

County of Roanoke, Virginia



Adopted Capital Improvement Program
Fiscal Years 2021—2030





Board of Supervisors

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Magisterial District*

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For the Fiscal Year Beginning

July 1, 2019

Christopher P. Morill

Executive Director



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July 1, 2020

To the Honorable Chairman and Members of the Board of Supervisors,
and the Citizens of Roanoke County, Virginia:

On June 23, 2020, the Roanoke County Board of Supervisors adopted the fiscal year 2021-2030 Capital Improvement Program (CIP). The County Administrator's proposed fiscal year 2021-2030 CIP was presented to the Board of Supervisors on January 28, 2020. The Board of Supervisors were provided with an overview of the proposed CIP at a work session on February 25, 2020 including an update on current capital projects.

Due to the COVID-19 pandemic, the original proposed CIP was revised and presented to the Board of Supervisors on May 12, 2020, based on anticipated reductions in various revenue categories. The revised proposal eliminated general government fund support to the CIP among other revenue adjustments. Additionally, some projects were removed, reduced, or deferred to be evaluated as part of the fiscal year 2022-2031 CIP development process. The Board of Supervisors made no changes to the County Administrator's proposed fiscal year 2021-2030 capital improvement program.

As part of this section of the Capital Improvement Program, the County Administrator's May 12, 2020 transmittal letter to the Board of Supervisors has been included, as it provides insight into the priorities and initiatives included in the ten year CIP. The remainder of the document has been updated to reflect the fiscal year 2021-2030 CIP adopted by the Board of Supervisors on June 23, 2020.

The entire Capital Improvement Program document is available on-line at: <http://www.roanokecountyva.gov/index.aspx?NID=80>.

Sincerely,

Laurie L. Gearheart, CPA
Director of Finance & Management Services

Meredith L. Thompson
Budget Division Director



May 12, 2020

Dear Chairman Radford and Members of the Board of Supervisors:

Attached for your consideration is my revised Proposed FY 2021 – FY 2030 Capital Improvement Program (CIP). This proposal for the FY 2021 – FY 2030 CIP totals \$82,270,862 in capital projects over the ten year plan. The original CIP proposal was presented on January 28, 2020 and totaled \$84,193,838 across the ten year plan. The reduction of \$1,922,976 since the original proposal is mostly included in the first year of the plan, fiscal year 2020-2021, with only minor changes to fiscal years 2022 through 2030.

In March of 2020, after the Board of Supervisors were provided with a work session on the Proposed FY 2021 – FY 2030 CIP, economic impacts from the COVID-19 pandemic emerged. Restrictions to limit the spread of the virus created immediate and long-term impacts to Roanoke County revenues. With reduced revenue estimates, both the County's operating budget and CIP were reevaluated. Balancing the operating budget included major reductions to capital projects in fiscal year 2020-2021. The revised proposal for fiscal year 2020-2021 now totals

\$4,635,474, which is a decrease from \$6,588,450 proposed in January.

With limited resources available, the priorities for this proposed CIP are to continue required funding based on agreements or mandates, maintain existing facilities and equipment that require replacement or updates, and support projects that maximize funding from other sources. To balance the CIP with reduced revenues, difficult decisions were made and include the elimination and reduction to project funding in the upcoming year. I recognize that continuing this model beyond FY 2021 is not sustainable through the ten year plan, but long term resolution of these issues will take more time to resolve than currently available. Fiscal years 2022-2030 remain largely the same as originally proposed. These planned years will be reevaluated once more information is available on the potential long-term impacts to the economy from the COVID-19 pandemic.

Roanoke County Public Schools (RCPS), faced with similar revenue reductions, will be proposing a revised operating budget and ten year plan. Please note that at the time of the printing of this document, the RCPS had not presented their revised CIP request. When the School Board submits their FY 2021 – FY 2030 CIP, staff will provide the Board of Supervisors with an update through the budget memo process.

Required Funding for Agreements and Mandates

The FY 2021 – FY 2030 Capital Improvement supports various projects that are required through mandate or agreements. While revenues in FY 2021 are reduced, funding for these



projects is necessary. The County committed to provide funding for both the Roanoke County Broadband Authority Infrastructure and the Woodhaven Property Acquisition and Improvements through the term of debt for these projects. Funding for these projects remains level with the original proposal of \$6.12 million over the ten year plan. The Storm Drainage Maintenance of Effort project provides funding to support maintenance and upkeep of stormwater management, which is required for the County to maintain its MS4 permit. Funding for this project totals \$2.59 million over the ten year plan, with a reduction of \$50,000 in FY 2021 due to available balances in this ongoing project.

Maintenance of Existing Facilities and Equipment

Facility and equipment replacement projects originally proposed for funding in fiscal year 2020-2021 are now proposed with the bare minimum required to maintain through this year.

Capital Maintenance Programs

The original proposal included \$18.8 million in funding for Capital Maintenance Programs (CMPs) over the next ten years. CMPs are now proposed to receive \$18.4 million due to reductions in the upcoming fiscal year. In FY 2021, \$1.10 million is proposed to adequately fund maintenance programs for General Services, Parks, Recreation & Tourism, and the Sheriff's Office. A new CMP was proposed for the Green Ridge Recreation Center, but funding for this new program is now delayed until FY 2022. CMP programs ensure that County facilities will remain functional and safe for our citizens, visitors, and employees.

Public Safety Communications Technology and Infrastructure

Maintenance of equipment and infrastructure is vital to the regional public safety communications network maintained by the County of Roanoke. The Digital Microwave Ring Replacement project is proposed to receive \$0.32 million in FY 2021, which is in addition to \$0.49 million in FY 2019 and FY 2020. This project replaces the County's 14 Microwave Radios, which have been in service since 2006. The Public Safety Communications Infrastructure project, proposed for \$0.15 million in funding in FY 2021, will replace the current mountaintop equipment located at all of the Roanoke Valley Radio System sites. Both of these projects replace equipment that is outdated and is longer supported by the vendor.

Technology and Software Updates

Roanoke County business requires that certain systems remain functional and up-to-date with vendor support. Roanoke County is in the process of updating its human resources and payroll software based on lack of vendor support of the previous system. Funding for this project was included in FY 2020 for the first phase of the Global HR project. Phases II and III were originally planned to receive \$1.73 million in funding over fiscal years 2021 and 2022. This project has been reevaluated and project funding has been reduced to \$1.55 million, and the third and final phase has been moved from FY 2022 to FY 2023. Funding for an upgrade to the County's financial system is required by the vendor and is included for funding in FY 2021 in the amount of \$0.72 million.



Maximize Funding from Other Sources

Planned projects that have leveraged funding outside of Roanoke County include projects that are eligible or have already been approved for grants, Virginia Department of Transportation, and Virginia Department of Fire Programs funding. In some cases, if match funds were eliminated, the County may be required to return funding already invested in active projects.

Transportation – Roads & Greenways

The ten year capital plan continues investments in our roads infrastructure and continues to leverage Commonwealth and Federal funding when available. Transportation projects proposed for funding in the ten year plan include completion of funding for the Fallowater Lane Extension (\$0.78 million, total for FY 2021 & FY 2022) and the County portion of the Plantation Road Phase II project (\$0.2 million, FY 2021). The Plantation Road project also includes \$1.75 million in Commonwealth funding that was appropriated by the Board of Supervisors in January 2019. County funds are also reserved to match Commonwealth Revenue Sharing funds (\$0.25 million annually) from FY 2023-2030 for future transportation priorities.

Rural Broadband Initiative

The Rural Broadband Initiative is vital to improving communication and data technology in both the business sector and in residential settings. The County is currently taking active steps to identify areas where citizens either do not have or have inadequate internet service. The County plans to use this data to

seek public-private partnerships and grants from the Virginia Telecommunication Initiative (VATI) program. The proposed CIP includes \$0.1 million in County funding, which will be combined with \$0.2 million allocated to this project from FY 2019 year end funds. A total of \$0.3 million is proposed to serve as the County's match portion of 20% to be eligible for the VATI grant program, which, if selected, could yield a total project cost of \$1.5 million.

Conclusion

The Proposed FY 2021 – FY 2030 CIP includes a conservative estimate of funding for the first year. The priority and focus for the next fiscal year is to manage through the economic uncertainties that lie ahead. Once these impacts can be evaluated more fully in the coming months, the FY 2022 – FY 2031 CIP development process will begin where planned funding and projects will be evaluated for capacity.

The CIP is balanced and reflects the Board of Supervisors' updated "12-12-12" model. Each County project proposed for financing through debt issuance meets the approved debt ratios assigned in the financial policy. Projections for future debt include an assumption of \$12.0 million for Roanoke County Public Schools during the years that are scheduled for funding.

I would like to recognize the contributions of Assistant County Administrators Rebecca Owens and Richard Caywood, our Finance and Management Services Department led by Laurie Gearheart, Budget Division staff including Meredith Thompson, Steve Elliott, and Corey White, Department Directors, Constitutional Officers, and their staff in the development of this



ten year CIP. I appreciate the collaboration of all involved to develop a revised capital improvement plan that meets the needs of our community through an uncertain economic time for Roanoke County.

Sincerely,

Daniel R. O'Donnell
Roanoke County Administrator



Capital Improvement Program Overview

The underlying strategy for the development of the Capital Improvement Program (CIP) is to plan for construction and maintenance of investments necessary to provide public services in compliance with the County's Comprehensive Plan and other adopted policies. It is a long-range planning tool used to schedule anticipated capital projects and coordinate capital financing in a way that manages future debt service requirements. By looking beyond the current year and projecting what, where, when and how capital investments should be made, capital programming enables the County to maintain an effective level of service for both the present and future population.

The CIP is a detailed listing of projects submitted to the Board of Supervisors for approval. For the purposes of the CIP, a capital project (or collection of projects) is defined as being beneficial to County citizens, generally costs in excess of \$100,000, and has a lifespan of over five years or, if funded by bonds, a lifespan at least equal to the length of the bond issue. This can include items such as reconstruction or replacement of buildings or equipment, new construction or development, and acquisition of property and equipment.

The CIP is a planning document and is subject to change each year as the needs of the community become more defined. The first year of the ten-year plan is the only formal appropriation of funding. The program is reviewed annually and revised based on current community needs, asset conditions, available resources, and funding opportunities.

The County Administrator established project priorities to align available resources with projects over the ten year period. These priorities provided by the County Administrator for projects included in the ten-year plan include:

- Maintenance of existing facilities and needs identified by the Facility Conditions Assessment;
- Support for technology for public safety and communications infrastructure;
- Investments in public infrastructure to promote economic development opportunities; and
- Continue to leverage the use of outside funding sources.

The CIP document is organized into three primary sections. These sections include:

- Summary of budget and financial information on all projects, funding sources, and additional operating impacts;
- Project descriptions with budget and funding information for each project organized by County Functional Teams; and
- Appendices providing information on projects not funded in the ten year plan and information regarding the County's outstanding debt and Board of Supervisors approved debt policies.



Roanoke County Vision and Strategic Plan

Community Strategic Plan

In FY 2017, the County of Roanoke Board of Supervisors adopted the first-ever Community Strategic Plan. As part of the strategic planning process, the following vision statement was developed in January 2016.

Vision Statement:

“Roanoke County is a vibrant, innovative, and scenic community that values its citizens, heritage, and quality of life.”

The Community Strategic Plan was created to provide guidance and influence the development of annual budget planning including the Capital Improvement Program (CIP). The County’s CIP development process included review of the departmental requests for capital funds in light of the vision and strategic direction provided by the community through the civic engagement process.

Strategic Initiatives

- Connect Roanoke County to the World
- Position Roanoke County for Future Economic Growth
- Promote Neighborhood Connections
- Ensure Citizen Safety
- Be a Caring & Inclusive Community
- Promote Lifelong Learning
- Keep Roanoke County Healthy, Clean, and Beautiful

Data on the progress toward these initiatives will be collected, reviewed, reported and used to make adjustments to County services and programs. Each year, an annual report is created to highlight the accomplishments related to the Community Strategic Plan from the prior year. The full Community Strategic Plan and annual reports can be found online at www.roanokecountyva.gov/CSP.

Organizational Strategic Plan

Roanoke County adopted an internal Organizational Strategic Plan, which identifies strategies to be used by departments and employees to deliver quality services with integrity and distinction in October 2017.

Vision Statement:

“Roanoke County is a vibrant, innovative, and scenic community that values its citizens, heritage, and quality of life.”

The following outcome areas were identified by staff as priorities within the Organizational Strategic Plan.

Outcome Areas:

- Responsive Service Delivery
- Branding and Marketing
- Workplace Culture and Being an Employer of Choice

Staff continue to monitor progress toward and prioritize goals within each outcome area.

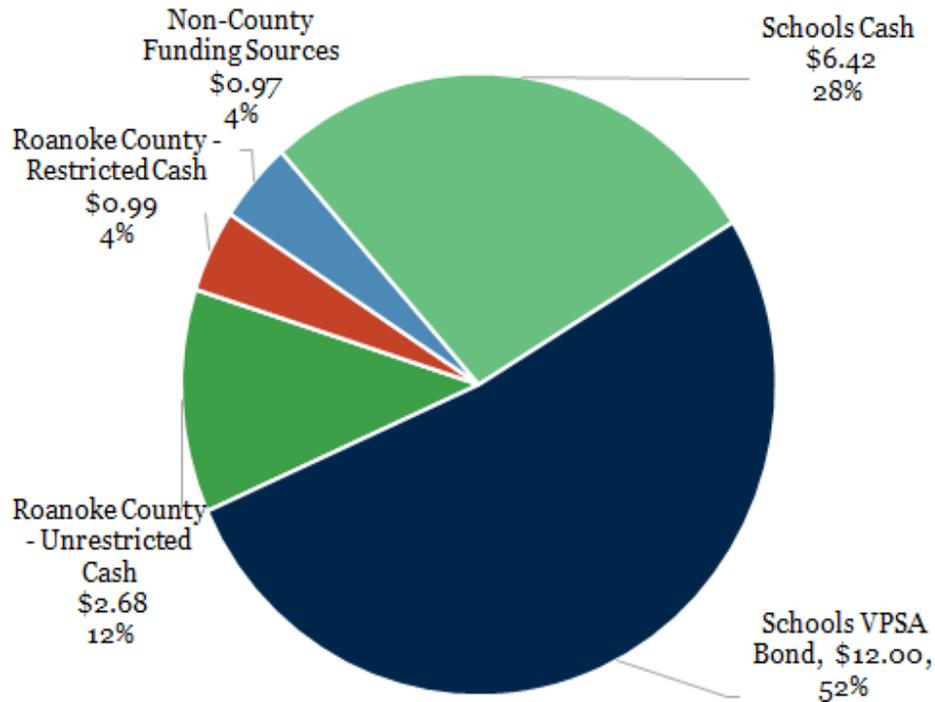




FY 2021 – FY 2030 Adopted Capital Improvement Program Summary of County & Schools Funding Sources

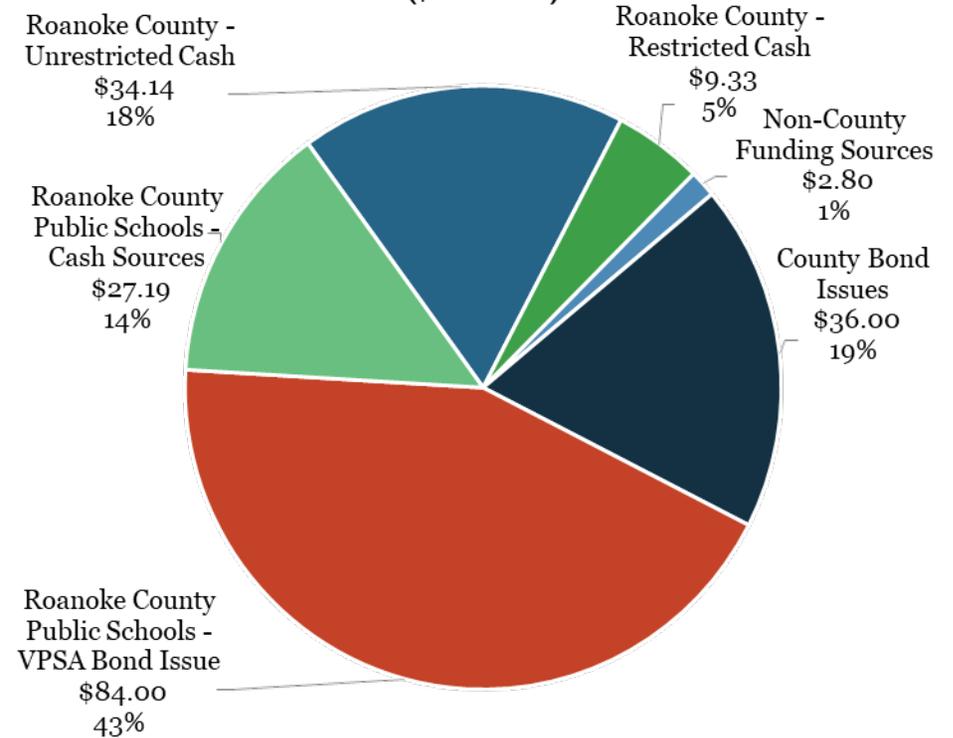
FY 2021
\$23,053,630

(\$ in millions)



FY 2021 - 2030
\$193,457,515

(\$ in millions)





County of Roanoke, Virginia FY 2021 – FY 2030 Adopted Capital Improvement Program Summary of County & Schools Funding

Roanoke County - Unrestricted Cash	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total
General Government Transfer	\$0	\$1,995,495	\$3,181,319	\$2,754,846	\$2,801,533	\$2,826,379	\$2,827,218	\$2,827,218	\$2,827,218	\$2,827,218	\$24,868,444
Capital Reserves	1,493,605	815,280	548,594	628,766	117,438	222,388	145,060	194,215	443,956	383,069	4,992,371
VPSPA Refunding Bonds	180,000	169,955	157,581	157,625	124,750	124,125	125,931	122,831	82,944	82,631	1,328,373
Debt Fund - County	276,487	276,784	277,825	279,609	280,812	276,487	279,309	279,354	0	0	2,226,667
Reallocate Cancelled/Completed Projects	728,532	0	0	0	0	0	0	0	0	0	728,532
Subtotal, Unrestricted Cash	\$2,678,624	\$3,257,514	\$4,165,319	\$3,820,846	\$3,324,533	\$3,449,379	\$3,377,518	\$3,423,618	\$3,354,118	\$3,292,918	\$34,144,387

Roanoke County - Restricted Cash	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total
CommIT Fund Transfer	\$0	\$883,000	\$883,000	\$883,000	\$883,000	\$883,000	\$883,000	\$883,000	\$883,000	\$883,000	\$7,947,000
Prior VDOT Revenue Sharing Funds (County)	200,000	0	0	0	0	0	0	0	0	0	200,000
Contribution from EDA	545,705	0	0	0	0	0	0	0	0	0	545,705
Economic Development Funds	141,445	141,445	0	0	0	0	0	0	0	0	282,890
Department of Fire Programs Funding	100,000	50,000	0	0	0	0	0	0	0	0	150,000
Fee Class Fund Transfer	0	80,000	50,000	50,000	25,000	0	0	0	0	0	205,000
Subtotal, Restricted Cash	\$987,150	\$1,154,445	\$933,000	\$933,000	\$908,000	\$883,000	\$883,000	\$883,000	\$883,000	\$883,000	\$9,330,595

Non-County Funding Sources	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total
PSAP Grant Funding	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000
FEMA Reimbursement	250,000	0	0	0	0	0	0	0	0	0	250,000
Stormwater Local Assistance Fund	0	0	400,000	0	0	400,000	0	0	400,000	0	1,200,000
Transfer from Schools	719,700	0	444,180	0	0	0	0	0	0	0	1,163,880
Contribution from City of Salem	0	0	32,000	0	0	0	0	0	0	0	32,000
Subtotal, Non-County Funding Sources	\$969,700	\$0	\$1,026,180	\$0	\$0	\$400,000	\$0	\$0	\$400,000	\$0	\$2,795,880

Roanoke County - Bonds	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total
Lease / Revenue Bonds	\$0	\$0	\$12,000,000	\$0	\$0	\$12,000,000	\$0	\$0	\$12,000,000	\$0	\$36,000,000
Subtotal, Lease / Revenue Bonds	\$0	\$0	\$12,000,000	\$0	\$0	\$12,000,000	\$0	\$0	\$12,000,000	\$0	\$36,000,000

Total, All County Funding Sources	\$ 4,635,474	\$ 4,411,959	\$ 18,124,499	\$ 4,753,846	\$ 4,232,533	\$ 16,732,379	\$ 4,260,518	\$ 4,306,618	\$ 16,637,118	\$ 4,175,918	\$ 82,270,862
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Capital Improvement Program FY 2021 – FY 2030



Summary of Funding Sources

Summary of County & Schools Funding Sources (Continued)

Roanoke County Public Schools (RCPS) - All Funding Sources	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total
Schools											
Transfer from Schools General Fund	0	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	9,000,000
Major Capital Reserves	3,950,785	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	9,350,785
Debt Fund - Schools	2,286,888	670,692	605,164	640,703	676,244	700,833	725,424	752,750	644,694	0	7,703,392
VPSA Refunding Credits	180,483	167,477	165,193	116,750	116,250	117,931	114,831	74,943	74,631	3,987	1,132,476
VPSA Bond Issue	12,000,000	12,000,000	0	12,000,000	12,000,000	0	12,000,000	12,000,000	0	12,000,000	84,000,000
Total, RCPS Funding Sources	\$18,418,156	\$14,438,169	\$2,370,357	\$14,357,453	\$14,392,494	\$2,418,764	\$14,440,255	\$14,427,693	\$2,319,325	\$13,603,987	\$111,186,653
Total FY 21-30 County & Schools CIP	\$23,053,630	\$18,850,128	\$20,494,856	\$19,111,299	\$18,625,027	\$19,151,143	\$18,700,773	\$18,734,311	\$18,956,443	\$17,779,905	\$193,457,515



County of Roanoke, Virginia FY 2021 – FY 2030 Adopted Capital Improvement Program All County & Schools Funding Sources with Projects

Funding Source/Functional Area/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 21-30 Total
Contribution from the City of Salem											
Public Safety											
Jail Abatement	0	0	32,000	0	0	0	0	0	0	0	32,000
Contribution from City of Salem Total	\$0	\$0	\$32,000	\$0	\$32,000						
Department of Fire Programs Funding											
Public Safety											
Diesel Exhaust Removal System	100,000	50,000	0	0	0	0	0	0	0	0	150,000
Department of Fire Programs Total	\$100,000	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000
Economic Development Funds											
Community Services											
Fallowater Lane	141,445	141,445	0	0	0	0	0	0	0	0	282,890
Economic Development Funds Total	\$141,445	\$141,445	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$282,890
FEMA Reimbursement											
Human Services											
PRT Capital Maintenance Program	250,000	0	0	0	0	0	0	0	0	0	250,000
FEMA Reimbursement Total	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000
Lease/Revenue Bonds											
Public Safety											
County Jail Abatement	0	0	147,000	0	0	0	0	0	0	0	147,000
Courthouse and Court Services	0	0	466,000	0	0	0	0	0	0	0	466,000
Courthouse HVAC Replacement	0	0	512,000	0	0	0	0	0	0	0	512,000
Diesel Exhaust Removal System	0	0	300,000	0	0	0	0	0	0	0	300,000
Fire Station Renovation/Replacement	0	0	0	0	0	0	0	0	10,500,000	0	10,500,000
Internal Services											
Public Service Center Facility Replacement	0	0	3,704,000	0	0	0	0	0	0	0	3,704,000
Administration Center Building Envelope Repairs	0	0	231,000	0	0	0	0	0	0	0	231,000
Administration Center Carpet Replacement	0	0	244,000	0	0	0	0	0	0	0	244,000

Capital Improvement Program FY 2021 – FY 2030



All Funding Sources with Projects

All Funding Sources (continued)

Funding Source/Functional Area/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 21-30 Total
Lease/Revenue Bonds (continued)											
Internal Services (continued)											
Public Safety Center Updates	0	0	0	0	0	750,000	0	0	0	0	750,000
Administration Center Facility Updates	0	0	0	0	0	0	0	0	1,500,000	0	1,500,000
Human Services											
Explore Park	0	0	1,400,000	0	0	0	0	0	0	0	1,400,000
Hollins Library Replacement	0	0	4,996,000	0	0	10,000,000	0	0	0	0	14,996,000
Sport Field Lighting Replacement	0	0	0	0	0	1,250,000	0	0	0	0	1,250,000
Lease/Revenue Bonds Total	\$0	\$0	\$12,000,000	\$0	\$0	\$12,000,000	\$0	\$0	\$12,000,000	\$0	\$36,000,000
Prior VDOT Revenue Sharing Funds (County)											
Community Services											
Plantation Road Phase II	200,000	0	0	0	0	0	0	0	0	0	200,000
Prior VDOT Revenue Sharing Funds (County) Total	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000
PSAP Grant											
Public Safety											
Emergency 911 Phone System Upgrade	0	0	150,000	0	0	0	0	0	0	0	150,000
PSAP Grant Total	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000
Roanoke County - Unrestricted Cash											
Public Safety											
Sheriff's Office Capital Maintenance Program	70,000	110,000	110,000	125,000	125,000	125,000	125,000	175,000	165,000	155,000	1,285,000
Digital Microwave Ring Replacement	327,000	0	0	0	0	0	0	0	0	0	327,000
Public Safety Communications Infrastructure	150,000	0	0	0	0	0	0	0	0	0	150,000
Emergency 911 Phone System Upgrade	0	0	294,000	0	0	0	0	0	0	0	294,000
Emergency Medical Dispatch	0	0	150,000	0	0	0	0	0	0	0	150,000
Fire and Rescue Ballistic Body Armor	70,000	0	0	0	0	0	0	0	0	0	70,000
Fire Station Renovation/Replacement	0	0	0	0	0	0	0	100,000	0	0	100,000
Courthouse Parking Lot Renovation	0	106,839	0	0	0	0	0	0	0	0	106,839
Courthouse HVAC Replacement	0	25,000	0	0	0	0	0	0	0	0	25,000

Capital Improvement Program FY 2021 – FY 2030



All Funding Sources with Projects

All Funding Sources (continued)

Funding Source/Functional Area/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 21-30 Total
Roanoke County - Unrestricted Cash (Continued)											
Community Services											
Fallowater Lane	250,000	250,000	0	0	0	0	0	0	0	0	500,000
Minor Transportation and Planning Studies	0	0	0	0	0	0	0	0	0	0	0
Plantation Road Phase II	0	0	0	0	0	0	0	0	0	0	0
VDOT Revenue Sharing Projects (Small Projects & TBD)	0	0	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,000,000
Storm Drainage Maintenance of Effort Program	150,000	215,000	225,000	225,000	225,000	250,000	250,000	300,000	350,000	400,000	2,590,000
NPDES - MS4 BMP Construction	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,800,000
Roanoke County Broadband Initiative	0	386,875	384,939	387,149	383,664	383,664	384,983	0	0	0	2,311,274
Woodhaven Property Acquisition and Imprv	0	162,800	387,200	387,697	387,869	387,715	387,235	386,430	387,499	388,181	3,262,626
Rural Broadband Initiative	100,000	0	0	0	0	0	0	0	0	0	100,000
Gateway Signs and Landscaping	0	50,000	50,000	50,000	0	0	0	0	0	0	150,000
Human Services											
Voting Machine Replacement	0	0	0	425,000	0	0	0	0	0	0	425,000
Countywide Library Public Use Computer Replacement	0	71,000	15,000	116,000	48,000	123,000	50,300	46,400	76,900	15,700	562,300
Hollins Library Replacement	0	80,000	0	0	0	0	0	0	0	0	80,000
Parks and Recreation Capital Maintenance Program	180,000	620,000	650,000	650,000	675,000	700,000	700,000	780,000	760,000	745,000	6,460,000
Green Ridge Capital Maintenance Program	0	100,000	125,000	125,000	150,000	150,000	150,000	205,788	204,719	194,037	1,404,544
Brambleton Center HVAC Repairs	0	0	0	0	0	0	0	0	0	0	0
East Roanoke River Greenway	125,000	0	0	0	0	0	0	0	0	0	125,000
Internal Services											
Dynamics D365 Upgrade	360,000	0	0	0	0	0	0	0	0	0	360,000
Human Resources and Payroll Modules	299,700	0	444,180	0	0	0	0	0	0	0	743,880
General Service Capital Maintenance Program	596,924	880,000	880,000	880,000	880,000	880,000	880,000	980,000	960,000	945,000	8,761,924
Roanoke County - Unrestricted Cash Total	\$2,678,624	\$3,257,514	\$4,165,319	\$3,820,846	\$3,324,533	\$3,449,379	\$3,377,518	\$3,423,618	\$3,354,118	\$3,292,918	\$34,144,387

Capital Improvement Program FY 2021 – FY 2030



All Funding Sources with Projects

All Funding Sources (continued)

Funding Source/Functional Area/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 21-30 Total
Sale of Land - Economic Development											
Community Services											
Roanoke County Broadband Initiative	382,905	0	0	0	0	0	0	0	0	0	382,905
Woodhaven Property Acquisition and Imprv	162,800	0	0	0	0	0	0	0	0	0	162,800
Sale of Land - Economic Development Total	\$545,705	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$545,705
Stormwater Local Assistance Fund											
Community Services											
NPDES - MS4 BMP Construction	0	0	400,000	0	0	400,000	0	0	400,000	0	1,200,000
Stormwater Local Assistance Fund Total	\$0	\$0	\$400,000	\$0	\$0	\$400,000	\$0	\$0	\$400,000	\$0	\$1,200,000
Transfer from Roanoke County Schools											
Internal Services											
Dynamics D365 Upgrade	360,000	0	0	0	0	0	0	0	0	0	360,000
Human Resources and Payroll Modules	359,700	0	444,180	0	0	0	0	0	0	0	803,880
Transfer from Roanoke County Schools Total	\$719,700	\$0	\$444,180	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,163,880
Transfer from Fee Class											
Human Services											
Parks and Recreation Capital Maintenance Program	0	80,000	50,000	50,000	25,000	0	0	0	0	0	205,000
Transfer from Fee Class Total	\$0	\$80,000	\$50,000	\$50,000	\$25,000	\$0	\$0	\$0	\$0	\$0	\$205,000
Transfer from CommIT Fund											
Internal Services											
County-Wide Computer Replacement Program	0	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	2,097,000
IT Infrastructure Replacement Program	0	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	5,850,000
Transfer from CommIT Fund Total	\$0	\$883,000	\$883,000	\$883,000	\$883,000	\$883,000	\$883,000	\$883,000	\$883,000	\$883,000	\$7,947,000
Roanoke County - All Funding Sources	\$4,635,474	\$4,411,959	\$18,124,499	\$4,753,846	\$4,232,533	\$16,732,379	\$4,260,518	\$4,306,618	\$16,637,118	\$4,175,918	\$82,270,862

Capital Improvement Program FY 2021 – FY 2030



All Funding Sources with Projects

All Funding Sources (continued)

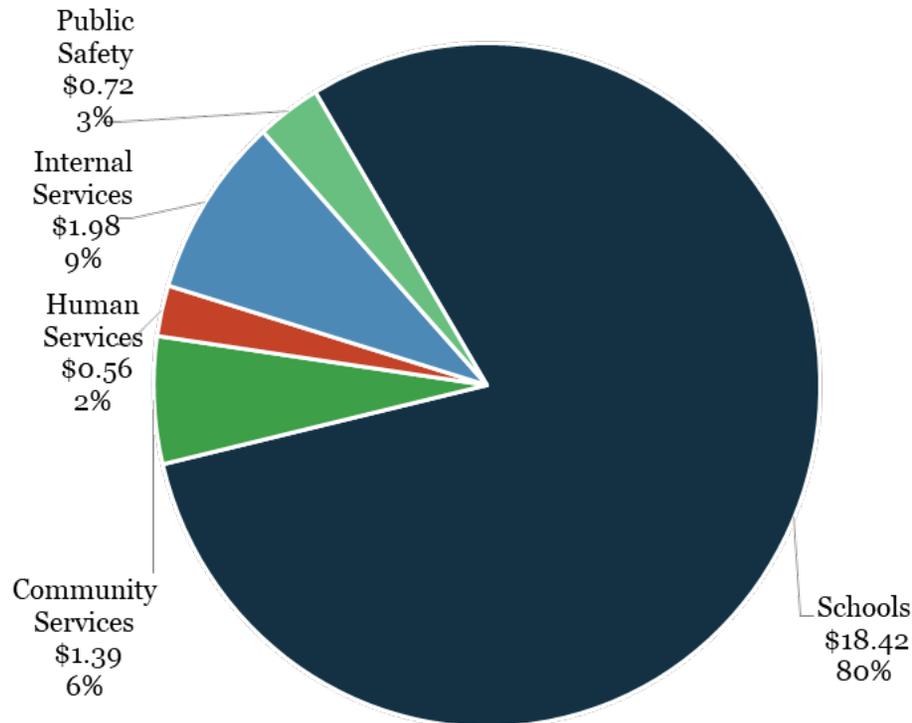
Funding Source/Functional Area/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 21-30 Total
Roanoke County Schools - All Funding Sources											
Schools											
Transfer from Schools General Fund	0	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	9,000,000
Major Capital Reserves	3,950,785	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	9,350,785
Debt Fund - Schools	2,286,888	670,692	605,164	640,703	676,244	700,833	725,424	752,750	644,694	0	7,703,392
VPSA Refunding Credits	180,483	167,477	165,193	116,750	116,250	117,931	114,831	74,943	74,631	3,987	1,132,476
VPSA Bond Issue	12,000,000	12,000,000	0	12,000,000	12,000,000	0	12,000,000	12,000,000	0	12,000,000	84,000,000
Roanoke County Schools Funding Sources	\$18,418,156	\$14,438,169	\$2,370,357	\$14,357,453	\$14,392,494	\$2,418,764	\$14,440,255	\$14,427,693	\$2,319,325	\$13,603,987	\$111,186,653
Total FY 21-30 County & Schools CIP	\$23,053,630	\$18,850,128	\$20,494,856	\$19,111,299	\$18,625,027	\$19,151,143	\$18,700,773	\$18,734,311	\$18,956,443	\$17,779,905	\$193,457,515



