIONAL AREA
Public Utilities

LOCATION
Totopotomoy Wastewater Treatment Plant

PROJECT DESCRIPTION
This project provides for the replacement of Programmable Logic Controller (PLC) 3 and associated integration.

USEFUL LIFE
10 years

TIMETABLE
Construction in FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**88,000**	**-**	**-**	**-**	**88,000**
Transfer from Public Utilities	-	88,000	-	-	-	88,000
Funding Uses	**-**	**88,000**	**-**	**-**	**-**	**88,000**
Utilities Infrastruct Improve	-	88,000	-	-	-	88,000

TWWTP Scrubber Overhaul

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Totopotomoy Wastewater Treatment Plant

PROJECT DESCRIPTION
This project includes an overhaul of the plant scrubber and associated equipment, along with blower/motor replacement.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**273,000**	**-**	**-**	**-**	**273,000**
Transfer from Public Utilities	-	273,000	-	-	-	273,000
Funding Uses	**-**	**273,000**	**-**	**-**	**-**	**273,000**
Professional Services	-	17,000	-	-	-	17,000
Utilities Infrastruct Improve	-	256,000	-	-	-	256,000

WIP III Upgrades AWWTP

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION
This project provides for improvements to comply with nutrient reductions as proposed in Virginia's approved Phase III Chesapeake Bay Watershed Implementation Plan.

USEFUL LIFE
20 to 50 years

TIMETABLE
Design in FY23 (Year 3); Construction in FY25 (Year 5).

OPERATING IMPACT
Recurring costs of $400,000 to begin outside the scope of the five-year plan.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**2,438,000**	**-**	**9,750,000**	**12,188,000**
Transfer from Public Utilities	-	-	2,438,000	-	9,750,000	12,188,000
Funding Uses	**-**	**-**	**2,438,000**	**-**	**9,750,000**	**12,188,000**
Professional Services	-	-	2,438,000	-	-	2,438,000
Utilities Infrastruct Improve	-	-	-	-	9,750,000	9,750,000

WIP III Upgrades DWWTP

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Doswell Wastewater Treatment Plant

PROJECT DESCRIPTION
This project provides for improvements to comply with nutrient reductions as proposed in Virginia's approved Phase III Chesapeake Bay Watershed Implementation Plan.

USEFUL LIFE
20 to 50 years

TIMETABLE
Design in FY24 (Year 4).

OPERATING IMPACT
Recurring costs of $250,000 to begin outside the scope of the five-year plan.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**2,000,000**	**-**	**2,000,000**
Transfer from Public Utilities	-	-	-	2,000,000	-	2,000,000
Funding Uses	**-**	**-**	**-**	**2,000,000**	**-**	**2,000,000**
Professional Services	-	-	-	2,000,000	-	2,000,000

WIP III Upgrades TWWTP

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Totopotomoy Wastewater Treatment Plant

PROJECT DESCRIPTION
This project provides for improvements to comply with nutrient reductions as proposed in Virginia's approved Phase III Chesapeake Bay Watershed Implementation Plan.

USEFUL LIFE
20 to 50 years

TIMETABLE
Design in FY21 (Year 1) and FY22 (Year 2);
Construction in FY24 (Year 4).

OPERATING IMPACT
Recurring maintenance costs beginning in FY25 (Year 5).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**500,000**	**1,407,000**	**-**	**7,625,000**	**-**	**9,532,000**
Transfer from Public Utilities	500,000	1,407,000	-	7,625,000	-	9,532,000
Funding Uses	**500,000**	**1,407,000**	**-**	**7,625,000**	**-**	**9,532,000**
Professional Services	500,000	1,407,000	-	-	-	1,907,000
Utilities Infrastruct Improve	-	-	-	7,625,000	-	7,625,000
Operating Impact	**-**	**-**	**-**	**-**	**500,000**	**500,000**
Repair & Maintenance Services	-	-	-	-	500,000	500,000

Air Park Water Tank Rehabilitation

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Air Park Water Storage Tank and Pump Station

PROJECT DESCRIPTION
This project provides for the rehabilitation of the Air Park Water Storage Tank.

USEFUL LIFE
20 years

TIMETABLE
Design in FY21 (Year 1); Construction in FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**153,000**	**795,000**	**-**	**-**	**-**	**948,000**
Transfer from Public Utilities	153,000	795,000	-	-	-	948,000
Funding Uses	**153,000**	**795,000**	**-**	**-**	**-**	**948,000**
Professional Services	153,000	-	-	-	-	153,000
Utilities Infrastruct Improve	-	795,000	-	-	-	795,000

Cold Harbor Road W/L Replacement

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

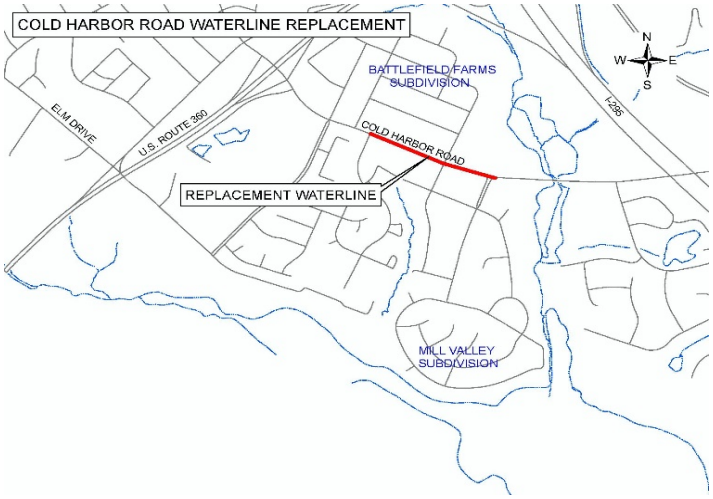
LOCATION
Cold Harbor Road from New Hunter Road to Catlin Road

PROJECT DESCRIPTION
This project provides for the FY23 (Year 3) design and easement acquisition and the FY24 (Year 4) construction to replace approximately 1,800' of 12" waterline along Cold Harbor Road from New Hunter Road to Catlin Road.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY23 (Year 3); Construction in FY24 (Year 4).

