

Capital Improvement Program Introduction

County government provides needed and desired services to the public. In order to provide these services, the County must furnish and maintain capital facilities and equipment, such as roads, parks and schools. The Capital Improvement Program (CIP) is a proposed schedule for the expenditure of funds to acquire or construct needed improvements over the next ten-year period.

The Capital Improvement Program is an important component of the County's long range planning process and serves as a planning and implementation tool for the acquisition, development, construction, maintenance, and renovation of public facilities, infrastructure and capital equipment. The first year of the CIP becomes the capital budget and the remaining years provide an estimated, but unfunded, cost of the proposed projects and their anticipated funding sources. The CIP is reviewed annually and the priorities re-evaluated based on conditions and requirements of the community.

In developing its Capital Improvement Program, the County adheres to a set of financial and debt management policies established by the Board of Supervisors. These policies help preserve the County's credit rating and establish the framework for the County's overall fiscal planning and management. Projects are carefully evaluated and prioritized to optimize the use of limited capital funds to meet operational and community needs.

CIP programming offers a systematic approach to planning and financing capital projects, and is one of the principal measures used in achieving desired growth and development as directed by the Comprehensive Plan. The CIP allows the County to anticipate and plan for future spending requirements, and provides a positive influence on private investment decisions.

A joint CIP process was approved by the Board of Supervisors on July 5, 2017 on Resolution R17-203.

Capital Improvement Plan:

The CIP represents Stafford County's policy regarding our long range planning process for the next ten years. The first year of the CIP becomes the capital budget and the remaining years provide an estimated, but unfunded, cost of the proposed projects and their anticipated funding sources as prioritized by the various review committees in accordance with the Board's guiding principles. The CIP is reviewed annually and the priorities re-evaluated based on conditions and requirements of the community.

In developing the Capital Improvement Program, the County adheres to a financial and debt management policy established by the Board of Supervisors and outlined in the Financial Management Policies section of this document. The policy helps preserve the County's credit rating and establishes the framework for the County's overall fiscal planning and management. Projects are carefully evaluated and prioritized to optimize the use of limited capital funds to meet operational and community needs.

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Benefits of Capital Programming are:

- Eliminates the duplication of project requests and enables the County to take advantage of joint planning and shared county facilities.
- Provides a budgeting tool which anticipates expenditure levels several years in advance to determine revenue needs and appropriate financing strategies.
- Provides a concise central source of information for citizens and land developers to accurately anticipate facilities in Stafford and to make their investment decisions accordingly.
- Assists in the implementation of the Comprehensive Plan.
- Provides a sound and stable financial program.
- Focuses attention on community goals and objectives.
- Allows for proper programming and project design.
- Overall, the CIP provides a foundation for coordinating and managing programs and expenditures, and assisting the local government in maintaining an excellent level of service to the citizens of Stafford, now and in the future.

Project Descriptions:

Capital Project

A planned expense for a facility or physical item requiring a minimum expenditure of \$100,000. Has a useful life span of 10 years or more and meets one or more of the following definitions:

- Requires the acquisition or construction of any physical facility for the community.
- Involves the acquisition of land or an interest in land for the community.
- Involves the acquisition or construction of public utilities.
- Involves the ongoing acquisition of major equipment or physical systems, such as, computer technology, radio systems, major specialized vehicles etc.
- Involves modifications to facilities, including additions to existing facilities, which increases the square footage, useful life, or value of the facility; and/or capital maintenance or replacement projects on existing facilities, as defined below.

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Capital Repair, Replacement and Rehabilitation Projects

Repair, replacement and rehabilitation projects (3R), primarily are small scale projects related to current existing physical assets. Generally, they are greater than \$50,000 and less than \$500,000 to be included in the County's CIP and accounted for in the Capital Projects Fund. These projects can extend the useful life of an asset, but not fundamentally change the structure or purpose. These also include repair, replacement and rehabilitation of major mechanical systems such as heating and cooling systems, which may exceed the \$500,000. Upgrades to technology infrastructure and systems can also be considered a 3R project.

The County's 3R projects are funded with current revenue as defined in the Principles of High Performance Financial Management. This funding is a minimum 3% of general government expenditures. In prior years, all activity for the 3R projects was accounted for in the General Fund. In the current budget, it is proposed to be accounted for in the Capital Projects Fund if it exceeds \$100,000. Projects that are under \$100,000 will be accounted for and expensed in the General Fund. This delineation of project s and change of budgetary practices creates a more transparent process. It creates the additional benefit of unused capital funds being held in reserve for the use of capital projects and creates a transparent reporting mechanism to inform management, the Board and the public.

The Budget also leverages the use of capital projects reserve and expired commitments to provide funding to invest in current assets, these funds will be transferred to the Capital Fund for projects over \$100,000. The remaining amount will be expended in the General Fund as a capital project. A list of the projects expensed in the General Fund can be found in the General Fund Expenditures section, within non-departmental and capital projects. This practice of utilizing the budget development process to fund projects is considered to provide the management, the Board and the citizens with a comprehensive list of needs and the resources to address those needs. This initiative supports the Board's priorities for infrastructure and fiscal responsibility.

Approximately \$10M in funding is applied to the School's 3R projects. The funding sources are cash and bond funding through the Virginia Public School Authority program. The School's 3R projects are identified and prioritized by School staff. These are presented to the School Board for approval. At the time of publication of the FY2019 Proposed Budget, the School Board had not approved the 3R projects. The items that are listed for the School's 3R projects are those they provided to the Oversight Committee as part of providing a comprehensive look at all bond funded projects.

Obligation project

A project in response to contractual requirements for joint funded projects (e.g. City) or project submissions tied to contractual agreements (e.g. Lease agreement for Storage Facility.)

Mandated Project

Projects submitted in response to a directive/law from a governing body (i.e. Local Govt., State Govt., or Federal Govt. mandate).

Funding Sources:

There are a number of different funding sources available for the various types of projects included in the Capital Improvements Program (CIP). This section outlines some of the more common funding sources used in the CIP.

Bonds

Bonds are usually for projects requiring initial capital outlays which exceed current revenue available in the short term. Bonds include general obligation debt, which requires a referendum, as well as lease/revenue bonds, which require only authorization by the Board of Supervisors after a public hearing.

Virginia Public School Authority (VPSA) funds can only be used to support the construction of school facilities. Similarly, Literary Fund allocations, when available, can be designated to projects for new school construction.

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Repair, Replacement and Rehab, Cash Capital or Pay-As-You-Go

Cash capital funding comes from annual appropriations and is part of the adopted operating budget. Projects that are typically smaller in scale such as minor renovations and upgrades are likely candidates for Cash Capital funding as long as the project has an expected useful life of at least five years or more. This type of funding provides the greatest flexibility since it:

- Has no debt service cost to be paid on the expenditure
- Is available at the start of the fiscal year
- Does not have to be approved through a referendum
- Can be carried over at the end of each fiscal year

Cash Proffers

Funds negotiated at the time of rezoning to help defray the capital costs associated with resultant development. As funds are collected over time, appropriations are used for specific capital facility needs.

Capital Project Reserve

Funds reserved from County operating revenues for capital projects.

Master Lease

Master Lease financing represents another source of capital financing to acquire equipment, vehicles, and technology purchases that have useful lives ranging from three to ten years. Master lease financing is very flexible, allowing the County to finance projects with minimal transaction costs and on an “as needed” basis over the term of the master lease. Because of the short-term maturities of master lease financing, interest rates are typically lower than rates on long-term bonds. Below is a summary of the master lease projects and the County’s availability limit for the ten-year period:

Functional Area	Department/Projects	Opening Date (CY)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Total This Period
General Government													
	Information Technology												
	ERP System		0	0	5,065,000	0	0	0	0	0	0	0	5,065,000
Public Safety													
	Fire and Rescue												
	Replacement Apparatus		1,978,000	1,536,000	2,044,000	1,614,000	1,710,000	876,000	898,000	920,000	943,000	1,279,000	13,798,000
	Life Pak Replacement		292,000	1,640,000	216,000	0	0	0	0	0	0	0	2,148,000
	Sheriff												
	Radio Back up (Core)		0	0	0	0	0	1,965,240	0	0	0	0	1,965,240
	Command Bus		0	0	691,000	0	0	0	0	0	0	0	691,000
Total Master Lease Projects			\$2,270,000	\$3,176,000	\$8,016,000	\$1,614,000	\$1,710,000	\$2,841,240	\$898,000	\$920,000	\$943,000	\$1,279,000	\$23,667,240
	Total Borrowes		\$2,270,000	\$3,176,000	\$8,016,000	\$1,614,000	\$1,710,000	\$2,841,240	\$898,000	\$920,000	\$943,000	\$1,279,000	\$23,667,240
Availability Limit			5,785,000	508,000	7,343,000	2,594,000	695,000	3,089,000	742,000	2,605,000	727,240	1,473,000	25,561,240
(Deficit)/Surplus			3,515,000	847,000	174,000	1,154,000	139,000	386,760	230,760	1,915,760	1,700,000	1,894,000	

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Revenue Sharing

The Revenue Sharing Program provides additional funding for use by a county, city, or town to construct, reconstruct, or improve the highway systems within each locality and for eligible rural additions in certain counties of the Commonwealth. Locality funds are matched with state funds, with statutory limitations on the amount of state funds authorized per locality. The program is administered by the Department of Transportation in cooperation with the participating localities, under the authority of Section 33.11-23.05 of the Code of Virginia. An annual allocation of funds for this program is designated by the Commonwealth Transportation Board. A locality may apply for a maximum of \$10 million in matching allocations for each year.

PPTA

The Public-Private Transportation Act of 1995 is the legislative framework enabling the Commonwealth of Virginia, qualifying local governments and certain other political entities to enter into agreements authorizing private entities to acquire, construct, improve, maintain, and/or operate qualifying transportation facilities.

Smart Scale

Other Revenue Sources

Other sources of revenue include State and Federal grants, private funds, transient occupancy taxes for tourism purposes, transportation service districts revenues, traffic impact fees and others. These funds are utilized to support a variety of projects to maximize available state revenue sharing based on the County's available funding.

State and Federal

government funding can support any project depending on its availability. Resources from the Potomac Rappahannock Transportation Commission (PRTC), motor fuels taxes, are limited to transportation-related projects, while water and sewer availability fees and pro rata fees can only be utilized for water and sewer projects.

Development of the Capital Improvement Program

The Department of Finance and Budget provides information concerning the County's past, present and future financial resources. The department prepares and distributes the package utilized by departments and agencies to submit project requests. The planning phase begins with a detailed review of the ten-year needs and as the program develops, Finance and Budget assists in the review and evaluation of project submissions. The CIP process takes approximately ten months each planning cycle.

Project Request

Each year, representatives of County departments, offices and agencies and the Stafford County Public Schools are asked to submit a Capital Improvements Project (CIP) request form. The completed forms provide a detailed project description, justification, cost projections, and a statement of impact on the County's and School's operating budgets.

Projected costs are determined using historical or current costs for similar projects based on engineering or architectural estimates when available. An average annual escalation assumption is included for all projects.

New projects should include the following:

- A CIP justification package - based on standards, comparisons, metrics, methodologies and objective study to justify the need and timing for capital improvements. This includes: the Comprehensive Plan, School capacity projections, vehicle and apparatus replacement criteria, facility maintenance and replacement needs assessment, long range space studies, facility master planning; and/or strategic plans.
- Program Description - The description should provide sufficient detail to permit a full understanding of the nature and scope of the project and include, but not be limited to the function or goal served, and the location (include an illustration, map or photograph, if appropriate). Also include in the program description a discussion of project need; the function a project will serve; the reason a project is requested for a specific time; a discussion of the project as it relates to department objectives and the relationship of the project to long term County goals as defined by the Comprehensive Plan.
- Operating Impact Summary - All CIP projects include a section that identifies operating budget impacts that will be incurred as a result of project implementation during the ten-year CIP period. Examples of annual operating budget impacts would include, but are not limited to maintenance, personnel, supplies, and utilities associated with the project. This calculation should estimate the annual cost for the capital project. This estimate should be included in the five-year operating budget included in the proposed budget for the upcoming year. Include any cost savings or improved efficiencies resulting from the proposed project. The purpose of assessing and displaying these impacts is to identify foreseeable demands on the operating budget as a result of project completion. Include any cost savings or improved efficiencies as a result of the proposed project
- Project Cost Estimates - The schedule should include the following phases:
 - Land: any actual or projected costs pertaining to the acquisition of land for a project, including appraisal fees, land costs, closing costs, and recording fees. Estimate acres and cost if firm figures are not known.
 - Construction: any actual or projected cost for construction of a project, including site preparation or grading, erection and finishing of structures, and any other on-site items such as roads, parking, curb and gutter, water and sewer, storm drains, and landscaping.
 - Planning and Design: any costs, actual or projected, for planning, architectural, or engineering fees. If a specific amount is not known, estimate these costs by taking ten percent of site development and construction costs.
 - Equipment: any costs, actual or projected, for furniture, fixtures, or equipment that is required in the facility but not included in the construction of the structure.
 - Hardware/Software: any costs, actual or projected, of any computer hardware or software associated with the project.
 - Project Management: any costs for personnel and operating costs needed for project or contract management during the life of the project.
 - Other: cost estimates for projects or project elements that do not fit in the above categories.

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Updated projects should include the following:

- Project amendments to include a brief description
 - Updated cost calculations based on current market or program clarifications.
 - Change in an existing approved project.
 - Change based on revenue projections.

Review Process:

Initial Staff Review

Finance and Budget Department staff compiles the submitted project requests and verifies the accuracy of the anticipated project costs and operating impact. The requests are extensively reviewed by the County Public Works Department (PW) and Department of Parks, Recreation and Community Facilities (PRCF) to verify the accuracy, adequacy and completeness of project descriptions, project cost, and funding requests. The Capital Improvement Program review schedule provides for a four week review period for any project in the CIP requiring construction.

Technical Review Committee

The TRC ranks the projects based on established criteria. The ranking process allows projects to be added in a systematic, objective manner. Available revenues, the Board's Guiding Principles and Priorities, and financial policies guide project inclusion in the Capital Improvement Program. The Technical Review Committee reports its recommendations to the Oversight Committee.

The Capital Program Technical Review Committee will assist the County in the Capital Program process by assuring that the technical aspects and costs of each of the requested projects have been researched and documented. The team will also review, evaluate and document the need for each project and make recommendations for priority funding based on the established Capital Project Evaluation Criteria. The Capital Program Technical Review Committee will report their recommendations to the County Administrator and the Capital Program "Oversight Committee".

TRC Members Responsibilities:

- Review all project requests for clarity, accuracy and appropriate timing;
- Meet with project submitters to clarify requests and propose revisions, if needed;
- Rank requested projects based on established evaluation criteria;
- Review available revenues and debt service requirements for project requests based on approved County financial policies;
- Prioritize projects based on their ranking and available revenues;
- Together with the DFB develop a recommended CIP based on revenue projections provided by DFB; Forward the joint recommendation to the Capital Program Oversight Committee for its review.

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TRC Members:

- County Budget Director, Department of Finance and Budget (Member/Facilitator)
- Senior Project Management staff, Department of Public Works
- Senior Planning staff, Department of Planning & Zoning
- Senior Project Management staff, Stafford County Schools
- Planning/Budget/Finance staff, Stafford County Schools
- Budget staff/analyst, Department of Finance and Budget

Established Project Evaluation Criteria:

Project evaluation criteria have been established and are used by the committees to review and evaluate all capital projects and their cost estimates. All projects are evaluated against various factors which the submitting department/agency is asked to address on each of the CIP forms.

All submitted or proposed Capital Improvement Projects will be subject to ranking in the following areas of emphasis:

- Health and Safety
- Education
- Impact on Operational Budget
- Special Considerations
- Economic/Community Development
- Quality of Life
- Infrastructure
- Sustainability/Energy Efficiency

Oversight Committee

The Oversight Committee (OSC) reviews the Technical Review Committee's ranking and Capital Program recommendation adjusting the projects as necessary. The Oversight Committee provides a recommended CIP to the County Administrator and reviews the recommendation with the Board of Supervisors and School Board at a joint meeting in December of each year.

The Committee will assure that the proposed Capital projects are aligned with County policies, established priorities, guiding principles and long term vision. The Committee will also assure that the recommended ten-year CIP is aligned with approved financial policies and that the County's financial stability is maintained through the prudent use of its revenues.

Oversight Committee Member Responsibilities:

- Review the recommended Capital Improvement Program presented by the Technical Review Committee.
- Ensure that the proposed project ranking is properly and consistently applied.
- Propose modifications/improvements to the project ranking system.
- Ensure that all capital projects carry out the County's long-range goals and objectives.
- Ensure that the recommended ten-year CIP addresses County needs through the proper timing, prioritization and balance of local government and school division projects.
- Ensure that County revenues are used wisely to address the County's capital needs and that the recommended CIP conforms to approved financial policies, including the use of on-going revenues and borrowed funds.
- Propose revisions or adjustments to the ten-year CIP proposed by the Technical Review Committee, if needed.
- Submit a recommended CIP to the County Administrator with any documented revisions to the plan submitted by the Technical Review Committee.

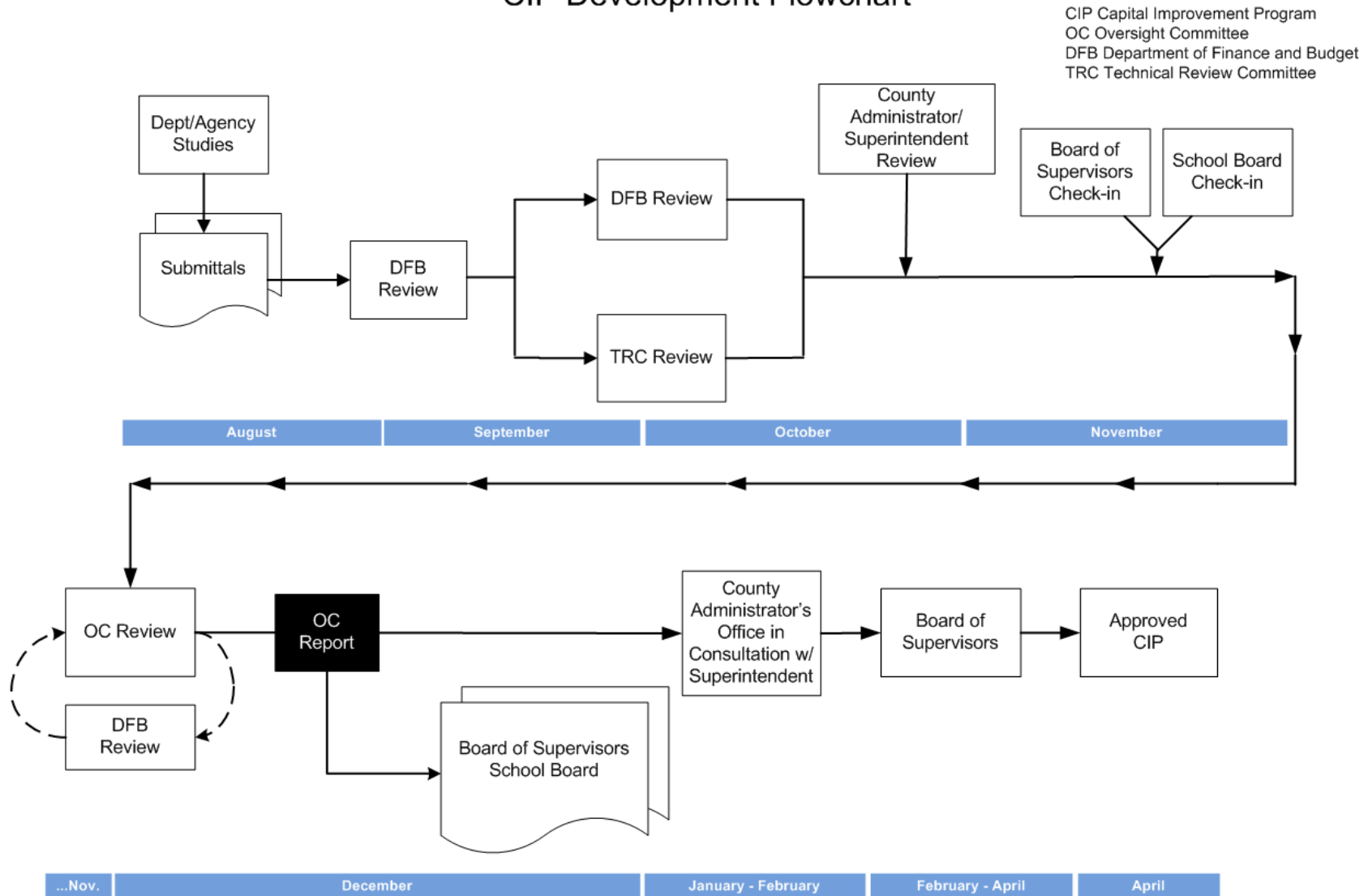
Oversight Committee Members:

- Members of the Board of Supervisors' Finance, Audit and Budget Committee.
- Members of the School Board Finance, Audit and Budget Committee.
- One Citizen Representative. Selected by Superintendent and County Administrator with business and construction experience.
- County/School Staff Support includes: Deputy County Administrators, Deputy Superintendents, the Director of Finance and Budget (Facilitator).

CIP Recommendation

The County Administrator's recommended CIP is reviewed by the Board of Supervisors for projects to be funded in the upcoming fiscal year during the annual budget process. The projects approved for funding in the current budget year become that year's Capital Budget. Those projects approved for funding in the subsequent years will serve as a guide to ongoing project planning and preparation of the following year's CIP.

CIP Development Flowchart



Policies

Financial Policy:

The CIP is developed to be consistent with approved County financial policies that set guidelines for the CIP and for the funding of maintenance and replacement projects.

New debt requires the County operating budget to absorb the increased debt service and any operating costs associated with the capital project. Prior to the issuance of any new debt, consideration will be given to current economic and budgetary conditions. The County is working to reduce reliance on debt by increasing other types of funding for capital projects. The County has established the following policies to assist management with financial decisions.

The County's Principles Of High Performance Financial Management was last update by Resolution R17-113 on April, 18, 2017.

Capital Improvement Program (CIP) and Bonded Debt Service Affordability Guidelines:

- A five-year CIP allocating capital improvement funds between the Schools and General Government will be adopted annually.
- Debt-funded CIP projects for County and Schools will be no less than \$500,000 each and will have a useful life that meets or exceeds the life of any debt issuance.
- Capital Improvement projects for County and Schools are items for which the purchase, construction, renovation, non-recurring replacement, expansion, or the acquisition represents a public betterment and adds to the total physical worth of Stafford. Projects include, but are not limited to, expenditures for land, new structures, major repairs and renovations; maintenance of existing structures; and expenditures for machinery, equipment and vehicles. Each project should have a total cost of \$500,000 or more. Scope of project includes all professional services (land acquisition, legal, planning, design) and construction costs.

Proffer Policy:

Development proffers can be a valuable asset towards funding capital projects in the County's CIP. Proffers are voluntary off-sets for new development to mitigate its capital facilities impacts. Proffers are derived from for individual zoning reclassifications of properties. Proffers are negotiated on a case by case basis between the Board of Supervisors and a land development applicant. Proffers benefiting the CIP usually take two forms 1) cash payments and 2) land dedications. The most prevalent type of proffer received by the County are cash payments.

State Code regulates when and how proffers can be accepted by the County and what they can be used for. Proffers are intended to minimize capital facilities impacts and cannot be used to off-set operating costs or maintenance. Proffers must be used for facility improvements that will increase capacity to serve the new development. Some proffers are designated to specific capital projects. The use of those designated funds would be restricted to the specified capital facility. Cash proffer payments can only be collected at time of final inspection for a new home or business. As a result, payments cannot be considered a reliable funding source. They are made to the County as development occurs and are subject to market conditions and decisions made by individual developers. For CIP planning purposes, the County must project when proffer payments are made.

The County is limited in its ability to expend proffer funds. Expenditure of proffer funds are not only limited to capital facilities but, can only be applied to projects within the CIP. There is a time limit for which proffer funds must be expended. The County has 12 years to expend proffer funds from the date of collecting all

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proffered payments associated with a specific zoning reclassification. If those funds are not expended, they must be forfeited to the Virginia Commonwealth Transportation Board to be used for construction of road improvements in the County.

The state monitors the County's use of proffers. The County is required to provide an annual report to the state on its activities regarding proffers. The County reports to the Virginia Commission on Local Government 1) the aggregate amount of cash proffer payments collected, 2) estimated dollar amount of proffered pledged to the County, and 3) the amount of proffer payments expended. The expended funds report must be broken out by type of public facility. Funds are not expended by the County until the Board of Supervisors has appropriated them to the Capital Budget for an eligible project.

In accordance with Section 15.2-2303.2 (B) of the Code of Virginia, localities are required to include in their capital improvement program a copy of the Survey of Cash Proffers accepted by local governments during the most recent fiscal year. Additionally, this Section requires that localities include in its annual capital budget the amount of cash proffers projected to be expended for projects in the adopted fiscal year.

Collected Proffers:

The table below provides details regarding proffer allocations for FY2017.

	FY2016	Proffers Received in FY2017	Proffers Budgeted & Appropriated in FY2017
Schools	\$813,143	\$1,342,256	\$846,730
Roads	517,050	1,132,801	215,726
Parks and Recreation	351,543	880,330	411,960
Libraries	124,384	154,765	
General Government	10,865	38,163	
Fire and Rescue	460,496	101,559	
Government Center	5,250	232	
Landfill	673		
	<hr/> \$2,283,404	<hr/> \$3,650,106	<hr/> \$1,474,416

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Coordinating Capital Budget with Operating Budget:

Additional operating impacts associated with CIP projects are estimated by the requesting department at the time the project is initially submitted for review. Impacts are broken down into personnel and operating expenses. These impacts are reviewed and updated annually. In the year the project is scheduled to be completed or implemented, costs are moved into the department's operating budget. See chart below for summary of all operating budget impacts:

Operating Impacts:

Operating Impacts Summary	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	384,507	1,065,000	1,086,000	1,487,000	1,911,000	1,956,000	2,287,000	5,718,000	6,200,000	7,731,000
Operating	23,610	267,000	533,000	710,430	1,034,120	1,061,160	2,263,280	2,910,860	3,227,520	3,380,720
Total Personnel and Operating	408,117	1,332,000	1,619,000	2,197,430	2,945,120	3,017,160	4,550,280	8,628,860	9,427,520	11,111,720

Debt Service Impacts:

Each year's maximum available debt service will be established by increasing the prior year's actual debt service by the percentage of general fund revenue changes averaged over the last 5 years.

The financial policies define the County's maximum debt. As part of the efforts to improve the County's bond rating, the Board amended its financial policies in November 2015. Debt limitations are as follows:

- General obligation debt shall not exceed 3% of the assessed valuation of taxable real property.
- General fund debt service expenditures (County and Schools) shall not exceed 10% of the general government and schools operating budgets.
- Debt ratios do not include debt to be repaid from identified revenue sources outside the General Fund. In the case of special service districts, the Board of Supervisors intends to set tax rates to cover any debt to be funded with the revenue.
- Capital lease debt service shall not exceed 1% of the general government budget. Capital lease debt may only be used if all the following four criteria are met:
 1. Capital lease purchase is eligible under state law for such financing;
 2. Useful life of the purchase equals or exceeds the term of the debt;
 3. Total purchase exceeds \$100,000; and
 4. Sufficient funds are available to service the capital lease debt.

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Although the proposed CIP will add an additional \$245,573,982 in bond funded debt over the ten year period, the additional debt to be incurred for these projects would still be below the County's guidelines.

Debt Capacity	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total Borrow	13,954,753	12,877,185	28,256,889	2,606,686	48,881,352	39,799,248	33,897,111	25,510,839	32,144,781	7,438,814
Debt Capacity	48,490,000	36,764,000	26,691,000	37,350,000	39,840,000	29,108,000	18,497,000	25,381,000	22,472,000	35,841,000
Cumulative (Deficit)/Surplus	34,535,247	58,422,062	56,856,173	91,599,487	82,558,135	71,866,887	56,466,776	56,336,937	46,664,156	75,066,342

Total Debt Service:

The following chart illustrates the year to year adjustment in the County's total debt.

