

County of Roanoke, Virginia



Adopted Capital Improvement Program
Fiscal Years 2020—2029





Board of Supervisors

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Magisterial District*

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*Catawba
Magisterial District*

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*Hollins
Magisterial District*

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*Windsor Hills
Magisterial District*

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Magisterial District*



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For the Fiscal Year Beginning

July 1, 2018

Christopher P. Morrill

Executive Director





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July 1, 2019

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

On May 28, 2019, the Roanoke County Board of Supervisors adopted the fiscal year 2020-2029 Capital Improvement Program (CIP). The County Administrator's proposed fiscal year 2020-2029 CIP was presented to the Board of Supervisors on January 22, 2019. The Board of Supervisors deliberated over projects and funding included in the CIP from January through May, culminating with the adoption of the ten-year CIP.

From the County Administrator's proposed CIP to the Board of Supervisors adopted CIP, the Board of Supervisors approved several changes to the ten-year capital plan. Board of Supervisors' approved changes to the FY 2020-2029 CIP are described below.

- The total project cost for the Hollins Library are adjusted from \$17.5 million to \$14.996 million to account for accelerated time frame for project completion. Project costs are adjusted to begin funding in FY 2023 with \$4.996 million in bond funding applied. In FY 2026, \$10.0 million in bond funding is designated to the project. Funding from the proposed CIP in FY 2027-2029 has been eliminated.
- In FY 2020, \$1,997,760 is added to the Fallowater Lane project with the receipt of Commonwealth revenue.

- The General Services CMP is reduced by \$10,000 in FY 2020 due to a combination of reducing \$40,000 in one-time funding available from FY 2019 and adding \$30,000 annually to cover the maintenance costs from the Vinton Fire & Rescue Station. With the ending of the Vinton Gain Sharing Agreement on July 1, 2019, the station becomes a County facility.
- The Computer Replacement Plan project is reduced to \$233,000 annually from \$275,000 to account for the elimination of five-year warranties.
- Changes to funding sources include a reduction in the General Government Fund transfers by \$50,000 based on proceeds from the 2019 VPSA Bond refund in FY 2020 – FY 2024 and a reduction in the Transfer from EDA in FY 2021, which is offset by the use of County Economic Development Funds.
- Adds \$10.0 million in FY 2029 for projects to be determined and bond funding to account for the County's borrowing as relates to the debt issuance policy.

As part of this section of the budget document, the County Administrator's January 22, 2019 transmittal letter to the Board of Supervisors has been included, as it provides details into the priorities of the ten-year CIP. The remainder of the document has been updated to reflect the fiscal year 2020-2029 CIP adopted by the Board of Supervisors on May 28, 2019.

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

Sincerely,

Meredith L. Thompson
Budget Manager

Steven R. Elliott
Budget Manager





January 22, 2019

Chairman Phil North
Members, Board of Supervisors
Roanoke County Administration Building
5204 Bernard Drive
Roanoke, Virginia 24018

Dear Chairman North and Members of the Board of Supervisors:

Attached for your consideration is my Proposed FY 2020 – FY 2029 Capital Improvement Program (CIP). Included as part of this proposal is the Roanoke County Public Schools' ten-year Capital Improvement Program requests, as approved by the Roanoke County School Board on January 10, 2019.

The ten-year plan is fiscally balanced, utilizes sound, long-term financial planning principles, and is consistent with County

fiscal policy. As presented, the Proposed FY 2020 – FY 2029 CIP totals \$158,833,568 in capital projects over the life of the ten-year plan, with \$80,955,094 attributable to County capital projects and \$77,878,474 requested by the Roanoke County School Board for schools' capital projects. Project priorities for Roanoke County Public Schools are established by the School Board and presented as requested in this ten-year plan.

Maintaining Existing Assets and Services

Capital Maintenance Programs

As proposed, approximately \$16.3 million is committed to County Capital Maintenance Programs (CMP) in the next ten years. For FY 2020, \$1.37 million is proposed to ensure existing infrastructure in General Services, Parks, Recreation & Tourism, and the Sheriff's Office, remain functional and safe for our citizens, visitors, and employees. Investments in facilities will be re-evaluated after the Board of Supervisors receives and reviews the County Facilities Assessment, scheduled for completion in July 2019.

Replacement of computers and other information technology infrastructure is budgeted at \$7.92 million in the ten-year plan to ensure the County can continue delivering high quality services to the public. As service delivery increasingly relies on technology, we must ensure our technology equipment is current and provides for the security of all our County's transactions internally and with our citizens.



Transportation - Roads

The ten-year capital plan continues modest 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 Buck Mountain / Starkey Road Intersection (\$0.25 million, FY 2020) and the County portion of the Plantation Road Phase II project (\$0.3 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 (\$0.25 million annually) are also reserved to match Commonwealth Revenue Sharing funds (\$0.25 annually) from FY 2022-2029 for future transportation priorities.

Transportation - Greenways

The ten-year plan includes two significant Greenways projects, which will ultimately connect Greenways in the County to the regional Greenway system. The West Roanoke River Greenway is an \$8.03 million project, all funded through Commonwealth and Federal resources. Of that total, \$4.54 million is included for appropriation in FY 2020. Those funds – Commonwealth SMART SCALE funds – were awarded to the County in late-2016 but had yet to be appropriated. Work on the West Roanoke Greenway is anticipated to begin in summer 2019.

The East Roanoke River Greenway is a \$9.0 million project, of which the majority of funding has already been appropriated by the Board of Supervisors. Of the total project funding, over 93% is from non-County funding sources such as Commonwealth and Federal grants. The FY 2020 proposed budget includes

appropriation of grant funding (\$0.366 million), with a required County match budgeted in FY 2021 (\$0.125 million). Work on this Greenway is anticipated to begin in FY 2020. Both Greenway projects have received considerable support from the Pathfinders for Greenways.

Stormwater Management

Commonwealth and Federal mandates in the area of stormwater run-off and pollutant discharge continue to require the County to fund improvements to our current stormwater infrastructure and create new infrastructure where necessary. Over \$5.7 million is planned in the ten-year CIP for stormwater and drainage improvements, with \$1.05 million of the total programmed in FY 2020. County funds are anticipated to leverage Stormwater Local Assistance Funds (SLAF) throughout the ten-year plan, with \$1.1 million in grant funding planned from FY 2020-2029.

Long-Term County Facility Needs

Public Service Center

This ten-year CIP includes \$13.7 million directed to the replacement of the County's Public Service Center. The total project cost estimate is \$15.25 million, with \$1.55 million funded in previous fiscal years, \$10.0 million funded in FY 2020, and \$3.7 million planned in FY 2023. An assessment of the facility was performed in FY 2017, with options to address continued service delivery from the departments and functions located at the current Public Service Center. Of the options presented in that FY 2017 assessment, County staff has



recommended the most cost efficient option, detailed in the next paragraph. Options to renovate the existing facility at the current location and acquire property to build a new facility were the most expensive. Because of the current condition of the facility and the importance of the services provided by the departments residing at the facility, this project is recommended for funding in FY 2020 to complete the scope of work associated with Phase I of the project.

The planned scope of work in FY 2020 will relocate the County's outdated and flood-prone Public Service Center located on Kessler Mill Road. While some operations that are not impacted by the flooding may remain at the site, most General Services, Parks, Recreation & Tourism, and some Community Development operations will be moved to strategic locations in the County to provide efficient services for our citizens and a safe and secure working environment for our employees. The County has acquired a property adjacent to the County's Fleet Service Center to support expanded operations at that site, and architectural and engineering work on the project began in winter 2019. Phase II of the project, with funding scheduled in FY 2023, anticipates relocating the Parks, Recreation and Tourism functions to a new location in the County.

Hollins Library

A project that has been included in prior ten-year plans is the renovation / replacement of the Hollins Library. In the Proposed FY 2020 – FY 2029 CIP, total project funding is included at \$17.5 million, with construction anticipated to begin in FY 2029. While the full scope of the project will be developed over the coming years, programming the funding for the

construction allows staff to identify the replacement of this facility as a priority and strategically consider the use of debt funding to finance this project.

Roanoke County Public Schools

Roanoke County Public Schools requests as approved by the Roanoke County School Board, total \$77.88 million from FY 2020-2029. The most significant capital initiative that will be managed by the Schools is the renovation of Cave Spring High School, which has been fully funded in prior fiscal years. This \$44.0 million project is anticipated to begin in January 2019 with completion expected to take 18 months. After completion of Cave Spring High School, a renovation at William Byrd High School is planned.

Roanoke County Public Schools has also identified \$10.0 million in their requested CIP to be applied to CMP projects over the next ten years. Additional information on the capital requests as approved by the School Board can be found in the Schools section of this document.

Conclusion

The Proposed FY 2020 – FY 2029 CIP reflects our continued prioritization of public asset maintenance with a focus on FY 2020 while awaiting the results of the County Facilities Assessment. The CIP is fiscally balanced, achievable, and reflects the Board of Supervisors preference for limiting long-term debt obligations by following the "10-10-10" model and utilizing cash sources to provide for 42% of all programmed County and Schools project expenditures.



As you consider this plan over the coming months, County staff will schedule work sessions and provide budget memoranda on the projects and funding identified in (or excluded from) this plan as requested.

I would like to recognize the contributions of Assistant County Administrators Rebecca Owens and Richard Caywood, our Finance Department led by Laurie Gearheart, Office of Management and Budget staff including Christopher Bever, Meredith Thompson, and Steve Elliott, Department Directors, Constitutional Officers, and their staff in the development of this ten-year CIP. I appreciate the role that they play in developing a fiscally responsible plan that addresses our County's capital infrastructure needs for the next decade.

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;
- Investments in public infrastructure and technology;
- Incorporation of the Roanoke County Public Schools projects and funding sources;
- Continued diversification of funding sources;
- Compliance with applicable state and federal mandates; and

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 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.

The broadly defined goals of the Community Strategic Plan are the result of the public input received, and have been developed into Strategic Initiatives that will guide the County over the next several years.

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 performance measures 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 updates can be found at www.roanokecountyva.gov/CSP.

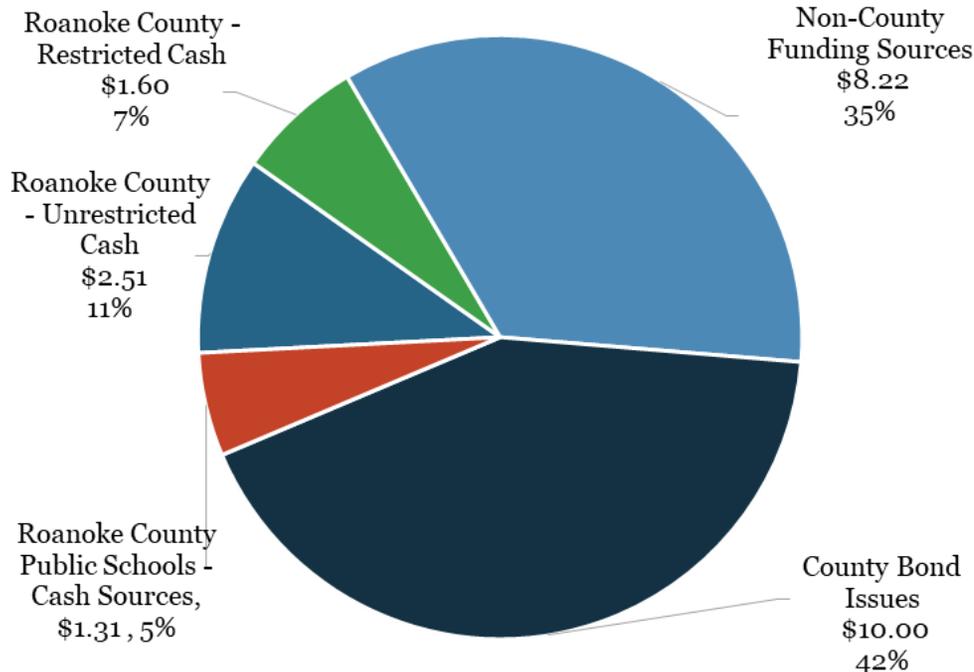
Organizational Strategic Plan

Roanoke County is in the process of updating an internal Organizational Strategic Plan, which will identify strategies to be used by departments and employees to deliver quality services with integrity and distinction.

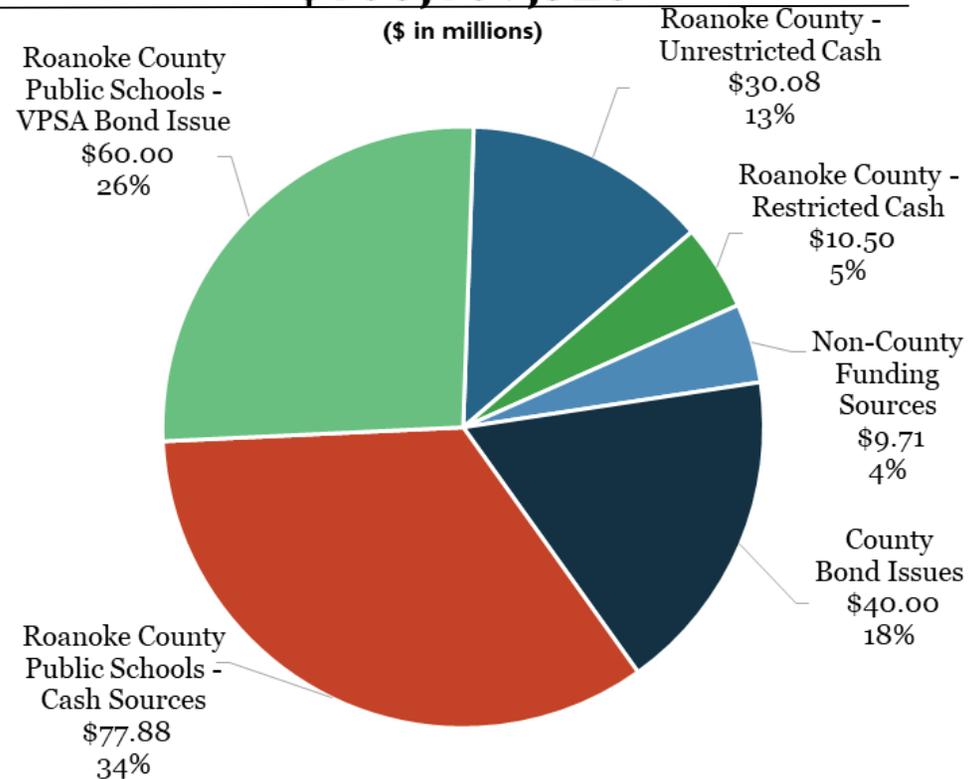


FY 2020 – FY 2029 Adopted Capital Improvement Program Summary of County & Schools Funding Sources

FY 2020
\$23,636,208
(\$ in millions)



FY 2020 - 2029
\$168,167,328
(\$ in millions)





County of Roanoke, Virginia FY 2020 – FY 2029 Adopted Capital Improvement Program Summary of County & Schools Funding

Roanoke County - Unrestricted Cash	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
General Government Transfer	\$1,226,000	\$1,550,000	\$1,554,000	\$1,668,000	\$1,770,000	\$1,900,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$17,668,000
Capital Reserves	815,480	987,361	931,136	963,733	988,612	770,971	1,100,767	706,827	331,995	635,237	8,232,119
VPSA Refunding Bonds (2015)	70,512	110,888	113,512	114,138	114,806	112,556	112,556	113,506	111,131	69,344	1,042,949
VPSA Refunding Bonds (2017)	12,443	11,944	11,443	13,443	12,819	12,194	11,569	12,425	11,700	13,600	123,580
VPSA Refunding Bonds (2019)	50,000	45,000	45,000	30,000	30,000	0	0	0	0	0	200,000
Debt Fund - County	276,884	276,487	276,784	277,825	279,609	280,812	276,487	269,460	261,604	0	2,475,952
Sale of Property	58,000	0	0	0	0	0	0	0	0	0	58,000
Future Project Close-Out	0	150,000	0	0	0	0	125,000	0	0	0	275,000
Subtotal, Unrestricted Cash	\$2,509,319	\$3,131,680	\$2,931,875	\$3,067,139	\$3,195,846	\$3,076,533	\$3,626,379	\$3,102,218	\$2,716,430	\$2,718,181	\$30,075,600

Roanoke County - Restricted Cash	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
CommIT Fund Transfer	\$783,000	\$783,000	\$783,000	\$783,000	\$783,000	\$783,000	\$783,000	\$783,000	\$783,000	\$783,000	\$7,830,000
CommIT Fund Balance	0	0	100,000	0	0	0	0	0	0	0	100,000
Prior VDOT Revenue Sharing Funds (County)	50,000	150,000	0	0	0	0	0	0	0	0	200,000
Prior Drainage Maintenance Funds (County)	20,000	0	0	0	0	0	0	0	0	0	20,000
Sale of Land - Economic Development	526,858	523,142	0	0	0	0	0	0	0	0	1,050,000
Economic Development Funds	18,920	22,563	162,800	0	0	0	0	0	0	0	204,283
Fee Class Fund	200,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,100,000
Subtotal, Restricted Cash	\$1,598,778	\$1,578,705	\$1,145,800	\$883,000	\$10,504,283						

Non-County Funding Sources	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
PSAP Grant Funding	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000
Private Capital Contributions	500,000	0	0	0	0	0	0	0	0	0	500,000
SMART SCALE Funds	4,542,105	0	0	0	0	0	0	0	0	0	4,542,105
Commonwealth Transportation Funds	1,997,760	0	0	0	0	0	0	0	0	0	1,997,760
Stormwater Local Assistance Fund	300,000	0	0	0	400,000	0	0	400,000	0	0	1,100,000
Transfer from Schools	310,820	541,680	0	0	0	0	0	0	0	0	852,500
Transportation Alternatives Grant	366,606	0	0	0	0	0	0	0	0	0	366,606
VDOT Reimbursement from Commonwealth	200,000	0	0	0	0	0	0	0	0	0	200,000
Subtotal, Non-County Funding Sources	\$8,217,291	\$541,680	\$150,000	\$0	\$400,000	\$0	\$0	\$400,000	\$0	\$0	\$9,708,971

Capital Improvement Program FY 2020 – FY 2029



Summary of Funding Sources

Summary of County & Schools Funding Sources (Continued)

Roanoke County - Bonds	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
Lease / Revenue Bonds	\$10,000,000	\$0	\$0	\$10,000,000	\$0	\$0	\$10,000,000	\$0	\$0	\$10,000,000	\$40,000,000
Subtotal, Lease / Revenue Bonds	\$10,000,000	\$0	\$0	\$10,000,000	\$0	\$0	\$10,000,000	\$0	\$0	\$10,000,000	\$40,000,000
Total, All County Funding Sources	\$ 22,325,388	\$ 5,252,065	\$ 4,227,675	\$ 13,950,139	\$ 4,478,846	\$ 3,959,533	\$ 14,509,379	\$ 4,385,218	\$ 3,599,430	\$ 13,601,181	\$ 90,288,854

Roanoke County Public Schools (RCPS) - All Funding Sources	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
Major Capital Reserves	\$0	\$586,163	\$0	\$0	\$0	\$57,746	\$0	\$0	\$0	\$0	\$643,909
Debt Fund - Schools	475,056	2,286,888	670,692	605,164	640,703	676,244	700,833	725,424	752,750	644,694	8,178,448
VPSA Refunding Credits	12,444	264,255	124,956	127,581	127,625	124,750	124,250	125,931	122,831	82,944	1,237,567
General Fund Transfer (for CMP)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000
Other Cash Sources	(176,680)	176,680	0	0	0	0	(222,901)	(753,454)	(477,457)	(727,638)	(2,181,450)
VPSA Bond Issue	0	10,000,000	9,232,185	767,815	10,000,000	10,000,000	0	10,000,000	10,000,000	0	60,000,000
Total, RCPS Funding Sources	\$1,310,820	\$14,313,986	\$11,027,833	\$2,500,560	\$11,768,328	\$11,858,740	\$1,602,182	\$11,097,901	\$11,398,124	\$1,000,000	\$77,878,474
Total, FY 20-29 County & RCPS Funding Sources	\$23,636,208	\$19,566,051	\$15,255,508	\$16,450,699	\$16,247,174	\$15,818,273	\$16,111,561	\$15,483,119	\$14,997,554	\$14,601,181	\$168,167,328



County of Roanoke, Virginia FY 2020 – FY 2029 Adopted Capital Improvement Program All County & Schools Funding Sources with Projects