OPERATING IMPACT
Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**187,000**	**633,000**	**-**	**820,000**
Transfer from Public Utilities	-	-	187,000	633,000	-	820,000
Funding Uses	**-**	**-**	**187,000**	**633,000**	**-**	**820,000**
Land Purch & Development Addtl	-	-	81,000	-	-	81,000
Professional Services	-	-	106,000	-	-	106,000
Utilities Infrastruct Improve	-	-	-	633,000	-	633,000

Creighton Rd at Walnut Grove Rd Interconnect

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

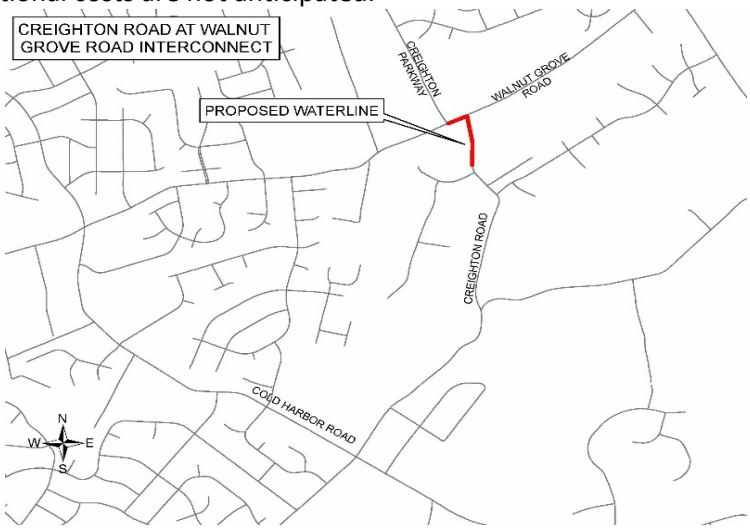
LOCATION
Walnut Grove Road from the intersection of Creighton Parkway to Creighton Road and along Creighton Road to Buffridge Drive

PROJECT DESCRIPTION
This project provides for the FY25 (Year 5) design and easement acquisition and the FY26 construction of 1,200' of 16" waterline along Walnut Grove Road from the intersection of Creighton Parkway to Creighton Road and along Creighton Road to Buffridge Drive.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**150,000**	**150,000**
Transfer from Public Utilities	-	-	-	-	150,000	150,000
Funding Uses	**-**	**-**	**-**	**-**	**150,000**	**150,000**
Land Purch & Development Addtl	-	-	-	-	50,000	50,000
Professional Services	-	-	-	-	100,000	100,000

Creighton Road WST Recoating & Rehab

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Creighton Road Water Storage Tank

PROJECT DESCRIPTION
This project provides for the rehabilitation of the Creighton Road Water Storage Tank.

USEFUL LIFE
20 years

TIMETABLE
Design in FY21 (Year 1); Construction in FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**264,000**	**500,000**	**-**	**-**	**-**	**764,000**
Transfer from Public Utilities	264,000	500,000	-	-	-	764,000
Funding Uses	**264,000**	**500,000**	**-**	**-**	**-**	**764,000**
Professional Services	264,000	-	-	-	-	264,000
Utilities Infrastruct Improve	-	500,000	-	-	-	500,000

Doswell Million Gallon Tank Rehab

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Doswell Million Gallon Tank

PROJECT DESCRIPTION
This project provides for the rehabilitation of the Doswell Million Gallon Tank.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY23 (Year 3).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**297,000**	**-**	**-**	**297,000**
Transfer from Public Utilities	-	-	297,000	-	-	297,000
Funding Uses	**-**	**-**	**297,000**	**-**	**-**	**297,000**
Professional Services	-	-	32,000	-	-	32,000
Utilities Infrastruct Improve	-	-	265,000	-	-	265,000

Dow Gil Rd to Harley Club Dr Waterline

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Along Ashcake Road from Dow Gil Road to Harley Club Drive

PROJECT DESCRIPTION
This project provides for the FY24 (Year 4) design and easement acquisition needed for future construction of approximately 4,000' of 20" waterline from Harley Club Drive in the Northlake Development to Ashcake Road and along Ashcake Road to Dow Gil Road.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY24 (Year 4).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**457,000**	**-**	**457,000**
Transfer from Public Utilities	-	-	-	457,000	-	457,000
Funding Uses	**-**	**-**	**-**	**457,000**	**-**	**457,000**
Land Purch & Development Addtl	-	-	-	194,000	-	194,000
Professional Services	-	-	-	263,000	-	263,000

DWTP Lagoon Rehabilitation

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Doswell Water Treatment Plant

PROJECT DESCRIPTION
This project consists of renovating the existing sludge lagoons to include liner replacements and access ramps.

USEFUL LIFE
30 years

TIMETABLE
Design in FY23 (Year 3); Construction in FY24 (Year 4).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**92,000**	**979,000**	**-**	**1,071,000**
Transfer from Public Utilities	-	-	92,000	979,000	-	1,071,000
Funding Uses	**-**	**-**	**92,000**	**979,000**	**-**	**1,071,000**
Professional Services	-	-	92,000	-	-	92,000
Utilities Infrastruct Improve	-	-	-	979,000	-	979,000

DWTP Raw Water Pumphouse Rehabilitation

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Doswell Water Treatment Plant

PROJECT DESCRIPTION
This project provides for the replacement of the main electrical service power cables, replacement of the variable frequency drive (VFD)/breaker panel, electrical room improvements and replacement of existing 3" waterline.

USEFUL LIFE
10 to 30 years

TIMETABLE
Design in FY24 (Year 4); Construction in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**118,000**	**680,000**	**798,000**
Transfer from Public Utilities	-	-	-	118,000	680,000	798,000
Funding Uses	**-**	**-**	**-**	**118,000**	**680,000**	**798,000**
Professional Services	-	-	-	118,000	-	118,000
Utilities Infrastruct Improve	-	-	-	-	680,000	680,000

DWTP to Railroad Crossing Waterline

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

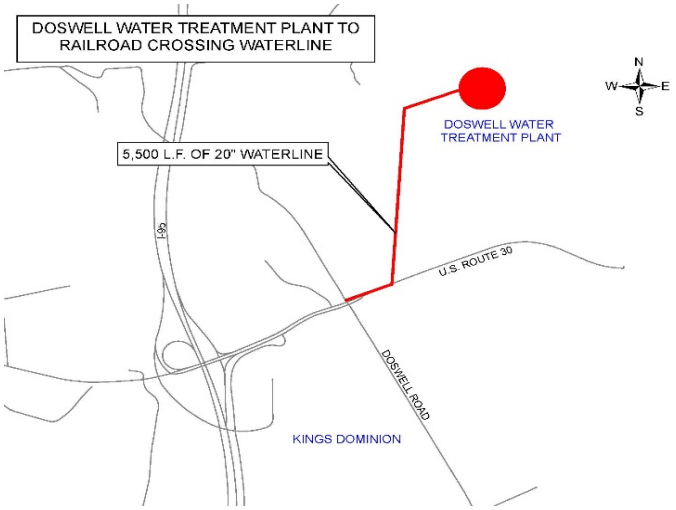
LOCATION
Doswell Water Treatment Plant to Route 30 Railroad Crossing

PROJECT DESCRIPTION
This project provides for the design, easement acquisition and construction of a new 5,500' parallel 20" water main from the Doswell Water Treatment Plant to the Route 30 railroad crossing to provide redundancy for the existing 18" waterline. This project also includes the overlay of the parking lot at the plant and the replacement of isolation valves in the parking lot.