FY 2021 – FY 2030 Adopted Capital Improvement Program Summary of County & Schools Projects by Functional Teams

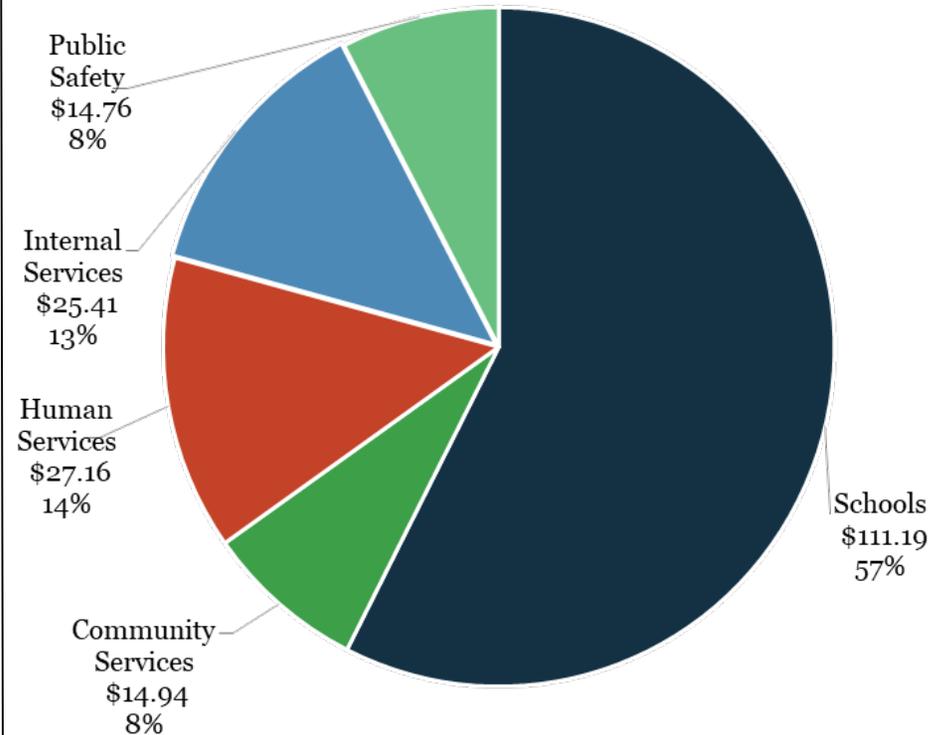
FY 2021
\$23,053,630

(\$ in millions)



FY 2021 - 2030
\$193,457,515

(\$ in millions)





County of Roanoke, Virginia FY 2021 – FY 2030 Adopted Capital Improvement Program Summary of County & Schools Projects by Functional Teams

Roanoke County & Roanoke County Public Schools Summary of Expenditures by Functional Area & Department											
Functional Team/Department	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total FY 21-30
Public Safety											
Fire & Rescue	\$170,000	\$50,000	\$300,000	\$0	\$0	\$0	\$0	\$100,000	\$10,500,000	\$0	\$11,120,000
Sheriff	70,000	110,000	289,000	125,000	125,000	125,000	125,000	175,000	165,000	155,000	1,464,000
Communications & IT	477,000	0	594,000	0	0	0	0	0	0	0	1,071,000
Courthouse and Court Services	0	131,839	978,000	0	0	0	0	0	0	0	1,109,839
Subtotal, Public Safety	717,000	291,839	2,161,000	125,000	125,000	125,000	125,000	275,000	10,665,000	155,000	14,764,839
Community Services											
Planning	591,445	391,445	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,982,890
Stormwater Management	150,000	415,000	825,000	425,000	425,000	850,000	450,000	500,000	950,000	600,000	5,590,000
Economic Development	645,705	599,675	822,139	824,846	771,533	771,379	772,218	386,430	387,499	388,181	6,369,605
Subtotal, Community Services	1,387,150	1,406,120	1,897,139	1,499,846	1,446,533	1,871,379	1,472,218	1,136,430	1,587,499	1,238,181	14,942,495
Human Services											
Parks and Recreation	555,000	800,000	2,225,000	825,000	850,000	2,100,000	850,000	985,788	964,719	939,037	11,094,544
Library	0	151,000	5,011,000	116,000	48,000	10,123,000	50,300	46,400	76,900	15,700	15,638,300
Elections	0	0	0	425,000	0	0	0	0	0	0	425,000
Subtotal, Human Services	555,000	951,000	7,236,000	1,366,000	898,000	12,223,000	900,300	1,032,188	1,041,619	954,737	27,157,844
Internal Services											
Communications & IT	0	883,000	883,000	883,000	883,000	883,000	883,000	883,000	883,000	883,000	7,947,000
Finance & Management Services	720,000	0	0	0	0	0	0	0	0	0	720,000
Finance & Mgmt Services/HR	659,400	0	888,360	0	0	0	0	0	0	0	1,547,760
General Services	596,924	880,000	5,059,000	880,000	880,000	1,630,000	880,000	980,000	2,460,000	945,000	15,190,924
Subtotal, Internal Services	1,976,324	1,763,000	6,830,360	1,763,000	1,763,000	2,513,000	1,763,000	1,863,000	3,343,000	1,828,000	25,405,684
Roanoke County Public Schools											
All Schools Projects	18,418,156	14,438,169	2,370,357	14,357,453	14,392,494	2,418,764	14,440,255	14,427,693	2,319,325	13,603,987	111,186,653
Subtotal, Roanoke County Public Schools	18,418,156	14,438,169	2,370,357	14,357,453	14,392,494	2,418,764	14,440,255	14,427,693	2,319,325	13,603,987	111,186,653
Total, FY 21-30 County & School Projects	\$23,053,630	\$18,850,128	\$20,494,856	\$19,111,299	\$18,625,027	\$19,151,143	\$18,700,773	\$18,734,311	\$18,956,443	\$31,383,892	\$193,457,515



County of Roanoke, Virginia FY 2021 – FY 2030 Adopted Capital Improvement Program All County and Schools Projects

Note: Projects with \$0 in FY 2021-2030 are active projects that have been fully funded in prior fiscal years.

Functional Team/Department/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 21-30 Total
Public Safety											
Sheriff											
Roanoke County Jail Abatement	\$0	\$0	\$179,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$179,000
Sheriff's Office Capital Maintenance Program	70,000	110,000	110,000	125,000	125,000	125,000	125,000	175,000	165,000	155,000	1,285,000
<i>Sheriff Total</i>	70,000	110,000	289,000	125,000	125,000	125,000	125,000	175,000	165,000	155,000	1,464,000
Communications & IT											
Digital Microwave Ring Replacement	327,000	0	0	0	0	0	0	0	0	0	327,000
Public Safety Communications Infrastructure	150,000	0	0	0	0	0	0	0	0	0	150,000
Emergency 911 Phone System Upgrade	0	0	444,000	0	0	0	0	0	0	0	444,000
Emergency Medical Dispatch	0	0	150,000	0	0	0	0	0	0	0	150,000
<i>Communications & IT Total</i>	477,000	0	594,000	0	0	0	0	0	0	0	1,071,000
Fire & Rescue											
Diesel Exhaust Removal System	100,000	50,000	300,000	0	0	0	0	0	0	0	450,000
Fire and Rescue Ballistic Body Armor	70,000	0	0	0	0	0	0	0	0	0	70,000
Fire Station Renovation/Replacement	0	0	0	0	0	0	0	100,000	10,500,000	0	10,600,000
<i>Fire & Rescue Total</i>	170,000	50,000	300,000	0	0	0	0	100,000	10,500,000	0	11,120,000
Courthouse and Court Services											
Courthouse Parking Lot Renovations	0	106,839	0	0	0	0	0	0	0	0	106,839
Courthouse HVAC Replacement	0	25,000	512,000	0	0	0	0	0	0	0	537,000
Courthouse and Court Services Carpeting	0	0	466,000	0	0	0	0	0	0	0	466,000
<i>Courthouse and Court Services Total</i>	0	131,839	978,000	0	0	0	0	0	0	0	1,109,839
Public Safety Total	\$717,000	\$291,839	\$2,161,000	\$125,000	\$125,000	\$125,000	\$125,000	\$275,000	\$10,665,000	\$155,000	\$14,764,839
Community Services											
Planning											
Fallowater Lane Extension	391,445	391,445	0	0	0	0	0	0	0	0	782,890
Plantation Road Phase II	200,000	0	0	0	0	0	0	0	0	0	200,000
Dry Hollow Road Safety Improvements	0	0	0	0	0	0	0	0	0	0	0
Huffman Lane Improvements	0	0	0	0	0	0	0	0	0	0	0

Capital Improvement Program FY 2021 – FY 2030



All County Capital Projects

All Projects (Continued)

Functional Team/Department/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 21-30 Total
Community Services(Continued)											
West Main Street Pedestrian Improvements	0	0	0	0	0	0	0	0	0	0	0
Williamson Road Pedestrian Improvements	0	0	0	0	0	0	0	0	0	0	0
Buck Mountain Road/Starkey Road Intersection	0	0	0	0	0	0	0	0	0	0	0
VDOT Revenue Sharing Projects (Small Projects & TBD)	0	0	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,000,000
Planning Total	591,445	391,445	250,000	2,982,890							
Stormwater Management											
NPDES - Leachate Management System Upgrade	0	0	0	0	0	0	0	0	0	0	0
NPDES - MS4 BMP Construction	0	200,000	600,000	200,000	200,000	600,000	200,000	200,000	600,000	200,000	3,000,000
Restoration of Wolf Creek at Goode Park	0	0	0	0	0	0	0	0	0	0	0
Storm Drainage Maintenance of Effort Program	150,000	215,000	225,000	225,000	225,000	250,000	250,000	300,000	350,000	400,000	2,590,000
Stormwater Management Total	150,000	415,000	825,000	425,000	425,000	850,000	450,000	500,000	950,000	600,000	5,590,000
Economic Development											
Roanoke County Broadband Initiative	382,905	386,875	384,939	387,149	383,664	383,664	384,983	0	0	0	2,694,179
Woodhaven Property Acquisition & Improvements	162,800	162,800	387,200	387,697	387,869	387,715	387,235	386,430	387,499	388,181	3,425,426
Gateway Signs & Landscaping	0	50,000	50,000	50,000	0	0	0	0	0	0	150,000
Rural Broadband Initiative	100,000	0	0	0	0	0	0	0	0	0	100,000
Economic Development Total	645,705	599,675	822,139	824,846	771,533	771,379	772,218	386,430	387,499	388,181	6,369,605
Community Services Total	\$1,387,150	\$1,406,120	\$1,897,139	\$1,499,846	\$1,446,533	\$1,871,379	\$1,472,218	\$1,136,430	\$1,587,499	\$1,238,181	\$14,942,495
Human Services											
Library											
Mount Pleasant Library Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Countywide Library Public Use Computer Repl. Plan	0	71,000	15,000	116,000	48,000	123,000	50,300	46,400	76,900	15,700	562,300
Hollins Branch Library Replacement	0	80,000	4,996,000	0	0	10,000,000	0	0	0	0	15,076,000
Library Total	0	151,000	5,011,000	116,000	48,000	10,123,000	50,300	46,400	76,900	15,700	15,638,300
Parks and Recreation											
Parks and Recreation Capital Maintenance Program	430,000	700,000	700,000	700,000	700,000	700,000	700,000	780,000	760,000	745,000	6,915,000
Green Ridge Capital Maintenance Program	0	100,000	125,000	125,000	150,000	150,000	150,000	205,788	204,719	194,037	1,404,544
East Roanoke River Greenway	125,000	0	0	0	0	0	0	0	0	0	125,000
West Roanoke River Greenway	0	0	0	0	0	0	0	0	0	0	0
Explore Park	0	0	1,400,000	0	0	0	0	0	0	0	1,400,000
Sports Field Lighting Replacement	0	0	0	0	0	1,250,000	0	0	0	0	1,250,000
Parks and Recreation Total	555,000	800,000	2,225,000	825,000	850,000	2,100,000	850,000	985,788	964,719	939,037	11,094,544

Capital Improvement Program FY 2021 – FY 2030



All County Capital Projects

All Projects (Continued)

Functional Team/Department/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 21-30 Total
Human Services (Continued)											
Elections											
Electronic Pollbook Replacement	0	0	0	0	0	0	0	0	0	0	0
Voting Machine Replacement	0	0	0	425,000	0	0	0	0	0	0	425,000
<i>Elections Total</i>	0	0	0	425,000	0	0	0	0	0	0	425,000
Human Services Total	\$555,000	\$951,000	\$7,236,000	\$1,366,000	\$898,000	\$12,223,000	\$900,300	\$1,032,188	\$1,041,619	\$954,737	\$27,157,844
Internal Services											
Communications & IT											
County-Wide Computer Replacement Program	\$0	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$2,097,000
IT Infrastructure Repl. Capital Maintenance Program	0	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	5,850,000
<i>CommIT Total</i>	0	883,000	883,000	883,000	883,000	883,000	883,000	883,000	883,000	883,000	7,947,000
Finance & Management Services											
Integrated Financial System (IFS)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Dynamics D365 Upgrade	720,000	0	0	0	0	0	0	0	0	0	\$720,000
<i>Finance Total</i>	720,000	0	0	0	0	0	0	0	0	0	720,000
Finance & Management Services/Human Resources											
Human Resources and Payroll Modules	659,400	0	888,360	0	0	0	0	0	0	0	1,547,760
<i>Finance/Human Resources Total</i>	659,400	0	888,360	0	0	0	0	0	0	0	1,547,760
General Services											
Bent Mountain Comm. Center Repairs & Renovations	0	0	0	0	0	0	0	0	0	0	0
General Service Capital Maintenance Program	596,924	880,000	880,000	880,000	880,000	880,000	880,000	980,000	960,000	945,000	8,761,924
Public Service Center Facility Replacement	0	0	3,704,000	0	0	0	0	0	0	0	3,704,000
Administration Center Envelope Repairs	0	0	231,000	0	0	0	0	0	0	0	231,000
Administration Center Carpet Replacement	0	0	244,000	0	0	0	0	0	0	0	244,000
Public Safety Center Updates	0	0	0	0	0	750,000	0	0	0	0	750,000
Administration Center Facility Updates	0	0	0	0	0	0	0	1,500,000	0	0	1,500,000
<i>General Services Total</i>	596,924	880,000	5,059,000	880,000	880,000	1,630,000	880,000	980,000	2,460,000	945,000	15,190,924
Internal Services Total	\$1,976,324	\$1,763,000	\$6,830,360	\$1,763,000	\$1,763,000	\$2,513,000	\$1,763,000	\$1,863,000	\$3,343,000	\$1,828,000	\$25,405,684
Subtotal, Roanoke County Projects	\$4,635,474	\$4,411,959	\$18,124,499	\$4,753,846	\$4,232,533	\$16,732,379	\$4,260,518	\$4,306,618	\$16,637,118	\$4,175,918	\$82,270,862



All Projects (Continued)

Roanoke County Public Schools

Schools											
Cave Spring High School	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Maintenance Program	0	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	9,000,000
HR Payroll and Software System	451,650	444,180	0	0	0	0	0	0	0	0	895,830
Dynamics D365 Upgrade	360,000	0	0	0	0	0	0	0	0	0	360,000
William Byrd High School	17,158,000	3,000,000	0	0	0	0	0	0	0	0	20,158,000
WE Cundiff Elementary	224,253	4,996,995	685,179	6,515,323	4,481,688	0	0	0	0	0	16,903,438
Glen Cove Elementary	224,253	4,996,994	685,178	6,000,000	4,518,312	0	0	0	0	0	16,424,737
Burton Center for the Arts & Technology	0	0	0	842,130	4,392,494	1,418,764	13,440,255	13,427,693	1,319,325	12,603,987	47,444,648
<i>Schools Total</i>	<u>18,418,156</u>	<u>14,438,169</u>	<u>2,370,357</u>	<u>14,357,453</u>	<u>14,392,494</u>	<u>2,418,764</u>	<u>14,440,255</u>	<u>14,427,693</u>	<u>2,319,325</u>	<u>13,603,987</u>	<u>111,186,653</u>
Total, Roanoke County Public Schools Projects	\$18,418,156	\$14,438,169	\$2,370,357	\$14,357,453	\$14,392,494	\$2,418,764	\$14,440,255	\$14,427,693	\$2,319,325	\$13,603,987	\$111,186,653
Total, FY 21-30 County & Schools Projects	\$23,053,630	\$18,850,128	\$20,494,856	\$19,111,299	\$18,625,027	\$19,151,143	\$18,700,773	\$18,734,311	\$18,956,443	\$17,779,905	\$193,457,515



County of Roanoke, Virginia FY 2021 – FY 2030 Adopted Capital Improvement Program Additional Operating Impacts

The table below provides summary information on the additional operating impacts that are associated with the projects included in the FY 2021 - FY 2030 Adopted Capital Improvement Program. Detailed information on the additional operating impacts can be found on each individual project page in the “Projects by Functional Team” section.

Additional operating impacts are defined as impacts that may increase or decrease operating costs as related to the most recently approved Operating Budget. Not all projects will have an additional operating impact, so not all projects are included in the table below. While the table below indicates that the project will have an impact on the Operating Budget (in some cases, it may save money in the Operating Budget), the decisions to include the costs in the Operating Budget have yet to be made. In some cases, additional costs associated with these projects may be offset with decreases in other parts of the Operating Budget as budget priorities change. In some cases where the additional operating impact is unknown until the final project scope is developed, the impacts are noted as “TBD.” The primary purpose of this table is to allow multi-year fiscal planning as relates to the implementation of capital projects included in this document.

Functional Team/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total FY 21-FY30
Public Safety											
Roanoke County Jail Abatement	\$0	\$0	\$14,485	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,485
Digital Microwave Ring Replacement	\$0	\$65,000	\$66,950	\$68,959	\$71,027	\$73,158	\$75,353	\$77,613	\$79,942	\$82,340	\$660,342
Public Safety Communications Infrastructure	\$0	\$15,000	\$15,450	\$15,914	\$16,391	\$16,883	\$17,389	\$17,911	\$18,448	\$19,002	\$152,387
Emergency 911 Phone System Upgrade	\$0	\$0	\$0	\$17,775	\$27,975	\$28,814	\$29,679	\$30,569	\$31,486	\$32,431	\$198,729
Fire Station Renovation/Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	TBD	TBD
Courthouse Parking Lot Renovations	\$0	\$0	TBD								
Courthouse HVAC Replacement	\$0	\$0	\$0	TBD							
Community Services											
Plantation Road Phase II	\$0	TBD									



Functional Team/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total FY 21-FY30
Community Services (continued)											
NPDES - Leachate Management System Upgrade	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Restoration of Wolf Creek in Goode Park Phase I	\$0	\$0	\$5,000	\$5,150	\$5,305	\$5,464	\$5,628	\$5,796	\$5,970	\$6,149	\$44,462
Roanoke County Broadband Initiative	\$325,000	\$325,000	TBD	\$650,000							
Gateways Signs & Landscaping	\$0	\$0	\$7,500	\$7,725	\$7,957	\$8,195	\$8,441	\$8,695	\$8,955	\$9,224	\$66,693
Human Services											
Hollins Branch Library Replacement	\$0	\$0	\$0	\$0	\$0	\$0	TBD	TBD	TBD	TBD	TBD
East Roanoke River Greenway	\$10,000	\$12,500	\$12,875	\$13,261	\$13,659	\$14,069	\$14,491	\$14,926	\$15,373	\$15,835	\$136,989
West Roanoke River Greenway	\$10,000	\$10,300	\$10,609	\$10,927	\$11,255	\$11,593	\$11,941	\$12,299	\$12,668	\$13,048	\$114,639
Sports Field Lighting Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$5,150	\$5,305	\$5,464	\$20,918
Electronic Pollbook Replacement	\$0	\$19,425	\$20,008	\$20,608	\$21,226	\$21,863	\$22,519	\$23,194	\$23,890	\$24,607	\$197,341
Voting Machine Replacement	\$0	\$0	\$0	\$0	\$18,100	\$18,643	\$19,202	\$19,778	\$20,372	\$20,983	\$117,078
Internal Services											
Dynamics D365 Upgrade	\$0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Human Resources and Payroll Modules	(\$54,175)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Bent Mountain Community Center Repairs and Renovations	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Public Service Center Facility Replacement	\$0	\$0	TBD								
Administration Center Facility Updates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	TBD	TBD
Roanoke County Public Schools											
Cave Spring High School	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
William Byrd High School	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
WE Cundiff Elementary School	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Glen Cove Elementary School	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Burton Center for the Arts & Technology	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD



Public Safety Functional Team





County of Roanoke, Virginia FY 2021 – FY 2030 Adopted Capital Improvement Program Public Safety Summary

Note: Projects with \$0 in FY 2021-2030 are active projects that have been fully funded in prior fiscal years.

Functional Team/Department/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 21-30 Total
Public Safety											
Sheriff											
Roanoke County Jail Abatement	\$0	\$0	\$179,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$179,000
Sheriff's Office Capital Maintenance Program	70,000	110,000	110,000	125,000	125,000	125,000	125,000	175,000	165,000	155,000	1,285,000
<i>Sheriff Total</i>	70,000	110,000	289,000	125,000	125,000	125,000	125,000	175,000	165,000	155,000	1,464,000
Communications & IT											
Digital Microwave Ring Replacement	327,000	0	0	0	0	0	0	0	0	0	327,000
Public Safety Communications Infrastructure	150,000	0	0	0	0	0	0	0	0	0	150,000
Emergency 911 Phone System Upgrade	0	0	444,000	0	0	0	0	0	0	0	444,000
Emergency Medical Dispatch	0	0	150,000	0	0	0	0	0	0	0	150,000
<i>Communications & IT Total</i>	477,000	0	594,000	0	0	0	0	0	0	0	1,071,000
Fire & Rescue											
Diesel Exhaust Removal System	100,000	50,000	300,000	0	0	0	0	0	0	0	450,000
Fire and Rescue Ballistic Body Armor	70,000	0	0	0	0	0	0	0	0	0	70,000
Fire Station Renovation/Replacement	0	0	0	0	0	0	0	100,000	10,500,000	0	10,600,000
<i>Fire & Rescue Total</i>	170,000	50,000	300,000	0	0	0	0	100,000	10,500,000	0	11,120,000
Courthouse and Court Services											
Courthouse Parking Lot Renovations	0	106,839	0	0	0	0	0	0	0	0	106,839
Courthouse HVAC Replacement	0	25,000	512,000	0	0	0	0	0	0	0	537,000
Courthouse and Court Services Carpeting	0	0	466,000	0	0	0	0	0	0	0	466,000
<i>Courthouse and Court Services Total</i>	0	131,839	978,000	0	0	0	0	0	0	0	1,109,839
Public Safety Total	\$717,000	\$291,839	\$2,161,000	\$125,000	\$125,000	\$125,000	\$125,000	\$275,000	\$10,665,000	\$155,000	\$14,764,839



Roanoke County Jail Abatement

Department: Sheriff

Location: 401 East Main Street, Salem, VA 24153

Magisterial District: City of Salem

Category: Replacement

Est. Useful Life: 15 years

Project Status: Planned

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	179,000	0	0	0	179,000	0	0	0	0	0	0	0	179,000
Funding Sources													
Lease /Revenue Bonds	147,000	0	0	0	147,000	0	0	0	0	0	0	0	147,000
City of Salem	32,000	0	0	0	32,000	0	0	0	0	0	0	0	32,000
Total Funding Sources	179,000	0	0	0	179,000	0	0	0	0	0	0	0	179,000
Operating Impacts			0	0	14,485	0	0	0	0	0	0	0	14,485



Project Summary:

The Roanoke County Jail abatement project consists of removal of VCT tile and mastic in all but one inmate housing units, as well as all staff work areas, jail intake area and medical section of the jail. Vinyl laminate sheet flooring was installed over VCT tile. The mastic adhesive is deteriorating and causing the VCT tile to become loose and float under the sheet laminate. This is causing the sheet laminate to separate, exposing the asbestos fibers, which may become airborne and pose a significant health risk to staff and inmates. The Jail division has had emergency abatement performed on the 4th, 5th, and 6th floor areas as safety issues have occurred. The total estimated cost to complete this project is \$179,000 estimated for abatement, cleaning, and sealing. The City of Salem is anticipated to contribute \$32,000 for this project.



Roanoke County Jail Abatement (continued)

Project Description and Justification:

The flooring throughout the jail facility consists of sheet vinyl that was installed over VCT tile. The VCT tile and mastic both contain asbestos. Deteriorating mastic adhesive may cause the sheet vinyl to separate exposing the asbestos fibers. During prior CIP projects, the floor tile and adhesive mastic were tested and determined to contain asbestos. Asbestos flooring is still present in the staff work areas, 11 inmate housing units, the jail intake area, and the Medical section of the jail. This project will abate the remaining asbestos flooring throughout the jail facility and reseal the concrete flooring. The City of Salem will be responsible for a portion of the costs.

Additional Operating Impacts:

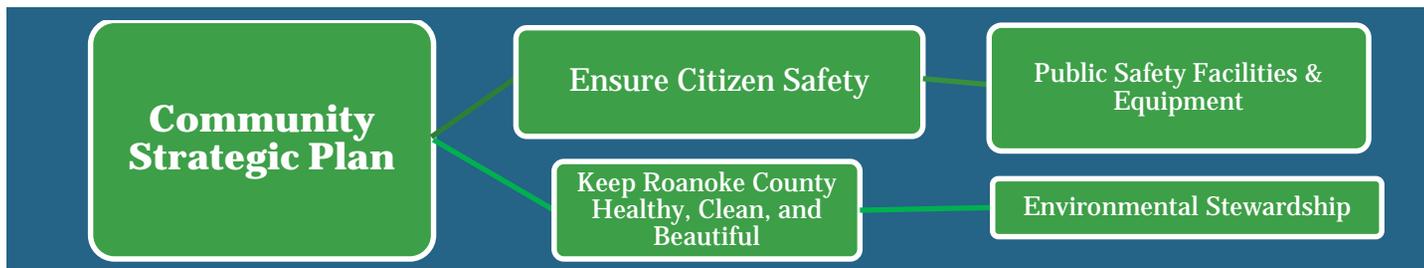
In order to facilitate the abatement and sealing process for inmate housing areas, temporary housing for inmates at the Western Virginia Regional Jail may cost up to \$14,485 during the project. Abating the remaining asbestos flooring will reduce annual maintenance costs associated with the upkeep of sheet vinyl flooring.

Conformance with Plans, Policies, and Legal Obligations:

The Roanoke County/Salem Jail has a legal obligation to comply with the Minimum Standards for Local Jails and Lockups as established by the Virginia Board of Corrections. Standard 6VAC15-40-1140: the facility floors, halls, corridors, and other walkway areas shall be maintained in a clean, dry, hazard-free manner. Additionally, in order to maintain accreditation with the American Correctional Association, the jail is required to comply with their standards regarding safety. This project was identified as a critical need in the Facility Conditions Assessment completed in 2019.

Project Highlights and Key Milestones:

- The original VCT tile and mastic were installed in 1978-79 during the original construction of the jail.
- Vinyl laminate sheeting was installed over the VCT tile and mastic in 2008.
- Abatement of one housing unit was completed in October 2014.
- There have been incidents of VCT tile and mastic separating from laminate flooring.
- City of Salem is anticipated to contribute \$32,000 to this project.





Sheriff's Office Capital Maintenance Program

Department: Sheriff

Location: Countywide

Magisterial District: Countywide

Category: Capital Maintenance Program

Est. Useful Life: 10-15 years

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	1,729,000	444,000	70,000	110,000	110,000	125,000	125,000	125,000	125,000	175,000	165,000	155,000	1,285,000
Funding Sources													
Roanoke County - Unrestricted Cash	1,729,000	444,000	70,000	110,000	110,000	125,000	125,000	125,000	125,000	175,000	165,000	155,000	1,285,000
Total Funding Sources	1,729,000	444,000	70,000	110,000	110,000	125,000	125,000	125,000	125,000	175,000	165,000	155,000	1,285,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Capital Maintenance Program (CMP) is the vehicle in which County assets are programmed to receive regular maintenance and repair. Dedicating resources each year to the Sheriff CMP will fund repairs and maintenance maximizing the life of the County Jail and Courthouse.



Capital Maintenance Program (continued)

Project Description and Justification:

The Capital Maintenance Program (CMP) is the vehicle in which County assets are programmed to receive regular maintenance and repair. Ongoing preventive maintenance of all facilities will help ensure the safety and value of these assets while avoiding potentially large costs resulting from lack of proper maintenance. Dedicating resources each year to the Sheriff CMP will fund repairs and maintenance maximizing the life of the County Jail and Courthouse. Funding is planned at \$70,000 in FY 2021 with planned increases based on facility needs and availability of funding sources.

Additional Operating Impacts:

Direct impact to the operating budget from the Capital Maintenance Program primarily comes from the additional staff time necessary to assess and implement repairs and maintenance. While repair and maintenance projects can have significant upfront costs, the long-term effect is a reduction in overall total cost and an increase in departmental efficiency. Over time, it is expected that ongoing preventive maintenance will actually reduce operating costs and enhance service levels.

Conformance with Plans, Policies, and Legal Obligations:

Maintenance and upkeep of County assets is necessary to maximize the potential of taxpayer funded buildings and facilities.

Project Highlights and Key Milestones:

- The Sheriff's Office received no dedicated funding for capital maintenance of facilities until FY 2016.
- In FY 2016, the CMP expanded to a 10-year funding schedule and first included in the Capital Improvement Program.





Digital Microwave Ring Replacement

Department: CommIT

Category: Replacement

Location: Countywide

Est. Useful Life: 10-15 years

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	813,000	486,000	327,000	0	0	0	0	0	0	0	0	0	327,000
Funding Sources													
Roanoke County -													
Unrestricted Cash	327,000	0	327,000	0	0	0	0	0	0	0	0	0	327,000
CommIT Fund Balance	161,000	161,000	0	0	0	0	0	0	0	0	0	0	0
Transfer from CommIT	325,000	325,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	813,000	486,000	327,000	0	0	0	0	0	0	0	0	0	327,000
Operating Impacts			0	65,000	66,950	68,959	71,027	73,158	75,353	77,613	79,942	82,340	660,342



Project Summary:

The Digital Microwave Ring Replacement project, with funding scheduled from FY 2019 through FY 2021, replaces the County's 14 Microwave Radios, which have been in service since 2006. The rings currently in use met their anticipated end-of-life date in 2017 and are no longer compatible with the newest operating and flash port software. New equipment and technology will offer more functionality and efficiency than current County microwave rings.



Digital Microwave Ring Replacement (continued)

Project Description and Justification:

This project replaces the County’s 14 Microwave Radios. The County’s 14 Microwave Radios have been in service since 2006 and have a lifespan of approximately 10 years with an end of life date in 2017. This project will also include an additional Microwave link, to include spare radios.

Replacement is necessary because the current radios are no longer compatible with the most current operating/flash port software. Equipment and technology now available in the marketplace are much more versatile than the equipment currently in use in Roanoke County. Replacement products may offer the County new and useful multi-functionality, such as pictures, text, video, and automatic location availability.

Additional Operating Impacts:

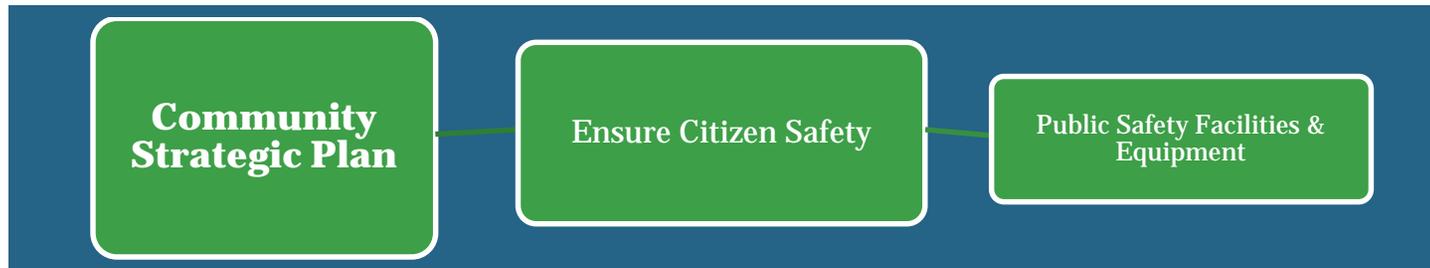
Beginning in FY 2022, there will be an estimated recurring impact on the county’s operating budget of \$65,000, with inflation added for future years, to implement additional hardware maintenance contracts. Actual costs will be known once the microwave radios, hardware, and software are purchased and will be considered as part of the FY 2022 operating budget.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms with the stated mission of the Board of Supervisors to provide high quality services at reasonable costs to the citizens of Roanoke County.

Project Highlights and Key Milestones:

- The County’s 14 Microwave radios have been in operation since 2006.
- Vendor life cycle plan has the radio model at end-of-life in 2017.
- Parts production and maintenance service ended in 2019.
- Project is scheduled for funding in FY 2019 - FY 2021.





Public Safety Communications Infrastructure

Department: CommIT

Category: Replacement

Location: Countywide

Est. Useful Life: 7 years

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	150,000	0	150,000	0	0	0	0	0	0	0	0	0	150,000
Funding Sources													
Roanoke County - Unrestricted Cash	150,000	0	150,000	0	0	0	0	0	0	0	0	0	150,000
Total Funding Sources	150,000	0	150,000	0	0	0	0	0	0	0	0	0	150,000
Operating Impacts			0	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	152,387



Project Summary:

The Public Safety Communications Infrastructure project, funded for FY 2021, will replace the current mountaintop routers located at all of the Roanoke Valley Radio System sites. The vendor has provided an end of life date of 2021 to the equipment currently used, which has been in use for 12 years. New routers will be computer based and compatible with commercial communication devices. This project is funded in FY 2021, which will coincide with the Digital Microwave Ring Upgrade project. Completing these projects together will provide for a more efficient and seamless upgrade to the overall connectivity of public safety radio system sites.



Public Safety Communications Infrastructure (continued)

Project Description and Justification:

The project entails replacing the current mountaintop routers located at all of the Roanoke Valley Radio System sites (Master Site, Poor Mountain, Fort Lewis Mountain, Mill Mountain and Crowell’s Gap). Franklin County is currently updating their radio infrastructure and will be purchasing the routers for Master Site and Crowell’s Gap. This project includes the purchase and installation of the 3 remaining routers located at Poor Mountain, Fort Lewis Mountain, and Mill Mountain.