<i>Funding Source/Functional Area/Project</i>	<i>FY 2020</i>	<i>FY 2021</i>	<i>FY 2022</i>	<i>FY 2023</i>	<i>FY 2024</i>	<i>FY 2025</i>	<i>FY 2026</i>	<i>FY 2027</i>	<i>FY 2028</i>	<i>FY 2029</i>	<i>FY 20-29 Total</i>
CommIT Fund Balance											
Public Safety											
Emergency 911 Phone System Upgrade	0	0	100,000	0	0	0	0	0	0	0	100,000
CommIT Fund Balance Total	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
Commonwealth Transportation Funds											
Community Services											
Fallowater Lane Extension	1,997,760	0	0	0	0	0	0	0	0	0	1,997,760
CommIT Fund Balance Total	\$1,997,760	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,997,760
Economic Development Funds											
Community Services											
Woodhaven Property Acquisition and Improvements	18,920	22,563	162,800	0	0	0	0	0	0	0	204,283
Economic Development Funds Total	\$18,920	\$22,563	\$162,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$204,283
Lease/Revenue Bonds											
Internal Services											
Public Service Center Construction	10,000,000	0	0	3,704,000	0	0	0	0	0	0	13,704,000
Projects to be Determined	0	0	0	0	0	0	0	0	0	10,000,000	10,000,000
Human Services											
Explore Park	0	0	0	1,300,000	0	0	0	0	0	0	1,300,000
Hollins Library Replacement	0	0	0	4,996,000	0	0	10,000,000	0	0	0	14,996,000
Lease/Revenue Bonds Total	\$10,000,000	\$0	\$0	\$10,000,000	\$0	\$0	\$10,000,000	\$0	\$0	\$10,000,000	\$40,000,000
Prior Drainage Maintenance Funds (County)											
Community Services											
Merriman Road Drainage Improvements	20,000	0	0	0	0	0	0	0	0	0	20,000
Prior Drainage Maintenance Funds (County) Total	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,000

Capital Improvement Program FY 2020 – FY 2029



All Funding Sources with Projects

All Funding Sources (continued)

Funding Source/Functional Area/Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 20-29 Total
Prior VDOT Revenue Sharing Funds (County)											
Community Services											
Buck Mountain Road/Starkey Road Intersection	50,000	0	0	0	0	0	0	0	0	0	50,000
Plantation Road Phase II	0	150,000	0	0	0	0	0	0	0	0	150,000
Prior VDOT Revenue Sharing Funds (County) Total	\$50,000	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000
Private Capital Contributions											
Internal Services											
Bent Mountain Comm. Center Repairs & Renovations	500,000	0	0	0	0	0	0	0	0	0	500,000
Private Capital Contributions Total	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000
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	\$150,000						
Roanoke County - Unrestricted Cash											
Community Services											
Buck Mountain Road/Starkey Road Intersection	200,000	0	0	0	0	0	0	0	0	0	200,000
Minor Transportation and Planning Studies	80,000	80,000	0	0	0	0	0	0	0	0	160,000
Plantation Road Phase II	0	150,000	0	0	0	0	0	0	0	0	150,000
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
Merriman Road Drainage Improvements	230,000	0	0	0	0	0	0	0	0	0	230,000
Storm Drainage Maintenance of Effort Program	0	180,000	225,000	225,000	250,000	250,000	275,000	275,000	275,000	275,000	2,230,000
NPDES - MS4 BMP Construction	300,000	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,900,000
Roanoke County Broadband Initiative	0	0	386,875	384,939	387,149	383,664	383,664	384,983	0	0	2,311,274
Woodhaven Property Acquisition and Imprv	0	0	0	387,200	387,697	387,869	387,715	387,235	386,430	388,181	2,712,327
Human Services											
Countywide Library Public Use Computer Replacement	41,000	43,000	71,000	15,000	116,000	0	0	0	0	0	286,000
Parks and Recreation Capital Maintenance Program	400,000	550,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	5,750,000
East Roanoke River Greenway	0	125,000	0	0	0	0	0	0	0	0	125,000

Capital Improvement Program FY 2020 – FY 2029



All Funding Sources with Projects

All Funding Sources (continued)

Funding Source/Functional Area/Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 20-29 Total
Roanoke County - Unrestricted Cash (Continued)											
Internal Services											
Dynamics D365 Upgrade	0	300,000	0	0	0	0	0	0	0	0	300,000
Human Resources and Payroll Modules	231,319	241,680	0	0	0	0	0	0	0	0	472,999
General Service Capital Maintenance Program	665,000	805,000	880,000	880,000	880,000	880,000	880,000	880,000	880,000	880,000	8,510,000
Bent Mountain Comm. Center Repairs & Renovations	200,000	0	0	0	0	0	0	0	0	0	200,000
Public Safety											
Sheriff's Office Capital Maintenance Program	95,000	110,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	1,205,000
Digital Microwave Ring Replacement	0	327,000	0	0	0	0	0	0	0	0	327,000
Public Safety Connectivity Upgrade	0	150,000	0	0	0	0	0	0	0	0	150,000
Emergency 911 Phone System Upgrade	0	0	194,000	0	0	0	0	0	0	0	194,000
Diesel Exhaust Removal System	0	0	0	0	0	0	525,000	0	0	0	525,000
Fire and Rescue Ballistic Body Armor	67,000	70,000	0	0	0	0	0	0	0	0	137,000
Roanoke County - Unrestricted Cash Total	\$2,509,319	\$3,131,680	\$2,931,875	\$3,067,139	\$3,195,846	\$3,076,533	\$3,626,379	\$3,102,218	\$2,716,430	\$2,718,181	\$30,075,600
Sale of Land - Economic Development											
Community Services											
Roanoke County Broadband Initiative	382,978	382,905	0	0	0	0	0	0	0	0	765,883
Woodhaven Property Acquisition and Imprv	143,880	140,237	0	0	0	0	0	0	0	0	284,117
Sale of Land - Economic Development Total	\$526,858	\$523,142	\$0	\$1,050,000							
SMART SCALE Funding											
Human Services											
West Roanoke River Greenway	4,542,105	0	0	0	0	0	0	0	0	0	4,542,105
SMART SCALE Funding Total	\$4,542,105	\$0	\$4,542,105								
Stormwater Local Assistance Fund											
Community Services											
NPDES - MS4 BMP Construction	300,000	0	0	0	400,000	0	0	400,000	0	0	1,100,000
Stormwater Local Assistance Fund Total	\$300,000	\$0	\$0	\$0	\$400,000	\$0	\$0	\$400,000	\$0	\$0	\$1,100,000

Capital Improvement Program FY 2020 – FY 2029



All Funding Sources with Projects

All Funding Sources (continued)

Funding Source/Functional Area/Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 20-29 Total
Transfer from Roanoke County Schools											
Internal Services											
Dynamics D365 Upgrade	0	300,000	0	0	0	0	0	0	0	0	300,000
Human Resources and Payroll Modules	310,820	241,680	0	0	0	0	0	0	0	0	552,500
Transfer from Roanoke County Schools Total	\$310,820	\$541,680	\$0	\$852,500							
Transfer from Fee Class											
Human Services											
Parks and Recreation Capital Maintenance Program	200,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,100,000
Transfer from Fee Class Total	\$200,000	\$100,000	\$1,100,000								
Transfer from Commit Fund											
Internal Services											
County-Wide Computer Replacement Program	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	2,330,000
IT Infrastructure Replacement Capital Maint. Program	225,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	5,175,000
Public Safety											
Digital Microwave Ring Replacement	325,000	0	0	0	0	0	0	0	0	0	325,000
Transfer from Commit Fund Total	\$783,000	\$7,830,000									
Transportation Alternatives Grant											
Human Services											
East Roanoke River Greenway	366,606	0	0	0	0	0	0	0	0	0	366,606
Transportation Alternatives Grant Total	\$366,606	\$0	\$366,606								
VDOT Reimbursement											
Community Services											
Storm Drainage Maintenance of Effort Program	200,000	0	0	0	0	0	0	0	0	0	200,000
VDOT Reimbursement Total	\$200,000	\$0	\$200,000								

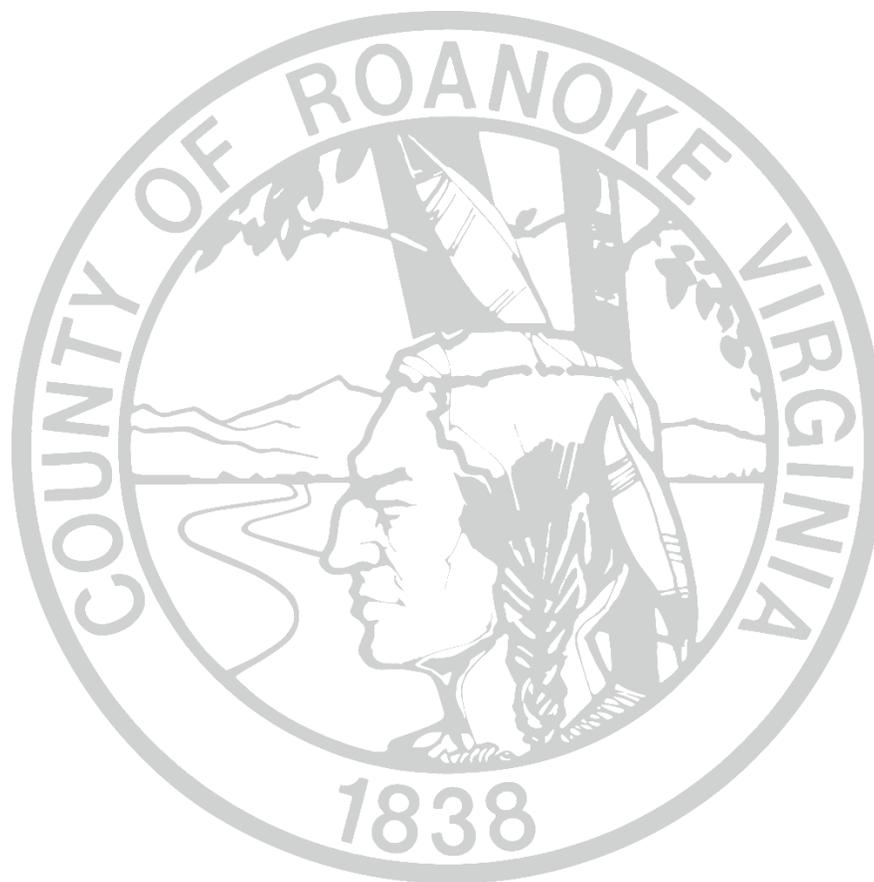
Capital Improvement Program
FY 2020 – FY 2029



All Funding Sources with
Projects

All Funding Sources (continued)

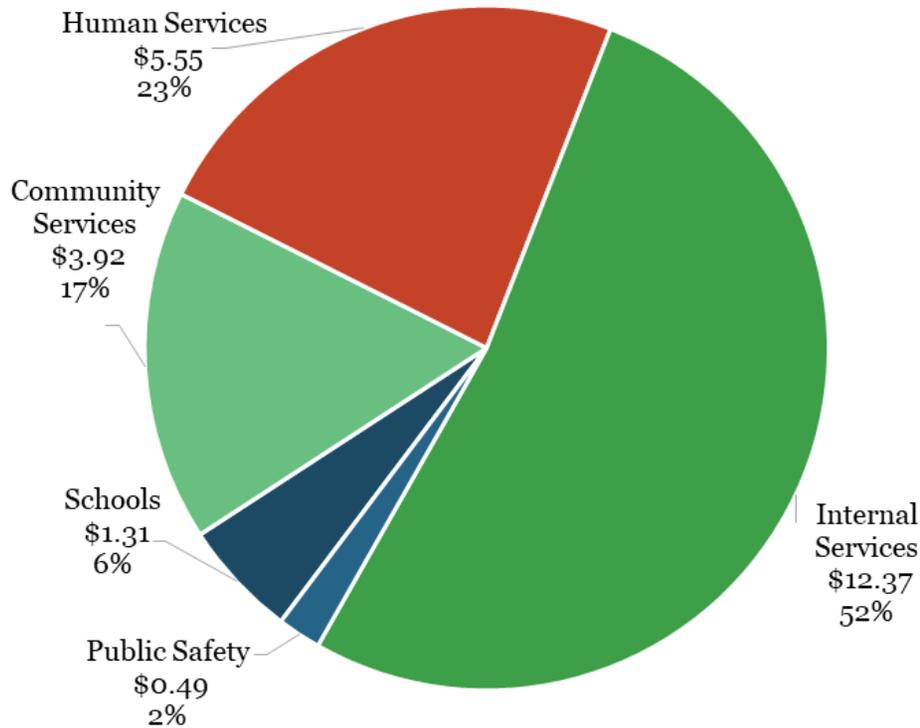
Funding Source/Functional Area/Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 20-29 Total
Roanoke County Schools - All Funding Sources											
Schools											
Transfer from Schools General Fund	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000
Major Capital Reserves	0	586,163	0	0	0	57,746	0	0	0	0	643,909
Debt Fund - Schools	475,056	2,286,888	670,692	605,164	640,703	676,244	700,833	725,424	752,750	644,694	8,178,448
VPSA Refunding Credits	12,444	264,255	124,956	127,581	127,625	124,750	124,250	125,931	122,831	82,944	1,237,567
Other Cash Sources	(176,680)	176,680	0	0	0	0	(222,901)	(753,454)	(477,457)	(727,638)	(2,181,450)
VPSA Bond Issue	0	10,000,000	9,232,185	767,815	10,000,000	10,000,000	0	10,000,000	10,000,000	0	60,000,000
Roanoke County - All Funding Sources	\$1,310,820	\$14,313,986	\$11,027,833	\$2,500,560	\$11,768,328	\$11,858,740	\$1,602,182	\$11,097,901	\$11,398,124	\$1,000,000	\$77,878,474
Total FY 20-29 County & Schools CIP	\$23,636,208	\$19,566,051	\$15,255,508	\$16,450,699	\$16,247,174	\$15,818,273	\$16,111,561	\$15,483,119	\$14,997,554	\$14,601,181	\$168,167,328



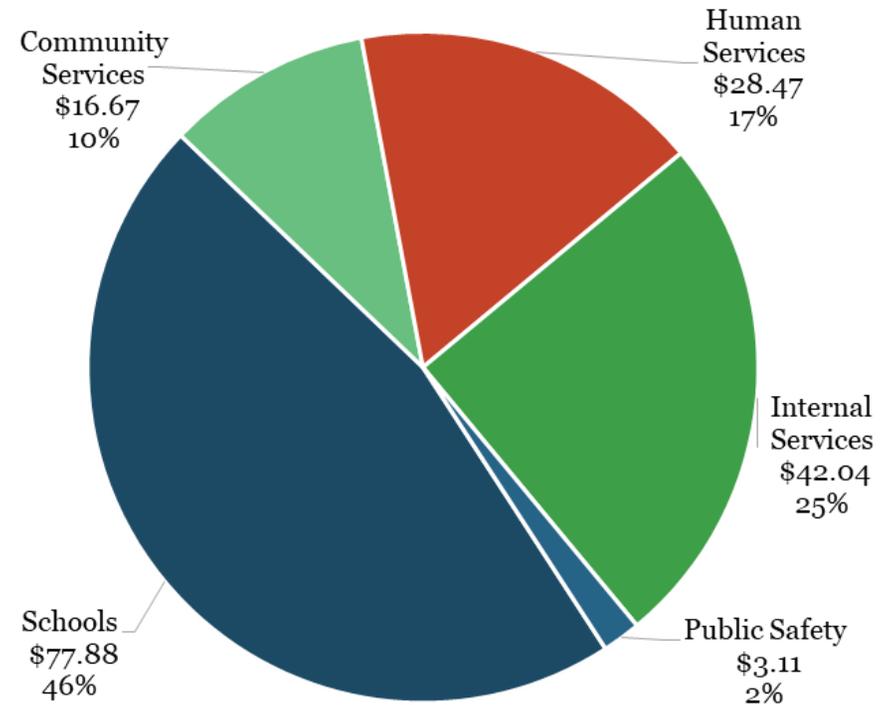


FY 2020 – FY 2029 Adopted Capital Improvement Program Summary of County & Schools Projects by Functional Teams

FY 2020
\$23,636,208
(\$ in millions)



FY 2020 - 2029
\$168,167,328
(\$ in millions)





County of Roanoke, Virginia FY 2020 – FY 2029 Adopted Capital Improvement Program Summary of County & Schools Projects by Functional Teams

Functional Team/Department	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20-29
Public Safety											
Fire & Rescue	\$67,000	\$70,000	\$0	\$0	\$0	\$0	\$525,000	\$0	\$0	\$0	\$662,000
Sheriff	95,000	110,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	1,205,000
Communications & IT	325,000	477,000	444,000	0	0	0	0	0	0	0	1,246,000
General District Court	0	0	0	0	0	0	0	0	0	0	0
Subtotal, Public Safety	487,000	657,000	569,000	125,000	125,000	125,000	650,000	125,000	125,000	125,000	3,113,000
Community Services											
Planning Services	2,327,760	380,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	4,707,760
Engineering & Development Services	0	0	0	0	0	0	0	0	0	0	0
Stormwater Management	1,050,000	180,000	425,000	425,000	850,000	450,000	475,000	875,000	475,000	475,000	5,680,000
Economic Development	545,778	545,705	549,675	772,139	774,846	771,533	771,379	772,218	386,430	388,181	6,277,884
Subtotal, Community Services	3,923,538	1,105,705	1,224,675	1,447,139	1,874,846	1,471,533	1,496,379	1,897,218	1,111,430	1,113,181	16,665,644
Human Services											
Parks and Recreation	5,508,711	775,000	700,000	2,000,000	700,000	700,000	700,000	700,000	700,000	700,000	13,183,711
Library	41,000	43,000	71,000	5,011,000	116,000	0	10,000,000	0	0	0	15,282,000
Subtotal, Human Services	5,549,711	818,000	771,000	7,011,000	816,000	700,000	10,700,000	700,000	700,000	700,000	28,465,711
Internal Services											
General Services	11,365,000	805,000	880,000	4,584,000	880,000	880,000	880,000	880,000	880,000	880,000	22,914,000
Finance	0	600,000	0	0	0	0	0	0	0	0	600,000
Finance/HR	542,139	483,360	0	0	0	0	0	0	0	0	1,025,499
Communications & IT	458,000	783,000	783,000	783,000	783,000	783,000	783,000	783,000	783,000	783,000	7,505,000
Project TBD	0	0	0	0	0	0	0	0	0	10,000,000	10,000,000
Subtotal, Internal Services	12,365,139	2,671,360	1,663,000	5,367,000	1,663,000	1,663,000	1,663,000	1,663,000	1,663,000	11,663,000	42,044,499
Roanoke County Public Schools											
All Schools Projects	1,310,820	14,313,986	11,027,833	2,500,560	11,768,328	11,858,740	1,602,182	11,097,901	11,398,124	1,000,000	77,878,474
Subtotal, Roanoke County Public Schools	1,310,820	14,313,986	11,027,833	2,500,560	11,768,328	11,858,740	1,602,182	11,097,901	11,398,124	1,000,000	77,878,474
Subtotal, FY 20-29 County & Schools	\$23,636,208	\$19,566,051	\$15,255,508	\$16,450,699	\$16,247,174	\$15,818,273	\$16,111,561	\$15,483,119	\$14,997,554	\$14,601,181	\$168,167,328



County of Roanoke, Virginia FY 2020 – FY 2029 Adopted Capital Improvement Program All County & Schools Projects

Note: Projects with \$0 in FY 2020-2029 are active projects that have been fully funded in prior fiscal years.