USEFUL LIFE
50 years

TIMETABLE
Design, easement acquisition and construction in FY21 (Year 1).

OPERATING IMPACT
Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**1,620,000**	**-**	**-**	**-**	**-**	**1,620,000**
Transfer from Public Utilities	1,620,000	-	-	-	-	1,620,000
Funding Uses	**1,620,000**	**-**	**-**	**-**	**-**	**1,620,000**
Land Purch & Development Addtl	10,000	-	-	-	-	10,000
Professional Services	175,000	-	-	-	-	175,000
Utilities Infrastruct Improve	1,435,000	-	-	-	-	1,435,000

Georgetown Electrical

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Georgetown Well House

PROJECT DESCRIPTION
This project includes the replacement of existing pump control equipment and associated electrical gear.

USEFUL LIFE
10 years

TIMETABLE
Construction in FY23 (Year 3).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**58,000**	**-**	**-**	**58,000**
Transfer from Public Utilities	-	-	58,000	-	-	58,000
Funding Uses	**-**	**-**	**58,000**	**-**	**-**	**58,000**
Utilities Infrastruct Improve	-	-	58,000	-	-	58,000

Georgetown Well Replacement

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Georgetown Well

PROJECT DESCRIPTION
This project provides for the replacement of the existing well as it has reached the end of its useful life.

USEFUL LIFE
30 years

TIMETABLE
Construction in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**105,000**	**105,000**
Transfer from Public Utilities	-	-	-	-	105,000	105,000
Funding Uses	**-**	**-**	**-**	**-**	**105,000**	**105,000**
Utilities Infrastruct Improve	-	-	-	-	105,000	105,000

Hanover-Richmond Joint Cap Contract

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Service Agreement

FUNCTIONAL AREA
Public Utilities

LOCATION
City of Richmond

PROJECT DESCRIPTION
This project provides for improvements to the City of Richmond's water system to support Hanover County's water supply.

USEFUL LIFE
N/A

TIMETABLE
Improvements completed annually.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**3,372,313**	**6,226,735**	**7,719,945**	**6,959,891**	**1,870,989**	**26,149,873**
Transfer from Public Utilities	3,372,313	6,226,735	7,719,945	6,959,891	1,870,989	26,149,873
Funding Uses	**3,372,313**	**6,226,735**	**7,719,945**	**6,959,891**	**1,870,989**	**26,149,873**
Utilities Infrastruct Improve	3,372,313	6,226,735	7,719,945	6,959,891	1,870,989	26,149,873

Harris Court WST Rehabilitation

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Harris Court Water Storage Tank and Pump Station

PROJECT DESCRIPTION
This project provides for the rehabilitation of the Harris Court Water Storage Tank.

USEFUL LIFE
20 years

TIMETABLE
Construction in FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**393,000**	**-**	**-**	**-**	**393,000**
Transfer from Public Utilities	-	393,000	-	-	-	393,000
Funding Uses	**-**	**393,000**	**-**	**-**	**-**	**393,000**
Utilities Infrastruct Improve	-	393,000	-	-	-	393,000

Hill Carter WST & Pump Station

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

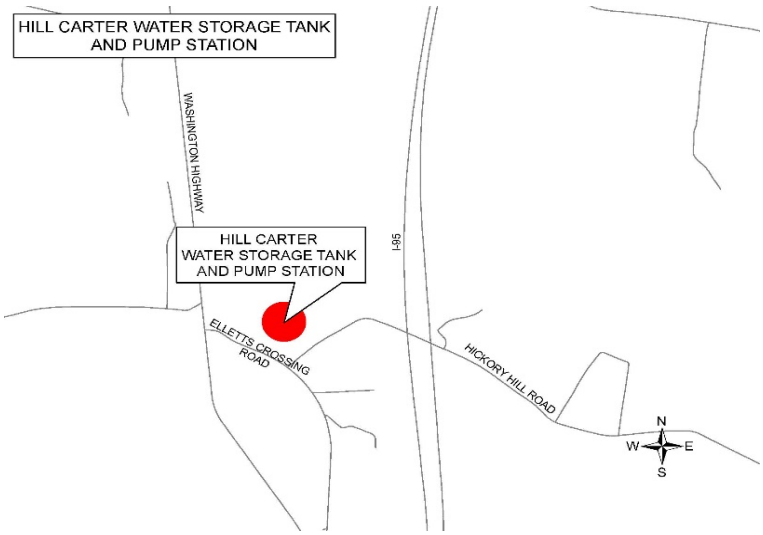
LOCATION
Near intersection of Elletts Crossing Road and Hickory Hill Road

PROJECT DESCRIPTION
This project provides for construction of a water pump station with an initial capacity of 7 to 10 million gallons per day (MGD), associated tankage with approximately 1.5 million gallons of storage and miscellaneous waterline improvements to connect this new facility to an existing 16" waterline in the area. This project will serve the planned business area east of Elletts Crossing Road that Hickory Hill Road traverses and will allow water to be moved south from the Doswell pressure zone to the Ashland pressure zone. In the near term, this project will allow water that was previously used by Bear Island Paper to be utilized by other customers.

USEFUL LIFE
5 to 50 years

TIMETABLE
Construction in FY22 (Year 2).

OPERATING IMPACT
Recurring operating costs beginning in FY23 (Year 3).