The equipment will be called upon to receive greater amounts of data, such as pictures, text and video, interpret and display this data, and relay this data to units in the field. For the most efficient and seamless upgrade, this project coincides with the Microwave Ring upgrade project.

Additional Operating Impacts:

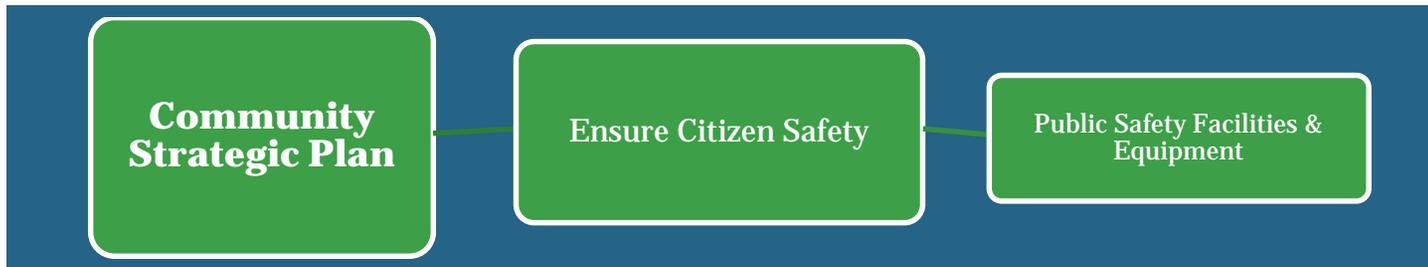
Beginning in FY 2022, there is anticipated to be a recurring impact on the operating budget of \$15,000 to implement maintenance service contracts, with inflation added for future years.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms with the stated mission of the Board of Supervisors to provide high quality services at reasonable costs to the citizens of Roanoke County.

Project Highlights and Key Milestones:

- Original mountaintop routers were purchased in 2010.
- Vendor announced the end of life for current mountaintop routers as 2021.
- Project is coincides with Digital Microwave Ring Replacement project to upgrade overall connectivity of public safety radio system sites.





Emergency 911 Phone System Upgrade

Department: CommIT – Emergency Communications Center
 Location: Public Safety Center, 5925 Cove Rd, Roanoke VA 24019
 Magisterial District: Countywide

Category: Replacement
 Est. Useful Life: 7 years
 Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	444,000	0	0	0	444,000	0	0	0	0	0	0	0	444,000
Funding Sources													
Roanoke County -													
Unrestricted Cash	294,000	0	0	0	294,000	0	0	0	0	0	0	0	294,000
PSAP Grant Funding	150,000	0	0	0	150,000	0	0	0	0	0	0	0	150,000
Total Funding Sources	444,000	0	0	0	444,000	0	0	0	0	0	0	0	444,000
Operating Impacts			0	0	0	17,775	27,975	28,814	29,679	30,569	31,486	32,431	198,729



Project Summary:

The Emergency 911 Phone System Upgrade Project, planned for FY 2023, is anticipated to upgrade the current 911 Emergency Communications Phone System. The most recent system was installed in 2015 and will have reached the “end of life” of the equipment by 2022. The current 911 phone system, in its current hardware and software configuration, is incapable of receiving and processing calls for service from anything other than telephones. The upgraded digital system would meet the challenges of technology growth by accepting other forms of communication and would be compatible with the “Next Generation 911” systems. Upgrading to “Next Generation 911” is a more resilient system that allows voice, photos, videos and text messages to flow seamlessly from the public to the 911 network.



Emergency 911 Phone System Upgrade (continued)

Project Description and Justification:

The Emergency 911 Phone System Upgrade Project, planned for FY 2023, is anticipated to upgrade the current 911 Emergency Communications Phone System. The project is expected to be funded in part with \$150,000 in PSAP (Public Safety Answering Point) grant funds with Roanoke County covering the remaining cost.

The most recent system was installed in 2015 and will have reached the “end of life” of the equipment by 2022. The current 911 phone system, in its current hardware and software configuration, is incapable of receiving and processing calls for service from anything other than telephones. The upgraded digital system would meet the challenges of technology growth by accepting other forms of communication including voice, photos, videos and text messages.

Additional Operating Impacts:

Beginning in FY 2024, there is anticipated to be an impact on the operating budget of approximately \$17,775 to implement maintenance services. Operating impacts increase to \$27,975 each year beginning in FY 2025 of the project for maintenance services, with inflation estimates added for future years.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms with the stated mission of the Board of Supervisors to provide high quality services at reasonable costs to the citizens of Roanoke County.

Project Highlights and Key Milestones:

- Current Emergency 911 Phone System purchased in FY 2014.
- County implemented “TXT2911” in FY 2016, allowing the public to send text messages (SMS) to 911.
- Expected end of life for current system is 2022.
- Project expected to receive funding from PSAP (Public Safety Answering Point) grant for \$150,000.





Emergency Medical Dispatch

Department: CommIT – 9-1-1

Category: Replacement

Location: Public Safety Center, 5925 Cove Rd, Roanoke VA 24019

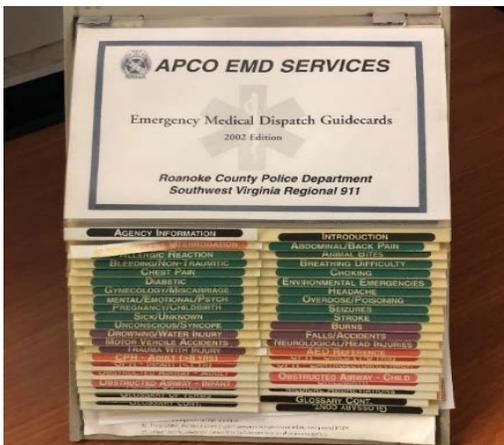
Est. Useful Life: 5 years

Magisterial District: Countywide

Project Status: New

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	150,000	0	0	0	150,000	0	0	0	0	0	0	0	150,000
Funding Sources													
Roanoke County - Unrestricted Cash	150,000	0	0	0	150,000	0	0	0	0	0	0	0	150,000
Total Funding Sources	150,000	0	0	0	150,000	0	0	0	0	0	0	0	150,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

This project proposes to upgrade the Emergency Communication Center Emergency Medical Dispatch Program in FY 2023. Emergency Medical Dispatch (EMD) is a systematic program of handling medical calls. Trained telecommunicators, using procedures locally approved by the Operational Medical Director (OMD), quickly and properly determine the nature and priority of the call, dispatch the appropriate response, then give the caller instructions to help treat the patient until the responding Emergency Medical Services (EMS) unit arrives. A comprehensive EMD program can reduce agency liability by providing thorough and consistent dispatch instructions. Total project cost is estimated at \$150,000.



Emergency Medical Dispatch (continued)

Project Description and Justification:

"Emergency Medical Dispatch" (EMD) is a systematic program of handling medical calls. Trained telecommunicators, using procedures locally approved by the Operational Medical Director (OMD), quickly and properly determine the nature and priority of the call, dispatch the appropriate response, then give the caller instructions to help treat the patient until the responding Emergency Medical Services (EMS) unit arrives. A comprehensive EMD program can reduce agency liability by providing thorough and consistent dispatch instructions. Roanoke County has used the same EMD Guide cards since December of 2006. The OMD has strongly encouraged an upgrade due to the outdated material.

The Association of Public-Safety Communications Officials (APCO) Institute's comprehensive EMD program is based on the National Standard Curriculum for EMD, and incorporates all of the current American Society for Testing and Materials and National Highway Traffic Safety Administrations guidelines. It is a cost effective way for agencies to implement an EMD program and includes customization of EMD Guide cards and locally controlled training by APCO Institute certified instructors.

Additional Operating Impacts:

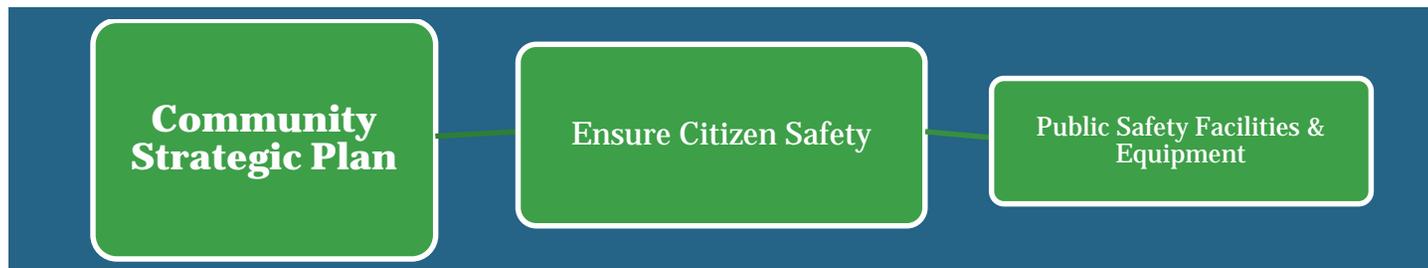
Depending on the upgrade chosen, the department may need an interface with our current Computer Aided Dispatch computers, licenses, continued training for ECC employees and software maintenance.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms with the stated mission of the Board of Supervisors to provide high quality services at reasonable costs to the citizens of Roanoke County.

Project Highlights and Key Milestones:

- Roanoke County Emergency Communications Center began Emergency Medical Dispatch in January of 2000.
- The Emergency Medical Dispatch Guide Cards were updated in December of 2006.
- The Operational Medical Director indicated that the current EMD Guide Cards are outdated and recommends an upgrade as soon as possible.





Diesel Exhaust Removal System

Department: Fire and Rescue/General Services
Location: Countywide Fire and Rescue Stations
Magisterial District: Countywide

Category: New Facilities
Est. Useful Life: Varies
Project Status: Planned

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	500,000	50,000	100,000	50,000	300,000	0	0	0	0	0	0	0	450,000
Funding Sources													
Department of Fire Programs	200,000	50,000	100,000	50,000	0	0	0	0	0	0	0	0	150,000
Lease/Revenue Bonds	300,000	0	0	0	300,000	0	0	0	0	0	0	0	300,000
Total Funding Sources	500,000	50,000	100,000	50,000	300,000	0	0	0	0	0	0	0	450,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Diesel Exhaust Removal System project will install emission capture equipment in approximately 60 apparatus bays to capture diesel emissions. This project mounts exhaust filtration equipment to capture these emissions. The Fire and Rescue Department has planned the use of Department of Fire Program funds in the amount of \$50,000 in FY 2020 and FY 2022 and \$100,000 in FY 2021 to purchase units at stations. Bond funding in FY 2023, in the amount of \$300,000, will purchase units at the remaining fire station facilities.



Diesel Exhaust Removal System (continued)

Project Description and Justification:

The Diesel Exhaust Removal System project will install emission capture equipment in approximately 60 apparatus bays to capture diesel emissions. This project mounts an exhaust filtration equipment to capture 100% of these emissions.

Most fire apparatus and emergency response vehicles run on diesel fuel. The exhaust from these vehicles is expelled directly into the station bays. An apparatus-mounted exhaust filtration device will capture these emissions resulting in a cleaner environment.

The Fire and Rescue Department has planned the use of Department of Fire Program funds in the amount of \$50,000 in FY 2020 and FY 2022 and \$100,000 in FY 2021 to purchase units at stations. Bond funding in FY 2023, in the amount of \$300,000, will purchase units at the remaining fire station facilities.

Additional Operating Impacts:

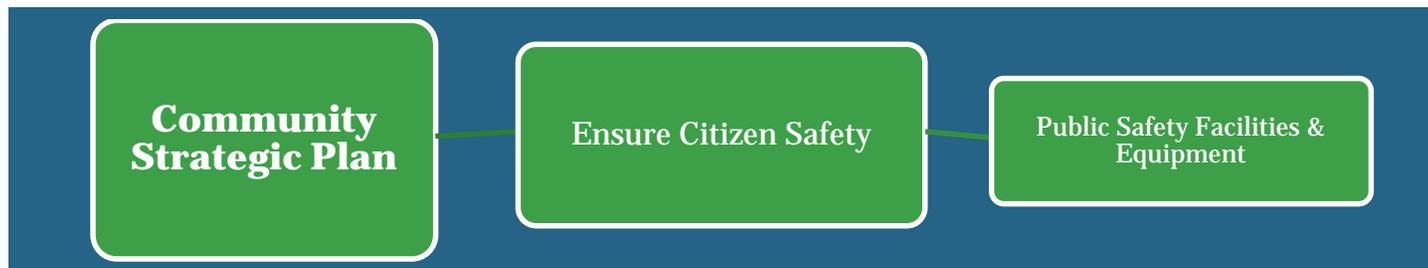
There is no anticipated additional operating impact with this project. The filtration devices come with a one-year warranty. Maintenance, repair, and replacement filter costs are anticipated to be covered by the existing budget when equipment is installed.

Conformance with Plans, Policies, and Legal Obligations:

This project relates to the departmental goal of maintaining compliance with National Fire Protection Association (NFPA), specifically the NFPA 1500 standard, which specifies the minimum requirements for an occupational safety and health program for fire departments.

Project Highlights and Key Milestones:

- Exhaust filtration device will capture vehicle emissions into station bays.
- Total cost for this project is approximately \$500,000.
- Project is planned to receive \$50,000 in Department of Fire Programs funding in FY 2020 and FY 2022 and \$100,000 in FY 2021 for a total of \$200,000.
- Bond funding in FY 2023 will fund the project an additional \$300,000 to install systems in remaining stations.
- Project originally planned for FY 2026 in prior CIP, but staff have identified this project as a priority to fund sooner.





Fire and Rescue Ballistic Body Armor

Department: Fire and Rescue

Category: New Facilities

Location: Countywide

Est. Useful Life: 5 years

Magisterial District: Countywide

Project Status: Planned

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	137,000	67,000	70,000	0	0	0	0	0	0	0	0	0	70,000
Funding Sources													
Roanoke County - Unrestricted Cash	137,000	67,000	70,000	0	0	0	0	0	0	0	0	0	70,000
Total Funding Sources	137,000	67,000	70,000	0	0	0	0	0	0	0	0	0	70,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Fire and Rescue Ballistic Body Armor project, funded in FY 2020 and FY 2021, purchases ballistic body armor for all fire and rescue personnel to include vests and helmets along with tactical emergency medical equipment for the treatment and transport of patients during an active shooter/intentional mass casualty incident. The purchase of this equipment will allow the County's Fire & Rescue, Police, Emergency Communications Center, and Sheriff's Offices along with the Town of Vinton's Police Department to develop a Rescue Task Force (RTF). An RTF allows fire and rescue personnel to treat and remove patients with law enforcement protection.



Fire and Rescue Ballistic Body Armor (continued)

Project Description and Justification:

In 2013, the Fire and Rescue Department along with the Police Department, and Sheriff's Office developed the Unified Hostile Incident Action Guide, which addressed responses to active threat incidents such as active shooter and intentional mass casualty incidents. In 2016, the Guide was reviewed and integrated into the County's Emergency Communications Center, and Town of Vinton Police Department. The updated Guide incorporated the rescue task force model (RTF), which is a group of fire, rescue, and law enforcement personnel responding to potential active threat incidents. This allows fire and rescue personnel, with law enforcement protection, to quickly treat major bleeds and injuries, increasing the rate of victim survival.

Capital funding, \$137,000 in FY 2020 (\$67,000) and FY 2021(\$70,000), purchases equipment including vests and helmets. Additionally, tactical emergency medical equipment and communication devices will be purchased to ensure effective communications and victim treatment.

Additional Operating Impacts:

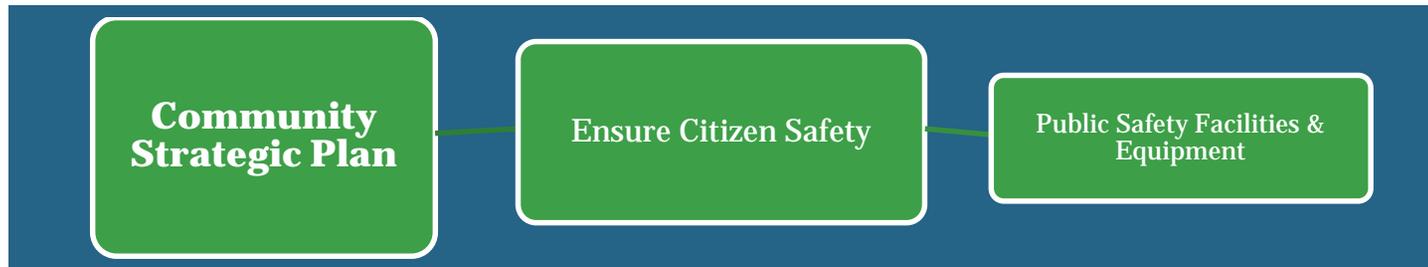
Any additional costs beyond the initial purchase of equipment will be covered by the Fire and Rescue Department. Those costs may include replacement of ballistic armor after 5 years and replacement of medical equipment.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms with the County's Unified Hostile Incident Action Guide, last amended in 2016.

Project Highlights and Key Milestones:

- Unified Hostile Incident Action Guide developed in 2013 and amended in 2016 to include County and Town of Vinton public safety departments.
- Guide identifies the development of a Rescue Task Force Model to allow fire and rescue personnel to enter within a designated area to treat victims with law enforcement protection.
- Purchase of ballistic body armor, emergency medical equipment and communications devices are required to support the Rescue Task Force Model.





Fire Station Renovation / Replacement

Department: Fire and Rescue/General Services

Category: New Facilities

Location: Countywide Fire and Rescue Stations

Est. Useful Life: Varies

Magisterial District: Countywide

Project Status: Planned

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	10,600,000	0	0	0	0	0	0	0	0	100,000	10,500,000	0	10,600,000
Funding Sources													
Lease/Revenue Bonds	10,500,000	0	0	0	0	0	0	0	0	0	10,500,000	0	10,500,000
Roanoke County - Unrestricted Cash	100,000	0	0	0	0	0	0	0	0	100,000	0	0	100,000
Total Funding Sources	10,600,000	0	0	0	0	0	0	0	0	100,000	10,500,000	0	10,600,000
Operating Impacts			0	0	0	0	0	0	0	0	0	TBD	TBD



Project Summary:

The Fire Station Renovation / Replacement project is planned to receive funding in FY 2028 (\$0.1 million) for planning and initial design and in FY 2029 (\$10.5 million) for construction to renovate and/or replace fire station facilities. Further evaluation will be necessary to identify which station(s) will need replacement or renovations. Roanoke County Fire and Rescue operates from 12 stations and a Regional Fire-EMS Training Center located in Roanoke County.



Fire Station Renovation / Replacement (continued)

Project Description and Justification:

The Fire Station Renovation / Replacement project is proposed to receive funding in FY 2028 (\$0.1 million) for planning and initial design and in FY 2029 (\$10.5 million) for construction to renovate and/or replace fire station facilities. Roanoke County Fire and Rescue operates from 12 stations and a Regional Fire-EMS Training Center located in Roanoke County.

Stations range in age with various facility needs, which will be evaluated closer to the planned funding years to determine which fire station(s) will be renovated and/or replaced.

Additional Operating Impacts:

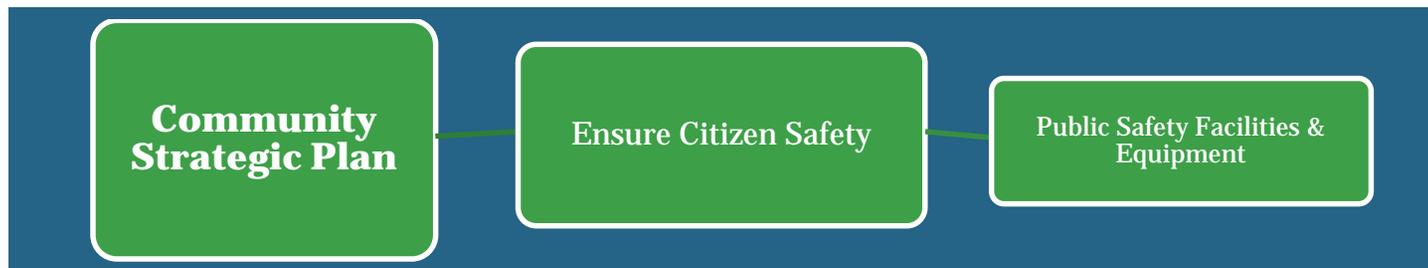
There is no anticipated additional operating impact with this project. Renovation or replacement of facilities may create operating savings.

Conformance with Plans, Policies, and Legal Obligations:

This project relates to the departmental goal of maintaining compliance with National Fire Protection Association (NFPA), specifically the NFPA 1500 standard, which specifies the minimum requirements for an occupational safety and health program for fire departments.

Project Highlights and Key Milestones:

- Roanoke County Fire and Rescue operates from 12 stations and a Regional Fire-EMS Training Center located in Roanoke County.
- Stations range in age with various facility needs, which will be evaluated closer to the planned funding years.
- Funding in FY 2028 (\$100,000) is planned for planning and initial design.
- Bond funding in FY 2029, \$10.5 million, is planned for construction to renovate and/or replace fire station facilities.





Courthouse Parking Lot Renovations

Department: General Services/Building Maintenance

Category: Replacement

Location: 305 East Main Street, Salem, VA 24153

Est. Useful Life: 25 Years

Magisterial District: City of Salem

Project Status: New

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	106,839	0	0	106,839	0	0	0	0	0	0	0	0	106,839
Funding Sources													
Roanoke County - Unrestricted Cash	106,839	0	0	106,839	0	0	0	0	0	0	0	0	106,839
Total Funding Sources	106,839	0	0	106,839	0	0	0	0	0	0	0	0	106,839
Operating Impacts			0	0	TBD								



Project Summary:

The Courthouse Parking Lot Renovations project is planned to address ongoing issues with funding planned in FY 2022. The Roanoke County Courthouse parking lot has exceeded its useful life, and the degradation of the asphalt has resulted in increasing subsurface structural issues. This project will include civil engineering design and project construction to replace the lot surface and to provide necessary subsurface/base repairs to ensure the long-term utilization of the lot. The Courthouse parking lot was identified as a deficiency in the 2019 Facilities Condition Assessment.



Courthouse Parking Lot Renovations (continued)

Project Description and Justification:

The Courthouse Parking Lot Renovations project is planned to address ongoing issues with funding planned in FY 2022. The project will address the subsurface and pavement needs for the Courthouse lot areas. Continued deferral of the project will result in increased overall project scope related costs due to the subsurface degradation resulting from failed asphalt. In addition to cost impacts, the condition of the lot represents an overall safety issue for the facility.

The Courthouse parking lot was identified as a deficiency in the 2019 Facilities Condition Assessment and an associated cost estimate was provided.

Additional Operating Impacts:

There are no additional operational cost impacts for this project.

Conformance with Plans, Policies, and Legal Obligations:

Providing a safe and functional parking lot is necessary for the efficient operation of the Courthouse facility. The Courthouse parking lot was identified as a deficiency in the 2019 Facilities Condition Assessment.

Project Highlights and Key Milestones:

- The lot condition has continued to degrade. Repairs have increased and provide only temporary and localized improvement.
- Project is planned for FY 2022 with \$106,839 in funding.
- Project identified as a deficiency in the 2019 Facilities Condition Assessment.

**Organizational
Strategic Plan**

Ensure Citizen Safety

Public Safety Facilities &
Equipment



Courthouse HVAC Replacement

Department: General Services/Building Maintenance

Category: Replacement

Location: 305 East Main Street, Salem, VA 24153

Est. Useful Life: 20-25 Years

Magisterial District: City of Salem

Project Status: New

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	537,000	0	0	25,000	512,000	0	0	0	0	0	0	0	537,000
Funding Sources													
Lease/Revenue Bonds	512,000	0	0	0	512,000	0	0	0	0	0	0	0	512,000
Roanoke County - Unrestricted Cash	25,000	0	0	25,000	0	0	0	0	0	0	0	0	25,000
Total Funding Sources	537,000	0	0	25,000	512,000	0	0	0	0	0	0	0	537,000
Operating Impacts			0	0	0	TBD							



Project Summary:

The Courthouse HVAC Replacement project is planned to replace major HVAC components that are original to the building, which have exceeded the end of their useful life. This project will incorporate due diligence planned for FY 2022 to perform initial engineering analysis to identify the best type of replacement components to replace the current obsolete system. Detailed design and replacement is planned for FY 2023. The 2019 Facilities Condition Assessment identified the needs proposed in this project as deficiencies with equipment that is well past service life expectancy.



Courthouse HVAC Replacement (continued)

Project Description and Justification:

The Courthouse HVAC Replacement project is planned to replace major HVAC components that are original to the building, which have exceeded the end of their useful life. Heating for the Courthouse is provided by two firetube steam boilers. These boilers are original to the facility, which was completed in 1982. They have exceeded their life expectancy by over 7 years. In addition, recurring maintenance and obsolescence issues are increasing. The Courthouse cooling is provided by two 100 ton reciprocating water cooled liquid chillers and cooling tower that are also original to the facility.

This project will incorporate due diligence planned for FY 2022 to perform initial engineering analysis to identify the best type of replacement components to replace the current obsolete system. Detailed design and replacement is planned for FY 2023.

Additional Operating Impacts:

Recurring energy utilization should decrease with the engineered replacement of these systems. The estimated total impact is undetermined at this time pending initial engineering work and the fluctuations in energy unit costs.

Conformance with Plans, Policies, and Legal Obligations:

Heating, cooling and ventilation for the Courthouse is necessary for the continuity of operations for a significant facility. The 2019 Facilities Condition Assessment identified the needs proposed in this project as deficiencies with equipment that is well past service life expectancy.

Project Highlights and Key Milestones:

- Recurring operational, functional, and obsolescence issues.
- Staff submitted CIP requests in both FY 2019 and FY 2020 for replacement of the chillers and cooling tower.
- The 2019 Facilities Condition Assessment indicates that these are deficiencies to be addressed.

Organizational Strategic Plan

Ensure Citizen Safety

Public Safety Facilities & Equipment



Courthouse and Court Services Carpet Replacement

Department: General Services/Building Maintenance

Category: Replacement

Location: Multiple

Est. Useful Life: 15 Years

Magisterial District: City of Salem

Project Status: New

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	466,000	0	0	0	466,000	0	0	0	0	0	0	0	466,000
Funding Sources													
Lease/Revenue Bonds	466,000	0	0	0	466,000	0	0	0	0	0	0	0	466,000
Total Funding Sources	466,000	0	0	0	466,000	0	0	0	0	0	0	0	466,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Courthouse and Court Services Carpet Replacement project will replace approximately 44,000 square feet of the carpeting for the Courthouse and 12,000 square feet of carpeting in the Court Services annex facility. The exact date of placement is unknown but carpeting at both locations have significantly exceeded their useful life and are categorized as deficiencies by the 2019 Facilities Condition Assessment.



Courthouse and Court Services Carpet Replacement (continued)

Project Description and Justification:

The Courthouse is a major County facility that is heavily used by the building occupants and public. The carpet on each floor is significantly worn and stained. Based on the comparative criticality as compared to other identified deficiencies, the 2019 Facilities Condition Assessment develops a maintenance action plan that is spread out over a five-year period.

While in need of current replacement, the project is planned for funding in FY 2023. The Courthouse and Court Services Carpet Replacement project will replace approximately 44,000 square feet of the carpeting for the Courthouse and 12,000 square feet of carpeting in the Court Services annex facility. The carpet will be replaced with a commercial grade nylon carpet. Carpet squares are the preferred product type.

Additional Operating Impacts:

There are no additional operational cost impacts for this project.

Conformance with Plans, Policies, and Legal Obligations:

The 2019 Facilities Condition Assessment categorizes this as a current deficiency.

Project Highlights and Key Milestones:

- The majority of the carpeted area in the Courthouse and Court Services buildings has well exceeded useful life and is worn and stained.
- The 2019 Facilities Condition Assessment includes these areas as deficiencies in need of replacement and predicts failure beyond just worn carpet within 3 years for sections.

Organizational Strategic Plan

Ensure Citizen Safety

Public Safety Facilities & Equipment





Community Services Functional Team





County of Roanoke, Virginia FY 2021 – FY 2030 Adopted Capital Improvement Program Community Services Summary

Note: Projects with \$0 in FY 2021-2030 are active projects that have been fully funded in prior fiscal years.

Functional Team/Department/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 21-30 Total
Community Services											
Planning											
Fallowater Lane Extension	391,445	391,445	0	0	0	0	0	0	0	0	782,890
Plantation Road Phase II	200,000	0	0	0	0	0	0	0	0	0	200,000
Dry Hollow Road Safety Improvements	0	0	0	0	0	0	0	0	0	0	0
Huffman Lane Improvements	0	0	0	0	0	0	0	0	0	0	0
West Main Street Pedestrian Improvements	0	0	0	0	0	0	0	0	0	0	0
Williamson Road Pedestrian Improvements	0	0	0	0	0	0	0	0	0	0	0
Buck Mountain Road/Starkey Road Intersection	0	0	0	0	0	0	0	0	0	0	0
VDOT Revenue Sharing Projects (Small Projects & TBD)	0	0	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,000,000
Planning Total	591,445	391,445	250,000	2,982,890							
Stormwater Management											
NPDES - Leachate Management System Upgrade	0	0	0	0	0	0	0	0	0	0	0
NPDES - MS4 BMP Construction	0	200,000	600,000	200,000	200,000	600,000	200,000	200,000	600,000	200,000	3,000,000
Restoration of Wolf Creek at Goode Park	0	0	0	0	0	0	0	0	0	0	0
Storm Drainage Maintenance of Effort Program	150,000	215,000	225,000	225,000	225,000	250,000	250,000	300,000	350,000	400,000	2,590,000
Stormwater Management Total	150,000	415,000	825,000	425,000	425,000	850,000	450,000	500,000	950,000	600,000	5,590,000
Economic Development											
Roanoke County Broadband Initiative	382,905	386,875	384,939	387,149	383,664	383,664	384,983	0	0	0	2,694,179
Woodhaven Property Acquisition & Improvements	162,800	162,800	387,200	387,697	387,869	387,715	387,235	386,430	387,499	388,181	3,425,426
Gateway Signs & Landscaping	0	50,000	50,000	50,000	0	0	0	0	0	0	150,000
Rural Broadband Initiative	100,000	0	0	0	0	0	0	0	0	0	100,000
Economic Development Total	645,705	599,675	822,139	824,846	771,533	771,379	772,218	386,430	387,499	388,181	6,369,605
Community Services Total	\$1,387,150	\$1,406,120	\$1,897,139	\$1,499,846	\$1,446,533	\$1,871,379	\$1,472,218	\$1,136,430	\$1,587,499	\$1,238,181	\$14,942,495



Fallowater Lane Extension

Department: Planning, Economic Development

Category: New Facilities

Location: Route 419/Electric Road and Chevy Road

Est. Useful Life: 30 Years

Magisterial District: Cave Spring Magisterial District

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	3,420,048	2,637,158	391,445	391,445	0	0	0	0	0	0	0	0	782,890
Funding Sources													
Roanoke County -													
Unrestricted Cash	500,000	0	250,000	250,000	0	0	0	0	0	0	0	0	500,000
Economic Development													
Funds	785,130	502,240	141,445	141,445	0	0	0	0	0	0	0	0	282,890
Commonwealth Transportation													
Funds	1,997,760	1,997,760	0	0	0	0	0	0	0	0	0	0	0
VDOT Reimbursement													
	137,158	137,158	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	3,420,048	2,637,158	391,445	391,445	0	0	0	0	0	0	0	0	782,890
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Fallowater Lane Extension project will reconstruct an existing private driveway to improve access to future development in the area designated as “The Ridges.” The project would upgrade the existing private drive to public road standards and construct a new section allowing for future road segments. Existing and planned funding sources include Economic Development Funds (\$0.50 M), VDOT Secondary Six-Year Plan Construction Formula Funds (\$2.00 M), VDOT Revenue Sharing* (\$0.92 M) and County match (\$0.92 M), which includes Economic Development funds (\$0.28 M), County VDOT Revenue Share funds (\$0.50), and funds returned from a canceled Revenue Sharing project received in FY 2020 (\$0.14 M). Roanoke County is administering the Preliminary Engineering phase and may administer the Construction phase. VDOT will administer the Right-of-Way phase, so VDOT Revenue Sharing funds (\$0.92) do not require appropriation.



Fallowater Lane Extension (continued)

Project Description and Justification:

The Fallowater Lane Extension project will reconstruct an existing private driveway to improve access to future development in the area designated as “The Ridges.” The draft 419 Town Center Plan recommends improving connectivity to expand development opportunities and specifically recommends extending Fallowater Lane to allow for development in “The Ridges.” Preliminary engineering began in Summer 2018. The Right-of-Way phase began in Fall 2019.

The project will upgrade the existing private drive to public road standards and construct a new section that would allow for future road segments. Existing and planned funding sources include Economic Development Funds (\$0.50 M), VDOT Secondary Six-Year Plan Construction Formula Funds (\$2.00 M), VDOT Revenue Sharing* (\$0.92 M) and County match (\$0.92 M), which includes Economic Development funds (\$0.28 M), County VDOT Revenue Share funds (\$0.50), and funds returned from a canceled Revenue Sharing project received in FY 2020 (\$0.14 M). Roanoke County is administering the Preliminary Engineering phase and may administer the Construction phase. VDOT will administer the Right-of-Way phase, so VDOT Revenue Sharing funds (\$0.92) do not require appropriation.

Additional Operating Impacts:

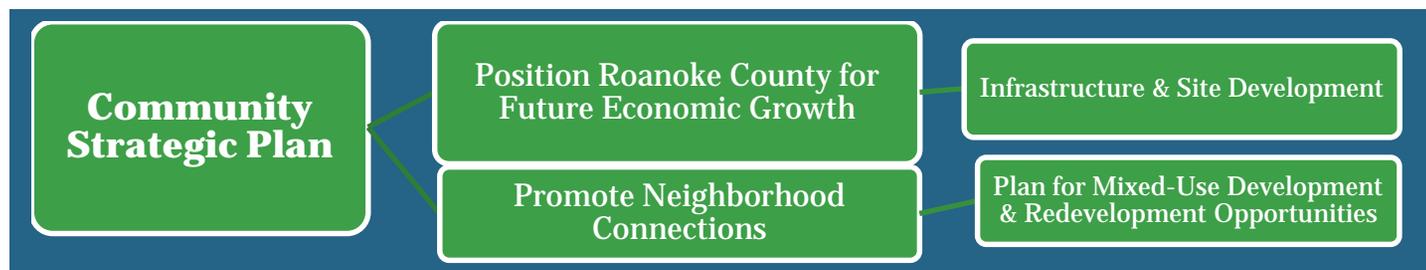
Roanoke County will not see an operating budget impact, as the project will be constructed to VDOT standards and will be accepted into the Secondary Road network when complete.