Functional Team/Department/Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 20-29 Total
Public Safety											
Sheriff											
Jail Control Room and Security Camera Upgrade	0	0	0	0	0	0	0	0	0	0	0
Sheriff's Office Capital Maintenance Program	95,000	110,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	1,205,000
<i>Sheriff Total</i>	95,000	110,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	1,205,000
Communications & IT											
Digital Microwave Ring Replacement	325,000	327,000	0	0	0	0	0	0	0	0	652,000
Public Safety Connectivity Upgrade	0	150,000	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
<i>Communications & IT Total</i>	325,000	477,000	444,000	0	0	0	0	0	0	0	1,246,000
Fire & Rescue											
Diesel Exhaust Removal System	\$0	\$0	\$0	\$0	\$0	\$0	\$525,000	\$0	\$0	\$0	\$525,000
Fire and Rescue Ballistic Body Armor	\$67,000	\$70,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$137,000
<i>Fire & Rescue Total</i>	67,000	70,000	0	0	0	0	525,000	0	0	0	662,000
General District Court											
General District Court Renovations and Furnishings	0	0	0	0	0	0	0	0	0	0	0
<i>General District Court Total</i>	0	0	0	0	0	0	0	0	0	0	0
Public Safety Total	\$487,000	\$657,000	\$569,000	\$125,000	\$125,000	\$125,000	\$650,000	\$125,000	\$125,000	\$125,000	\$3,113,000
Community Services											
Engineering and Development Services											
Cityworks Permit System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<i>Engineering and Development Services Total</i>	0	0	0	0	0	0	0	0	0	0	0
Planning Services											
Fallowater Lane Extension	\$1,997,760	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,997,760
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	250,000	0	0	0	0	0	0	0	0	0	250,000

Capital Improvement Program FY 2020 – FY 2029



All County and Schools Capital Projects

All Projects (Continued)

Functional Team/Department/Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 20-29 Total
Community Services(Continued)											
Minor Transportation and Planning Studies	80,000	80,000	0	0	0	0	0	0	0	0	160,000
Plantation Road Phase II	0	300,000	0	0	0	0	0	0	0	0	300,000
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 Services Total	2,327,760	380,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	4,707,760
Stormwater Management											
NPDES - Leachate Management System	0	0	0	0	0	0	0	0	0	0	0
Restoration of Glade Creek Phase II	0	0	0	0	0	0	0	0	0	0	0
Merriman Road Drainage Improvements	250,000	0	0	0	0	0	0	0	0	0	250,000
Storm Drainage Maintenance of Effort Program	200,000	180,000	225,000	225,000	250,000	250,000	275,000	275,000	275,000	275,000	2,430,000
NPDES - MS4 BMP Construction	600,000	0	200,000	200,000	600,000	200,000	200,000	600,000	200,000	200,000	3,000,000
Stormwater Management Total	1,050,000	180,000	425,000	425,000	850,000	450,000	475,000	875,000	475,000	475,000	5,680,000
Economic Development											
Roanoke County Broadband Initiative	382,978	382,905	386,875	384,939	387,149	383,664	383,664	384,983	0	0	3,077,157
Woodhaven Property Acquisition & Improvements	162,800	162,800	162,800	387,200	387,697	387,869	387,715	387,235	386,430	388,181	3,200,727
Economic Development Total	545,778	545,705	549,675	772,139	774,846	771,533	771,379	772,218	386,430	388,181	6,277,884
Community Services Total	\$3,923,538	\$1,105,705	\$1,224,675	\$1,447,139	\$1,874,846	\$1,471,533	\$1,496,379	\$1,897,218	\$1,111,430	\$1,113,181	\$16,665,644
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	41,000	43,000	71,000	15,000	116,000	0	0	0	0	0	286,000
Hollins Branch Library Replacement	0	0	0	4,996,000	0	0	10,000,000	0	0	0	14,996,000
Library Total	41,000	43,000	71,000	5,011,000	116,000	0	10,000,000	0	0	0	15,282,000
Parks and Recreation											
Parks and Recreation Capital Maintenance Program	600,000	650,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	6,850,000
East Roanoke River Greenway	366,606	125,000	0	0	0	0	0	0	0	0	491,606
West Roanoke River Greenway	4,542,105	0	0	0	0	0	0	0	0	0	4,542,105
Explore Park	0	0	0	1,300,000	0	0	0	0	0	0	1,300,000
Parks and Recreation Total	5,508,711	775,000	700,000	2,000,000	700,000	700,000	700,000	700,000	700,000	700,000	13,183,711
Human Services Total	\$5,549,711	\$818,000	\$771,000	\$7,011,000	\$816,000	\$700,000	\$10,700,000	\$700,000	\$700,000	\$700,000	\$28,465,711
Internal Services											
Communications & IT											
County-Wide Computer Replacement Program	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$2,330,000
IT Infrastructure Repl. Capital Maintenance Program	225,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	5,175,000
CommIT Total	458,000	783,000	783,000	783,000	783,000	783,000	783,000	783,000	783,000	783,000	7,505,000

Capital Improvement Program FY 2020 – FY 2029



All County and Schools Capital Projects

All Projects (Continued)

Functional Team/Department/Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 20-29 Total
Internal Services (Continued)											
Finance											
Integrated Financial System (IFS)	0	0	0	0	0	0	0	0	0	0	0
Dynamics D365 Upgrade	0	600,000	0	0	0	0	0	0	0	0	\$600,000
Finance Total	0	600,000	0	0	0	0	0	0	0	0	600,000
Finance/Human Resources											
Human Resources and Payroll Modules	542,139	483,360	0	0	0	0	0	0	0	0	1,025,499
Finance/Human Resources Total	542,139	483,360	0	0	0	0	0	0	0	0	1,025,499
General Services											
Fleet Service Center Generator	0	0	0	0	0	0	0	0	0	0	0
Public Service Center Facility	10,000,000	0	0	3,704,000	0	0	0	0	0	0	13,704,000
General Service Capital Maintenance Program	665,000	805,000	880,000	880,000	880,000	880,000	880,000	880,000	880,000	880,000	8,510,000
Bent Mountain Comm. Center Repairs & Renovations	700,000	0	0	0	0	0	0	0	0	0	700,000
General Services Total	11,365,000	805,000	880,000	4,584,000	880,000	880,000	880,000	880,000	880,000	880,000	22,914,000
Non-Departmental											
Reserve for Future Projects	0	0	0	0	0	0	0	0	0	10,000,000	\$10,000,000
Non-Departmental Total	0	0	0	0	0	0	0	0	0	10,000,000	10,000,000
Internal Services Total	\$12,365,139	\$2,671,360	\$1,663,000	\$5,367,000	\$1,663,000	\$1,663,000	\$1,663,000	\$1,663,000	\$1,663,000	\$1,663,000	\$42,044,499
Subtotal, Roanoke County Projects	\$22,325,388	\$5,252,065	\$4,227,675	\$13,950,139	\$4,478,846	\$3,959,533	\$14,509,379	\$4,385,218	\$3,599,430	\$13,601,181	\$90,288,854

Roanoke County Public Schools

Schools											
Cave Spring High School	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Maintenance Program	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000
HR Payroll and Software System	310,820	241,680	0	0	0	0	0	0	0	0	552,500
Dynamics D365 Upgrade	0	300,000	0	0	0	0	0	0	0	0	300,000
William Byrd High School	0	12,772,306	8,479,834	0	0	0	0	0	0	0	21,252,140
Hidden Valley Middle School	0	0	1,547,999	1,500,560	10,134,238	0	0	0	0	0	13,182,797
Burlington Elementary	0	0	0	0	300,000	5,000,199	0	0	0	0	5,300,199
Glenvar Elementary	0	0	0	0	334,090	5,858,541	0	0	0	0	6,192,631
WE Cundiff Elementary	0	0	0	0	0	0	602,182	9,434,191	0	0	10,036,373
Glen Cove Elementary	0	0	0	0	0	0	0	663,710	10,398,124	0	11,061,834
Schools Total	1,310,820	14,313,986	11,027,833	2,500,560	11,768,328	11,858,740	1,602,182	11,097,901	11,398,124	1,000,000	77,878,474
Total, Roanoke County Public Schools Projects	\$1,310,820	\$14,313,986	\$11,027,833	\$2,500,560	\$11,768,328	\$11,858,740	\$1,602,182	\$11,097,901	\$11,398,124	\$1,000,000	\$77,878,474
Total, FY 20-29 County & Schools Projects	\$23,636,208	\$19,566,051	\$15,255,508	\$16,450,699	\$16,247,174	\$15,818,273	\$16,111,561	\$15,483,119	\$14,997,554	\$14,601,181	\$168,167,328



County of Roanoke, Virginia FY 2020 – FY 2029 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 2020 - FY 2029 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.

<i>Functional Team/Project</i>	<i>FY 2020</i>	<i>FY 2021</i>	<i>FY 2022</i>	<i>FY 2023</i>	<i>FY 2024</i>	<i>FY 2025</i>	<i>FY 2026</i>	<i>FY 2027</i>	<i>FY 2028</i>	<i>FY 2029</i>	<i>Total FY 20-FY 29</i>
Public Safety											
Digital Microwave Ring Replacement	\$0	\$0	\$65,000	\$66,950	\$68,959	\$71,027	\$73,158	\$75,353	\$77,613	\$79,942	\$578,002
Public Safety Connectivity Upgrade	\$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	\$17,775	\$27,975	\$28,814	\$29,679	\$30,569	\$31,486	\$32,431	\$33,404	\$232,132
Community Services											
Cityworks Permit System	\$0	\$57,000	(\$35,000)	(\$36,050)	(\$37,132)	(\$38,245)	(\$39,393)	(\$40,575)	(\$41,792)	(\$43,046)	(\$254,232)
Minor Transportation and Planning Studies	(\$20,000)	(\$20,000)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$40,000)
Plantation Road Phase II	\$0	\$0	TBD								
NPDES - Leachate Management System Upgrade	\$0	TBD									
Restoration of Glade Creek in Vinyard Park Phase II	\$0	\$10,000	\$10,300	\$10,609	\$10,927	\$11,255	\$11,593	\$11,941	\$12,299	\$12,668	\$101,591
Roanoke County Broadband Initiative	\$325,000	\$325,000	\$325,000	TBD	\$975,000						



Additional Operating Impacts (continued)

Functional Team/Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20-FY 29
Human Services											
East Roanoke River Greenway	\$0	\$10,000	\$12,500	\$12,875	\$13,261	\$13,659	\$14,069	\$14,491	\$14,926	\$15,373	\$121,154
West Roanoke River Greenway	\$0	\$5,000	\$5,150	\$5,305	\$5,464	\$5,628	\$5,796	\$5,970	\$6,149	\$6,334	\$50,796
Internal Services											
Dynamics D365 Upgrade	\$0	\$0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Human Resources and Payroll Modules	\$60,000	\$82,000	\$91,000	\$93,730	\$96,542	\$99,438	\$102,421	\$105,494	\$108,659	\$111,919	\$951,203
Fleet Service Center Generator	\$0	\$1,100	\$1,133	\$1,167	\$1,202	\$1,238	\$1,275	\$1,313	\$1,353	\$1,393	\$11,175
Public Service Center Facility Replacement	\$0	\$0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Bent Mountain Community Center Repairs and Renovations	\$0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Roanoke County Public Schools											
Cave Spring High School	\$0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
William Byrd High School	\$0	\$0	\$0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Hidden Valley Middle School	\$0	\$0	\$0	\$0	\$0	TBD	TBD	TBD	TBD	TBD	TBD
Burlington Elementary School	\$0	\$0	\$0	\$0	\$0	\$0	TBD	TBD	TBD	TBD	TBD
Glenvar Elementary School	\$0	\$0	\$0	\$0	\$0	\$0	\$0	TBD	TBD	TBD	TBD
WE Cundiff Elementary School	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	TBD	TBD	TBD
Glen Cove Elementary School	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	TBD	TBD



Public Safety Functional Team





County of Roanoke, Virginia FY 2020 – FY 2029 Adopted Capital Improvement Program Public Safety Summary

Note: Projects with \$0 in FY 2020-2029 are active projects that have been fully funded in prior fiscal years.

Functional Team/Department/Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 20-29 Total
Public Safety											
Sheriff											
Jail Control Room and Security Camera Upgrade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sheriff's Office Capital Maintenance Program	95,000	110,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	1,205,000
<i>Sheriff Total</i>	95,000	110,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	1,205,000
Communications & IT											
Digital Microwave Ring Replacement	325,000	327,000	0	0	0	0	0	0	0	0	652,000
Public Safety Connectivity Upgrade	0	150,000	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
<i>Communications & IT Total</i>	325,000	477,000	444,000	0	0	0	0	0	0	0	1,246,000
Fire & Rescue											
Diesel Exhaust Removal System	0	0	0	0	0	0	525,000	0	0	0	525,000
Fire and Rescue Ballistic Body Armor	67,000	70,000	0	0	0	0	0	0	0	0	137,000
<i>Fire & Rescue Total</i>	67,000	70,000	0	0	0	0	525,000	0	0	0	662,000
General District Court											
General District Court Renovations and Furnishings	0	0	0	0	0	0	0	0	0	0	0
<i>General District Court Total</i>	0	0	0	0	0	0	0	0	0	0	0
Public Safety Total	\$487,000	\$657,000	\$569,000	\$125,000	\$125,000	\$125,000	\$650,000	\$125,000	\$125,000	\$125,000	\$3,113,000



Jail Control Room and Security Camera Upgrade

Department: Sheriff

Category: Replacement

Location: 305 East Main Street, Salem, VA 24153

Est. Useful Life: 10 years

Magisterial District: City of Salem

Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	600,000	600,000	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Roanoke County -													
Unrestricted Cash	492,000	492,000	0	0	0	0	0	0	0	0	0	0	0
City of Salem	108,000	108,000	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	0	0	0	0	0	0	0	0	0



Project Summary:

The Jail Control Room and Security Camera Upgrade project anticipates replacing 135 obsolete analog cameras with internet protocol (IP) cameras while upgrading the control room's touch screen security system. All project funding was approved in FY 2019. Replacement equipment for the current system is difficult to acquire, and the control room is a vital component of the security of the jail. The City of Salem contributed \$108,000 for the project in FY 2019.



Jail Control Room and Security Camera Upgrade (continued)

Project Description and Justification:

The Jail Control Room and Security Camera Upgrade anticipates replacing 135 obsolete analog cameras with internet protocol (IP) cameras and to upgrade the control room’s touch screen security system. The Jail’s security system is an integral part of day to day operations. These upgrades are pressing, as current equipment in use is now unsupported by vendors. IP cameras offer a number of benefits including superior image quality, versatility, data network connectivity, data encryption, and require no specialty software. These cameras may produce efficiencies in staff resources. The City of Salem will be responsible for a portion of the total costs of this project.

Additional Operating Impacts:

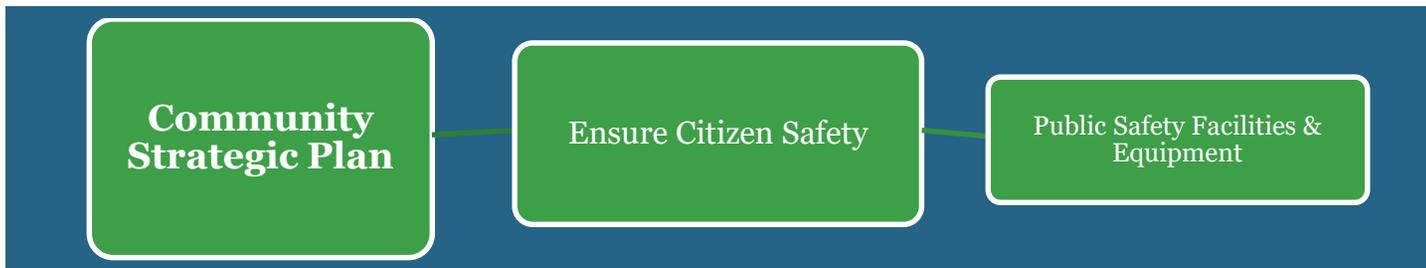
An additional impact to the operating budget is not anticipated, as operating costs for the existing system will be sufficient to cover maintenance of the new equipment.

Conformance with Plans, Policies, and Legal Obligations:

This project conforms to the Comprehensive Plan, Chapter 4- Community Facilities: “Provide a safe and secure jail environment.” The Jail has a legal obligation to comply with the Minimum Standards for Local Jails and Lockups as established by the Virginia Board of Corrections. Per Standard 6VAC15-40-840, the facility shall maintain a designated post, staffed 24 hours a day that controls activities and flow of people in and out of the secure area of the jail. In order to maintain accreditation with the American Correctional Association, the jail is obligated to comply with standards regarding safety.

Project Highlights and Key Milestones:

- Last upgrade to camera system and control room was in 2009-2010.
- Software support for cameras ended in 2012.
- New technology will provide for more camera capabilities.
- Camera replacement is planned for FY 2020.





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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	1,554,000	349,000	95,000	110,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	1,205,000
<u>Funding Sources</u>													
Roanoke County - Unrestricted Cash	1,554,000	349,000	95,000	110,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	1,205,000
Total Funding Sources	1,554,000	349,000	95,000	110,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	1,205,000
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 \$95,000 in FY 2020, \$110,000 in FY 2021, and increases to \$125,000 per year beginning in FY 2022.

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: EOC, 5925 Cove Road, Roanoke, VA 24019

Est. Useful Life: 10-15 years

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	813,000	161,000	325,000	327,000	0	0	0	0	0	0	0	0	652,000
Funding Sources													
Roanoke County -													
Unrestricted Cash	327,000	0	0	327,000	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	0	325,000	0	0	0	0	0	0	0	0	0	325,000
Total Funding Sources	813,000	161,000	325,000	327,000	0	0	0	0	0	0	0	0	652,000
Operating Impacts			0	0	65,000	66,950	68,959	71,027	73,158	75,353	77,613	79,942	578,002



Project Summary:

The Digital Microwave Ring Replacement project, with funding scheduled from FY 2019 through FY 2021, anticipates replacing 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 schedules replacement of 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 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 ends in 2019.
- Project is scheduled for funding in FY 2019 - FY 2021.

Community Strategic Plan

Ensure Citizen Safety

Public Safety Facilities & Equipment



Public Safety Connectivity Upgrade

Department: CommIT

Location: Countywide

Magisterial District: Countywide

Category: Replacement

Est. Useful Life: 7 years

Project Status: New

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	150,000	0	0	150,000	0	0	0	0	0	0	0	0	150,000
Funding Sources													
Roanoke County - Unrestricted Cash	150,000	0	0	150,000	0	0	0	0	0	0	0	0	150,000
Total Funding Sources	150,000	0	0	150,000	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 Connectivity Upgrade project, planned 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 planned to occur in FY 2021, which will coincide with the Digital Microwave Ring Upgrade project. Planning these projects together will provide for a more efficient and seamless upgrade to the overall connectivity of public safety radio system sites.



Public Safety Connectivity Upgrade (continued)

Project Description and Justification:

The project will entail 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 will include 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 is planned to coincide with the Microwave Ring upgrade project.

Additional Operating Impacts:

Beginning in FY 2021, 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 planned to coincide 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: New

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
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	194,000	0	0	0	194,000	0	0	0	0	0	0	0	194,000
CommIT Fund Balance	100,000	0	0	0	100,000	0	0	0	0	0	0	0	100,000
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	17,775	27,975	28,814	29,679	30,569	31,486	32,431	33,404	232,132



Project Summary:

The Emergency 911 Phone System Upgrade Project, planned for FY 2022, 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 2022, is anticipated to upgrade the current 911 Emergency Communications Phone System. The project expected to be funded in part with \$100,000 from the CommIT fund balance and \$150,000 in PSAP (Public Safety Answering Point) grant.

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 be 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 2022, 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 2023 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 test messages (SMS) to 911.
- Expected end of life for current system is FY 2022.
- Project expected to receive funding from PSAP (Public Safety Answering Point) grant for \$150,000.

Community Strategic Plan

Ensure Citizen Safety

Public Safety Facilities & Equipment



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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	525,000	0	0	0	0	0	0	0	525,000	0	0	0	525,000
Funding Sources													
Roanoke County - Unrestricted Cash	525,000	0	0	0	0	0	0	0	525,000	0	0	0	525,000
Total Funding Sources	525,000	0	0	0	0	0	0	0	525,000	0	0	0	525,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Diesel Exhaust Removal System project, planned for FY 2026, 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.



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 100% of these emissions resulting in a cleaner environment.

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 100% of vehicle emissions into station bays.
- Total cost for this project is approximately \$525,000.
- Project is planned for FY 2026.





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: New

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	137,000	0	67,000	70,000	0	0	0	0	0	0	0	0	137,000
Funding Sources													
Roanoke County - Unrestricted Cash	137,000	0	67,000	70,000	0	0	0	0	0	0	0	0	137,000
Total Funding Sources	137,000	0	67,000	70,000	0	0	0	0	0	0	0	0	137,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Fire and Rescue Ballistic Body Armor project, planned for FY 2020 and FY 2021, will purchase 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. Purchase of this equipment would 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 would allow fire and rescue personnel to treat and remove patients with law enforcement protection, which increases the rate of victim survival in the event of an active threat incident.



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 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 incident. 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, in the amount of \$137,000 over FY 2020 and FY 2021, will purchase the equipment including vests and helmets. Additionally, tactical emergency medical equipment and communication devices would 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.