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**7,210,000**	**-**	**-**	**-**	**7,210,000**
Transfer from Public Utilities	-	7,210,000	-	-	-	7,210,000
Funding Uses	**-**	**7,210,000**	**-**	**-**	**-**	**7,210,000**
Utilities Infrastruct Construc	-	7,210,000	-	-	-	7,210,000
Operating Impact	**-**	**-**	**30,000**	**30,000**	**30,000**	**90,000**
Repair & Maintenance Services	-	-	30,000	30,000	30,000	90,000

Hill View Drive Waterline Replacement

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

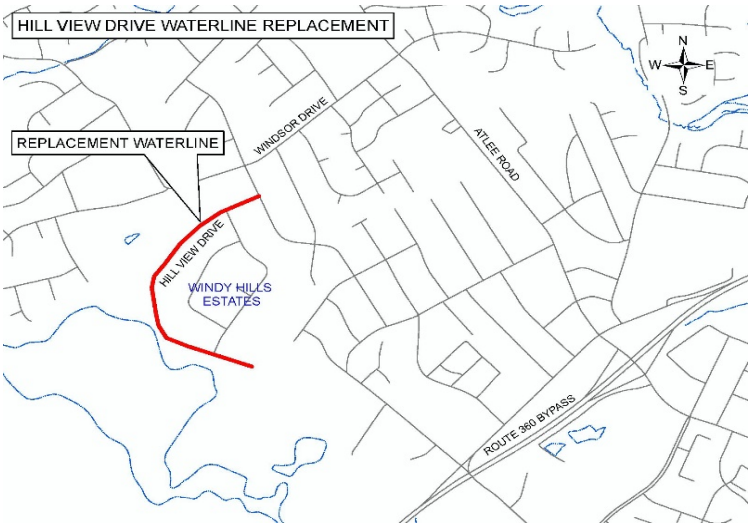
LOCATION
Hill View Drive from Barnette Avenue to the end of the road

PROJECT DESCRIPTION
This project provides for the FY25 (Year 5) design and easement acquisition and the FY26 construction to replace approximately 3,800' of 6" waterline with 8" waterline along Hill View Drive from Barnette Avenue to the end of the road.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**158,000**	**158,000**
Transfer from Public Utilities	-	-	-	-	158,000	158,000
Funding Uses	**-**	**-**	**-**	**-**	**158,000**	**158,000**
Land Purch & Development Addtl	-	-	-	-	12,000	12,000
Professional Services	-	-	-	-	146,000	146,000

I-95 Waterline Crossing at Long Road

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Ashcake Road to Harley Club Drive in the Northlake Development

PROJECT DESCRIPTION
This project provides for the FY21 (Year 1) construction of approximately 1,200' of 20" waterline from Ashcake Road to Harley Club Drive in the Northlake Development.

USEFUL LIFE
50 years

TIMETABLE
Construction in FY21 (Year 1).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**1,000,000**	**-**	**-**	**-**	**-**	**1,000,000**
Transfer from Public Utilities	1,000,000	-	-	-	-	1,000,000
Funding Uses	**1,000,000**	**-**	**-**	**-**	**-**	**1,000,000**
Utilities Infrastruct Construc	1,000,000	-	-	-	-	1,000,000

Jackson Avenue WST Demolition

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Jackson Avenue Water Storage Tank

PROJECT DESCRIPTION
This project provides for the demolition of the Jackson Avenue Water Storage Tank. This tank needs significant investment to remain in service in the future. This tank is of limited value due to improvements that have been made since it was constructed.

USEFUL LIFE
N/A

TIMETABLE
Design and construction in FY21 (Year 1).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**207,000**	**-**	**-**	**-**	**-**	**207,000**
Transfer from Public Utilities	207,000	-	-	-	-	207,000
Funding Uses	**207,000**	**-**	**-**	**-**	**-**	**207,000**
Professional Services	27,000	-	-	-	-	27,000
Utilities Infrastruct Improve	180,000	-	-	-	-	180,000

Kings Dominion Entrance Rd W/L

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Route 30 between Kings Dominion Entrance Road and Railroad Crossing

PROJECT DESCRIPTION
This project provides for the design, easement acquisition and construction of a 2,400' parallel 20" water main along Route 30 from the railroad crossing to the Kings Dominion entrance road.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY22 (Year 2); Construction in FY23 (Year 3).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**110,000**	**730,000**	**-**	**-**	**840,000**
Transfer from Public Utilities	-	110,000	730,000	-	-	840,000
Funding Uses	**-**	**110,000**	**730,000**	**-**	**-**	**840,000**
Land Purch & Development Addtl	-	28,000	-	-	-	28,000
Professional Services	-	82,000	-	-	-	82,000
Utilities Infrastruct Improve	-	-	730,000	-	-	730,000

Maple Street Waterline Replacement

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Maple Street from England Street to Myrtle Street

PROJECT DESCRIPTION
This project provides for the FY25 (Year 5) design and easement acquisition and the FY26 construction to replace approximately 650' of 4" waterline with 8" waterline along Maple Street from England Street to Myrtle Street.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**100,000**	**100,000**
Transfer from Public Utilities	-	-	-	-	100,000	100,000
Funding Uses	**-**	**-**	**-**	**-**	**100,000**	**100,000**
Land Purch & Development Addtl	-	-	-	-	50,000	50,000
Professional Services	-	-	-	-	50,000	50,000

Pamunkey Regional Jail Waterline

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

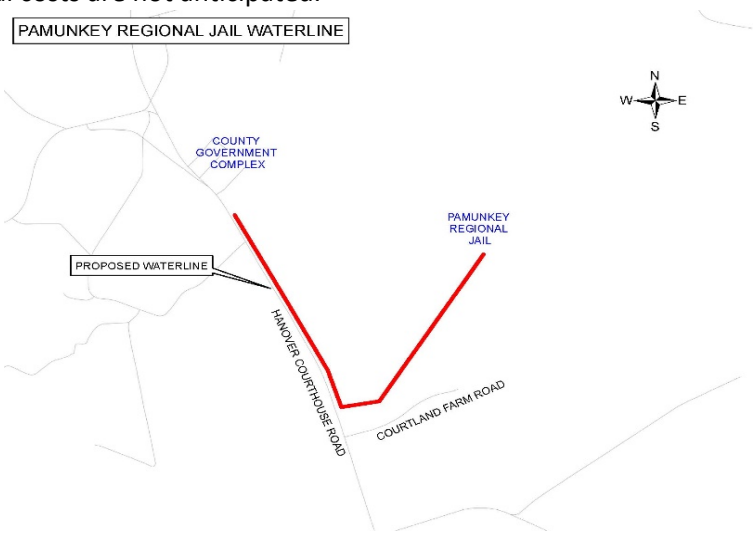
LOCATION
Between the Pamunkey Regional Jail and the County Government Courthouse Complex

PROJECT DESCRIPTION
This project provides for the design, easement acquisition and construction of a second 12" waterline from the Pamunkey Regional Jail to the County Government Courthouse Complex. The new 7,000' waterline will provide redundancy for a critical waterline and will follow Courtland Farm Road and Route 301.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY24 (Year 4); Construction in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**255,000**	**1,224,000**	**1,479,000**
Transfer from Public Utilities	-	-	-	255,000	1,224,000	1,479,000
Funding Uses	**-**	**-**	**-**	**255,000**	**1,224,000**	**1,479,000**
Land Purch & Development Addtl	-	-	-	17,000	-	17,000
Professional Services	-	-	-	238,000	-	238,000
Utilities Infrastruct Improve	-	-	-	-	1,224,000	1,224,000

Pleasant Street WST & PS Generator Repl

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Pleasant Street Water Storage Tank and Pump Station

PROJECT DESCRIPTION
This project includes the installation of a new 125 kW generator and automatic transfer switch. The existing generator was installed in 1999 and has reached the end of its useful life.