Conformance with Plans, Policies, and Legal Obligations:

The project implements components recommended in the draft 419 Town Center Plan.

Project Highlights and Key Milestones:

- Extension of Fallowater Lane recommended in the draft 419 Town Center Plan, presented in September 2016.
- In September 2017, the Board of Supervisors adopted a resolution to reallocate Secondary Six-Year Plan Construction Formula Funding to the project.
- Preliminary Engineering Phase began in Summer 2018.
- Right of Way Phase began in Fall 2019.
- Construction scheduled to begin in late 2020.
- Completion of construction anticipated in late 2021.





Plantation Road Phase II

Department: Planning

Category: New Facilities

Location: Plantation Road

Est. Useful Life: 30 Years

Magisterial District: Hollins

Project Status: Planned

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	1,952,213	1,752,213	200,000	0	0	0	0	0	0	0	0	0	200,000
Funding Sources													
Prior VDOT Revenue Sharing Funds (County)	200,000	0	200,000	0	0	0	0	0	0	0	0	0	200,000
SMART Scale Grant	1,752,213	1,752,213	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	1,952,213	1,752,213	200,000	0	0	0	0	0	0	0	0	0	200,000
Operating Impacts			0	TBD									



Project Summary:

The Plantation Road Bicycle, Pedestrian and Streetscape Improvement project encompasses almost one mile of Plantation Road from Interstate 81 to Williamson Road. The improvements planned have been broken into two phases with the first phase completed in the fall of 2018. The Plantation Road Phase II project, planned through FY 2021, continues the pedestrian accommodations from the first phase of the project. Phase II includes the installation of sidewalk, street trees, curb and gutter. The Walrond Drive intersection will be realigned, and pedestrian signals and crosswalks will be added to the Plantation Road/ Gander Way/Friendship Lane traffic signal. This project is mostly funded by SMART SCALE funding, \$1.75 M, appropriated in FY 2019. An additional \$200,000 of prior VDOT Revenue Sharing Funds (County) is included in FY 2021 to address a project contingency.



Plantation Road Phase II (continued)

Project Description and Justification:

Phase II of the Plantation Road project, planned through FY 2021, continues the pedestrian accommodations from the first phase of the project. The Plantation Road Bicycle, Pedestrian and Streetscape Improvement project encompasses almost one mile of Plantation Road from Interstate 81 to Williamson Road. The improvements planned have been broken into two phases with the first phase completed in the fall of 2018.

Phase II includes the installation of sidewalk, street trees, curb and gutter. The Walrond Drive intersection will be realigned, and pedestrian signals and crosswalks will be added the Plantation Road/ Gander Way/Friendship Lane traffic signal. This project is mostly funded by SMART SCALE funding, \$1.75 M appropriated in FY 2019. An additional \$200,000 is included in FY 2021 to address some increased costs and to provide a project funding contingency.

Additional Operating Impacts:

Streetscape improvements within this project may require additional landscape maintenance responsibilities, but impact estimates are not yet available. The County will also be required to maintain a stormwater management facility.

Conformance with Plans, Policies, and Legal Obligations:

This project is in conformance with the Roanoke County Comprehensive Plan (2005) and the Hollins Area Plan (2008) which was adopted as a component of the Comprehensive Plan. The Plantation Road Project implements the Hollins Area Plan.

Project Highlights and Key Milestones:

- Phase I of the Plantation Road Project was completed in Fall 2018.
- Phase II includes sidewalk, street trees, curbs and guttering, the realignment of the Walrond Drive intersection, and pedestrian signals and crosswalks at Gander Way/Friendship Lane.
- FY 2017: SMART SCALE funding awarded and programmed.
- FY 2019: Preliminary engineering phase underway.
- FY 2020: Right-of-Way phase planned.
- FY 2021: Construction advertisement and construction phase expected to begin.





Dry Hollow Road Safety Improvements

Department: Planning

Location: Dry Hollow Road, Salem VA

Magisterial District: Catawba Magisterial District

Category: Replacement

Est. Useful Life: 30 years

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	608,000	608,000	0	0	0	0	0	0	0	0	0	0	0
<u>Funding Sources</u>													
Roanoke County - Unrestricted Cash	608,000	608,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	608,000	608,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Dry Hollow Road Safety Improvements project will improve travel conditions on Dry Hollow Road. At the Norfolk Southern railroad underpass on Dry Hollow Road, the road narrows to one lane in a blind curve with a steep embankment dropping off into a stream. Neighborhood safety concerns, as well as steady growth in programs at Camp Roanoke, have renewed interest in this project.

The total project cost is estimated at \$2.2 million. Through FY 2019, \$0.61 million in County funding has been allocated to match State Revenue Sharing funds, and \$0.39 million has been allocated through the Commonwealth's Secondary Six-Year Program. The balance is funded through the Commonwealth's Secondary Six-Year Program. This will be a VDOT administered project; therefore, Commonwealth funds do not need to be appropriated.



Dry Hollow Road Safety Improvements (continued)

Project Description and Justification:

The Dry Hollow Road Safety Improvements project will improve travel conditions on Dry Hollow Road. At the Norfolk Southern railroad underpass on Dry Hollow Road, the road narrows to one lane in a blind curve with a steep embankment dropping off into a stream. Neighborhood safety concerns, as well as steady growth in programs at Camp Roanoke, have renewed interest in this project.

Revenue Sharing funds for preliminary engineering were approved in FY 2016, with construction funds sought through subsequent programming. In FY 2017, Roanoke County applied for and received matching Revenue Sharing funds, to continue the construction programming process. VDOT and County staff have moved this project to the Secondary Six-Year Improvement Program, to complete construction programming. The preliminary engineering phase is currently underway.

Operating Budget, Cost, and Efficiency Impact:

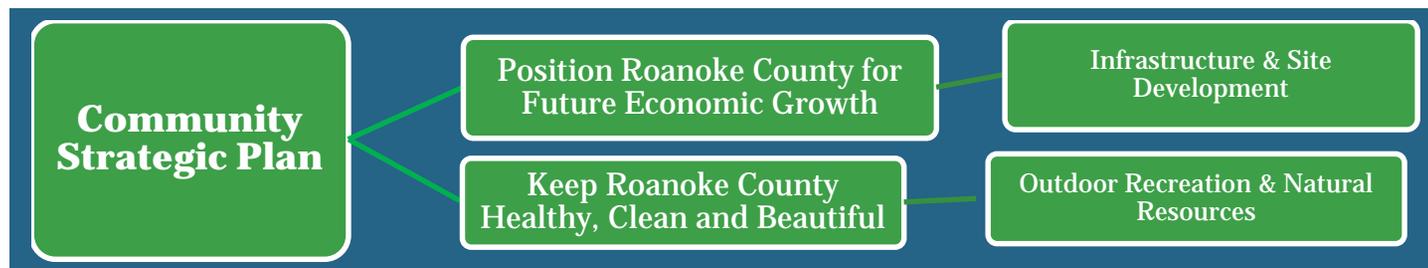
There will be no operating budget impact to Roanoke County as VDOT currently maintains the road and will continue to maintain it after the project is complete.

Conformance with Plans, Policies, and Legal Obligations:

The Transportation section of the Roanoke County Community Strategic Plan addresses adequate transportation infrastructure.

Project Highlights and Key Milestones:

- Project added to the VDOT Six Year Plan for 1998-2004.
- Project removed from the Six Year Plan in 2009.
- Investigated safety alternatives with VDOT in April 2013.
- Revenue Sharing Funds in FY 2016 - 2017 were \$1.2 million (50/50 match).
- Total project cost estimated at \$2.2 million. Secondary Six-Year Improvement Program funding will fully fund the project.
- FY 2019: Preliminary Engineering underway.
- FY 2021: Right-of-way phase planned.
- FY 2022: Construction advertisement and construction phase expected to begin.





Huffman Lane Improvements

Department: Planning

Category: Replacement

Location: Huffman Lane

Est. Useful Life: 30 Years

Magisterial District: Vinton Magisterial District

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	70,000	70,000	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Roanoke County - Unrestricted Cash	70,000	70,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	70,000	70,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Huffman Lane Improvements project is a rural addition project to extend Huffman Lane 0.10 mile from end of state maintenance to a new turn around. This project would complete a long standing effort to improve Huffman Lane and benefit residents of that neighborhood.

Roanoke County has been awarded revenue sharing funds (\$70,000) for the engineering and construction phase, which required a \$70,000 match appropriated in prior years for a total project cost of \$140,000. Roanoke County is locally administering the preliminary engineering phase, and is working with neighbors to secure necessary right of way. Following acquisition of right of way, VDOT will administer the construction phase so the state match does not require appropriation.



Huffman Lane Improvements (continued)

Project Description and Justification:

The Huffman Lane Improvements project is a rural addition project to extend Huffman Lane 0.10 miles from end of state maintenance to a new turn around. This project would complete a long standing effort to improve Huffman Lane and benefit residents of that neighborhood. In 2007, a rural addition project was created to extend Huffman Lane and resurface the existing state road. Right of way acquisition was unsuccessful, and the existing state route was paved with project funds. Citizens in the neighborhood are assisting Roanoke County in obtaining right of way deeds which will allow the project to move forward.

Roanoke County was awarded \$70,000 in Revenue Sharing funds for this project, which required a \$70,000 local match. Total project costs are estimated at \$140,000, with the County portion being \$70,000.

Additional Operating Impacts:

Roanoke County will see no operating budget impact, as VDOT currently maintains the road, and will continue to maintain it after the project is complete.

Conformance with Plans, Policies, and Legal Obligations:

The project is consistent with Roanoke County's efforts to support growth and development.

Project Highlights and Key Milestones:

- 2007: VDOT and Roanoke County allocated revenue sharing funds for a rural addition project.
- 2009: Existing state route paved, but right of way acquisition was unsuccessful for addition.
- 2015: Renewed interest by citizens in the neighborhood led to reconsideration of the project.
- Revenue Sharing funds Awarded:
 - In FY 2017 for preliminary engineering
 - In FY 2018 for construction.
- FY 2021: Construction phase expected to begin.

Community Strategic Plan

Position Roanoke County for Future Economic Growth

Infrastructure & Site Development



West Main Street Pedestrian Improvements

Department: Planning

Location: West Main Street, Salem VA

Magisterial District: Catawba Magisterial District

Category: New Facilities

Est. Useful Life: 30 years

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	67,000	67,000	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Roanoke County - Unrestricted Cash	67,000	67,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	67,000	67,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The West Main Street Pedestrian Improvements project continues the existing West Main Street improvements and safety accommodations. This project will install sidewalk, pedestrian crossings and crosswalks along West Main Street between the City of Salem and Technology Drive to connect to existing Roanoke County and City of Salem sidewalks.

The total project cost of \$1,036,699 was funded in FY 2017 by SMART SCALE funding (\$902,699) and also the VDOT Revenue Sharing program (\$67,000 County and \$67,000 VDOT). Since the project will be administered by VDOT, the SMART SCALE funding and Revenue Sharing match did not require appropriation by the Board of Supervisors. Construction on this project is expected to begin in 2021.



West Main Street Pedestrian Improvements (continued)

Project Description and Justification:

The West Main Street Pedestrian Improvements project continues the existing West Main Street improvements and safety accommodations. The project will install sidewalk along the north side of West Main Street, from Daugherty Road to Technology Drive, within existing right of way. This project will also install standard crosswalk across all secondary street intersections, continental crosswalk and pedestrian signals at Alleghany Drive and Daugherty Road intersections, and install sidewalk along the south side of West Main Street from the Salem city limits to Technology Drive. This project will connect to an existing section of sidewalk along the north side of West Main Street, from Salem city limits to Daugherty Road, that was constructed during the Rt 11/460 Widening Project.

Operating Budget, Cost, and Efficiency Impact:

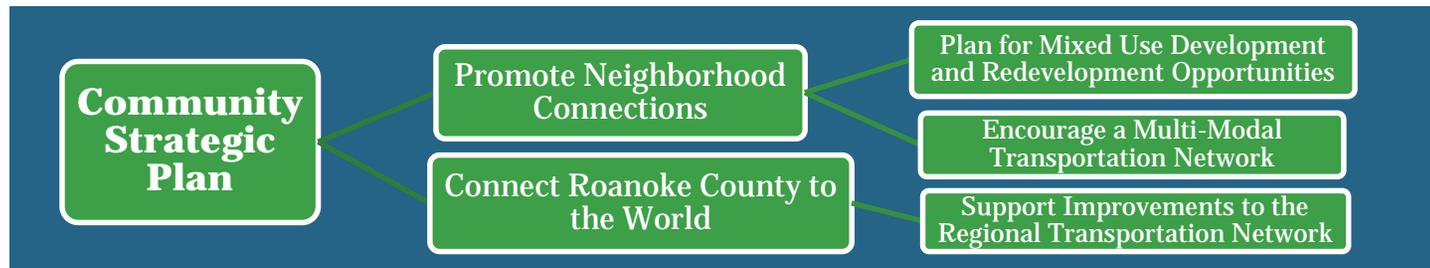
Roanoke County will be responsible for minor maintenance of the sidewalk facility once constructed, which will be absorbed in the existing operating budget.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms to several plans including Roanoke County Comprehensive Plan (2005), Glenvar Community Plan (2012), Constrained Long Range Transportation Plan (CLRTP), Transportation Improvement Program (TIP), Bikeway Plan for the Roanoke Valley Area MPO (2012), and VDOT Policy for Integrating Bicycle and Pedestrian Accommodations.

Project Highlights and Key Milestones:

- The first segment of sidewalk from the City of Salem to Daugherty Road on the north side was completed with the West Main Street road widening construction in 2014. Sidewalk funding was obtained through the Regional Surface Transportation Program.
- FY 2017 Revenue Sharing funds in the amount of \$134,000 (\$67,000 County match) were allocated to the project.
- Preliminary engineering began on the project in FY 2017.
- SMART SCALE funding of \$902,699 was awarded in June 2017.
- VDOT held a Design Public Hearing in August 2018.
- Construction expected to begin in 2021.





Williamson Road Pedestrian Improvements

Department: Planning

Category: New Facilities

Location: Williamson Road, Roanoke, VA

Est. Useful Life: 30 years

Magisterial District: Hollins Magisterial District

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	275,000	275,000	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Corridor Improvement													
Fund	55,000	55,000	0	0	0	0	0	0	0	0	0	0	0
Transportation													
Alternatives Grant	220,000	220,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	275,000	275,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Williamson Road Pedestrian Improvement project will construct sidewalks along the north side of Williamson Road between Peters Creek Road and Plantation Road. This project will complete a vital missing link in the pedestrian network between existing and planned accommodations in the Hollins area. The original project cost was \$275,000, which was funded by \$55,000 in Corridor Improvement Project funds and \$220,000 in a Transportation Alternatives Grant in FY 2018. Transportation Alternatives Grant projects are locally-administered, however, after surveying this project and an adjoining project to the South, VDOT will administer both projects. Total project costs increased to \$1.9 million due to ADA requirements and Roanoke County applied for SMART SCALE funds of \$1.66 million, which was awarded in June 2019.



Williamson Road Pedestrian Improvements (continued)

Project Description and Justification:

The Williamson Road Pedestrian Improvement project will complete a vital missing link in the pedestrian network between existing and planned accommodations in the Hollins area including the Plantation Road Bicycle, Pedestrian and Streetscape Improvement Project. This project connects to existing pedestrian crosswalks and signals at the Williamson Road/Plantation Road intersection, existing sidewalk on the north side of Williamson Road from Plantation Road to Marson Road, existing sidewalk on the south side of Williamson Road from Plantation Road to Hollins Court Drive, proposed pedestrian crosswalks and signals at the Peters Creek Road/Williamson Road intersection, and pedestrian safety improvements in design for the west side of Williamson Road between Peters Creek Road and North Roanoke Assisted Living.

Operating Budget, Cost, and Efficiency Impact:

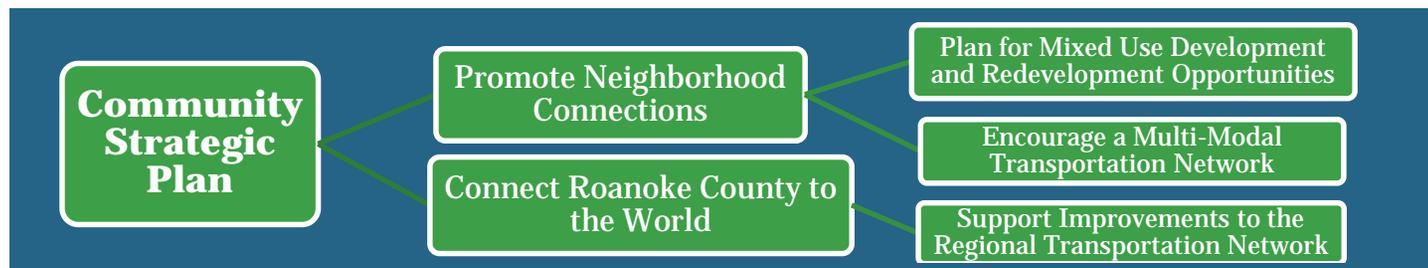
Roanoke County will see minimal operating impact limited to routine maintenance of the sidewalk facility once constructed which is anticipated to be absorbed within the existing operating budget.

Conformance with Plans, Policies, and Legal Obligations:

This project continues to implement the Hollins Area Plan, adopted November 11, 2008. The Hollins Area Plan is a component of the 2005 Roanoke County Community Plan. This project is also identified as a high priority in the 2015 Regional Pedestrian Vision Plan.

Project Highlights and Key Milestones:

- Project identified as a high priority in the 2015 Regional Pedestrian Vision Plan.
- Transportation Alternatives Set-Aside funding awarded in June 2017.
- VDOT agreed to administer the project in 2018
- SMART SCALE funding awarded in June 2019.
- Preliminary Engineering phase began in Summer 2019.
- Construction is anticipated to begin in 2022.





Buck Mountain Rd / Starkey Rd Intersection Improvements

Department: Planning

Category: New Facilities

Location: Buck Mountain Road / Starkey Road

Est. Useful Life: 30 years

Magisterial District: Cave Spring

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	580,000	580,000	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Roanoke County -													
Unrestricted Cash	450,000	450,000	0	0	0	0	0	0	0	0	0	0	0
Private Capital Contributions	80,000	80,000	0	0	0	0	0	0	0	0	0	0	0
Prior VDOT Revenue													
Sharing Funds (County)	50,000	50,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	580,000	580,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Buck Mountain Road and Starkey Road Intersection Improvements project anticipates reconstructing the existing intersection. The need for this improvement project is based on a Traffic Analysis Report conducted by the Virginia Department of Transportation (VDOT) in April 2013. A survey of the intersection has already been completed. Pedestrian and bicycle accommodations would be evaluated during preliminary engineering. Total project costs are estimated at \$3.3 million, with nearly \$2.1 million from VDOT's Regional Surface Transportation Program (RSTP) and \$580,000 from Revenue Sharing Program funding. County funding sources, to match potential Revenue Sharing funds, include \$80,000 in a rezoning cash proffer accepted in FY 2018 and \$250,000 in both FY 2019 and FY 2020. As this is a VDOT administered project, RSTP and State Revenue Sharing funds do not require appropriation.



Buck Mountain Rd / Starkey Rd Intersection Improvements (continued)

Project Description and Justification:

The project includes reconstruction of the existing three-way, un-signalized intersection at Buck Mountain Road and Starkey Road. A 2013 VDOT traffic analysis recommended improvements to the intersection if traffic conditions changed as a result of land development. With the development of property near this intersection, the County is now pursuing options to improve traffic flow.

The cost estimate for the project is \$3.3 million and will be administered by VDOT. Through a rezoning ordinance in January 2017, the Board of Supervisors accepted a rezoning proffer in the amount of \$80,000, to help offset potential traffic impacts from new development. Regional Surface Transportation Program funds (\$2.1 million) have been allocated, beginning in FY 2020. Revenue Sharing Program funds were requested, with \$573,278 allocated for FY 2019 and FY 2020. An additional \$500,000 in County match funding is also identified to support Revenue Sharing Program funds.

Additional Operating Impacts:

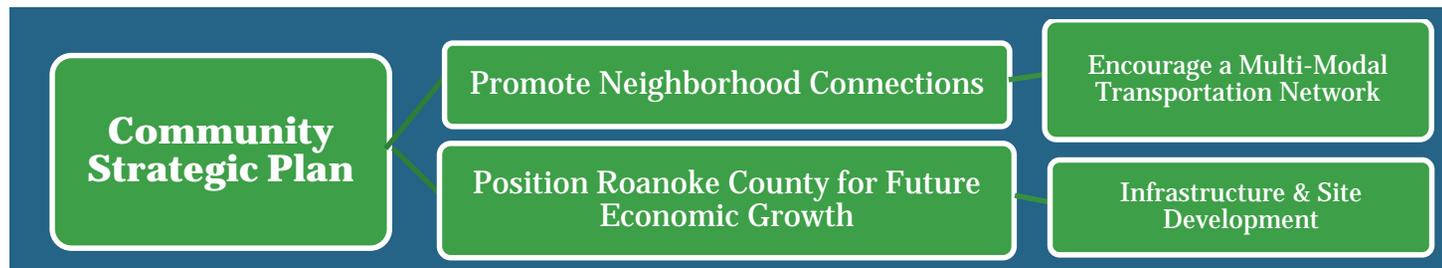
The proposed improvements are to the VDOT Secondary System. VDOT will assume maintenance of any new intersection improvements when complete.

Conformance with Plans, Policies, and Legal Obligations:

This project is in conformance with the Roanoke County Comprehensive Plan (2005). The Transportation element of the plan includes long range plans for highway improvements. Both Buck Mountain Road and Starkey Road, through their intersection, are listed for improvements.

Project Highlights and Key Milestones:

- A rezoning cash proffer of \$80,000, to improve the intersection, was accepted by the Board of Supervisors in January 2017.
- A survey of the area was completed in August 2017.
- Revenue Sharing funds are allocated in FY 2019 and FY 2020.
- Additional Secondary Six Year Plan Funds will be allocated in FY 2023.
- FY 2019: Preliminary engineering phase underway.





VDOT Revenue Sharing Program

Department: Planning

Category: Replacement/New Facilities

Location: Countywide

Est. Useful Life: Varies

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	2,515,000	515,000	0	0	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,000,000
Funding Sources													
Roanoke County - Unrestricted Cash	2,515,000	515,000	0	0	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,000,000
Total Funding Sources	2,515,000	515,000	0	0	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,000,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Revenue Sharing Program provides additional funding for use by Roanoke County to construct, reconstruct, improve or maintain the VDOT secondary or primary highway system. Locality funds are matched with 50% state funds. The program is administered by VDOT in cooperation with participating localities. Construction may be accomplished by VDOT, or by Roanoke County under agreement with VDOT. The VDOT Revenue Sharing Program is on a two year cycle. Funding for projects approved in FY 2021 is allocated over FY 2021 and FY 2022. In FY 2021 and FY 2022, one existing project has been identified in the Revenue Sharing Program: Fallowater Lane Extension.



VDOT Revenue Sharing Program (continued)

Project Description and Justification:

The Revenue Sharing Program provides additional funds which expedite needed roadway and safety improvements. Locality funds are matched with 50% state funds. An annual allocation of funds for this program is designated by the Commonwealth Transportation Board. Application for program funding must be made by resolution of the Board of Supervisors. Types of projects eligible for revenue sharing include: Deficits on completed VDOT administered construction or improvement project, supplemental funding for projects listed in the adopted Six-Year Plan and ongoing construction or improvement projects, construction or improvements included in either the adopted Six-Year Plan or the locality's capital plan, improvements necessary for the acceptance of specific subdivision streets otherwise eligible for acceptance into the system for maintenance, new hard surfacing, certain new roadways that meet the qualifications outlined in the Revenue Sharing Guidelines, and maintenance on highway systems consistent with VDOT operating policies.

Additional Operating Impacts:

This program is administered by existing County staff, so there are no additional operating costs associated with administration. Maintenance costs for future projects are unknown until the scope of the project is finalized.

Conformance with Plans, Policies, and Legal Obligations:

The Revenue Sharing Program is identified in Chapter 4 of the Roanoke County Community (Comprehensive) Plan. One of the objectives of the Plan is to continue to maintain and update Secondary and Primary road improvement plans based on consistent policies and criteria.

Project Highlights and Key Milestones:

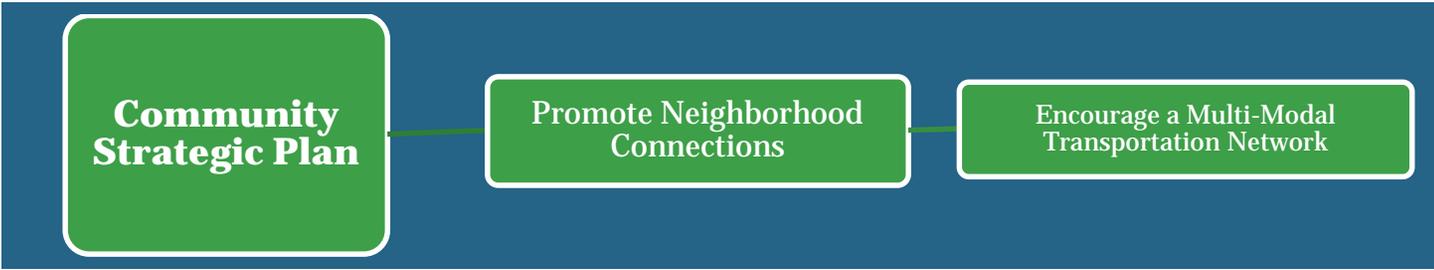
- The County has leveraged tens of millions of state dollars for roadway and drainage improvements since 1988.

Recent projects completed include:

- Plantation Road Bicycle, Pedestrian, and Streetscape Improvements Project (Phase I)
- Ivyland Road Extension
- Buck Mountain/Starkey Rd Intersection Improvements

Projects planned in FY 2021 and FY 2022:

- Fallowater Lane Extension
- The Fallowater Lane Extension is a stand-alone project included in this document.
- VDOT portion of project costs are not required to be appropriated by the Board of Supervisors if VDOT is administering the project.





NPDES - Leachate Management System Upgrade

Department: Engineering & Development Services

Category: New Facilities

Location: Dixie Caverns Landfill

Est. Useful Life: 20 years

Magisterial District: Catawba

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	650,000	650,000	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Roanoke County - Unrestricted Cash	650,000	650,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	650,000	650,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			TBD										



Project Summary:

The NPDES - Leachate Management System Upgrade project will replace the Leachate Management System that collects the discharge from the closed Dixie Caverns Landfill and discharges it to the public sanitary sewer. The existing system is past its useful lifespan and needs to be replaced. An initial design is 90% complete; however, County staff are investigating the possibility of obtaining a discharge permit from the Virginia Department of Environmental Quality. If this discharge permit can be obtained, significant capital and operational cost savings would be realized.



NPDES - Leachate Management System Upgrade (continued)

Project Description and Justification:

The NPDES - Leachate Management System Upgrade project will replace the existing system that collects leachate from the closed Dixie Caverns Landfill and discharges it to the public sanitary sewer. The existing system is past its useful lifespan and needs to be replaced. An initial design is 90% complete and it includes a new 50,000 gallon storage tank, pumps, and controls, relining the existing leachate pond, and improving alarm communications.

As an alternative to this construction, the County is working with the Virginia Department of Environmental Quality (DEQ) to possibly obtain a permit to discharge into an adjacent stream. If this discharge permit can be obtained, substantial savings in capital costs and ongoing operational costs would be realized. Either option would comply with environmental laws and regulations.

Additional Operating Impacts:

The County does not have the trained staff required to properly maintain pumps, instruments, and controls. Once this project is completed, an operating/maintenance contractor shall be obtained to perform these services. The estimated yearly operating impact beginning in FY 2022 is estimated at \$50,000 per year if a discharge permit cannot be obtained. If the permit is successful, the net savings will be approximately \$50,000 from the elimination of sewer treatment costs from the Western Virginia Water Authority.

Conformance with Plans, Policies, and Legal Obligations:

This project is required to meet County’s legal obligations of collecting leachate and keeping it out of streams.

Project Highlights and Key Milestones:

- Dixie Cavern Landfill closed in 1976 and is not properly capped.
- Roanoke County enters consent agreement with EPA in 1987.
- Site removed from EPA priority list in 2001.
- Consultant hired to conduct study and design plans FY 2016.
- Design plans are 90% completed in FY 2018.
- Permit application submitted to VA DEQ in December 2018.
- In 2019, worked with DEQ to have sampling plan approved.





NPDES-MS4 BMP Construction

Department: Development Services

Category: Replacement and New Facilities

Location: Countywide

Est. Useful Life: Varies

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	3,219,776	219,776	0	200,000	600,000	200,000	200,000	600,000	200,000	200,000	600,000	200,000	3,000,000
Funding Sources													
Roanoke County - Unrestricted Cash	2,019,776	219,776	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,800,000
Stormwater Local Assistance Fund	1,200,000	0	0	0	400,000	0	0	400,000	0	0	400,000	0	1,200,000
Total Funding Sources	3,219,776	219,776	0	200,000	600,000	200,000	200,000	600,000	200,000	200,000	600,000	200,000	3,000,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The National Pollutant Discharge Elimination System (NPDES)-MS4 BMP Construction project, provides resources for the design and construction of Best Management Practices (BMPs) to address sediment, bacteria, and PCBs discharge in the County. Roanoke County has a Municipal Separate Storm Sewer System (MS4) permit with Total Maximum Daily Load (TMDL) requirements. This project helps the County to meet these requirements by lowering discharge of these pollutants toward its numeric waste load allocations. Project funding is supplemented with anticipated Virginia Stormwater Local Assistance Fund grants, for which the County anticipates applying every third year.



NPDES-MS4 BMP Construction (continued)

Project Description and Justification:

The National Pollutant Discharge Elimination System (NPDES)-MS4 BMP Construction project funds the design and construction of Best Management Practices (BMPs) to address sediment, bacteria, and PCBs discharge in the County. Roanoke County has a Municipal Separate Storm Sewer System (MS4) permit with Total Maximum Daily Load (TMDL) requirements. This project helps the County meet these requirements by lowering discharge of these pollutants toward its numeric waste load allocations. These facilities provide stormwater treatment for development in the County that occurred prior to stormwater regulations. These project activities are required to comply with the MS4 permit.

The current highest priority projects include stabilization of Mudlick Creek watershed upstream of Hidden Valley High School and stabilization at Read Mountain Preserve. This project may also be used to fund studies pertaining to our MS4 permit compliance.

Additional Operating Impacts:

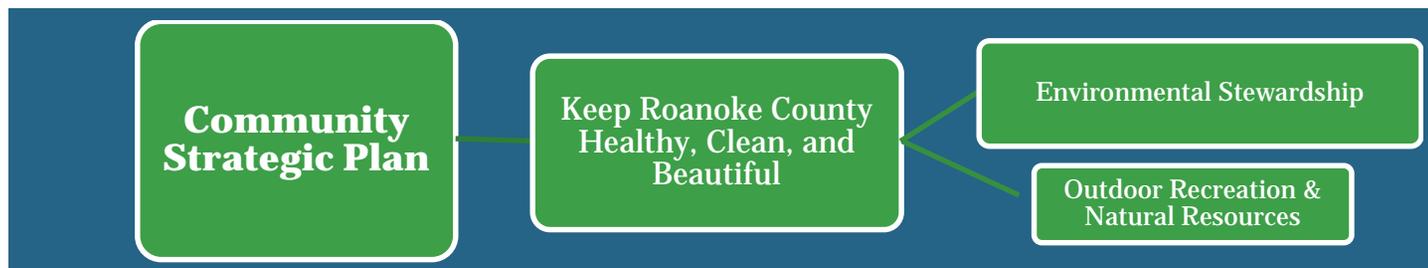
Existing County staff will be utilized for this effort, so there will not be an additional operating impact. However, as the County constructs additional BMPs as required by the MS4 permit, staffing levels may need to be analyzed to ensure proper maintenance of the BMPs.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms to Roanoke County's MS4 Program Plan which describes how Roanoke County will comply with its MS4 permit.

Project Highlights and Key Milestones:

- Latest MS4 permit was issued in November 2018.
- BMP construction helps keep Roanoke County in compliance with State permit requirements.
- Restoration of Glade Creek in Vinyard Park, Phase I completed in FY 2017.
- Restoration of Murray Run at Ogden Road completed in FY 2017.
- Restoration of Glade Creek in Vinyard Park, Phase II completed in FY 2019.
- Prior year County and SLAF funding from this program was used for the Restoration of Wolf Creek in Goode Park, Phase I project in FY 2020.





Restoration of Wolf Creek at Goode Park, Phase I

Department: Development Services

Category: New Facilities

Location: Goode Park

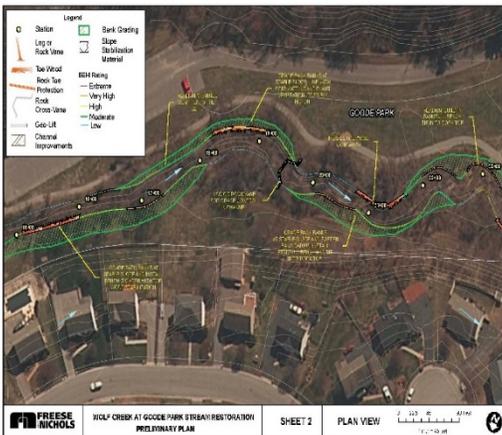
Est. Useful Life: 20 years

Magisterial District: Vinton

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	600,000	600,000	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Roanoke County -													
Unrestricted Cash	300,000	300,000	0	0	0	0	0	0	0	0	0	0	0
Stormwater Local Assistance Fund	300,000	300,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	600,000	600,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			0	0	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	44,462



Project Summary:

The Restoration of Wolf Creek at Goode Park, Phase I was created in FY 2020 using funding from the NPDES – MS4 BMP Construction Program. Of the \$600,000 in project funding, \$300,000 was received from Stormwater Local Assistance Fund. This project will stabilize the stream banks along Wolf Creek in a portion of Goode Park using natural stream methodologies. This will reduce sediment discharge in support of the County’s MS4 permit Total Maximum Daily Load Requirements and reduce bank erosion that is endangering portions of the existing greenway trail.