General District Court Renovations and Furnishings

Department: General Services/General District Court

Category: Replacement

Location: 305 East Main Street, Salem, VA 24153

Est. Useful Life: 10-15 Years

Magisterial District: City of Salem

Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	125,000	125,000	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Roanoke County - Unrestricted Cash	125,000	125,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	125,000	125,000	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 General District Court Renovations and Furnishings project, funded in FY 2019, provides updates to two courtrooms. The project scope includes refinishing all courtroom benches and fixed furniture, painting, carpet replacement, lighting replacement, and replacement of acoustic fabric on courtroom walls. The Roanoke County Courthouse was constructed in 1985. Housed within the facility is the Roanoke County General District Court representing the 23rd Judicial District of Virginia.

Prior to this project, the courtrooms had not been updated since the building was opened. Limited renovations updating carpet and paint in the office areas were last completed over 15 years ago. The associated finishes in the courtrooms and offices are badly worn, outdated, and have exceeded their reasonable service life expectancy.



General District Court Renovations and Furnishings (continued)

Project Description and Justification:

The Roanoke County General District Court for the 23rd Judicial Circuit of Virginia is located in the County Courthouse Complex in downtown Salem. This project will fund renovations to outdated furniture and carpet in the courtrooms, judicial chambers, and clerk’s office. The General District Courtrooms are highly used public spaces with over 14,000 hearings occurring in 2016.

General Services staff have worked with the General District Court Clerk’s office to prioritize needs and maximize the impact of funding. The project scope includes refinishing all courtroom benches and fixed furniture, painting, carpet replacement, lighting replacement, and replacement of acoustic fabric on courtroom walls.

Additional Operating Impacts:

There are no additional operational cost impacts for this project. Specific furniture and materials will be selected to best provide for long term functionality and cost benefit.

Conformance with Plans, Policies, and Legal Obligations:

Furniture and floor coverings are necessary components for the operation of the General District Court.

Project Highlights and Key Milestones:

- Project fully funded in FY 2019.
- Project updates courtrooms 1 and 2 at the Roanoke County General District Court located at the County Courthouse.
- Project includes: replacing carpet, lighting improvements, repainting, refinishing wood work, and replacing acoustic fabric in the courtrooms.

Organizational Strategic Plan

Responsive Service Delivery

Develop a Strategy to Streamline Processes and Services





Community Services Functional Team





County of Roanoke, Virginia FY 2020 – FY 2029 Adopted Capital Improvement Program Community Services Summary

Note: Projects with \$0 in FY 2020-2029 are active projects that have been fully funded in prior fiscal years.

Functional Team/Department/Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 20-29 Total
Community Services											
Engineering and Development Services											
Cityworks Permit System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<i>Engineering and Development Services Total</i>	0	0	0	0	0	0	0	0	0	0	0
Planning Services											
Fallowater Lane Extension	1,997,760	0	0	0	0	0	0	0	0	0	1,997,760
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	250,000	0	0	0	0	0	0	0	0	0	250,000
Minor Transportation and Planning Studies	80,000	80,000	0	0	0	0	0	0	0	0	160,000
Plantation Road Phase II	0	300,000	0	0	0	0	0	0	0	0	300,000
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
<i>Planning Services Total</i>	2,327,760	380,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	4,707,760
Stormwater Management											
NPDES - Leachate Management System	0	0	0	0	0	0	0	0	0	0	0
Restoration of Glade Creek Phase II	0	0	0	0	0	0	0	0	0	0	0
Merriman Road Drainage Improvements	250,000	0	0	0	0	0	0	0	0	0	250,000
Storm Drainage Maintenance of Effort Program	200,000	180,000	225,000	225,000	250,000	250,000	275,000	275,000	275,000	275,000	2,430,000
NPDES - MS4 BMP Construction	600,000	0	200,000	200,000	600,000	200,000	200,000	600,000	200,000	200,000	3,000,000
<i>Stormwater Management Total</i>	1,050,000	180,000	425,000	425,000	850,000	450,000	475,000	875,000	475,000	475,000	5,680,000
Economic Development											
Roanoke County Broadband Initiative	382,978	382,905	386,875	384,939	387,149	383,664	383,664	384,983	0	0	3,077,157
Woodhaven Property Acquisition & Improvements	162,800	162,800	162,800	387,200	387,697	387,869	387,715	387,235	386,430	388,181	3,200,727
<i>Economic Development Total</i>	545,778	545,705	549,675	772,139	774,846	771,533	771,379	772,218	386,430	388,181	6,277,884
Community Services Total	\$3,923,538	\$1,105,705	\$1,224,675	\$1,447,139	\$1,874,846	\$1,471,533	\$1,496,379	\$1,897,218	\$1,111,430	\$1,113,181	\$16,665,644



Cityworks Permit System

Department: Engineering & Development Services

Category: New Facilities

Location: 5204 Bernard Drive, Roanoke, VA 24018 (County Administration Building)

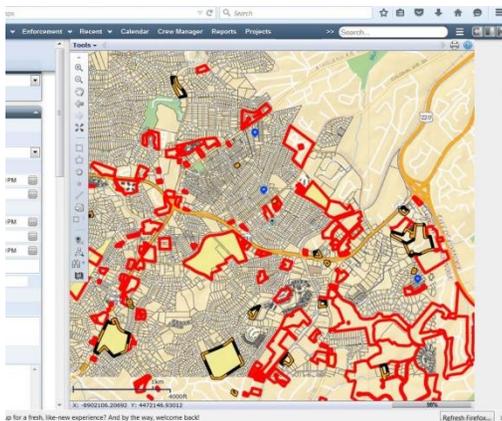
Est. Useful Life: 15 years

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	910,000	910,000	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Roanoke County - Unrestricted Cash	870,000	870,000	0	0	0	0	0	0	0	0	0	0	0
Community Development 3% Technology Fee	40,000	40,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	910,000	910,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			0	57,000	(35,000)	(36,050)	(37,132)	(38,245)	(39,393)	(40,575)	(41,792)	(43,046)	(254,232)



Project Summary:

This is Phase II of the project and consists of expanding the use of the Cityworks software system to manage workflows for land development, building plan reviews, permitting, building inspections and enforcement. The new system will allow staff to operate one comprehensive system and improve work process management and tracking. The system will provide key performance indicators and reporting to assist in departmental management. A public access portal will be developed to make it easier to do business in Roanoke County. Cityworks replaces the current system, Land Development Office (LDO) which was acquired in 2004 is obsolete and will no longer be supported by the manufacturer.



Comprehensive Public Asset and Work Management Solutions (continued)

Project Description and Justification:

This is Phase II of the project and consists of expanding the use of the Cityworks software system to manage workflows for land development, building plan reviews, permitting, building inspections and enforcement. The new system will allow staff to operate one comprehensive system and improve work process management and tracking. The system will provide key performance indicators and reporting to assist in departmental management. A public access portal will be developed to make it easier to do business in Roanoke County. Cityworks replaces the current system, Land Development Office (LDO) which was acquired in 2004 and vendor server support ends as of January 2020. Failure of the current system may result in reversion to paper/manual process. Cityworks allows for ready access to data to support GIS and other business operations and will provide more appropriate and efficient services to building and development community.

Additional Operating Impacts:

The total net impact from current annual maintenance costs is estimated as an increase of \$22,000, and will likely impact the FY 2021 operating budget. Once fully implemented and the old system is no longer required there is anticipated to be annual operating savings of \$35,000.

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 the Department's Building Services and Code Enforcement. Shifting fully to a web-based solution connected to wireless networks will improve mobility and flexibility for our citizens, customers, and staff.

Project Highlights and Key Milestones:

- Phase I, Asset Management, was funded via general operating dollars and is completed.
- Phase II of the project consists of expanding the use of this current software system to manage land development and building plan reviews, permitting, and building inspections and enforcement.
- Board of Supervisors approved additional funding for Cityworks System in December 2018.

Community
Strategic Plan

Position Roanoke County for
Future Economic Growth

Business-Friendly
Development Process



Fallowater Lane Extension

Department: Planning, Economic Development
Location: Route 419/Electric Road and Chevy Road
Magisterial District: Cave Spring Magisterial District

Category: New Facilities
Est. Useful Life: 30 Years
Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	502,240	502,240	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Economic Development													
Funds	502,240	502,240	0	0	0	0	0	0	0	0	0	0	0
Commonwealth Transportation													
Funds	1,997,760	0	1,997,760	0	0	0	0	0	0	0	0	0	1,997,760
Total Funding Sources	2,500,000	502,240	1,997,760	0	0	0	0	0	0	0	0	0	1,997,760
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Fallowater Lane Extension project, funded in FY 2019, 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.” The project would upgrade the existing private drive to public road standards and construct a new section allowing for future road segments. The estimated cost of this project is \$2.5 million, of which \$1.495 million has been reallocated from VDOT Secondary Six-Year Plan Construction Formula Funds per prior Board approval. The balance of funding (\$1.0 million) comes from Roanoke County and VDOT Revenue Sharing funds (50/50 split). Roanoke County will administer the preliminary engineering phase and may administer the construction. VDOT will administer the right-of-way phase, so VDOT funds 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 project will upgrade the existing private drive to public road standards and construct a new section that would allow for future road segments. The estimated cost of this project is \$2.5 million, of which \$1.495 million has been reallocated from VDOT Secondary Six-Year Plan Construction Formula Funds. The balance of funding (\$1.0 million) comes from Roanoke County and VDOT Revenue Sharing funds (50/50 split).

Additional Operating Impacts:

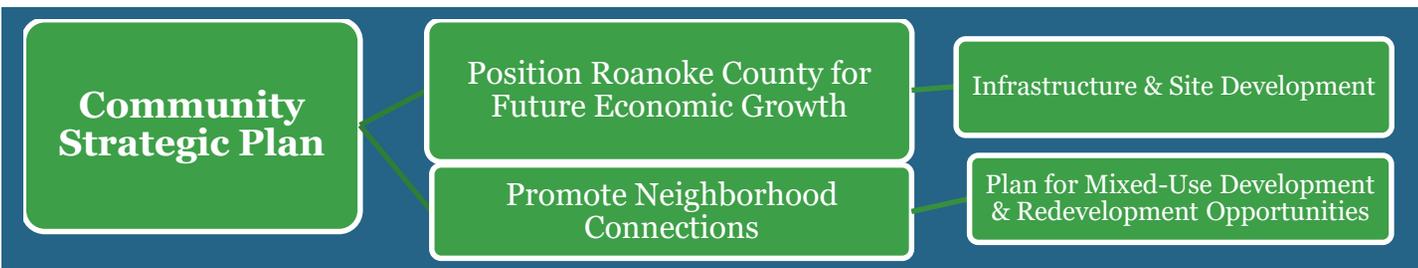
Roanoke County will not see an operating budget impact, as the project will be constructed to VDOT standards and will be accepted into the Secondary Road network when complete.

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 scheduled for Spring 2019.
- Construction scheduled to begin in Spring 2020.
- Completion of construction scheduled for Summer 2021.





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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	608,000	608,000	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
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, \$608,000 in County funding has been allocated to match State Revenue Sharing funds (\$608,000), and \$104,000 has been allocated through the Commonwealth's Secondary Six-Year Program. The balance of \$815,000 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:

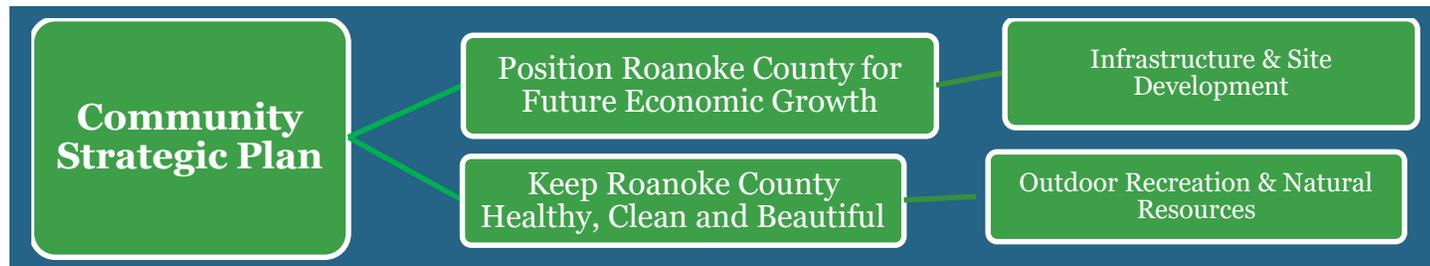
There will be no operating budget impact to Roanoke County as VDOT currently maintains the road and will continue to maintain it after the project is complete.

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 2022: Right-of-way phase planned.
- FY 2023: Construction advertisement and construction phase expected to begin.





Huffman Lane Improvements

Department: Planning

Location: Huffman Lane

Magisterial District: Vinton Magisterial District

Category: Replacement

Est. Useful Life: 30 Years

Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
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 requires 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 has been awarded \$70,000 in Revenue Sharing funds for this project, which requires 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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
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 FY 2020.



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:

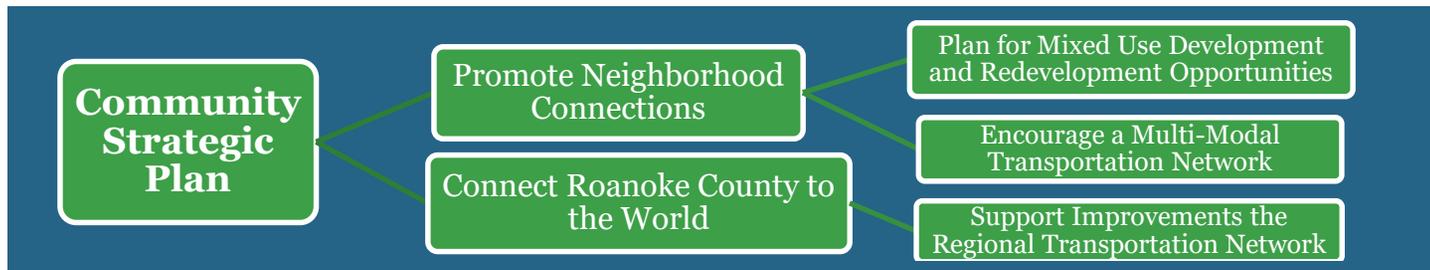
Roanoke County will be responsible for minor maintenance of the sidewalk facility once constructed, which will be absorbed in the existing operating budget.

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 FY 2020.





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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
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 increase to \$1.9 million due to ADA requirements and Roanoke County applied for SMART SCALE funds of \$1.6 million.



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 proposed bicycle and pedestrian safety improvements in the planning stages 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.
- Original project costs were \$275,000 with funding sources including County Corridor Improvement Project Funds and Transportation Alternatives funding awarded in FY 2018.
- A SMART SCALE request was submitted in 2018 to fund the estimated \$1,660,000 deficit of total VDOT administered project.





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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	580,000	330,000	250,000	0	0	0	0	0	0	0	0	0	250,000
Funding Sources													
Roanoke County -													
Unrestricted Cash	450,000	250,000	200,000	0	0	0	0	0	0	0	0	0	200,000
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	0	50,000	0	0	0	0	0	0	0	0	0	50,000
Total Funding Sources	580,000	330,000	250,000	0	0	0	0	0	0	0	0	0	250,000
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 all phases of 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. Supplemental funding from VDOT Secondary Six Year Plan makes up the difference in state match funds and local funds in FY 2023.

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.
- FY 2022: Right-of-way phase planned.
- FY 2023: Construction advertisement and construction phase expected to begin.





Minor Transportation and Planning Studies

Department: Planning

Category: New Facilities

Location: Countywide

Est. Useful Life: 30 Years

Magisterial District: Countywide

Project Status: New

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	160,000	0	80,000	80,000	0	0	0	0	0	0	0	0	160,000
Funding Sources													
Roanoke County - Unrestricted Cash	160,000	0	80,000	80,000	0	0	0	0	0	0	0	0	160,000
Total Funding Sources	160,000	0	80,000	80,000	0	0	0	0	0	0	0	0	160,000
Operating Impacts			(20,000)	(20,000)	0	0	0	0	0	0	0	0	(40,000)



Project Summary:

The Minor Transportation and Planning Studies project, funded in FY 2020 and FY 2021, will provide the preliminary work necessary to apply for competitive transportation grant funding programs including SMART SCALE. Preliminary work may include survey work, deed/plat work, preliminary engineering, studies, match funds, professional services and other similar expenses. These studies would provide more accurate project costs, which would allow for stronger and more competitive grant applications. Planned transportation grant applications will focus on roadway, pedestrian, bicycle and streetscape improvements to facilitate economic development. Proposed projects may come from Reimagine Plans and/or the Regional Study on Transportation Project Prioritization for Economic Development and Growth (RVTPOTED Study – 2018). Additionally, Roanoke County may pursue transportation and planning studies for turn around, intersection, and drainage improvements as identified by the County and VDOT.



Minor Transportation and Planning Studies (continued)

Project Description and Justification:

Transportation funding programs are becoming increasingly more competitive and are now requiring detailed conceptual plans and project estimates with application submissions. The Minor Transportation and Planning Studies Project will fund preliminary work, which allow the County to submit stronger, more complete applications to receive grant funding.

Planned transportation grant applications will focus on roadway, pedestrian, bicycle and streetscape improvements to facilitate economic development. Proposed projects may come from Reimagine Plans and/or the Regional Study on Transportation Project Prioritization for Economic Development and Growth (RVTPo TED Study – 2018). Additionally, Roanoke County may pursue transportation and planning studies for turn around, intersection, and drainage improvements as identified by the County and VDOT.

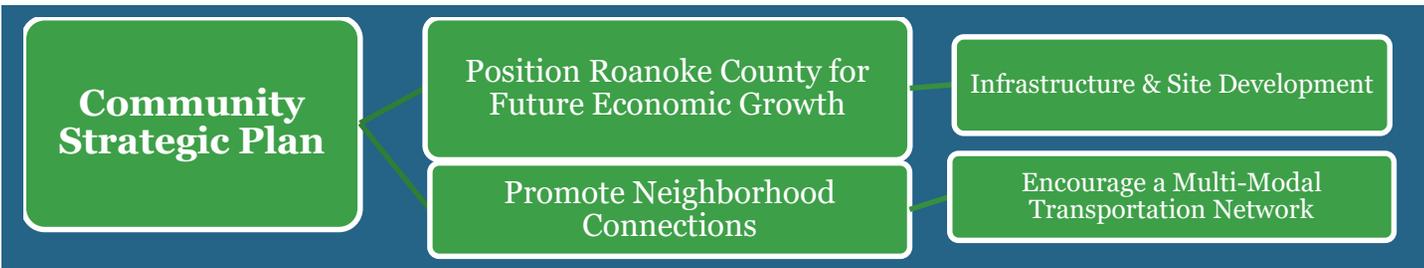
Additional Operating Impacts:

Funding for preliminary work for several recent projects was incurred by the Community Development: Planning Services operating department. By planning for these costs within the CIP, the project will reduce impacts on the department’s operating budget, which are expected at \$20,000 in both FY 2020 and FY 2021 for a total reduction of \$40,000.

Conformance with Plans, Policies, and Legal Obligations:

This project will help to implement projects in conformance with the Roanoke County Comprehensive Plan (2005), the Hollins Area Plan (2008), the Regional Study on Transportation Project Prioritization for Economic Development and Growth (RVTPo TED Study - 2018), the draft 419 Town Center Plan, the draft Hollins Center Plan and the draft Oak Grove Center Plan.

- Project Highlights and Key Milestones:**
- 2017 surveying work for Buck Mountain/Starkey Road Intersection Improvements assisted preliminary design and supported a successful application for RSTP and Revenue Sharing funds.
 - Roanoke County extended a contract with Stantec to study a Diverging Diamond Intersection at Route 419 and Route 220. This provided conceptual plans and traffic analysis for a SMART SCALE application.
 - 2018 surveying work for Route 419 between Ogden Road and Starkey Road is supporting project scoping and preliminary design for a future SMART SCALE application.





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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	2,052,213	1,752,213	0	300,000	0	0	0	0	0	0	0	0	300,000
Funding Sources													
Roanoke County - Unrestricted Cash	150,000	0	0	150,000	0	0	0	0	0	0	0	0	150,000
Prior VDOT Revenue Sharing Funds (County)	150,000	0	0	150,000	0	0	0	0	0	0	0	0	150,000
SMART SCALE Grant	1,752,213	1,752,213	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	2,052,213	1,752,213	0	300,000	0	0	0	0	0	0	0	0	300,000
Operating Impacts			0	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, to be appropriated in FY 2019. An additional \$300,000 is included in FY 2021 to cover a project contingency. Of the \$300,000, prior VDOT Revenue Sharing Funds (County) will cover 50% and unrestricted cash will cover the remaining.



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 to be appropriated in FY 2019. An additional \$300,000 is included in FY 2021 due to provide for a sufficient project funding contingency.

Additional Operating Impacts:

Streetscape improvements within this project may require additional landscape maintenance responsibilities, but impact estimates are not yet available.