Debt Service	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Existing Debt Service	43,613,716	41,275,473	39,410,427	38,406,640	36,379,564	34,313,531	33,206,733	33,041,359	32,369,000	31,975,020
County Debt Service	-	-	-	677,652	1,384,365	162,338	-	-	-	-
County Master Lease		532,000	744,000	1,877,000	378,000	400,000	205,000	210,000	215,000	221,000
Schools Debt Service	150,536	1,167,724	1,077,554	302,501	218,126	3,928,021	3,330,374	2,836,488	2,134,730	2,689,854
Dedicated Courthouse Funding				(850,000)	-	(4,000,000)	(4,000,000)	(4,000,000)	(4,000,000)	(4,000,000)
Total Debt Service	43,764,252	43,125,733	43,082,242	44,085,607	44,889,022	43,313,348	45,741,924	48,623,038	50,300,409	52,817,282

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Summary of all Funding Sources:

Debt Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
County Bond Proceeds	-	-	24,641,889	-	1,940,000	-	-	-	-	50,000
School Bond Proceeds	13,954,753	12,877,185	3,615,000	2,606,686	46,941,352	39,799,248	33,897,111	25,510,839	32,144,781	7,388,814
Master Lease	2,270,000	3,176,000	8,016,000	1,614,000	1,710,000	876,000	898,000	920,000	943,000	1,279,000

County Cash Sources

General Fund Allocation Transfer 3%	2,945,000	3,891,000	3,492,000	3,105,000	3,476,000	3,838,000	3,935,000	3,053,000	2,600,000	4,087,000
Courthouse Ramp Up Funding	1,839,303	2,560,697	4,000,000	3,150,000	4,000,000	-	-	-	-	-
Estate Tax Revenue - to support School projects	183,316	188,815	194,480	200,314	206,324	212,513	218,889	225,456	232,219	239,186
Year End Funding	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Net Funding Sale of MES				6,300,000						

School Cash Sources

Fleet Services Fund (Schools 3R)	700,000	-	-	-	-	-	-	-	-	-
Nutrition Fund (Schools 3R)	115,000	118,000	122,000	126,000	130,000	-	-	-	-	-
Current Revenue (Schools 3R)	5,107,000	5,186,000	5,158,000	5,101,000	5,246,324	5,083,000	5,079,000	5,044,000	5,049,000	4,936,000
Additional local transfer to support School projects	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000

Prior Fund Balance & Proffers

June 2018 Real Estate Increase - One Time Funding	2,000,000	-	-	-	-	-	-	-	-	-
School's year end carryover	427,000									
Use of Prior Year Fund Balance, General Fund (County 3R)	840,000	-	-	-	-	-	-	-	-	-
Available funding from current capital project savings	74,225									
Capital Projects Reserve Fund Balance	1,208,329	-	-	-	-	-	-	-	-	-
Schools Major Capital Projects Fund Balance	614,755	-	-	-	-	-	-	-	-	-
School's Capital Project Reserve	46,622	-	-	-	-	-	-	-	-	-
Proffers	-	-	163,631	-	-	3,648,239	-	-	-	-

Total Projected Sources **34,325,303** **29,997,697** **51,403,000** **24,203,000** **65,650,000** **55,457,000** **46,028,000** **36,753,295** **42,969,000** **19,980,000**

Capital Improvements Program

Stafford County FY19 Adopted Budget

Summary of all Projects:

Projects by Fuctional Area	Completion Date	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
General Government											
ERP System	FY2021	200,000	-	5,065,000	-	-	-	-	-	-	-
Fiber Network		542,000	-	-	-	-	-	-	-	-	-
Repairs, Replacements and Rehabs		284,000	212,000	642,000	338,000	697,000	1,016,000	1,304,000	380,000	979,000	203,000
Public Safety											
Fire and Rescue											
Replacement Apparatus		1,978,000	1,536,000	2,044,000	1,614,000	1,710,000	876,000	898,000	920,000	943,000	1,279,000
Replacement Ambulance		824,000	861,000	882,000	903,000	927,000	951,000	975,000	999,000	1,023,000	1,050,000
LifePak Replacement		292,000	1,640,000	216,000	-	-	-	-	-	-	-
Repairs, Replacements and Rehabs		330,000	-	-	-	-	-	-	-	-	100,000
Sheriff		-	-	-	-	-	-	-	-	-	-
Command Bus	FY2021	-		691,000	-	-	-	-	-	-	-
Radio Core	FY2024	-	-	-	-	-	-	-	-	-	-
Repairs, Replacements and Rehabs		1,036,000	818,000	-	-	-	-	-	-	-	-
Code Compliance		-	-	-	-	-	-	-	-	-	-
Stormwater		300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Judicial											
Courthouse			2,600,000	29,000,000	3,150,000	5,940,000					
Courthouse Parking lot			1,800,000								
Parks and Recreation											
Repairs, Replacements and Rehabs		229,000	1,148,000	749,000	884,000	1,447,000	904,000	1,021,000	1,183,000	-	1,589,000
Library		-	-	-	-	-	-	-	-	-	50,000

Capital Improvements Program

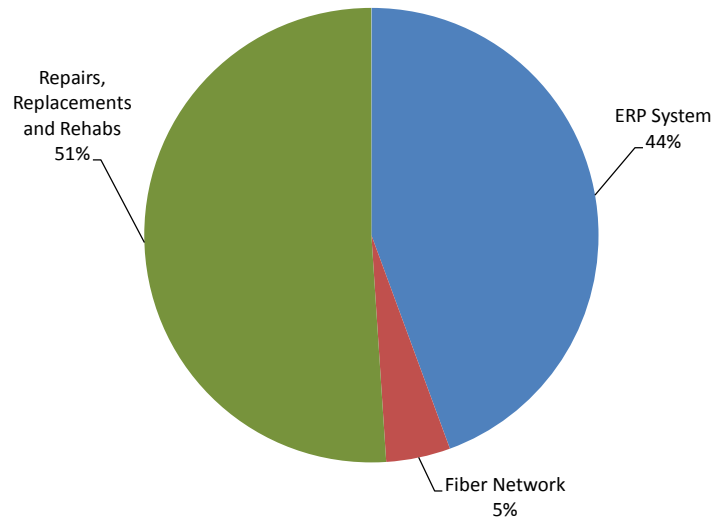
Stafford County FY19 Adopted Budget

Summary of all Projects (Continued):

Projects by Fuctional Area	Completion Date	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Public Works											
Transfer to Transportation Fund		3,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Repairs, Replacements and Rehabs		40,000	552,000	919,000	680,000	105,000	667,000	335,000	191,000	298,000	845,000
Education											
Rebuild Moncure ES	FY2020	1,000,000	-	-	-	-	-	-	-	-	-
Improvements to Gari Melchers	FY2019	-	-	-	-	-	-	-	-	-	-
Purchase & Renovate FCS	FY2020	10,652,000	-	-	-	-	-	-	-	-	-
Addition FCS - Phase I; 10 Classrooms										-	-
Addition FCS - Phase II; 10 Classrooms		-	-	-	-	-	-	-	-	-	
Renovate Ferry Farm ES		857,000	9,945,000	-	-	-	-	-	-	-	
Rebuild Hartwood ES	FY2031	-	-	-	-	-	-	-	1,057,295	-	1,700,000
Elementary School #18	FY2028	-	-	-	-	-	-	1,250,000	19,300,000	28,373,000	1,970,000
High School #6	FY2026	-	-	-	5,100,000	43,400,000	42,450,000	28,993,000	1,397,000	-	-
Bond Funded Repairs, Replacement and Rehabs	Ongoing	2,549,500	4,121,000	3,615,000	2,606,000	4,954,000	2,210,000	4,873,000	4,982,000	5,004,000	4,958,000
Cash/Grant/Lease Funded Repairs, Replacements and Rehabs	Ongoing	8,372,500	5,304,000	6,280,000	7,628,000	5,170,000	5,083,000	5,079,000	5,044,000	5,049,000	4,936,000
Total All Projects		32,486,000	31,837,000	51,403,000	24,203,000	65,650,000	55,457,000	46,028,000	36,753,295	42,969,000	19,980,000

*Schedules do not include Transportation and Utilities projects. Information on projects and funding are in separate sections.

General Government



Expenditures	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Later Years Funding	Total Project Cost
ERP System	0	200,000	0	5,065,000	0	0	0	0	0	0	0	0	5,265,000
Fiber Network	0	542,000	0	0	0	0	0	0	0	0	0	0	542,000
Repairs, Replacements and Rehabs	0	284,000	212,000	642,000	338,000	697,000	1,016,000	1,304,000	380,000	979,000	203,000	0	6,055,000
Total General Government	\$0	\$1,026,000	\$212,000	\$5,707,000	\$338,000	\$697,000	\$1,016,000	\$1,304,000	\$380,000	\$979,000	\$203,000	\$0	\$11,862,000

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Prior Year Fund Balance	0	820,000	0	0	0	0	0	0	0	0	0
GF Allocation Transfer - 3% Guideline	0	206,000	212,000	642,000	338,000	697,000	1,016,000	1,304,000	380,000	979,000	203,000
Master Lease Proceeds	0	0	0	5,065,000	0	0	0	0	0	0	0
Total	\$0	\$1,026,000	\$212,000	\$5,707,000	\$338,000	\$697,000	\$1,016,000	\$1,304,000	\$380,000	\$979,000	\$203,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	101,507	104,000	106,000	108,000	110,000	112,000	114,000	117,000	119,000	121,000
Operating	28,610	45,000	316,640	328,946	341,543	354,445	367,663	381,209	396,098	405,342
Debt Service Master Lease	0	0	0	1,186,000	1,186,000	1,186,000	1,186,000	1,186,000	1,186,000	1,186,000
Total	\$130,117	\$149,000	\$422,640	\$1,622,946	\$1,637,543	\$1,652,445	\$1,667,663	\$1,684,209	\$1,701,098	\$1,712,342

Information Technology Repairs, Replacements and Rehabs

Total Project Cost: \$6,055,000

Est. Opening Date: On-going

PROGRAM DESCRIPTION

Information Technology (IT) infrastructure should be upgraded as appropriate to maintain consistent service levels. The Stafford County IT Equipment and Risk Reduction Plan will assist with standardizing the operating environment with current versions of systems software and hardware. The implementation of new technology, as determined by the IT Strategic Plan, will reduce cost, improve efficiency, make maintenance and support considerably more efficient and minimize the number of problems with the operational environment.

The Server (Virtual Cluster) and Storage Area Network (SAN) replacement plan supports the replacement and maintenance of the County's central computing infrastructure. The systems are purchased with a five year warranty after which replacement would be recommended due to new technology and the demands of the application exceeding the capability of the existing hardware.

The County's risk reduction plan (which provides business continuity in the event of a computer room and or a network operation center disaster) involves hardware redundancy and geographical separation of critical systems and equipment. Redundancy of critical systems in the plan will be co-located in the County Administration and Public Safety buildings.

Two years ago IT installed a cloud-based managed Wi-Fi system in the Administration Center. The goal is to extend the Wi-Fi system into the Public Safety Center, Courthouse building and our remote sites. Total replacement of the system will be in FY25 under a 6 year replacement cycle.

Our goal is to extend our fiber network to as many remote sites as possible by utilizing the Schools existing fiber network. Fiber provides a much more stable network for computers and phones than current cable internet providers and it will significantly reduce network outages and help improve redundancy.

Virtual Desktop virtualization is client-server computing where the desktop is stored on a centralized server and distributed to users through the network. It reduces desktop computer costs and upgrades and provides easier management of operating systems. This system will be under a 6 year replacement cycle.

OPERATING IMPACT SUMMARY

The additional operating costs are associated with smartnet maintenance on new equipment and licenses.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Network Equipment Replacement	0	284,000	212,000	368,000	338,000	522,000	1,016,000	565,000	380,000	979,000	203,000
Physical Security	0	0	0	165,000	0	0	0	0	0	0	0
Managed Wi-Fi	0	0	0	0	0	0	0	185,000	0	0	0
iSeries H.T.E. Hardware Replacement	0	0	0	109,000	0	0	0	0	0	0	0
Server Replacement	0	0	0	0	0	175,000	0	0	0	0	0
Virtual Desktop	0	0	0	0	0	0	0	554,000	0	0	0
Total	\$0	\$284,000	\$212,000	\$642,000	\$338,000	\$697,000	\$1,016,000	\$1,304,000	\$380,000	\$979,000	\$203,000

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Prior Year Fund Balance	0	78,000	0	0	0	0	0	0	0	0	0
GF Allocation Transfer - 3% Guideline	0	206,000	212,000	642,000	338,000	697,000	1,016,000	1,304,000	380,000	979,000	203,000
Total	\$0	\$284,000	\$212,000	\$642,000	\$338,000	\$697,000	\$1,016,000	\$1,304,000	\$380,000	\$979,000	\$203,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Operating	25,000	41,000	57,640	64,946	72,543	80,445	88,663	97,209	106,098	115,342
Total	\$25,000	\$41,000	\$57,640	\$64,946	\$72,543	\$80,445	\$88,663	\$97,209	\$106,098	\$115,342

General Government Repairs, Replacement, and Rehabs

Description of Project	Year	Project Amount
ERP Study	FY2019	200,000
Fiber to fire stations	FY2019	542,000
Upgrade fiber network equipment to 1 GB	FY2019	284,000
	FY2019 Total	1,026,000
Replace fiber site network equipment to 1 GB	FY2020	212,000
	FY2020 Total	212,000
Replace Cisco network equipment in the Courthouse that are end of life	FY2021	165,000
Replace fiber site network equipment to 1 GB	FY2021	203,000
Physical security at remote sites	FY2021	165,000
Replace Admin and Public Safety Center DMVPN Routers	FY2021	109,000
	FY2021 Total	642,000
Replace Cisco network equipment at remote sites that are end of life	FY2022	338,000
	FY2022 Total	338,000
Replace Admin and Public Safety Center core network equipment	FY2023	522,000
Replace Cisco UCS Servers that are end of life	FY2023	175,000
	FY2023 Total	697,000
Replace County's Storage Area Network (SAN)	FY2024	538,000
Replace Backup System	FY2024	478,000
	FY2024 Total	1,016,000
Implement virtual desktop technology to reduce PC replacement frequency	FY2025	554,000
Replace Admin and Courthouse Uninterruptable Power Supply System	FY2025	111,000
Replace Admin and Public Safety Center Firewall routers	FY2025	454,000
Replace Cisco Managed WiFi system that is end of life	FY2025	185,000
	FY2025 Total	1,304,000
Replace Cisco network equipment at remote sites that are end of life	FY2026	380,000
	FY2026 Total	380,000
Replace Cisco wiring closet network equipment that are end of life	FY2027	391,000
Replace Cisco network equipment in the Courthouse that are end of life	FY2027	197,000
Replace Cisco network equipment at remote sites that are end of life	FY2027	391,000
	FY2027 Total	979,000
Replace Cisco UCS Servers that are end of life	FY2028	203,000
	FY2028 Total	203,000
	Grand Total	6,055,000

Enterprise Resource Planning (ERP) System Purchase and Implementation

Total Project Cost: \$5,265,000

Est. Opening Date: FY2019

PROGRAM DESCRIPTION

This project funds the purchase and implementation of a new ERP system. The County currently uses a collection disparate systems for finance, HR, Utility billing, permitting, etc. H.T.E is the primary application used by the County and has been in use since 1999. While it has undergone several upgrades, it does not provide many of the essential features of modern ERP systems. Most users still use mainframe green screen technology and it runs on an IBM i series (AS/400), which is also outdated and many generations behind modern computing platforms. The intention of going to a new ERP system will be to consider a cloud-based software as a service system (SaaS) that will integrate all of the key functions under a single computing platform and database management system. This will provide better integration between functions, improved reporting, and eliminate the double-entry of data. It is anticipated that the ERP will include modules for A/R, A/P, G/L, utility billing, payroll, HR, employee self service, vendor self service, data warehousing and possibly permitting and asset management. It is anticipated that the project will begin by hiring a consultant to conduct a thorough needs assessment and to provide assistance, assist with the development of an RFP and assistance with the purchase and implementation of the selected system.

OPERATING IMPACT SUMMARY

Maintenance costs for H.T.E. and the maintenance of the i-series computer. Both systems will likely be kept functioning for at least two years after implementation for reference purposes

CHANGE/REASON FOR REVISION

2019 - New to the CIP

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	0	200,000	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	4,800,000	0	0	0	0	0	0	0
Contingency	0	0	0	265,000	0	0	0	0	0	0	0
Total	\$0	\$200,000	\$0	\$5,065,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Prior Year Fund Balance	0	200,000	0	0	0	0	0	0	0	0	0
Master Lease Proceeds	0	0	0	5,065,000	0	0	0	0	0	0	0
Total	\$0	\$200,000	\$0	\$5,065,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	101,507	104,000	106,000	108,000	110,000	112,000	114,000	117,000	119,000	121,000
Operating	3,610	4,000	259,000	264,000	269,000	274,000	279,000	284,000	290,000	290,000
Master Lease	0	0	0	1,186,000	1,186,000	1,186,000	1,186,000	1,186,000	1,186,000	1,186,000
Revenue/Savings	0	0	0	0	0	0	0	0	0	0
Total	\$105,117	\$108,000	\$365,000	\$1,558,000	\$1,565,000	\$1,572,000	\$1,579,000	\$1,587,000	\$1,595,000	\$1,597,000

County Fiber Network Deployment

Total Project Cost: \$542,000

Est. Opening Date: On-going

PROGRAM DESCRIPTION

This project will deploy and light fiber to over 20 sites not currently wired to the County network. These sites currently rely on cable modems, which results in over 2000 service interruptions each year. Connecting fiber to these sites will improve reliability to over 98%. This project will utilize the fiber that the school system deployed over the last several years to minimize the length of each fiber connection. The County currently runs several sites through the school system's backbone using advanced encryption technology. The project will initially target public safety sites and sites located the closest to schools' fiber.

OPERATING IMPACT SUMMARY

There are no additional operating costs associated with this project.

CHANGE/REASON FOR REVISION

FY2019 - New to the CIP

PROJECT COSTS

<u>Expenditures</u>	<u>Prior Year</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2022</u>	<u>FY2023</u>	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>FY2028</u>
Construction / Project	0	542,000	0	0	0	0	0	0	0	0	0
Total	\$0	\$542,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

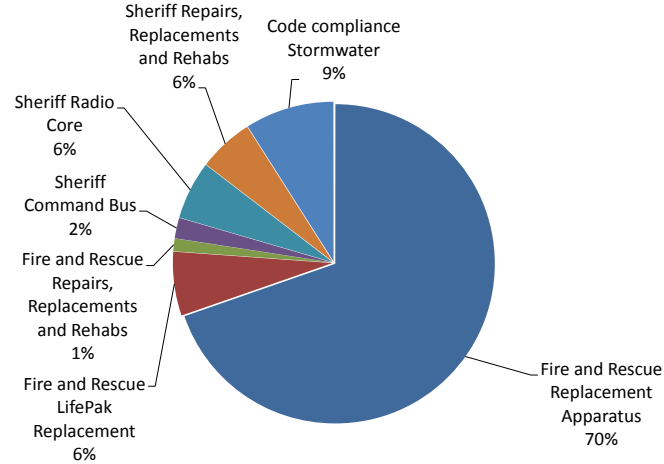
<u>Revenues</u>	<u>Prior Year</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2022</u>	<u>FY2023</u>	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>FY2028</u>
Prior Year Fund Balance	0	542,000	0	0	0	0	0	0	0	0	0
Total	\$0	\$542,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

<u>Operating Impacts</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2022</u>	<u>FY2023</u>	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>FY2028</u>
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

General Government Repairs, Replacement, and Rehabs

Description of Project	Year	Project Amount
ERP Study	FY2019	200,000
Fiber to fire stations	FY2019	542,000
Upgrade fiber network equipment to 1 GB	FY2019	284,000
	FY2019 Total	1,026,000
Replace fiber site network equipment to 1 GB	FY2020	212,000
	FY2020 Total	212,000
Replace Cisco network equipment in the Courthouse that are end of life	FY2021	165,000
Replace fiber site network equipment to 1 GB	FY2021	203,000
Physical security at remote sites	FY2021	165,000
Replace Admin and Public Safety Center DMVPN Routers	FY2021	109,000
	FY2021 Total	642,000
Replace Cisco network equipment at remote sites that are end of life	FY2022	338,000
	FY2022 Total	338,000
Replace Admin and Public Safety Center core network equipment	FY2023	522,000
Replace Cisco UCS Servers that are end of life	FY2023	175,000
	FY2023 Total	697,000
Replace County's Storage Area Network (SAN)	FY2024	538,000
Replace Backup System	FY2024	478,000
	FY2024 Total	1,016,000
Implement virtual desktop technology to reduce PC replacement frequency	FY2025	554,000
Replace Admin and Courthouse Uninterruptable Power Supply System	FY2025	111,000
Replace Admin and Public Safety Center Firewall routers	FY2025	454,000
Replace Cisco Managed WiFi system that is end of life	FY2025	185,000
	FY2025 Total	1,304,000
Replace Cisco network equipment at remote sites that are end of life	FY2026	380,000
	FY2026 Total	380,000
Replace Cisco wiring closet network equipment that are end of life	FY2027	391,000
Replace Cisco network equipment in the Courthouse that are end of life	FY2027	197,000
Replace Cisco network equipment at remote sites that are end of life	FY2027	391,000
	FY2027 Total	979,000
Replace Cisco UCS Servers that are end of life	FY2028	203,000
	FY2028 Total	203,000
	Grand Total	6,055,000

Public Safety



Expenditures	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Later Years Funding	Total Project Cost
Fire and Rescue Replacement Apparatus	0	2,802,000	2,397,000	2,926,000	2,517,000	2,637,000	1,827,000	1,873,000	1,919,000	1,966,000	2,329,000	0	23,193,000
Fire and Rescue LifePak Replacement	0	292,000	1,640,000	216,000	0	0	0	0	0	0	0	0	2,148,000
Fire and Rescue Repairs, Replacements and Rehabs	0	330,000	0	0	0	0	0	0	0	0	100,000	0	430,000
Sheriff Command Bus	0	0	0	691,000	0	0	0	0	0	0	0	0	691,000
Sheriff Radio Core	0	0	0	0	0	0	1,965,240	0	0	0	0	0	1,965,240
Sheriff Repairs, Replacements and Rehabs	0	1,036,000	818,000	0	0	0	0	0	0	0	0	0	1,854,000
Code compliance Stormwater	0	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	0	3,000,000
Total Public Safety	\$0	\$4,760,000	\$5,155,000	\$4,133,000	\$2,817,000	\$2,937,000	\$4,092,240	\$2,173,000	\$2,219,000	\$2,266,000	\$2,729,000	\$0	\$33,281,240

Revenues	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Prior Year Fund Balance	0	330,000	0	0	0	0	0	0	0	0	0
GF Allocation Transfer - 3% Guideline	0	2,160,000	1,979,000	1,182,000	1,203,000	1,227,000	1,251,000	1,275,000	1,299,000	1,323,000	1,450,000
Master Lease Proceeds	0	2,270,000	3,176,000	2,951,000	1,614,000	1,710,000	2,841,240	898,000	920,000	943,000	1,279,000
Total	\$0	\$4,760,000	\$5,155,000	\$4,133,000	\$2,817,000	\$2,937,000	\$4,092,240	\$2,173,000	\$2,219,000	\$2,266,000	\$2,729,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	20,000	21,000	24,000	25,000	26,000	26,000	50,000	51,000	52,000	54,000
Debt Service Master Lease	0	330,000	918,000	1,332,000	1,546,000	1,773,000	2,081,724	1,816,724	1,887,724	2,012,724
Total	\$20,000	\$351,000	\$942,000	\$1,357,000	\$1,572,000	\$1,799,000	\$2,131,724	\$1,867,724	\$1,939,724	\$2,066,724

CARDIAC EQUIPMENT REPLACEMENT

Total Project Cost: \$2,148,000

Est. Opening Date: 2019

PROGRAM DESCRIPTION

This project will replace all of the Fire and Rescue Department's cardiac monitor/defibrillator and CardioPulmonary Resuscitation (CPR) equipment which was obtained in 2009 on a lease-purchase program. The lease ended in 2014 and the department purchased the equipment at that time. The service life for this equipment is ten years. Cardiac monitor/defibrillator equipment is essential to the department's advanced life support and emergency medical services program. Replacement of the equipment en masse is necessary in order to maintain consistency, maintain current equipment with technological standards and ultimately provide optimal care.

OPERATING IMPACT SUMMARY

No additional operating costs associated with this project

PROJECT COSTS

<u>Expenditures</u>	<u>Prior Year</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2022</u>	<u>FY2023</u>	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>FY2028</u>
Other	0	292,000	1,640,000	216,000	0	0	0	0	0	0	0
Total	\$0	\$292,000	\$1,640,000	\$216,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

<u>Revenues</u>	<u>Prior Year</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2022</u>	<u>FY2023</u>	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>FY2028</u>
Master Lease Proceeds	0	292,000	1,640,000	216,000	0	0	0	0	0	0	0
Total	\$0	\$292,000	\$1,640,000	\$216,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

<u>Operating Impacts</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2022</u>	<u>FY2023</u>	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>FY2028</u>
Master Lease	0	68,000	452,000	503,000	503,000	503,000	435,000	51,000	0	0
Total	\$0	\$68,000	\$452,000	\$503,000	\$503,000	\$503,000	\$435,000	\$51,000	\$0	\$0

Fire Rescue Repairs, Replacements and Rehabs

Total Project Cost: \$430,000

Est. Opening Date: On-going

PROGRAM DESCRIPTION

Funds will be utilized to upgrade the infrastructure of our numerous volunteer stations. These upgrades could include the installation of the exhaust removal systems in each remaining station, replacement of HVAC, electrical and plumbing/septic systems and repairs to roofs, concrete apparatus floors and aprons, etc. Funding will be allocated annually based on location needs. Examples include cracked foundations, roofs with multiple failing layers, lacking dormitory space, code compliance with egress.

CHANGE/REASON FOR REVISION

2019 - New to the CIP

OPERATING IMPACT SUMMARY

No additional operating impacts are associated with this project

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Major Repairs and Facility Upgrades	0	330,000	0	0	0	0	0	0	0	0	100,000
Total	\$0	\$330,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Prior Year Fund Balance	0	330,000	0	0	0	0	0	0	0	0	0
Total	\$0	\$330,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Public Safety Command Bus Replacement

Total Project Cost: \$691,000

Est. Opening Date: 2021

PROGRAM DESCRIPTION

The current command bus is approaching 13 years in service. Most of the technologies purchased as a part of the command bus are also approaching 13 years old and have or will soon reach their end of life. An upgrade approximately eight years ago, funded by a grant, extended the life of the bus. The command bus continues to operate as an alternate communications center and doubles as a command post for special events, unique and extended investigations, and as a means to continue operations in the face of natural or manmade disasters that can affect operations of the emergency communications center. Newer technologies will make the use of the command bus and its capabilities more efficient and prevent the limitations in functionality currently imposed due to the old technology and limited space. This bus, when needed, supports a critical function that must be system ready at a moments notice and capable of delivering necessary services.

OPERATING IMPACT SUMMARY

There are no additional operating impacts associated with this project.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Construction / Project	0	0	0	691,000	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$691,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Master Lease Proceeds	0	0	0	691,000	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$691,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Master Lease	0	0	0	92,000	92,000	92,000	92,000	92,000	92,000	92,000
Total	\$0	\$0	\$0	\$92,000	\$92,000	\$92,000	\$92,000	\$92,000	\$92,000	\$92,000

Sheriff Maintenance, Repairs and Improvements

Total Project Cost: \$1,854,000

Est. Opening Date: On-going

PROGRAM DESCRIPTION

1. Safety Improvements -Government Center and Courthouse public safety amplifier installation and enhancement.
2. Ongoing Improvements/Upgrades - Consolettes for Command bus and Microwave replacements for 13 towers.
3. IT Improvements - Animal Control Software equipping the Officer with information concerning previous encounters with animals and their owners.

OPERATING IMPACT SUMMARY

Operating impacts associated with this project will be minimal and include increases for software updates and additional utilities for the range facility.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
IT improvements	0	286,000	500,000	0	0	0	0	0	0	0	0
Ongoing improvements/upgrades	0	540,000	318,000	0	0	0	0	0	0	0	0
Safety improvements	0	110,000	0	0	0	0	0	0	0	0	0
Dive Team Vehicle	0	100,000	0	0	0	0	0	0	0	0	0
Total	\$0	\$1,036,000	\$818,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
GF Allocation Transfer - 3% Guideline	0	1,036,000	818,000	0	0	0	0	0	0	0	0
Total	\$0	\$1,036,000	\$818,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Operating	0	0	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Total	\$0	\$0	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000

Radio Core

Total Project Cost: \$1,965,240

Est. Opening Date: 2024

PROGRAM DESCRIPTION

Stafford County operates an emergency radio system that services the County Sheriff's Office, Fire Department, Emergency Management, Utilities, Parks and Recreation, and the Schools. The same system also services the City of Fredericksburg for their Emergency Services. The radio system is a Motorola P25 system that consists of 14 tower sites and one radio system core. The radio system core acts as the brain of the system and controls the various radio channels and talk groups. The core is housed in a secure and protected location. The system has the ability to lose a tower and still function on the remaining towers. The system weakness is in the single core design. If the core were lost due to an issue in the core or with the building housing the core, the radio system would not function. The installation of a secondary "Hot Standby" core at a second location would give the redundancy needed to ensure operations of the vital emergency radio system. This would allow the system to automatically fall over to the secondary core in the event of a failure of the main core. This redundancy is necessary in emergency services to prevent the loss of emergency communications during major weather events or any type of disaster that would affect the locality. Continuing without a second core is placing a liability on the system that could result in loss of emergency communications.

OPERATING IMPACT SUMMARY

This Radio Core will have operating costs for annual maintenance and upkeep.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Construction / Project	0	0	0	0	0	0	1,909,620	0	0	0	0
Contingency	0	0	0	0	0	0	55,620	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$1,965,240	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Master Lease Proceeds	0	0	0	0	0	0	1,965,240	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$1,965,240	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Operating	0	0	0	0	0	0	23,000	23,000	24,000	25,000
Master Lease	0	0	0	0	0	0	260,724	260,724	260,724	260,724
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$283,724	\$283,724	\$284,724	\$285,724

Stormwater Compliance

Total Project Cost: \$3,000,000

Est. Opening Date: On-Going

PROGRAM DESCRIPTION

The U.S. Environmental Protection Agency (EPA), in coordination with the Virginia Department of Environmental Quality (DEQ), has developed a Total Maximum Daily Load (TMDL) for the Chesapeake Bay, which was finalized by EPA on December 31, 2010. The TMDL establishes a "pollution diet" for the entire Chesapeake Bay watershed to address pollution from nutrients and sediment, and requires localities to implement water quality improvements to meet water quality standards for the Chesapeake Bay. EPA has identified that certain stormwater retrofits as a key component of the TMDL, therefore, the County's MS4 Stormwater Permit will contain certain retrofit mandates on a phased basis over 15 years. Retrofits include stream restoration projects, construction of new stormwater management facilities and upgrades to existing facilities to meet quality standards.

OPERATING IMPACT SUMMARY

Operating costs will begin with completion of the construction of the first facilities. The stormwater retrofits will be located on both public and private properties. It is assumed that the County will be responsible for the operation and maintenance (O&M) of retrofit facilities.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Construction / Project	0	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Total	\$0	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
GF Allocation Transfer - 3% Guideline	0	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Total	\$0	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Operating	20,000	21,000	21,000	22,000	23,000	23,000	24,000	25,000	25,000	26,000
Total	\$20,000	\$21,000	\$21,000	\$22,000	\$23,000	\$23,000	\$24,000	\$25,000	\$25,000	\$26,000

Public Safety Repairs, Replacement and Rehabs

Description of Project	Year	Project Amount
County MS4 Stormwater Permit	FY2019	300,000
Animal Control Software provides information to ACO's about previous activity at specific locations	FY2019	286,000
Radio Consolettes for Command Bus replacement of current ones which are falling apart	FY2019	103,000
13 towers - 2 per year- \$400K per year	FY2019	437,000
Dive team vehicle replacement	FY2019	100,000
Major Repairs and Facility Upgrades to fire and rescue stations	FY2019	330,000
Government Center and Courthouse public safety amplifier installation and enhancement	FY2019	110,000
	FY2019 Total	1,666,000
County MS4 Stormwater Permit	FY2020	300,000
Upgrades to CAD	FY2020	500,000
Firing Range Facilities - building with classroom space	FY2020	318,000
	FY2020 Total	1,118,000
County MS4 Stormwater Permit	FY2021	300,000
	FY2021 Total	300,000
County MS4 Stormwater Permit	FY2022	300,000
	FY2022 Total	300,000
County MS4 Stormwater Permit	FY2023	300,000
	FY2023 Total	300,000
County MS4 Stormwater Permit	FY2024	300,000
	FY2024 Total	300,000
County MS4 Stormwater Permit	FY2025	300,000
	FY2025 Total	300,000
County MS4 Stormwater Permit	FY2026	300,000
	FY2026 Total	300,000
County MS4 Stormwater Permit	FY2027	300,000
	FY2027 Total	300,000
County MS4 Stormwater Permit	FY2028	300,000
unscheduled maintenance and repairs	FY2028	100,000
	FY2028 Total	400,000
	Grand Total	5,284,000

Judicial

Expenditures	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Later Years Funding	Total Project Cost
Courthouse	0	0	4,400,000	29,000,000	3,150,000	5,940,000	0	0	0	0	0	0	42,490,000
Total Courts	\$0	\$0	\$4,400,000	\$29,000,000	\$3,150,000	\$5,940,000	\$0	\$0	\$0	\$0	\$0	\$0	\$42,490,000

Revenues	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bond Proceeds	0	0	0	24,641,889	0	1,940,000	0	0	0	0	0
Proffers	0	0	0	163,631	0	0	0	0	0	0	0
Current Revenue - Ramp Up	0	543,000	2,690,177	3,935,000	3,085,000	3,935,000	0	0	0	0	0
Designated Current Revenue	0	65,000	65,000	65,000	65,000	65,000	0	0	0	0	0
Use of Prior Year Fund Balance Courthouse	0	1,231,303	0	0	0	0	0	0	0	0	0
Total	\$0	\$1,839,303	\$2,755,177	\$28,805,520	\$3,150,000	\$5,940,000	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	379,000	781,000	804,000	828,000	853,000	879,000	905,000
Operating	0	0	0	164,430	474,120	488,160	503,280	517,860	533,520	549,720
Debt Service	0	0	0	1,031,008	2,062,017	2,224,355	2,224,355	2,224,355	2,224,355	2,224,355
Debt Service Master Lease	0	0	0	0	0	0	0	0	0	0
Revenue	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$1,574,438	\$3,317,137	\$3,516,515	\$3,555,635	\$3,595,215	\$3,636,875	\$3,679,075

Courthouse

Total Project Cost: \$42,490,000

Est. Opening Date: 2022

PROGRAM DESCRIPTION

In 2016, a space needs study was conducted to identify the 20 year space needs for the courthouse and a security analysis of the facility with the assistance of the National Center for State Courts to develop a Facilities Master Plan. The new proposed courthouse construction would be phased. Phase one would include construction of a proposed 88,000 square foot four story Circuit Court Bldg with partial basement and be located on the current County Administration campus.

OPERATING IMPACT SUMMARY

Operating costs include one-time start up expenses for new employees and maintenance supplies and equipment for Parks, Recreation and Community Facilities. Ongoing costs include eight deputies for the Sheriff's department and three maintenance mechanic II and one custodian for Parks, Recreation and Community Facilities department.

CHANGE/REASON FOR REVISION

FY2007 - New project in CIP \$20.6M

FY2008 - Updated construction cost \$33.8M

FY2009 - No change

FY2010 - No change.