USEFUL LIFE
20 years

TIMETABLE
Construction in FY23 (Year 3).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**201,000**	**-**	**-**	**201,000**
Transfer from Public Utilities	-	-	201,000	-	-	201,000
Funding Uses	**-**	**-**	**201,000**	**-**	**-**	**201,000**
Utilities Infrastruct Improve	-	-	201,000	-	-	201,000

Pleasant Street WST Rehabilitation

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Pleasant Street Water Storage Tank and Pump Station

PROJECT DESCRIPTION
This project provides for the rehabilitation of the Pleasant Street Water Storage Tank.

USEFUL LIFE
20 years

TIMETABLE
Design in FY22 (Year 2); Construction in FY24 (Year 4).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**79,000**	**-**	**115,000**	**-**	**194,000**
Transfer from Public Utilities	-	79,000	-	115,000	-	194,000
Funding Uses	**-**	**79,000**	**-**	**115,000**	**-**	**194,000**
Professional Services	-	79,000	-	-	-	79,000
Utilities Infrastruct Improve	-	-	-	115,000	-	115,000

Pole Green Road Western W/L Improvements

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Pole Green Road from Colemanden Drive to Lee Davis Road and Rustic Lane to Rural Point Road

PROJECT DESCRIPTION
This project provides for the FY23 (Year 3) design and easement acquisition and the FY25 (Year 5) construction of 2,400' of 16" waterline along Pole Green Road from Colemanden Drive to Lee Davis Road and Rustic Lane to Rural Point Road. The waterline will be constructed as part of the road improvement project planned for Pole Green Road.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY23 (Year 3); Construction in FY25 (Year5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**235,000**	**-**	**672,000**	**907,000**
Transfer from Public Utilities	-	-	235,000	-	672,000	907,000
Funding Uses	**-**	**-**	**235,000**	**-**	**672,000**	**907,000**
Land Purch & Development Addtl	-	-	120,000	-	-	120,000
Professional Services	-	-	115,000	-	-	115,000
Utilities Infrastruct Construc	-	-	-	-	672,000	672,000

Quarles Rd WST Demolition

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Quarles Road Water Storage Tank

PROJECT DESCRIPTION
This project provides for the demolition of the Quarles Road Water Storage Tank and booster pump station in FY25 (Year 5). This tank and pump station will no longer be needed once the Hill Carter Tank and Pump Station are in service.

USEFUL LIFE
N/A

TIMETABLE
Design and construction in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**138,000**	**138,000**
Transfer from Public Utilities	-	-	-	-	138,000	138,000
Funding Uses	**-**	**-**	**-**	**-**	**138,000**	**138,000**
Professional Services	-	-	-	-	32,000	32,000
Utilities Infrastruct Improve	-	-	-	-	106,000	106,000

Route 1 from Elletts Crossing

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Route 1 from Elletts Crossing to Falling Creek Lumber

PROJECT DESCRIPTION
This project provides for the FY25 (Year 5) design and easement acquisition and the FY26 construction to replace approximately 1,700' of 6" waterline with 8" and 12" waterline along Route 1 from Elletts Crossing to Falling Creek Lumber.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**-**	**68,000**	**68,000**
Transfer from Public Utilities	-	-	-	-	68,000	68,000
Funding Uses	**-**	**-**	**-**	**-**	**68,000**	**68,000**
Land Purch & Development Addtl	-	-	-	-	12,000	12,000
Professional Services	-	-	-	-	56,000	56,000

Route 1 Waterline Improvements

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

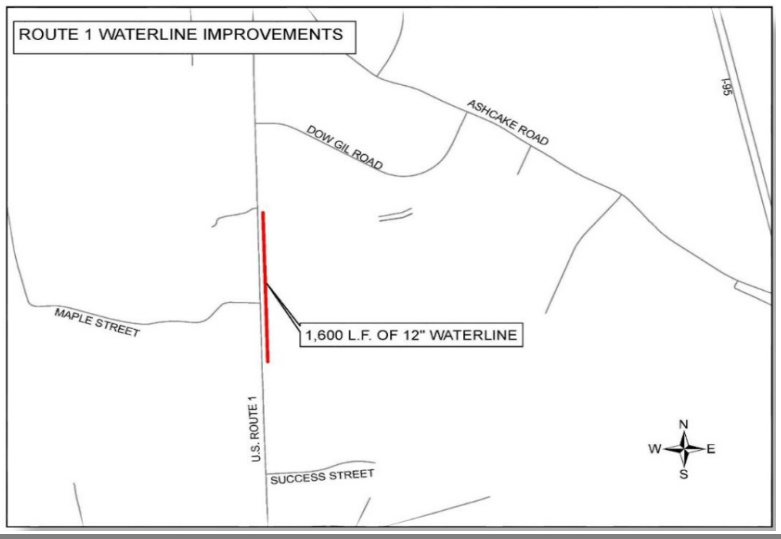
LOCATION
Route 1, Washington Highway from VA Warehousing to Chandler Lane

PROJECT DESCRIPTION
This project provides for the design, easement acquisition and construction of approximately 1,600' of 12" waterline along Route 1, Washington Highway from VA Warehousing towards Chandler Lane. This project provides public water to the east side of Route 1, redundancy moving water along the Route 1 corridor and increases the ability to meet higher demands.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY21 (Year 1); Construction in FY22 (Year 2).

OPERATING IMPACT
Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**262,000**	**526,000**	**-**	**-**	**-**	**788,000**
Transfer from Public Utilities	262,000	526,000	-	-	-	788,000
Funding Uses	**262,000**	**526,000**	**-**	**-**	**-**	**788,000**
Land Purch & Development Addtl	170,000	-	-	-	-	170,000
Professional Services	92,000	-	-	-	-	92,000
Utilities Infrastruct Construc	-	526,000	-	-	-	526,000

Sinclair Manor Estates Tank Replacement

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Sinclair Manor Estates Tank

PROJECT DESCRIPTION
This project provides for the replacement of the existing 5,000 gallon hydropneumatic tank and 10,000 gallon ground tank at Sinclair Manor Estates.