Restoration of Wolfe Creek at Goode Park, Phase I (continued)

Project Description and Justification:

The Restoration of Wolf Creek at Goode Park, Phase I was created in FY 2020 using funding from the NPDES – MS4 BMP Construction Program. Of the \$600,000 in project funding, \$300,000 was received from Stormwater Local Assistance Fund. This project will stabilize the stream banks along Wolf Creek in a portion of Goode Park using natural stream methodologies. This will reduce sediment discharge in support of the County’s MS4 permit Total Maximum Daily Load Requirements and reduce bank erosion that is endangering portions of the existing greenway trail.

Additional Operating Impacts:

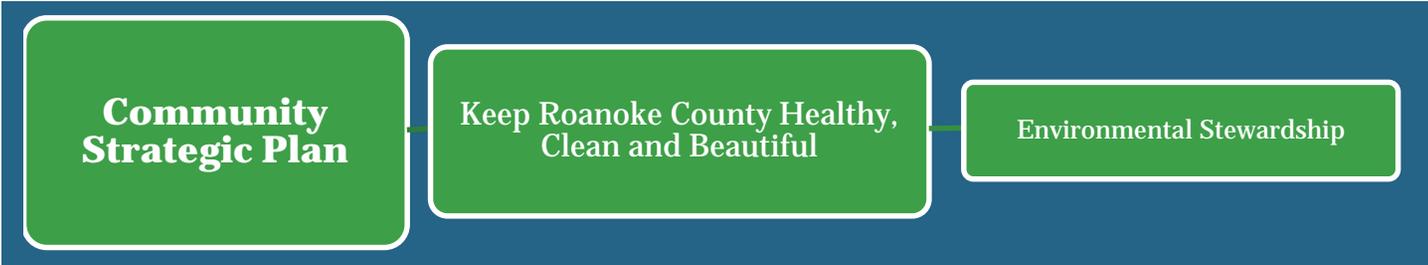
As these stream restoration projects are performed, it is anticipated that ongoing maintenance will be required from time to time. Required maintenance is difficult to forecast, as these types of facilities are still new, with unclear maintenance requirements. Also, required maintenance may be affected by the severity of storms that occur. Staff has included a rough estimate of \$5,000 beginning in FY 2023 for operating costs, increasing annually by inflation. Once the project is completed, additional impacts will be quantified.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms to Roanoke County’s MS4 Program Plan, which describes how Roanoke County will comply with its MS4 permit requirements and Total Maximum Daily Load requirements.

Project Highlights and Key Milestones:

- Project created in FY 2020 with the receipt of Virginia Stormwater Local Assistance Funding (SLAF), obtained in May 2019.
- Design phase began in August 2019.
- Construction anticipated to begin in Summer 2020.
- Funding for this project was allocated from the NPDES – MS4 BMP Construction project.





Storm Drainage Maintenance of Effort Program

Department: Development Services

Category: Replacement

Location: Countywide

Est. Useful Life: Varies

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	3,532,062	942,062	150,000	215,000	225,000	225,000	225,000	250,000	250,000	300,000	350,000	400,000	2,590,000
Funding Sources													
Roanoke County - Unrestricted Cash	3,332,062	742,062	150,000	215,000	225,000	225,000	225,000	250,000	250,000	300,000	350,000	400,000	2,590,000
VDOT Reimbursement	200,000	200,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	3,532,062	942,062	150,000	215,000	225,000	225,000	225,000	250,000	250,000	300,000	350,000	400,000	2,590,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Storm Drainage Maintenance of Effort Program project addresses public drainage problems through repairs and system upgrades to County-owned storm drainage systems that cannot be addressed through the operating budget. At times, project funds may be used for emergency repairs that are caused by significant storm events. For projects that involve public streets, participation by VDOT is sought.



Storm Drainage Maintenance of Effort Program (continued)

Project Description and Justification:

As public drainage problems are identified, they are ranked based on severity and cost-effectiveness of repair. Periodically, reports are made to the Board in order to add projects to the program list. Currently, there are 37 projects on the list. Projects are constructed based on their ranking, availability of funding, and other project specific issues. Where possible, the County’s drainage crew is used to perform this work. When this is done, the labor and equipment costs are funded through the operating budget and the material costs are funded through this program. Where necessary or appropriate, the work is performed by contractors.

Additional Operating Impacts:

There are no additional operating costs associated with this project. The County currently funds two work crews that will provide maintenance on these facilities. As additional stormwater drainage facilities are added to the inventory, additional staff to support on-going maintenance may need to be added to the operating budget.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms to the Board of Supervisor’s past support of providing maintenance and replacement services for County-owned storm drainage infrastructure.

Project Highlights and Key Milestones:

- Reduction in other stormwater projects offsets cost of Maintenance of Effort projects.
- Maintenance of Effort projects are by nature on-going.
- Resources from the Drainage Maintenance program were utilized to support improvements at Kenwick Trail and Belle Meade Drive in FY 2019.





Roanoke County Broadband Authority Infrastructure

Department: Economic Development

Category: New Facilities

Location: Countywide

Est. Useful Life: Varies

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	3,899,769	1,205,590	382,905	386,875	384,939	387,149	383,664	383,664	384,983	0	0	0	2,694,179
Funding Sources													
Roanoke County -													
Unrestricted Cash	2,340,787	29,513	0	386,875	384,939	387,149	383,664	383,664	384,983	0	0	0	2,311,274
Economic Development													
Funds	793,099	793,099	0	0	0	0	0	0	0	0	0	0	0
Contribution from EDA	765,883	382,978	382,905	0	0	0	0	0	0	0	0	0	382,905
Total Funding Sources	3,899,769	1,205,590	382,905	386,875	384,939	387,149	383,664	383,664	384,983	0	0	0	2,694,179
*Operating Impacts			325,000	325,000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

*Operating impacts have already been accounted for in the annual operating budget.



Project Summary:

The Roanoke County Broadband Authority Infrastructure project promotes economic development by providing affordable, high speed broadband services in the Roanoke Valley. The Roanoke County Broadband Authority (RVBA) on behalf of Roanoke County and as part of a multi-jurisdictional effort constructed a 25 mile core fiber network in Roanoke County.

The County's portion of the installation joins previous installations in the cities of Salem and Roanoke, ultimately providing a system with over 80 miles of fiber for commercial, business and governmental use. Construction of the core fiber network in the County was completed in October 2017. Annual funding remains in the CIP to support debt service payments for the financing of the project.



Roanoke County Broadband Authority Infrastructure (continued)

Project Description and Justification:

The Roanoke Valley Broadband Authority (RVBA), formed by the County of Roanoke, City of Roanoke, City of Salem and Botetourt County, constructed a core fiber network of approximately 25 miles to serve Roanoke County. In order to support continued commercial growth and development, the proposed network aligns with major transportation corridors of the County and targets commercial and industrial activity centers.

Capital construction costs are financed for ten years, and the County will provide annual principal and interest payments on the debt. The project including the design, engineering, construction costs, and interest payments totals \$3.9 million over the ten year period.

Additional Operating Impacts:

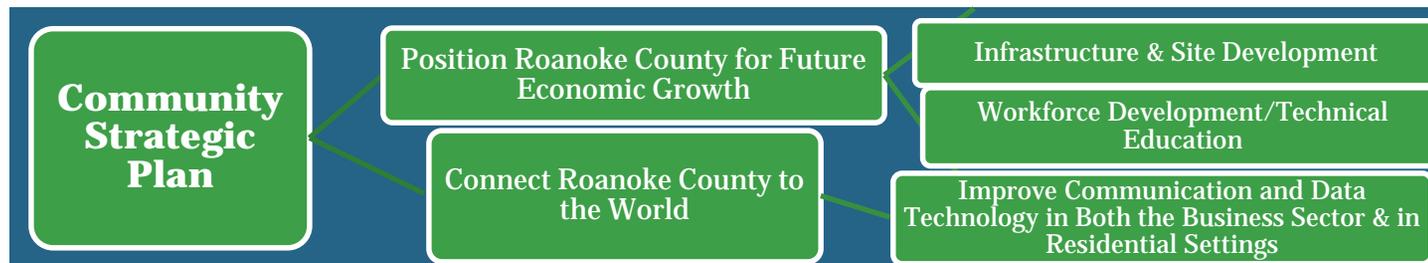
The Broadband Authority Infrastructure project will impact the Operating Budget due to annual operating expenses, which are expected to be around \$325,000 until such time as the RVBA is financially self-sufficient. RVBA expects to be self-sufficient by the end of FY 2022.

Conformance with Plans, Policies, and Legal Obligations:

The project is consistent with Roanoke County’s efforts to support commercial growth and development.

Project Highlights and Key Milestones:

- 25 miles of core fiber network constructed to serve Roanoke County and was lit in October 2017
- RVBA expects to be financially self-sufficient in slightly less than six years.
- Expansion of broadband network may be considered in future years but is currently not funded in the CIP.





Woodhaven Property Acquisition and Improvements

Department: Economic Development

Category: New Facilities

Location: Woodhaven Road / Interstate 81 / Interstate 581

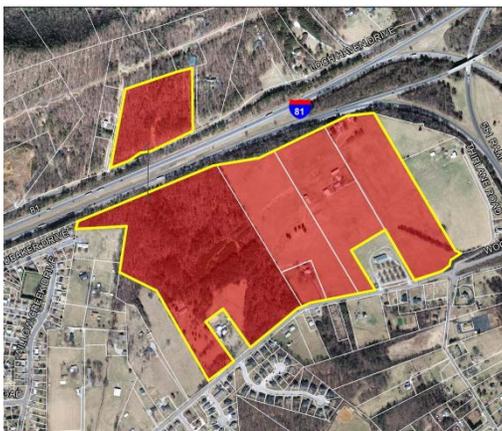
Est. Useful Life: Varies

Magisterial District: Catawba Magisterial District

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	3,953,180	527,754	162,800	162,800	387,200	387,697	387,869	387,715	387,235	386,430	387,499	388,181	3,425,426
Funding Sources													
Roanoke County -													
Unrestricted Cash	3,262,626	0	0	162,800	387,200	387,697	387,869	387,715	387,235	386,430	387,499	388,181	3,262,626
Economic Development													
Funds	383,874	383,874	0	0	0	0	0	0	0	0	0	0	0
Contribution from EDA	306,680	143,880	162,800	0	0	0	0	0	0	0	0	0	162,800
Total Funding Sources	3,953,180	527,754	162,800	162,800	387,200	387,697	387,869	387,715	387,235	386,430	387,499	388,181	3,425,426
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Wood Haven Road Properties Under Contract

Project Summary:

This project will create a 100+ acre business park, which will be owned and developed by the Western Virginia Regional Industrial Facility Authority (WVRIFA). Roanoke County, along with the Cities of Roanoke and Salem are jointly financing this effort. The project aims to increase the amount of marketable property in the Roanoke Valley available for business development. Roanoke County's total share of the project is expected to be approximately \$4.4 million, financed through the WVRIFA over 20 years. A total of \$3.4 million in project financing is budgeted in the FY 2021 – FY 2030 CIP.



Woodhaven Property Acquisition and Improvements (continued)

Project Description and Justification:

The Western Virginia Regional Industrial Facility Authority (WVRIFA) was formed in 2013 to enhance economic growth for member localities by developing, owning, and operating one or more facilities on a cooperative basis. The WVRIFA is a voluntary cost and revenue sharing model, whereby multiple jurisdictions can jointly acquire and develop property and share in the revenues generated from new development. There are six member localities in the WVRIFA - Roanoke County, Botetourt County, Franklin County, Roanoke City, Salem City, and the Town of Vinton. Roanoke County and the Cities of Roanoke and Salem are the only participants in the Woodhaven project.

The properties collectively referred to as the Wood Haven properties consist of over 100 acres. Specific project and development plans were produced in conjunction with a community engagement process in 2017 and 2018. Structures on the property were demolished and Roanoke Gas made system improvements on the property in 2018. The property was rezoned to a planned technology development district. The project is currently in the engineering and design phase for utility infrastructure and developing an entrance location, with construction planned for 2020.

Additional Operating Impacts:

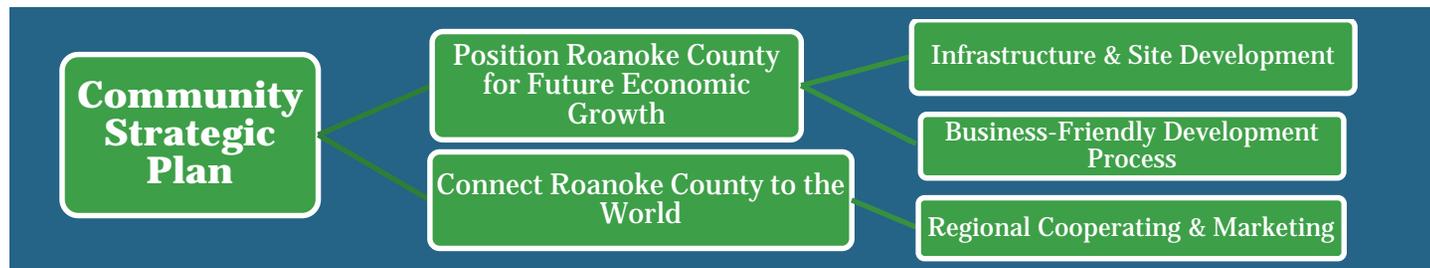
No operating impacts expected.

Conformance with Plans, Policies, and Legal Obligations:

The project is consistent with Roanoke County’s efforts to support commercial growth and development.

Project Highlights and Key Milestones:

- 2013: WVRIFA formed by the localities of Roanoke County, Botetourt County, Franklin County, Roanoke City, Salem City, and the Town of Vinton.
- 2015: a site analysis study was completed by Timmons Engineering.
- September 2016: Resolution approving a "Participation Agreement" creating the Western Virginia Regional Industrial Facilities Authority.
- Community meetings held in 2017 and 2018.
- Demolition of structures on property completed in 2018.
- Roanoke Gas made system improvements on the property in 2018.
- Roanoke County 44%, City of Roanoke 44%, City of Salem 12% of project costs.





Gateway Signs & Landscaping

Department: Planning, Parks, Recreation & Tourism, and Public Information

Category: New Facilities

Location: Countywide

Est. Useful Life: Varies

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	225,000	75,000	0	50,000	50,000	50,000	0	0	0	0	0	0	150,000
Funding Sources													
Roanoke County - Unrestricted Cash	150,000	0	0	50,000	50,000	50,000	0	0	0	0	0	0	150,000
Community Foundation of Western Virginia	50,000	50,000	0	0	0	0	0	0	0	0	0	0	0
PRT Matching Contribution	25,000	25,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	225,000	75,000	0	50,000	50,000	50,000	0	0	0	0	0	0	150,000
Operating Impacts			0	0	7,500	7,725	7,957	8,195	8,441	8,695	8,955	9,224	66,693



Project Summary:

The Gateway Signs and Landscaping project expands the use of the new Roanoke County brand (“hiker and rock” logo) signs at County entrances. Four new signs featuring the new brand were installed in Fall 2017. This project proposes replacing and installing additional signs along primary routes with three or more lanes at prominent County entrances with new and complimentary landscaping. Smaller metal blade signs will be installed along primary routes with two lanes and secondary routes at the County boundary. The project will also begin to implement the new regional VBR Wayfinding Program. The implementation will allow for a gradual approach to installing wayfinding signs in the community as our area partners implement their plans. All new County gateway signs and the existing four gateway signs will incorporate “Virginia’s Blue Ridge” to coordinate with the Virginia’s Blue Ridge Wayfinding project.



Gateway Signs & Landscaping (continued)

Project Description and Justification:

The Gateway Signs and Landscaping project proposes replacing and installing additional signs along primary routes with three or more lanes at prominent County entrances with new and complimentary landscaping. Smaller metal blade signs will be installed along primary routes with two lanes and secondary routes at the County boundary.

The Roanoke County “hiker and rock” logo and branding colors were chosen specifically to represent the qualities of Roanoke County as reflected in the Vision Statement adopted by the Board of Supervisors in January 2016. The project will also begin to implement the new regional VBR Wayfinding Program, which includes a gradual approach to installing wayfinding signs in the community as area partners implement their plans. All new County gateway signs and the existing four gateway signs will incorporate “Virginia’s Blue Ridge” to coordinate with the Virginia’s Blue Ridge Wayfinding project.

Additional Operating Impacts:

New and updated landscaping will require ongoing maintenance. Occasional sign maintenance and replacement will be needed.

Conformance with Plans, Policies, and Legal Obligations:

This project is in conformance with the Roanoke County Comprehensive Plan (2005), Hollins Area Plan (2008), Glenvar Community Plan (2012), and 419 Town Center Plan (2019) which were all adopted as components of the Comprehensive Plan.

Project Highlights and Key Milestones:

- Virginia’s Blue Ridge Board adopted a Regional Wayfinding Program in 2018.
- VBR initiated development of detailed implementation plans in September 2018.
- County Gateways Committee formed including Community Development, Parks, Recreation and Tourism and Public Information Office Staff to collaborate on a plan to update County gateways in conjunction with VBR Regional Wayfinding plans in October 2018.
- The Community Foundation grant funding for Regional Wayfinding in Virginia’s Blue Ridge in the amount of \$50,000 was appropriated in FY 2020.





Rural Broadband Initiative

Department: Communications & Information Technology

Category: New Facilities

Location: Countywide

Est. Useful Life: Varies

Magisterial District: Countywide

Project Status: New

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	100,000	0	100,000	0	0	0	0	0	0	0	0	0	100,000
Funding Sources													
Roanoke County - Unrestricted Cash	100,000	0	100,000	0	0	0	0	0	0	0	0	0	100,000
Allocation of FY 2019 Year End Funding	200,000	200,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	300,000	200,000	100,000	0	0	0	0	0	0	0	0	0	100,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Rural Broadband Initiative project is planned to improve communication and data technology in both the business sector and in residential settings. The County has collected survey data to identify areas where citizens either do not have or have inadequate internet service. The County plans to use this data to seek public-private partnerships and grants from the Virginia Telecommunication Initiative (VATI) program. The FY 2021-FY 2030 CIP includes \$0.1 million in County funding, which will be combined with \$0.2 million allocated to this project from FY 2019 year end funds. A total of \$0.3 million is proposed to serve as the County's match portion of 20% to be eligible for the VATI grant program, which, if selected, could yield a total project cost of \$1.5 million.



Rural Broadband Initiative (continued)

Project Description and Justification:

The Rural Broadband Initiative project is planned to improve communication and data technology in both the business sector and in residential settings. The County is currently collecting survey data to identify areas where citizens either do not have or have inadequate internet service. The study data will be analyzed to evaluate the next steps in improving high-speed Internet access across Roanoke County. It is expected to identify current infrastructure, partners, partnership agreements, grants opportunities, unmet demand, and prevalent residential internet speeds in the community, along with gaps in each of these areas that may be closed through future action.

The County plans to use this data to seek public-private partnerships and grants from the Virginia Telecommunication Initiative (VATI) program. The ten-year CIP includes \$0.1 million in County funding, which will be combined with \$0.2 million allocated to this project from FY 2019 year end funds. A total of \$0.3 million is proposed to serve as the County's match portion of 20% to be eligible for the VATI grant program, which, if selected, could yield a total project cost of \$1.5 million.

Additional Operating Impacts:

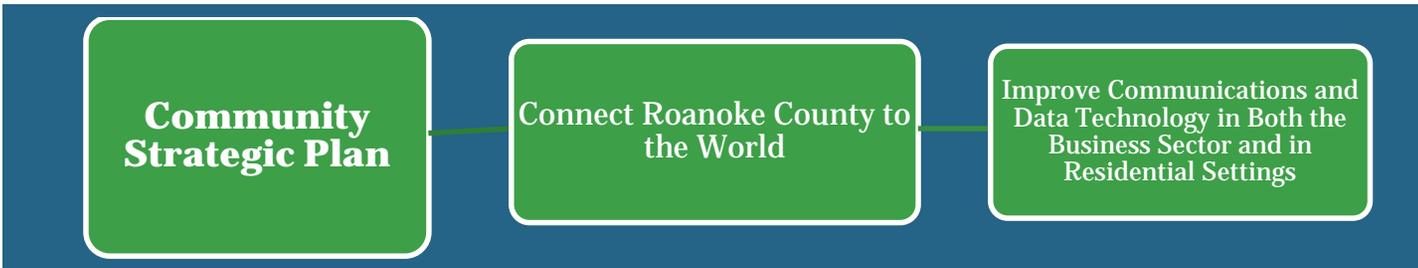
No additional operating impacts are anticipated.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms to the Community Strategic Plan's Initiative to Connect Roanoke County to the World. Improving broadband availability to the business community and improving wireless connectivity in residential areas will be pursued to ensure Roanoke County's economic future.

Project Highlights and Key Milestones:

- Roanoke County began collecting survey data in the Broadband Availability Study in December 2019 to identify areas that are under-served and not served by high-speed internet.
- In December 2019, the Board of Supervisors allocated \$200,000 toward the capital project to be used toward applications for grants and/or public-private partnership opportunities.
- In FY 2021, an additional \$100,000 will serve as the County's match portion.
- Broadband Availability Survey has been collected, and data is being evaluated by staff.







Human Services Functional Team





County of Roanoke, Virginia FY 2021 – FY 2030 Adopted Capital Improvement Program Human Services Summary

Note: Projects with \$0 in FY 2021-2030 are active projects that have been fully funded in prior fiscal years.

Functional Team/Department/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 21-30 Total
Human Services											
Library											
Mount Pleasant Library Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Countywide Library Public Use Computer Repl. Plan	0	71,000	15,000	116,000	48,000	123,000	50,300	46,400	76,900	15,700	562,300
Hollins Branch Library Replacement	0	80,000	4,996,000	0	0	10,000,000	0	0	0	0	15,076,000
<i>Library Total</i>	0	151,000	5,011,000	116,000	48,000	10,123,000	50,300	46,400	76,900	15,700	15,638,300
Parks and Recreation											
Parks and Recreation Capital Maintenance Program	430,000	700,000	700,000	700,000	700,000	700,000	700,000	780,000	760,000	745,000	6,915,000
Green Ridge Capital Maintenance Program	0	100,000	125,000	125,000	150,000	150,000	150,000	205,788	204,719	194,037	1,404,544
East Roanoke River Greenway	125,000	0	0	0	0	0	0	0	0	0	125,000
West Roanoke River Greenway	0	0	0	0	0	0	0	0	0	0	0
Explore Park	0	0	1,400,000	0	0	0	0	0	0	0	1,400,000
Sports Field Lighting Replacement	0	0	0	0	0	1,250,000	0	0	0	0	1,250,000
<i>Parks and Recreation Total</i>	555,000	800,000	2,225,000	825,000	850,000	2,100,000	850,000	985,788	964,719	939,037	11,094,544
Elections											
Electronic Pollbook Replacement	0	0	0	0	0	0	0	0	0	0	0
Voting Machine Replacement	0	0	0	425,000	0	0	0	0	0	0	425,000
<i>Elections Total</i>	0	0	0	425,000	0	0	0	0	0	0	425,000
Human Services Total	\$555,000	\$951,000	\$7,236,000	\$1,366,000	\$898,000	\$12,223,000	\$900,300	\$1,032,188	\$1,041,619	\$954,737	\$27,157,844



Mount Pleasant Library Renovation

Department: Library

Location: 2918 Jae Valley Road, Roanoke, VA 24014

Magisterial District: Vinton

Category: Replacement

Est. Useful Life: 15-20 years

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	173,579	173,579	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Roanoke County -													
Unrestricted Cash	163,579	163,579	0	0	0	0	0	0	0	0	0	0	0
Private Capital Contributions	10,000	10,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	173,579	173,579	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Mount Pleasant Library Renovation Project addresses immediate renovation needs for the facility. This project, funded in FY 2019, planned to address HVAC replacement needs, exterior window replacement, interior and exterior painting, floor coverings, and interior space configuration changes to improve line of sight for staff. After detailed investigation prior to project design work, the septic system was determined to be not feasible for future use or expansion of fixtures. Addressing the septic/sewer needs is a non-deferrable priority to ensure continued utilization of the facility and will utilize a significant amount of project funding. Remaining funding will be prioritized to address the most pressing remaining facility needs.



Mount Pleasant Library Renovation (continued)

Project Description and Justification:

Improvements to the Mount Pleasant Library were originally planned to include evaluating placement of restroom facilities, installing new windows and floor coverings, painting the interior and exterior, and upgrading and reorienting shelving and furniture to allow for better line of sight for staff.

The initial engineering due diligence for the project required evaluation of continued functionality of the septic system for the property as there were no records available. During the investigation, it was determined that the system has exceeded its useful life, likely to fail, and would not be permitted for any additional fixtures. The County evaluated replacement with a septic system or connection to the public sewer system. The Western Virginia Water Authority is currently in the design process to determine the total cost of the work.

Addressing the septic/sewer needs is a non-deferrable priority to ensure continued utilization of the facility and will utilize a significant amount of project funding. Remaining funding will be prioritized to address the most pressing remaining facility needs.

Additional Operating Impacts:

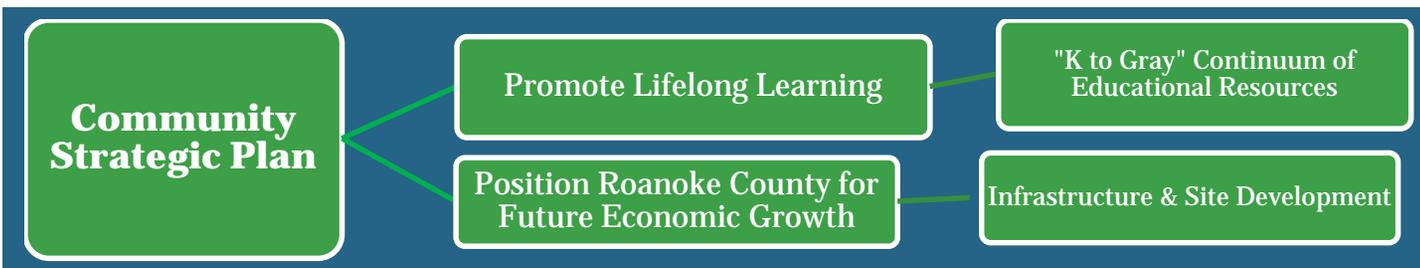
There are no additional operating cost impacts for this project. Replacement systems will continue to be maintained by General Services, and replacement windows, flooring, and furnishings will be selected to best provide for long term functionality and cost benefit.

Conformance with Plans, Policies, and Legal Obligations:

Maintenance and upkeep of County assets is necessary to maximize the potential of taxpayer funded buildings and facilities. The 2019 Facilities Condition Assessment includes multiple deficiencies that are also priorities of the project.

Project Highlights and Key Milestones:

- Mount Pleasant Library opened in 2009 under lease agreement.
- In 2011, Roanoke County purchased the cinderblock building.
- Renovations were originally planned to address needs in the library building including HVAC replacement, window replacement, painting, and floor covering.
- After detailed investigation prior to project design work, the septic system was determined to be not feasible for future use or expansion of fixtures.
- The Western Virginia Water Authority is currently in the design process to determine the total cost of connection to the public sewer system.





County-wide Library Public Computer Replacement Plan

Department: Library

Category: Replacement

Location: County-wide

Est. Useful Life: 5 years

Magisterial District: County-wide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	703,300	141,000	0	71,000	15,000	116,000	48,000	123,000	50,300	46,400	76,900	15,700	562,300
Funding Sources													
Roanoke County - Unrestricted Cash	703,300	141,000	0	71,000	15,000	116,000	48,000	123,000	50,300	46,400	76,900	15,700	562,300
Total Funding Sources	703,300	141,000	0	71,000	15,000	116,000	48,000	123,000	50,300	46,400	76,900	15,700	562,300
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

As public use library computers reach the end of their life spans, the County-wide Library Public Computer Replacement Plan ensures that adequate computer resources are available to the community. This plan establishes a five-year public computer replacement cycle, allowing the Library to maintain the technological requirements needed to run current and future software, and security programs. On a rotating five year cycle, all public use computers will be replaced by branch. Due to limited available funding related to the COVID-19 pandemic, funding for FY 2021 is eliminated and will be evaluated with the development of the FY 2022 - FY 2031 CIP. Funding for this project has been extended through the ten year plan and will be evaluated annually based on technology and individual branch needs.



County-wide Library Public Use Computer Replacement Plan (continued)

Project Description and Justification:

The County-wide Library Public Computer Replacement Plan will replace aging public computers at all six branch libraries over a five year cycle. As computers reach the end of their life span, funding is required for replacement.

This plan will replace all library public use computers with planned replacement at various branches each year. Due to limited available funding related to the COVID-19 pandemic, funding for FY 2021 is eliminated and will be evaluated with the development of the FY 2022 - FY 2031 CIP. Under this program, the Library will streamline specification, acquisition, and deployment of new equipment and disposal of old equipment. Software and hardware will be updated to the most recent versions ensuring the public will have adequate computing power to meet the requirements of future software and security programs.

Additional Operating Impacts:

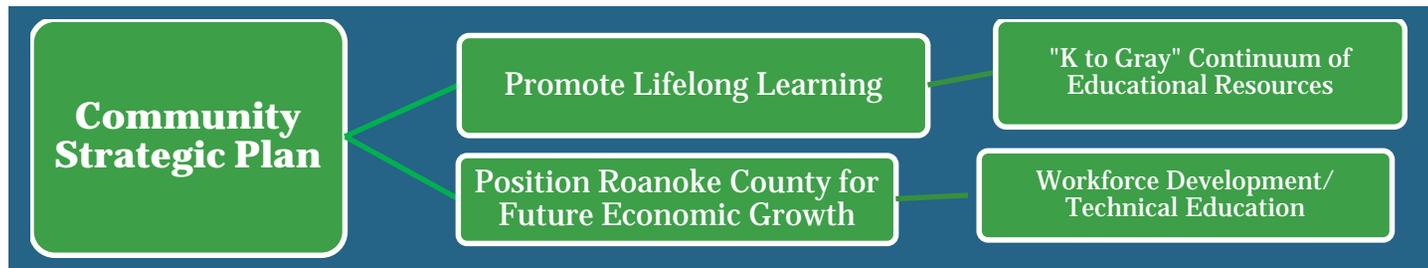
There are no anticipated operating impacts.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms to the Roanoke County Community Strategic Plan to promote lifelong learning and to position the County for future economic growth. It also ensures equipment is up to date.

Project Highlights and Key Milestones:

- Implements replacement plan to match anticipated 5 year useful life.
- Improves acquisition and disposal of outdated equipment.
- Plan ensures public computers will run up-to-date security and software programs.
- Plan includes funding for Microsoft Office on each computer.
- Plan includes funding for additional software packages.





Hollins Library Replacement

Department: Library

Location: 6624 Peters Creek Road, Hollins, VA 24019

Magisterial District: Hollins

Category: Replacement

Est. Useful Life: 30 years

Project Status: Planned

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	15,076,000	0	0	80,000	4,996,000	0	0	10,000,000	0	0	0	0	15,076,000
Funding Sources													
Lease/Revenue Bonds	14,996,000	0	0	0	4,996,000	0	0	10,000,000	0	0	0	0	14,996,000
Roanoke County - Unrestricted Cash	80,000	0	0	80,000	0	0	0	0	0	0	0	0	80,000
Total Funding Sources	15,076,000	0	0	80,000	4,996,000	0	0	10,000,000	0	0	0	0	15,076,000
Operating Impacts			0	0	0	0	0	0	TBD	TBD	TBD	TBD	TBD



Project Summary:

The Hollins Library Replacement Project, with planning and initial design scheduled for FY 2022 and FY 2023 and construction funding in FY 2026, is planned to replace the 17,600 square foot Hollins Library with a new facility that is consistent with a service model already implemented at the South County, Glenvar, and Vinton locations. Placement of a new facility will be an issue. Adjacent commercial development has grown exponentially since the library opened in 1971 so the building is now landlocked on a relatively small two acre site. A professional study that addresses this question should be included in the first year architectural and engineering phase. The total project cost is estimated at \$15.08 million. Specific details regarding site acquisition and construction costs were provided to the Board of Supervisors through FY 2020 Budget Memo #4.



Hollins Library Replacement (continued)

Project Description and Justification:

Hollins Library is the only major branch in the Roanoke County library system that has not been replaced. An expansion 26 years ago retained the original building, but melding the old and new square footage was not completely successful. Much of the layout and infrastructure hamper service delivery. The replacement project proposes building a new technologically advanced library that may include enhanced security, a larger parking area, up-to-date electronic resources, 50+ public work stations, an improved children’s area, scaled technology for children, a separate teen/tween room, meeting spaces, study rooms, a creativity workshop, and well-lit browsing areas.

After 48 years of heavy use, Hollins Library remains one of the busiest libraries in the Roanoke Valley and the western Virginia region. It is a mainstay of the Library system, averaging almost 700 visitors per day. This branch supports educational and informational needs across a wide spectrum.

Additional Operating Impacts:

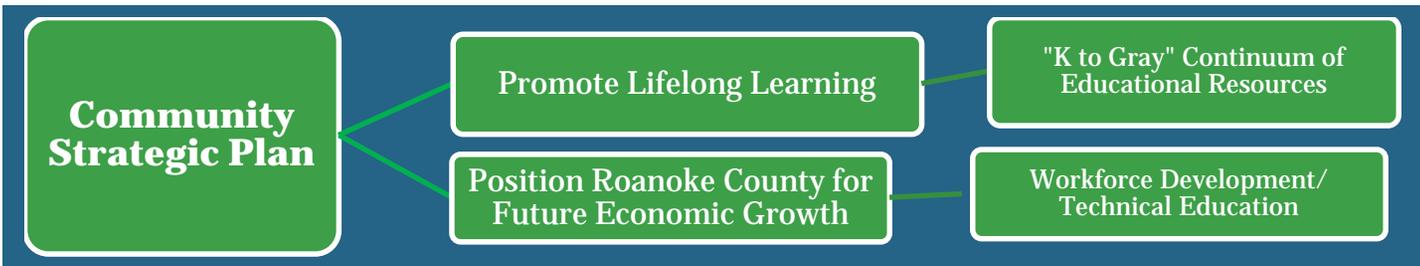
The proposed replacement to the facility may increase citizen usage significantly. Higher demand may raise utility costs and staff costs. With increased usage, additional funds may be generated by rentals and events. Additional operating funding would not be required until completion of construction.