FY2011 - Consolidate a renovation of current courthouse project and reduced existing project to an addition due to current conditions in the economy. Project to begin in FY13. \$21.7M

FY2012 - Changed scope of project. Added a Courthouse annex project. Due to shortage in affordability project to begin planning and design in FY17. \$22.9M

FY2013 - Due to conditions in the economy and changes in affordability project will begin planning and design work in FY19. No other changes have been made. \$22.2M

FY2014 - Scope of project changed to include parking improvements and significant ADA upgrades. \$26.8M

FY2015 - No change

FY2016 - Project cost update. No change in scope of project. \$29M

FY2017 - No change

FY2018 - Change in scope of project. Project is a new construction for all three courts. New proposed cost is \$71M

FY2019 - Change in scope of project. Project is a new phased construction. New estimated cost is \$42.5M

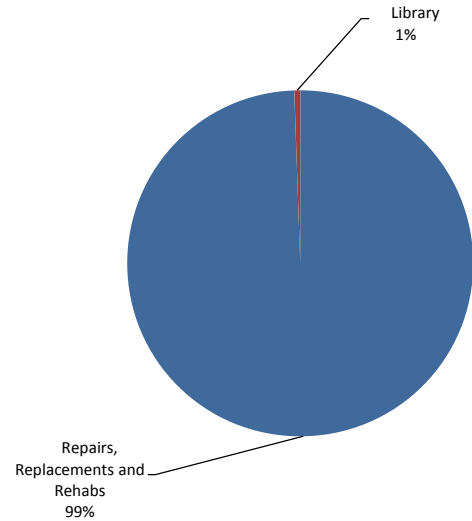
PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	0	0	2,600,000	0	0	0	0	0	0	0	0
Construction / Project	0	0	1,800,000	25,400,000	3,150,000	5,940,000	0	0	0	0	0
Contingency	0	0	0	3,600,000	0	0	0	0	0	0	0
Total	\$0	\$0	\$4,400,000	\$29,000,000	\$3,150,000	\$5,940,000	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bond Proceeds	0	0	0	24,641,889	0	1,940,000	0	0	0	0	0
General Fund Allocation Transfer	0	0	0	0	0	0	0	0	0	0	0
Proffers	0	0	0	163,631	0	0	0	0	0	0	0
Current Revenue - Ramp Up	0	543,000	2,690,177	3,935,000	3,085,000	3,935,000	0	0	0	0	0
Designated Current Revenue	0	65,000	65,000	65,000	65,000	65,000	0	0	0	0	0
Use of Prior Year Fund Balance Courthouse	0	1,231,303	0	0	0	0	0	0	0	0	0
Total	\$0	\$1,839,303	\$2,755,177	\$28,805,520	\$3,150,000	\$5,940,000	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	379,000	781,000	804,000	828,000	853,000	879,000	905,000
Operating	0	0	0	164,430	474,120	488,160	503,280	517,860	533,520	549,720
Debt Service	0	0	0	1,031,008	2,062,017	2,224,355	2,224,355	2,224,355	2,224,355	2,224,355
Total	\$0	\$0	\$0	\$1,574,438	\$3,317,137	\$3,516,515	\$3,555,635	\$3,595,215	\$3,636,875	\$3,679,075

Parks, Recreation and Cultural



Expenditures	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY19-FY28 Funding	Later Years Funding	Total Project Cost
Repairs, Replacements and Rehabs	0	229,000	1,148,000	749,000	884,000	1,447,000	904,000	1,021,000	1,183,000	0	1,589,000	9,154,000	0	9,154,000
Library	0	0	0	0	0	0	0	0	0	0	50,000	50,000	19,813,500	19,863,500
Total Parks, Recreation and Cultural	\$0	\$229,000	\$1,148,000	\$749,000	\$884,000	\$1,447,000	\$904,000	\$1,021,000	\$1,183,000	\$0	\$1,639,000	\$9,204,000	\$19,813,500	\$29,017,500

Revenues	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
GF Allocation Transfer - 3% Guideline	0	229,000	1,148,000	749,000	884,000	1,447,000	904,000	1,021,000	1,183,000	0	1,589,000
Proffers	0	0	0	0	0	0	0	0	0	0	50,000
Total	\$0	\$229,000	\$1,148,000	\$749,000	\$884,000	\$1,447,000	\$904,000	\$1,021,000	\$1,183,000	\$0	\$1,639,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Parks and Recreation Repair, Replacement and Rehab

Total Project Cost: \$9,154,000

Est. Opening Date: On-going

PROGRAM DESCRIPTION

Repair, replace and rehab various County assets.

OPERATING IMPACT SUMMARY

There are no operating costs associated with these projects.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Asphalt/Parking/Roads/Signs	0	0	0	0	214,000	0	0	312,000	624,000	0	496,000
ADA/Security/Master Plan	0	0	133,000	0	203,000	383,000	168,000	288,000	0	0	0
Building Replace/Repairs	0	103,000	0	465,000	225,000	399,000	0	0	177,000	0	0
Site Improvements/Fields/Trails	0	126,000	1,015,000	284,000	242,000	665,000	736,000	421,000	382,000	0	1,093,000
Total	\$0	\$229,000	\$1,148,000	\$749,000	\$884,000	\$1,447,000	\$904,000	\$1,021,000	\$1,183,000	\$0	\$1,589,000

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
GF Allocation Transfer - 3% Guideline	0	229,000	1,148,000	749,000	884,000	1,447,000	904,000	1,021,000	1,183,000	0	1,589,000
Total	\$0	\$229,000	\$1,148,000	\$749,000	\$884,000	\$1,447,000	\$904,000	\$1,021,000	\$1,183,000	\$0	\$1,589,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Library #4

Total Project Cost: \$19,863,500

Est. Opening Date: 2029

PROGRAM DESCRIPTION

The Central Rappahannock Regional Library (CRRL) Board of Trustees is recommending the opening of a new branch library in the County to meet current unmet demands and to accommodate projected new population growth. High demand for books, programming, meeting rooms, computers and other library services at the Porter and England Run libraries will be relieved by a third library facility in the developing residential/commercial Courthouse area. The facility will be needed to keep pace with population growth and the development of core infrastructure by Stafford County to provide comprehensive education and quality of life opportunities for all County residents. Three options for a new facility could include a traditional branch which would be similar to Porter and England Run libraries, a store front facility which could be located at a retail venue, or a partnership with Germanna Community College.

OPERATING IMPACT SUMMARY

No operating costs are associated with the project in this planning period.

CHANGE/REASON FOR REVISION

FY2013 - New to the CIP, project to begin in FY2022

FY2014 - Project moved to the right one year, reduced funding based on affordability

FY2015 - No Change

FY2016 - Project moved to last year of the CIP (2025) - \$1M for planning and design

FY2017 - Project moving forward - based on affordability

FY2018 - Project moved to last year of CIP (2027) based on affordability

FY2019 - Change in funding amount for planning and design. Change in revenue source.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	0	0	0	0	0	0	0	0	0	0	50,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Proffers	0	0	0	0	0	0	0	0	0	0	50,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000

Operating Impacts		FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Parks and Recreation Repair, Replacement and Rehab

Description of Project	Year	Project Amount
Lake Mooney Cabin restoration	FY2019	103,000
Shade structure over three existing playground	FY2019	126,000
	FY2019 Total	229,000
Various parks renovate existing athletic fields	FY2020	219,000
Agility course and exercise equipment - Pratt Park	FY2020	133,000
Replace worn out artificial turf field #1 - Smith Lake	FY2020	398,000
Replace worn out artificial turf field #2 - Smith Lake	FY2020	398,000
	FY2020 Total	1,148,000
Rectangle field lights	FY2021	284,000
Embrey Mill Park conference building	FY2021	465,000
	FY2021 Total	749,000
Rowser ADA restroom for softball field	FY2022	203,000
Lake Mooney phase 3 Picnic Shelter	FY2022	112,000
Replace pavilion	FY2022	130,000
Pave and light Pratt parking lot	FY2022	214,000
Pratt Restroom/Concession Renovation	FY2022	225,000
	FY2022 Total	884,000
Security, improve service to citizens, provide space for long-term staffing needs	FY2023	383,000
Curtis Park restroom at Pool	FY2023	318,000
Brooks - replace skate park	FY2023	347,000
Chichester shop	FY2023	399,000
	FY2023 Total	1,447,000
Additional walks and security measures, Smith lake	FY2024	168,000
Permanent restroom at soccer fields at Willowmere	FY2024	368,000
Replace two sheds with one small building, Gov. Center	FY2024	368,000
	FY2024 Total	904,000
ADA accessibility upgrades at various parks	FY2025	288,000
Resurface parking lots, Willowmere	FY2025	312,000
Install soccer field lights and landscaping - Willowmere	FY2025	421,000
	FY2025 Total	1,021,000

Parks and Recreation Repair, Replacement and Rehab

Description of Project	Year	Project Amount
Logistics/material preservation building	FY2026	177,000
Replace the skate park at Curtis Park	FY2026	624,000
Replace fence at various diamond fields	FY2026	126,000
Pool resurfacing, Curtis Park	FY2026	256,000
	FY2026 Total	1,183,000
Playground, Carl Lewis	FY2028	122,000
Pool resurfacing, Woodlands	FY2028	218,000
Remove baby pool and install splash pad, Curtis Park	FY2028	272,000
Create restroom facilities at shelter #7	FY2028	481,000
Pratt entrance and parking to Butler road	FY2028	496,000
	FY2028 Total	1,589,000
	Grand Total	9,154,000

Educational

Expenditures	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Later Years Funding	Total Project Cost
Schools													
Rebuild Moncure Elementary	35,589,000	1,000,000	0	0	0	0	0	0	0	0	0	0	36,589,000
Purchase/Renovate Fredericksburg Christian School	0	10,652,000	0	0	0	0	0	0	0	0	0	0	10,652,000
Renovate Ferry Farm Elementary	0	857,000	9,945,000	0	0	0	0	0	0	0	0	0	10,802,000
High School #6	0	0	0	0	5,100,000	43,400,000	42,450,000	28,993,000	1,397,000	0	0	0	121,340,000
Elementary School #18	0	0	0	0	0	0	0	1,250,000	19,300,000	28,373,000	1,970,000	0	50,893,000
Rebuild Hartwood Elementary	0	0	0	0	0	0	0	0	1,057,295	0	1,700,000	53,044,000	55,801,295
Bond Funded Repairs, Replacements & Rehabs	0	2,549,500	4,121,000	3,616,000	2,607,000	4,954,000	2,211,000	4,873,000	4,982,000	5,004,000	4,958,000	0	39,875,500
Cash/Grant/Lease Funded Repairs, Replacements and Rehabs	0	8,372,500	5,304,000	6,279,000	7,627,000	5,170,000	5,082,000	5,079,000	5,044,000	5,049,000	4,936,000	0	57,942,500
Total Education	\$35,589,000	\$23,431,000	\$19,370,000	\$9,895,000	\$15,334,000	\$53,524,000	\$49,743,000	\$40,195,000	\$31,780,295	\$38,426,000	\$13,564,000	\$53,044,000	\$383,895,295

Revenues	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bond Proceeds	27,162,000	13,954,753	12,877,185	3,616,000	2,607,000	47,147,676	42,221,006	33,897,111	23,090,081	32,144,781	7,388,814
Prior Year Fund Balance	0	2,370,931	0	0	0	0	0	0	0	0	0
Fleet Services Capital Funding	0	700,000	0	0	0	0	0	0	0	0	0
Nutrition Capital Funding	0	115,000	118,000	121,000	126,000	130,000	0	0	0	0	0
Current Revenue - County	0	0	0	0	6,300,686	0	0	0	0	0	0
Current Revenue - Schools	6,449,199	6,290,316	6,374,815	6,158,000	6,300,314	6,246,324	6,294,513	6,297,889	6,269,456	6,281,219	6,175,186
Proffers	1,977,801	0	0	0	0	0	1,227,481	0	2,420,758	0	0
Total	\$35,589,000	\$23,431,000	\$19,370,000	\$9,895,000	\$15,334,000	\$53,524,000	\$49,743,000	\$40,195,000	\$31,780,295	\$38,426,000	\$13,564,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	283,000	957,000	976,000	1,320,000	2,614,000	2,666,000	2,720,000	2,774,000	2,829,000	3,186,000
Operating	0	242,000	250,000	1,107,000	1,141,000	686,000	707,000	728,000	750,000	1,922,000
Debt Service	150,536	1,318,260	2,395,815	2,698,399	2,916,551	6,861,837	10,394,863	13,231,350	15,163,513	17,853,366
Total	\$433,536	\$2,517,260	\$3,621,815	\$5,125,399	\$6,671,551	\$10,213,837	\$13,821,863	\$16,733,350	\$18,742,513	\$22,961,366

REBUILD MONCURE ELEMENTARY SCHOOL

Links to Board's Strategic Initiatives

School Goals: 1 and 3
County Goals: 1, 3, and 8

Total Project Cost: \$36,589,000

Est. Opening Date: FY2020

PROGRAM DESCRIPTION

Construct a 966-student elementary school for grades Pre-K through 5 to replace the existing Moncure Elementary (950 K-5, 16 Pre-K). The Rebuild Moncure Elementary School Project will include the construction of the school building (\$214/SF), the development of the site, all planning & design requirements, all support furnishing, furniture & equipment and technology infrastructure. Juggins Road Improvements will be administered by Stafford County Government which will enable the County to apply for state Revenue Sharing matching funds. \$1M in Rebuild MES Project Funds are being contributed to the Juggins Road Project. The school will be constructed with classrooms and core facilities to accommodate 986 students and follow the 2015 Stafford County Public Schools Elementary School Education Specification. The school will adhere to the Stafford County Public Schools Facility Design Standards, including pursuing LEED Silver Certification. Site location will be located off Juggins Road. To open the new Moncure Elementary School in September 2019 the following milestones must be achieved: Design must start no later than April 2016 and be completed no later than May 2017. Construction must start September 2017 and be complete by May 2019. Punchlist items and furnishing to occur June through July 2019, and the school opens in September 2019. The existing Moncure ES and site will be turned over to Stafford County per School Board/Board of Supervisors approved MOU.

OPERATING IMPACT SUMMARY

There will be no additional operating or personnel costs as part of this project because the staff will vacate the old building and transition to the new building. Rebuild Moncure ES will be a LEED Silver building, therefore energy consumption will be significantly less per square foot than the old Moncure ES.

CHANGE/REASON FOR REVISION

2018 - Project cost increased by \$1.03M. Additional Proffers added, approved by BOS on 7/5/2017, Resolution R17-195. Current revenue updated to actuals.

2019 - No change

PROJECT COSTS

Expenditures	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	2,524,000	0	0	0	0	0	0	0	0	0	0
Property Acquisition	1,700,000	0	0	0	0	0	0	0	0	0	0
Construction / Project	29,967,000	1,000,000	0	0	0	0	0	0	0	0	0
Hardware/Software	350,000	0	0	0	0	0	0	0	0	0	0
Equipment	786,000	0	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	262,000	0	0	0	0	0	0	0	0	0	0
Total	\$35,589,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bond Proceeds	27,162,000	1,000,000	0	0	0	0	0	0	0	0	0
Current Revenue - Schools	6,449,199	0	0	0	0	0	0	0	0	0	0
Proffers	1,977,801	0	0	0	0	0	0	0	0	0	0
Total	\$35,589,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Debt Service	0	84,000	84,000	84,000	84,000	84,000	84,000	84,000	84,000	84,000
Total	\$0	\$84,000	\$84,000	\$84,000	\$84,000	\$84,000	\$84,000	\$84,000	\$84,000	\$84,000

Purchase/Renovate FCS

Total Project Cost: \$10,652,000

Est. Opening Date: FY2020

Links to Board's Strategic Initiatives

School Goals: 1 and 3
County Goals: 1, 3, and 8

PROGRAM DESCRIPTION

The procurement of Fredericksburg Christian School (FCS) would add approximately 21 acres and 39,000 square feet to SCPS' inventory (21 classrooms, office suite, library, gym with stage, serving kitchen, and music room.) Purchasing FCS allows for the removal of all Early Childhood Special Education (ECSE) from elementary schools, freeing up 20 classrooms and 473 elementary seats for K-5 use, divisionwide. Additionally, FCS enables a North-South Campus concept for the ECSE and Head Start programs, with the northern campus being FCS and the existing Gari Melchers Complex as the southern campus. The asking price for FCS is \$7.8M, however the purchase price has been negotiated to \$7.2M. Staff estimates roughly \$2.9M hard renovation and project management cost would be needed to ready the FCS building for use as the ECSE-Head Start North Campus. A brief description of the modification and construction work needed includes constructing bathrooms for all classrooms, expand the clinic, install security vestibule, install CCTV and fiber, modify the playground with age-appropriate equipment, paint, replace flooring (tile and carpeting), standardize locks, and upgrade of kitchen to production level. If funds are made available in FY19 to purchase FCS and initiate the renovation, the following milestones must be achieved to open FCS in FY20 (Sept. 2019): design must start June 2018 and be completed November 2018, project bids in December 2018 with contract awarded February 2019, renovation starts in April 2019 and is completed in August 2019, and FCS to open in September 2019.

OPERATING IMPACT SUMMARY

The relocation of ECSE and some Head Start programs will allow for a delivery model that increases efficiency and helps mitigate non-ideal conditions associated with a single Head Start program location. The dual-campus concept will be overseen by two assistant principals, one at each site, and an array of support staff will need to be hired to work at the new FCS location. The Assistant Principal overseeing FCS and an Administrative Assistant IV will be hired one year prior to the opening of FCS (FY19), with the rest of the support staff starting when the school opens in FY20. This facility will be subjected to SCPS' standard maintenance and operation costs, to include custodial support, internal and external preventative maintenance, utilities, etc.

CHANGE/REASON FOR REVISION

2019 - New project in CIP

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	0	281,500	0	0	0	0	0	0	0	0	0
Property Acquisition	0	7,200,000	0	0	0	0	0	0	0	0	0
Construction / Project	0	2,945,500	0	0	0	0	0	0	0	0	0
Contingency	0	225,000	0	0	0	0	0	0	0	0	0
Total	\$0	\$10,652,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bond Proceeds	0	10,405,253	0	0	0	0	0	0	0	0	0
Prior Year Fund Balance	0	246,747	0	0	0	0	0	0	0	0	0
Total	\$0	\$10,652,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	283,000	961,000	980,000	1,000,000	1,020,000	1,040,000	1,061,000	1,082,000	1,104,000	1,126,000
Operating	0	242,000	250,000	257,000	265,000	273,000	281,000	289,000	298,000	307,000
Debt Service	0	871,000	871,000	871,000	871,000	871,000	871,000	871,000	871,000	871,000
Total	\$283,000	\$2,074,000	\$2,101,000	\$2,128,000	\$2,156,000	\$2,184,000	\$2,213,000	\$2,242,000	\$2,273,000	\$2,304,000

Renovate Ferry Farm ES

Total Project Cost: \$10,802,000

Est. Opening Date: FY2021

[Links to Board's Strategic Initiatives](#)

School Goals: 1 and 3
County Goals: 1, 3, and 8

PROGRAM DESCRIPTION

A 2007 HLA Study recommended a rebuild of FFES due to the cost of renovation exceeding 70% of the replacement cost. A 2008 facility assessment evaluated the condition of the school and provided recommendations on the levels and timing of investments to critical building systems. This facility assessment was updated in 2017 and shows a significant level of investment needed by FY22, totaling roughly 90% of the cost to replace the existing school. However, based on affordability constraints, the school division is proposing to demolish the original 1957 section of the building and construct a new building with approximately 9,000 additional square feet, for a total of roughly 23k sqft. The new section of the building will benefit all students at the school by providing a larger art room, music room, and library to meet current elementary school education specifications. It will also allow for an expanded clinic and office spaces, and the building will be constructed on-grade to improve building access for students, staff, and the community. The new section of the school will not result in any loss of classrooms, however, if budget and design allow, additional classrooms will be added. Working with the VA Department of Education, cost estimating consultants, and historic data, \$275 per square foot was used to estimate the cost of this project. Estimated demolition, modular swing space, and site work costs are included in the project cost. The following milestones must be achieved for the new building to open September 2020: design starts in July 2018 and is completed in February 2019, contract is awarded April 2019, June 2019 construction starts and ends July 2020, and building opens September 2020.

OPERATING IMPACT SUMMARY

This project will result in a new portion of building that is more energy efficient than the old section that is planned to be demolished. Swing space in the form of modular buildings will be utilized to house the affected section of the school while construction is occurring. The additional square footage will be addressing programmatic deficiencies. Therefore, no additional personnel or operating costs are associated with the Renovate Ferry Farm Elementary School project.

CHANGE/REASON FOR REVISION

2007 - New renovation project in CIP, open FY12; \$11.3M
2008 - Change in scope, additional square footage, change in escalation. Project moved from FY12 to FY13; \$21.3M
2009 - Project moved from FY13 to FY14; \$22.9M
2010 - Decrease in project scope, project moved from FY14 to FY13; \$7.2M
2011 - Increase in scope, project moved from FY13 to FY14; \$8.7M
2012 - Increase in scope, project changed from renovation to rebuild. Project moved from FY14 to FY19; \$19M
2013 - Increased square footage, escalation change, project moved from FY19 to FY21; \$25M
2014 - No change
2015 - Change in escalation; \$25.5M
2016 - No change
2017 - Decreased capacity, new ES educational specifications. Project moved from FY21 to FY22; \$29.9M
2018 - No change
2019 - Change in project scope to renovation. Project moved from FY22 to FY21; \$10.802M

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	0	857,000	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	9,517,000	0	0	0	0	0	0	0	0
Contingency	0	0	428,000	0	0	0	0	0	0	0	0
Total	\$0	\$857,000	\$9,945,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bond Proceeds	0	0	8,756,185	0	0	0	0	0	0	0	0
Prior Year Fund Balance	0	857,000	0	0	0	0	0	0	0	0	0
Current Revenue - Schools	0	0	1,188,815	0	0	0	0	0	0	0	0
Total	\$0	\$857,000	\$9,945,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Debt Service	0	0	733,000	733,000	733,000	733,000	733,000	733,000	733,000	733,000
Total	\$0	\$0	\$733,000	\$733,000	\$733,000	\$733,000	\$733,000	\$733,000	\$733,000	\$733,000

High School #6

Total Project Cost: \$121,340,000

Est. Opening Date: FY2026

Links to Board's Strategic Initiatives

School Goals: 1 and 3
County Goals: 1, 3, and 8

PROGRAM DESCRIPTION

The Division's methodology for determining the need for additional high school capacity is when the projected high school enrollment exceeds 100% of capacity. There are five high schools within Stafford County, for a total capacity of 10,650. The 2018-2027 student enrollment projections indicate a need for a new high school to be in September 2024 (FY25), when the projected enrollment is 10,782. High School #6 will be designed to house 2,150 students and serve grades 9 through 12. The current site is within the Westlake subdivision, located south of Route 17 and west of Poplar Road. The site was proffered to the county by the developer and consists of 65 +/- acres. HS #6 will be designed and constructed utilizing the most current high school education specifications and in accordance with the Stafford County Public Schools Facility Design Standards. This project includes the construction of the school building, all outbuildings, development of the site, any off-site road improvements, all on-campus road improvements, parking lots, all athletic fields including bleachers, stadium, and track, storm water management requirements, and the installation of utilities. Included in the project cost are planning and design requirements, furniture, fixtures, equipment, technology infrastructure, and project management. SCPS high school education specifications will be updated prior to design beginning and staff expects a total square footage requirement at, or near, 300,000. Working with VA Department of Education, cost estimating consultants, and historic data, Division staff estimate a building cost of \$240/sqft. Site work is estimated at \$300,000 per acre, with the preface that site costs are volatile and may vary once design begins. However, at the Board of Supervisors meeting held on June 19, 2018, the BOS voted to reduce the total project cost by \$20M, which is reflected on this report. HS #6 is being planned as a LEED Silver facility that is designed to achieve an Energy Star rating of 80 or better and an Energy Utilization Index rating of less than 24. Rainwater will be collected and used for irrigation and/or grey water. Additionally, photovoltaic panels will be used to not only supplement energy consumption, but also as a teaching tool for students. For HS #6 to open in September 2025, it is assumed the developer will have utilities and road access completed prior to construction start. The following milestones must be achieved: design begins May 2021 and is complete Nov. 2022, project bids in Jan. 2023 and is awarded in Feb. 2023, construction will begin Apr. 2023 and be complete Apr. 2025 (2-year construction period), punch list, furnishing, and commissioning occur May through July 2025, and the school opens in Sept. 2025.

OPERATING IMPACT SUMMARY

The principal, librarian, admin assistant V, and an admin assistant IV are funded and hired one year prior to HS #6 opening. When the school opens (FY26), there will be a total of 79 positions, excluding grade-level teachers, funded to support the new facility. The instructional startup costs one year prior to HS #6 opening include the purchasing of textbooks, library books, and other instructional startup requirements. After the first year of the school being open, expect a noteworthy drop in operational funds to be observed as the result of all one-time startup items being purchased. HS #6 will be a LEED Silver, energy efficient building with approximately 300,000 sqft. The estimated utilities are included in the operating costs.

CHANGE/REASON FOR REVISION

2016 - New project in CIP, open FY26; \$106.3M

2017 - Project moved from FY26 to FY28, updated construction cost; \$120.3M

2018 - No change

2019 - Project moved from FY28 to FY26; construction cost lowered at request of BOS; \$121.3M

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	0	0	0	0	5,100,000	4,350,000	1,100,000	579,000	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	37,000,000	38,250,000	28,000,000	1,397,000	0	0
Contingency	0	0	0	0	0	2,050,000	3,100,000	414,000	0	0	0
Total	\$0	\$0	\$0	\$0	\$5,100,000	\$43,400,000	\$42,450,000	\$28,993,000	\$1,397,000	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bond Proceeds	0	0	0	0	0	42,193,676	40,010,006	28,993,000	1,397,000	0	0
Current Revenue - County	0	0	0	0	3,899,686	0	0	0	0	0	0
Current Revenue - Schools	0	0	0	0	1,200,314	1,206,324	1,212,513	0	0	0	0
Proffers	0	0	0	0	0	0	1,227,481	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$5,100,000	\$43,400,000	\$42,450,000	\$28,993,000	\$1,397,000	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	284,000	3,666,000	3,740,000	3,815,000
Operating	0	0	0	0	0	0	1,150,000	1,769,000	1,204,000	1,240,000
Debt Service	0	0	0	0	0	3,531,000	6,879,000	9,305,000	9,422,000	9,422,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$8,313,000	\$14,740,000	\$14,366,000	\$14,477,000

Elementary School #18

Links to Board's Strategic Initiatives

School Goals: 1 and 3
County Goals: 1, 3, and 8

Total Project Cost: \$50,893,000

Est. Opening Date: FY2028

PROGRAM DESCRIPTION

The Division's methodology for determining the need for additional elementary capacity is when the projected elementary enrollment exceeds 100% of capacity in an elementary school region. The current capacity in the Central Region, which includes 8 elementary schools, is 6,544 and increases to 6,685 when Rebuild Moncure ES opens in September 2019. The 2018-2027 student enrollment projections show the need for a new elementary school to open in the Central Region in September 2022 (FY23). The capacity of ES #18 will be planned as 966 and serve grades pre-k through 5. Currently, the location of this school is in the center part of the county, within the Embrey Mill subdivision, where relief to multiple elementary schools can be obtained via redistricting. ES #18 will be designed and constructed using the most current elementary school education specifications and in accordance with the Stafford County Public Schools Facility Design Standards. This project includes the construction of the school building, all outbuildings, development of the entire 20-acre site, any off-site road improvements, all on-campus road improvements, parking lots, athletic fields, storm water management requirements, and the installation of utilities. Included in the project cost are planning and design requirements, furniture, fixtures, equipment, technology infrastructure, and project management costs. Current SCPS elementary school education specifications identify a 107,500 sqft requirement, similar to Rebuild Moncure ES. Working with VA Department of Education, cost estimating consultants, and historic data, Division staff estimate a minimum building cost of \$220/sqft. Site work is estimated at \$4.1M, with the preface that site costs are volatile and may vary once design begins. ES #18 is being planned as a LEED Silver rated facility that is designed to achieve an Energy Star rating of 80 or better and an Energy Utilization Index (EUI) rating of less than 24. Collection and use of rainwater for irrigation and/or grey water will also be implemented. Additionally, photovoltaic panels will be used to not only supplement energy consumption, but also as a teaching tool for students. For ES #18 to open in September 2027, the following milestones must be achieved: design begins Sept. 2024 and complete Oct. 2025 (12-month design period), bid project Nov./Dec. 2025 and award contract in Feb. 2026, construction starts in Mar. 2026 and ends May 2027 (15 months), punch list items, furnishing, and commissioning to occur Jun. through Aug. 2027, and the school opens in Sept. 2027.

OPERATING IMPACT SUMMARY

The principal, librarian, admin assistant IV, and an admin assistant III are funded and hired one year prior to ES #18 opening. When the school opens (FY28), there will be a total of 25 positions, excluding grade-level teachers, funded to support the building. The instructional startup costs one year before ES #18 opens include the purchasing of textbooks, library books, and other instructional startup requirements. After the first year of the school being open, a noteworthy drop in operational funds occurs as the result of all the one-time startup items being paid for. ES #18 will be a LEED Silver, energy efficient building with approximately 107,500 sqft. The estimated utilities are included in the operation costs.

CHANGE/REASON FOR REVISION

2013 - New project in CIP, included Head Start, open FY22; \$36.9M

2014 - Project moved from FY22 to FY23; \$37.9M

2015 - Change in scope, finalized site location; \$39.8M

2016 - Change in scope, Head Start removed. Project moved from FY23 to FY28; \$32.3M

2017 - Change in scope, new elementary educational specifications; \$38M

2018 - No change

2019 - Project cost updated. Cost per sqft and escalation rate adjusted; \$50.893M

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	0	0	0	0	0	0	0	1,250,000	2,300,000	323,000	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	0	0	16,000,000	26,300,000	1,621,000
Contingency	0	0	0	0	0	0	0	0	1,000,000	1,750,000	349,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,250,000	\$19,300,000	\$28,373,000	\$1,970,000

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bond Proceeds	0	0	0	0	0	0	0	31,111	15,653,786	27,140,781	1,970,000
Current Revenue - Schools	0	0	0	0	0	0	0	1,218,889	1,225,456	1,232,219	0
Proffers	0	0	0	0	0	0	0	0	2,420,758	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,250,000	\$19,300,000	\$28,373,000	\$1,970,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	358,000	1,764,000
Operating	0	0	0	0	0	0	0	0	850,000	940,000
Debt Service	0	0	0	0	0	0	0	3,000	1,313,000	3,584,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000	\$2,521,000	\$6,288,000

Rebuild Hartwood Elementary School

Links to Board's Strategic Initiatives

School Goals: 1 and 3
County Goals: 1, 3, and 8

Total Project Cost: \$55,801,295

Est. Opening Date: FY2031

PROGRAM DESCRIPTION

Hartwood ES was originally constructed in 1963 and received three major additions (1966, 1988 and 1993) for a total of 61,068 sf. This is the only school in the county that is not supported by County water and sewer, so the school operates two wells and a package waste water treatment plant. SCPS initiated a facility assessment in 2008 to evaluate the physical condition of the school and site and provide recommendations on the levels and timing of investments to major building systems. As part of the 2015 Moseley Study, the report compared the 2009 SCPS elementary education specification to the existing school space. The study found an 11,000 sqft program deficiency. Comparing that program deficiency to the 2015 SCPS elementary education specification shows a 29,500 sqft deficiency. The 2008 assessment was updated in 2017 and shows a significant level of investment (\$17.2M in today's cost or \$29.4M in FY27) needed by FY27. This, coupled with the need to address educational program deficiencies and provide county water and sewer to the school site, resulted in the proposed rebuild project. 2018-2027 Student Enrollment Projections show additional capacity will be needed in the southwest part of the county servicing Hartwood and Rocky Run Elementary Schools in the immediate to near future. The Division currently has not secured a site for the Rebuild Hartwood ES; however, the site will be 20 acres +/-, located in the Urban Service Area, and be in the current Hartwood ES attendance zone. The Rebuild Hartwood ES project is planned for a capacity of 966 students and serve grades pre-k through 5. This will add approximately 301 additional elementary student seats and provide two pre-k designed classrooms. Rebuild Hartwood ES will be designed and constructed using the most current elementary school education specifications (similar to Rebuild MES and site adapted) and the SCPS Facility Design Standards, to will include the construction of the school building, all outbuildings, the development of the entire site, any off-site road improvements, on-campus roads and parking lots, athletic fields, and storm water management requirements. This project will also include all planning and design requirements, furniture, fixtures, equipment, technology infrastructure, and project management requirements. The programming sf of the proposed Rebuild Hartwood ES is identified at 108,500 sf. Working with VDOE, our consultants, and historic data, staff estimate a minimum \$220 per square foot building cost in today's dollars. Site work is estimated at \$5.5M for site, storm water management, and parking lots.