USEFUL LIFE
20 years

TIMETABLE
Design and construction in FY21 (Year 1).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**185,000**	**-**	**-**	**-**	**-**	**185,000**
Transfer from Public Utilities	185,000	-	-	-	-	185,000
Funding Uses	**185,000**	**-**	**-**	**-**	**-**	**185,000**
Professional Services	35,000	-	-	-	-	35,000
Utilities Infrastruct Improve	150,000	-	-	-	-	150,000

Sinclair Manor Well Replacement

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Sinclair Manor Well

PROJECT DESCRIPTION
This project provides for the replacement of the existing well as it has reached the end of its useful life.

USEFUL LIFE
30 years

TIMETABLE
Construction in FY24 (Year 4).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**102,000**	**-**	**102,000**
Transfer from Public Utilities	-	-	-	102,000	-	102,000
Funding Uses	**-**	**-**	**-**	**102,000**	**-**	**102,000**
Utilities Infrastruct Improve	-	-	-	102,000	-	102,000

Stonewall Parkway W/L Replacement

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

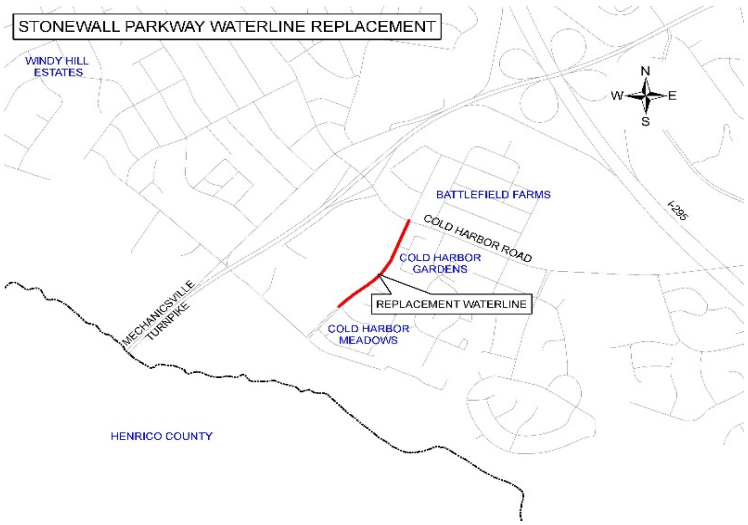
LOCATION
Stonewall Parkway from Cold Harbor Road to Overlook Drive

PROJECT DESCRIPTION
This project provides for the design, easement acquisition and construction of a new 1,800' 12" water main along Stonewall Parkway from Cold Harbor Road to Overlook Drive and abandonment of the existing 12" water main.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY22 (Year 2); Construction in FY23 (Year 3).

OPERATING IMPACT
Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**92,000**	**482,000**	**-**	**-**	**574,000**
Transfer from Public Utilities	-	92,000	482,000	-	-	574,000
Funding Uses	**-**	**92,000**	**482,000**	**-**	**-**	**574,000**
Land Purch & Development Addtl	-	39,000	-	-	-	39,000
Professional Services	-	53,000	-	-	-	53,000
Utilities Infrastruct Improve	-	-	482,000	-	-	482,000

Water System Valve Improvements

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Lucille Road, Burton Parrish Drive, Deep Creek Drive, Various Hydrant Valves and Lake Ridge Parkway

PROJECT DESCRIPTION
This project replaces 3 failed valves, adds a new critical valve, replaces 3 hydrant valves and adds a new air release valve.

USEFUL LIFE
40 years

TIMETABLE
Construction in FY21 (Year 1).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**150,000**	**-**	**-**	**-**	**-**	**150,000**
Transfer from Public Utilities	150,000	-	-	-	-	150,000
Funding Uses	**150,000**	**-**	**-**	**-**	**-**	**150,000**
Utilities Infrastruct Improve	150,000	-	-	-	-	150,000

Water System Valve Improvements

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Harbor Hill Road and Confederate Drive

PROJECT DESCRIPTION
This project provides for the replacement of an existing 12" valve at Harbor Hill Road and an existing 8" valve at Confederate Drive.

USEFUL LIFE
40 years

TIMETABLE
Construction in FY24 (Year 4).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**120,000**	**-**	**120,000**
Transfer from Public Utilities	-	-	-	120,000	-	120,000
Funding Uses	**-**	**-**	**-**	**120,000**	**-**	**120,000**
Utilities Infrastruct Improve	-	-	-	120,000	-	120,000

School Improvements Fund Summary

FY21-FY25 Funding Sources by Project Type

	Construction	Equipment	Facility Improvements	Land Acquisition	Technology	Total
Bond Proceeds	**40,000,000**	**3,920,000**	**18,855,000**	**3,000,000**	**-**	**65,775,000**
Transfers In	**-**	**6,700,000**	**1,907,562**	**-**	**11,392,438**	**20,000,000**
Transfer fr GF - FBA Education	-	-	-	-	5,000,000	5,000,000
Transfer from General Fund	-	6,700,000	1,907,562	-	6,392,438	15,000,000
Total	**40,000,000**	**10,620,000**	**20,762,562**	**3,000,000**	**11,392,438**	**85,775,000**

FY21-FY25 Projects Funded by Long-term Debt

	Construction	Equipment	Facility Improvements	Land Acquisition	Total
Auditorium Renovations	-	-	950,000	-	950,000
Bathroom Renovations	-	-	1,235,000	-	1,235,000
Gymnasium Repairs	-	-	850,000	-	850,000
HVAC Repairs & Upgrades	-	-	7,425,000	-	7,425,000
Kitchen Renovations	-	-	760,000	-	760,000
Roof Repairs & Replacements	-	-	1,405,000	-	1,405,000
Safety & Security	-	3,920,000	-	-	3,920,000
School Building Upgrades	-	-	2,290,000	-	2,290,000
School Grounds Upgrades	-	-	3,940,000	-	3,940,000
School Renovation	40,000,000	-	-	-	40,000,000
School Site	-	-	-	3,000,000	3,000,000
Total	**40,000,000**	**3,920,000**	**18,855,000**	**3,000,000**	**65,775,000**

Auditorium Renovations

DEPARTMENT
School CIP

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Education

LOCATION
Atlee High and Hanover High

PROJECT DESCRIPTION
An upgraded lighting and sound system will be installed at the Hanover High School auditorium. Atlee High School auditorium will be renovated to include the installation of new seating, sound system, lighting, stage and curtains as well as cosmetic improvements to wall and floor finishes.