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.





VDOT Revenue Sharing Program

Department: Planning

Location: Countywide

Magisterial District: Countywide

Category: Replacement/New Facilities

Est. Useful Life: Varies

Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
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 2019 is allocated over FY 2019 and FY 2020. In FY 2019 through FY 2020, two projects have been identified in the Revenue Sharing Program: Fallowater Lane Extension (\$502,240 County PPP funds) and Starkey Road/Buck Mountain Road Intersection Improvements (\$500,000 County and \$80,000 Developer Cash Proffer), with County funding included with those individual projects.



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:

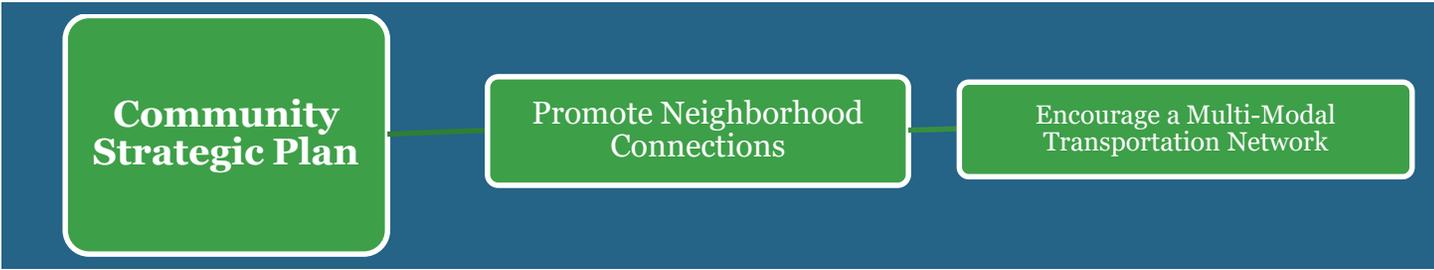
- County has leveraged tens of millions of state dollars for roadway and drainage improvements since 1988.

Recent projects completed include:

- Ivyland Road Extension

Projects planned in FY 2019 and FY 2020:

- Fallowater Lane Extension (\$502,240 County PPP funds).
- Starkey Road/Buck Mountain Road Intersection Improvements (\$500,000 County Share and \$80,000 Developer Cash Proffer).
- Both Fallowater Lane Extension and Starkey Road/Buck Mountain Road Intersection Improvements are stand-alone projects 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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
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			0	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 design is 95% complete and the work includes a new 50,000 gallon storage tank, pumps, and controls, relining the existing leachate pond, and improving alarm communications. Engineering & Development Services is also working on an alternative with the Virginia Department of Environmental Quality (DEQ) to possibly obtain a permit to discharge into an adjacent stream. Either option would comply with environmental laws and regulations.



NPDES - Leachate Management System Upgrade (continued)

Project Description and Justification:

The NPDES - Leachate Management System Upgrade project will reconstruct the existing system that is past its useful lifetime that collects and controls the discharge of leachate to the public sanitary sewer from the closed Dixie Caverns Landfill. The design is 95% complete and the work includes a new 50,000 gallon storage tank, pumps, and controls, relining the existing leachate pond, and improving alarm communications. Engineering & Development Services is also working on an alternative with the Virginia Department of Environmental Quality (DEQ) to possibly obtain a permit to discharge into an adjacent stream. Pending approval, this would result in substantial saving in capital costs and ongoing operational costs. Either option would comply with environmental laws and regulations.

Additional Operating Impacts:

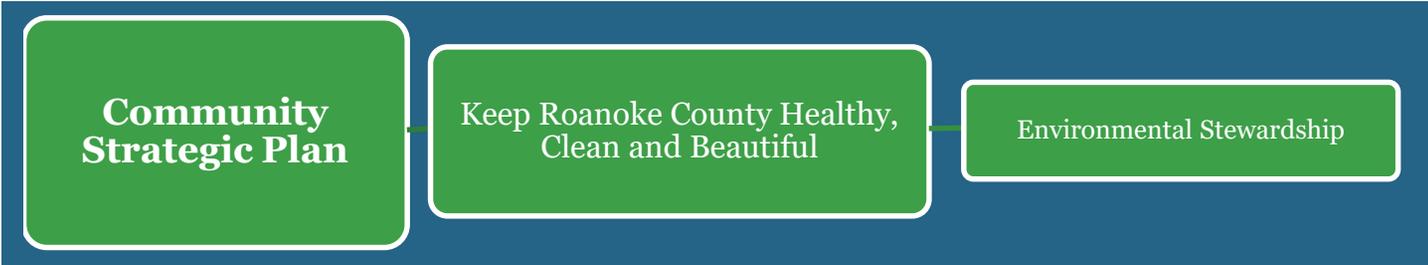
The County does not have the trained staff required to properly maintain pumps, instruments, and controls. Once this project is completed, an operating/maintenance contractor shall be obtained to perform these services. The estimated yearly operating impact beginning in FY 2020 is estimated at \$50,000 per year if a discharge permit cannot be obtained. If the permit is successful, the net savings will be approximately \$70,000 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 were 95% completed in FY 2018.
- County is working with Virginia DEQ to possibly obtain permit to discharge to an adjacent stream.
- Either option would comply with environmental laws and regulations.





Restoration of Glade Creek in Vinyard Park, Phase II

Department: Engineering & Development Services

Category: New Facilities

Location: Vinyard Park

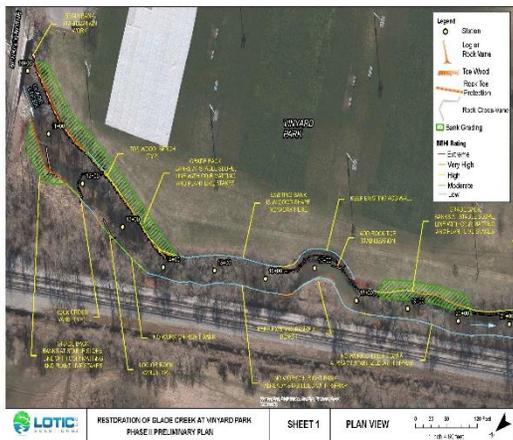
Est. Useful Life: 20 years

Magisterial District: Vinton

Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	844,351	844,351	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Roanoke County - Unrestricted Cash	460,724	460,724	0	0	0	0	0	0	0	0	0	0	0
Stormwater Local Assistance Fund	384,177	384,177	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	844,901	844,901	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			0	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	101,591



Project Summary:

This project is a part of the NPDES – MS4 BMP Construction Program, and it builds on the Phase I stream restoration project that was completed in 2016. This project will stabilize the stream banks along Glade Creek through the lower part of Vinyard Park (east of Berkley Road). This will reduce sediment discharges in support of the County’s MS4 permit Total Maximum Daily Load Requirements; stop bank erosion that is endangering existing park fields and improve safety by eliminating existing steep (vertical) stream banks.



Restoration of Glade Creek in Vinyard Park, Phase II (continued)

Project Description and Justification:

This project is a part of the NPDES – MS4 BMP Construction Program, and it builds on the Phase 1 stream restoration project that was completed in 2016. This project will stabilize the stream banks along Glade Creek through the lower part of Vinyard Park (east of Berkley Road). This will reduce sediment discharges in support of the County’s MS4 permit Total Maximum Daily Load Requirements; stop bank erosion that is endangering existing park fields, and improve safety by eliminating existing steep (vertical) stream banks. Construction began in October 2018 and is anticipated to be completed in Spring 2019. 45% of the cost is being provided through a Virginia Stormwater Local Assistance Fund (SLAF) grant.

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 \$10,000 beginning in FY 2021 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:

- Virginia Stormwater Local Assistance Funding (SLAF) obtained in FY 2017
- Design began and U.S. Corps of Engineers Joint permit application was made in August 2017
- Construction began in October 2018.
- Completion anticipated in 2019.
- 45% of the cost is being provided through a Virginia Stormwater Local Assistance Fund (SLAF) grant.

Community Strategic Plan

Keep Roanoke County Healthy, Clean and Beautiful

Environmental Stewardship



Merriman Road Drainage Improvements

Department: Engineering and Development Services

Category: Replacement

Location: Merriman Road

Est. Useful Life: 20 Years

Magisterial District: Cave Spring

Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	584,406	334,406	250,000	0	0	0	0	0	0	0	0	0	250,000
Funding Sources													
Roanoke County - Unrestricted Cash	397,203	167,203	230,000	0	0	0	0	0	0	0	0	0	230,000
VDOT Revenue Sharing	167,203	167,203	0	0	0	0	0	0	0	0	0	0	0
Prior Drainage Maintenance Funds (County)	20,000	0	20,000	0	0	0	0	0	0	0	0	0	20,000
Total Funding Sources	584,406	334,406	250,000	0	0	0	0	0	0	0	0	0	250,000
Operating Impacts			0	0	0	0	0	0	0	0	0	0	0



Project Summary:

The Merriman Road Drainage Improvements project continues improvements to install and replace new storm drainage infrastructure, which will handle increases in stormwater. The Merriman Road drainage improvements will reduce street and structure flooding throughout the neighborhoods of Sunnyside Drive, Bradford Drive and Merriman Road. Significant rain events in summer 2018 caused flooding to these areas because the existing storm drainage system is past its useful life. Investing in infrastructure reduces flood risk, protects public safety, protects private property, and improves water quality. Prior year funding includes VDOT Revenue Sharing, which the County contributed a 50% match.



Merriman Road Drainage Improvements (continued)

Project Description and Justification:

The existing inadequate drainage system along Merriman Road consists of roadside ditches, culverts and a 100 foot timber retaining wall. The retaining wall was designed to divert runoff into a 30 inch corrugated metal pipe that discharges into a tributary of Mudlick Creek. The existing drainage system is approximately 56 years old. Drainage system improvements will increase pipe sizes, install new road side inlets, reduce flooding and improve public safety.

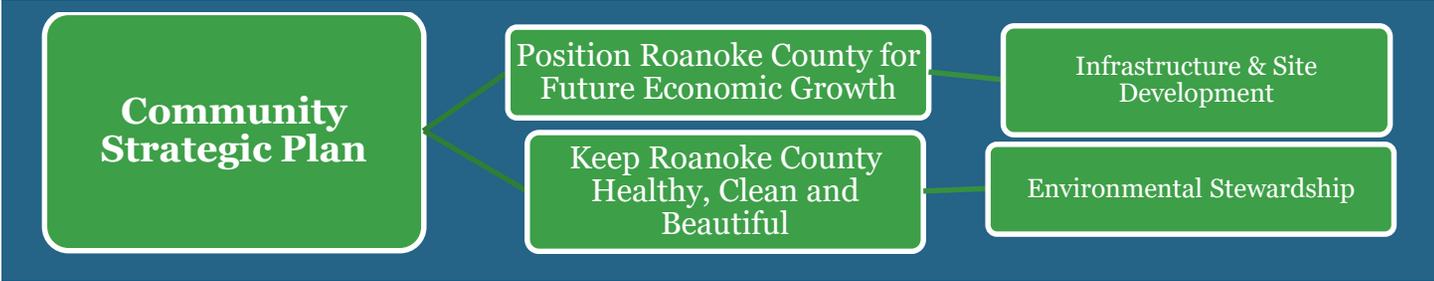
Additional Operating Impacts:

There are no additional operating costs associated with this project. The County currently funds two work crews that will provide maintenance on this system.

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:**
- Merriman Road drainage system approximately 56 years old and at end of useful life.
 - Project will improve drainage on Merriman Road to improve road safety and protect 2 homes from frequent flooding due to inadequate drainage system.
 - Improvements will increase pipe sizes, install new road side inlets, reduce flooding and improve public safety.





Storm Drainage Maintenance of Effort Program

Department: Engineering & Development Services

Category: Replacement

Location: Countywide

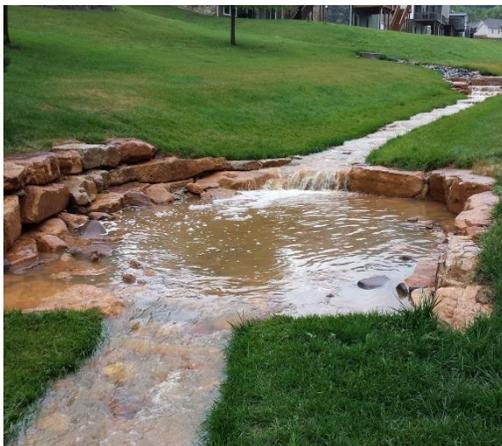
Est. Useful Life: Varies

Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	3,172,062	742,062	200,000	180,000	225,000	225,000	250,000	250,000	275,000	275,000	275,000	275,000	2,430,000
Funding Sources													
Roanoke County -													
Unrestricted Cash	2,972,062	742,062	0	180,000	225,000	225,000	250,000	250,000	275,000	275,000	275,000	275,000	2,230,000
VDOT Reimbursement	200,000	0	200,000	0	0	0	0	0	0	0	0	0	200,000
Total Funding Sources	3,172,062	742,062	200,000	180,000	225,000	225,000	250,000	250,000	275,000	275,000	275,000	275,000	2,430,000
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. Due to historic rain amounts in 2018, planned projects have been delayed. As this is an on-going program, projects may be substituted as conditions warrant.



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. Due to historic rain amounts in 2018, planned projects have been delayed. As this is an on-going program, projects may be substituted as conditions warrant.

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.
- Following historic rain amounts in 2018, the department is evaluating and rescheduling planned projects.





NPDES-MS4 BMP Construction

Department: Engineering & 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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	3,219,776	219,776	600,000	0	200,000	200,000	600,000	200,000	200,000	600,000	200,000	200,000	3,000,000
Funding Sources													
Roanoke County - Unrestricted Cash	2,119,776	219,776	300,000	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,900,000
Stormwater Local Assistance Fund	1,100,000	0	300,000	0	0	0	400,000	0	0	400,000	0	0	1,100,000
Total Funding Sources	3,219,776	219,776	600,000	0	200,000	200,000	600,000	200,000	200,000	600,000	200,000	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 stream restoration of Wolf Creek in Goode Park, stabilization of Mudlick Creek watershed upstream of Hidden Valley High School, and stabilization at Read Mountain Preserve.

Additional Operating Impacts:

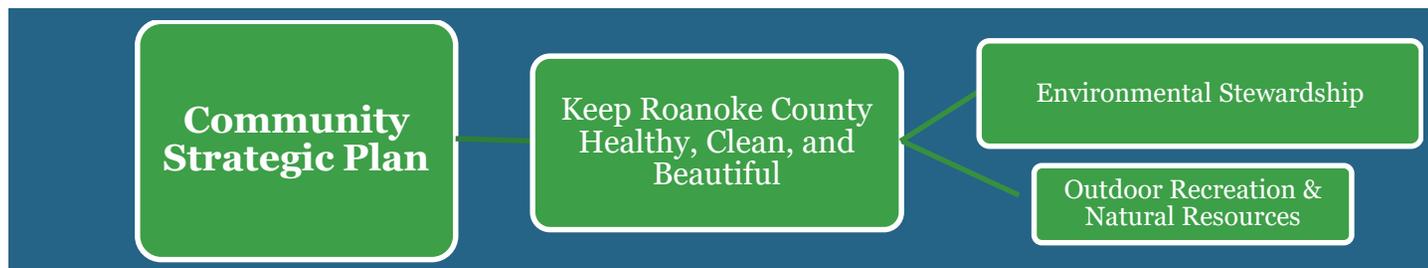
Existing County staff will be utilized for this effort, so there will not be an additional operating impact. However, as the County constructs additional BMPs as required by the MS4 permit, staffing levels may need to be analyzed to ensure proper maintenance of the BMPs.

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.
- Construction on the Restoration of Glade Creek in Vinyard Park, Phase II project began in October 2018.
- Application for SLAF funding submitted in October 2018 for Restoration of Wolf Creek in Goode Park, Phase I.
- Construction anticipated to begin in Summer 2020, pending award of grant funding.





Roanoke County Broadband Initiative

Department: Economic Development

Category: New Facilities

Location: Countywide

Est. Useful Life: Varies

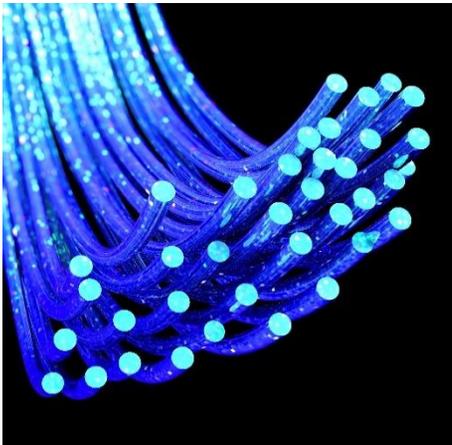
Magisterial District: Countywide

Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	3,899,769	822,612	382,978	382,905	386,875	384,939	387,149	383,664	383,664	384,983	0	0	3,077,157
Funding Sources													
Roanoke County -													
Unrestricted Cash	2,340,787	29,513	0	0	386,875	384,939	387,149	383,664	383,664	384,983	0	0	2,311,274
Economic Development													
Funds	793,099	793,099	0	0	0	0	0	0	0	0	0	0	0
Sale of Land -													
Economic Development	765,883	0	382,978	382,905	0	0	0	0	0	0	0	0	765,883
Total Funding Sources	3,899,769	822,612	382,978	382,905	386,875	384,939	387,149	383,664	383,664	384,983	0	0	3,077,157
*Operating Impacts			325,000	325,000	325,000	TBD	975,000						

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



Project Summary:

The Roanoke County Broadband Initiative 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 Initiative (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 Initiative 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

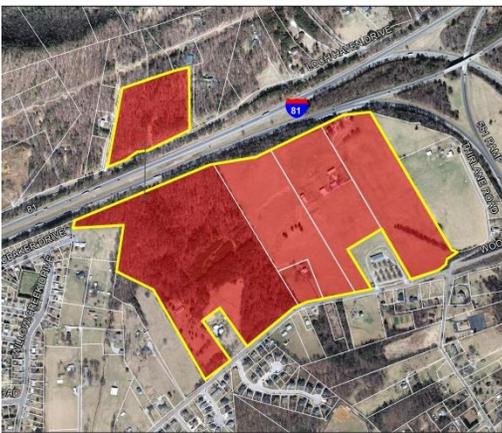
Est. Useful Life: Varies

Magisterial District: Catawba Magisterial District

Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	3,565,681	364,954	162,800	162,800	162,800	387,200	387,697	387,869	387,715	387,235	386,430	388,181	3,200,727
Funding Sources													
Roanoke County -													
Unrestricted Cash	2,712,327	0	0	0	0	387,200	387,697	387,869	387,715	387,235	386,430	388,181	2,712,327
Economic Development													
Funds	569,237	364,954	18,920	22,563	162,800	0	0	0	0	0	0	0	204,283
Sale of Land -													
Economic Development	284,117	0	143,880	140,237	0	0	0	0	0	0	0	0	284,117
Total Funding Sources	3,565,681	364,954	162,800	162,800	162,800	387,200	387,697	387,869	387,715	387,235	386,430	388,181	3,200,727
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 \$3.2 million in project financing is budgeted in the FY 2020 – FY 2029 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. Project currently in engineering and design phase for utility infrastructure and developing a entrance location, with construction planned for FY 2020.

Additional Operating Impacts:

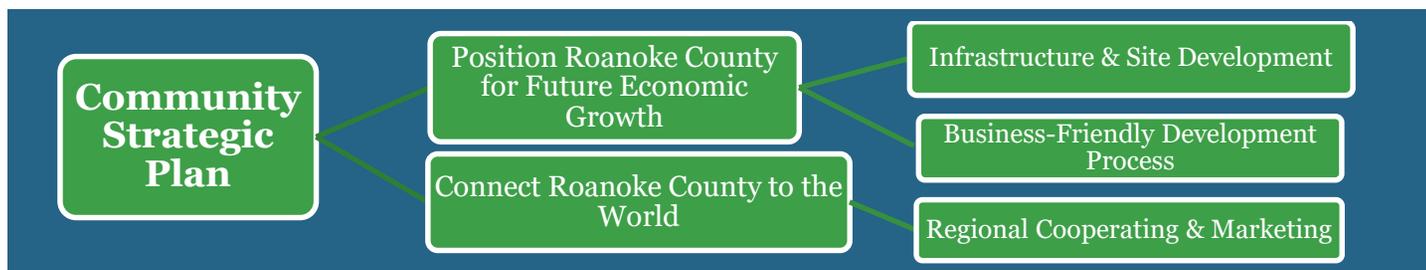
No operating impacts expected.

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.