OPERATING IMPACT SUMMARY

Rebuild HES will be a LEED Silver, energy efficient building with 108,500 sf. This new school's energy consumption will be significantly less per square foot than the current facility. This project will address significant building and programmatic space deficiencies that were identified in a facility assessment study, bringing the latest SCPS school design to Hartwood ES. Capacity will be increased in the southwest part of the county where classroom overcrowding is projected. While school teachers and staff will migrate to the newly built Hartwood ES, there will be an additional 4 support positions needed because Rebuild Hartwood ES will be larger and presumably serve a greater number of students. There will be no additional operating costs outside of the Division's budget associated with this project.

CHANGE/REASON FOR REVISION

2007 - New renovation project in CIP, open FY12; \$9.4M

2008 - Project removed from CIP

2009 - No change

2010 - No change

2011 - No change

2012 - No change

2013 - No change

2014 - Renovation project added to CIP, opening FY24; \$12.5M

2015 - Decrease in escalation rate, project moved from FY24 to FY26; \$12.1M

2016 - Increased cost per square foot, decreased escalation rate, project moved from FY26 to FY27; \$14.4M

2017 - Increase in scope, new ES educational specifications; \$21.8M

2018 - No change

2019 - Project changed from renovation to rebuild, moved from FY27 to FY31; \$55.801M

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	0	0	0	0	0	0	0	0	0	0	1,700,000
Property Acquisition	0	0	0	0	0	0	0	0	1,057,295	0	0
Construction / Project	0	0	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,057,295	\$0	\$1,700,000

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bond Proceeds	0	0	0	0	0	0	0	0	1,057,295	0	460,814
Current Revenue - Schools	0	0	0	0	0	0	0	0	0	0	1,239,186
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,057,295	\$0	\$1,700,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Debt Service	0	0	0	0	0	0	0	0	88,000	88,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$88,000	\$88,000

CAPITAL MAINTENANCE - INFRASTRUCTURE

Total Project Cost: \$97,818,000

Est. Opening Date: 2019-2028

PROGRAM DESCRIPTION

Improvements and upgrades to various schools, facilities, equipment and grounds to correct deficiencies in safety, security, maintenance and repair.

OPERATING IMPACT SUMMARY

These improvement and upgrade projects are needed to continue to supply the students in Stafford County with a learning environment that is conducive to learning, setting the students up for success.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
School Site Improvements	0	4,017,500	7,750,000	4,540,000	4,178,000	3,205,000	5,118,000	2,271,000	2,121,000	6,822,000	2,589,000
Pavement	0	2,650,000	1,237,000	372,000	1,695,000	170,000	929,000	1,434,000	0	1,838,000	1,696,000
Environmental Upgrades	0	3,430,500	438,000	3,528,000	1,585,000	2,674,000	840,000	3,465,000	5,443,000	1,393,000	2,738,000
Roof Replace/Repair	0	824,000	0	1,455,000	2,776,000	4,075,000	406,000	2,782,000	2,462,000	0	2,871,000
Total	\$0	\$10,922,000	\$9,425,000	\$9,895,000	\$10,234,000	\$10,124,000	\$7,293,000	\$9,952,000	\$10,026,000	\$10,053,000	\$9,894,000

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bond Proceeds	0	2,549,500	4,121,000	3,616,000	2,607,000	4,954,000	2,211,000	4,873,000	4,982,000	5,004,000	4,958,000
Prior Year Fund Balance	0	1,267,184	0	0	0	0	0	0	0	0	0
Fleet Services Capital Funding	0	700,000	0	0	0	0	0	0	0	0	0
Nutrition Capital Funding	0	115,000	118,000	121,000	126,000	130,000	0	0	0	0	0
Current Revenue - County	0	0	0	0	2,401,000	0	0	0	0	0	0
Current Revenue - Schools	0	6,290,316	5,186,000	6,158,000	5,100,000	5,040,000	5,082,000	5,079,000	5,044,000	5,049,000	4,936,000
Total	\$0	\$10,922,000	\$9,425,000	\$9,895,000	\$10,234,000	\$10,124,000	\$7,293,000	\$9,952,000	\$10,026,000	\$10,053,000	\$9,894,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	213,000	558,000	861,000	1,079,000	1,494,000	1,679,000	2,087,000	2,504,000	2,923,000
Revenue/Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$213,000	\$558,000	\$861,000	\$1,079,000	\$1,494,000	\$1,679,000	\$2,087,000	\$2,504,000	\$2,923,000



Infrastructure Project List

Stafford County Public Schools

CIP FY2019-28

Project Lead	Department	Project Type	Project Description	Funding Source	Year	Project Amount
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems (AHU-VAV-Chiller-BAS-Kitchen A/C) - RES	Bond Proceeds	FY2019	1,799,500
Schools	Schools	Pavement	Repair Track - MVHS	Bond Proceeds	FY2019	750,000
Schools	Schools	School Site Improvements	Repair Interior Finishes - AGWMS/GES - Phase II	Prior Year Fund Balance / Current Revenue	FY2019	2,450,500
Schools	Schools	Environmental Upgrades	Repair Chillers - BPHS, CFHS & MVHS	Current Revenue - Schools	FY2019	343,000
Schools	Schools	Environmental Upgrades	Repair Elevator - SMS	Current Revenue - Schools	FY2019	187,000
Schools	Schools	Environmental Upgrades	Repair Gym HVAC - GMC	Current Revenue - Schools	FY2019	315,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems - AYBAC (PDC)	Current Revenue - Schools	FY2019	162,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems - FES Addition	Current Revenue - Schools	FY2019	78,000
Schools	Schools	Environmental Upgrades	Repair Network Operation Center (NOC) Electric Breakers - CFHS	Current Revenue - Schools	FY2019	17,000
Schools	Schools	Environmental Upgrades	Replace Chiller - PRES	Current Revenue - Schools	FY2019	510,000
Schools	Schools	Environmental Upgrades	Replace HVAC - Support Services	Current Revenue - Schools	FY2019	19,000
Schools	Schools	Pavement	Repair Pavement - GMC	Current Revenue - Schools	FY2019	850,000
Schools	Schools	Pavement	Repair Tennis Court - NSHS	Current Revenue - Schools	FY2019	350,000
Schools	Schools	Roofs	Repair Roof (SS) - HES	Current Revenue - Schools	FY2019	289,000
Schools	Schools	Roofs	Repair Roof (SS) - WES	Current Revenue - Schools	FY2019	236,000
Schools	Schools	Roofs	Repair Roofs - KWBES & MBES	Current Revenue - Schools	FY2019	299,000
Schools	Schools	School Site Improvements	Convert ES Computer Rooms - MBES, CES, HOES, RRES	Current Revenue - Schools	FY2019	112,000
Schools	Schools	School Site Improvements	Repair Erosion & Drainage (Phase 4, 7 - 9) - DSMS	Current Revenue - Schools	FY2019	325,000
Schools	Schools	School Site Improvements	Repair Phone, Media Retrieval & PA Systems - HOES	Current Revenue - Schools	FY2019	195,000
Schools	Schools	School Site Improvements	Replace Network Cable Plant - AGWMS/GES	Current Revenue - Schools	FY2019	273,000
Schools	Schools	School Site Improvements	Replace Network Cable Plant - SMS	Current Revenue - Schools	FY2019	185,000
Schools	Schools	School Site Improvements	Upgrade Locker Commons - NSHS	Current Revenue - Schools	FY2019	220,000
Schools	Schools	School Site Improvements	Upgrade School Flashing Signs (Remote Access)	Current Revenue - Schools	FY2019	142,000
Schools	Schools	Pavement	Construct Northern Fueling Station - Coal Landing Road	Fleet Services Capital Funding	FY2019	700,000
Schools	Schools	School Site Improvements	Replace Walk-In Freezer & Refrigerators - GMC	Nutrition Capital Funding	FY2019	115,000
Schools	Schools	Environmental Upgrades	Energy Performance Contract (Building Envelope, Lighting & Irrigation) - All Schools	School Master Lease Proceeds	FY2019	6,000,000
Schools	Schools	School Site Improvements	Repair Exterior Envelope - NSHS	Bond Proceeds	FY2020	2,730,000
Schools	Schools	School Site Improvements	Repair Interior Finishes - HHPMS Phase I (Bond)	Bond Proceeds	FY2020	1,391,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems (Chiller) - SES Addition	Current Revenue - Schools	FY2020	103,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems (Replace Building Automation Controls) - Fifteen (15) Sites	Current Revenue - Schools	FY2020	335,000
Schools	Schools	Pavement	Construct Salt Storage - Support Services Complex	Current Revenue - Schools	FY2020	258,000
Schools	Schools	Pavement	Repair Pavement - PRES	Current Revenue - Schools	FY2020	824,000
Schools	Schools	Pavement	Repair Tracks - AGWMS & RES	Current Revenue - Schools	FY2020	155,000
Schools	Schools	School Site Improvements	Install Additional Aiphone Console (1 per Facility)	Current Revenue - Schools	FY2020	66,000
Schools	Schools	School Site Improvements	Install Additional Security Lighting - ES Playgrounds (17 ES)	Current Revenue - Schools	FY2020	97,000
Schools	Schools	School Site Improvements	Install Messaging Marquee - RTMS (Manual)	Current Revenue - Schools	FY2020	67,000
Schools	Schools	School Site Improvements	Install Messaging Marquees - AGWMS/GES/RES (Manual)	Current Revenue - Schools	FY2020	67,000
Schools	Schools	School Site Improvements	Painting - SHS	Current Revenue - Schools	FY2020	101,000
Schools	Schools	School Site Improvements	Repair Bathroom Floor - ABES	Current Revenue - Schools	FY2020	156,000
Schools	Schools	School Site Improvements	Repair Exterior (Paint) - GMC & SCHMS	Current Revenue - Schools	FY2020	227,000
Schools	Schools	School Site Improvements	Repair Interior Finishes - HHPMS Phase I (Current Revenue)	Current Revenue - Schools	FY2020	103,000
Schools	Schools	School Site Improvements	Repair Library - RES	Current Revenue - Schools	FY2020	52,000
Schools	Schools	School Site Improvements	Repair Phone, Media Retrieval & PA Systems - SMS	Current Revenue - Schools	FY2020	206,000
Schools	Schools	School Site Improvements	Repair Playground & Play Area - WCES	Current Revenue - Schools	FY2020	165,000
Schools	Schools	School Site Improvements	Replace & Add Storage Buildings - CFHS, HOES, RES & RRES	Current Revenue - Schools	FY2020	347,000
Schools	Schools	School Site Improvements	Replace Auditorium Audio/Lighting - MVHS	Current Revenue - Schools	FY2020	180,000
Schools	Schools	School Site Improvements	Replace Fire Alarm System - RTMS	Current Revenue - Schools	FY2020	258,000
Schools	Schools	School Site Improvements	Replace Generator - HOES	Current Revenue - Schools	FY2020	65,000
Schools	Schools	School Site Improvements	Replace Generator - Support Services Complex	Current Revenue - Schools	FY2020	155,000
Schools	Schools	School Site Improvements	Replace Gym/Team Lockers - BPHS	Current Revenue - Schools	FY2020	117,000
Schools	Schools	School Site Improvements	Replace Hallway Lockers - SMS	Current Revenue - Schools	FY2020	119,000
Schools	Schools	School Site Improvements	Upgrade Black Boards to White Boards	Current Revenue - Schools	FY2020	103,000
Schools	Schools	School Site Improvements	Upgrade CTE Lab - CFHS	Current Revenue - Schools	FY2020	36,000
Schools	Schools	School Site Improvements	Upgrade Entrances - NSHS	Current Revenue - Schools	FY2020	824,000
Schools	Schools	School Site Improvements	Replace Walk-In Freezer & Refrigerators - WES	Nutrition Capital Funding	FY2020	118,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems - NSHS Phase I	Bond Proceeds	FY2021	3,183,000
Schools	Schools	School Site Improvements	Repair Interior Finishes - HHPMS Phase II (Bond)	Bond Proceeds	FY2021	433,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems - (RTAA Chiller-MDF HVAC) - CFHS	Current Revenue - Schools	FY2021	345,000
Schools	Schools	Roofs	Repair Roof - BPHS (Standing seam & Outbuildings; Ext painting)	Current Revenue - Schools	FY2021	743,000



Infrastructure Project List
Stafford County Public Schools
CIP FY2019-28

Project Lead	Department	Project Type	Project Description	Funding Source	Year	Project Amount
Schools	Schools	Pavement	Repair Tennis Courts - CFHS	Current Revenue - Schools	FY2021	372,000
Schools	Schools	Roofs	Replace Roof - GVES Addition (SS) & Library Overhang	Current Revenue - Schools	FY2021	372,000
Schools	Schools	Roofs	Replace Roof - SES (Area E & Outbuildings SS)	Current Revenue - Schools	FY2021	340,000
Schools	Schools	School Site Improvements	Construct Stairs at Football Stadium - RTMS	Current Revenue - Schools	FY2021	142,000
Schools	Schools	School Site Improvements	Construct Storage Buildings - ABES, AYBAC, GVES & WCES	Current Revenue - Schools	FY2021	266,000
Schools	Schools	School Site Improvements	Renovate Aimee Building - SHS	Current Revenue - Schools	FY2021	266,000
Schools	Schools	School Site Improvements	Repair Field Drainage - CFHS	Current Revenue - Schools	FY2021	212,000
Schools	Schools	School Site Improvements	Repair Interior Finishes - HHPMS Phase II (Current Revenue)	Current Revenue - Schools	FY2021	629,000
Schools	Schools	School Site Improvements	Repair Library - KWBES	Current Revenue - Schools	FY2021	54,000
Schools	Schools	School Site Improvements	Repair Long Jump & South D Ring - SHS	Current Revenue - Schools	FY2021	285,000
Schools	Schools	School Site Improvements	Repair Phone, Media Retrieval & PA Systems - NSHS	Current Revenue - Schools	FY2021	318,000
Schools	Schools	School Site Improvements	Repair Playground & Play Area - RES	Current Revenue - Schools	FY2021	170,000
Schools	Schools	School Site Improvements	Replace Fiber Optic Cabling (Interior) - BPHS, TBGMS, NSHS & RTMS	Current Revenue - Schools	FY2021	372,000
Schools	Schools	School Site Improvements	Replace Fire Alarm System - MBES	Current Revenue - Schools	FY2021	318,000
Schools	Schools	School Site Improvements	Replace Generator - PRES	Current Revenue - Schools	FY2021	106,000
Schools	Schools	School Site Improvements	Replace Generator - RES	Current Revenue - Schools	FY2021	106,000
Schools	Schools	School Site Improvements	Replace Phone, Media Retrieval & PA Systems - PRES	Current Revenue - Schools	FY2021	212,000
Schools	Schools	School Site Improvements	Upgrade CTE Tech Ed Lab - HHPMS	Current Revenue - Schools	FY2021	212,000
Schools	Schools	School Site Improvements	Upgrade Network (IT) Plant - ABES, KWBES, MBES, CES, HES & RRES (ES IT Standard Specs)	Current Revenue - Schools	FY2021	318,000
Schools	Schools	School Site Improvements	Replace Walk-In Freezer & Refrigerators - RES	Nutrition Capital Funding	FY2021	121,000
Schools	Schools	Roofs	Replace Roof - CFHS (Area A, B & D-All outbuilding SS)	Bond Proceeds	FY2022	2,404,000
Schools	Schools	School Site Improvements	Repair Interior Finishes - RES (Bond)	Bond Proceeds	FY2022	203,000
Schools	Schools	School Site Improvements	Repair Interior Finishes - RES (Current Revenue)	Current Revenue - County	FY2022	1,090,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems - NSHS Phase II	Current Revenue - County	FY2022	1,311,000
Schools	Schools	Environmental Upgrades	Replace CTE Dust Collection Systems - SMS	Current Revenue - Schools	FY2022	274,000
Schools	Schools	Pavement	Construct Salt Storage - Coal Landing	Current Revenue - Schools	FY2022	328,000
Schools	Schools	Pavement	Repair Pavement - RES	Current Revenue - Schools	FY2022	656,000
Schools	Schools	Pavement	Repair Pavement - SMS	Current Revenue - Schools	FY2022	546,000
Schools	Schools	Pavement	Repair Tracks - RRES & WCES	Current Revenue - Schools	FY2022	165,000
Schools	Schools	Roofs	Replace Roof - RES (Area A SS)	Current Revenue - Schools	FY2022	372,000
Schools	Schools	School Site Improvements	Construct Canopy - Support Services Complex	Current Revenue - Schools	FY2022	137,000
Schools	Schools	School Site Improvements	Install Sound System Gym/Activity Room - GVES & HES	Current Revenue - Schools	FY2022	109,000
Schools	Schools	School Site Improvements	Repair Athletic Fields - TBGMS, HHPMS, RTMS & SMS	Current Revenue - Schools	FY2022	218,000
Schools	Schools	School Site Improvements	Repair Exterior Envelope (Windows) and Board Room Overhang - AYBAC	Current Revenue - Schools	FY2022	241,000
Schools	Schools	School Site Improvements	Repair Library - RRES	Current Revenue - Schools	FY2022	56,000
Schools	Schools	School Site Improvements	Repair Playground & Play Area - PRES	Current Revenue - Schools	FY2022	87,000
Schools	Schools	School Site Improvements	Replace Fire Alarm System - WCES	Current Revenue - Schools	FY2022	328,000
Schools	Schools	School Site Improvements	Replace Generator - DMS	Current Revenue - Schools	FY2022	437,000
Schools	Schools	School Site Improvements	Replace Generator - WES	Current Revenue - Schools	FY2022	436,000
Schools	Schools	School Site Improvements	Replace Phone, Media Retrieval & PA Systems - CFHS	Current Revenue - Schools	FY2022	274,000
Schools	Schools	School Site Improvements	Replace Phone, Media Retrieval & PA Systems - HES	Current Revenue - Schools	FY2022	218,000
Schools	Schools	School Site Improvements	Upgrade CTE Labs - FACS - DMS	Current Revenue - Schools	FY2022	218,000
Schools	Schools	School Site Improvements	Replace Walk-In Freezer & Refrigerators - PRES	Nutrition Capital Funding	FY2022	126,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems (VAV-Chiller-AHU-BAS-Kitchen A/C) - PRES	Bond Proceeds	FY2023	2,252,000
Schools	Schools	Roofs	Repair Roof - AYBAC	Bond Proceeds	FY2023	1,126,000
Schools	Schools	School Site Improvements	Repair Interior Finishes - NSHS Phase I	Bond Proceeds	FY2023	1,576,000
Schools	Schools	Environmental Upgrades	Install Kitchen A/C - WES	Current Revenue - Schools	FY2023	422,000
Schools	Schools	Pavement	Repair Tracks - PRES	Current Revenue - Schools	FY2023	170,000
Schools	Schools	Roofs	Replace Roof - FES (SS)	Current Revenue - Schools	FY2023	361,000
Schools	Schools	Roofs	Replace Roof - RTMS (SS-All areas)	Current Revenue - Schools	FY2023	2,588,000
Schools	Schools	School Site Improvements	Repair Library - AGWMS	Current Revenue - Schools	FY2023	58,000
Schools	Schools	School Site Improvements	Repair Playground & Play Area - GES	Current Revenue - Schools	FY2023	90,000
Schools	Schools	School Site Improvements	Replace Generator - SMS	Current Revenue - Schools	FY2023	450,000
Schools	Schools	School Site Improvements	Replace Phone, Media Retrieval & PA Systems - RRES	Current Revenue - Schools	FY2023	225,000
Schools	Schools	School Site Improvements	Upgrade CTE Labs - FACS & Tech Ed Lab - NSHS	Current Revenue - Schools	FY2023	676,000
Schools	Schools	School Site Improvements	Replace Walk-In Freezer & Refrigerators - FFES	Nutrition Capital Funding	FY2023	130,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems - AYBAC (Bond)	Bond Proceeds	FY2024	840,000
Schools	Schools	School Site Improvements	Repair Interior Finishes - PRES	Bond Proceeds	FY2024	1,371,000
Schools	Schools	Pavement	Repair Pavement - AYBAC	Current Revenue - Schools	FY2024	754,000



Infrastructure Project List
Stafford County Public Schools
CIP FY2019-28

Project Lead	Department	Project Type	Project Description	Funding Source	Year	Project Amount
Schools	Schools	Pavement	Repair Tracks - KWBES	Current Revenue - Schools	FY2024	175,000
Schools	Schools	Roofs	Replace Roof - PRES (SS)	Current Revenue - Schools	FY2024	406,000
Schools	Schools	School Site Improvements	Repair Exterior Envelope - HHPMS	Current Revenue - Schools	FY2024	1,101,000
Schools	Schools	School Site Improvements	Repair Interior Finishes - NSHS Phase II	Current Revenue - Schools	FY2024	1,506,000
Schools	Schools	School Site Improvements	Repair Library - CES	Current Revenue - Schools	FY2024	60,000
Schools	Schools	School Site Improvements	Repair Mechanical Systems - AYBAC (Current Revenue)	Current Revenue - Schools	FY2024	175,000
Schools	Schools	School Site Improvements	Repair Playground & Play Area - GMC	Current Revenue - Schools	FY2024	93,000
Schools	Schools	School Site Improvements	Replace Fire Alarm System - RRES	Current Revenue - Schools	FY2024	348,000
Schools	Schools	School Site Improvements	Replace Phone, Media Retrieval & PA Systems - TBGMS	Current Revenue - Schools	FY2024	232,000
Schools	Schools	School Site Improvements	Upgrade CTE Labs	Current Revenue - Schools	FY2024	232,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems - SMS Phase I	Bond Proceeds	FY2025	1,075,000
Schools	Schools	Roofs	Replace Roof - AGWMS/GES	Bond Proceeds	FY2025	2,782,000
Schools	Schools	School Site Improvements	Repair Interior Finishes - NSHS Phase III	Bond Proceeds	FY2025	1,016,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems - WCES	Current Revenue - Schools	FY2025	2,390,000
Schools	Schools	Pavement	Repair Pavement - NSHS (Student Lot)	Current Revenue - Schools	FY2025	717,000
Schools	Schools	Pavement	Repair Pavement - HES	Current Revenue - Schools	FY2025	717,000
Schools	Schools	School Site Improvements	Repair Exterior Envelope - AGWMS/GES	Current Revenue - Schools	FY2025	596,000
Schools	Schools	School Site Improvements	Repair Library - HHPMS	Current Revenue - Schools	FY2025	62,000
Schools	Schools	School Site Improvements	Replace Fire Alarm System - PRES	Current Revenue - Schools	FY2025	358,000
Schools	Schools	School Site Improvements	Replace Roof - AGWMS/GES	Current Revenue - Schools	FY2025	239,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems - BPHS Phase I	Bond Proceeds	FY2026	2,583,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems - SMS Phase II	Bond Proceeds	FY2026	2,399,000
Schools	Schools	Environmental Upgrades	Install Kitchen A/C - HOES	Current Revenue - Schools	FY2026	461,000
Schools	Schools	Roofs	Replace Roof - WCES	Current Revenue - Schools	FY2026	2,462,000
Schools	Schools	School Site Improvements	Repair Athletic Fields - NSHS	Current Revenue - Schools	FY2026	739,000
Schools	Schools	School Site Improvements	Repair Exterior Envelope - WES	Current Revenue - Schools	FY2026	614,000
Schools	Schools	School Site Improvements	Repair Library - ABES	Current Revenue - Schools	FY2026	64,000
Schools	Schools	School Site Improvements	Repair Phone, Media Retrieval & PA Systems - KWBES	Current Revenue - Schools	FY2026	246,000
Schools	Schools	School Site Improvements	Repair Playground & Play Area - KWBES	Current Revenue - Schools	FY2026	106,000
Schools	Schools	School Site Improvements	Repair Playground & Play Area - RRES	Current Revenue - Schools	FY2026	106,000
Schools	Schools	School Site Improvements	Upgrade CTE Labs	Current Revenue - Schools	FY2026	246,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems - BPHS Phase II	Bond Proceeds	FY2027	1,393,000
Schools	Schools	School Site Improvements	Repair Interior Finishes - WCES	Bond Proceeds	FY2027	1,711,000
Schools	Schools	School Site Improvements	Repair Stormwater Management - SHS	Bond Proceeds	FY2027	1,900,000
Schools	Schools	Pavement	Construct Bus Parking - Phase II (TBD)	Current Revenue - Schools	FY2027	887,000
Schools	Schools	Pavement	Repair Pavement - DMS	Current Revenue - Schools	FY2027	951,000
Schools	Schools	School Site Improvements	Construct Storage Buildings - DSMS, FFES, TBGMS & KWBES	Current Revenue - Schools	FY2027	317,000
Schools	Schools	School Site Improvements	Renovate Front Office Suite - NSHS	Current Revenue - Schools	FY2027	191,000
Schools	Schools	School Site Improvements	Repair Athletic Fields - BPHS	Current Revenue - Schools	FY2027	632,000
Schools	Schools	School Site Improvements	Repair Athletic Fields - MVHS	Current Revenue - Schools	FY2027	632,000
Schools	Schools	School Site Improvements	Repair Exterior Envelope - RES	Current Revenue - Schools	FY2027	632,000
Schools	Schools	School Site Improvements	Repair Exterior Envelope (Doors & Windows) - GMC	Current Revenue - Schools	FY2027	632,000
Schools	Schools	School Site Improvements	Repair Library - RTMS	Current Revenue - Schools	FY2027	66,000
Schools	Schools	School Site Improvements	Repair Playground & Play Area - MBES	Current Revenue - Schools	FY2027	109,000
Schools	Schools	Environmental Upgrades	Repair Mechanical Systems - (AHU, Chiller, Fans) - RRES	Bond Proceeds	FY2028	2,087,000
Schools	Schools	Roofs	Repair Roof - RRES (SS-All Areas)	Bond Proceeds	FY2028	2,871,000
Schools	Schools	Environmental Upgrades	Install Kitchen A/C - AGWMS/GES	Current Revenue - Schools	FY2028	651,000
Schools	Schools	Pavement	Repair Pavement - CFHS	Current Revenue - Schools	FY2028	1,696,000
Schools	Schools	School Site Improvements	Construct Exterior Bleachers - DSMS	Current Revenue - Schools	FY2028	391,000
Schools	Schools	School Site Improvements	Construct Outdoor Classroom - GVES & RRES	Current Revenue - Schools	FY2028	784,000
Schools	Schools	School Site Improvements	Repair Athletic Fields - CFHS	Current Revenue - Schools	FY2028	651,000
Schools	Schools	School Site Improvements	Repair Exterior Envelope - HOES	Current Revenue - Schools	FY2028	651,000
Schools	Schools	School Site Improvements	Repair Playground & Play Area - CES	Current Revenue - Schools	FY2028	112,000

TRANSPORTATION SUMMARY

Expenditures	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Later Years Funding	Total Project Cost
BELMONT - FERRY FARM TRAIL - PHASE 6	545,836	270,107	1,700,000	0	0	0	0	0	0	0	0	0	2,515,943
BEREA CHURCH ROAD (SR 654) IMPROVEMENTS	775,000	300,000	619,288	4,112,068	0	0	0	0	0	0	0	0	5,806,356
BROOKE ROAD (SR 608) RECONSTRUCTION SOUTH OF ESKIMO HILL ROAD (SR 628)	1,880,569	7,138,157	0	0	0	0	0	0	0	0	0	0	9,018,726
COURTHOUSE ROAD (SR 630) AT JEFFERSON DAVIS HWY (RT 1) INTERSECTION IMPROVEMENT	4,890,576	500,000	1,500,000	3,528,841	1,282,575	1,282,575	0	0	0	0	0	0	12,984,567
ENON ROAD (SR 753) WIDENING: RT1 TO I-95	401,891	0	500,000	566,930	568,266	1,691,722	1,550,403	5,128,350	0	0	0	0	10,407,562
JEFFERSON DAVIS HWY (RT 1) at POTOMAC CREEK DRIVE (SR 761)	150,000	150,000	500,000	1,000,000	0	0	0	0	0	0	0	0	1,800,000
JUGGINS ROAD (SR 711) RECONSTRUCTION	575,000	1,275,000	200,000	0	170,600	0	0	0	0	0	0	0	2,220,600
TECH CENTER DRIVE	0	0	0	0	0	0	0	0	0	0	25,000	0	25,000
TELEGRAPH ROAD (SR 637) AND WOODSTOCK LANE (SR 639) AT RT 1 SAFETY IMPROVEMENTS	0	1,100,000	3,200,000	4,500,000	0	0	0	0	0	0	0	0	8,800,000
FLATFORD ROAD SIDEWALK	0	91,000	39,130	519,870	0	0	0	0	0	0	0	0	650,000
ONVILLE ROAD SIDEWALK	100,000	25,000	425,000	0	0	0	0	0	0	0	0	0	550,000
Total All Projects	\$9,318,872	\$10,849,264	\$8,683,418	\$14,227,709	\$2,021,441	\$2,974,297	\$1,550,403	\$5,128,350	\$0	\$0	\$25,000	\$0	\$54,778,754

Revenues	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Later Years Funding	Total Project Cost
Current Revenue	2,925,000	1,275,200	0	0	0	0	0	0	0	0	0	0	4,200,200
School Fund Allocation Transfer in	200,000	637,500	100,000	0	0	0	0	0	0	0	0	0	937,500
Proffers/Capital Reserve	629,291	1,061,356	0	0	0	0	0	0	0	0	25,000	0	1,715,647
Service District	0	428,200	627,114	1,000,261	0	0	0	0	0	0	0	0	2,055,575
Prior Year Fund Balance	2,393,910	304,021	1,090,000	871,712	0	0	0	0	0	0	0	0	4,659,643
Revenue Sharing	8,905,975	2,338,171	850,000	871,712	0	0	0	0	0	0	0	0	12,965,858
State/Federal	2,641,669	1,639,886	5,706,625	5,844,992	3,208,646	6,282,575	0	0	0	0	0	0	25,324,393
Impact Fees	792,379	627,559	500,000	500,000	500,000	0	0	0	0	0	0	0	2,919,938
Total Funding	\$18,488,224	\$8,311,893	\$8,873,739	\$9,088,677	\$3,708,646	\$6,282,575	\$0	\$0	\$0	\$0	\$25,000	\$0	\$54,778,754

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	58,000	60,000	62,000	63,000	65,000	67,000	69,000	71,000
Operating	0	0	35,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total	\$0	\$0	\$93,000	\$62,000	\$64,000	\$65,000	\$67,000	\$69,000	\$71,000	\$73,000

BELMONT - FERRY FARM TRAIL - PHASE 6

Total Project Cost: \$2,515,943

Est. Opening Date: 2021

[Links to Board's Strategic Initiatives](#)

- Parks & Rec Commission Facilities Plan

PROGRAM DESCRIPTION

The project consists of constructing a portion of the Belmont-Ferry Farm Trail. The target segment is phase 6 from the Chatham Bridge to Ferry Farm. Trails are the highest use need as identified by County residents. Design of Phase 6 of the Belmont-Ferry Farm Trail is at the conceptual stage. This project will complete the design, permitting and construction of Phase 6. This project has been awarded the TEA Grant through VDOT.