USEFUL LIFE
20 years

TIMETABLE
Hanover High School lighting to be completed in FY21 (Year 1) and Atlee High School renovations in FY23 (Year 3).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**250,000**	**-**	**700,000**	**-**	**-**	**950,000**
Bond Proceeds	250,000	-	700,000	-	-	950,000
Funding Uses	**250,000**	**-**	**700,000**	**-**	**-**	**950,000**
Alt to Facility or Office	250,000	-	700,000	-	-	950,000

Bathroom Renovations

DEPARTMENT
School CIP

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Education

LOCATION
Atlee High, Beaverdam Elementary, Cold Harbor Elementary and South Anna Elementary

PROJECT DESCRIPTION
Elementary schools will have bathroom renovations to become fully ADA compliant. This project also includes a refresh of Atlee High School bathrooms. Renovations will only involve modifications above ground and will not include renovations to the plumbing and sewer infrastructure. Typical improvements will include: new fixtures, tile, ceiling grid, paint, ventilation and minor structural changes to improve ADA accessibility.

USEFUL LIFE
20 years

TIMETABLE
Renovations to be completed in FY21 (Year 1) and FY23 (Year 3).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**445,000**	**-**	**790,000**	**-**	**-**	**1,235,000**
Bond Proceeds	445,000	-	790,000	-	-	1,235,000
Funding Uses	**445,000**	**-**	**790,000**	**-**	**-**	**1,235,000**
Alt to Facility or Office	445,000	-	790,000	-	-	1,235,000

Gymnasium Repairs

DEPARTMENT
School CIP

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Education

LOCATION
Various

PROJECT DESCRIPTION
The schools scheduled for general improvements to athletic facility infrastructure are based on the FY13 School Facilities Assessment. These improvements are being done based on normal wear and fall within the reasonable expected lifetime of the component. The improvements include gym floor replacement in elementary and middle schools and replacement of scoreboard and bleachers at Hanover High.

USEFUL LIFE
20 years

TIMETABLE
Gym floor replacement & stage improvements in FY21 (Year 1); Scoreboard replacement in FY23 (Year 3).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**50,000**	**-**	**800,000**	**-**	**-**	**850,000**
Bond Proceeds	50,000	-	800,000	-	-	850,000
Funding Uses	**50,000**	**-**	**800,000**	**-**	**-**	**850,000**
Alt to Facility or Office	50,000	-	800,000	-	-	850,000

HVAC Repairs & Upgrades

DEPARTMENT
School CIP

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Education

LOCATION
Atlee High, Liberty Middle, Mechanicsville Elementary, Rural Point Elementary and South Anna Elementary

PROJECT DESCRIPTION
HVAC systems used within the various school facilities require ongoing planned and unplanned maintenance and eventual replacement based on the predicted life of the unit. As an HVAC system approaches the end of the predicted life, staff review various factors to determine the timing for replacement. These factors include: the frequency of unplanned maintenance, the costs associated with unscheduled maintenance, the availability of spare parts, the cost and availability of the refrigerant and the energy efficiency of the unit.

USEFUL LIFE
20 years

TIMETABLE
Replacement of equipment in FY21 (Year 1), FY23 (Year 3) and FY25 (Year 5).

OPERATING IMPACT
Potential energy savings achieved through more efficient equipment being installed.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**6,075,000**	**-**	**1,200,000**	**-**	**150,000**	**7,425,000**
Bond Proceeds	6,075,000	-	1,200,000	-	150,000	7,425,000
Funding Uses	**6,075,000**	**-**	**1,200,000**	**-**	**150,000**	**7,425,000**
Building Accessory Equip Repl	6,075,000	-	1,200,000	-	150,000	7,425,000

Kitchen Renovations

DEPARTMENT
School CIP

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Education

LOCATION
Various

PROJECT DESCRIPTION
Many schools are in need of new kitchen equipment. This project includes replacement of a hood exhaust system, walk-in refrigerator and freezer condenser, as well as replacement of ovens in various schools as needed.

USEFUL LIFE
20 years

TIMETABLE
Replacement of equipment in FY21 (Year 1), FY23 (Year 3) and FY25 (Year 5).

OPERATING IMPACT
Potential energy savings achieved through more energy efficient modern equipment.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**280,000**	**-**	**75,000**	**-**	**405,000**	**760,000**
Bond Proceeds	280,000	-	75,000	-	405,000	760,000
Funding Uses	**280,000**	**-**	**75,000**	**-**	**405,000**	**760,000**
Machinery & Equipment Repl	280,000	-	75,000	-	405,000	760,000

Painting

DEPARTMENT
School CIP

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Education

LOCATION
Various

PROJECT DESCRIPTION
The schools scheduled for interior painting are based on the FY13 School Facilities Assessment. These improvements are being done based on normal wear and fall within the reasonable expected lifetime of the component.

USEFUL LIFE
20 years

TIMETABLE
Painting to be done annually.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**400,000**	**85,000**	**100,000**	**159,562**	**200,000**	**944,562**
Transfer from General Fund	400,000	85,000	100,000	159,562	200,000	944,562
Funding Uses	**400,000**	**85,000**	**100,000**	**159,562**	**200,000**	**944,562**
Alt to Facility or Office	400,000	85,000	100,000	159,562	200,000	944,562

Roof Repairs & Replacements

DEPARTMENT
School CIP

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Education

LOCATION
Cool Spring Elementary, Elmont Elementary, Lee-Davis High and Stonewall Jackson Middle

PROJECT DESCRIPTION
Roofing systems used within the various school facilities require ongoing maintenance and eventual replacement based on the predicted life and manufacturer's warranty for the given structure. As a roofing system approaches the end of the predicted life, staff review the history of roof repairs and the unscheduled maintenance costs to determine the timing for the replacement.

USEFUL LIFE
15 to 25 years

TIMETABLE
Annual repairs and replacements.

OPERATING IMPACT
Potential energy savings achieved through building enhancements.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**720,000**	**100,000**	**593,000**	**200,000**	**755,000**	**2,368,000**
Bond Proceeds	320,000	-	430,000	-	655,000	1,405,000
Transfer from General Fund	400,000	100,000	163,000	200,000	100,000	963,000
Funding Uses	**720,000**	**100,000**	**593,000**	**200,000**	**755,000**	**2,368,000**
Alt to Facility or Office	720,000	100,000	593,000	200,000	755,000	2,368,000

Safety & Security

DEPARTMENT
School CIP

PROJECT TYPE
Equipment

FUNCTIONAL AREA
Education

LOCATION
Various

PROJECT DESCRIPTION
Safety and security projects will focus on replacing fire suppression systems, updating door access and locks and adding vestibules, as well as updating the employee badge access system.