Human Services Functional Team





County of Roanoke, Virginia FY 2020 – FY 2029 Adopted Capital Improvement Program Human Services Summary

Note: Projects with \$0 in FY 2020-2029 are active projects that have been fully funded in prior fiscal years.

Functional Team/Department/Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 20-29 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	41,000	43,000	71,000	15,000	116,000	0	0	0	0	0	286,000
Hollins Branch Library Replacement	0	0	0	4,996,000	0	0	10,000,000	0	0	0	14,996,000
<i>Library Total</i>	41,000	43,000	71,000	5,011,000	116,000	0	10,000,000	0	0	0	15,282,000
Parks and Recreation											
Parks and Recreation Capital Maintenance Program	600,000	650,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	6,850,000
East Roanoke River Greenway	366,606	125,000	0	0	0	0	0	0	0	0	491,606
West Roanoke River Greenway	4,542,105	0	0	0	0	0	0	0	0	0	4,542,105
Explore Park	0	0	0	1,300,000	0	0	0	0	0	0	1,300,000
<i>Parks and Recreation Total</i>	5,508,711	775,000	700,000	2,000,000	700,000	700,000	700,000	700,000	700,000	700,000	13,183,711
Human Services Total	\$5,549,711	\$818,000	\$771,000	\$7,011,000	\$816,000	\$700,000	\$10,700,000	\$700,000	\$700,000	\$700,000	\$28,465,711



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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
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, which began in FY 2019, addresses HVAC replacement needs, exterior window replacement, interior and exterior painting, floor coverings, and interior space configuration changes to improve line of sight for staff.

An additional funding request for a “Phase II” renovation project with an estimated cost of \$148,000 which involved renovating and re-purposing the garage on site and other site improvements was considered but not funded in the CIP.



Mount Pleasant Library Renovation (continued)

Project Description and Justification:

Renovating Mt. Pleasant Library addresses multiple issues associated with the existing building. Along with the fire station across the street, the library forms the core of the Mt. Pleasant commercial area and provides a key service delivery point and popular community gathering space for residents.

Improvements to the library space will 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.

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.

Project Highlights and Key Milestones:

- Mount Pleasant Library opened in 2009 under lease agreement.
- In 2011, Roanoke County purchased the cinderblock building.
- Renovations will address immediate renovation needs in the existing library building including HVAC replacement, window replacement, painting, and floor covering.
- Phase II renovations totaling \$148,000 were considered but not funded in the CIP.

Community
Strategic Plan

Promote Lifelong Learning

"K to Gray" Continuum of
Educational Resources



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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	386,000	100,000	41,000	43,000	71,000	15,000	116,000	0	0	0	0	0	286,000
Funding Sources													
Roanoke County - Unrestricted Cash	386,000	100,000	41,000	43,000	71,000	15,000	116,000	0	0	0	0	0	286,000
Total Funding Sources	386,000	100,000	41,000	43,000	71,000	15,000	116,000	0	0	0	0	0	286,000
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 will ensure 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. Over five years, all public use computers will be replaced by branch with Glenvar in FY 2020, Hollins in FY 2021, Vinton in FY 2022, both smaller branches (Bent Mountain and Mount Pleasant) in FY 2023, and South County in FY 2024. Additional funding after five years will be considered as new technology becomes available.



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 branch library public use computers beginning with South County in FY 2019, followed by Glenvar in FY 2020, Hollins in FY 2021, Vinton in FY 2022, and Bent Mountain and Mount Pleasant in FY 2023. 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:

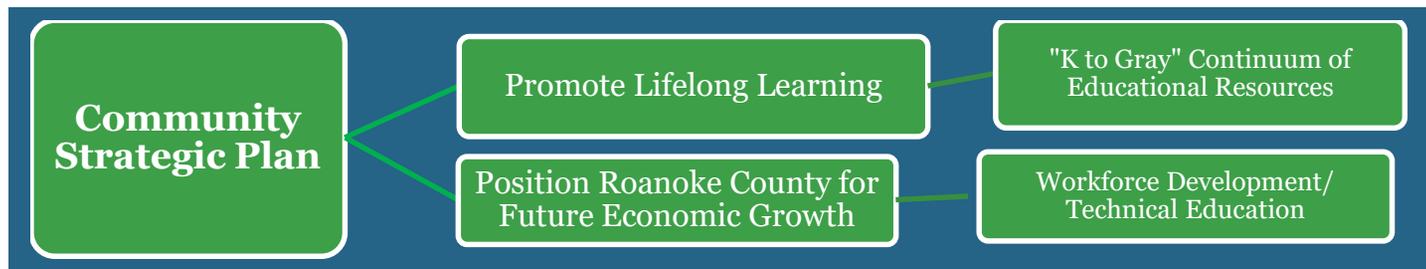
There are no anticipated operating impacts.

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.
- South County Library computer replacement funded in FY 2019, with Glenvar planned in FY 2020.





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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	14,996,000	0	0	0	0	4,996,000	0	0	10,000,000	0	0	0	14,996,000
Funding Sources													
Lease/Revenue Bonds	14,996,000	0	0	0	0	4,996,000	0	0	10,000,000	0	0	0	14,996,000
Total Funding Sources	14,996,000	0	0	0	0	4,996,000	0	0	10,000,000	0	0	0	14,996,000
Operating Impacts			0	0	0	0	0	0	0	TBD	TBD	TBD	TBD



Project Summary:

The Hollins Library Replacement Project, with planning and initial design scheduled for FY 2023 and construction funding in FY 2026, proposes 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 \$17.5 million. Specific details regarding site acquisition and construction costs were provided to the Board of Supervisors through FY 2019 Budget Memo #6, “Hollins Library Capital Project.”



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 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:

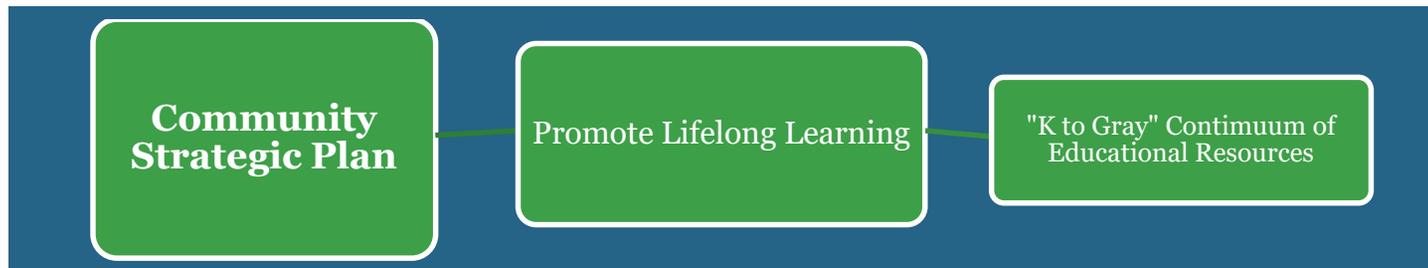
The proposed renovations to the facility may increase citizen usage by 25-40%. Higher demand may raise utility costs and staff costs. With increased usage, additional funds may be generated by rentals and events. Additional operating funding would not be required until completion of construction.

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.
- It 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 by \$4.996 million in bonds in FY 2023, in the process is to secure an experienced library architectural firm to help evaluate the advantages of either staying or relocating the library.
- Phase II project costs, funded by an additional \$10,0 million in bonds, are included 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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	9,690,000	2,840,000	600,000	650,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	6,850,000
Funding Sources													
Roanoke County -													
Unrestricted Cash	7,790,000	2,040,000	400,000	550,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	5,750,000
Fee Class Fund	1,900,000	800,000	200,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,100,000
Total Funding Sources	9,690,000	2,840,000	600,000	650,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	6,850,000
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 \$600,000 in FY 2020, \$650,000 in FY 2021, and then \$700,000 in FY 2022 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. Future project planning and prioritization for the CMP is anticipated to be enhanced through a comprehensive Facility Condition Assessment study expected to be completed in FY 2020.



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 \$600,000 in FY 2020, \$650,000 in FY 2021, and then \$700,000 in FY 2022 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.

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.

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.

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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	9,007,446	8,515,840	366,606	125,000	0	0	0	0	0	0	0	0	491,606
Funding Sources													
Roanoke County - Unrestricted Cash	603,000	478,000	0	125,000	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	0	366,606	0	0	0	0	0	0	0	0	0	366,606
Private Capital Contributions	20,000	20,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	9,007,446	8,515,840	366,606	125,000	0	0	0	0	0	0	0	0	491,606
Operating Impacts			0	10,000	12,500	12,875	13,261	13,659	14,069	14,491	14,926	15,373	121,154



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. To receive the \$366,606 in Transportation Alternatives Grant program in FY 2020, the County has budgeted \$125,000 in match funds for FY 2021.



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. The section from Roanoke City to the County’s Niagara Ranch is anticipated to be complete in FY 2020, and the other two sections are planned to be completed in FY 2021.

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 receive \$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:

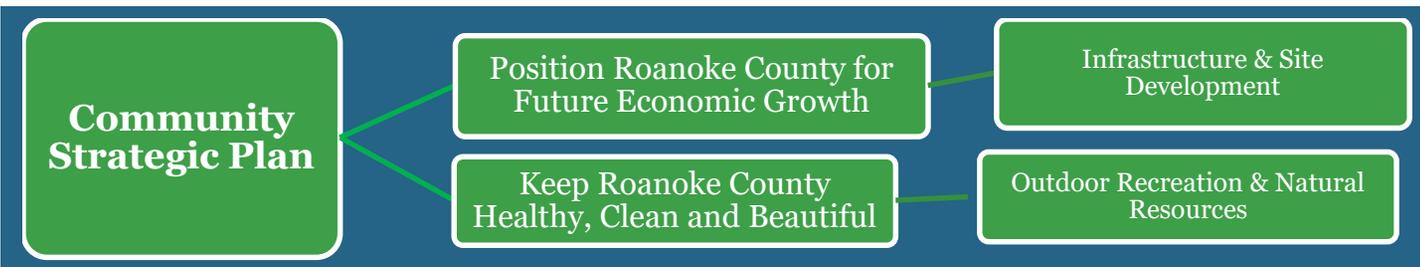
After project completion, funding will be required to maintain the greenway. An estimate of \$10,000 annually beginning in FY 2020 is included for planning purposes, increasing to \$12,500 in FY 2021 once the final connection has been completed.

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 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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	8,032,031	3,489,926	4,542,105	0	0	0	0	0	0	0	0	0	4,542,105
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	0	4,542,105	0	0	0	0	0	0	0	0	0	4,542,105
Total Funding Sources	8,032,031	3,489,926	4,542,105	0	0	0	0	0	0	0	0	0	4,542,105
Operating Impacts			0	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	50,796



Project Summary:

The West Roanoke River Greenway Extension Projects includes 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. Construction is anticipated to begin in 2019 with project completion in FY 2020.



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 \$5,000 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; however, there is no formal agreement executed between the localities.

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 have 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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	7,023,484	5,723,484	0	0	0	1,300,000	0	0	0	0	0	0	1,300,000
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	5,700,000	4,400,000	0	0	0	1,300,000	0	0	0	0	0	0	1,300,000
Total Funding Sources	7,023,484	5,723,484	0	0	0	1,300,000	0	0	0	0	0	0	1,300,000
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 (\$1.3 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, Don’s Cab-Inns and Reba Farm opened their businesses at Explore Park. Both Blue Mountain Adventures and Don’s Cab-Inns will continue to expand their overnight accommodations into 2020. Treetop Quest’s aerial adventure course will open 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 hopes to award additional contracts in the first half of calendar year 2019 to expand services by private vendors at Explore Park. Funding in FY 2023, (\$1.3 million), will provide for additional infrastructure based on public-private partnership needs.

Additional Operating Impacts:

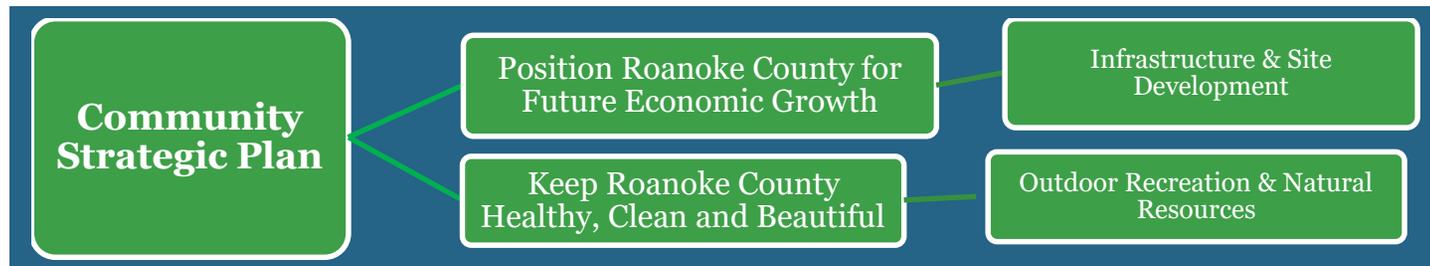
The improvements planned in the current CIP will not have an impact on the operating budget. In FY 2019, the Board of Supervisors approved the addition of a Recreation Programmer position to support Explore Park activities, which is expected to be offset by revenues collected in the Fee Class Fund. Future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







Internal Services Functional Team





County of Roanoke, Virginia FY 2020 – FY 2029 Adopted Capital Improvement Program Internal Services Summary

Note: Projects with \$0 in FY 2020-2029 are active projects that have been fully funded in prior fiscal years.

Functional Team/Department/Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 20-29 Total
Internal Services											
Communications & IT											
County-Wide Computer Replacement Program	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$233,000	\$2,330,000
IT Infrastructure Repl. Capital Maintenance Program	225,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	5,175,000
<i>CommIT Total</i>	458,000	783,000	7,505,000								
Finance											
Integrated Financial System (IFS)	0	0	0	0	0	0	0	0	0	0	0
Dynamics D365 Upgrade	0	600,000	0	0	0	0	0	0	0	0	\$600,000
<i>Finance Total</i>	0	600,000	0	600,000							
Finance/Human Resources											
Human Resources and Payroll Modules	542,139	483,360	0	0	0	0	0	0	0	0	1,025,499
<i>Finance/Human Resources Total</i>	542,139	483,360	0	1,025,499							
General Services											
Fleet Service Center Generator	0	0	0	0	0	0	0	0	0	0	0
Public Service Center Facility	10,000,000	0	0	3,704,000	0	0	0	0	0	0	13,704,000
General Service Capital Maintenance Program	665,000	805,000	880,000	880,000	880,000	880,000	880,000	880,000	880,000	880,000	8,510,000
Bent Mountain Comm. Center Repairs & Renovations	700,000	0	0	0	0	0	0	0	0	0	700,000
<i>General Services Total</i>	11,365,000	805,000	880,000	4,584,000	880,000	880,000	880,000	880,000	880,000	880,000	22,914,000
Non-Departmental											
Reserve for Future Projects	0	0	0	0	0	0	0	0	0	10,000,000	10,000,000
<i>Non-Departmental Total</i>	0	0	0	0	0	0	0	0	0	10,000,000	10,000,000
Internal Services Total	\$12,365,139	\$2,671,360	\$1,663,000	\$5,367,000	\$1,663,000	\$1,663,000	\$1,663,000	\$1,663,000	\$1,663,000	\$11,663,000	\$42,044,499



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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	2,880,000	550,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	2,330,000
Funding Sources													
CommIT Fund Transfer	2,880,000	550,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	2,330,000
Total Funding Sources	2,880,000	550,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	233,000	2,330,000
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.



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 funded 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.

Additional Operating Impacts:

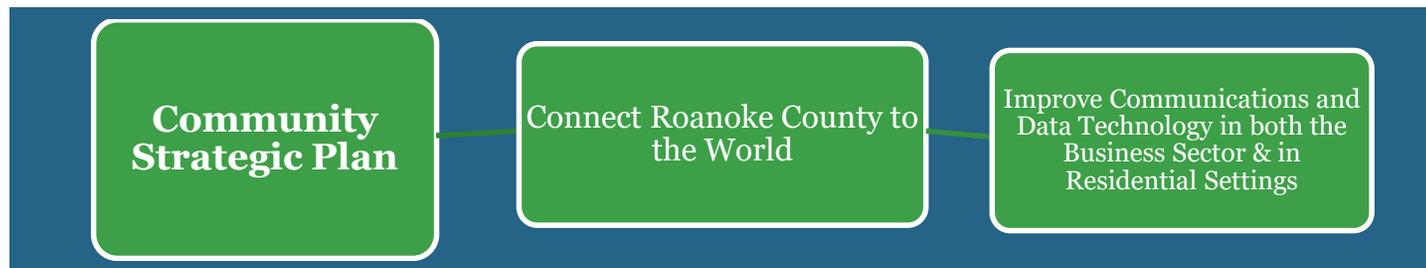
There are no anticipated operating impacts.

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 each year during the FY 2020 – FY 2029 CIP.





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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	6,275,000	1,100,000	225,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	5,175,000
Funding Sources													
CommIT Fund Transfer	6,275,000	1,100,000	225,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	5,175,000
Total Funding Sources	6,275,000	1,100,000	225,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	5,175,000
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.



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 \$225,000 in FY 2020 and then \$550,000 annually from FY 2021 through FY 2029 from the CommIT 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.

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 scheduled to receive \$225,000 in FY 2020 and then \$550,000 annually each year from FY 2021 – FY 2029 CIP.

Community Strategic Plan

Connect Roanoke County to the World

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



Integrated Financial System (IFS)

Department: Finance

Location: Countywide

Magisterial District: Countywide

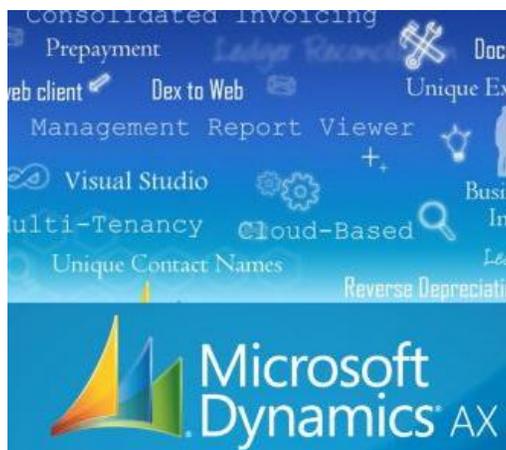
Category: Replacement

Est. Useful Life: 15-20 years

Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
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 pays 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, and the County anticipates continuing in this direction with this project.

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 allow 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 will also ensure 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.
- Implementation of IFS modules and process improvement will continue over the next several years.





Dynamics D365 Upgrade

Department: Finance, CommlT

Category: Replacement

Location: Countywide

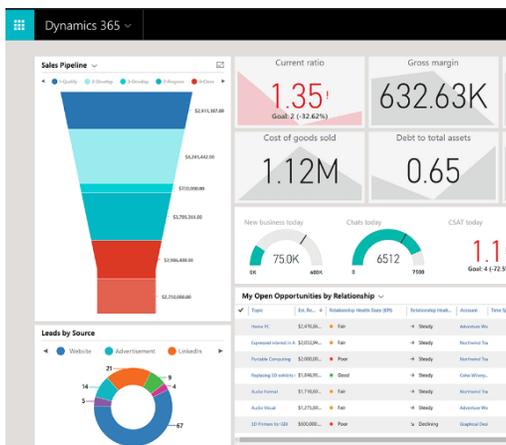
Est. Useful Life: 5 years

Magisterial District: Countywide

Project Status: New

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	600,000	0	0	600,000	0	0	0	0	0	0	0	0	600,000
Funding Sources													
Roanoke County -													
Unrestricted Cash	300,000	0	0	300,000	0	0	0	0	0	0	0	0	300,000
Transfer from Schools	300,000	0	0	300,000	0	0	0	0	0	0	0	0	300,000
Total Funding Sources	600,000	0	0	600,000	0	0	0	0	0	0	0	0	600,000
Operating Impacts			0	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 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 50/50 between the County and Roanoke County Public Schools.

Additional Operating Impacts:

The Dynamics platform is currently hosted on premise in the CommIT data center. As part of this project, the County will evaluate whether to host this solution with Microsoft as compared to continuing at the CommIT data center. If we continue to run on premise, we do not anticipate any additional yearly operating costs. If the study shows that moving to a hosted solution has benefit to the County, additional operating costs will increase.