OPERATING IMPACT SUMMARY

Annual operating impact includes one additional full time park maintenance worker position and one time start up costs for equipment to maintain trails.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	545,836	54,107	0	0	0	0	0	0	0	0	0
Property Acquisition	0	216,000	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	1,700,000	0	0	0	0	0	0	0	0
Total	\$545,836	\$270,107	\$1,700,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Prior Year Fund Balance	109,167	54,021	340,000	0	0	0	0	0	0	0	0
State/Federal	436,669	216,086	1,360,000	0	0	0	0	0	0	0	0
Total	\$545,836	\$270,107	\$1,700,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	58,000	60,000	62,000	63,000	65,000	67,000	69,000	71,000
Operating	0	0	35,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total	\$0	\$0	\$93,000	\$62,000	\$64,000	\$65,000	\$67,000	\$69,000	\$71,000	\$73,000

BEREA CHURCH ROAD (SR 654) IMPROVEMENTS

Total Project Cost: \$5,806,356

Est. Opening Date: 2022

[Links to Board's Strategic Initiatives](#)

- Redevelopment Plan
- Economic Development 10 Point Plan
- Comprehensive Plan

PROGRAM DESCRIPTION

Reconstruction of Berea Church Road from Truslow Road to Warrenton Road using VDOT 3R standards. Improvements will include improved shoulders, drainage and wider lanes. Bicycle accommodations will also be included in this project.



OPERATING IMPACT SUMMARY

This is a safety improvement, upon completion this will become a part of the VDOT secondary system.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	775,000	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	300,000	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	619,288	4,112,068	0	0	0	0	0	0	0
Total	\$775,000	\$300,000	\$619,288	\$4,112,068	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Proffers/Capital Reserve	302,147	785,456	0	0	0	0	0	0	0	0	0
Service District	0	300,000	619,288	896,287	0	0	0	0	0	0	0
Revenue Sharing	2,353,966	549,212	0	0	0	0	0	0	0	0	0
Total	\$2,656,113	\$1,634,668	\$619,288	\$896,287	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

BROOKE ROAD (SR 608) RECONSTRUCTION SOUTH OF ESKIMO HILL ROAD (SR 628)

Total Project Cost: \$9,018,726

Est. Opening Date: 2020

[Links to Board's Strategic Initiatives](#)

- Approved by voters in the 2008 referendum
- Comprehensive Plan
- Youth Driver Safety Initiative

PROGRAM DESCRIPTION

Reconstruction of Brooke Road from 0.64 miles south of Eskimo Hill Road to 2.44 miles south of Eskimo Hill Road.



OPERATING IMPACT SUMMARY

A 2008 Transportation Bond Program project. Upon completion, VDOT becomes the owner of the improvement

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	890,567	0	0	0	0	0	0	0	0	0	0
Property Acquisition	990,002	1,933,906	0	0	0	0	0	0	0	0	0
Construction / Project	0	5,204,251	0	0	0	0	0	0	0	0	0
Total	\$1,880,569	\$7,138,157	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Current Revenue	2,850,000	0	0	0	0	0	0	0	0	0	0
Proffers/Capital Reserve	3,400	275,900	0	0	0	0	0	0	0	0	0
Prior Year Fund Balance	114,485	0	0	0	0	0	0	0	0	0	0
Revenue Sharing	3,605,904	901,459	0	0	0	0	0	0	0	0	0
Impact Fees	640,019	627,559	0	0	0	0	0	0	0	0	0
Total	\$7,213,808	\$1,804,918	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

COURTHOUSE ROAD (SR 630) AT JEFFERSON DAVIS HWY (RT 1) INTERSECTION IMPROVEMENT

Total Project Cost: \$12,984,567

Est. Opening Date: 2024

[Links to Board's Strategic Initiatives](#)

- Parks & Rec Commission Facilities Plan

PROGRAM DESCRIPTION

The intersection of Courthouse Road (S.R. 630) and Jefferson Davis Highway (U.S. Route 1) has a Level of Service of "F" during peak morning and afternoon traffic periods. Furthermore, U.S. Route 1 serves as the primary alternate route for I-95 when there are backups on the Interstate Highway. The proposed improvements to this intersection include additional left and right turn lanes to allow simultaneous traffic movement north and south on Route 1, and east and west on Route 630 to eliminate the current split phasing at that intersection. This will greatly increase the volume of traffic that can pass, and allow more flexibility to adjust signal phasing to accommodate peak hour and emergency signal patterns. The project will also include pedestrian accommodations consistent with the location in the center of the Stafford courthouse area and the future plans for the Courthouse Urban Development Area. The project scope has been expanded to include improvements to Hope Road, funded by approved Smart Scale revenues. Timing of this phase of the project is contingent upon the timing for the receipt of the Smart Scale funds.



OPERATING IMPACT SUMMARY

No operating impacts are expected for the County since upon completion, VDOT becomes the owner of the improvement.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	890,576	0	0	0	0	0	0	0	0	0	0
Property Acquisition	4,000,000	500,000	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	1,500,000	3,528,841	1,282,575	1,282,575	0	0	0	0	0
Total	\$4,890,576	\$500,000	\$1,500,000	\$3,528,841	\$1,282,575	\$1,282,575	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Proffers/Capital Reserve	323,744	0	0	0	0	0	0	0	0	0	0
Prior Year Fund Balance	2,121,544	250,000	750,000	871,712	0	0	0	0	0	0	0
Revenue Sharing	2,445,288	250,000	750,000	871,712	0	0	0	0	0	0	0
State/Federal	0	0	0	1,785,417	1,282,575	1,282,575	0	0	0	0	0
Total	\$4,890,576	\$500,000	\$1,500,000	\$3,528,841	\$1,282,575	\$1,282,575	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

ENON ROAD (SR 753) WIDENING: RT1 TO I-95

Total Project Cost: \$10,407,562

Est. Opening Date: 2025

[Links to Board's Strategic Initiatives](#)

- Redevelopment Plan
- Comprehensive Plan
- Economic Development 10 Point Plan

PROGRAM DESCRIPTION

Enon Road has experienced a large increase in vehicle trips per day since the opening of the I-95 interchange at Centreport Parkway. A recent traffic engineering analysis determined that the segment between Route 1 and Stafford Indians Lane currently has 9,000 vehicle trips per day (VPD) and projects over 15,000 VPD in 2020. Furthermore, the study noted deficiencies in the intersection at Route 1. The study recommended construction of a 3-lane section for Enon Road east of the I-95 bridge, and tapering to a 2-lane section just east of the bridge. This project might qualify to receive future Smart Scale funding. The CIP assumes Board approval to submit this project for HB2 funding and approval by the CTB.



OPERATING IMPACT SUMMARY

No operating impacts are expected for the County since upon completion, VDOT becomes the owner of the improvement.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	401,891	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	500,000	566,930	568,266	1,691,722	1,550,403	5,128,350	0	0	0
Total	\$401,891	\$0	\$500,000	\$566,930	\$568,266	\$1,691,722	\$1,550,403	\$5,128,350	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Prior Year Fund Balance	48,714	0	0	0	0	0	0	0	0	0	0
Revenue Sharing	200,817	0	0	0	0	0	0	0	0	0	0
State/Federal	0	0	793,321	1,156,679	1,555,671	5,000,000	0	0	0	0	0
Impact Fees	152,360	0	500,000	500,000	500,000	0	0	0	0	0	0
Total	\$401,891	\$0	\$1,293,321	\$1,656,679	\$2,055,671	\$5,000,000	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

JEFFERSON DAVIS HWY (RT 1) at POTOMAC CREEK DRIVE (SR 761)

Total Project Cost: \$1,800,000

Est. Opening Date: 2021

[Links to Board's Strategic Initiatives](#)

- Comprehensive Plan
- Approved by Board for HB2 Funding

PROGRAM DESCRIPTION

Construction of a left-turn lane from southbound Jefferson Davis Highway to Potomac Creek Drive. Completion of this project according to the schedule shown is dependent upon the timing for the receipt of state Smart Scale Funding. This project will be administered by VDOT.

OPERATING IMPACT SUMMARY

A 2008 Transportation Bond Program project. Upon completion, VDOT becomes the owner of the improvement.



PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	150,000	150,000	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	500,000	1,000,000	0	0	0	0	0	0	0
Total	\$150,000	\$150,000	\$500,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
State/Federal	331,000	340,000	622,000	507,000	0	0	0	0	0	0	0
Total	\$331,000	\$340,000	\$622,000	\$507,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

JUGGINS ROAD (SR 711) RECONSTRUCTION

Total Project Cost: \$2,220,600

Est. Opening Date: 2021

Links to Board's Strategic Initiatives
- Supports the Board's Education Initiative

PROGRAM DESCRIPTION

Two lane reconstruction of Juggins Road (S.R. 711) from Chadwick Drive to the new Moncure Elementary School location, a distance of approximately .25 mile. Project will also include the rural restoration and surface treatment of Juggins Road from the north entrance to the elementary school to the end of state maintenance, about .3 mile. Bond funds would be included with the VPSA borrow for the school construction as this work is integral to the school construction.

OPERATING IMPACT SUMMARY

Road improvement necessary to support additional traffic resulting from the Moncure Elementary School relocation. Upon completion, VDOT becomes the owner of the improvement.



PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	275,000	25,000	0	0	0	0	0	0	0	0	0
Property Acquisition	300,000	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	1,250,000	200,000	0	170,600	0	0	0	0	0	0
Total	\$575,000	\$1,275,000	\$200,000	\$0	\$170,600	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Current Revenue	75,000	0	0	0	0	0	0	0	0	0	0
School Fund Transfer In	200,000	637,500	100,000	0	0	0	0	0	0	0	0
Revenue Sharing	300,000	637,500	100,000	0	0	0	0	0	0	0	0
State/Federal	0	0	0	0	170,600	0	0	0	0	0	0
Total	\$575,000	\$1,275,000	\$200,000	\$0	\$170,600	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

TECH CENTER DRIVE

Total Project Cost: \$2,600,000

Est. Opening Date: 2029

[Links to Board's Strategic Initiatives](#)

- Redevelopment Plan
- Comprehensive Plan
- Economic Development 10 Point Plan

PROGRAM DESCRIPTION

Road Construction to serve the Technology and Research Park within the Quantico Corporate Center, including improvements to the intersection with Telegraph Road.



OPERATING IMPACT SUMMARY

This is an Economic Development opportunity for the County.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Construction / Project	0	0	0	0	0	0	0	0	0	0	25,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,000

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Proffers/Capital Reserve	0	0	0	0	0	0	0	0	0	0	25,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

TELEGRAPH ROAD (SR 637) AND WOODSTOCK LANE (SR 639) AT RT 1 SAFETY IMPROVEMENTS

Total Project Cost: \$8,800,000

Est. Opening Date: 2022

[Links to Board's Strategic Initiatives](#)

- Approved by Board for HB2 Funding
- Supports Economic Development

PROGRAM DESCRIPTION

This project consists of roadway reconstruction/realignment, installation of a new traffic signal, turn lane improvements and access management. This project has been approved to receive House Bill 2 (HB2) funding. The timing for the distribution of the HB2 funds is unknown at this time. Initial funding involves the release of Widenwater CDA funding for this project.



OPERATING IMPACT SUMMARY

No operating impacts are expected for the County since upon completion, VDOT becomes the owner of the improvement.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	0	1,100,000	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	3,200,000	4,500,000	0	0	0	0	0	0	0
Total	\$0	\$1,100,000	\$3,200,000	\$4,500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Current Revenue	0	1,275,200	0	0	0	0	0	0	0	0	0
State/Federal	1,874,000	571,000	2,900,000	1,980,000	199,800	0	0	0	0	0	0
Total	\$1,874,000	\$1,846,200	\$2,900,000	\$1,980,000	\$199,800	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

FLATFORD ROAD SIDEWALK

Total Project Cost: \$650,000

Est. Opening Date: 2022

[Links to Board's Strategic Initiatives](#)

- Board Sidewalk Priority

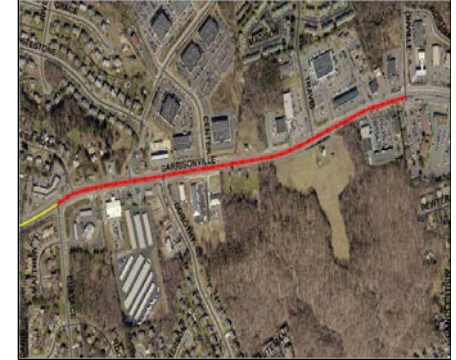
PROGRAM DESCRIPTION

Flatford Road sidewalk project extends from the terminus of Parkway Boulevard (SR-1264) to the terminus of Walpole Street (SR-709) near its intersection with Winding Creek Road (SR-628), approximately 1,400 feet in length. Construction of the Project would connect two existing sidewalks and provide for safer pedestrian access along a busy route. This route is frequently used by pedestrians traveling from one adjacent neighborhood to the next, and would improve pedestrian access to a commercial area near the intersection of Courthouse Road and Walpole Street. Constructing this "missing link" would also safely connect pedestrians to public facilities including Rodney Thompson Middle School, Park Ridge Elementary School, and John M. Porter Library.

The Project will consist of a five-foot wide sidewalk on the east side of Flatford Road with a crosswalk to be installed just north of the entrance to Horizons Church to help safely connect pedestrians to the west side of Flatford Road. The proposed sidewalk would then extend to Walpole Street, with another crosswalk installed on Winding Creek Road to connect with the existing sidewalk. This project is dependent on receipt of TAP funds in June 2018.

OPERATING IMPACT SUMMARY

No operating impacts are anticipated at this time



PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	0	91,000	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	39,130	519,870	0	0	0	0	0	0	0
Total	\$0	\$91,000	\$39,130	\$519,870	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Service District	0	18,200	7,826	103,974	0	0	0	0	0	0	0
State/Federal	0	72,800	31,304	415,896	0	0	0	0	0	0	0
Total	\$0	\$91,000	\$39,130	\$519,870	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

ONVILLE ROAD SIDEWALK

Total Project Cost: \$550,000

Est. Opening Date: 2021

[Links to Board's Strategic Initiatives](#)

- Board Sidewalk Priority

PROGRAM DESCRIPTION

The proposed sidewalk would connect existing sidewalks along Onville Road (SR-641) and provide for safer pedestrian movement along a busy roadway that is frequently used by pedestrians traveling between their homes and nearby commercial areas along Garrisonville Road. This location would be considered the "missing link" from Worth Avenue (Private) to Garrison Woods Drive (SR-1877). Overall, the project would provide pedestrian access to Garrisonville Road (SR - 610). This phase is proposed to be constructed as a five (5) foot wide, approximately 1,100 linear foot long concrete sidewalk.

Start Location: Approximately 250' north of Worth Avenue. End Location: Garrison Woods Drive (SR-1877)



OPERATING IMPACT SUMMARY

No operating impacts are anticipated at this time

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning/Design	100,000	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	25,000	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	425,000	0	0	0	0	0	0	0	0
Total	\$100,000	\$25,000	\$425,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Service District	0	110,000	0	0	0	0	0	0	0	0	0
State/Federal	0	440,000	0	0	0	0	0	0	0	0	0
Total	\$0	\$550,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Utilities

Who Are We:

Stafford County Utilities mission is to provide water and wastewater services that satisfy the current and future needs and expectations of our customers.

Stafford County has two water reservoirs, Smith Lake and Lake Mooney. These reservoirs supply water to Stafford County's treatment facilities. The Smith Lake Water Treatment Facility (WTF), rated at 10 million gallons per day (mgd), provides water to the northern region of Stafford and to the Camp Barrett area of Marine Corps Base Quantico. The Lake Mooney WTF, rated at a maximum of 12 mgd, provides water to the southern region. Combined, the two reservoirs hold over 7.1 billion gallons of water. If needed, interconnecting piping in the water distribution system allows the transfer of treated water from one service area to the other. The Abel Lake WTF was taken offline December 2014; however, the water supply remains available for future use. The capacity is expected to be needed in the future.

The water distribution system is comprised of more than 665 miles of pipe ranging in size from 2 to 30 inches in diameter, with four primary pumping stations. Three ground storage tanks, two standpipes and eleven elevated tanks provide water storage of nearly 20.65 million gallons.

Wastewater treatment is provided by the Little Falls Run and Aquia wastewater treatment facilities (WWTF). The treatment capacity at Little Falls Run WWTF is currently permitted at 8 mgd. The current treatment capacity at Aquia WWTF is 10 mgd. Both treatment facilities utilize biological nutrient removal, ultraviolet light disinfection, and the low-load aeration system that allows higher flow rates without adversely affecting treatment. The wastewater collection and transmission system consists of 533 miles of sewer lines and 88 pump stations

Funding Sources:

Stafford County operates the Utilities system as a self-supporting entity. The Utilities Department has three major sources of revenue:

Monthly User Fees pay the operations and maintenance costs of the system and a portion of annual debt service costs.

Availability Fees are used to pay for outstanding debt, the construction of new water supply sources, water and wastewater treatment facilities, and neighborhood projects.

Pro Rata Fees are used to construct the water tanks, water and sewer mains, and pumping stations identified in the Water and Sewer Master Plan.

Other sources of revenue include connection charges, bulk sale of water, septic haulers fees, pump & haul fees, reconnection fees, and inspection fees.

The intent of the County in setting its rates and fees is to cover all costs of providing service to its customers. The rates are structured so that new customers connecting to the system pay the majority of the cost associated with the growth of the system and current users pay the entire cost associated with current operations, including maintenance and rehabilitation.

Stafford County has authority to establish and review water and wastewater rates and adopts an annual budget and capital improvements program. System earnings and issuance of revenue bonds provide financing of capital improvements.

Repair, Replacement, and Rehabilitation Projects (3R Projects)

3R projects, primarily are small scale projects that include repair, replacement and rehabilitation of existing physical assets.

3R projects include:

- Repair, replacement and rehabilitation projects; and/or,
- Projects that will increase the useful life of an existing asset but not fundamentally change the structure or purpose (i.e. pipe lining and manhole rehabilitation, replacement of degraded pipe, wet well and concrete rehabilitation, etc); and/or,
- Repair, replacement, and rehabilitation of major mechanical, electrical, or communication systems for pump stations, treatment facilities, etc; and/or,
- Upgrades to technology infrastructure.

3R projects do not include:

- Major overhauls to assets that change the structure or purpose; and,
- New assets that contribute to growth and exceed \$500,000 each

UTILITIES SUMMARY

Expenditures	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Later Years Funding	Total Project Cost
Water Projects	4,464,000	8,457,200	7,559,000	6,040,000	7,600,000	6,600,000	3,390,200	7,420,800	7,476,000	8,303,000	3,643,000	400,000	71,353,200
Wastewater Projects	14,906,000	19,463,000	11,153,000	10,705,200	12,235,200	14,882,800	2,720,400	6,383,500	6,897,100	2,346,000	2,546,000	0	104,238,200
Other	2,555,800	2,697,000	2,268,000	1,028,700	878,200	977,800	3,015,300	820,500	555,200	1,008,300	400,000	0	16,204,800
Total All Projects	\$21,925,800	\$30,617,200	\$20,980,000	\$17,773,900	\$20,713,400	\$22,460,600	\$9,125,900	\$14,624,800	\$14,928,300	\$11,657,300	\$6,589,000	\$400,000	\$191,796,200

Revenues	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	5,371,000	10,800,000	5,679,000	0	6,000,000	5,000,000	0	0	0	0	0
User Fees	4,135,800	12,004,200	11,561,650	13,103,150	9,175,850	15,870,150	7,302,900	12,086,350	13,461,750	10,419,300	5,543,000
Availability Fees	3,349,000	4,652,000	512,000	523,000	4,234,000	546,000	1,591,000	746,000	846,000	946,000	1,046,000
ProRata Fees	9,070,000	3,161,000	3,227,350	4,147,750	1,303,550	1,044,450	232,000	1,792,450	620,550	292,000	0
Total Funding	\$21,925,800	\$30,617,200	\$20,980,000	\$17,773,900	\$20,713,400	\$22,460,600	\$9,125,900	\$14,624,800	\$14,928,300	\$11,657,300	\$6,589,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	904,000	1,379,000	1,379,000	1,881,000	2,299,000	2,299,000	2,299,000	2,299,000	2,299,000	2,299,000
Revenue/Savings	0	0	0	0	0	0	0	0	0	0
Total	\$904,000	\$1,379,000	\$1,379,000	\$1,881,000	\$2,299,000	\$2,299,000	\$2,299,000	\$2,299,000	\$2,299,000	\$2,299,000

WATER PROJECTS

Expenditures:	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Later Years Funding	Total CIP (FY19-28)	Total Project Cost
432-06 - Moncure Pump Station Distribution Upgrade	0	90,000	0	0	0	0	0	0	0	0	0	0	90,000	90,000
472-01 - Shelton Shop Road 8" Main 472/433 Boundary Adjustment	0	95,000	0	0	0	0	0	0	0	0	0	0	95,000	95,000
342-06 - 24" Main along Truslow Road from I-95 to Enon Road to Hulls Chapel Road	0	0	300,000	3,060,000	0	0	0	0	0	0	0	0	3,360,000	3,360,000
342-15 & 16 - 24" Main from Enon Road Tank to Centreport Pkwy, via Abel Lake and existing 16" Replacement	0	100,000	4,000,000	0	0	0	0	0	0	0	0	0	4,100,000	4,100,000
433-04 - Construct 10-inch main from Embrey Mill Road to the existing 10-inch main on White Chapel Lane	0	0	0	0	0	0	0	0	0	761,000	0	0	761,000	761,000
433-05 - Construct 16-inch main along Courthouse Road from pumping station at 433/370 Zone boundary to Rollinswood Lane	0	0	0	0	0	0	0	0	0	0	793,000	0	793,000	793,000
472-100 - Construct 0.5 Million Gallon Storage Tank along Garrisonville Road near Ripley Road	0	0	0	0	0	0	145,200	1,306,800	0	0	0	0	1,452,000	1,452,000
472-200 - Construct 0.9 mgd pumping station along Lightfoot Road near Mountain View Road	0	0	0	0	0	0	0	0	0	292,000	0	0	292,000	292,000
480-04 - Construct 12" Main along University Blvd from 12" Main on Reservoir Road	0	0	0	0	0	0	0	14,000	126,000	0	0	0	140,000	140,000
Tank Removal	0	0	0	100,000	0	0	0	0	0	0	0	0	100,000	100,000
Hydrant/Valves Replacement Program	0	100,000	100,000	100,000	100,000	100,000	150,000	200,000	250,000	300,000	350,000	400,000	2,150,000	2,150,000
Water Distribution Rehab - Neighborhood Systems	0	500,000	500,000	500,000	500,000	500,000	550,000	600,000	650,000	700,000	750,000	0	5,750,000	5,750,000
Water Distribution Rehab - Transmission Lines Replacements	0	500,000	500,000	500,000	500,000	500,000	550,000	600,000	650,000	700,000	750,000	0	5,750,000	5,750,000
Regional Water Interconnection	0	0	0	0	0	0	450,000	4,000,000	0	0	0	0	4,450,000	4,450,000
Water Distribution Rehab - Small Water Projects	0	322,200	150,000	300,000	250,000	250,000	300,000	350,000	400,000	450,000	500,000	0	3,272,200	3,272,200
Water Extension Projects	0	250,000	250,000	250,000	250,000	250,000	300,000	350,000	400,000	450,000	500,000	0	3,250,000	3,250,000
Redundant Gate Replacement for Abel Lake and Smith Lake	0	0	80,000	80,000	0	0	0	0	0	0	0	0	160,000	160,000
Lake Mooney - Thickener Tank and Equipment	0	0	0	800,000	0	0	0	0	0	0	0	0	800,000	800,000
Lake Mooney - Permanganate	0	0	0	350,000	0	0	0	0	5,000,000	4,650,000	0	0	10,000,000	10,000,000
Lake Mooney - Additional Modules for Interconnection	0	0	0	0	0	0	945,000	0	0	0	0	0	945,000	945,000
Smith Lake - Electrical Switchgear	0	500,000	0	0	0	0	0	0	0	0	0	0	500,000	500,000
Smith Lake - Filter Replacements	1,496,000	0	1,679,000	0	0	0	0	0	0	0	0	0	1,679,000	3,175,000
342 Phase 1	2,800,000	0	0	0	6,000,000	5,000,000	0	0	0	0	0	0	11,000,000	13,800,000
342-101 - Enon Road Water Tank (formerly Centreport)	168,000	6,000,000	0	0	0	0	0	0	0	0	0	0	6,000,000	6,168,000
TOTALS:	\$4,464,000	\$8,457,200	\$7,559,000	\$6,040,000	\$7,600,000	\$6,600,000	\$3,390,200	\$7,420,800	\$7,476,000	\$8,303,000	\$3,643,000	\$400,000	\$66,489,200	\$71,353,200

433-06 - Moncure Pump Station Distribution Upgrade

Total Project Cost: \$90,000

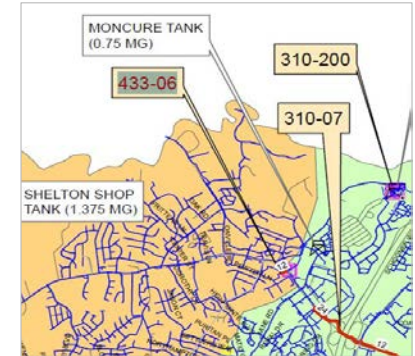
Est. Opening Date: FY2019

Links to Board's Strategic Initiatives

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project constructs a new 12" water transmission line from the existing Moncure Water Booster Station to an existing 8" water line just south of the booster station. This new line will provide for additional flow of water from the 310 Pressure Zone into the 433 Pressure Zone in anticipation of increased water demands.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	90,000	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$90,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	45,000	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	45,000	0	0	0	0	0	0	0	0	0
Total	\$0	\$90,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

472-01 - Shelton Shop Road 8" Main 472/433 Boundary Adjustment

Total Project Cost: \$95,000

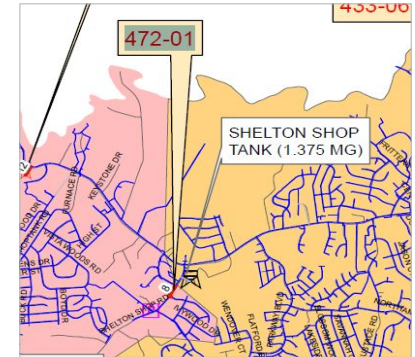
Est. Opening Date: FY2019

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes design and construction of an 8-inch main along Shelton Shop Road from existing 12-inch at Soaring Eagle Drive and existing 6-inch on Oakwood Drive (413 feet). The purpose of the project is to eliminate the 450 Zone.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	95,000	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$95,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	95,000	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$95,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

342-06 - 24" Main along Truslow Road from I-95 to Enon Road to Hulls Chapel Road

Total Project Cost: \$3,360,000

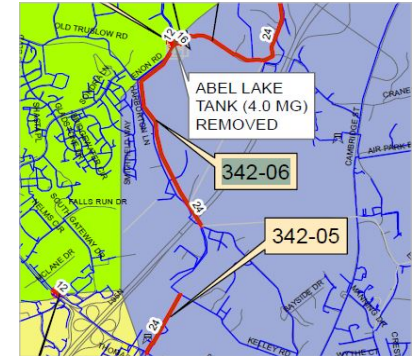
Est. Opening Date: FY2021

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes design and construction of a 24-inch water main along Truslow Road to Hulls Chapel Road (8,365 feet). The purpose of the project is to convey large quantities of flow from Lake Mooney WTP to both the southern and northern zones in the water system. This project significantly increases both the reliability and flexibility of the overall system. The project conveys flow to the Abel Lake Tank, Centreport portion of the 342 Zone, and to the 370 Zone and the northern zones by transferring flows to the 370 Zone Pumping Station near the airport.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	300,000	3,060,000	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$300,000	\$3,060,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	150,000	1,530,000	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	150,000	1,530,000	0	0	0	0	0	0	0
Total	\$0	\$0	\$300,000	\$3,060,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

342-15 & 16 - 24" Main from Enon Road Tank to Centreport Pkwy, via Abel Lake and existing 16" Replacement

Total Project Cost: \$4,100,000

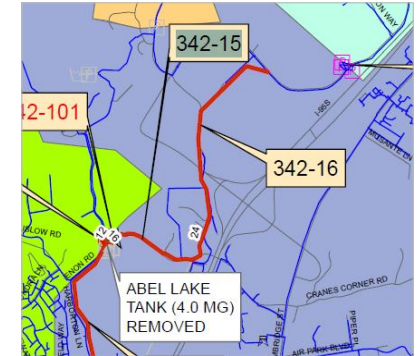
Est. Opening Date: FY2020

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

Construct a 24 inch main along Hulls Chapel Road to Moorewood Lane and Able Lake, as well as a 24 inch main from Abel Lake to Mountain View Road to existing 18 inch main.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	100,000	4,000,000	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$100,000	\$4,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	4,000,000	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	100,000	0	0	0	0	0	0	0	0	0
Total	\$0	\$100,000	\$4,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	335,000	335,000	335,000	335,000	335,000	335,000	335,000	335,000	335,000
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$335,000	\$335,000	\$335,000	\$335,000	\$335,000	\$335,000	\$335,000	\$335,000	\$335,000

433-04 - Construct 10-inch main from Embrey Mill Road to the existing 10-inch main on White Chapel Lane

Total Project Cost: \$761,000

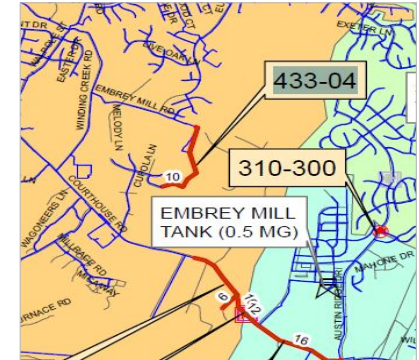
Est. Opening Date: FY2027

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes design and construction of 10-inch water main from Embrey Mill Road to the existing 10-inch main on White Chapel Lane (3,132 feet). The purpose of these projects is to connect the existing 12-inch main along Courthouse Road to the piping network north of Courthouse Road.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	0	0	0	761,000	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$761,000	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	761,000	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$761,000	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

433-05 - Construct 16-inch main along Courthouse Road from pumping station at 433/370 Zone boundary to Rollinswood Lane

Total Project Cost: \$793,000

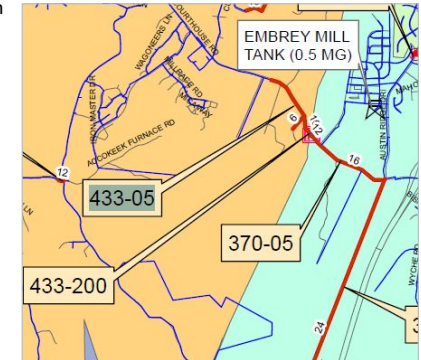
Est. Opening Date: FY2028

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes design and construction of a 16-inch main along Courthouse Road from pumping station at 433/370N Zone boundary to Rollinswood Lane (2,720 feet). The purpose of the project is to provide flow from the pumping station to the 12-inch mains on Courthouse Road, Danielle Way and Ramoth Church Road. This pumping station will provide a second source of supply to the 433 Zone and utilize the transmission system in the southern portion of the 433 Zone to deliver flow to the customers in the southern portion of the 433 Zone and to the 472 Zone. The timing for construction of this main will be concurrent with the 433 Zone Pumping Station (433-200).