USEFUL LIFE
20 years

TIMETABLE
Repairs and replacements to occur in FY21 (Year 1), FY23 (Year 3) and FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**1,075,000**	**-**	**865,000**	**-**	**1,980,000**	**3,920,000**
Bond Proceeds	1,075,000	-	865,000	-	1,980,000	3,920,000
Funding Uses	**1,075,000**	**-**	**865,000**	**-**	**1,980,000**	**3,920,000**
Building Accessory Equip Addtl	1,075,000	-	865,000	-	1,980,000	3,920,000

School Building Upgrades

DEPARTMENT
School CIP

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Education

LOCATION
Various

PROJECT DESCRIPTION
This project includes funding for a visitor team unconditioned space at Lee-Davis High, electrical service upgrades at the School Board Office, a replacement of back-up generators at Lee-Davis High and Atlee High and a school-wide bell replacement system.

USEFUL LIFE
15 to 25 years

TIMETABLE
Repairs and replacements to occur in FY21 (Year 1), FY23 (Year 3) and FY25 (Year 5).

OPERATING IMPACT
Potential energy savings achieved through building enhancements.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**125,000**	**-**	**620,000**	**-**	**1,545,000**	**2,290,000**
Bond Proceeds	125,000	-	620,000	-	1,545,000	2,290,000
Funding Uses	**125,000**	**-**	**620,000**	**-**	**1,545,000**	**2,290,000**
Alt to Facility or Office	125,000	-	620,000	-	1,545,000	2,290,000

School Buses

DEPARTMENT
School CIP

PROJECT TYPE
Equipment

FUNCTIONAL AREA
Education

LOCATION
N/A

PROJECT DESCRIPTION
Regular bus replacement helps ensure reliability of daily transportation for students as well as helps keep annual maintenance costs down. School buses need to be replaced when they are unable to be practically repaired. Ideal replacement occurs when buses have been in service between 10 and 15 years but replacement decisions are ultimately made by looking at the overall condition of each particular bus.

USEFUL LIFE
10 to 15 years

TIMETABLE
Buses to be purchased annually.

OPERATING IMPACT
Annual replacement of school buses removes the oldest, least efficient buses from the fleet and increases the operational efficiency and reliability of the fleet.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**1,000,000**	**1,200,000**	**1,500,000**	**1,500,000**	**1,500,000**	**6,700,000**
Transfer from General Fund	1,000,000	1,200,000	1,500,000	1,500,000	1,500,000	6,700,000
Funding Uses	**1,000,000**	**1,200,000**	**1,500,000**	**1,500,000**	**1,500,000**	**6,700,000**
Motor Vehicle & Equipment Repl	1,000,000	1,200,000	1,500,000	1,500,000	1,500,000	6,700,000

School Grounds Upgrades

DEPARTMENT
School CIP

PROJECT TYPE
Facility Improvements

FUNCTIONAL AREA
Education

LOCATION
Various

PROJECT DESCRIPTION
The schools scheduled for general upgrades to various exterior structures and grounds are based on the FY13 School Facilities Assessment. These projects include parking lot repairs and replacements at Atlee High and other locations as needed, tennis court replacement at Lee-Davis High and Liberty Middle, track resurfacing at Patrick Henry High and Atlee High, field bathrooms at Patrick Henry High, greenhouse replacement at Liberty Middle and replacement of irrigation systems on athletic fields at Lee-Davis High.

USEFUL LIFE
20 years

TIMETABLE
Facility improvements to be completed in FY21 (Year 1), FY23 (Year 3) and FY25 (Year 5).

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**1,380,000**	**-**	**1,045,000**	**-**	**1,515,000**	**3,940,000**
Bond Proceeds	1,380,000	-	1,045,000	-	1,515,000	3,940,000
Funding Uses	**1,380,000**	**-**	**1,045,000**	**-**	**1,515,000**	**3,940,000**
Alterations to Grounds	1,380,000	-	1,045,000	-	1,515,000	3,940,000

School Renovation

DEPARTMENT
School CIP

PROJECT TYPE
Construction

FUNCTIONAL AREA
Education

LOCATION
Current John M. Gandy Elementary Site

PROJECT DESCRIPTION
Based on a facility analysis, several schools are in need of replacement or renovation. A new school will be constructed on the current John M. Gandy Elementary School property with design work beginning in FY22 (Year 2) and construction in FY23 (Year 3). There will be public input opportunities prior to the start of official design and construction.

USEFUL LIFE
50 years

TIMETABLE
Project will begin in FY22 (Year 2) with design and engineering work.

OPERATING IMPACT
Potential changes in operational costs are not yet quantified. Costs will vary based on final design of the new school.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**4,000,000**	**36,000,000**	**-**	**-**	**40,000,000**
Bond Proceeds	-	4,000,000	36,000,000	-	-	40,000,000
Funding Uses	**-**	**4,000,000**	**36,000,000**	**-**	**-**	**40,000,000**
Construction	-	4,000,000	36,000,000	-	-	40,000,000

School Site

DEPARTMENT
School CIP

PROJECT TYPE
Land Acquisition

FUNCTIONAL AREA
Education

LOCATION
To be determined

PROJECT DESCRIPTION
This project includes funding to purchase a secondary school site in eastern Hanover.

USEFUL LIFE
50 years

TIMETABLE
Project will begin in FY24 (Year 4).

OPERATING IMPACT
Changes in operational costs will occur outside the scope of the five-year plan.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**-**	**-**	**-**	**3,000,000**	**-**	**3,000,000**
Bond Proceeds	-	-	-	3,000,000	-	3,000,000
Funding Uses	**-**	**-**	**-**	**3,000,000**	**-**	**3,000,000**
Land Purch & Development Addtl	-	-	-	3,000,000	-	3,000,000

Technology Enhancements

DEPARTMENT
School CIP

PROJECT TYPE
Technology

FUNCTIONAL AREA
Education

LOCATION
All schools

PROJECT DESCRIPTION
Technology enhancements include upgrading switches and wireless infrastructure as well as the purchase of devices for teachers. The upgrade of switches will replace existing switches that have exceeded their useful life. The upgrade of wireless infrastructure is necessary due to the increasing instructional devices and use. The purchase of laptops for teachers is included in FY22 (Year 2) and FY23 (Year 3). In addition to the new initiatives, ongoing technology equipment replacement and bandwidth for the existing network is included in this project.

USEFUL LIFE
5 years

TIMETABLE
Computers and related hardware to be purchased annually.

OPERATING IMPACT
Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	**1,200,000**	**1,615,000**	**2,237,000**	**1,140,438**	**5,200,000**	**11,392,438**
Transfer fr GF - FBA Education	-	-	1,000,000	-	4,000,000	5,000,000
Transfer from General Fund	1,200,000	1,615,000	1,237,000	1,140,438	1,200,000	6,392,438
Funding Uses	**1,200,000**	**1,615,000**	**2,237,000**	**1,140,438**	**5,200,000**	**11,392,438**
Information System Equip Addtl	1,200,000	1,615,000	2,237,000	1,140,438	5,200,000	11,392,438

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