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 allow 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 will also ensure the County complies with applicable state and federal mandates by providing the applicable 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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	2,338,769	1,313,270	542,139	483,360	0	0	0	0	0	0	0	0	1,025,499
Funding Sources													
Roanoke County -													
Unrestricted Cash	1,298,769	825,770	231,319	241,680	0	0	0	0	0	0	0	0	472,999
Transfer from Schools	1,040,000	487,500	310,820	241,680	0	0	0	0	0	0	0	0	552,500
Total Funding Sources	2,338,769	1,313,270	542,139	483,360	0	0	0	0	0	0	0	0	1,025,499
Operating Impacts			60,000	82,000	91,000	93,730	96,542	99,438	102,421	105,494	108,659	111,919	951,203



Project Summary:

The Human Resources (HR) and Payroll project, planned from FY 2018 to FY 2021, 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 anticipated to be split 50/50 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, Talent Management, Talent Science, Learning Management, and HR Service Delivery. HR and Payroll will be upgraded to the Global HR module with this project. Project costs are anticipated to be split 50/50 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. An increase of \$60,000 will be required by the County in FY 2020 to implement the new system, with an additional \$22,000 increase anticipated in FY 2021.

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 be complete by November 2019.
- Talent Acquisition phase will begin in Spring 2020.
- Migration to Infor's CloudSuite payroll platform planned to begin in March 2020.
- Costs are split 50/50 with Roanoke County Schools.

**Organizational
Strategic Plan**

Responsive Service
Delivery

Develop a Strategy to
Streamline Processes and
Services



Fleet Center Generator

Department: General Services

Category: New Facilities

Location: 5235 Hollins Road, Hollins, VA 24019

Est. Useful Life: 10-15 years

Magisterial District: Hollins

Project Status: Active

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	195,000	195,000	0	0	0	0	0	0	0	0	0	0	0
Funding Sources													
Roanoke County -													
Unrestricted Cash	95,000	95,000	0	0	0	0	0	0	0	0	0	0	0
Fleet Center Fund	100,000	100,000	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	195,000	195,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impacts			0	1,100	1,133	1,167	1,202	1,238	1,275	1,313	1,353	1,393	11,175



Project Summary:

The Roanoke County Fleet Center Generator project, funded in FY 2017, engineers and installs a permanent backup electric generator system to ensure continuity of services during emergency events. The Fleet Center is the centralized facility for vehicle and heavy equipment maintenance and repairs for all departments and other outside agencies. Furthermore, a generator would provide enhanced options for managing County disaster recovery of computer network systems and may provide an excellent location for staging of other emergency functions. The project will be considered and constructed to coincide with timing on new Public Service Center. Because the Public Service Center Replacement CIP project includes the expansion of the Fleet Service Center, the generator project will be coordinated to ensure it addresses long-term functional needs associated with the expansion.



Fleet Center Generator (continued)

Project Description and Justification:

The Roanoke County Fleet Center Generator project engineers and installs a permanent backup electric generator system to ensure continuity of services during emergency events. This project helps the County to be better prepared in any circumstances by providing backup electricity. Furthermore, a generator would provide enhanced options for managing County disaster recovery of computer network systems and may provide an excellent location for staging of other emergency functions.

The Fleet Center is the centralized facility for vehicle and heavy equipment maintenance and repairs for all departments and other outside agencies, including Western Virginia Water Authority, Western Virginia Regional Jail Authority, and Roanoke Valley Resource Authority. Vehicles and equipment are required for both delivery of regular services and response to citizen needs during emergencies.

Installation of the generator will coincide with A&E designs for the expansion of the Fleet Service Center as part of the Public Service Center Replacement project to maximize cost effectiveness.

Additional Operating Impacts:

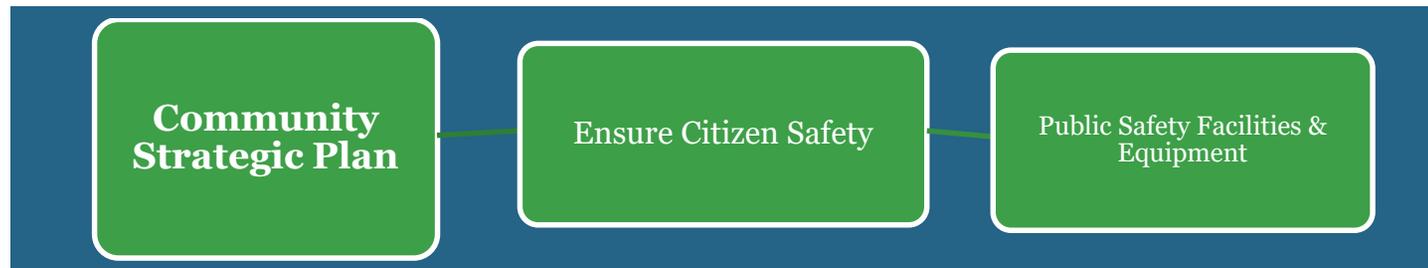
Annual contractual maintenance and testing costs are estimated to be \$1,100. The current estimated cost of the electrical systems and loads for the building, combined with market costs for generators, equipment and labor was derived by internal staff. Cost and efficiency impacts are variable depending on the number and duration of events.

Conformance with Plans, Policies, and Legal Obligations:

The availability of generator back-up capability for the Fleet Center is a necessary strategic core initiative in the County’s overall emergency continuity of operations planning.

Project Highlights and Key Milestones:

- Fleet Center opened in 2009 as the centralized facility for vehicle and heavy equipment maintenance and repairs.
- Fleet Center supports Roanoke County departments and other agencies including Western Virginia Water Authority, Western Virginia Regional Jail, and Roanoke Valley Resource Authority.
- FY 2017 budget appropriated \$195,000 for an emergency generator and applicable electrical infrastructure needs.
- Will be installed to coincide with new Public Service Center project.





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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	15,254,000	1,550,000	10,000,000	0	0	3,704,000	0	0	0	0	0	0	13,704,000
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	1,000,000	10,000,000	0	0	3,704,000	0	0	0	0	0	0	13,704,000
Total Funding Sources	15,254,000	1,550,000	10,000,000	0	0	3,704,000	0	0	0	0	0	0	13,704,000
Operating Impacts			0	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	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 are proposed to fund the construction of Phase I of the project. Phase II of the project is proposed to be funded in FY 2023 with \$3.704 M in bonds. In FY 2019, Architectural and Engineering services for Phase I of the project were contracted.



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 will contain three major components including expansion of the existing Fleet Services Center for all General Services department functions as well as 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 of Parks, Recreation, and Tourism Department district shops. Phase I of this project is anticipated to include construction procurement and commencement of construction with completion anticipated in FY 2021. It is also anticipated that the relocation of Parks, Recreation and Tourism offices and warehouse needs will be completed as Phase II with FY 2023 funding.

Additional Operating Impacts:

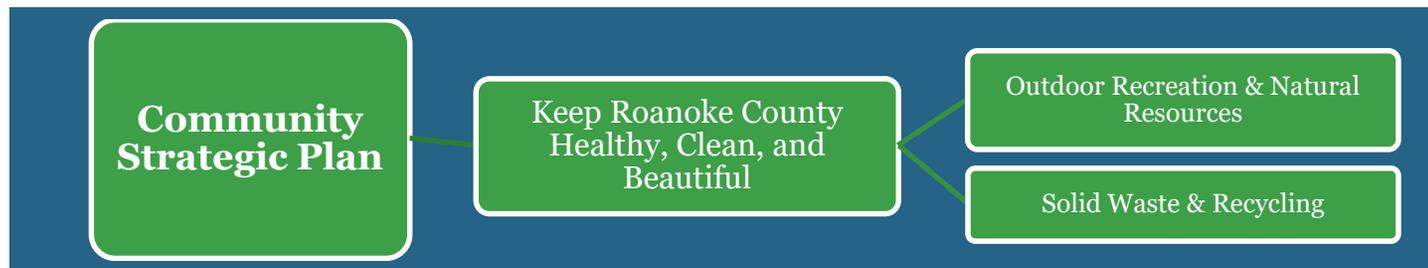
Maintenance costs for the building will likely decrease with the completion of multiple phases of the project. Non-deferrable short and long term maintenance needs for the existing facility can be redirected for other facility infrastructure operating or maintenance needs.

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 2018, County contracted for the acquisition of property to facilitate expansion of Fleet Service Center.
- In FY 2019, Architectural and Engineering design services for Phase I were contracted and commenced.





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 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	11,703,574	3,193,574	665,000	805,000	880,000	880,000	880,000	880,000	880,000	880,000	880,000	880,000	8,510,000
Funding Sources													
Roanoke County - Unrestricted Cash	11,703,574	3,193,574	665,000	805,000	880,000	880,000	880,000	880,000	880,000	880,000	880,000	880,000	8,510,000
Total Funding Sources	11,703,574	3,193,574	665,000	805,000	880,000	880,000	880,000	880,000	880,000	880,000	880,000	880,000	8,510,000
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. Future project planning and prioritization for the CMP is anticipated to be enhanced through a comprehensive Facility Condition Assessment study expected to be completed in FY 2020.



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 2020 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.

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 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 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 AC/ HVAC units, electrical and lighting systems, heaters, renovating buildings, upgrading building automated security systems, and repairing asphalt.
- A comprehensive Facility Condition Assessment study will be completed in FY 2020 to provide prioritization and planning for the CMP.





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: New

Financial Summary

	Total Cost	Through FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20 - FY 29
Total Project Cost	700,000	0	700,000	0	0	0	0	0	0	0	0	0	700,000
Funding Sources													
Roanoke County - Unrestricted Cash	200,000	0	200,000	0	0	0	0	0	0	0	0	0	200,000
Private Capital Contributions	500,000	0	500,000	0	0	0	0	0	0	0	0	0	500,000
Total Funding Sources	700,000	0	700,000	0	0	0	0	0	0	0	0	0	700,000
Operating Impacts			0	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 Board of Supervisors 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. Section 106 Historic Mitigation funding associated with the Mountain Valley Pipeline will provide \$500,000 for this project.



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.

To better understand the necessary repairs and renovations required, the County contracted with a professional architectural and engineering firm to provide an assessment for the facility. Phase I of this project will address the core facility deficiencies. Specific scope components include: replacement of the built-up flat roof sections, replacement of all HVAC equipment, limited electrical and plumbing needs for the original section of the building, addressing the most critical building envelope items, repairs and repavement of the parking lot that also serves the library branch, limited ceiling and floor repairs to areas damaged by roof leaks, and associated architectural and engineering services. A subsequent Phase II for the project, not included in the FY 2020-2029 CIP, will provide interior renovations, replace windows and doors, and provide architectural and engineering services.

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.

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 will provide \$500,000 for the project.







Roanoke County Public Schools





County of Roanoke, Virginia FY 2020 – FY 2029 Adopted Capital Improvement Program Roanoke County Public Schools Summary

Note: Projects with \$0 in FY 2020-2029 are active projects that have been fully funded in prior fiscal years.

Functional Team/Department/Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 20-29 Total
Roanoke County Public Schools											
Schools											
Cave Spring High School	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Maintenance Program	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000
HR Payroll and Software System	310,820	241,680	0	0	0	0	0	0	0	0	552,500
Dynamics D365 Upgrade	0	300,000	0	0	0	0	0	0	0	0	300,000
William Byrd High School	0	12,772,306	8,479,834	0	0	0	0	0	0	0	21,252,140
Hidden Valley Middle School	0	0	1,547,999	1,500,560	10,134,238	0	0	0	0	0	13,182,797
Burlington Elementary	0	0	0	0	300,000	5,000,199	0	0	0	0	5,300,199
Glenvar Elementary	0	0	0	0	334,090	5,858,541	0	0	0	0	6,192,631
WE Cundiff Elementary	0	0	0	0	0	0	602,182	9,434,191	0	0	10,036,373
Glen Cove Elementary	0	0	0	0	0	0	0	663,710	10,398,124	0	11,061,834
<i>Schools Total</i>	1,310,820	14,313,986	11,027,833	2,500,560	11,768,328	11,858,740	1,602,182	11,097,901	11,398,124	1,000,000	77,878,474
Total, Roanoke County Public Schools Projects	\$1,310,820	\$14,313,986	\$11,027,833	\$2,500,560	\$11,768,328	\$11,858,740	\$1,602,182	\$11,097,901	\$11,398,124	\$1,000,000	\$77,878,474



**Roanoke County Public Schools
FY 2020 – FY 2029 Capital Improvement Program Overview**

As part of the County Administrator’s Adopted FY 2020-2029 Capital Improvement Program (CIP), projects approved by the Roanoke County Public Schools (RCPS) School Board are included in the ten-year plan. The Roanoke County School Board approved their ten-year CIP on January 10, 2019. This section contains summary information on the RCPS ten-year CIP. Additional RCPS CIP information can be found on the RCPS website as part of the January 10, 2019 Schools Board meeting.

Roanoke County Public Schools Projects Summary

The RCPS requested fiscal year 2020-2029 CIP includes \$77.88 million in projects and funding sources. The plan includes \$10.0 million (\$1.0 million annually) for the Schools Capital Maintenance Program to address smaller capital needs across all Schools facilities. The plan also includes \$0.853 million for the RCPS share of an updated Human Resources and Payroll system (FY 2020-2021, \$0.553 million) and an upgrade to the shared financial system (FY 2021, \$0.3 million). The balance of funding (\$67.03 million) is planned for projects at specific facilities throughout the County. These projects include:

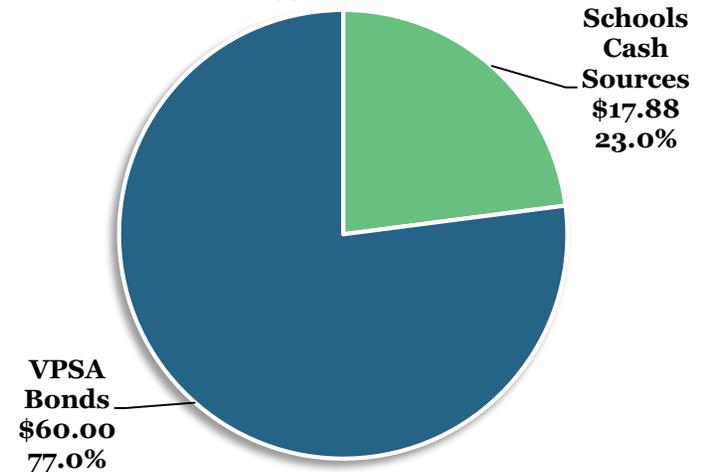
Project/Facility	Fiscal Year(s) Funding	FY 20-29 Funding
William Byrd High School	FY 2021-2022	\$21.25 million
Hidden Valley Middle School	FY 2022-2024	\$13.18 million
Burlington Elementary	FY 2024-2025	\$5.3 million
Glenvar Elementary	FY 2024-2025	\$6.19 million
WE Cundiff Elementary	FY 2026-2027	\$10.03 million
Glen Cove Elementary	FY 2027-2028	\$11.06 million

Projects requested in the RCPS fiscal year 2020-2029 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 \$17.88 million over the ten-year plan. Bonds utilized by RCPS are Virginia Public Schools Authority (VPSA) bonds and total \$60.0 million over the ten-year plan.

**FY 2020 - FY 2029 RCPS Requested CIP
Summary of Funding Sources
\$77.88 Million**



Cash sources comprise 23.0% of all funding sources, while VPSA bonds comprise 77.0% 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.



Cave Spring High School

Cave Spring High School opened in 1968. The project included in this ten-year CIP was originally a part of the 1997 Roanoke County Public Schools Blue Ribbon Study, and was unanimously approved by the School Board for inclusion in the fiscal year 2018-2027 CIP. A contract for the project was awarded in October 2018. Project construction is began in January 2019, with completion anticipated to take 18 months.



The renovation of Cave Spring High School is an estimated \$44.0 million project. The table below summarizes project expenditures and funding sources by fiscal year.

Cave Spring High School Project Expenditures and Funding Sources (\$ in millions) Project Costs/Funding Sources Provided by RCPS Staff				
	FY16	FY18	FY19	Total FY16-19
Total Project Costs	\$1.90	\$35.5	\$6.6	\$44.0
Schools Cash Sources	\$1.90	\$5.5	\$6.6	\$44.0
VPSA Bonds	\$0.00	\$30.0	\$0.0	\$30.0
Total Funding	\$1.90	\$35.5	\$6.6	\$44.0

Note: No project funding appropriated in FY 2017.

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. 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 \$10.0 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 eliminate antiquated and inefficient Human Resources and Payroll modules. The RCPS portion of this project is estimated at \$0.552 million from FY 2020-2021 and is included in the CIP.

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 \$0.6 million with the Schools share of the project (\$0.3 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



2020-2029 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 able to 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 2020-2029 Capital Improvement Program.



Appendices





County of Roanoke, Virginia FY 2020 – FY 2029 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 2020 – FY 2029 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	
County Jail Flooring Abatement	See projects not funded section.
Public Safety Radio Replacement	Replacement of over 900 of the County's public safety radios. The old radios were no longer being manufactured, and replacement parts availability was limited. It is anticipated that all the radios will be purchased and operational by the end of FY 2019.
Conventional Backup Repeater Replacement	Replacement of five of the County's conventional backup repeater stations, which provide connectivity to the Public Safety Radio System. The current repeaters are no longer in production and parts availability is limited. Work on this project is expected to be completed by the end of FY 2019.
Community Services	
Plantation Road Phase I	The Plantation Road Bicycle, Pedestrian and Streetscape Improvement project encompassed almost one mile of Plantation Road from Interstate 81 to Williamson Road. Work completed included construction of shared use path along the west side of Plantation Road, curb and gutter improvements, planting of street trees, utility relocation, and stormwater improvements. The project has been completed, and a ribbon cutting was held in October 2018.
Lila Drive Intersection and Reconstruction	Reconstruction of Lila Drive to public road standards including construction of a T-style turnaround and minor drainage improvements. These improvements made Lila Drive eligible for acceptance into the VDOT Secondary Road System. All work has been completed on this project.



Appendix A: Prior Year Projects Removed (Continued)

Functional Team/Project	Description
Human Services	
Sports Field Lighting	See projects not funded section.
Arnold R. Burton Softball Complex Improvements	See projects not funded section.
Hollins Park	See projects not funded section.
Internal Services	
Bent Mountain Community Center (Phase II)	See projects not funded section.