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	0	0	0	0	793,000
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$793,000

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	793,000
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$793,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

472-100 - Construct 0.5 Million Gallon Storage Tank along Garrisonville Road near Ripley Road

Total Project Cost: \$1,452,000

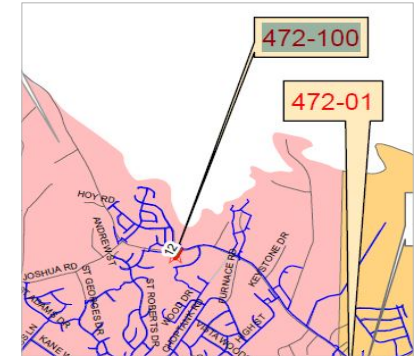
Est. Opening Date: FY2026

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

The adequacy of storage for each pressure zone was assessed using the required volume of effective storage equal to one-half of the average day demand in accordance with VDH requirements. The average day demand under buildout conditions for the 472 Zone will be 0.85 mgd. Consequently, the volume of storage needed in the 472 Zone under buildout conditions is roughly 0.4 MG which is met by the existing 0.5 MG Vista Woods Tank. A second 0.5 MG elevated tank is proposed for the 472 Zone to provide operational flexibility if the Vista Woods Tank is temporarily taken out-of-service. The proposed site for the new tank is along Garrisonville Road near Ripley Road. This tank would typically provide storage to the northern portion of the 472 Zone.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	145,200	1,306,800	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$145,200	\$1,306,800	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	145,200	1,306,800	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$145,200	\$1,306,800	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

472-200 - Construct 0.9 mgd pumping station along Lightfoot Road near Mountain View Road

Total Project Cost: \$292,000

Est. Opening Date: FY2027

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

Smith Lake WTP currently supplies water to three pressure zones with hydraulic grade lines of 310, 370, 433 and 472 feet. Water from the Smith Lake WTP is pumped to the Moncure PS on the western border of the 310 Zone which pumps flow to the 433 Zone. Flow from the 433 Zone is boosted to the 472 Zone through the Vista Woods PS which is located on the western border of the 433 Zone along Shelton Shop Road. The 472 Zone has one elevated tank along Mountain View Road in the vicinity of Spy Glass Lane (0.5 MG Vista Woods Tank at overflow elevation 472 feet).



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	0	0	0	292,000	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$292,000	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	292,000	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$292,000	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

480-04 - Construct 12" Main along University Blvd from 12" Main on Reservoir Road

Total Project Cost: \$140,000

Est. Opening Date: FY2026

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project entails the construction of a 12" line along University Blvd between Reservoir Road and an existing 12" main. Water pressure and fire flow needs to be increased in this area of the Route 17 corridor due to demand and future development. This line links to existing dead ends and will enable better flow in the system.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	0	14,000	126,000	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,000	\$126,000	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	14,000	126,000	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,000	\$126,000	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Tank Removal

Total Project Cost: \$100,000

Est. Opening Date: FY2021

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

The Master Plan recommends the removal of the Bandy Elevated Water Storage Tank and the Crane's Corner Elevated Water Storage Tank from the water infrastructure system upon the completion of the 342 Pressure Zone Improvements (30"/24" water transmission lines from Lake Mooney Water Treatment Facility to designated connection points at Centerport Parkway, Enon Road Elevated Water Storage Tank, Old Forge, Washington Street, Cool Springs Road).



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	100,000	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	100,000	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Hydrant/Valves Replacement Program

Total Project Cost: \$2,150,000

Est. Opening Date: FY2029

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This work consists of replacing damaged or inoperable fire hydrants and in-line waterline valves. Over time, these integral parts of the water distribution system prevent proper operation of the system. These fittings require frequent exercise and maintenance. During exercise, it is often discovered that these fittings require replacement. Due to the age of the system and growth over the past 15-20 years, discovery of significant numbers of failure have occurred.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	100,000	100,000	100,000	100,000	100,000	150,000	200,000	250,000	300,000	350,000
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$150,000	\$200,000	\$250,000	\$300,000	\$350,000

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	100,000	100,000	100,000	100,000	100,000	150,000	200,000	250,000	300,000	350,000
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$150,000	\$200,000	\$250,000	\$300,000	\$350,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Water Distribution Rehab - Neighborhood Systems

Total Project Cost: \$5,750,000

Est. Opening Date: FY2022

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This work consists of the successive replacement of significant portions of the water distribution system in a variety of neighborhoods such as Ferry Farm, Aquia Harbor, Falmouth, Bel-Air, Leland/Deacon, and others as necessary. The water distribution system in these area has required numerous areas of concentrated repairs and is some of the oldest infrastructure in the County. This project is part of a renewed effort to focus on the Repair/Replace/Rehabilitate philosophy for infrastructure in the County.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	500,000	500,000	500,000	500,000	500,000	550,000	600,000	650,000	700,000	750,000
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$550,000	\$600,000	\$650,000	\$700,000	\$750,000

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	500,000	500,000	500,000	500,000	500,000	550,000	600,000	650,000	700,000	750,000
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$550,000	\$600,000	\$650,000	\$700,000	\$750,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Water Distribution Rehab - Transmission Lines Replacements

Total Project Cost: \$5,750,000

Est. Opening Date: FY2024

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This work consists of replacement of significant sections of our medium sized distribution lines. This work will make improvements to lines such as the Smith Lake Distribution (24"/10") line under I-95 in the north, the 8" Line from YMCA to Route 1 on Butler Road, Truslow Road from Route 1 to Carriage Hill, Deacon Road/Brook Road/Smith Street, Berea Church Road 12" as well as others as necessary. This project is part of a renewed effort to focus on the Repair/Replace/Rehabilitate philosophy for infrastructure in the County.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	500,000	500,000	500,000	500,000	500,000	550,000	600,000	650,000	700,000	750,000
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$550,000	\$600,000	\$650,000	\$700,000	\$750,000

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	500,000	500,000	500,000	500,000	500,000	550,000	600,000	650,000	700,000	750,000
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$550,000	\$600,000	\$650,000	\$700,000	\$750,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Regional Water Interconnection

Total Project Cost: \$4,450,000

Est. Opening Date: FY2025

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project consists of the installation of a waterline connection between Stafford County and Spotsylvania County near Lake Mooney for emergency use in the event either system requires additional treated water.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	450,000	4,000,000	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$450,000	\$4,000,000	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	450,000	4,000,000	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$450,000	\$4,000,000	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Water Distribution Rehab - Small Water Projects

Total Project Cost: \$3,272,200

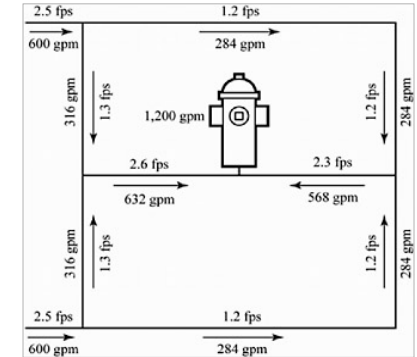
Est. Opening Date: FY2021

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

These projects consist of strategic improvements along numerous water distribution lines throughout the entire County. These projects consist of "looping", short distances of increases in pipe size, short distances of making pipe type changes, and removing conflicts.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	322,200	150,000	300,000	250,000	250,000	300,000	350,000	400,000	450,000	500,000
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$322,200	\$150,000	\$300,000	\$250,000	\$250,000	\$300,000	\$350,000	\$400,000	\$450,000	\$500,000

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	322,200	150,000	300,000	250,000	250,000	300,000	350,000	400,000	450,000	500,000
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$322,200	\$150,000	\$300,000	\$250,000	\$250,000	\$300,000	\$350,000	\$400,000	\$450,000	\$500,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Water Extension Projects

Total Project Cost: \$3,250,000

Est. Opening Date: FY2029

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This work consists of projects qualifying for the extension program developed by the Board (R10-217) for residential connection to the existing water transmission system. This work would include Short Water Extensions, Neighborhood Projects, and Large Scale Projects.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	250,000	250,000	250,000	250,000	250,000	300,000	350,000	400,000	450,000	500,000
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$300,000	\$350,000	\$400,000	\$450,000	\$500,000

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	250,000	250,000	250,000	250,000	250,000	300,000	350,000	400,000	450,000	500,000
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$300,000	\$350,000	\$400,000	\$450,000	\$500,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Redundant Gate Replacement for Abel Lake and Smith Lake

Total Project Cost: \$160,000

Est. Opening Date: FY2020

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project consists of the installation of a redundant sluice gate on the bottom invert outlet spillway pipe at Abel Lake. Currently, there is only one gate. This gate is vulnerable to failure due to infrequent usage. Failure of the existing gate endangers the volume of the reservoir.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	80,000	80,000	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	80,000	80,000	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Lake Mooney - Thickener Tank and Equipment

Total Project Cost: \$800,000

Est. Opening Date: FY2021

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project consists of the construction of a second sludge thickener at the Lake Mooney Water Treatment Facility. The addition of this new tank and equipment allows for the repair and/or replacement of the existing thickener equipment without taking the entire plant off-line. These structures/equipment are typically provided in redundancy when newly constructed. Due to cost saving at new construction, the decision was to delay these aspect of the new Lake Mooney facility.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	800,000	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$800,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	800,000	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$800,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Lake Mooney - Permanganate

Total Project Cost: \$10,000,000

Est. Opening Date: FY2023

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project consists of the installation of a manganese removal system in addition to the permanganate contact process currently in place at the Lake Mooney Plant. This additional equipment at a new facility is due to the existing chemical make-up of the raw water in the new reservoir. Manganese is a naturally occurring element and is currently removed in the water treatment process but at a greater cost than newer technology costs. These equipment cost is a place-holder and will allow the installation upon complete analysis and recommendations by the consulting engineers and staff.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	350,000	0	0	0	0	5,000,000	4,650,000	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$350,000	\$0	\$0	\$0	\$0	\$5,000,000	\$4,650,000	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	350,000	0	0	0	0	5,000,000	4,650,000	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$350,000	\$0	\$0	\$0	\$0	\$5,000,000	\$4,650,000	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Lake Mooney - Additional Modules for Interconnection

Total Project Cost: \$945,000

Est. Opening Date: FY2024

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

The additional membrane modules for 5 million gallons of treatment capacity is planned as a placeholder in case this future capacity is necessary at an earlier time that is currently modeled.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	945,000	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$945,000	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	945,000	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$945,000	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Smith Lake - Electrical Switchgear

Total Project Cost: \$500,000

Est. Opening Date: FY2019

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project entails the replacement of the primary electrical switchgear at the Smith Lake Water Treatment Facility. The existing switchgear is original to the plant construction and is at or near its useful safe life. Technology has become more efficient and safer since the installation and it is necessary to replace this critical equipment.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	500,000	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	500,000	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Smith Lake - Filter Replacements

Total Project Cost: \$3,175,000

Est. Opening Date: FY2019

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project consists of the replacement of the filter structure and filter media for the two treatment trains at the Smith Lake Water Treatment Facility. The structure has met its designed life expectancy and is in need of replacement. Newer technology will allow for more efficient operation and a greater treatment capacity.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	1,496,000	0	1,679,000	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$1,496,000	\$0	\$1,679,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	1,679,000	0	0	0	0	0	0	0	0
User Fees	1,496,000	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$1,496,000	\$0	\$1,679,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$140,000	\$140,000	\$140,000	\$140,000	\$140,000	\$140,000	\$140,000	\$140,000	\$140,000

342 Phase 1

Total Project Cost: \$13,800,000

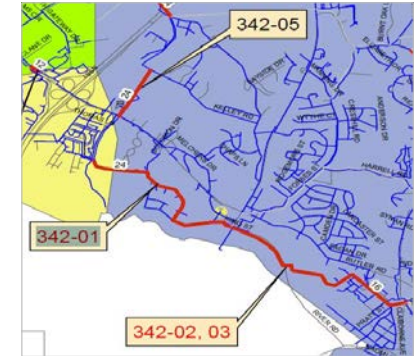
Est. Opening Date: FY2023

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

Construct a 24 inch main along Warrenton Road from Olde Forge Road to Jefferson Davis Highway and Butler Road to Carter Street, a 16 inch main along Butler Road, from Carter Street to White Oak Road to Castle Rock Drive, an 18 inch main along Butler Road, from Castle Rock Drive to Deacon Road / Cool Springs Intersection, as well as a 24 inch main along RV Parkway and Beagle Road to Truslow Road.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	6,000,000	5,000,000	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$6,000,000	\$5,000,000	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	2,800,000	0	0	0	6,000,000	5,000,000	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$2,800,000	\$0	\$0	\$0	\$6,000,000	\$5,000,000	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	502,000	920,000	920,000	920,000	920,000	920,000	920,000
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$502,000	\$920,000	\$920,000	\$920,000	\$920,000	\$920,000	\$920,000

342-101 - Enon Road Water Tank (formerly Centreport)

Total Project Cost: \$6,168,000

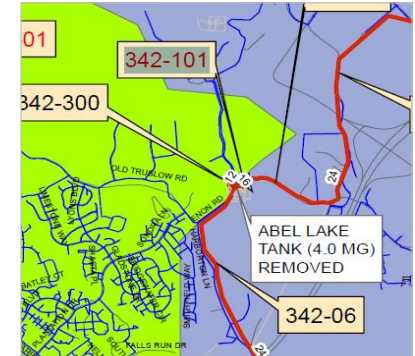
Est. Opening Date: FY2019

Links to Board's Strategic Initiatives

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project entails the construction of a 2 Million Gallon elevated water storage tank to be located at the current site of the Enon Road/Abel Lake Ground Tank. This new elevated water storage tank will provide water storage for the northern portion of the 342 Pressure Zone as well as storage for transmission into the 370 Pressure Zone. This project will enable the Centerport Parkway business area to have adequate water supply for future development as well as meet fire flow demands.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	168,000	6,000,000	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$168,000	\$6,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	6,000,000	0	0	0	0	0	0	0	0	0
User Fees	84,000	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	84,000	0	0	0	0	0	0	0	0	0	0
Total	\$168,000	\$6,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	502,000	502,000	502,000	502,000	502,000	502,000	502,000	502,000	502,000	502,000
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$502,000	\$502,000	\$502,000	\$502,000	\$502,000	\$502,000	\$502,000	\$502,000	\$502,000	\$502,000

WASTEWATER PROJECTS

Expenditures:	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Later Years Funding	Total CIP (FY19-28)	Total Project Cost
A-40 - Aquia Drive 8" Gravity Line, Delaware Drive to Vessel Drive	0	60,000	470,000	0	0	0	0	0	0	0	0	0	530,000	530,000
A-47 - Aquia Harbour 15" Gravity Line at Voyage Drive	0	40,000	300,000	0	0	0	0	0	0	0	0	0	340,000	340,000
A-51 - Coal Landing 15" Main, Greenridge Drive to US1	0	40,000	410,000	0	0	0	0	0	0	0	0	0	450,000	450,000
A-115 - Aquia @ Bridge Force Main	0	150,000	1,050,000	0	0	0	0	0	0	0	0	0	1,200,000	1,200,000
A-205 - Expand Upper Accokeek Pump Station	0	120,000	980,000	0	0	0	0	0	0	0	0	0	1,100,000	1,100,000
LFR-3 - Falls Run Interceptor, Phase 2	0	400,000	0	0	3,700,000	0	0	0	0	0	0	0	4,100,000	4,100,000
A-18 - Replace 24" with 36" Gravity Line, Whitsons Run to Austin Run Pump Station	0	0	0	0	139,300	1,253,700	0	0	0	0	0	0	1,393,000	1,393,000
A-37 - Construct 8" Gravity Line from Marshall to Heritage Oaks II Pump Station	0	0	0	0	0	55,500	499,500	0	0	0	0	0	555,000	555,000
A-234 - Expand Azalea Woods at Galway Lane Pump Station	0	0	0	0	0	0	1,300	11,700	0	0	0	0	13,000	13,000
LFR-15 - Replace 18", 15" and 12" with 24" Line along Claiborne Run from Morton Road to Kings Hill Road	0	0	206,300	1,856,700	0	0	0	0	0	0	0	0	2,063,000	2,063,000
LFR-30 - Construct 12" Gravity Line from England Run Pump Station to Days Inn Pump Station	0	0	0	0	0	0	118,100	1,062,900	0	0	0	0	1,181,000	1,181,000
LFR-51 - Construct 10" Line to serve future Central PDA Growth	0	0	0	0	24,500	220,500	0	0	0	0	0	0	245,000	245,000
LFR-58 - Replace 8" with 15" Line along Cambridge Street from Force Main to Michael Street	0	0	13,500	121,500	0	0	0	0	0	0	0	0	135,000	135,000
LFR-59 - Replace 8" with 10" from Nelms Circle to Auction Drive	0	0	0	0	0	0	0	137,900	1,241,100	0	0	0	1,379,000	1,379,000
LFR-129 - Replace 8" with 16" Force Main from Potomac Creek Pump Station	0	0	0	264,000	2,376,000	0	0	0	0	0	0	0	2,640,000	2,640,000
LFR-204 - Expand future Celebrate Virginia Pump Station	0	0	0	0	0	0	45,000	405,000	0	0	0	0	450,000	450,000
LFR-209 - Replace Falls Run Pump Station	0	0	538,200	4,850,000	0	0	0	0	0	0	0	0	5,388,200	5,388,200
LFR-214 - Expand Claiborne Run PS	0	1,500,000	0	0	0	0	0	0	0	0	0	0	1,500,000	1,500,000
LFR-217 - Expand Stafford Place Pump Station	0	0	0	0	0	4,500	40,500	0	0	0	0	0	45,000	45,000
LFR-228 - Expand Ingleside Pump Station	0	0	0	0	21,400	192,600	0	0	0	0	0	0	214,000	214,000
Gravity Lines & Interceptor Maintenance	0	500,000	500,000	500,000	500,000	500,000	550,000	600,000	650,000	700,000	750,000	0	5,750,000	5,750,000
Pump Stations	0	500,000	500,000	500,000	500,000	500,000	550,000	600,000	650,000	700,000	750,000	0	5,750,000	5,750,000
Little Falls Run Wastewater Treatment Facility - Influent Structure	0	350,000	0	0	0	0	0	0	0	0	0	0	350,000	350,000
Little Falls Run Wastewater Treatment Facility - Influent Grit Blowers	0	150,000	0	0	0	0	0	0	0	0	0	0	150,000	150,000
Little Falls Run Wastewater Treatment Facility - Filter Replacement	0	0	250,000	0	0	0	0	0	0	0	0	0	250,000	250,000
Aquia Wastewater Treatment Facility - Generator Tiebreaker (MCC Replacment)	0	1,000,000	0	0	0	0	0	0	0	0	0	0	1,000,000	1,000,000
Infiltration and Inflow Maintenance	0	250,000	250,000	250,000	250,000	250,000	300,000	350,000	400,000	450,000	500,000	0	3,250,000	3,250,000
Sewer Extension Projects	242,000	252,000	262,000	273,000	284,000	296,000	346,000	396,000	446,000	496,000	546,000	0	3,597,000	3,839,000

WASTEWATER PROJECTS

Expenditures:	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Later Years Funding	Total CIP (FY19-28)	Total Project Cost
AWWTF-001 - Aquia WWTF Upgrade - Facilities Planning	0	75,000	0	0	0	0	0	0	0	0	0	0	75,000	75,000
AWWTF-002 - Aquia WWTF General Upgrades - Concrete Repair, Headworks, Power Distribution	0	380,000	1,520,000	0	0	0	0	0	0	0	0	0	1,900,000	1,900,000
AWWTF-003 - Aquia WWTF Solids Handling - Sludge Storage Expansion	0	0	0	0	130,000	1,170,000	0	0	0	0	0	0	1,300,000	1,300,000
AWWTF-005 - Aquia WWTF General Upgrades - Filtration, UV, Controls, Miscellaneous	0	0	0	0	0	0	0	390,000	3,510,000	0	0	0	3,900,000	3,900,000
LWWTF-001 - Little Falls Run WWTF Upgrade - Facilities Planning	0	125,000	0	0	0	0	0	0	0	0	0	0	125,000	125,000
LWWTF-002 - Little Falls Run WWTF General Upgrades - Concrete Repair, Headworks, UV	0	0	260,000	1,740,000	0	0	0	0	0	0	0	0	2,000,000	2,000,000
LWWTF-003 - Little Falls Run WWTF Denitrification Upgrade	0	0	0	350,000	3,150,000	0	0	0	0	0	0	0	3,500,000	3,500,000
LWWTF-004 - Little Falls Run WWTF Upgrades (Rappahannock Policy, FWNC / NH3 Allowance)	0	0	0	0	1,160,000	10,440,000	0	0	0	0	0	0	11,600,000	11,600,000
LWWTF-005 - Little Falls Run WWTF General Upgrades - Filtration, Miscellaneous	0	0	0	0	0	0	270,000	2,430,000	0	0	0	0	2,700,000	2,700,000
Claiborne Run Gravity Sewer Project Construction	2,700,000	3,750,000	0	0	0	0	0	0	0	0	0	0	3,750,000	6,450,000
Lower Accokeek	2,571,000	7,571,000	0	0	0	0	0	0	0	0	0	0	7,571,000	10,142,000
Wayside Sewer Interceptor	3,179,000	0	0	0	0	0	0	0	0	0	0	0	0	3,179,000
Falls Run Sewage Force Main 24-inch	0	250,000	3,643,000	0	0	0	0	0	0	0	0	0	3,893,000	3,893,000
Claiborne Run Parallel Force Main	6,214,000	2,000,000	0	0	0	0	0	0	0	0	0	0	2,000,000	8,214,000
TOTALS:	\$14,906,000	\$19,463,000	\$11,153,000	\$10,705,200	\$12,235,200	\$14,882,800	\$2,720,400	\$6,383,500	\$6,897,100	\$2,346,000	\$2,546,000	\$0	\$89,332,200	\$104,238,200

A-40 - Aquia Drive 8" Gravity Line, Delaware Drive to Vessel Drive

Total Project Cost: \$530,000

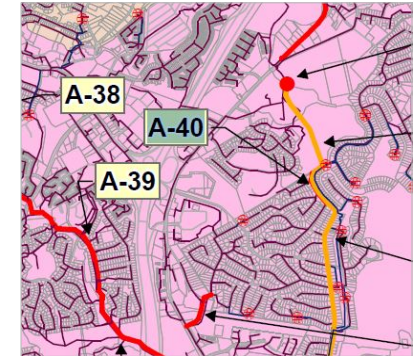
Est. Opening Date: FY2020

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes replacement of the existing 8-inch with 12-inch gravity main along Aquia Drive from Delaware Drive to Vessel Drive (2,028 feet). The purpose of the project is to increase the conveyance capacity of the existing 8-inch gravity main. Prior to replacing the existing gravity main, it is recommended that flow monitoring and/or sewer modeling be performed to assess the available capacity remaining in the existing gravity main.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	60,000	470,000	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$60,000	\$470,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	60,000	470,000	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$60,000	\$470,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

A-47 - Aquia Harbour 15" Gravity Line at Voyage Drive

Total Project Cost: \$340,000

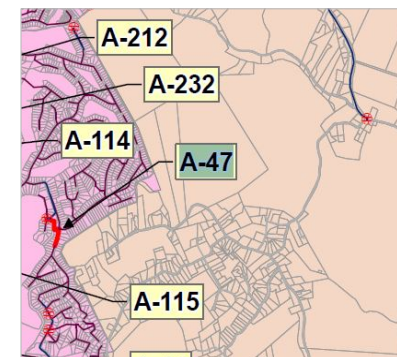
Est. Opening Date: FY2020

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes replacement of the existing 8-inch with 15-inch gravity main near Voyage Drive (1,206 feet). The purpose of this project is to increase the capacity of the existing 8-inch gravity main. Prior to replacing the existing gravity main, it is recommended that flow monitoring be performed to assess the available capacity remaining in the existing gravity main.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	40,000	300,000	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$40,000	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	40,000	300,000	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$40,000	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

A-51 - Coal Landing 15" Main, Greenridge Drive to US1

Total Project Cost: \$450,000

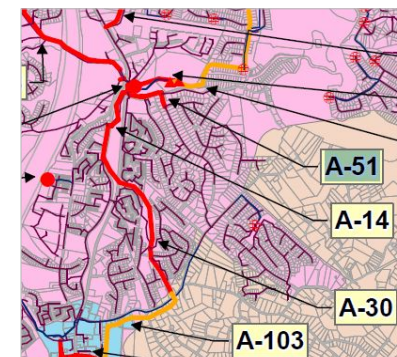
Est. Opening Date: FY2020

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes replacement of the existing 12-inch with 15-inch gravity main along Coal Landing Rd from Jefferson Davis Hwy to Knightsbridge Way (1,586 feet). The purpose of the project is to serve future customers in this area.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	40,000	410,000	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$40,000	\$410,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	40,000	410,000	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$40,000	\$410,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

A-115 - Aquia @ Bridge Force Main

Total Project Cost: \$1,200,000

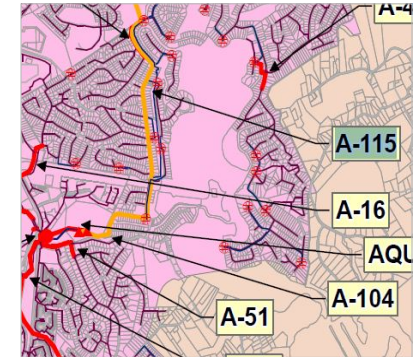
Est. Opening Date: FY2020

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes replacement of the 14-inch and 12-inch force mains from Aquia at Bridge PS to the existing 18-inch force main near Starboard Cove Lane (6,976 feet). The purpose of the project is to increase the capacity of the force main. The timing for construction of this project is dependent on the timing of flows in this area.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	150,000	1,050,000	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$150,000	\$1,050,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	150,000	1,050,000	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$150,000	\$1,050,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

A-205 - Expand Upper Accokeek Pump Station

Total Project Cost: \$1,100,000

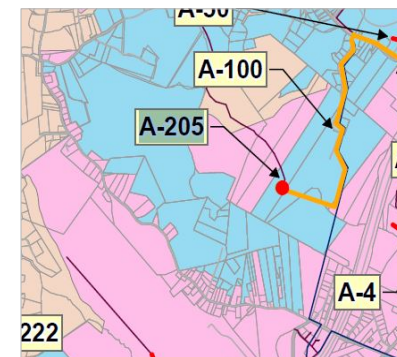
Est. Opening Date: FY2020

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes expansion of the Upper Accokeek PS by 2.95 mgd. The purpose of this project is to serve growth in the vicinity of the pumping station.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	120,000	980,000	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$120,000	\$980,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	120,000	980,000	0	0	0	0	0	0	0	0
Total	\$0	\$120,000	\$980,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LFR-3 - Falls Run Interceptor, Phase 2

Total Project Cost: \$4,100,000

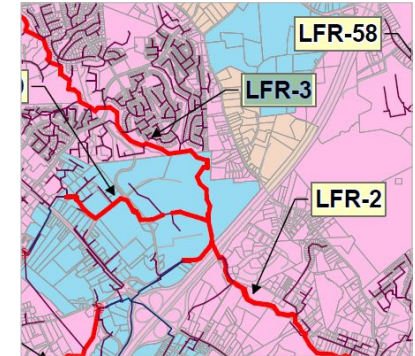
Est. Opening Date: FY2021

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes replacement of the existing 15-inch and 12-inch with 24-inch gravity main along Falls Run from 30-inch in vicinity of Stanstead Road to Pennsbury Court (12,338 feet). The purpose of the project is to significantly increase the conveyance capacity of interceptor along Falls Run to satisfy future needs. The timing for this project is dependent on the timing for development of Westlake and the area along Potomac Creek west of Abel Lake.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	400,000	0	0	3,700,000	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$400,000	\$0	\$0	\$3,700,000	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	400,000	0	0	3,700,000	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$400,000	\$0	\$0	\$3,700,000	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

A-18 - Replace 24" with 36" Gravity Line, Whitsons Run to Austin Run Pump Station

Total Project Cost: \$1,393,000

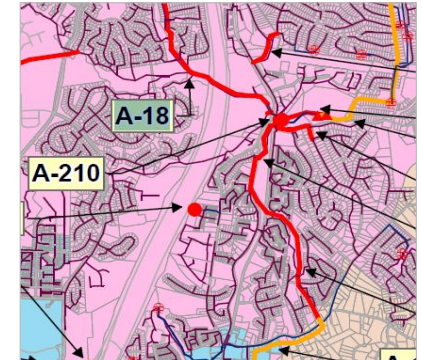
Est. Opening Date: FY2021

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes replacement of the existing 24-inch with 36-inch gravity main along Austin Run from Whitsons Run to Austin Run PS (2,354 feet). The purpose of the project is to increase the capacity of this critical interceptor which conveys flow from the interceptors along Austin and Whitsons Run under I-95 to the Austin Run PS. This project serves a large area and a major source of flow impacting the timing for replacing the existing gravity main is the quantity of flow through the Camp Barrett PS (Quantico Marine Corps Base). Delays in the quantity of flow from Quantico Marine Corps Base could delay the construction of this project.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	139,300	1,253,700	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$139,300	\$1,253,700	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	69,650	626,850	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	69,650	626,850	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$139,300	\$1,253,700	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

A-37 - Construct 8" Gravity Line from Marshall to Heritage Oaks II Pump Station

Total Project Cost: \$555,000

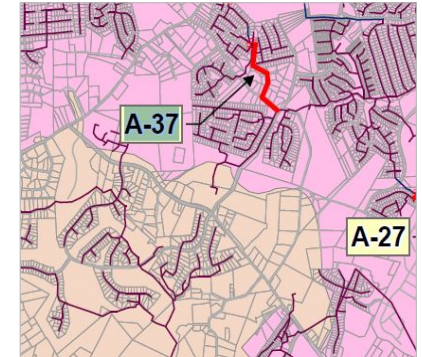
Est. Opening Date: FY2024

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes design and construction of an 8-inch gravity main from interceptor along Austin Run near Winding Creek Road and Marshall Road to Heritage Oaks II PS (2,635 feet). The purpose of the project is to eliminate the Heritage Oaks II PS. The timing for construction of this project is dependent on growth and available capacity of the Heritage Oaks II PS.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	55,500	499,500	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$55,500	\$499,500	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	55,500	499,500	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$55,500	\$499,500	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

A-234 - Expand Azalea Woods at Galway Lane Pump Station

Total Project Cost: \$13,000

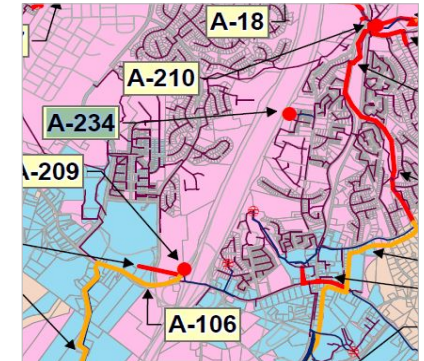
Est. Opening Date: FY2025

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes design and construction of an increase in pumping capacity for the Azalea Woods @ Galway Lane PS by 0.056 mgd.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	1,300	11,700	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$1,300	\$11,700	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	1,300	11,700	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$1,300	\$11,700	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LFR-15 - Replace 18", 15" and 12" with 24" Line along Claiborne Run from Morton Road to Kings Hill Road

Total Project Cost: \$2,063,000

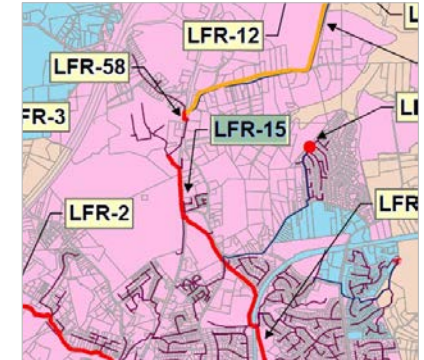
Est. Opening Date: FY2021

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes replacement of the existing 18-inch, 15-inch and 12-inch with 24-inch gravity main along Claiborne Run from Morton Road to Kings Hill Road (6,212 feet). The timing for this project will be dependent on the timing of flows from the Potomac Creek PS. The County has been replacing segments of interceptor along Claiborne Run downstream of this segment due to poor structural condition. The County may decide to replace the 18-inch, 15-inch and 12-inch mains earlier than capacity would dictate if these mains are also found to be in poor condition.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	206,300	1,856,700	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$206,300	\$1,856,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	206,300	1,856,700	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$206,300	\$1,856,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LFR-30 - Construct 12" Gravity Line from England Run Pump Station to Days Inn Pump Station

Total Project Cost: \$1,181,000

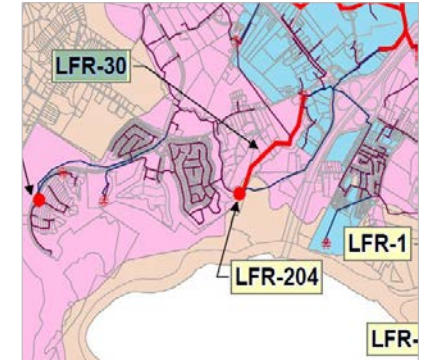
Est. Opening Date: FY2025

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes design and construction of a 12-inch gravity main along unnamed tributary to England Run from England Run PS to Days Inn PS (4,500 feet). The purpose of the project is to convey flows from the upstream interceptors which were constructed to eliminate the Days Inn PS and the Heritage CC PS.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	118,100	1,062,900	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$118,100	\$1,062,900	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	118,100	1,062,900	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$118,100	\$1,062,900	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LFR-51 - Construct 10" Line to serve future Central PDA Growth

Total Project Cost: \$245,000

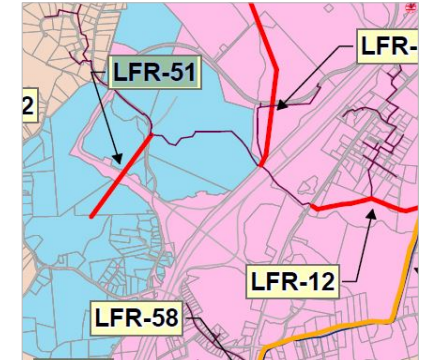
Est. Opening Date: FY2023

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes design and construction of a 10-inch gravity main to serve future development in the Centerport/Airport part of the County (1,000 feet), specifically the southwest quadrant.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	24,500	220,500	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$24,500	\$220,500	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	24,500	220,500	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$24,500	\$220,500	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LFR-58 - Replace 8" with 15" Line along Cambridge Street from Force Main to Michael Street

Total Project Cost: \$135,000

Est. Opening Date: FY2021

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes replacement of the existing 8-inch main with a 15-inch gravity main along Cambridge Street from the force main to Michael Street (480 feet).