Conformance with Plans, Policies, and Legal Obligations:

Recommendations from the Library Regional Comprehensive Study (2004-05; 5:4-7) identified Hollins Library as an ideal “Full-Service Center Library” of 30,000 square feet.

Project Highlights and Key Milestones:

- The Hollins Library opened in 1971 and was expanded and remodeled in 1993.
- Through the CIP process and in various discussions, alternative solutions have been proposed, including the possibility of relocating the library to at least a 4+/- acre site.
- Phase I, funded with \$80,000 in FY 2022 will provide for a professional study with an experienced library architectural firm to evaluate service delivery needs and site/construction feasibility.
- Phase II, funded by \$4.916 million in bonds in FY 2023 to provide resources for potential land acquisition, Architectural and Engineering services, and future construction.
- Phase III project costs are funded by an additional \$10.0 million in bonds in FY 2026





Parks and Recreation Capital Maintenance Program

Department: Parks, Recreation & Tourism

Category: Capital Maintenance Program

Location: Countywide

Est. Useful Life: Varies

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	10,355,000	3,440,000	430,000	700,000	700,000	700,000	700,000	700,000	700,000	780,000	760,000	745,000	6,915,000
Funding Sources													
Roanoke County - Unrestricted Cash	8,900,000	2,440,000	180,000	620,000	650,000	650,000	675,000	700,000	700,000	780,000	760,000	745,000	6,460,000
Fee Class Fund	1,205,000	1,000,000	0	80,000	50,000	50,000	25,000	0	0	0	0	0	205,000
FEMA Reimbursement	0	0	250,000	0	0	0	0	0	0	0	0	0	250,000
Total Funding Sources	10,355,000	3,440,000	430,000	700,000	700,000	700,000	700,000	700,000	700,000	780,000	760,000	745,000	6,915,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Parks and Recreation Capital Maintenance Program (CMP) is the vehicle in which County assets are programmed to receive regular maintenance and repair. The CMP dedicates \$430,000 in FY 2021, with increases planned through the remainder of the ten-year CIP. Annual funding to the Parks and Recreation CMP will fund repairs and maintenance maximizing the life of County parks, playgrounds, sports fields, courts, restrooms, and other recreational buildings.



Parks & Recreation Capital Maintenance Program (continued)

Project Description and Justification:

The Capital Maintenance Program (CMP) is the vehicle in which County assets are programmed to receive regular maintenance and repair. Ongoing preventive maintenance helps to ensure the safety and value of County assets while avoiding potentially large costs resulting from lack of proper maintenance. The CMP dedicates \$430,000 in FY 2021, with planned increases through the remainder of the plan. Annual funding to the Parks and Recreation CMP will fund repairs and maintenance maximizing the life of County parks, playgrounds, sports fields, courts, restrooms, and other recreational buildings.

Additional Operating Impacts:

Direct impact to the operating budget from the Capital Maintenance Program primarily comes from the additional staff time necessary to assess and implement repairs and maintenance. While repair and maintenance projects can have significant upfront costs, the long-term effect is a reduction in overall total cost and an increase in departmental efficiency. Over time, it is expected that ongoing preventive maintenance will actually reduce operating costs or cost avoidance and enhance service levels.

Conformance with Plans, Policies, and Legal Obligations:

Maintenance and upkeep of County assets is necessary to maximize the potential of taxpayer funded buildings and facilities. The 2019 Facility Conditions Assessment identified Capital Maintenance Programs as a resource to fund minor facility needs.

Project Highlights and Key Milestones:

- In FY 2016, the Parks & Recreation CMP expanded to a 10-year funding schedule and is included in the Capital Improvement Program (CIP).
- The Parks and Recreation CMP includes replacing playgrounds, bleachers, resurfacing courts, repaving trails in County parks, maintaining greenways, adding water service to shelters, repairing restrooms and facilities, and addressing any drainage issues.





Green Ridge Capital Maintenance Program

Department: Parks, Recreation & Tourism

Category: Capital Maintenance Program

Location: Green Ridge Recreation Center

Est. Useful Life: 50 Years

Magisterial District: Hollins

Project Status: New

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	1,404,544	0	0	100,000	125,000	125,000	150,000	150,000	150,000	205,788	204,719	194,037	1,404,544
Funding Sources													
Roanoke County - Unrestricted Cash	1,404,544	0	0	100,000	125,000	125,000	150,000	150,000	150,000	205,788	204,719	194,037	1,404,544
Total Funding Sources	1,404,544	0	0	100,000	125,000	125,000	150,000	150,000	150,000	205,788	204,719	194,037	1,404,544
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Green Ridge Capital Maintenance Program (CMP) proposes to fund ongoing maintenance and repair of various systems within the recreation facility. The facility is over 10 years of age and requires a dedicated funding stream for overall facility maintenance. The facility continues to cover its direct operating costs through revenue generation, but capital maintenance funding assistance is needed for the long term future. Annual funding to the Green Ridge CMP will fund repairs and maintenance maximizing the life of the building and waterpark. The 2019 Facility Condition Assessment study identified the facility as underfunded for current repair needs. With proposed funding at \$100,000 in FY 2022, the Green Ridge CMP creates a funding source for ongoing maintenance and repairs.



Green Ridge Capital Maintenance Program (continued)

Project Description and Justification:

The Green Ridge Capital Maintenance Program (CMP) proposes to fund ongoing maintenance and repair of various systems within the recreation facility. The facility is over 10 years of age and requires a dedicated funding stream for overall facility maintenance. The facility continues to cover its direct operating costs through revenue generation, but capital maintenance funding assistance is needed for the long term future. Annual funding to the Green Ridge CMP will fund repairs and maintenance maximizing the life of the building and waterpark. The 2019 Facility Condition Assessment study identified the facility as underfunded for current repair needs. With proposed funding at \$100,000 in FY 2022, the Green Ridge CMP creates a funding source for ongoing maintenance and repairs.

Additional Operating Impacts:

Direct impact to the operating budget from the Capital Maintenance Program primarily comes from the additional staff time necessary to assess and implement repairs and maintenance. While repair and maintenance projects can have significant upfront costs, the long-term effect is a reduction in overall total cost and an increase in departmental efficiency. Over time, it is expected that ongoing preventive maintenance will actually reduce operating costs or cost avoidance and enhance service levels.

Conformance with Plans, Policies, and Legal Obligations:

Maintenance and upkeep of County assets is necessary to maximize the potential of taxpayer funded buildings and facilities and to adhere to the findings of the 2019 Facility Condition Assessment Study.

Project Highlights and Key Milestones:

- Green Ridge Recreation Center opened in 2009, and Splash Valley waterpark has operated for 10 seasons.
- The Green Ridge CMP is proposed to address ongoing maintenance and repairs to maximize the life of the building and waterpark.
- The program is proposed to be funded in FY 2022 at \$100,000 with planned increases over the ten year plan.

Community Strategic Plan

Keep Roanoke County Healthy, Clean, & Beautiful

Outdoor Recreation & Natural Resources



East Roanoke River Greenway Extension

Department: Parks, Recreation & Tourism

Category: New Facilities

Location: Roanoke City to Explore Park

Est. Useful Life: 25-50 years

Magisterial District: Vinton

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	9,007,446	8,882,446	125,000	0	0	0	0	0	0	0	0	0	125,000
Funding Sources													
Roanoke County - Unrestricted Cash	603,000	478,000	125,000	0	0	0	0	0	0	0	0	0	125,000
FLAP Grant	1,387,000	1,387,000	0	0	0	0	0	0	0	0	0	0	0
Regional Surface Transportation Program Grant	5,857,840	5,857,840	0	0	0	0	0	0	0	0	0	0	0
Prior Federal Transportation Funds	773,000	773,000	0	0	0	0	0	0	0	0	0	0	0
Transportation Alternatives Grant	366,606	366,606	0	0	0	0	0	0	0	0	0	0	0
Private Capital Contributions	20,000	20,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	9,007,446	8,882,446	125,000	0	0	0	0	0	0	0	0	0	125,000
Operating Impacts			10,000	12,500	12,875	13,261	13,659	14,069	14,491	14,926	15,373	15,835	136,989



Project Summary:

The extension of the Roanoke River Greenway from Roanoke City to Explore Park will add approximately 5 miles to the Roanoke Valley greenway network. The entire project is broken into three sections and is funded through various federal and state funding programs. The first section is planned to run along the Roanoke River from the Western Virginia Water Authority water pollution control plant for 2.5 miles to reach Roanoke County's Niagara Ranch, an equestrian center at Explore Park. Another portion will continue from Niagara Ranch for 1/3 mile to property owned by the Roanoke Valley Resource Authority. Another will extend 1.7 miles from this property to connect to federal overlooks before terminating at Explore Park.



East Roanoke River Greenway Extension (continued)

Project Description and Justification:

The East Roanoke River Greenway project constructs an additional 5 miles of greenways and trails within Roanoke County’s Parks system. Federal and State grant funding has been awarded to fund engineering, environmental, design, and construction phases for the different sections of the project. The value of donated land from the Western Virginia Water Authority, Appalachian Power, and the Virginia Recreational Facilities Authority was used toward local match requirements for the Transportation Alternatives Program funding. An additional County match of \$125,000 has been budgeted in FY 2021 to offset \$366,606 in grant funding from the Transportation Alternatives Program in FY 2020.

This project addresses the community desire to increase the number of accessible and conveniently located greenways and trails available to citizens. The project will provide a safe and healthy environment for walkers, joggers, hikers, strollers and bike riders of all ages.

Additional Operating Impacts:

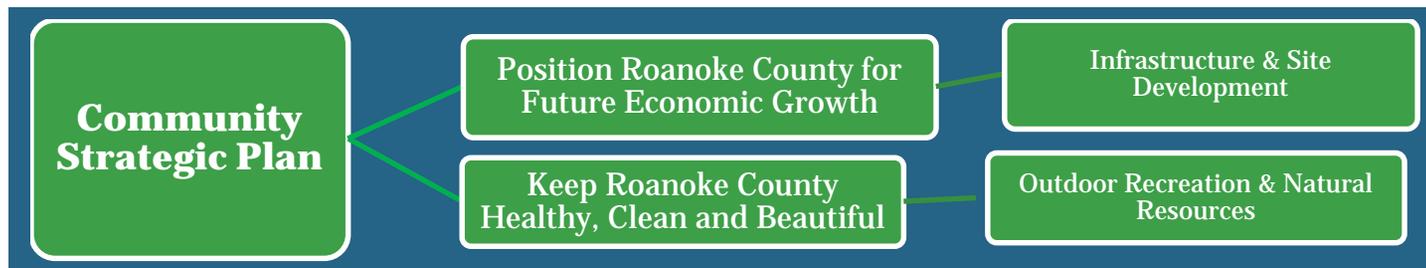
After project completion, funding will be required to maintain the greenway. An estimate of \$10,000 annually beginning in FY 2021 is included for planning purposes, increasing to \$12,500 in FY 2022 once the final connection has been completed.

Conformance with Plans, Policies, and Legal Obligations:

Completion of the Roanoke River Greenway is the top regional priority identified in the 1995 Roanoke Valley Greenway Plan, updated in 2007 and 2018. This project is consistent with the 2007 Comprehensive Master Plan for Park and Facilities and the 2012 Glenvar Community Plan.

Project Highlights and Key Milestones:

- In 2013, Roanoke County entered a 99-year lease agreement with the VRFA for operation and development of Explore Park.
- In 2014, Roanoke County reopened 14 miles of trail and river access at Explore Park.
- In 2017, Roanoke County received \$1.36M in Federal Lands Access Program (FLAP) funding from Eastern Federal Lands Highway Division (EFLHD) to design and construct the East Roanoke River Greenway.
- Roanoke County has been awarded over \$5.8M from VDOT through the Regional Surface Transportation Program to extend the Roanoke River Greenway through Explore Park to Rutrough Road.





West Roanoke River Greenway Extension

Department: Parks, Recreation & Tourism

Category: New Facilities

Location: Green Hill Park to Riverside Park

Est. Useful Life: 25-50 years

Magisterial District: Catawba Magisterial District, City of Salem

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	8,032,031	8,032,031	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Highway Safety Improvement Program	499,166	499,166	0	0	0	0	0	0	0	0	0	0	0
Regional Surface Transportation Program	2,990,760	2,990,760	0	0	0	0	0	0	0	0	0	0	0
SMART SCALE Funding	4,542,105	4,542,105	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	8,032,031	8,032,031	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048	114,639



Project Summary:

The West Roanoke River Greenway Extension Projects includes the addition of approximately 1.8 miles to the Roanoke Valley greenway network from Green Hill Park in Roanoke County to Riverside Park in the City of Salem. Roanoke County is responsible for administration of the project with oversight from the Virginia Department of Transportation (VDOT) and collaboration with the City of Salem. The project is financed by federal and state funding for design and construction of the project. Preliminary engineering for the project is complete, pending approval of environmental permits from federal and state agencies. Right-of-way negotiations are underway with landowners.



West Roanoke River Greenway Extension (continued)

Project Description and Justification:

The West Roanoke River Greenway project constructs 1.8 miles of Roanoke River Greenway in Roanoke County and the City of Salem, from Green Hill Park upstream of Diuguids Lane to Riverside Park, downstream of Mill Lane. The Roanoke River Greenway is a 10' paved, bicycle/pedestrian, shared use trail, with over 14 miles completed. Construction of this off-road section will significantly improve safety for bicyclists, pedestrians and motorists and will connect residential areas to an industrial center. As a priority greenway for the region, the Roanoke River Greenway is considered a critical component of economic development initiatives.

This section of greenway will include two bridges across the Roanoke River, a separated grade crossing at Diuguids Lane, an at-grade crossing at Mill Lane, and a retaining wall structure along the Roanoke River below West Riverside Drive. VDOT has completed a Value Engineering Analysis of the project. The Pathfinders for Greenways, a non-profit supporting regional trails and greenways, have approved up to \$350,000 in private donations for the right-of-way phase of the project.

Additional Operating Impacts:

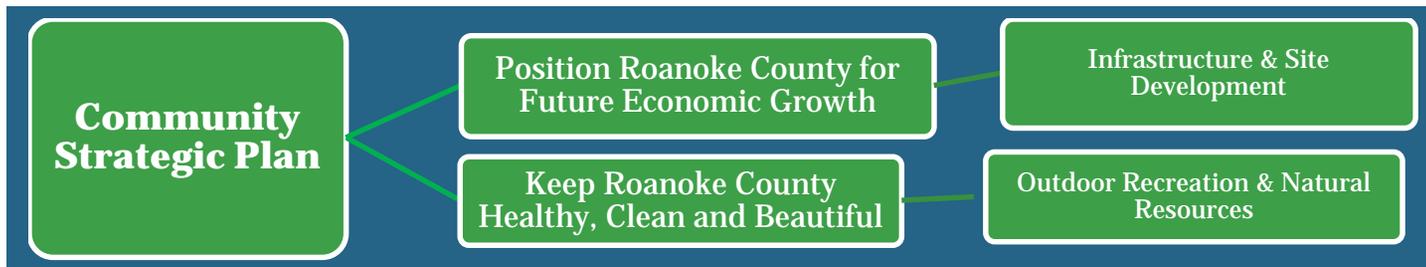
After project completion, funding will be required to maintain the greenway. Staff has calculated a rough estimate of \$10,000 for maintenance increasing annually by inflation. The City of Salem and Roanoke County have agreed to share the maintenance and inspection costs of the two bridges that will span the Roanoke River.

Conformance with Plans, Policies, and Legal Obligations:

Completion of the Roanoke River Greenway is the top regional priority identified in the 1995 Roanoke Valley Greenway Plan, updated in 2007 and 2018. This project is consistent with the goals, objectives, and policies of the 2007 Comprehensive Master Plan for Park and Facilities and the 2012 Glenvar Community Plan. Support of the greenway is also incorporated into several regional strategic and transportation plans.

Project Highlights and Key Milestones:

- In 2010, the Board of Supervisors approved the appropriation of \$3,499,166 in federal Open Container funds; \$3,000,000 of the funds were transferred to another project.
- In 2015, the Board of Supervisors approved the appropriation of \$2,990,760 in Regional Surface Transportation Program funds.
- In 2015, the Board of Supervisors supported a regional grant application requesting \$4,542,105 in SMART SCALE funds that was approved in 2016.
- Pathfinders for Greenways approved \$350,000 in private donations to complete the right-of-way phase of this project.





Explore Park

Department: Parks, Recreation & Tourism

Category: New Facilities

Location: 56 Roanoke River Pkwy, Roanoke, VA 24014

Est. Useful Life: Varies

Magisterial District: Vinton

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	7,123,484	5,723,484	0	0	1,400,000	0	0	0	0	0	0	0	1,400,000
Funding Sources													
Roanoke County - Unrestricted Cash	1,000,000	1,000,000	0	0	0	0	0	0	0	0	0	0	0
Virginia Department of Conservation Grant	323,484	323,484	0	0	0	0	0	0	0	0	0	0	0
Lease/Revenue Bonds	5,800,000	4,400,000	0	0	1,400,000	0	0	0	0	0	0	0	1,400,000
Total Funding Sources	7,123,484	5,723,484	0	0	1,400,000	0	0	0	0	0	0	0	1,400,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The first phase of the Explore Park Adventure Plan is projected to be spread over 10 years. The plan provides funds for the development of Explore Park infrastructure to support private-public partnerships and to implement different aspects of the Adventure Plan. This project will support park operations for Roanoke County citizens, and market the facility for economic development. The first phase of this project, (\$5.7 M from FY 2016 – FY 2018) primarily focused on master planning, infrastructure implementation and repairs. Future infrastructure improvements (\$1.4 M in FY 2023) will be utilized to support additional growth of public-private partnerships through expansion of water and sewer, road connections, building renovations and trail enhancements.



Explore Park (continued)

Project Description and Justification:

This project provides funds for the development of Explore Park infrastructure and implementation of the Explore Park Adventure Plan. It provides the necessary park infrastructure to support park operations for citizens and to market the facility for economic development. The first phase of the project funds water and sewer connections, design of internal park water and sewer systems, design of the road system, bike skills park, building repairs, land studies, broadband connections, land purchase, and road paving. These infrastructure projects were necessary to attract private development. In 2018, Blue Mountain Adventures and Don’s Cab-Inns opened their businesses at Explore Park. Both will continue to expand their overnight accommodations into 2020. Treetop Quest’s aerial adventure course opened in 2019.

The second round of request for proposals were issued in November of 2018 for additional outdoor adventure themed services and food and beverage for Brugh Tavern. Roanoke County awarded a contract in the first half of calendar year 2019 to expand services by private vendors at Explore Park. Funding in FY 2023, (\$1.4 million), will provide for additional infrastructure based on public-private partnership needs. The project is in the final stages of completing the infrastructure to support private business development and park operations.

Additional Operating Impacts:

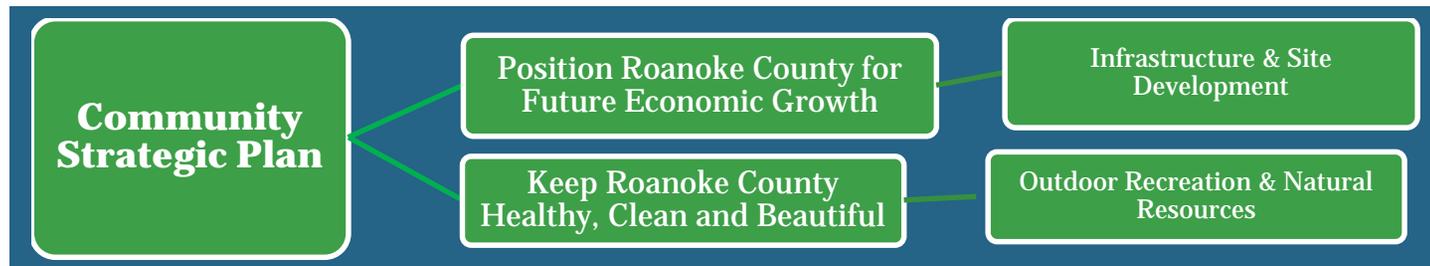
The improvements planned in the current CIP will not have an impact on the operating budget. In FY 2019, the Board of Supervisors approved the addition of a Recreation Programmer position to support Explore Park activities, which is expected to be offset by revenues collected in the Fee Class Fund. Future operating impacts are anticipated to be offset by revenue received from public-private partnerships.

Conformance with Plans, Policies, and Legal Obligations:

This project is consistent with the general goals, objectives, and policies of the 1998 Roanoke County Community Plan, Mount Pleasant Comprehensive Plan and the 2007 Department of Parks, Recreation and Tourism Comprehensive Master Plan for Parks and Facilities.

Project Highlights and Key Milestones:

- Roanoke County signed 99-year lease of Explore Park in 2013.
- The development of the Explore Park Master Plan (\$200,000) was completed in FY2016.
- The Explore Park Adventure Plan adopted by the Board of Supervisors in FY 2017.
- Water and Sewer construction completed in early 2019.
- Three vendors opened their businesses at Explore Park in 2018.
- Cabin campground and bath house construction completed in 2018.
- In FY 2019, County awarded \$323,484 grant for improvements to mountain bike trail system.
- Twin Creeks Brewing Co opened Brugh Tavern in fall of 2019.





Sports Field Lighting Program

Department: Parks, Recreation & Tourism

Category: Replacement

Location: Countywide

Est. Useful Life: 30 years

Magisterial District: Countywide

Project Status: New

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	1,250,000	0	0	0	0	0	0	1,250,000	0	0	0	0	1,250,000
Funding Sources													
Lease/Revenue Bonds	1,250,000	0	0	0	0	0	0	1,250,000	0	0	0	0	1,250,000
Total Funding Sources	1,250,000	0	0	0	0	0	0	1,250,000	0	0	0	0	1,250,000
Operating Impacts			0	0	0	0	0	0	5,000	5,150	5,305	5,464	20,918



Project Summary:

The Sports Field Lighting Program project includes \$1.25 million in bond funding in FY 2026 to replace lighting systems to allow for increased athletic field usage. Sports field lighting allows for youth adult sports to have more access to and use of Roanoke County fields outside of daylight hours. Sports field lighting allows more daily uses on a field and minimizes the need for additional athletic fields in the park system. This project will allow the replacement of two of the oldest lighting systems in the County's park system while also adding an additional light system to Merriman field 4 located at Starkey Park to support lacrosse, soccer and flag football.



Sports Field Lighting Program (continued)

Project Description and Justification:

The Sports Field Lighting Program project proposes \$1.25 million in bond funding in FY 2026 to replace lighting systems to allow for increased athletic field usage. Sports field lighting allows for youth adult sports to have more access to and use of Roanoke County fields outside of daylight hours. Sports field lighting allows more daily uses on a field and minimizes the need for additional athletic fields in the park system. This project will allow the replacement of two of the oldest lighting systems in the County's park system while also adding an additional light system to Merriman field 4 located at Starkey Park to support lacrosse, soccer and flag football.

Clearbrook and Whispering Pines lighting systems are over 30 years of age and have past their useful life. Clearbrook is essential for lacrosse, soccer and softball. Without lights, these three programs would need additional fields to be able to play in South Roanoke County, and lacrosse would not have a facility to play in during March of each year until day light savings time. Clearbrook is also used each year by RCPS middle school, JV and Varsity teams. Whispering Pines fields support men's softball tournaments as well as recreation baseball and travel baseball practices. By adding LED light systems, Roanoke County will reduce energy consumption and have a 10 year warranty on the units.

Additional Operating Impacts:

After project completion, funding will be required to maintain the field lighting. An estimate of \$5,000 annually beginning in FY 2027 is included for planning purposes, increasing yearly for inflation.

Conformance with Plans, Policies, and Legal Obligations:

This project was identified as a need in the Facility Conditions Assessment completed in 2019.

Project Highlights and Key Milestones:

- Sports Field Lighting Program project included in prior year CIPs but was removed in FY 2020 – FY 2029 CIP pending results of the 2019 Facility Conditions Assessment.
- This project was identified as a need in the Facility Conditions Assessment completed in 2019.
- \$1.25 million in bond funding planned in FY 2026 to replace two of the oldest light systems in Roanoke County's parks.
- Clearbrook field lights are approximately 32 years of age.
- Whispering Pines field lights are approximately 34 years of age.

**Community
Strategic Plan**

**Keep Roanoke County
Healthy, Clean and
Beautiful**

**Outdoor Recreation &
Natural Resources**



Electronic Pollbook Replacement

Department: Elections

Location: Countywide

Magisterial District: Countywide

Category: Replacement

Est. Useful Life: 5-10 years

Project Status: New

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	150,000	150,000	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Allocation of FY 2019 Year End Funds	150,000	150,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	150,000	150,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			0	19,425	20,008	20,608	21,226	21,863	22,519	23,194	23,890	24,607	197,341



Project Summary:

The Electronic Pollbook Replacement project was funded with \$150,000 in December 2019 through the allocation of FY 2019 year end funds by the Board of Supervisors. This project was requested through the FY 2021 – FY 2030 CIP process, but further evaluation revealed that pollbooks would need to be purchased prior to July 1, 2020 to be in place for the 2020 Presidential election. The project includes replacement of the County’s existing electronic pollbook hardware and acquisition of new software with warranty and service.



Electronic Pollbook Replacement (continued)

Project Description and Justification:

The Electronic Pollbook Replacement project was funded with \$150,000 in December 2019 through the allocation of FY 2019 year end funds by the Board of Supervisors. This project was requested through the FY 2021 – FY 2030 CIP process, but further evaluation revealed that pollbooks would need to be purchased prior to July 1, 2020 to be in place for the 2020 Presidential election. The project includes replacement of the County's existing electronic pollbook hardware and acquisition of new software with warranty and service.

The laptops, in use by the department since 2014, have surpassed their expected useful life of 2-4 years and no longer perform adequately or reliably on Election Day. With considerably increased turnout expected in the 2020 presidential and federal election cycle, funding was added for an electronic pollbook solution that limits disruption of the electoral process and meets the needs of the changing security and technical requirements that elections are currently facing.

Additional Operating Impacts:

The Elections department expects that support would cost an additional \$13,125 annually and an extended warranty on the pollbook machines would cost \$6,300 per year, with inflation assumed in future years.

Conformance with Plans, Policies, and Legal Obligations:

The system planned has been approved by the Virginia Department of Elections for use in the Commonwealth. Any hardware/software/equipment selected must meet requirements set forth in Virginia Code and by the Virginia Department of Elections/State Board of Elections.

Project Highlights and Key Milestones:

- 2014 – Roanoke County purchased 66 new HP ProBook laptops for use at polling places and acquired 3 additional laptops for backup.
- 2014 – Roanoke County utilized DemTech's Advocate Precinct Management software to program electronic pollbooks and run Advocate Control Center on Election Day.
- 2017 – Department of Elections withdrew funding for the Advocate Electronic Pollbook effective July 1, 2017, requiring localities wishing to continue to use the software to pay for it themselves. DemTech offered continued use of its software for \$2,310 per annum.

Community
Strategic Plan

Responsive Service
Delivery

Promote Neighborhood
Connections



Voting Machine Replacement

Department: Elections

Location: Countywide

Magisterial District: Countywide

Category: Replacement

Est. Useful Life: 5-10 years

Project Status: New

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	425,000	0	0	0	0	425,000	0	0	0	0	0	0	425,000
<u>Funding Sources</u>													
Roanoke County - Unrestricted Cash	425,000	0	0	0	0	425,000	0	0	0	0	0	0	425,000
Total Funding Sources	425,000	0	0	0	0	425,000	0	0	0	0	0	0	425,000
Operating Impacts			0	0	0	0	18,100	18,643	19,202	19,778	20,372	20,983	117,078



Project Summary:

The Voting Machine Replacement project, planned in FY 2024, will replace Roanoke County's existing voting equipment, the Unisyn OpenElect Voting Optical Scan (OVO) and OpenElect Voting Optical Interface (OVI), initially acquired in 2015. These machines will reach the end of their useful life within 10 years of use. Funding required to replace these systems is anticipated to be \$425,000, and equipment needs will be evaluated closer to the planned funding year.



Voting Machine Replacement (continued)

Project Description and Justification:

The Voting Machine Replacement project, planned in FY 2024, will replace Roanoke County’s existing voting equipment, the Unisyn OpenElect Voting Optical Scan (OVO) and OpenElect Voting Optical Interface (OVI), initially acquired in 2015. These machines will reach the end of their useful life within 10 years of use. Funding required to replace these systems is anticipated to be \$425,000, and equipment needs will be evaluated closer to the planned funding year. Any new equipment purchased would require to be certified by the US Election Assistance Commission (EAC) and the Virginia Department of Elections.

Additional Operating Impacts:

The department currently spends \$18,080 on hardware warranties and firmware for voting equipment. Potential savings or increases will be determined closer to the planned year of funding.

Conformance with Plans, Policies, and Legal Obligations:

Equipment must be certified by the U.S. Election Assistance Commission, meet requirements set forth in Virginia Code, and by the Virginia Department of Elections/State Board of Elections.

Project Highlights and Key Milestones:

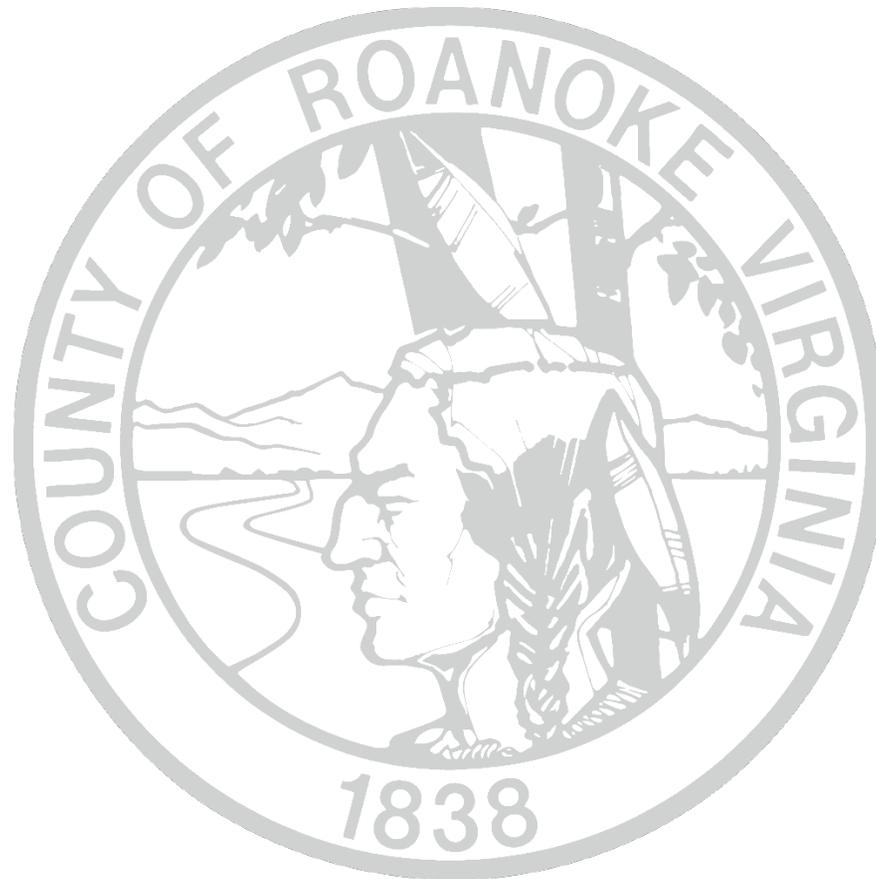
- Roanoke County’s existing voting equipment acquired in 2015, with a maximum useful life of 10 years.
- Replacement of systems is planned for FY 2024 with \$425,000 in funding.
- Any new equipment would be certified by the EAC and the Virginia Department of Elections.







Internal Services Functional Team





County of Roanoke, Virginia FY 2021 – FY 2030 Adopted Capital Improvement Program Internal Services Summary

Note: Projects with \$0 in FY 2021-2030 are active projects that have been fully funded in prior fiscal years.

Functional Team/Department/Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 21-30 Total
Internal Services											
Communications & IT											
County-Wide Computer Replacement Program	\$0	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$2,097,000
IT Infrastructure Repl. Capital Maintenance Program	0	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	5,850,000
<i>CommIT Total</i>	0	883,000	883,000	883,000	883,000	883,000	883,000	883,000	883,000	883,000	7,947,000
Finance											
Integrated Financial System (IFS)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Dynamics D365 Upgrade	720,000	0	0	0	0	0	0	0	0	0	\$720,000
<i>Finance Total</i>	720,000	0	0	0	0	0	0	0	0	0	720,000
Finance/Human Resources											
Human Resources and Payroll Modules	659,400	0	888,360	0	0	0	0	0	0	0	1,547,760
<i>Finance/Human Resources Total</i>	659,400	0	888,360	0	0	0	0	0	0	0	1,547,760
General Services											
Bent Mountain Comm. Center Repairs & Renovations	0	0	0	0	0	0	0	0	0	0	0
General Service Capital Maintenance Program	596,924	880,000	880,000	880,000	880,000	880,000	880,000	980,000	960,000	945,000	8,761,924
Public Service Center Facility Replacement	0	0	3,704,000	0	0	0	0	0	0	0	3,704,000
Administration Center Envelope Repairs	0	0	231,000	0	0	0	0	0	0	0	231,000
Administration Center Carpet Replacement	0	0	244,000	0	0	0	0	0	0	0	244,000
Public Safety Center Updates	0	0	0	0	0	750,000	0	0	0	0	750,000
Administration Center Facility Updates	0	0	0	0	0	0	0	0	1,500,000	0	1,500,000
<i>General Services Total</i>	596,924	880,000	5,059,000	880,000	880,000	1,630,000	880,000	980,000	2,460,000	945,000	15,190,924
Internal Services Total	\$1,976,324	\$1,763,000	\$6,830,360	\$1,763,000	\$1,763,000	\$2,513,000	\$1,763,000	\$1,863,000	\$3,343,000	\$1,828,000	\$25,405,684



County-Wide Computer Replacement Program

Department: Communications & Information Technology

Category: Replacement

Location: Countywide

Est. Useful Life: 5 – 10 years

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	2,880,000	783,000	0	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	2,097,000
Funding Sources													
CommIT Fund Transfer	2,880,000	783,000	0	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	2,097,000
Total Funding Sources	2,880,000	783,000	0	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	2,097,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

Beginning in FY 2018, the County-Wide Computer Replacement program became part of the ten-year CIP. The program is necessary to ensure that employees have adequate computing power and that the latest security measures are always met by maintaining computer systems. With this program, Communications & Information Technology will streamline the specification, acquisition, and deployment of new equipment and disposal of old equipment. This program assures that appropriate computing resources are available for departments to support the needs of Roanoke County's business processes. Due to the limited available funding related to the COVID-19 pandemic, funding for FY 2021 is eliminated and will be evaluated with the development of the FY 2022 – FY 2031 CIP.