County of Roanoke, Virginia FY 2020 – FY 2029 Adopted Capital Improvement Program Unfunded Projects

<i>Functional Team/Project</i>	<i>Description</i>	<i>Estimated Cost</i>
Public Safety		
County Jail Generator Replacement	Replacement of the current generator at the County Jail with a 750kw diesel generator. The generator will be monitored and serviced with Capital Program Maintenance funds until replacement funding is programmed in future CIPs.	\$300,000
County Jail Flooring Abatement	The Roanoke County Jail abatement project would consist 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. Project will be prioritized as part of the 2019 Facilities Assessment and considered for inclusion in future CIPs.	\$184,000
Back Creek Fire & Rescue Station Parking Lot Repairs	This project would provide for the replacement of the existing asphalt parking lot consisting of approximately 36,100 square feet. Project will be prioritized as part of the 2019 Facilities Assessment and considered for inclusion in future CIPs.	\$147,600
Analog P25 System Replacement	This project must be coordinated with the County's radio partners (RVRS) in the City. The City is currently in the process of building a new 911 Center and communication tower while coordinating a move to their new location. Project timing and scope will be considered once the City has completed all work with their transition to the new 911 Center.	\$1,000,000
General District Court Renovations (Phase II)	Phase II of the General District Court Renovations addresses refinishing of judges benches, witness stands, and pews and acoustic fabric in the Courtrooms. Project will be prioritized as part of the 2019 Facilities Assessment and considered for inclusion in future CIPs.	\$110,000



Appendix B: Unfunded Projects (Continued)

<i>Functional Team/Project</i>	<i>Description</i>	<i>Estimated Cost</i>
Community Services		
Flood Plain Study	Preparation of site-specific hydrologic and hydraulic studies that look at areas that have chronic and repetitive flooding problems; or that need FEMA map revisions. Project was not included in the CIP as other stormwater initiatives were prioritized ahead of this request.	\$375,000
Residential & Commercial Structure Acquisition	Certain residential and commercial structures experience repetitive losses from floods. This project would provide funding for mitigation that may include purchasing and demolition, structure elevating, or structure flood proofing. Parameters of the program and a County match of funds would need to be identified before inclusion in the CIP.	\$2,000,000
Human Services		
Hollins Library Renovations	Securing an experienced library architectural firm in FY 2020 to help evaluate the advantages of either staying or relocating the Hollins Library. Funding for this initiative is included in the out-years of the CIP and associated with the Hollins Library Replacement project.	\$50,000
Mt. Pleasant Library Renovations (Phase II)	Phase II of the Mt. Pleasant Library renovations would implement the transformation of the adjacent garage building into a business lab space, replace the concrete patio that adjoins both buildings, replace the concrete apron at the front of the library branch, construct and pave a redesigned parking lot for the properties and possibly provide a sewer connection to the public system. Project will be prioritized as part of the 2019 Facilities Assessment and considered for inclusion in future CIPs.	\$148,000
Relocation of Vinton Service Desks	Relocation of the main desk to the center of the library to make it more visible and accessible to patrons, which would increase the level of customer service while also boosting the ability of staff to ensure a safe and secure environment for all who enter. Project will be prioritized as part of the 2019 Facilities Assessment and considered for inclusion in future CIPs.	\$65,000



Appendix B: Unfunded Projects (Continued)

Functional Team/Project	Description	Estimated Cost
South County Library Maker Space	Moving into the future as a resource for technology training and workforce development, the reference space at the South County Library would be re-worked to serve as a Next Generation Tech and Workforce Development Center. A work study to address the capacity of the area to host a variety of technological equipment and costs of re-purposing the area is recommended. Project will be prioritized as part of the 2019 Facilities Assessment and considered for inclusion in future CIPs.	\$117,500
Green Ridge Recreation Center Capital Maint. Program	Annual funding to the Green Ridge Recreation Center Capital Maintenance Program would fund repairs and maintenance maximizing the life of the building, waterpark and grounds. Project will be prioritized as part of the 2019 Facilities Assessment and considered for inclusion in future CIPs.	\$1,000,000
Explore Park In-River Kayak Park and Festival Venue	The in-river park would create water obstacles and adjust water levels in the river so every water craft experience can be different. The project would also include infrastructure to Riverside Village for a stage, sound improvements, building renovations, seating, access points, viewing platforms and overlook thinning to create a venue for events, competitions and festivals. Project may be considered in future CIPs as the second phase of Explore Park improvements is fully developed.	\$1,800,000
Countywide Sports Field Lighting	The Sports Field Lighting project would continue the sport field lighting plan to relight and light sports fields throughout Roanoke County's park system for youth and adult sports. This project was included in prior CIPs but removed from the FY 2020-2029 CIP pending prioritization as relates to the completion of the 2019 Facilities Assessment. It may be reconsidered for inclusion in future CIPs.	\$2,640,000
Hollins Park: Picnic Shelter/Restrooms/Parking	The Hollins Park project would provide for design and engineering plans for the development of the second phase of Hollins Park including paving the existing parking lot, constructing a picnic shelter and restroom facility, playground improvements, and landscape enhancements. This project was included in prior CIPs but removed from the FY 2020-2029 CIP pending prioritization as relates to the completion of the 2019 Facilities Assessment. It may be reconsidered for inclusion in future CIPs.	\$440,000
Arnold R. Burton Softball Complex Improvements	The Arnold R. Burton Softball Complex project would construct a tournament headquarters, press boxes, general security lighting, parking lot adjustment with paving, security fencing, and a ticket booth. This project was included in prior CIPs but removed from the FY 2020-2029 CIP pending prioritization as relates to the completion of the 2019 Facilities Assessment. It may be reconsidered for inclusion in future CIPs.	\$720,000



Appendix B: Unfunded Projects (Continued)

Functional Team/Project	Description	Estimated Cost
Internal Services		
County Courthouse – Facility and Parking Lot Improvements	<p>Requested facility improvements included:</p> <ul style="list-style-type: none"> --The cooling tower and two chillers for the Courthouse facility have exceeded their useful reasonable service life expectancy and experience recurring maintenance and operational issues. --The Courthouse contains eight public restrooms with finishes and fixtures requiring replacement after 32 years of utilization. --The Courthouse parking lot is also original to construction of the facility and the asphalt has significant areas of structural failure that necessitates asphalt replacement of the entire lot. <p>County staff will utilize General Services CMP funds to maintain functionality in all areas of the Courthouse until the project is prioritized as relates to the 2019 Facilities Assessment.</p>	\$664,000
Bent Mountain Community Center Phase II	<p>Phase II of the project may include repairing the structural parking lot and sidewalk issues, lighting and plumbing system renovations, and repairs to flooring, walls, and ceilings, as well as other cosmetic improvements. This portion of the Bent Mountain Community Center project was included in prior CIPs but removed from the FY 2020-2029 CIP pending prioritization as relates to the completion of the 2019 Facilities Assessment. It may be reconsidered for inclusion in future CIPs.</p>	\$1,810,000
Total, Unfunded Requests		\$13,571,100



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.

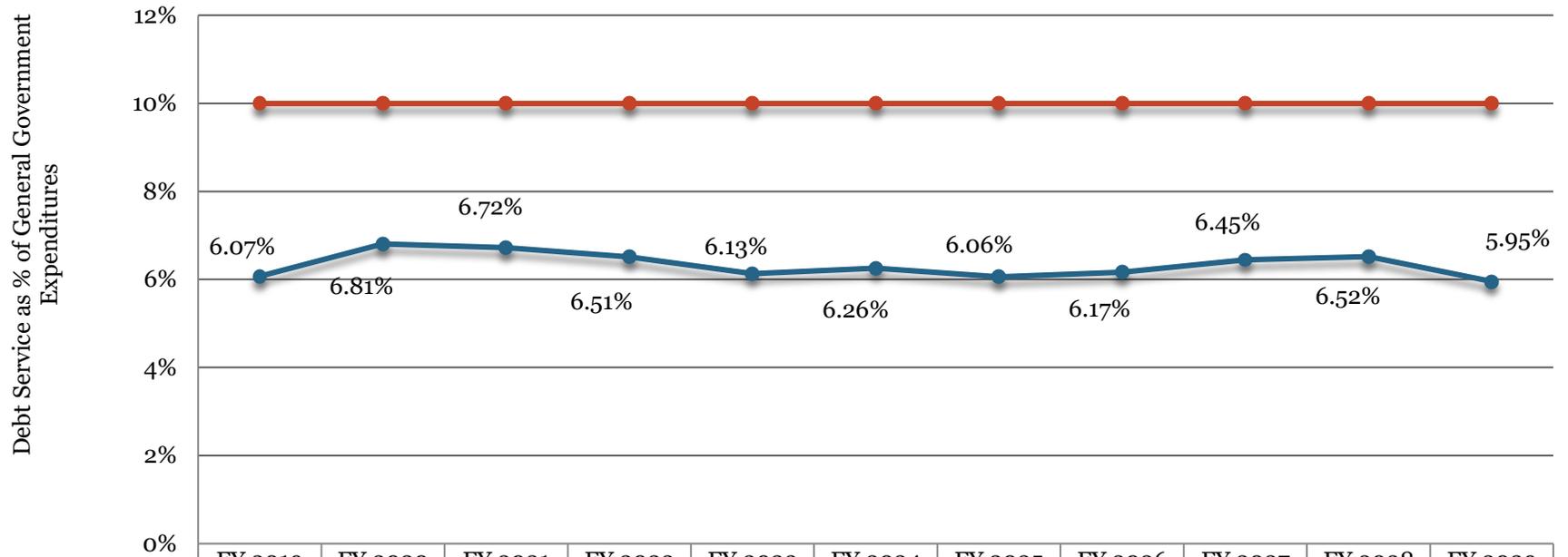
Ratio	Limit	FY 2018 (Actual)	FY 2019 (Projected)	FY 2020 (Projected)
Debt Service as a Percentage of General Government Expenditures	10.0%	6.57%	6.07%	6.81%
Debt as a Percentage of Taxable Assessed Value	3.0%	1.58%	1.71%	1.65%



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 Service as a Percentage of General Government Expenditures



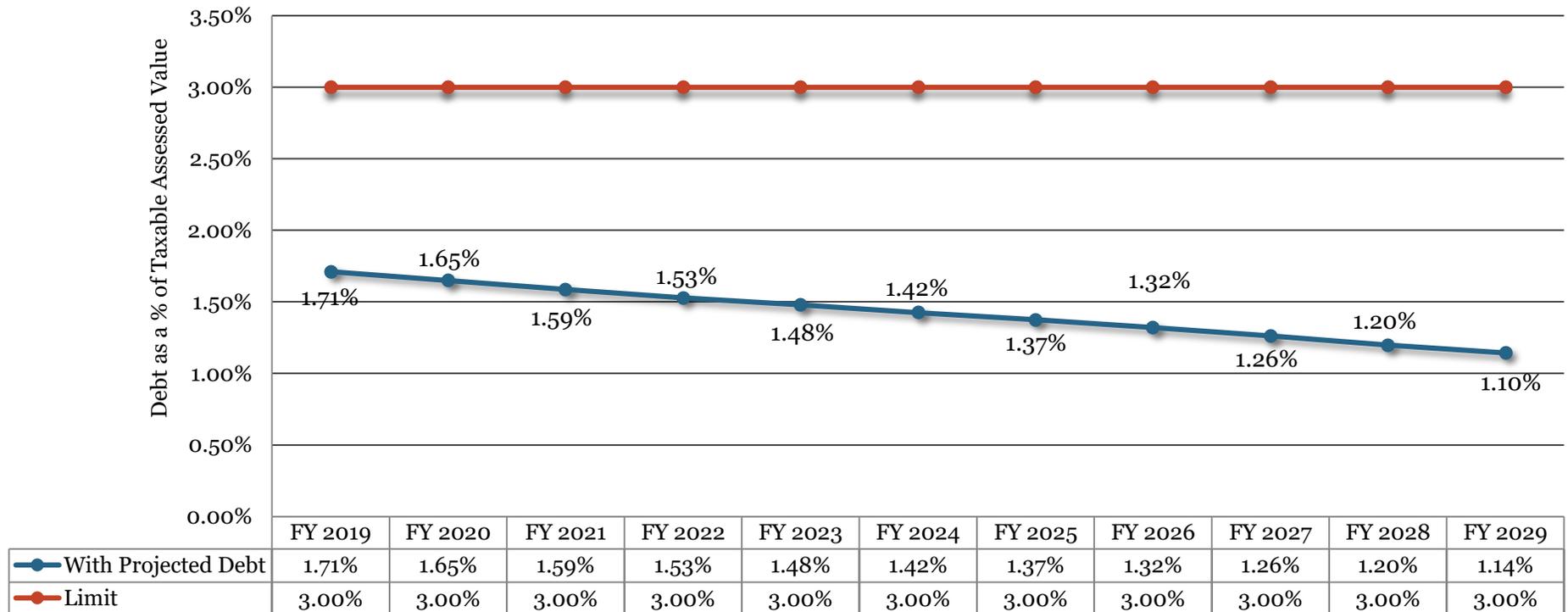
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
—●— With Projected Debt	6.07%	6.81%	6.72%	6.51%	6.13%	6.26%	6.06%	6.17%	6.45%	6.52%	5.95%
—●— Limit	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%



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 as a Percentage of Taxable Assessed Value
FY 2019 - FY 2029**

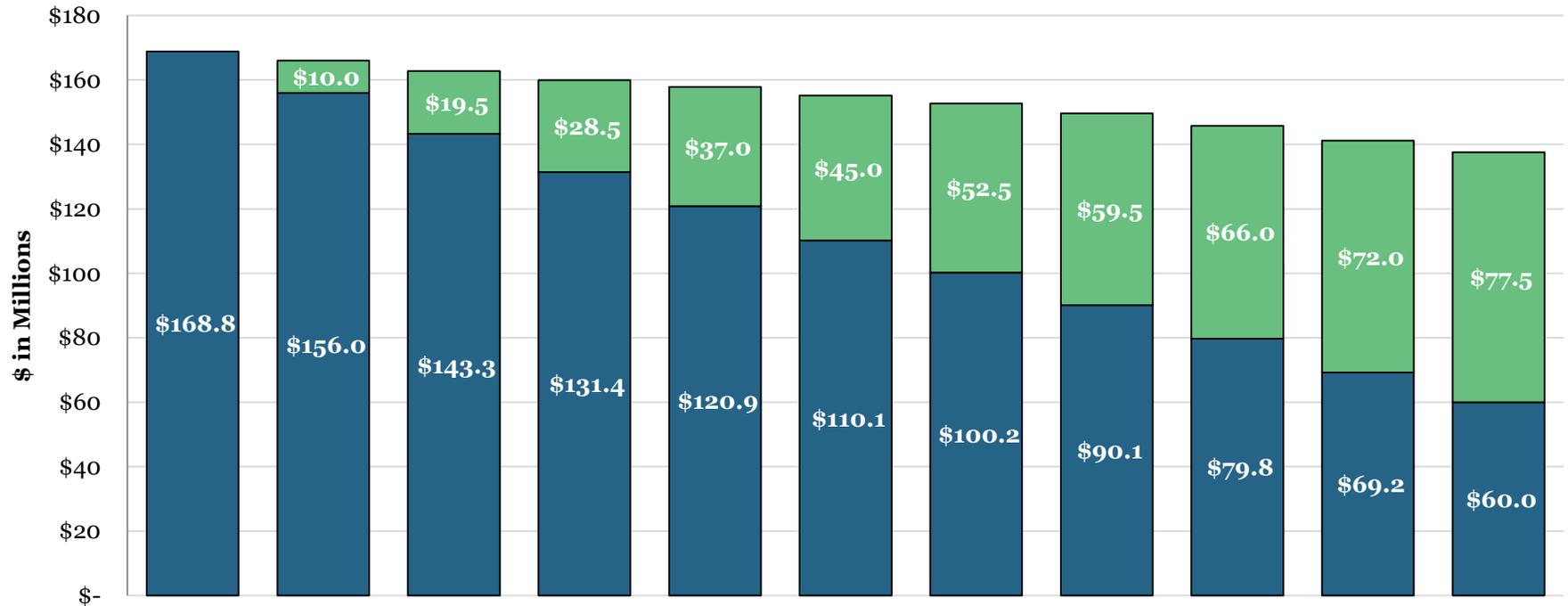




Outstanding Debt

The below chart outlines the level of outstanding debt for County and Schools from FY 2019 through FY 2029 based on the assumed debt issuance in the FY 2019 – FY 2028 Capital Improvement Program.

**Existing and Planned Outstanding Debt
FY 2019 - FY 2029**



	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
New Debt Issuance - County	\$ -	\$ 10,000,000	\$ -	\$ -	\$ 10,000,000	\$ -	\$ -	\$ 10,000,000	\$ -	\$ -	\$ 10,000,000
New Debt Issuance - Schools	\$ -	\$ -	\$ 10,000,000	\$ 10,000,000	\$ -	\$ 10,000,000	\$ 10,000,000	\$ -	\$ 10,000,000	\$ 10,000,000	\$ -
Existing Debt Outstanding (FY 19)	\$ 168,849,175	\$ 155,984,888	\$ 143,295,490	\$ 131,403,052	\$ 120,864,551	\$ 110,146,182	\$ 100,221,388	\$ 90,104,832	\$ 79,766,160	\$ 69,205,000	\$ 60,030,000
New Debt Outstanding (FY 19-29)	\$ -	\$ 10,000,000	\$ 19,500,000	\$ 28,500,000	\$ 37,000,000	\$ 45,000,000	\$ 52,500,000	\$ 59,500,000	\$ 66,000,000	\$ 72,000,000	\$ 77,500,000
Total Debt Outstanding	\$ 168,849,175	\$ 165,984,888	\$ 162,795,490	\$ 159,903,052	\$ 157,864,551	\$ 155,146,182	\$ 152,721,388	\$ 149,604,832	\$ 145,766,160	\$ 141,205,000	\$ 137,530,000



Projected Debt Service

The below chart outlines the level of projected debt service for County and Schools from FY 2019 through FY 2029 based on the assumed debt issuance in the FY 2019 – FY 2028 Capital Improvement Program.

**Projected Debt Service
FY 2019 - FY 2029**



	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Existing (through FY 2019)	\$17,834,555	\$20,298,126	\$19,245,790	\$17,852,682	\$15,949,397	\$15,614,500	\$14,311,621	\$14,020,290	\$13,746,755	\$13,458,210	\$11,622,678
Planned (After FY 2019)	\$ -	\$ -	\$1,100,000	\$2,155,000	\$3,180,000	\$4,190,000	\$5,155,000	\$6,090,000	\$7,595,000	\$8,440,000	\$8,670,000



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 are 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	Comparative Jurisdictions				AAA Rated Jurisdictions			
	Roanoke County	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%

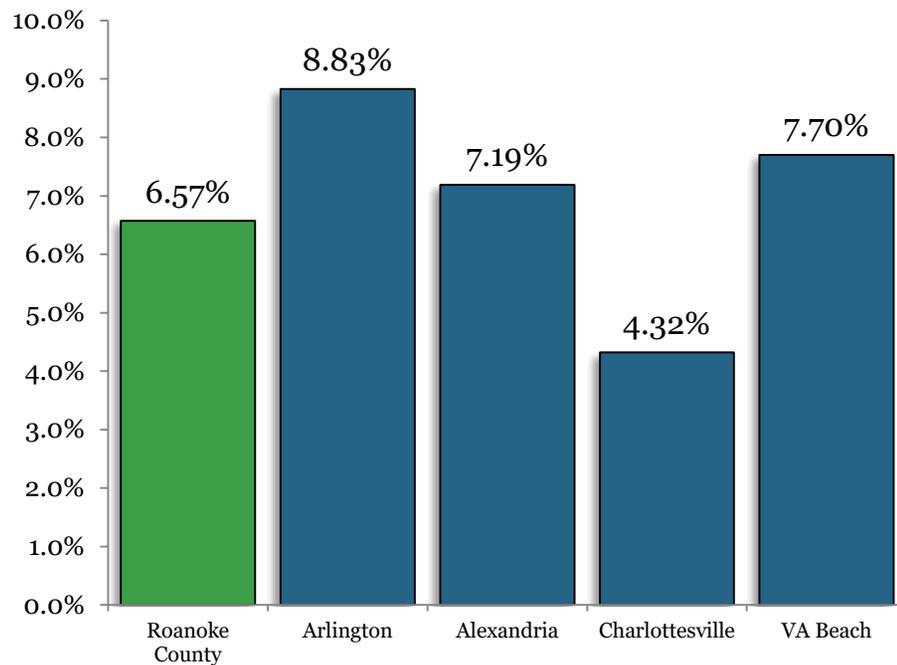
All information from each locality's 2018 Comprehensive Annual Financial Report (CAFR), FY 2020 Adopted Budget Documents, or Adopted Financial Policies



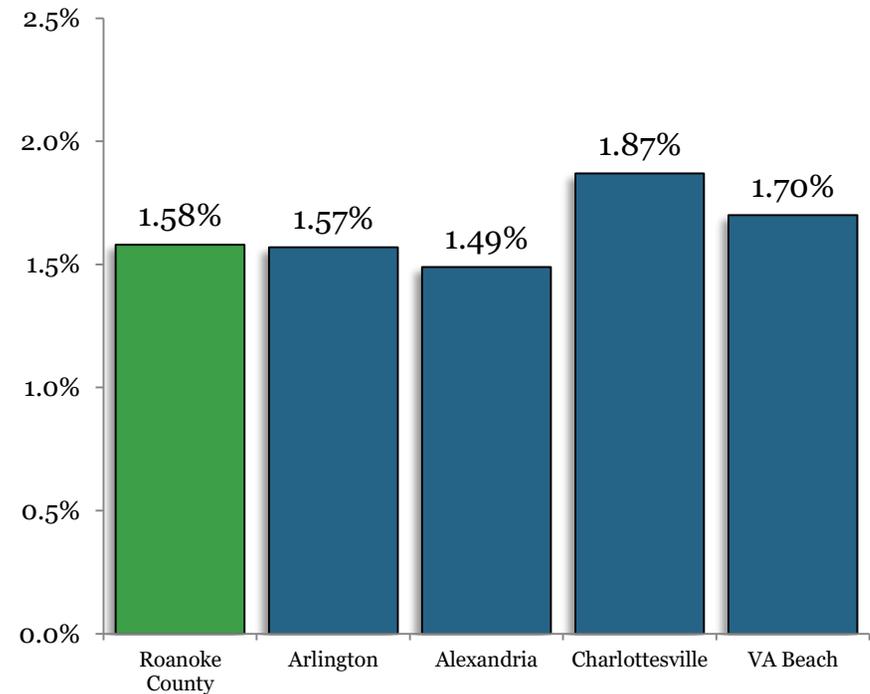
Comparative Jurisdictions (continued)

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. The primary factor holding the County back from a AAA rating is its residential-to-commercial tax base ratio, which is heavily skewed toward residential. All data below is based on data as of June 30, 2018.

Debt Service as a % of General Government Expenditures



Debt as a % of Taxable Assessed Value



All information from each locality’s 2018 Comprehensive Annual Financial Report (CAFR)