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	13,500	121,500	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$13,500	\$121,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	6,750	60,750	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	6,750	60,750	0	0	0	0	0	0	0
Total	\$0	\$0	\$13,500	\$121,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LFR-59 - Replace 8" with 10" from Nelms Circle to Auction Drive

Total Project Cost: \$1,379,000

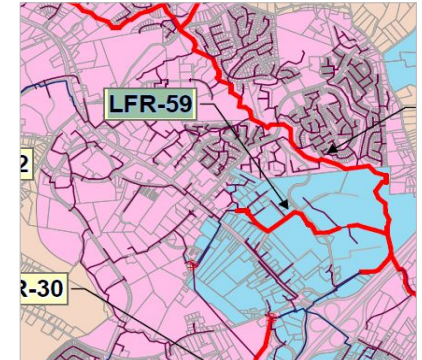
Est. Opening Date: FY2026

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes replacement of 8-inch main with a 10-inch gravity main from Nelms Circle to Auction Drive (5,638 feet).



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	0	137,900	1,241,100	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$137,900	\$1,241,100	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	68,950	620,550	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	68,950	620,550	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$137,900	\$1,241,100	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LFR-129 - Replace 8" with 16" Force Main from Potomac Creek Pump Station

Total Project Cost: \$2,640,000

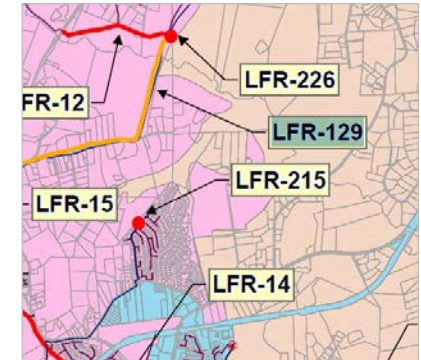
Est. Opening Date: FY2022

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes replacement of the existing 8-inch with a 16-inch force main from Potomac Creek PS (9,055 feet). The purpose of the project is to serve future customers in the area served by the Potomac Creek PS.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	264,000	2,376,000	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$264,000	\$2,376,000	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	132,000	1,188,000	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	132,000	1,188,000	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$264,000	\$2,376,000	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LFR-204 - Expand future Celebrate Virginia Pump Station

Total Project Cost: \$450,000

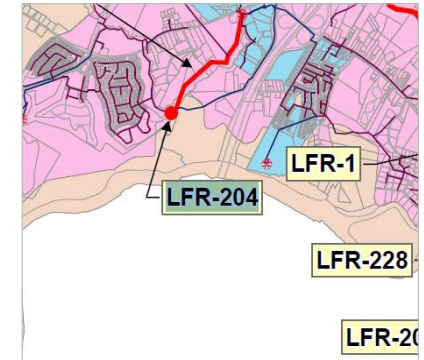
Est. Opening Date: FY2025

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes design and construction of the expansion of the Celebrate VA PS by 1.53 mgd. The purpose of the project is to serve future customers in this area.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	45,000	405,000	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$45,000	\$405,000	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	45,000	405,000	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$45,000	\$405,000	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LFR-209 - Replace Falls Run Pump Station

Total Project Cost: \$5,388,200

Est. Opening Date: FY2022

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes design and construction for the replacement of the Falls Run PS. This project replaces a vital part of the wastewater collection system in the southern part of the County. The existing station on Washington Street is nearing the end of its useful designed life and is in need of a complete structure, equipment, and possibly a location upgrade.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	538,200	4,850,000	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$538,200	\$4,850,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	269,100	2,425,000	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	269,100	2,425,000	0	0	0	0	0	0	0
Total	\$0	\$0	\$538,200	\$4,850,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LFR-214 - Expand Claiborne Run PS

Total Project Cost: \$1,500,000

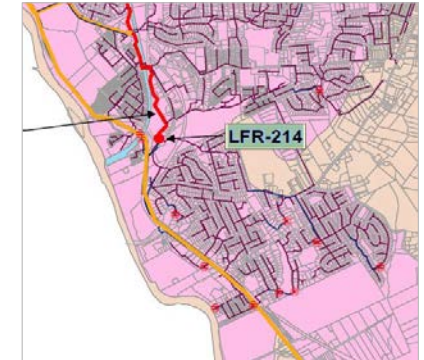
Est. Opening Date: FY2019

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project includes expansion of the Claiborne Run PS by 6.93 mgd.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	1,500,000	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$1,500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	1,500,000	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$1,500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LFR-217 - Expand Stafford Place Pump Station

Total Project Cost: \$45,000

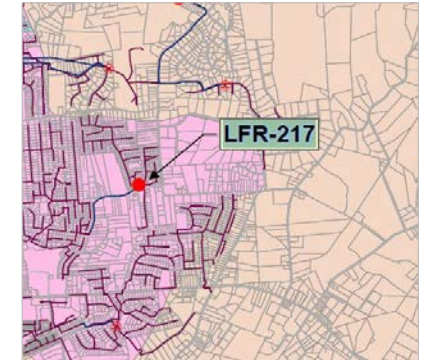
Est. Opening Date: FY2024

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project is expansion of Stratford Place PS by 0.165 mgd.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	4,500	40,500	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$4,500	\$40,500	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	4,500	40,500	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$4,500	\$40,500	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LFR-228 - Expand Ingleside Pump Station

Total Project Cost: \$214,000

Est. Opening Date: FY2023

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project is the expansion of the Ingleside PS by 0.311 mgd.

OPERATING IMPACT SUMMARY

Subject to normal maintenance.



PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	21,400	192,600	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$21,400	\$192,600	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	21,400	192,600	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$21,400	\$192,600	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Gravity Lines & Interceptor Maintenance

Total Project Cost: \$5,750,000

Est. Opening Date: FY2021

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This work consists of the replacement of significant lengths of wastewater gravity interceptors throughout the County. The Master Plan identifies which gravity interceptors that require capacity upgrades or replacement but not replacement due to age or condition. This work is part of a renewed effort to focus on the Repair/Replace/Rehabilitate philosophy for infrastructure in the County.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	500,000	500,000	500,000	500,000	500,000	550,000	600,000	650,000	700,000	750,000
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$550,000	\$600,000	\$650,000	\$700,000	\$750,000

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	500,000	500,000	500,000	500,000	500,000	550,000	600,000	650,000	700,000	750,000
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$550,000	\$600,000	\$650,000	\$700,000	\$750,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Pump Stations

Total Project Cost: \$5,750,000

Est. Opening Date: FY2021

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This work consists of partial or significant replacements of existing pump stations that have exhibited frequent maintenance issues. The Utilities Department maintains more than 90 pump stations with some being more than 30 years old. The Master Plan identifies which pump stations that require capacity upgrades or replacement but not replacement due to age or performance. This work is part of a renewed effort to focus on the Repair/Replace/Rehabilitate philosophy for infrastructure in the County.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	500,000	500,000	500,000	500,000	500,000	550,000	600,000	650,000	700,000	750,000
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$550,000	\$600,000	\$650,000	\$700,000	\$750,000

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	500,000	500,000	500,000	500,000	500,000	550,000	600,000	650,000	700,000	750,000
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$550,000	\$600,000	\$650,000	\$700,000	\$750,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Little Falls Run Wastewater Treatment Facility - Influent Structure

Total Project Cost: \$350,000

Est. Opening Date: FY2019

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project consists of the replacement of the influent structure and equipment for the Little Falls Run Wastewater Treatment Facility. All wastewater in the southern part of the County flows through this structure. This structure was constructed in the early 90's and has reached or exceeded its useful life and needs to be replaced. The structure, along with current equipment and technology will allow the facility to operate more efficiently and be more dependable.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	350,000	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	350,000	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Little Falls Run Wastewater Treatment Facility - Influent Grit Blowers

Total Project Cost: \$150,000

Est. Opening Date: FY2019

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This work is directly associated with the project to replace the influent structure at Little Falls Run Wastewater Treatment Facility.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	150,000	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	150,000	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Little Falls Run Wastewater Treatment Facility - Filter Replacement

Total Project Cost: \$250,000

Est. Opening Date: FY2020

[Links to Board's Strategic Initiatives](#)

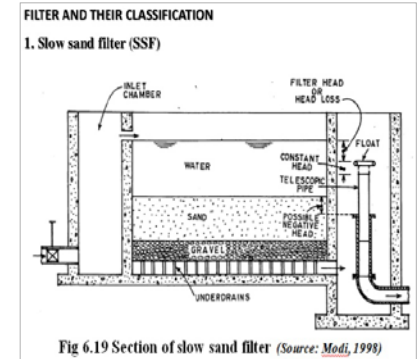
- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This work consists of the replacement of the filter media at Little Falls Run Wastewater Treatment Facility. The media material is sacrificial and requires periodic replacement.

OPERATING IMPACT SUMMARY

Subject to normal maintenance.



PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	250,000	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	250,000	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Aquia Wastewater Treatment Facility - Generator Tiebreaker (MCC Replacment)

Total Project Cost: \$1,000,000

Est. Opening Date: FY2019

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This work consists of creating a parallel operating scenario for the two large power generators at Aquia Wastewater Treatment Facility. Currently, the plant relies on two generators each operating a separate portion of the plant. This project creates a parallel operation of the generators and removes the vulnerability of a system failure in the event of a lengthy power outage.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	1,000,000	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	1,000,000	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Infiltration and Inflow Maintenance

Total Project Cost: \$3,250,000

Est. Opening Date: FY2021

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This work consists of specific repairs to areas of our existing wastewater infrastructure to prevent ground water or surface water from entering into the collection system. This inflow/infiltration uses critical capacity in both the collection system and treatment facility. The large system in the County and the age of the system require constant evaluation of inflow/infiltration into the system.



An offset pipe joint showing active Infiltration/Inflow was located during a TV inspection.

OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	250,000	250,000	250,000	250,000	250,000	300,000	350,000	400,000	450,000	500,000
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$300,000	\$350,000	\$400,000	\$450,000	\$500,000

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	250,000	250,000	250,000	250,000	250,000	300,000	350,000	400,000	450,000	500,000
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$300,000	\$350,000	\$400,000	\$450,000	\$500,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Sewer Extension Projects

Total Project Cost: \$3,839,000

Est. Opening Date: FY2029

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

Short Sewer Extension Projects, Neighborhood Projects and Large Scale Projects that qualify for the extension of sewer service under the County's Water & Sewer Line Extension Policy (R10-217).



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	242,000	252,000	262,000	273,000	284,000	296,000	346,000	396,000	446,000	496,000	546,000
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$242,000	\$252,000	\$262,000	\$273,000	\$284,000	\$296,000	\$346,000	\$396,000	\$446,000	\$496,000	\$546,000

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	242,000	252,000	262,000	273,000	284,000	296,000	346,000	396,000	446,000	496,000	546,000
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$242,000	\$252,000	\$262,000	\$273,000	\$284,000	\$296,000	\$346,000	\$396,000	\$446,000	\$496,000	\$546,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

AWWTF-001 - Aquia WWTF Upgrade - Facilities Planning

Total Project Cost: \$75,000

Est. Opening Date: FY2019

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

DOU has identified certain proposed modifications as part of its on-going asset renewal program. These upgrades include on-going concrete repair to process units, power distribution main-tie-main configuration, potential headworks upgrade, and a higher-capacity dewatering centrifuge. Aging infrastructure, including the original Schreiber process train and the effluent filtration system, require periodic major maintenance or upgrades. Existing sludge storage volume is somewhat limited for current sludge processing operations and plant capacity rating. The proposed, limited WWTF facilities planning would build upon the master plan evaluation and baseline condition assessments at Aquia to prioritize and aggregate various upgrades and modifications - a platform for subsequent capital improvement projects.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	75,000	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	75,000	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

AWWTF-002 - Aquia WWTF General Upgrades - Concrete Repair, Headworks, Power Distribution

Total Project Cost: \$1,900,000

Est. Opening Date: FY2020

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

DOU has identified certain proposed modifications as part of its on-going asset renewal program. These upgrades include on-going concrete repair to process units, power distribution main-tie-main configuration, and potential headworks upgrade. These general upgrades are compatible and consistent with other anticipated near-term upgrades and modifications for firm capacity, efficient operations, system reliability, and effluent compliance.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	380,000	1,520,000	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$380,000	\$1,520,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	380,000	1,520,000	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$380,000	\$1,520,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

AWWTF-003 - Aquia WWTF Solids Handling - Sludge Storage Expansion

Total Project Cost: \$1,300,000

Est. Opening Date: FY2023

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

DOU has identified the need for higher sludge dewatering capacity to optimize its current solids processing operation. The current sludge storage (aerobic digestion) capacity is less than the rated plant capacity sludge production levels, and additional sludge storage would improve sludge stabilization prior to dewatering and disposal, and facilitate the use of a higher capacity centrifuge. Supplemental sludge storage tankage, with aeration / mixing / pumping, is proposed. These general upgrades are compatible and consistent with other anticipated near-term upgrades and modifications for firm capacity, efficient operations, system reliability, and biosolids management permit compliance.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	130,000	1,170,000	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$130,000	\$1,170,000	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	130,000	1,170,000	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$130,000	\$1,170,000	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

AWWTF-005 - Aquia WWTF General Upgrades - Filtration, UV, Controls, Miscellaneous

Total Project Cost: \$3,900,000

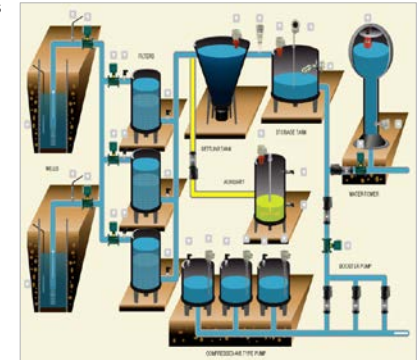
Est. Opening Date: FY2026

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

DOU has identified certain proposed modifications as part of its on-going asset renewal program. These upgrades include mechanical and control upgrades to effluent filtration, plant SCADA and overall process control system updates, and other miscellaneous treatment upgrades. Effluent UV disinfection equipment has limited remaining life, technology upgrade may be part of asset renewal. These general upgrades are compatible and consistent with other anticipated near-term upgrades and modifications for firm capacity, efficient operations, system reliability, and effluent compliance.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	0	390,000	3,510,000	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$390,000	\$3,510,000	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	390,000	3,510,000	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$390,000	\$3,510,000	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LWWTF-001 - Little Falls Run WWTF Upgrade - Facilities Planning

Total Project Cost: \$125,000

Est. Opening Date: FY2019

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

DOU has identified certain proposed modifications as part of its on-going asset renewal program. These upgrades include on-going concrete repair to process units, potential headworks upgrade, and UV disinfection performance improvements. Aging infrastructure, including the original Schreiber process train and the effluent filtration system, require periodic major maintenance or upgrades. The site may be constrained with respect to pending or future upgrades or expansion, treatment technologies and configurations should be studied. In addition, the master planning process has identified near-term and longer-term wastewater system growth that may affect the timing of certain capacity upgrades. The proposed, step-wise WWTF facilities planning would build upon the master plan evaluation and baseline condition assessments at Little Falls Run to prioritize and aggregate various upgrades and modifications - a platform for subsequent capital improvement projects.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	125,000	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$125,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	125,000	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$125,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LWWTF-002 - Little Falls Run WWTF General Upgrades - Concrete Repair, Headworks, UV

Total Project Cost: \$2,000,000

Est. Opening Date: FY2021

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

DOU has identified certain proposed modifications as part of its on-going asset renewal program. These upgrades include on-going concrete repair to process units, potential headworks upgrade, and UV disinfection updates. These general upgrades are compatible and consistent with other anticipated near-term upgrades and modifications for firm capacity, efficient operations, system reliability, and effluent compliance.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	260,000	1,740,000	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$260,000	\$1,740,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	260,000	1,740,000	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$260,000	\$1,740,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LWWTF-003 - Little Falls Run WWTF Denitrification Upgrade

Total Project Cost: \$3,500,000

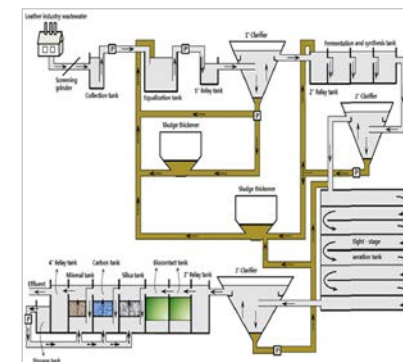
Est. Opening Date: FY2022

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

The Little Falls Run WWTF VPDES Permit expires in September 2020, DEQ is proposing a Rappahannock River Water Quality Policy due to low downstream dissolved oxygen levels, so the reapplication process may identify other upgrades or modifications. These upgrades are compatible and consistent with other anticipated near-term upgrades and modifications for firm capacity, efficient operations, system reliability, and nutrient removal permit compliance.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	350,000	3,150,000	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$350,000	\$3,150,000	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	350,000	3,150,000	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$350,000	\$3,150,000	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LWWTF-004 - Little Falls Run WWTF Upgrades (Rappahannock Policy, FWNC / NH3 Allowance)

Total Project Cost: \$11,600,000

Est. Opening Date: FY2023

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

The Little Falls Run WWTF VPDES Permit expires in September 2020, DEQ is proposing a Rappahannock River Water Quality Policy due to low downstream dissolved oxygen levels, so the reapplication process may identify other upgrades or modifications. This CIP project specifically addresses nitrogen removal and phosphorus polishing. These upgrades are compatible and consistent with other anticipated near-term upgrades and modifications for firm capacity, efficient operations, system reliability, and nutrient removal permit compliance. This CIP line item is an Allowance, which would be defined and detailed as the water quality criteria is adopted, DEQ policies & procedures are reviewed, and the new rule is applied to VPDES Permit renewals in 2018. There is no property acquisition cost included in this budgetary allowance.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	1,160,000	10,440,000	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$1,160,000	\$10,440,000	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	1,160,000	10,440,000	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$1,160,000	\$10,440,000	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

LWWTF-005 - Little Falls Run WWTF General Upgrades - Filtration, Miscellaneous

Total Project Cost: \$2,700,000

Est. Opening Date: FY2025

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

DOU has identified certain proposed modifications as part of its on-going asset renewal program. These upgrades include mechanical and control upgrades to effluent filtration, plant SCADA and overall process control system updates, and other miscellaneous treatment upgrades. These general upgrades are compatible and consistent with other anticipated near-term upgrades and modifications for firm capacity, efficient operations, system reliability, and effluent compliance.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	0	0	0	0	0	270,000	2,430,000	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$270,000	\$2,430,000	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	270,000	2,430,000	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$270,000	\$2,430,000	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Claiborne Run Gravity Sewer Project Construction

Total Project Cost: \$6,450,000

Est. Opening Date: FY2019

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project will repair and replace a section of the Claiborne Run interceptor. Most of the lower end of this interceptor was replaced previously but due to difficulties with CSX and access challenges it was delayed. This project's scope was recently decreased based on modifications to the Falls Run FM which decreased the capacity upgrades for the Claiborne Run PS and gravity interceptor.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	3,750,000	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$3,750,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	3,750,000	0	0	0	0	0	0	0	0	0
ProRata Fees	2,700,000	0	0	0	0	0	0	0	0	0	0
Total	\$2,700,000	\$3,750,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Lower Accokeek

Total Project Cost: \$10,142,000

Est. Opening Date: FY2019

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project is compiled of several master-planned projects necessary to serve the southern Courthouse Area. This project consists of the Lower Accokeek Pumping Station, a gravity interceptor from the Hospital southward to Accokeek Creek, a force main from the pumping station at Accokeek Creek northward to the Hope Road vicinity, and other gravity lines designed to remove Wyche Road Pumping Station and Rowser Pumping Station from the system. Another project, further downstream, called the Wayside Interceptor is also an integral part of this overall system supporting the Courthouse Area.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Expenditures	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	2,571,000	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	7,571,000	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$2,571,000	\$7,571,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Revenues	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	2,571,000	4,800,000	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	2,771,000	0	0	0	0	0	0	0	0	0
Total	\$2,571,000	\$7,571,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	402,000	402,000	402,000	402,000	402,000	402,000	402,000	402,000	402,000	402,000
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$402,000	\$402,000	\$402,000	\$402,000	\$402,000	\$402,000	\$402,000	\$402,000	\$402,000	\$402,000

Wayside Sewer Interceptor

Total Project Cost: \$3,179,000

Est. Opening Date: FY2020

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project is a master-planned project associated with the Lower Accokeek project. This portion of the gravity interceptor serving the northern Courthouse Area is necessary to accommodate the future flows coming from the Lower Accokeek Pumping Station in route to the Austin Run Pumping Station and Aquia Wastewater Treatment Facility.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	179,000	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	3,000,000	0	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$3,179,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	3,179,000	0	0	0	0	0	0	0	0	0	0
Total	\$3,179,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Falls Run Sewage Force Main 24-inch

Total Project Cost: \$3,893,000

Est. Opening Date: FY2020

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

The project consists of the replacement of the Falls Run Force Main which trasmits flow from the Falls Run Pumping Station in Falmouth to the Claiborne Run Parallel Force Main near Cool Springs Road and Route 3. This change in alignment is advantageous in that it decreases the anticipated upgrades to the Claiborne Run Pumping Station and interceptor saving approximately \$12M in future spending.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	0	250,000	3,643,000	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$250,000	\$3,643,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	125,000	1,821,500	0	0	0	0	0	0	0	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	125,000	1,821,500	0	0	0	0	0	0	0	0
Total	\$0	\$250,000	\$3,643,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Claiborne Run Parallel Force Main

Total Project Cost: \$8,214,000

Est. Opening Date: FY2019

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

This project is a long-planned master plan project (formerly LFR-113, 2006 MP) that has been modified to meet current flows and configurations. The project has been modified in how it transmits flows. This project is part of the reconfiguration involving the Claiborne Run Pumping Station and the Falls Run Force Main. This project was originally intended to connect the Claiborne Run Pumping Station to the Little Falls Run Wastewater Treatment Facility. As now planned, this project will be a dedicated extension of the Falls Run Force Main, thus contributing to significant capital savings.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	6,214,000	2,000,000	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$6,214,000	\$2,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	2,000,000	0	0	0	0	0	0	0	0	0
Availability Fees	3,107,000	0	0	0	0	0	0	0	0	0	0
ProRata Fees	3,107,000	0	0	0	0	0	0	0	0	0	0
Total	\$6,214,000	\$2,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

OTHER

Expenditures:	Prior Funding	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Later Years Funding	Total CIP (FY19-28)	Total Project Cost
Stafford Complex	750,000	0	0	0	0	0	0	0	0	423,000	0	0	423,000	1,173,000
Vehicles and Equipment Replacement	675,000	1,554,000	891,000	443,000	426,000	662,000	383,000	458,000	400,000	400,000	400,000	0	6,017,000	6,692,000
Contingency Allowance	1,130,800	1,143,000	1,377,000	585,700	452,200	315,800	2,632,300	362,500	155,200	185,300	0	0	7,209,000	8,339,800
TOTALS:	\$2,555,800	\$2,697,000	\$2,268,000	\$1,028,700	\$878,200	\$977,800	\$3,015,300	\$820,500	\$555,200	\$1,008,300	\$400,000	\$0	\$13,649,000	\$16,204,800

Stafford Complex

Total Project Cost: \$1,173,000

Est. Opening Date: FY2023

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

Funding is included in the planning period to evaluate and potentially construct facilities on land owned by the County near the Regional Jail for use by Fire & Rescue, Parks and Recreation and the Department of Utilities. For the Department of Utilities the need would be for additional area to store pipe and other materials and enhance our ability to make bulk purchases and achieve cost savings. Space is also needed to provide indoor storage for the vac trucks to prevent freezing issues in cold weather. In addition, centralized office space is needed to consolidate operations and eliminate the need to lease office space.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	750,000	0	0	0	0	0	0	0	0	423,000	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$750,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$423,000	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	750,000	0	0	0	0	0	0	0	0	423,000	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$750,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$423,000	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Vehicles and Equipment Replacement

Total Project Cost: \$6,692,000

Est. Opening Date: FY2028

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

Replacement of vehicles and major pieces of equipment due to high mileage, excess repair and maintenance cost, or condition issues.

OPERATING IMPACT SUMMARY

Subject to normal maintenance.



PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	675,000	1,554,000	891,000	443,000	426,000	662,000	383,000	458,000	400,000	400,000	400,000
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$675,000	\$1,554,000	\$891,000	\$443,000	\$426,000	\$662,000	\$383,000	\$458,000	\$400,000	\$400,000	\$400,000

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	675,000	1,554,000	891,000	443,000	426,000	662,000	383,000	458,000	400,000	400,000	400,000
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$675,000	\$1,554,000	\$891,000	\$443,000	\$426,000	\$662,000	\$383,000	\$458,000	\$400,000	\$400,000	\$400,000

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Contingency Allowance

Total Project Cost: \$8,339,800

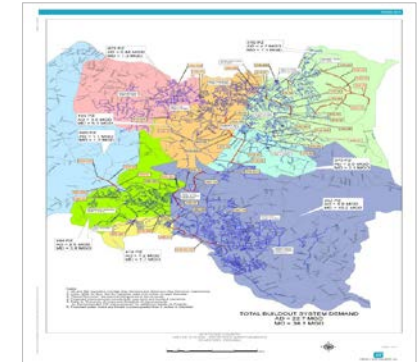
Est. Opening Date: FY2028

[Links to Board's Strategic Initiatives](#)

- Water and Sewer Master Plan
- Utilities Fiscal Plan

PROGRAM DESCRIPTION

Funding is included in the planning period to provide contingent allowance for all capital projects.



OPERATING IMPACT SUMMARY

Subject to normal maintenance.

PROJECT COSTS

Cost Categories	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Planning / Design	0	0	0	0	0	0	0	0	0	0	0
Property Acquisition	0	0	0	0	0	0	0	0	0	0	0
Construction / Project	1,130,800	1,143,000	1,377,000	585,700	452,200	315,800	2,632,300	362,500	155,200	185,300	0
Contingency	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	\$1,130,800	\$1,143,000	\$1,377,000	\$585,700	\$452,200	\$315,800	\$2,632,300	\$362,500	\$155,200	\$185,300	\$0

Funding Sources	Prior Year	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Bonds	0	0	0	0	0	0	0	0	0	0	0
User Fees	1,130,800	1,143,000	1,377,000	585,700	452,200	315,800	2,632,300	362,500	155,200	185,300	0
Availability Fees	0	0	0	0	0	0	0	0	0	0	0
ProRata Fees	0	0	0	0	0	0	0	0	0	0	0
Total	\$1,130,800	\$1,143,000	\$1,377,000	\$585,700	\$452,200	\$315,800	\$2,632,300	\$362,500	\$155,200	\$185,300	\$0

Operating Impacts	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Personnel	0	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0	0
Debt Service	0	0	0	0	0	0	0	0	0	0
Revenue / Savings	0	0	0	0	0	0	0	0	0	0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Debt Management Policy Statement

The Government Finance Officers Association's Committee on Governmental Debt and Fiscal Policy issued a statement regarding Recommended Practice on Debt Policy Management in 1995, and revised it in 2003. The following comments were made in the introduction to the statement:

"Debt management policies are written guidelines and restrictions that affect the amount and type of debt issued by a state or local government, the issuance process, and the management of a debt portfolio. A debt management policy improves the quality of decisions, provides justification for the structure of debt issuance, identifies policy goals, and demonstrates a commitment to long-term financial planning, including a multi-year capital plan. Adherence to a debt management policy signals to rating agencies and the capital markets that a government is well managed and should meet its obligations in a timely manner. Debt levels and their related annual costs are important long-term obligations that must be managed within available resources. An effective debt management policy provides guidelines for a government to manage its debt program in line with those resources."

Accordingly, Stafford County examined its debt program and the Board of Supervisors adopted debt policy limits to ensure that no undue burden is placed on the County and its citizens. The County's debt policies are included in the Board's Principles of High Performance Financial Management. Updated in November 2015, the debt limitations are as follows:

- General obligation debt shall not exceed 3.0% of the assessed valuation of taxable real property.
- General fund debt service expenditures (County and Schools) shall not exceed 10% of the general government and schools operating budgets.
- Capital lease debt service shall not exceed 1% of the general government budget. Capital lease debt may only be used if the following four criteria are met:
 1. Capital lease purchase is eligible under state law for such financing; and,
 2. Useful life of the purchase equals or exceeds the term of the debt; and,
 3. Total purchase exceeds \$100,000; and,
 4. Sufficient funds are available to service the capital lease debt.
- Virginia counties, unlike cities, do not have a legal debt limit.
- Revenue and refunding bonds and bonds for school capital projects are sold through the State's Literary Fund or the Virginia Public School Authority,
- Bonds sold through the Virginia Resource Authority or other state agency as prescribed by law requires a public hearing and approval by the Board of Supervisors.
- General Obligation bond sales must be approved by voter referendum. This requirement does not apply to "moral obligation issues," such as Certificates of Participation, which do not commit Stafford's full faith and credit and ad valorem taxing power, but instead, require annual appropriation by the Board of Supervisors.

The adopted CIP fully complies with the financial policies.

Bond Rating

The County's bond ratings are shown below:

	Moody's	Standard & Poor's	Fitch
General Obligation	Aa1	AAA	AAA

In May, 2017 Stafford County received positive financial news when Moody's Investors Service confirmed the County's bond rating at Aa1 and revised the outlook to positive. The County also received an upgrade from Fitch rating agency from AA+ to AAA and stated the upgrade reflects the County's strong revenue framework and long term prospects, low long term liability burden, and outstanding gap closing capacity.

Rating agencies focus on four major areas when reviewing a community's financial standing: the economy, finances, debt and financial management, and governance. A high bond rating means that the County can borrow money at a lower cost, saving taxpayer money.

Other factors that influenced Standard & Poors' rating for Stafford included the County's very strong economy, strong management, strong budgetary performance, with operating surpluses in the general fund, budgetary flexibility, strong liquidity, and adequate debt. The Board will continue its work toward further enhancing the County's bond rating.

DEPARTMENTAL GOALS/OBJECTIVES

- Further enhancing the County's General Obligation Bond rating to promote financial integrity
- Maintain cash capital at 3% of the operating budget
- Ensure fiscal integrity by achieving and maintaining our goal of a 10% debt service to general fund expenditures ratio by 2015
- Maintain and/or update our well-diversified management planning tools and policies in such areas as financials, land use, economic development.
- Maintain our revenue stabilization, capital projects and opportunity fund reserves

The above goals support the Principles of High Performance Financial Management and the Board of Supervisors Priorities for the community.