County-Wide Computer Replacement Program (continued)

Project Description and Justification:

The Computer Replacement Program operates on a five-year replacement cycle that keeps County workstations with the most up-to-date operating systems and internal hardware. The County-Wide Computer Replacement program is necessary to ensure that employees have adequate computing power and that the latest security measures are met by maintaining computer systems. Beginning in FY 2018, the County-Wide Computer Replacement program became part of the ten year CIP.

With this program, Communications & Information Technology will streamline the specification, acquisition, and deployment of new equipment and disposal of old equipment. This program assures that appropriate computing resources are available for departments to support the needs of Roanoke County's business processes. The project is planned for future funding by transferring \$233,000 annually from the CommIT Fund, which is a reduction from \$275,000 scheduled in prior years due to the County no longer purchasing five year warranties on new products. Due to the limited available funding related to the COVID-19 pandemic, funding for FY 2021 is eliminated and will be evaluated with the development of the FY 2022 – FY 2031 CIP.

Additional Operating Impacts:

There are no anticipated operating impacts.

Conformance with Plans, Policies, and Legal Obligations:

Proper computer resources are necessary to the functions of all Roanoke County departments.

Project Highlights and Key Milestones:

- Program became part of the ten year CIP beginning in FY 2018.
- Computer Replacement Program will replace all computers on a five-year rotation.
- Program will improve disposal of old/outdated equipment.
- Program scheduled to receive \$233,000 annually from FY 2022 through FY 2030 during the FY 2021 – FY 2030 CIP.

Community Strategic Plan

Connect Roanoke County to the World

Improve Communications and Data Technology in both the Business Sector & in Residential Settings



IT Infrastructure Replacement Capital Maintenance Program

Department: Communications & Information Technology

Category: Replacement

Location: Countywide

Est. Useful Life: Varies

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	7,425,000	1,575,000	0	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	5,850,000
Funding Sources													
CommIT Fund Transfer Allocation of FY 2019	7,175,000	1,325,000	0	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	5,850,000
Year End Funding	250,000	250,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	7,425,000	1,575,000	0	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	5,850,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

Beginning in FY 2018, the IT Infrastructure Replacement Capital Maintenance Program became part of the 10 year CIP. The IT Infrastructure Replacement Capital Maintenance Program (CMP) supports maintenance and repairs to Roanoke County’s network infrastructure, which are vital to supporting business operations. This system, comprised of thousands of individual components representing a multimillion dollar investment, connects to every department, throughout multiple County facilities, and supports Public Safety systems 24 hours a day/7 days a week. Due to the limited available funding related to the COVID-19 pandemic, funding for FY 2021 is eliminated and will be evaluated with the development of the FY 2022 – FY 2031 CIP.



IT Infrastructure Replacement Capital Maintenance Program (continued)

Project Description and Justification:

The IT Infrastructure Replacement Capital Maintenance Program (CMP) will support maintenance and repairs to Roanoke County's network infrastructure, which are vital to supporting business operations. This system, comprised of thousands of individual components representing a multimillion dollar investment, connects to every department, throughout multiple County facilities, and supports Public Safety systems 24 hours a day/7 days a week. The IT Infrastructure Replacement CMP transfers \$650,000 annually from FY 2022 through FY 2030 from the Communications & Information Technology Fund.

Maintaining this infrastructure life cycle is crucial to supporting our citizens and staff. Possible adverse effects of delaying this network infrastructure upgrade cycle include slowdown of 9-1-1 response times, the inability to store or back up critical business information, and the reduction of security effectiveness, and the possible delayed or unavailable citizen or employee access to systems and data. Due to the limited available funding related to the COVID-19 pandemic, funding for FY 2021 is eliminated and will be evaluated with the development of the FY 2022 – FY 2031 CIP.

Additional Operating Impacts:

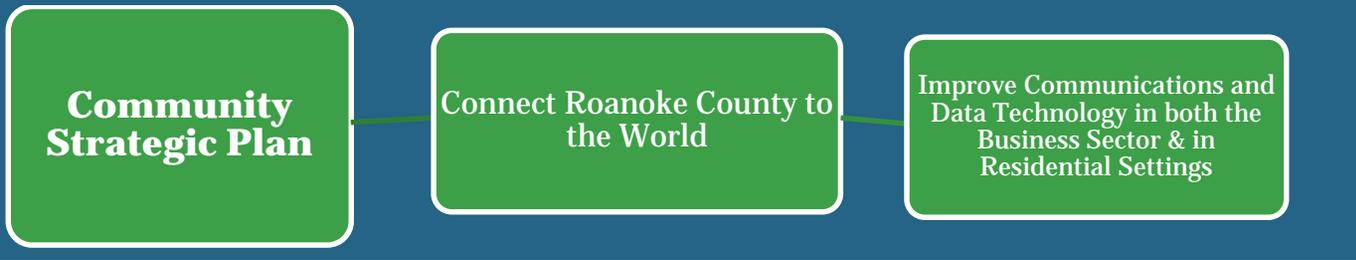
There are no anticipated operating impacts.

Conformance with Plans, Policies, and Legal Obligations:

Proper information technology resources are necessary to the functions of all Roanoke County departments.

Project Highlights and Key Milestones:

- Program became part of the ten year CIP beginning in FY 2018.
- Network infrastructure is a vital component for everyday business functions for all departments.
- Program will replace network infrastructure as necessary.
- Program received \$250,000 in FY 2019 year end funds in addition to \$225,000 appropriated in FY 2020.
- Program scheduled to receive \$650,000 annually each year from FY 2022 – FY 2030 CIP.





Integrated Financial System (IFS)

Department: Finance

Category: Replacement

Location: Countywide

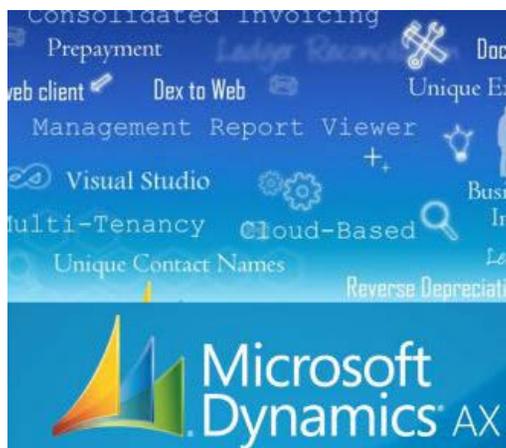
Est. Useful Life: 15-20 years

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	3,996,390	3,996,390	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Roanoke County -													
Unrestricted Cash	2,496,390	2,496,390	0	0	0	0	0	0	0	0	0	0	0
Transfer from Schools	1,500,000	1,500,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	3,996,390	3,996,390	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Integrated Financial System (IFS) project, fully funded in prior years, replaced and enhanced the financial software systems used by the County of Roanoke, Roanoke County Schools, and the Western Virginia Regional Jail Authority. IFS supports the integration of key financial business processes, supports process automation, and allows data to be entered or updated only once. Replacement was necessary as the vendor of the prior financial system would not commit any new resources to development and support was limited. The new finance system went live on July 1, 2016. This remains an active project due to the need for enhanced reporting capabilities which are currently being developed by the project vendor.



Integrated Financial System (IFS) (continued)

Project Description and Justification:

An Integrated Financial System (IFS) replaced the financial software systems used by the County of Roanoke, Roanoke County Schools, and the Western Virginia Regional Jail Authority. IFS supports the integration of key financial business processes and allows data to be entered or updated only once. The goal is to have all related financial processes in one system to share data and eliminate the need for system interfaces allowing for a more efficient and cost effective work environment.

Additional Operating Impacts:

This project had a minimal impact on the operating budget as the County paid for licensing and maintenance of software associated with the previous system. The County, Roanoke County Public Schools, and the Western Virginia Regional Jail Authority share a single financial system which has saved County citizens a substantial amount of tax dollars over the years in independent licensing.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms with the Board of Supervisors stated mission to provide high quality delivery of services to the citizens of Roanoke County. It allows County Administration to have real time financial data available which is instrumental in making informed decisions on how to enhance public health, safety, and/or welfare issues, protect our existing investment in facilities and infrastructure while anticipating future needs. It also ensures the County complies with applicable state and federal mandates by providing the applicable financial data for reporting purposes.

Project Highlights and Key Milestones:

- The existing financial data software was used by the County since 1990 and was purchased by a new vendor in 2010.
- Vendor would not commit resources to new development, but continued to service the software for limited time.
- Integrated Financial System went live in July 2016.
- Dynamics AX 2012 was upgraded to Dynamics AX 2012 R3 CUI3 in May of 2018.

**Organizational
Strategic Plan**

Responsive Service
Delivery

Develop a Strategy to
Streamline Processes and
Services



Dynamics D365 Upgrade

Department: Finance, Communications & Information Technology

Category: Replacement

Location: Countywide

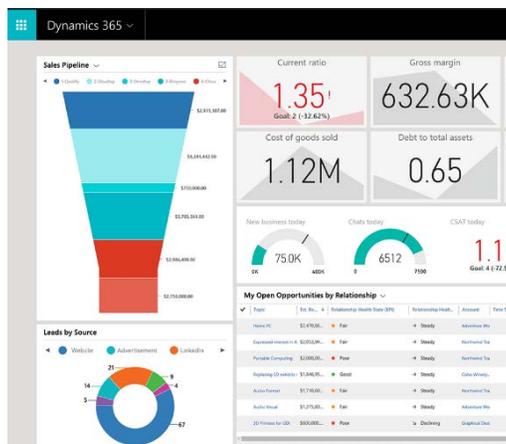
Est. Useful Life: 5 years

Magisterial District: Countywide

Project Status: Planned

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	720,000	0	720,000	0	0	0	0	0	0	0	0	0	720,000
Funding Sources													
Roanoke County -													
Unrestricted Cash	360,000	0	360,000	0	0	0	0	0	0	0	0	0	360,000
Transfer from Schools	360,000	0	360,000	0	0	0	0	0	0	0	0	0	360,000
Total Funding Sources	720,000	0	720,000	0	0	0	0	0	0	0	0	0	720,000
Operating Impacts			0	TBD									



Project Summary:

The Dynamics D365 Upgrade Project, planned for FY 2021, will upgrade the integrated financial system for the County, Roanoke County Public Schools and the entities for whom the County serves as fiscal agent. The Finance Department went live with Microsoft Dynamics AX 2012 as the County's integrated financial system platform in July of 2016. This project will focus on the upgrade of Dynamics AX 2012 to the next generation of the Dynamics platform, D365. This upgrade will allow the County to ensure continued support from Microsoft for this platform while providing additional functional and technical enhancements that will simplify the use and support of this system. Funding for this project is split 50/50 between the County and Roanoke County Public Schools.



Dynamics D365 Upgrade (continued)

Project Description and Justification:

The Dynamics D365 Upgrade Project, planned for FY 2021, will upgrade the integrated financial system for the County, Roanoke County Public Schools and the entities for whom the County serves as fiscal agent. The Finance Department went live with Microsoft Dynamics AX 2012 as the County’s integrated financial system platform in July of 2016. Microsoft will no longer support the County’s current platform in October 2021. This project will focus on the upgrade of Dynamics AX 2012 to the next generation of the Dynamics platform, D365.

This upgrade will allow the County to ensure continued support from Microsoft for this platform while providing additional functional and technical enhancements that will simplify the use and support of this system. Funding for this project is split between the County and Roanoke County Public Schools.

Additional Operating Impacts:

Additional operating impacts are expected with shifting the platform hosting from onsite to Microsoft’s data centers. Microsoft’s preferred operating model for D365 is “Software as a Service (SaaS)” where the software is hosted and running in Microsoft’s data centers. This model has a higher yearly cost but also has advantages in that it avoids the related infrastructure costs for running the software on premise.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms with the Board of Supervisors stated mission to provide high quality delivery of services to the citizens of Roanoke County. The project will ensure the County complies with applicable state and federal mandates by providing relevant financial data for reporting purposes.

Project Highlights and Key Milestones:

- Dynamics AX 2012 was implemented in July of 2016 replacing the legacy Performance accounting system.
- Dynamics AX 2012 was upgraded to Dynamics AX 2012 R3 CUI3 in May of 2018.
- Microsoft mainstream support for Dynamics AX 2012 R3 will End in October of 2021.
- This project is targeted to begin in September 2020 with completion and Go Live July 2021.





Human Resources and Payroll Modules

Department: Human Resources and Finance

Category: Replacement

Location: Countywide

Est. Useful Life: 15 years

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	3,403,169	1,855,409	659,400	0	888,360	0	0	0	0	0	0	0	1,547,760
Funding Sources													
Roanoke County - Unrestricted Cash	1,800,969	1,057,089	299,700	0	444,180	0	0	0	0	0	0	0	743,880
Transfer from Schools	1,602,200	798,320	359,700	0	444,180	0	0	0	0	0	0	0	803,880
Total Funding Sources	3,403,169	1,855,409	659,400	0	888,360	0	0	0	0	0	0	0	1,547,760
Operating Impacts			(54,175)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD



Project Summary:

The Human Resources (HR) and Payroll project, with funding planned from FY 2018 to FY 2022, will further invest in the current Human Resources and Payroll system, Infor/Lawson. This project will also migrate the current modules utilized by the County of Roanoke, Roanoke County Schools, and the Western Virginia Regional Jail Authority to the new platform, Infor/Lawson CloudSuite HCM and Payroll. The current HR and Payroll systems will be decommissioned in the near future and require migration to the new platform. Project costs are shared with Roanoke County Schools.



Human Resources and Payroll Modules (continued)

Project Description and Justification:

The Human Resources (HR) & Payroll project, planned from FY 2018 to FY 2021, will require an additional investment in the Infor/Lawson HR and Payroll systems. The HR and Payroll systems will be decommissioned and require migration to a new platform. These systems also require compatibility with the new Integrated Financial System (IFS) implemented in 2016. Infor/Lawson CloudSuite HCM and Payroll will provide required platform changes and needed functionality. The modules that will be acquired with this project include Global HR, Performance and Goals, Talent Acquisition, and Global Payroll. HR and Payroll will be upgraded to the Global HR module with this project. Project costs are shared with Roanoke County Public Schools.

Additional Operating Impacts:

This project will migrate Infor/Lawson from a hosted solution to software as a service and will impact the operating budget. Operating expenses are expected to decrease by \$54,175 in FY 2021. Operating impacts beyond FY 2021 will be developed with the implementation of the new platform.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms with the Board of Supervisors stated mission to provide high quality delivery of services to the citizens of Roanoke County. It will provide daily support to the operations and functions of all County departments and will allow County Administration to have real time financial data available which is instrumental in making informed decisions while anticipating future needs.

Project Highlights and Key Milestones:

- The County has been using the current human resources and payroll software since 1999.
- Current platform of Infor/Lawson is being decommissioned.
- Initial planning began in FY 2017 for the HR and Payroll Modules, with implementation scheduled from FY 2018 – FY 2021.
- The first phase of implementation of the HR and Payroll system began in September 2018 and was completed in Spring 2020.
- Talent Acquisition phase will begin in FY 2021.
- Migration to Infor’s CloudSuite payroll platform planned to begin in FY 2022.
- Costs are shared with Roanoke County Schools.

**Organizational
Strategic Plan**

Responsive Service
Delivery

Develop a Strategy to
Streamline Processes and
Services



Bent Mountain Community Center Repairs and Renovations

Department: General Services

Category: Replacement

Location: 10140 Tinsley Lane, Bent Mountain, VA 24059

Est. Useful Life: 20-25 years

Magisterial District: Windsor Hills

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	700,000	700,000	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Roanoke County -													
Unrestricted Cash	200,000	200,000	0	0	0	0	0	0	0	0	0	0	0
Private Capital													
Contributions	500,000	500,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	700,000	700,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			TBD										



Project Summary:

The Bent Mountain Community Center Repairs and Renovations project will identify and address maintenance and repair needs for the facility. The Bent Mountain Community Center is housed in the former Bent Mountain Elementary School, originally constructed in the 1930s with an addition built in 1990. Following the school's closure in 2010, the County took ownership of the property in 2011 and executed a lease with the Bent Mountain Center, Inc. in 2013. The Center is currently used by the Civic League for community activities and programs. Various building systems and components have well exceeded the end of their useful life and based on their actual condition necessitate investment in the facility for continued utilization. Total project funding for this project is \$700,000 with \$500,000 from Section 106 Historic Mitigation funding associated with the Mountain Valley Pipeline.



Bent Mountain Community Center Repairs and Renovations (continued)

Project Description and Justification:

The Bent Mountain Community Center Repairs and Renovations project addresses maintenance and repair needs for various building systems and components that have exceeded the end of their useful life. The Center, turned over to the Roanoke County Board of Supervisors in 2011, is currently leased to the Bent Mountain Center, Inc.

Phase I of this project will address the significant roofing issues related to the building. This includes replacement of the built-up flat roof sections, repairs to the slate and metal seam roof sections, and necessary related structural and insulation repairs. The design work has been completed and approval provided by the Commonwealth of Virginia Department of Historic Resources.

A subsequent Phase II for the project will prioritize design and construction needs with remaining project funding. Phase II Engineering and Design began in Fall 2019.

Additional Operating Impacts:

Direct impact to the operating budget from repairs and renovations to the Bent Mountain Community Center are unknown at this time. There is potential for increased maintenance costs to various system upgrades including HVAC.

Conformance with Plans, Policies, and Legal Obligations:

Maintenance and upkeep of County assets are necessary to maximize the potential of taxpayer funded buildings and facilities. The priorities of this existing CIP project incorporate deficiencies identified in the 2019 Facility Conditions Assessment.

Project Highlights and Key Milestones:

- Bent Mountain Elementary School constructed in 1930s with addition built in 1990.
- Elementary School closed in 2010, and County Board of Supervisors took ownership in 2011.
- In 2013, the Board executed a lease with Bent Mountain Center, Inc. to use a portion of the facility for community programs.
- In 2018, the Board approved an amendment of the lease to include use of the entire center.
- Roanoke County contracted with A&E firm to provide assessment on necessary repairs and renovations.
- Section 106 Historic Mitigation funding provided \$500,000 for the project.





General Services Capital Maintenance Program

Department: General Services

Category: Capital Maintenance Program

Location: Countywide

Est. Useful Life: 10-15 years

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	12,620,498	3,858,574	596,924	880,000	880,000	880,000	880,000	880,000	880,000	980,000	960,000	945,000	8,761,924
Funding Sources													
Roanoke County - Unrestricted Cash	12,620,498	3,858,574	596,924	880,000	880,000	880,000	880,000	880,000	880,000	980,000	960,000	945,000	8,761,924
Total Funding Sources	12,620,498	3,858,574	596,924	880,000	880,000	880,000	880,000	880,000	880,000	980,000	960,000	945,000	8,761,924
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The General Services Capital Maintenance Program (CMP) is the vehicle in which County assets are programmed to receive regular maintenance and repair. Dedicating funding each year to the General Services CMP will fund repairs and maintenance maximizing the life of County facilities, lots, electrical systems, and plumbing systems. A comprehensive, independent Facility Conditions Assessment was completed in 2019 and will be utilized as a resource for developing current and future needs.



Capital Maintenance Program (continued)

Project Description and Justification:

The Capital Maintenance Program (CMP) is the mechanism that provides funding for applicable facilities maintenance and repair expenses. Ongoing preventive maintenance of facilities will ensure the safety and value of County assets while avoiding repair costs from lack of proper maintenance.

The program, administered by General Services, incorporates strategic evaluation and planning to maintain County infrastructure to provide for both the short and long term operational needs. The FY 2021 CMP plan will continue to focus on the core facility needs of the County while also continuing to prioritize and address long-term component investment in areas such as parking lots and roofs at a stage that mitigates additional expenditures that would be realized if deferred. CMP funding is also necessary to address projects related to service delivery needs for Departments.

Additional Operating Impacts:

Direct impact to the operating budget from the Capital Maintenance Program primarily comes from the additional staff time necessary to assess and implement repairs and maintenance. While repair and maintenance projects can have significant upfront costs, the long-term effect is a reduction in overall total cost and an increase in departmental efficiency. Over time, it is expected that ongoing preventive maintenance will reduce operating costs and enhance service levels.

Conformance with Plans, Policies, and Legal Obligations:

Maintenance and upkeep of assets is necessary to maximize the potential of buildings and facilities, which directly and indirectly supports all of the County's Community Strategic Plan Initiatives. The Facility Conditions Assessment helps inform overall General Services CMP planning needs.

Project Highlights and Key Milestones:

- In FY 2016, CMP expanded to 10-year funding schedule and is included in the current CIP.
- The General Services CMP services County facilities, replacing HVAC units, electrical and lighting systems, heaters, renovating buildings, upgrading building automated security systems, and repairing asphalt.
- A comprehensive Facility Conditions Assessment study was completed in 2019 and is utilized to inform overall CMP planning needs.





Public Service Center Facility Replacement

Department: General Services

Category: Replacement

Location: 1206 Kessler Mill Road, Salem, VA 24153

Est. Useful Life: 30 years

Magisterial District: City of Salem

Project Status: Active

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	15,254,000	11,550,000	0	0	3,704,000	0	0	0	0	0	0	0	3,704,000
Funding Sources													
Roanoke County -													
Unrestricted Cash	500,000	500,000	0	0	0	0	0	0	0	0	0	0	0
Fleet Center Fund	50,000	50,000	0	0	0	0	0	0	0	0	0	0	0
Lease/Revenue Bonds	14,704,000	11,000,000	0	0	3,704,000	0	0	0	0	0	0	0	3,704,000
Total Funding Sources	15,254,000	11,550,000	0	0	3,704,000	0	0	0	0	0	0	0	3,704,000
Operating Impacts			0	0	0	TBD							



Project Summary:

The Public Service Center Facility Replacement Project implements a strategy that best blends operational efficiencies with overall cost effectiveness based on a comprehensive Building Planning Study completed in FY 2017. This project was initiated to address the multiple issues related to the current facility/site to include the condition of the facility, significant storm water challenges, location within the Federal Emergency Management Agency (FEMA) designated 100-year flood plain, and the cumulative resulting feasibility limitations for long term use of the site for existing County functions. In FY 2020, \$10.0 M in bonds funds the construction of Phase I of the project. Phase II of the project is planned for funding in FY 2023 with \$3.7 M in bonds.



Public Service Center Facility (continued)

Project Description and Justification:

The Public Service Center Facility Replacement Project began in FY 2017 with the completion of a Building Planning Study. In FY 2018, a contract for acquisition on or before July, 2019 was executed on a key piece of property necessary for expansion of the existing County Fleet Service Center.

In FY 2019, Architectural and Engineering services for Phase I of the project were contracted and commenced. Phase I includes expansion of the existing Fleet Services Center for all General Services department functions, renovation of a section of the facility adjacent to the Fleet Service Center for relocation of the Communications Shop and site management functions for Communications & Information Technology, utilization of the existing Public Service Center site not located within the flood plain for Stormwater Operations, and the relocation a district shop for the Parks, Recreation, and Tourism Department to Green Hill Park.

In FY 2020, the County purchased two additional properties on Hollins Road for the future relocation of Parks, Recreation and Tourism offices and warehouse needs as Phase II of the project. Phase II is currently anticipated to commence in FY 2023.

Additional Operating Impacts:

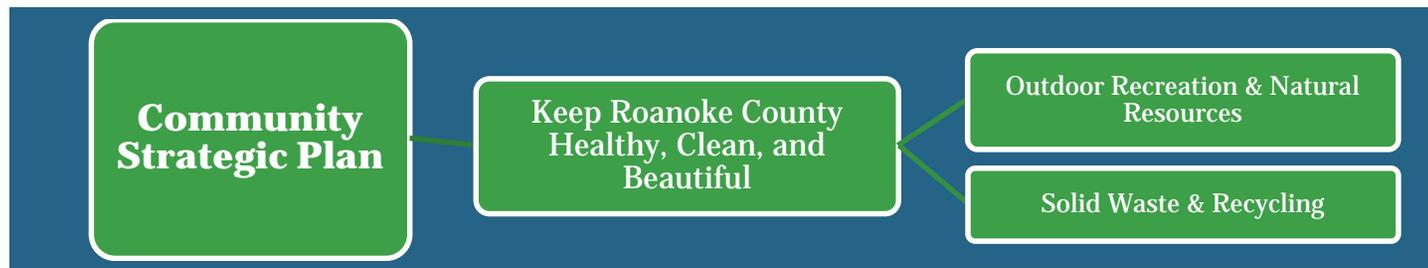
Maintenance costs for the building will likely decrease with the completion of multiple phases of the project. Non-deferrable short and long term maintenance needs for the existing facility can be redirected for other facility infrastructure operating or maintenance needs.

Conformance with Plans, Policies, and Legal Obligations:

The Public Service Center is a core facility that provides support to all departments and direct delivery of major services/programs to citizens.

Project Highlights and Key Milestones:

- The building, originally constructed in 1950, is located in a flood plain, and flooded in 1985 and 2004.
- The facility is regularly impacted by water entering both office and operational space during periods of heavy rain due to inadequate drainage.
- In FY 2017, a Building Planning Study was commissioned to identify a replacement strategy.
- In FY 2019, Architectural and Engineering design services for Phase I were completed.
- In FY 2020, the County contracted for the acquisition of property to facilitate the relocation of Parks, Recreation & Tourism, currently planned for FY 2023 construction.





Administration Center Building Envelope Repairs

Department: General Services

Category: Replacement

Location: 5204 Bernard Drive, Roanoke, VA 24018

Est. Useful Life: 8-12 years

Magisterial District: Cave Spring

Project Status: New

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	231,000	0	0	0	231,000	0	0	0	0	0	0	0	231,000
Funding Sources													
Lease/Revenue Bonds	231,000	0	0	0	231,000	0	0	0	0	0	0	0	231,000
Total Funding Sources	231,000	0	0	0	231,000	0	0	0	0	0	0	0	231,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Administration Center Building Envelope Repairs project, planned for funding in FY 2023, will address issues with the building envelope, which continues to degrade. A structural engineering report was conducted in 2018 to evaluate the entire building envelope. Air gaps, water infiltration, insect issues, and failing windows were identified as issues. Funding in the amount of \$231,000 is planned to wet seal the building windows and utilize joint sealant for the gaps. This solution is estimated by the contracted structural engineering firm to address the issue for 8-12 years. The Facility Conditions Assessment identified Roanoke County Administration Center building envelope as a deficiency.



Administration Center Building Envelope Repairs (continued)

Project Description and Justification:

The Administration Center Building Envelope Repairs project, funded in FY 2023, plans to address issues with building envelope, which continues to degrade. A structural engineering report was conducted in 2018 to evaluate the entire building envelope. Air gaps, water infiltration, insect issues and failing windows were identified issues. Funding in the amount of \$231,000 is planned to wet seal the building windows and utilize joint sealant for the gaps. This solution is estimated by the contracted structural engineering firm to address the issue for 8-12 years.

The 2019 Facility Conditions Assessment concurs with the structural engineering report and categorizes these repairs as current deficiencies and includes this scope of work in the resulting recommended 5-year action plan.

Additional Operating Impacts:

No additional operating impacts are anticipated.

Conformance with Plans, Policies, and Legal Obligations:

Maintenance and upkeep of County assets is necessary to maximize the potential of taxpayer funded buildings and facilities, which directly and indirectly supports all of the County's Community Strategic Plan Initiatives. Project identified as a deficiency within the 2019 Facility Conditions Assessment.

Project Highlights and Key Milestones:

- General Services has seen increasing issues with the building exterior.
- Structural Engineering Report with evaluation and recommendations provided in 2018.
- 2019 Facility Conditions Assessment identified Roanoke County Administration Center Building Envelope as a deficiency.

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Administration Center Carpet Replacement

Department: General Services

Category: Replacement

Location: 5204 Bernard Drive, Roanoke, VA 24018

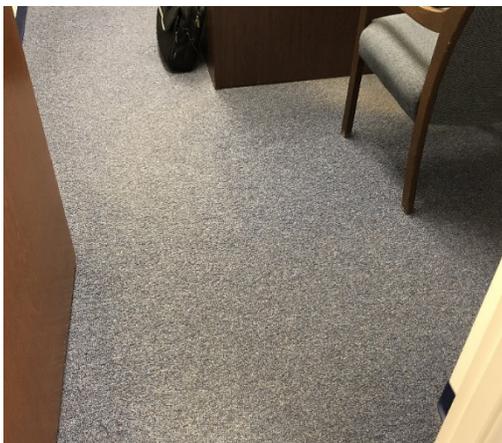
Est. Useful Life: 10-15 years

Magisterial District: Cave Spring

Project Status: New

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	244,000	0	0	0	244,000	0	0	0	0	0	0	0	244,000
Funding Sources													
Lease/Revenue Bonds	244,000	0	0	0	244,000	0	0	0	0	0	0	0	244,000
Total Funding Sources	244,000	0	0	0	244,000	0	0	0	0	0	0	0	244,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Administration Center Carpet Replacement project will replace worn and stained carpet throughout the building. The exact date of placement is unknown but the areas planned have exceeded their useful life and are categorized as deficiencies by the 2019 Facility Conditions Assessment. This project is planned in FY 2023 with \$0.24 million in bond funding.



Administration Center Carpet Replacement (continued)

Project Description and Justification:

The County Administration Building is a major County facility that is heavily used by the building occupants and public. The carpet is planned for replacement with a commercial grade nylon carpet. The carpet on each floor is significantly worn and stained. Carpet squares are the preferred product type

The 2019 Facility Conditions Assessment categorizes this as a current deficiency. Based on the comparative criticality as compared to other identified deficiencies, the Assessment develops a maintenance action plan that is spread out over a five-year period. While in need of current replacement, the project is planned for funding in FY 2023 as recommended in the Assessment.

Additional Operating Impacts:

No additional operating impacts are anticipated.

Conformance with Plans, Policies, and Legal Obligations:

Maintenance and upkeep of County assets is necessary to maximize the potential of taxpayer funded buildings and facilities, which directly and indirectly supports all of the County's Community Strategic Plan Initiatives. Project identified as a part of Facility Conditions Assessment.

Project Highlights and Key Milestones:

- The carpet planned for replacement has well exceeded useful life and is worn and stained.
- The 2019 Facility Conditions Assessment includes these areas as deficiencies in need of replacement and predicts failure beyond just worn carpet within 3 years for sections.
- \$244,000 in bond funding is planned for FY 2023 to replace carpet throughout the Administration Center.

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Public Safety Center Facility Updates

Department: General Services – Public Safety Center

Category: Replacement

Location: Public Safety Center, 5925 Cove Rd, Roanoke, VA 24019

Est. Useful Life: Varies

Magisterial District: Catawba

Project Status: New

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	750,000	0	0	0	0	0	0	750,000	0	0	0	0	750,000
Funding Sources													
Lease/Revenue Bonds	750,000	0	0	0	0	0	0	750,000	0	0	0	0	750,000
Total Funding Sources	750,000	0	0	0	0	0	0	750,000	0	0	0	0	750,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Roanoke County Public Safety Center Facility Updates project is planned to replace and update HVAC components that are approaching the end of their useful life. In FY 2026, \$0.75 million in bond funding is planned to address HVAC component needs within the facility including rooftop units, packaged units, and variable air volume boxes throughout the building. The exact scope of work will be evaluated closer to the funding year. This project was identified as a need within the 2019 Facility Conditions Assessment.



Public Safety Center Facility Updates (continued)

Project Description and Justification:

The Roanoke County Public Safety Center Facility Updates project is planned to replace and update HVAC components that are approaching the end of their useful life. In FY 2026, \$0.75 million in bond funding is planned to address HVAC component needs within the facility including rooftop units, packaged units, and variable air volume boxes throughout the building. The exact scope of work will be evaluated closer to the funding year. This project was identified as a need within the 2019 Facility Conditions Assessment.

The Public Safety Center building was constructed in 2006 and dedicated in 2007. The building currently houses police, fire and rescue, E-911 communications center, and information technology staff.

Additional Operating Impacts:

Minimal energy savings should be obtained due to efficiency improvements but cannot be quantified at this time.

Conformance with Plans, Policies, and Legal Obligations:

Maintenance and upkeep of County assets is necessary to maximize the potential of taxpayer funded buildings and facilities, which directly and indirectly supports all of the County's Community Strategic Plan Initiatives. This project was identified as a need within the 2019 Facility Conditions Assessment.

Project Highlights and Key Milestones:

- Roanoke County Public Safety Center was constructed in 2006.
- The building houses police, fire and rescue, E-911 and information technology staff.
- In FY 2026, \$0.75 million in bond funding is planned to address HVAC needs within the facility that will be evaluated closer to the funding year.
- This project was identified as a need within the 2019 Facility Conditions Assessment.

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Administration Center Facility Updates

Department: General Services

Category: Replacement

Location: 5204 Bernard Drive, Roanoke, VA 24018

Est. Useful Life: Varies

Magisterial District: Cave Spring

Project Status: New

Financial Summary

	Total Cost	Through FY 2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Total FY 21 - FY 30
Total Project Cost	1,500,000	0	0	0	0	0	0	0	0	0	1,500,000	0	1,500,000
Funding Sources													
Lease/Revenue Bonds	1,500,000	0	0	0	0	0	0	0	0	0	1,500,000	0	1,500,000
Total Funding Sources	1,500,000	0	0	0	0	0	0	0	0	0	1,500,000	0	1,500,000
Operating Impacts			0	0	0	0	0	0	0	0	0	TBD	TBD



Project Summary:

The Administration Center Facility Updates project is planned to address issues identified in the 2019 Facility Conditions Assessment. In FY 2029, \$1.5 million in bond funding is proposed to address issues including HVAC and potentially other facility needs that will be evaluated closer to the funding year. The Administration Center building was constructed in 1981 with an open space floor plan that was subsequently reconfigured to meet the needs of the County. In 2017, a limited evaluation recommended a comprehensive HVAC replacement.



Administration Center Facility Updates (continued)

Project Description and Justification:

The Administration Center Facility Updates project is planned to address issues identified in the 2019 Facility Conditions Assessment. In FY 2029, \$1.5 million in bond funding is proposed to address issues including HVAC and potentially other facility needs that will be evaluated closer to the funding year.

The County commissioned a limited mechanical study in 2017 to evaluate and provide for recommendations on short- and long-term needs. The report indicated that the entire system should be replaced and would need to include more detailed engineering analysis to develop the comprehensive scope as this will be a significant project that includes replacement and construction in all areas of the building. The 2019 Facility Conditions Assessment indicates that there are significant current and future liabilities related to the building's HVAC systems.

Additional Operating Impacts:

No additional operating impacts are currently anticipated.

Conformance with Plans, Policies, and Legal Obligations:

Maintenance and upkeep of County assets is necessary to maximize the potential of taxpayer funded buildings and facilities, which directly and indirectly supports all of the County's Community Strategic Plan Initiatives. Project identified as a part of Facility Conditions Assessment.

Project Highlights and Key Milestones:

- Roanoke County Administration Center was constructed in 1981 with an open space floor plan that was reconfigured to meet the County's needs.
- Many of the building's mechanical components are original to the building and will require strategic replacement.
- 2017 limited engineering evaluation recommended a comprehensive replacement.
- 2019 Facility Conditions Assessment recommends a comprehensive engineering analysis to identify and quantify the scope and HVAC needs.

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Roanoke County Public Schools





County of Roanoke, Virginia FY 2021 – FY 2030 Adopted Capital Improvement Program Roanoke County Public Schools Summary

Note: Projects with \$0 in FY 2021-2030 are active projects that have been fully funded in prior fiscal years.

Roanoke County Public Schools											
Schools											
Cave Spring High School	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Maintenance Program	0	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	9,000,000
HR Payroll and Software System	451,650	444,180	0	0	0	0	0	0	0	0	895,830
Dynamics D365 Upgrade	360,000	0	0	0	0	0	0	0	0	0	360,000
William Byrd High School	17,158,000	3,000,000	0	0	0	0	0	0	0	0	20,158,000
WE Cundiff Elementary	224,253	4,996,995	685,179	6,515,323	4,481,688	0	0	0	0	0	16,903,438
Glen Cove Elementary	224,253	4,996,994	685,178	6,000,000	4,518,312	0	0	0	0	0	16,424,737
Burton Center for the Arts & Technology	0	0	0	842,130	4,392,494	1,418,764	13,440,255	13,427,693	1,319,325	12,603,987	47,444,648
<i>Schools Total</i>	18,418,156	14,438,169	2,370,357	14,357,453	14,392,494	2,418,764	14,440,255	14,427,693	2,319,325	13,603,987	111,186,653
Total, Roanoke County Public Schools Projects	\$18,418,156	\$14,438,169	\$2,370,357	\$14,357,453	\$14,392,494	\$2,418,764	\$14,440,255	\$14,427,693	\$2,319,325	\$13,603,987	\$111,186,653



**Roanoke County Public Schools
FY 2021 – FY 2030 Capital Improvement Program Overview**

As part of the County Administrator’s Adopted FY 2021-2030 Capital Improvement Program (CIP), projects approved by the Roanoke County Public Schools (RCPS) School Board are included in the ten-year plan. This section contains summary information on the RCPS ten-year CIP. The Roanoke County School Board approved their ten-year CIP on March 26, 2020. Due to anticipated reduced revenues related to the COVID-19 pandemic, RCPS presented a revised CIP to the School Board that was adopted on May 14, 2020. Additional RCPS CIP information can be found on the RCPS website as part of the March 26, 2020 and May 14, 2020 School Board meetings.

Roanoke County Public Schools Projects Summary

The RCPS adopted fiscal year 2021-2030 CIP includes \$111.19 million in projects and funding sources. The plan includes \$9.0 million (\$1.0 million annually from FY 2022 through FY 2030) for the Schools Capital Maintenance Program to address smaller capital needs across all Schools facilities. The plan also includes \$1.26 million for the RCPS share of an updated Human Resources and Payroll system (FY 2021-2022, \$0.896 million) and an upgrade to the shared financial system (FY 2021, \$0.36 million). The balance of funding (\$100.93 million) is planned for projects at specific facilities throughout the County. These projects include:

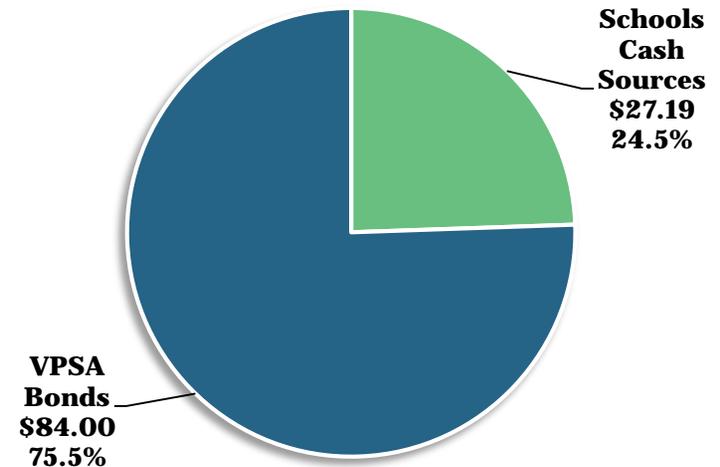
Project/Facility	Fiscal Year(s) Funding	FY 21-30 Funding
William Byrd High School	FY 2021-2022	\$20.16 million
WE Cundiff Elementary	FY 2021-2025	\$16.90 million
Glen Cove Elementary	FY 2021-2025	\$16.42 million
Burton Center for Arts & Technology	FY 2024-2030	\$47.44 million

Projects requested in the RCPS fiscal year 2021-2030 CIP are evaluated on an annual basis. The ten-year plan is updated annually to account for changes in project funding, School Board priorities, project costs, and project timing.

Roanoke County Public Schools Funding Summary

RCPS capital projects are funded by two primary sources: cash and bonds. RCPS cash sources total \$27.19 million over the ten-year plan. Bonds utilized by RCPS are Virginia Public Schools Authority (VPSA) bonds and total \$84.0 million over the ten-year plan.

**FY 2021 - FY 2030 RCPS Adopted CIP
Summary of Funding Sources
\$111.19 Million**



Cash sources comprise 24.5% of all funding sources, while VPSA bonds comprise 75.5% of total funding in the RCPS ten-year CIP.

Similar to the capital projects, capital funding is evaluated on an annual basis based on updated School Board priorities, new funding opportunities, and project timing as relates to planned bond issuances.



RCPS Capital Maintenance Program

The School Board is responsible for preserving and maintaining 32 physical buildings, totaling approximately 2.6 million square feet with a current average age of 50 years. Included in that total are sixteen (16) elementary schools, five (5) middle schools, five (5) high schools, and one (1) specialty high school. Other facilities include administration, transportation, warehouse, technology, and maintenance buildings.

As part of the RCPS CIP, \$1.0 million is budgeted annually for capital maintenance projects at RCPS facilities from FY 2022 through FY 2030. This funding will provide for the completion of projects including but not limited to HVAC improvements, roofing repairs, window replacements, and other infrastructure improvements which will extend the useful life of RCPS facilities and help avoid costly as-needed repairs which are often more expensive than providing planned infrastructure improvements. These projects are funded with \$9.0 million in RCPS cash sources over the life of the ten-year plan.

Human Resources and Payroll Module/Financial System

RCPS will be contributing funding to the County for a shared Human Resources and Payroll module. This system will connect to the current Integrated Financial System project being implemented through the County's Finance Department, and will provide an upgrade to Human Resources and Payroll modules. The RCPS portion of this project is estimated at \$0.896 million from FY 2021-2022.

Additionally, the County and Schools shared financial system is due for an upgrade in FY 2021. The total cost of the upgrade is estimated at \$0.72 million with the Schools share of the project (\$0.36 million) budgeted in FY 2021.

Renovation and Modernization Projects – Facilities Use and Condition Assessment & Demographic Study

During fiscal year 2015-2016, the RCPS School Board funded a facilities use and conditions assessment study to help identify and plan for future facility renovation and modernization projects. The study reviewed all major systems in the facilities (HVAC, electrical, roofing, lighting, etc.) and identified the scope of renovations needed to restore the building to optimum operating condition. This assessment has helped inform some of the prioritization of projects in the FY 2021-2030 CIP.



Additionally, a demographics study to determine future projected enrollment for each educational facility was also completed in 2016. School buildings are used today in vastly different ways than they were over 40 years ago. Some programs did not exist then (certain special education services, technology, lab space, etc.) and older buildings may not be providing efficient program space. Likewise, the space needed for today's programs impacts the student capacity in each building. The study indicated how RCPS is using school space for current programs and projected student and population trends by school and grade. With the information from this study, the School Board is able to better predict building renovations required based on programming and student enrollment.

Information from both the Facility Use and Condition Assessment Study and the demographics study, along with School Board project prioritization were utilized in developing the RCPS fiscal year 2021-2030 Capital Improvement Program.





Appendices





County of Roanoke, Virginia FY 2021 – FY 2030 Adopted Capital Improvement Program Prior Year Projects Removed

A number of projects that were listed in the prior year Capital Improvement Program (CIP) no longer appear in the FY 2021 – FY 2030 CIP. In some cases this is due to the completion of a project; in others a project may no longer be part of the County’s plan for future capital investments.

<i>Functional Team/Project</i>	<i>Description</i>
Public Safety	
Jail Control Room and Security Camera Upgrade	Replacement of 135 obsolete analog cameras with IP cameras and upgrade of the control room's security system. The software support for the cameras ended in 2012 and the new cameras will provide more security capabilities. This project is expected to be completed by the end of FY 2020.
General District Court Renovations and Furnishings	Updates to two General District Court courtrooms including refinishing courtroom benches and fixed furniture, painting, carpet replacement, lighting replacement, and replacement of acoustic fabric on courthouse walls. This project is expected to be completed by the end of FY 2020.
Community Services	
Cityworks Permit System	Cityworks replaced the Development Services software system to manage workflows related to land development, building plan reviews, permitting, building inspections and enforcement. This two phased project is expected to be completed by the end of FY 2020.
Restoration of Glade Creek Phase II	Funded through the NPDES - MS4 BMP Construction program, the project stabilized stream banks along Glade Creek through the lower part of Vinyard Park to reduce sediment discharge. Construction began in FY 2018 and was completed in the summer of 2019.
Merriman Road Drainage Improvements	This project was added in FY 2020 and upon further evaluation was cancelled due to updated cost estimate to complete. Funding for this project is reallocated for use as revenue in the FY 2021 CIP.



County of Roanoke, Virginia FY 2021 – FY 2030 Adopted Capital Improvement Program Unfunded Projects

The following represent projects that were not funded in the Adopted FY 2021 – FY 2030 Capital Improvement Program (CIP), adopted by the Board of Supervisors on June 23, 2020. The original Proposed FY 2021 – FY 2030 CIP presented on January 28, 2020 included some projects that were removed based on reduced revenues related to the COVID-19 pandemic. Some ongoing projects did not receive funding in FY 2021 but are not considered unfunded as they have planned funding within the ten-year CIP.

<i>Functional Team/Project</i>	<i>Description</i>	<i>Estimated Cost</i>
Community Services		
Minor Transportation and Planning Studies	The Minor Transportation and Planning Studies project was funded in FY 2020 in the amount of \$80,000. The project, as proposed on January 28, 2020, would have received an additional \$20,000 in FY 2021 and FY 2022. Due to reduced revenues and project scope, the project has been eliminated. The \$80,000 funded in FY 2020 has not yet been utilized and this balance will be repurposed to support projects adopted in FY 2021.	\$40,000
Hman Services		
Brambleton Center HVAC Repairs	The Brambleton Center HVAC Repairs project, as proposed on January 28, 2020, would have received funding in FY 2021 to replace an outdated boiler and air conditioning system at the recreation facility. With limited funding and temporary closure of the facility due to COVID-19, the project was eliminated in the Adopted FY 2021 - FY 2030 budget. Funding will be considered with the development of the FY 2022 - FY 2031 CIP.	\$300,000



**County of Roanoke, Virginia
FY 2021 – FY 2030 Adopted Capital Improvement Program
Unfunded Projects (Continued)**

<i>Functional Team/Project</i>	<i>Description</i>	<i>Estimated Cost</i>
Internal Services		
Cybersecurity Enhancement Program	Roanoke County Information Technology requested the project to enhance current measures to secure and protect the technology and data assets used by the community and internally by County departments. IT staff will continue to evaluate various resources and systems to assist with cybersecurity program efforts. Project may be included in future CIPs as more information is available on resources and systems available.	\$1,911,683
Laserfiche Forms	Roanoke County Information Technology requested the project to implement Laserfiche Forms across the organization, which would allow departments to complete and approve online forms within Laserfiche and could be used to collect information interdepartmentally or from individual employees. Project was not included as other initiatives were prioritized ahead of this request.	\$92,000
Total, Unfunded Requests		\$2,343,683



Board of Supervisors' Adopted Debt Ratios

In April 2018, the Board of Supervisors approved a comprehensive financial policy which establishes guidelines and limitations for the issuance of debt. The documentation of these procedures gives rating agencies and County citizens the assurance that the issuance of debt is a well-planned program. The debt policy also states that the Capital Improvement Plan will include a ten-year projection of the County debt ratios. This projection of ratios can be used to determine the County's ability to issue new debt and ensures adherence to the policy over the ten-year timeframe.

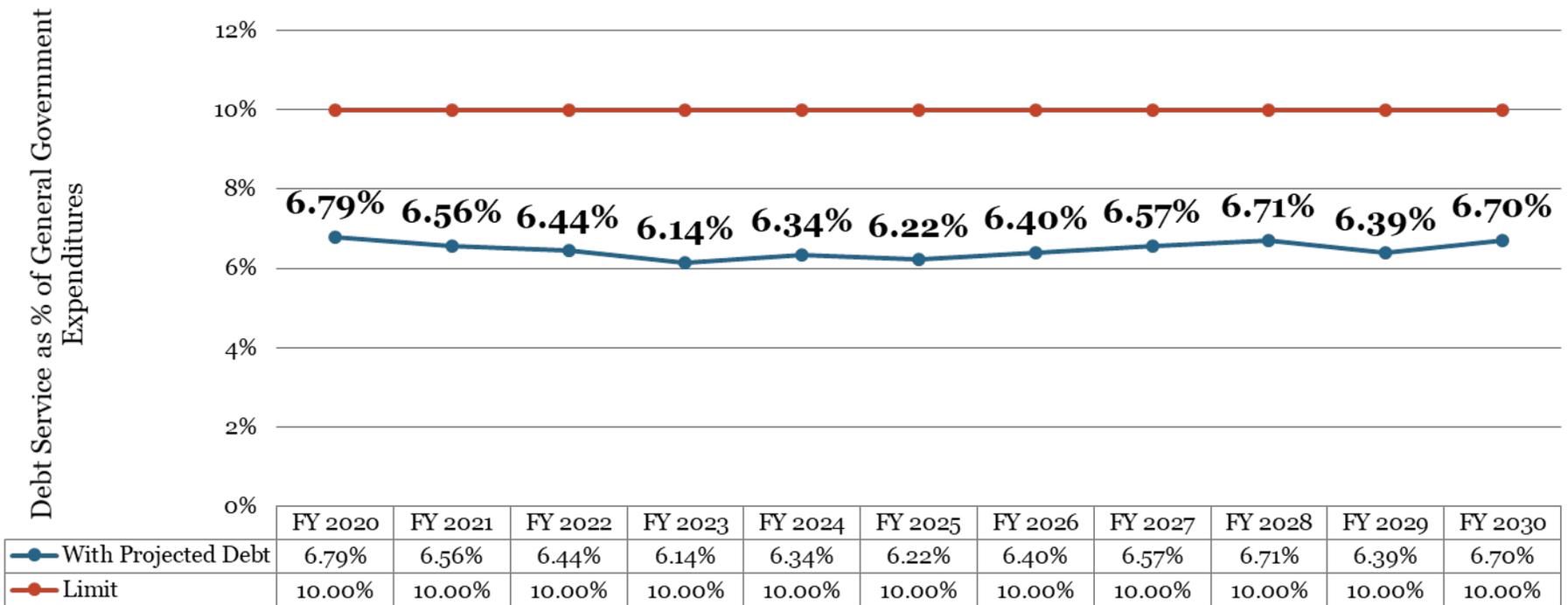
Ratio	Limit	FY 2019 (Actual)	FY 2020 (Projected)	FY 2021 (Projected)
Debt Service as a Percentage of General Government Expenditures	10.0%	6.26%	6.79%	6.56%
Debt as a Percentage of Taxable Assessed Value	3.0%	1.80%	1.74%	1.69%



Debt Service as a Percentage of General Government Expenditures

Debt as a percentage of general government expenditures is calculated by taking the debt service (principal and interest) paid in a year divided by total general County and School expenditures. The County’s debt policy states that the debt service to General Government expenditures ratio should not exceed 10%. Adhering to this policy limit allows for a more favorable bond rating and ensures that the County’s debt spending is sustainable relative to its overall expenditures.

**Debt Services as a Percentage of General Government Expenditures
FY 2020 - FY 2030**

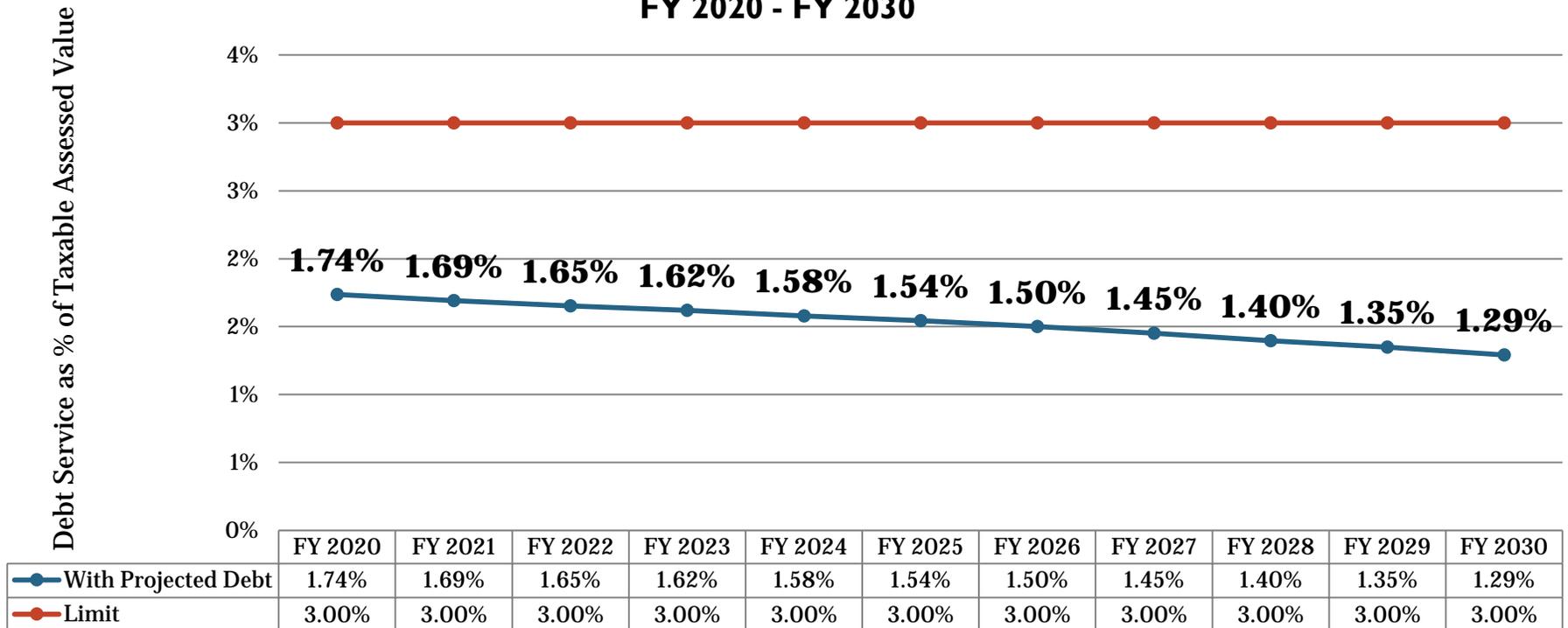




Debt as a Percentage of Taxable Assessed Value

Debt as a percentage of taxable assessed value is the outstanding debt principal divided by the market value assessment of all real and personal property located in the County. The County's debt policy states that the debt as a percentage of taxable assessed value ratio should not exceed 3%. Adhering to this policy limit allows for a more favorable bond rating and ensures that the County's debt load is sustainable relative to its taxable base.

**Debt Services as a Percentage of Taxable Assessed Value
FY 2020 - FY 2030**

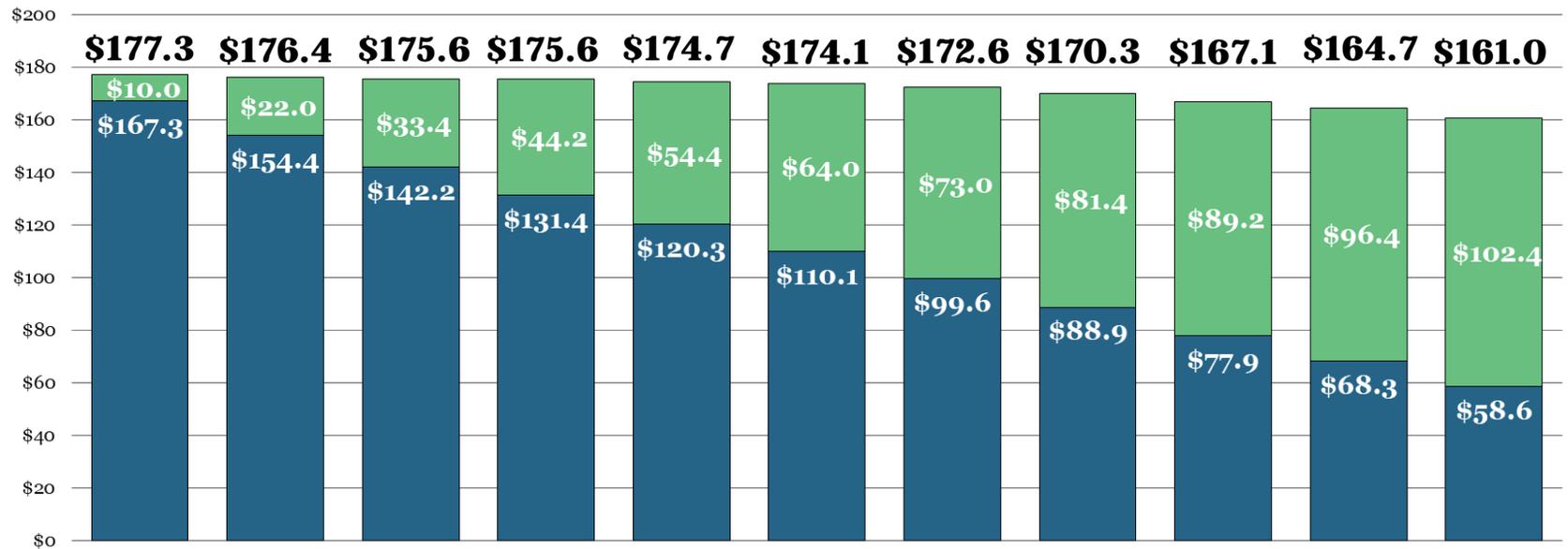




Outstanding Debt

The below chart outlines the level of outstanding debt for County and Schools from FY 2020 through FY 2030 based on the assumed debt issuance in the FY 2021 – FY 2030 Capital Improvement Program.

**Existing and Planned Outstanding Debt
FY 2020 - FY 2030**



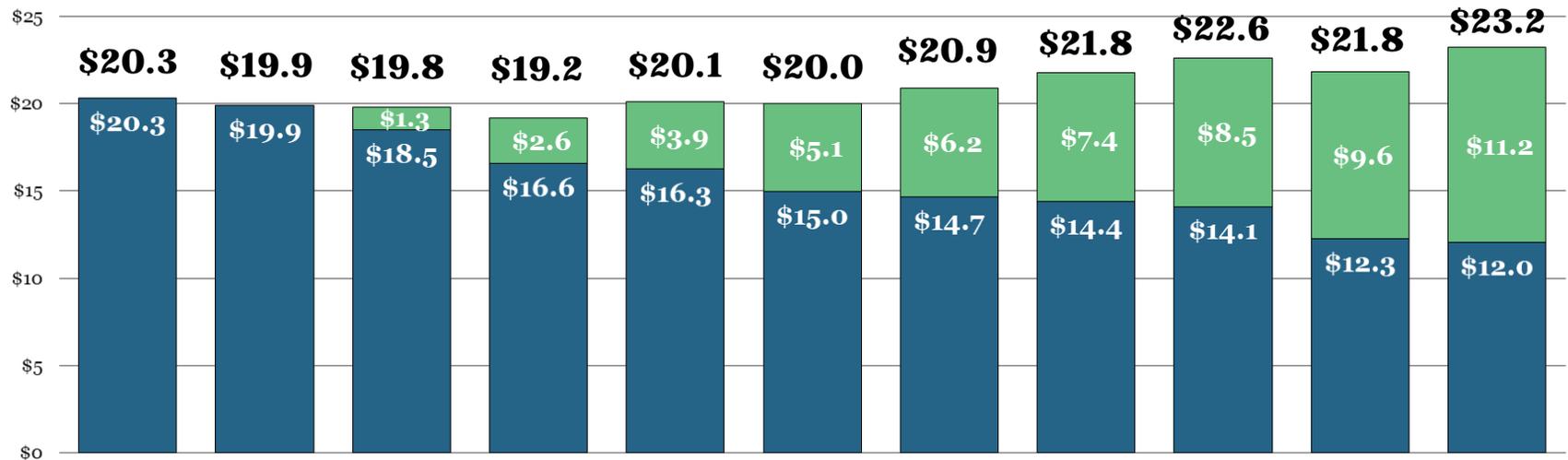
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
New Debt Issuance - County	\$ 10,000,000	\$ -	\$ -	\$ 12,000,000	\$ -	\$ -	\$ 12,000,000	\$ -	\$ -	\$ 12,000,000	\$ -
New Debt Issuance - Schools	\$ -	\$ 12,000,000	\$ 12,000,000	\$ -	\$ 12,000,000	\$ 12,000,000	\$ -	\$ 12,000,000	\$ 12,000,000	\$ -	\$ 12,000,000
Existing Debt Outstanding (FY 20)	\$ 167,341,276	\$ 154,376,878	\$ 142,194,440	\$ 131,350,939	\$ 120,312,570	\$ 110,052,776	\$ 99,581,220	\$ 88,867,548	\$ 77,911,388	\$ 68,321,388	\$ 58,551,388
New Debt Outstanding (FY 20-30)	\$ 10,000,000	\$ 22,000,000	\$ 33,400,000	\$ 44,200,000	\$ 54,400,000	\$ 64,000,000	\$ 73,000,000	\$ 81,400,000	\$ 89,200,000	\$ 96,400,000	\$ 102,400,000
Total Debt Outstanding	\$ 177,341,276	\$ 176,376,878	\$ 175,594,440	\$ 175,550,939	\$ 174,712,570	\$ 174,052,776	\$ 172,581,220	\$ 170,267,548	\$ 167,111,388	\$ 164,721,388	\$ 160,951,388



Projected Debt Service

The below chart outlines the level of projected debt service for County and Schools from FY 2020 through FY 2030 based on the assumed debt issuance in the FY 2020– FY 2029 Capital Improvement Program.

**Projected Debt Service
FY 2020 - FY 2030**



	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Existing (FY 20)	\$ 20,298,126	\$ 19,898,919	\$ 18,501,888	\$ 16,598,356	\$16,262,444	\$ 14,957,781	\$ 14,668,768	\$ 14,396,527	\$ 14,108,251	\$ 12,271,962	\$12,048,496
Planned (After FY 20)	\$ -	\$ -	\$ 1,320,000	\$ 2,604,000	\$ 3,852,000	\$ 5,064,000	\$ 6,240,000	\$ 7,380,000	\$ 8,484,000	\$ 9,552,000	\$11,184,000



Comparative Jurisdictions

The below table provides a comparison of established debt ratios for three localities that are comparable to Roanoke County in size and/or service delivery. In addition, debt policies for four Virginia localities with AAA ratings (the highest available) are provided for informative purposes. The County's debt policies area very similar to comparative jurisdictions and compare favorably to the listed AAA rated localities. This is indicative of sound financial management and shows that the Board of Supervisors' established ratio limits are consistent with best practices.

Debt Ratio	Roanoke County	Comparative Jurisdictions			AAA Rated Jurisdictions			
		Roanoke City	Lynchburg City	Hanover County	Arlington (AAA)	Alexandria (AAA)	Charlottesville (AAA)	Virginia Beach (AAA)
Debt Service as a % of General Government Expenditures Limit	10%	10%	N/A	10%	10%	12%	10%	10%
Debt as a % of Taxable Assessed Value Limit	3%	4%	4.5%	2.5%	3%	2.5%	N/A	3.5%

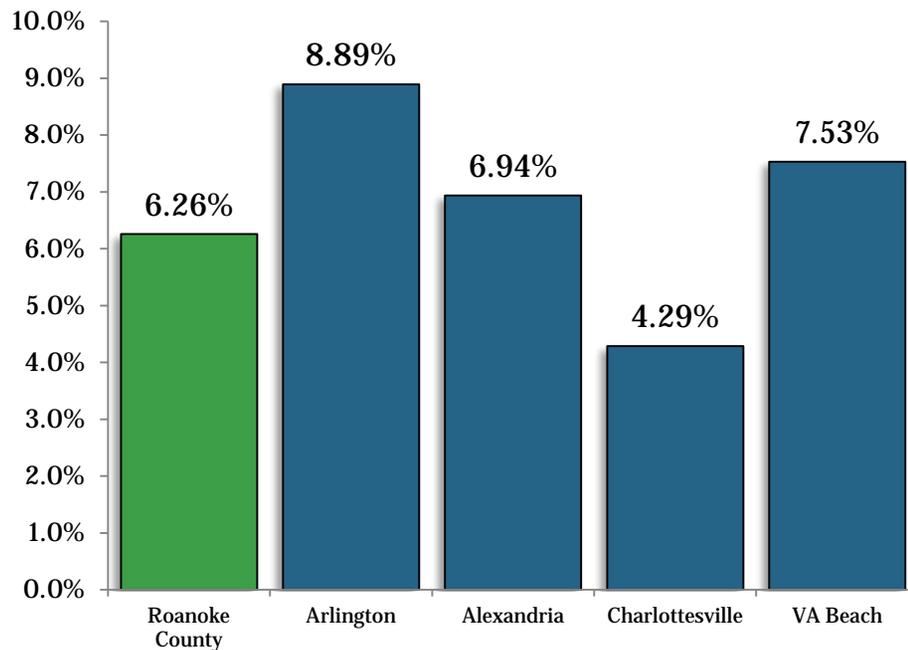
All information from each locality's 2019 Comprehensive Annual Financial Report (CAFR), FY 2020 Adopted Budget Documents, or Adopted Financial Policies



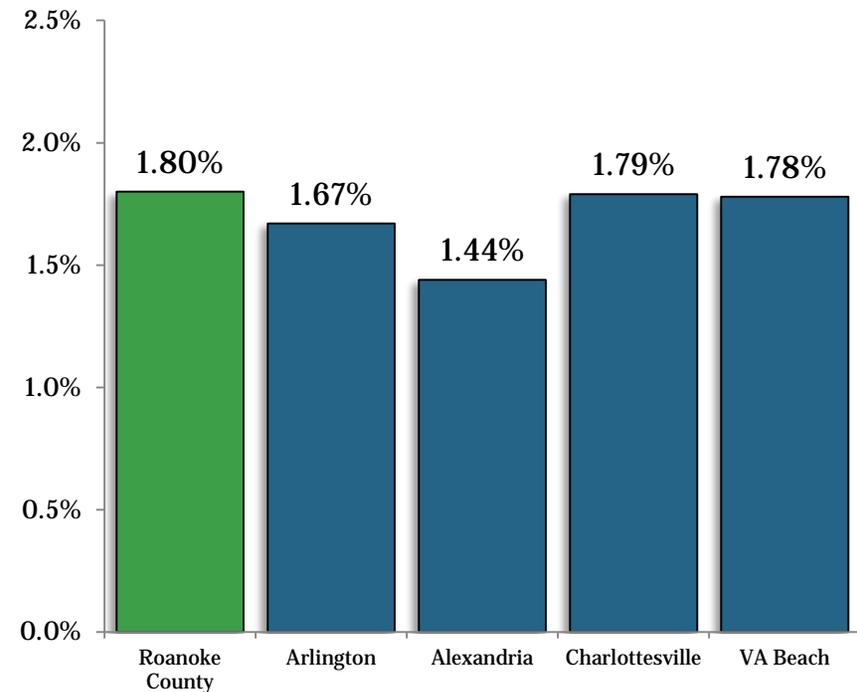
Comparative Jurisdictions (continued)

Roanoke County is currently rated AA+ by the three major ratings agencies. The below charts compare the County's actual debt ratios to four AAA rated localities in Virginia. Roanoke County's ratios compare quite favorably to each of the comparative jurisdictions. This positive comparison shows that the County's current debt load relative to its expenditures, assessed value, and population is consistent with the levels necessary to acquire AAA rated status. All data below is based on data as of June 30, 2019.

Debt Service as a % of General Government Expenditures



Debt as a % of Taxable Assessed Value



All information from each locality's 2019 Comprehensive Annual Financial Report (CAFR)