SERVICE LEVELS

	FY2017 Actual	FY2018 Budget	FY2019 Plan
Outcomes			
Debt Service	\$44,665,779	\$46,529,009	45,607,413
Debt Service per Capita	\$309	\$315	\$304
Maintain current rating with a goal to achieve the highest possible GO bond rating from all three rating agencies - Goal - AAA			
Standard & Poor's	AAA	AAA	AAA
Moody's	Aa1	Aa1	Aa1
Fitch	AA+	AAA	AAA

DEPARTMENTAL ACCOMPLISHMENTS

- May 2017 Fitch upgraded the County's bond rating from AA+ to AAA.
- July 2015 Standard & Poor's upgraded the County's bond rating to AAA.
- The goal to budget 3% of the operating budget for Repairs, Replacements and Rehabilitations was accomplished in the FY18 adopted budget.

Analysis of Outstanding Debt

Stafford County FY19 Adopted Budget

General Obligation Bonds

School Bond - VPSA

Fiscal Year	Balance July 1	Principal Payments	Balance June 30
2019	290,819,649	18,980,996	271,838,653
2020	271,838,653	18,836,214	253,002,439
2021	253,002,439	18,115,408	234,887,031
2022	234,887,031	18,250,176	216,636,855
2023	216,636,855	18,040,183	198,596,672

Bonds for County Projects

Fiscal Year	Balance July 1	Principal Payments	Balance June 30
2019	42,530,000	2,815,000	39,715,000
2020	39,715,000	2,805,000	36,910,001
2021	36,910,001	2,805,000	34,105,001
2022	34,105,001	2,800,000	31,305,001
2023	31,305,001	2,325,000	28,980,001

Revenue Bonds

Lease Revenue Bonds

Fiscal Year	Balance July 1	Principal Payments	Balance June 30
2019	8,671,416	2,242,668	6,428,748
2020	6,428,748	1,801,826	4,626,922
2021	4,626,922	1,847,255	2,779,667
2022	2,779,667	691,881	2,087,786
2023	2,087,786	708,196	1,379,590

Financing Lease - VRA

General Government

Fiscal Year	Balance July 1	Principal Payments	Balance June 30
2019	75,515,000	4,415,000	71,100,000
2020	71,100,000	4,580,000	66,520,000
2021	66,520,000	4,665,000	61,855,000
2022	61,855,000	4,765,000	57,090,000
2023	57,090,000	4,875,000	52,215,000

Literary Fund Loans

Fiscal Year	Balance July 1	Principal Payments	Balance June 30
2019	864,590	216,149	648,441
2020	648,441	216,149	432,292
2021	432,292	216,149	216,143
2022	216,143	216,143	0

Total General Obligation Bonds

Fiscal Year	Balance July 1	Principal Payments	Balance June 30
2019	334,214,239	22,012,145	312,202,094
2020	312,202,094	21,857,363	290,344,732
2021	290,344,732	21,136,557	269,208,175
2022	269,208,175	21,266,319	247,941,856
2023	247,941,856	20,365,183	227,576,673

General Government - Financing Lease - Crow's Nest

Fiscal Year	Balance July 1	Principal Payments	Balance June 30
2019	5,376,744	484,050	4,892,694
2020	4,892,694	495,247	4,397,447
2021	4,397,447	506,703	3,890,744
2022	3,890,744	518,424	3,372,320
2023	3,372,320	530,416	2,841,904

Other Debt

Other- Landfill

Fiscal Year	Balance July 1	Principal Payments	Balance June 30
2019	1,455,000	215,000	1,240,000
2020	1,240,000	225,000	1,015,000
2021	1,015,000	235,000	780,000
2022	780,000	245,000	535,000
2023	535,000	260,000	275,000

Analysis of Outstanding Debt

Stafford County FY19 Adopted Budget

Utilities Fund

Revenue Bonds

Fiscal Year	Balance July 1	Principal Payments	Balance June 30
2019	96,977,810	3,624,851	93,352,959
2020	93,352,959	3,743,087	89,609,872
2021	89,609,872	3,861,760	85,748,112
2022	85,748,112	3,985,877	81,762,235
2023	81,762,235	4,115,454	77,646,781

Total Utilities Debt

Fiscal Year	Balance July 1	Principal Payments	Balance June 30
2019	96,977,810	3,624,851	93,352,959
2020	93,352,959	3,743,087	89,609,872
2021	89,609,872	3,861,760	85,748,112
2022	85,748,112	3,985,877	81,762,235
2023	81,762,235	4,115,454	77,646,781

All Funds

Total All Funds Debt

Fiscal Year	Balance July 1	Principal Payments	Balance June 30
2019	522,210,209	28,578,714	418,116,495
2020	489,216,495	28,122,523	389,993,973
2021	456,513,973	27,587,275	362,406,698
2022	424,261,698	26,707,501	335,699,197
2023	392,789,197	25,979,249	309,719,948

General Fund Bond Debt

Stafford County FY19 Adopted Budget

Virginia Resource Authority, Crows Nest Series 2008

Fiscal Year	Principal	Interest	Total	Balance
2008	\$0	\$0	\$0	\$9,500,001
2009	352,741	269,707	622,448	9,147,260
2010	363,402	271,713	635,115	8,783,858
2011	374,386	260,729	635,115	8,409,472
2012	385,702	249,413	635,115	8,023,770
2013	397,360	237,755	635,115	7,626,410
2014	420,460	184,487	604,947	7,205,950
2015	441,736	163,211	604,947	6,764,214
2016	451,954	152,993	604,947	6,312,260
2017	462,409	142,538	604,947	5,849,851
2018	473,106	131,841	604,947	5,376,745
2019	484,050	120,897	604,947	4,892,695
2020	495,247	109,700	604,947	4,397,448
2021	506,703	98,244	604,947	3,890,745
2022	518,424	86,523	604,947	3,372,321
2023	530,416	74,530	604,946	2,841,905
2024	542,686	62,261	604,947	2,299,219
2025	555,240	49,707	604,947	1,743,979
2026	568,084	36,863	604,947	1,175,895
2027	581,225	23,722	604,947	594,670
2028	594,670	10,277	604,947	0
	<u>\$9,500,001</u>	<u>\$2,737,111</u>	<u>\$12,237,112</u>	

General Government General Obligation Bonds, Refunding Series 2012

Fiscal Year	Principal	Interest	Total	Balance
	\$0	\$0	\$0	\$4,810,000
2013	0	191,595	191,595	4,810,000
2014	700,000	205,325	905,325	4,110,000
2015	695,000	177,578	872,578	3,415,000
2016	505,000	148,878	653,878	2,910,000
2017	500,000	125,375	625,375	2,410,000
2018	490,000	102,256	592,256	1,920,000
2019	485,000	79,447	564,447	1,435,000
2020	480,000	56,894	536,894	955,000
2021	480,000	32,294	512,294	475,000
2022	475,000	9,997	484,997	0
	<u>\$4,810,000</u>	<u>\$1,129,639</u>	<u>\$5,939,639</u>	

General Fund Bond Debt

Stafford County FY19 Adopted Budget

General Government General Obligation Bonds, Parks, Recreation and Transportation Series 2013

Fiscal Year	Principal	Interest	Total	Balance
				18,785,000
2015	935,000	436,923	1,371,923	17,850,000
2016	935,000	840,825	1,775,825	16,915,000
2017	940,000	808,100	1,748,100	15,975,000
2018	940,000	765,900	1,705,900	15,035,000
2019	940,000	718,900	1,658,900	14,095,000
2020	940,000	671,900	1,611,900	13,155,000
2021	940,000	624,900	1,564,900	12,215,000
2022	940,000	577,900	1,517,900	11,275,000
2023	940,000	530,900	1,470,900	10,335,000
2024	940,000	483,900	1,423,900	9,395,000
2025	940,000	436,900	1,376,900	8,455,000
2026	940,000	389,900	1,329,900	7,515,000
2027	940,000	342,900	1,282,900	6,575,000
2028	940,000	295,900	1,235,900	5,635,000
2029	940,000	248,900	1,188,900	4,695,000
2030	940,000	206,600	1,146,600	3,755,000
2031	940,000	169,000	1,109,000	2,815,000
2032	940,000	131,400	1,071,400	1,875,000
2033	940,000	93,800	1,033,800	935,000
2034	935,000	56,200	991,200	0
	<u>18,785,000</u>	<u>8,831,648</u>	<u>27,616,648</u>	

Transportation Service District General Obligation Bonds, Garrisonville District Series 2013

Fiscal Year	Principal	Interest	Total	Balance
2014		123,076	\$123,076	5,290,000
2015	260,000	236,900	496,900	5,030,000
2016	260,000	227,800	487,800	4,770,000
2017	265,000	215,975	480,975	4,505,000
2018	265,000	202,725	467,725	4,240,000
2019	265,000	189,475	454,475	3,975,000
2020	265,000	176,225	441,225	3,710,000
2021	265,000	162,975	427,975	3,445,000
2022	265,000	149,725	414,725	3,180,000
2023	265,000	136,475	401,475	2,915,000
2024	265,000	123,225	388,225	2,650,000
2025	265,000	109,975	374,975	2,385,000
2026	265,000	96,725	361,725	2,120,000
2027	265,000	83,475	348,475	1,855,000
2028	265,000	70,225	335,225	1,590,000
2029	265,000	58,300	323,300	1,325,000
2030	265,000	47,700	312,700	1,060,000
2031	265,000	37,100	302,100	795,000
2032	265,000	26,500	291,500	530,000
2033	265,000	15,900	280,900	265,000
2034	265,000	5,300	270,300	0
	<u>5,290,000</u>	<u>2,372,700</u>	<u>7,662,700</u>	

General Fund Bond Debt

Stafford County FY19 Adopted Budget

General Government General Obligation Bonds - Series 2015, Parks, Recreation

Fiscal Year	Principal	Interest	Total	Balance
2016	-	113,557	113,557	5,947,629
2017	299,832	235,977	535,809	5,647,797
2018	299,832	226,982	526,814	5,347,965
2019	299,832	214,989	514,821	5,048,133
2020	296,949	200,069	497,018	4,751,184
2021	296,949	185,222	482,171	4,454,235
2022	296,949	170,374	467,323	4,157,286
2023	296,949	155,527	452,476	3,860,337
2024	296,949	140,680	437,629	3,563,388
2025	296,949	125,832	422,781	3,266,439
2026	296,949	110,985	407,934	2,969,490
2027	296,949	96,137	393,086	2,672,541
2028	296,949	81,290	378,239	2,375,592
2029	296,949	69,412	366,361	2,078,643
2030	296,949	60,503	357,452	1,781,694
2031	296,949	51,595	348,544	1,484,745
2032	296,949	42,686	339,635	1,187,796
2033	296,949	33,592	330,541	890,847
2034	296,949	24,313	321,262	593,898
2035	296,949	14,847	311,796	296,949
2036	296,949	5,011	301,960	-
	<u>5,947,629</u>	<u>2,359,582</u>	<u>8,307,211</u>	

General Government General Obligation Bonds Series 2015, Transportation

Fiscal Year	Principal	Interest	Total	Balance
2016		83,386	\$83,386	4,367,371
2017	220,168	173,279	\$393,447	4,147,203
2018	220,168	166,674	\$386,842	3,927,035
2019	220,168	157,867	\$378,035	3,706,867
2020	218,051	146,912	\$364,963	3,488,816
2021	218,051	136,009	\$354,060	3,270,765
2022	218,051	125,107	\$343,158	3,052,714
2023	218,051	114,204	\$332,255	2,834,663
2024	218,051	103,302	\$321,353	2,616,612
2025	218,051	92,399	\$310,450	2,398,561
2026	218,051	81,497	\$299,548	2,180,510
2027	218,051	70,594	\$288,645	1,962,459
2028	218,051	59,691	\$277,742	1,744,408
2029	218,051	50,969	\$269,020	1,526,357
2030	218,051	44,428	\$262,479	1,308,306
2031	218,051	37,886	\$255,937	1,090,255
2032	218,051	31,345	\$249,396	872,204
2033	218,051	24,667	\$242,718	654,153
2034	218,051	17,853	\$235,904	436,102
2035	218,051	10,903	\$228,954	218,051
2036	218,051	3,680	\$221,731	-
	<u>4,367,371</u>	<u>1,732,652</u>	<u>6,100,023</u>	

* Years 2020 through 2033 include funding for Courthouse area improvements, England Run Library and Patawomeck Park only

General Fund Bond Debt

Stafford County FY19 Adopted Budget

General Government General Obligation Bonds - Series 2017, Parks, Recreation

Fiscal Year	Principal	Interest	Total	Balance
				2,653,200
2018	-	67,439	67,439	2,653,200
2019	133,100	107,531	240,631	2,520,100
2020	133,100	100,876	233,976	2,387,000
2021	133,100	94,221	227,321	2,253,900
2022	133,100	87,566	220,666	2,120,800
2023	133,100	80,911	214,011	1,987,700
2024	133,100	74,256	207,356	1,854,600
2025	133,100	67,604	200,704	1,721,500
2026	133,100	60,946	194,046	1,588,400
2027	133,100	54,291	187,391	1,455,300
2028	133,100	47,636	180,736	1,322,200
2029	133,100	41,646	174,746	1,189,100
2030	133,100	36,322	169,422	1,056,000
2031	132,000	31,020	163,020	924,000
2032	132,000	26,400	158,400	792,000
2033	132,000	22,440	154,440	660,000
2034	132,000	18,480	150,480	528,000
2035	132,000	14,520	146,520	396,000
2036	132,000	10,478	142,478	264,000
2037	132,000	6,353	138,353	132,000
2038	132,000	2,145	134,145	-
	<u>2,653,200</u>	<u>1,053,081</u>	<u>3,706,281</u>	

General Government General Obligation Bonds Series 2017, Transportation

Fiscal Year	Principal	Interest	Total	Balance
				9,406,800
2018		239,101	\$239,101	9,406,800
2019	471,900	381,245	\$853,145	8,934,900
2020	471,900	357,650	\$829,550	8,463,000
2021	471,900	334,055	\$805,955	7,991,100
2022	471,900	310,460	\$782,360	7,519,200
2023	471,900	286,865	\$758,765	7,047,300
2024	471,900	263,270	\$735,170	6,575,400
2025	471,900	239,675	\$711,575	6,103,500
2026	471,900	216,080	\$687,980	5,631,600
2027	471,900	192,485	\$664,385	5,159,700
2028	471,900	168,890	\$640,790	4,687,800
2029	471,900	147,654	\$619,554	4,215,900
2030	471,900	128,778	\$600,678	3,744,000
2031	468,000	109,980	\$577,980	3,276,000
2032	468,000	93,600	\$561,600	2,808,000
2033	468,000	79,560	\$547,560	2,340,000
2034	468,000	65,520	\$533,520	1,872,000
2035	468,000	51,480	\$519,480	1,404,000
2036	468,000	37,148	\$505,148	936,000
2037	468,000	22,523	\$490,523	468,000
2038	468,000	7,605	\$475,605	-
	<u>9,406,800</u>	<u>3,733,618</u>	<u>13,140,418</u>	

General Fund Bond Debt

Stafford County FY19 Adopted Budget

Virginia Resource Authority 2017, Animal Shelter

Virginia Resource Authority 2017C, Station 14

Fiscal Year	Principal	Interest	Total	Balance
				5,430,000
2018	190,000	199,187	389,187	5,240,000
2019	180,000	206,769	386,769	5,060,000
2020	190,000	200,563	390,563	4,870,000
2021	195,000	192,722	387,722	4,675,000
2022	205,000	182,472	387,472	4,470,000
2023	215,000	171,709	386,709	4,255,000
2024	230,000	160,306	390,306	4,025,000
2025	240,000	148,263	388,263	3,785,000
2026	250,000	135,706	385,706	3,535,000
2027	265,000	122,509	387,509	3,270,000
2028	275,000	110,572	385,572	2,995,000
2029	285,000	100,972	385,972	2,710,000
2030	295,000	91,909	386,909	2,415,000
2031	310,000	80,306	390,306	2,105,000
2032	320,000	66,063	386,063	1,785,000
2033	335,000	53,578	388,578	1,450,000
2034	345,000	42,738	387,738	1,105,000
2035	355,000	31,294	386,294	750,000
2036	370,000	19,213	389,213	380,000
2037	380,000	6,484	386,484	-
	<u>5,430,000</u>	<u>2,323,334</u>	<u>7,753,334</u>	

Fiscal Year	Principal	Interest	Total	Balance
				5,890,000
2019	290,000	118,820	408,820	5,600,000
2020	295,000	253,575	548,575	5,305,000
2021	295,000	243,184	538,184	5,010,000
2022	295,000	231,391	526,391	4,715,000
2023	295,000	218,322	513,322	4,420,000
2024	295,000	204,228	499,228	4,125,000
2025	295,000	190,134	485,134	3,830,000
2026	295,000	175,016	470,016	3,535,000
2027	295,000	159,897	454,897	3,240,000
2028	295,000	144,778	439,778	2,945,000
2029	295,000	129,659	424,659	2,650,000
2030	295,000	114,966	409,966	2,355,000
2031	295,000	100,697	395,697	2,060,000
2032	295,000	86,428	381,428	1,765,000
2033	295,000	72,159	367,159	1,470,000
2034	295,000	57,891	352,891	1,175,000
2035	295,000	45,097	340,097	880,000
2036	295,000	33,778	328,778	585,000
2037	295,000	23,509	318,509	290,000
2038	290,000	14,163	304,163	-
	<u>5,890,000</u>	<u>2,622,404</u>	<u>8,507,692</u>	

General Fund Bond Debt

Stafford County FY19 Adopted Budget

Virginia Resource Authority 2017C, 2008 Refunding

Fiscal Year	Principal	Interest	Total	Balance
				4,085,000
2018		68,178		4,085,000
2019	2,485,000	112,753	2,597,753	1,600,000
2020		77,650	77,650	1,600,000
2021		77,650	77,650	1,600,000
2022		77,650	77,650	1,600,000
2023		77,650	77,650	1,600,000
2024		77,650	77,650	1,600,000
2025		77,650	77,650	1,600,000
2026		77,650	77,650	1,600,000
2027		77,650	77,650	1,600,000
2028		77,650	77,650	1,600,000
2029		77,650	77,650	1,600,000
2030		77,650	77,650	1,600,000
2031		77,650	77,650	1,600,000
2032	805,000	58,122	863,122	795,000
2033	795,000	19,297	814,297	-
	<u>4,085,000</u>	<u>1,121,972</u>	<u>5,206,972</u>	

Virginia Resource Authority 2014B, Refunding of Series 2006 and 2008,
Embrey Mill Park Improvements and Indoor Recreation Center

Fiscal Year	Principal	Interest	Total	Balance
2015	\$0	\$2,034,800	\$2,034,800	64,335,000
2016	1,300,000	2,826,863	\$4,126,863	63,035,000
2017	1,340,000	2,788,831	\$4,128,831	61,695,000
2018	1,395,000	2,729,547	\$4,124,547	60,300,000
2019	1,460,000	2,660,663	\$4,120,663	58,840,000
2020	4,095,000	2,526,641	\$6,621,641	54,745,000
2021	4,175,000	2,327,122	\$6,502,122	50,570,000
2022	4,265,000	2,117,097	\$6,382,097	46,305,000
2023	4,365,000	1,895,953	\$6,260,953	41,940,000
2024	2,830,000	1,711,581	\$4,541,581	39,110,000
2025	2,920,000	1,568,763	\$4,488,763	36,190,000
2026	3,020,000	1,422,975	\$4,442,975	33,170,000
2027	3,115,000	1,276,966	\$4,391,966	30,055,000
2028	3,215,000	1,133,659	\$4,348,659	26,840,000
2029	3,315,000	985,878	\$4,300,878	23,525,000
2030	3,420,000	833,494	\$4,253,494	20,105,000
2032	2,685,000	578,791	\$3,263,791	13,905,000
2033	2,790,000	477,813	\$3,267,813	11,115,000
2034	2,885,000	372,109	\$3,257,109	8,230,000
2035	2,995,000	262,572	\$3,257,572	5,235,000
2036	2,560,000	156,219	\$2,716,219	2,675,000
2037	2,675,000	52,828	\$2,727,828	0
	<u>64,335,000</u>	<u>33,433,122</u>	<u>97,768,122</u>	

General Fund Lease Debt

Stafford County FY19 Adopted Budget

Communications System

Fiscal Year	Principal	Interest	Total	Balance
	\$0	\$0	\$0	\$8,707,998
2012	845,765	269,390	1,115,155	7,862,233
2013	880,846	234,309	1,115,155	6,981,387
2014	908,562	206,593	1,115,155	6,072,825
2015	937,149	178,006	1,115,155	5,135,676
2016	966,636	148,519	1,115,155	4,169,040
2017	997,051	118,104	1,115,155	3,171,990
2018	1,028,423	86,732	1,115,155	2,143,567
2019	692,504	58,641	751,145	1,451,062
2020	714,294	36,851	751,145	736,769
2021	736,769	14,376	751,145	0
	<u>\$8,707,998</u>	<u>\$1,351,522</u>	<u>\$10,059,520</u>	

Fire Rescue Self-Contained Breathing Apparatus (SCBA), Fire Rescue Heavy Rescue, Public Safety Computer Aided Dispatch

Fiscal Year	Principal	Interest	Total	Balance
				5,980,906
2015	776,915	129,278	906,193	5,203,991
2016	792,808	113,386	906,193	4,411,183
2017	809,044	97,149	906,193	3,602,139
2018	825,634	80,560	906,193	2,776,506
2019	842,583	63,610	906,193	1,933,923
2020	366,915	48,281	415,196	1,567,008
2021	376,591	38,605	415,196	1,190,416
2022	386,523	28,674	415,196	803,894
2023	396,716	18,480	415,196	407,178
2024	407,178	8,018	415,196	0
	<u>5,980,906</u>	<u>626,042</u>	<u>6,606,948</u>	

Radio System FCC Mandated Upgrade to TDMA

Fiscal Year	Principal	Interest	Total	Balance
	\$0	\$0	\$0	\$2,100,000
2017	405,709	33,511	439,220	1,694,291
2018	412,732	26,488	439,220	1,281,560
2019	419,876	19,344	439,220	861,684
2020	427,145	12,075	439,220	434,539
2021	434,539	4,681	439,220	0
	<u>\$2,100,000</u>	<u>\$96,100</u>	<u>\$5,575,775</u>	

Fire Rescue Heavy Rescue

Fiscal Year	Principal	Interest	Total	Balance
				3,028,339
2017	276,506	58,209	334,715	2,751,833
2018	282,049	52,665	334,715	2,469,784
2019	287,704	47,011	334,715	2,182,080
2020	293,472	41,242	334,715	1,888,607
2021	299,356	35,359	334,715	1,589,251
2022	305,358	29,357	334,715	1,283,893
2023	311,480	23,235	334,715	972,413
2024	317,725	16,990	334,715	654,688
2025	324,095	10,620	334,715	330,593
2026	330,593	4,122	334,715	0
	<u>3,028,339</u>	<u>318,810</u>	<u>3,347,149</u>	

Utilities Fund Bond Debt

Stafford County FY19 Adopted Budget

Virginia Resource Authority - Little Falls Run

Fiscal Year	Principal	Interest	Total	Balance
				9,326,573
2012	179,131	640,886	820,017	9,147,442
2013	365,351	321,513	686,864	8,782,091
2014	378,429	308,435	686,864	8,403,662
2015	393,034	260,813	653,847	8,010,628
2016	405,681	215,150	620,831	7,604,947
2017	416,791	204,039	620,830	7,188,156
2018	428,204	192,626	620,830	6,759,952
2019	439,931	180,899	620,830	6,320,021
2020	451,978	168,852	620,830	5,868,043
2021	464,356	156,474	620,830	5,403,687
2022	477,072	143,758	620,830	4,926,615
2023	490,137	130,694	620,831	4,436,478
2024	503,559	117,271	620,830	3,932,919
2025	517,349	103,482	620,831	3,415,570
2026	531,516	89,314	620,830	2,884,054
2027	546,072	74,758	620,830	2,337,982
2028	561,027	59,804	620,831	1,776,955
2029	576,390	44,440	620,830	1,200,565
2030	592,174	28,655	620,829	608,391
2031	608,391	12,439	620,830	0
	<u>9,326,573</u>	<u>3,454,302</u>	<u>12,780,875</u>	

Virginia Resources Authority - Aquia

Fiscal Year	Principal	Interest	Total	Balance
				23,386,038
2012	536,481	475,248	1,011,729	22,849,557
2013	1,064,593	353,935	1,418,528	21,784,964
2014	1,074,248	344,280	1,418,528	20,710,716
2015	1,091,505	327,023	1,418,528	19,619,211
2016	1,124,655	247,521	1,372,176	18,494,556
2017	1,152,860	172,967	1,325,827	17,341,696
2018	1,163,838	161,989	1,325,827	16,177,858
2019	1,174,920	150,906	1,325,826	15,002,938
2020	1,186,109	139,717	1,325,826	13,816,829
2021	1,197,404	128,423	1,325,827	12,619,425
2022	1,208,805	117,020	1,325,825	11,410,620
2023	1,220,317	105,509	1,325,826	10,190,303
2024	1,231,937	93,889	1,325,826	8,958,366
2025	1,243,668	82,158	1,325,826	7,714,698
2026	1,255,511	70,315	1,325,826	6,459,187
2027	1,267,467	58,359	1,325,826	5,191,720
2028	1,279,537	46,290	1,325,827	3,912,183
2029	1,291,721	34,105	1,325,826	2,620,462
2030	1,304,022	21,804	1,325,826	1,316,440
2031	1,316,440	9,388	1,325,828	0
	<u>23,386,038</u>	<u>3,140,846</u>	<u>26,526,884</u>	

Utilities Fund Bond Debt

Stafford County FY19 Adopted Budget

Virginia Resources Authority - 2012 Rocky Pen Run Dam and Reservoir, Rocky Pen Run Water Treatment Facility, Various water distribution projects and infrastructure improvements.

Virginia Resources Authority - 2014 Various water distribution projects and infrastructure improvements.

Fiscal Year	Principal	Interest	Total	Balance
				15,000,000
2013		2,314,858		15,000,000
2014	810,000	2,606,713	3,416,713	14,190,000
2015	845,000	2,573,679	3,418,679	13,345,000
2016	885,000	2,531,847	3,416,847	12,460,000
2017	930,000	1,506,616	2,436,616	11,530,000
2018	975,000	479,078	1,454,078	10,555,000
2019	1,020,000	432,531	1,452,531	9,535,000
2020	1,070,000	383,550	1,453,550	8,465,000
2021	1,125,000	327,303	1,452,303	7,340,000
2022	1,180,000	273,487	1,453,487	6,160,000
2023	1,235,000	218,703	1,453,703	4,925,000
2024	-	188,906	188,906	4,925,000
2025	-	188,906	188,906	4,925,000
2026	-	188,906	188,906	4,925,000
2027	455,000	181,797	636,797	4,470,000
2028	475,000	167,266	642,266	3,995,000
2029	495,000	152,109	647,109	3,500,000
2030	-	144,375	144,375	3,500,000
2031	-	144,375	144,375	3,500,000
2032	-	144,375	144,375	3,500,000
2033	-	144,375	144,375	3,500,000
2034	640,000	131,175	771,175	2,860,000
2035		117,975	117,975	2,860,000
2036		117,975	117,975	2,860,000
2037		117,975	117,975	2,860,000
2038		117,975	117,975	2,860,000
2039		117,975	117,975	2,860,000
2040		117,975	117,975	2,860,000
2041	905,000	99,309	1,004,309	1,955,000
2042	950,000	61,050	1,011,050	1,005,000
2043	1,005,000	20,728	1,025,728	0
	<u>15,000,000</u>	<u>16,313,867</u>	<u>28,999,009</u>	

Fiscal Year	Principal	Interest	Total	Balance
				16,010,000
2015		597,721		16,010,000
2016	525,000	624,678	2,314,858	15,485,000
2017	545,000	605,234	1,150,234	14,940,000
2018	570,000	580,237	1,150,237	14,370,000
2019	600,000	552,006	1,152,006	13,770,000
2020	625,000	529,041	1,154,041	13,145,000
2021	645,000	507,247	1,152,247	12,500,000
2022	670,000	482,450	1,152,450	11,830,000
2023	700,000	454,069	1,154,069	11,130,000
2024	730,000	422,125	1,152,125	10,400,000
2025	765,000	388,616	1,153,616	9,635,000
2026	800,000	350,863	1,150,863	8,835,000
2027	840,000	311,288	1,151,288	7,995,000
2028	880,000	271,063	1,151,063	7,115,000
2029	915,000	236,816	1,151,816	6,200,000
2030	945,000	207,578	1,152,578	5,255,000
2031	975,000	176,184	1,151,184	4,280,000
2032	1,010,000	141,800	1,151,800	3,270,000
2033	1,050,000	104,116	1,154,116	2,220,000
2034	1,090,000	63,656	1,153,656	1,130,000
2035	<u>1,130,000</u>	<u>21,475</u>	<u>1,151,475</u>	0
	<u>16,010,000</u>	<u>7,030,542</u>	<u>24,205,722</u>	

Utilities Fund Bond Debt

Stafford County FY19 Adopted Budget

Virginia Resources Authority - 2015

Fiscal Year	Principal	Interest	Total	Balance
				8,620,000
2016		168,467		8,620,000
2017	270,000	367,856	637,856	8,350,000
2018	280,000	356,463	636,463	8,070,000
2019	295,000	341,728	636,728	7,775,000
2020	310,000	326,225	636,225	7,465,000
2021	325,000	312,153	637,153	7,140,000
2022	340,000	297,313	637,313	6,800,000
2023	355,000	279,503	634,503	6,445,000
2024	375,000	260,797	635,797	6,070,000
2025	395,000	241,066	636,066	5,675,000
2026	415,000	221,709	636,709	5,260,000
2027	435,000	202,678	637,678	4,825,000
2028	455,000	182,672	637,672	4,370,000
2029	475,000	161,791	636,791	3,895,000
2030	495,000	143,384	638,384	3,400,000
2031	510,000	127,681	637,681	2,890,000
2032	530,000	107,831	637,831	2,360,000
2033	555,000	83,416	638,416	1,805,000
2034	580,000	59,613	639,613	1,225,000
2035	600,000	36,563	636,563	625,000
2036	625,000	12,391	637,391	0
	<u>8,620,000</u>	<u>4,291,299</u>	<u>12,742,831</u>	

Virginia Resources Authority - 2016

Fiscal Year	Principal	Interest	Total	Balance
				41,140,000
2017		826,134		41,140,000
2018	95,000	1,801,466	2,314,858	41,045,000
2019	95,000	1,798,322	1,893,322	40,950,000
2020	100,000	1,793,775	1,893,775	40,850,000
2021	105,000	1,789,022	1,894,022	40,745,000
2022	110,000	1,783,863	1,893,863	40,635,000
2023	115,000	1,778,097	1,893,097	40,520,000
2024	1,415,000	1,738,891	3,153,891	39,105,000
2025	1,495,000	1,664,322	3,159,322	37,610,000
2026	1,570,000	1,585,781	3,155,781	36,040,000
2027	1,195,000	1,514,928	2,709,928	34,845,000
2028	1,255,000	1,452,147	2,707,147	33,590,000
2029	1,310,000	1,386,419	2,696,419	32,280,000
2030	1,895,000	1,305,941	3,200,941	30,385,000
2031	1,995,000	1,207,909	3,202,909	28,390,000
2032	2,100,000	1,103,225	3,203,225	26,290,000
2033	2,195,000	1,004,391	3,199,391	24,095,000
2034	1,650,000	925,088	2,575,088	22,445,000
2035	2,385,000	841,866	3,226,866	20,060,000
2036	2,490,000	741,319	3,231,319	17,570,000
2037	2,590,000	636,544	3,226,544	14,980,000
2038	2,695,000	530,859	3,225,859	12,285,000
2039	2,800,000	431,344	3,231,344	9,485,000
2040	2,900,000	327,863	3,227,863	6,585,000
2041	2,115,000	228,009	2,343,009	4,470,000
2042	2,195,000	139,116	2,334,116	2,275,000
2043	2,275,000	46,922	2,321,922	0
	<u>41,140,000</u>	<u>30,383,559</u>	<u>71,115,817</u>	

