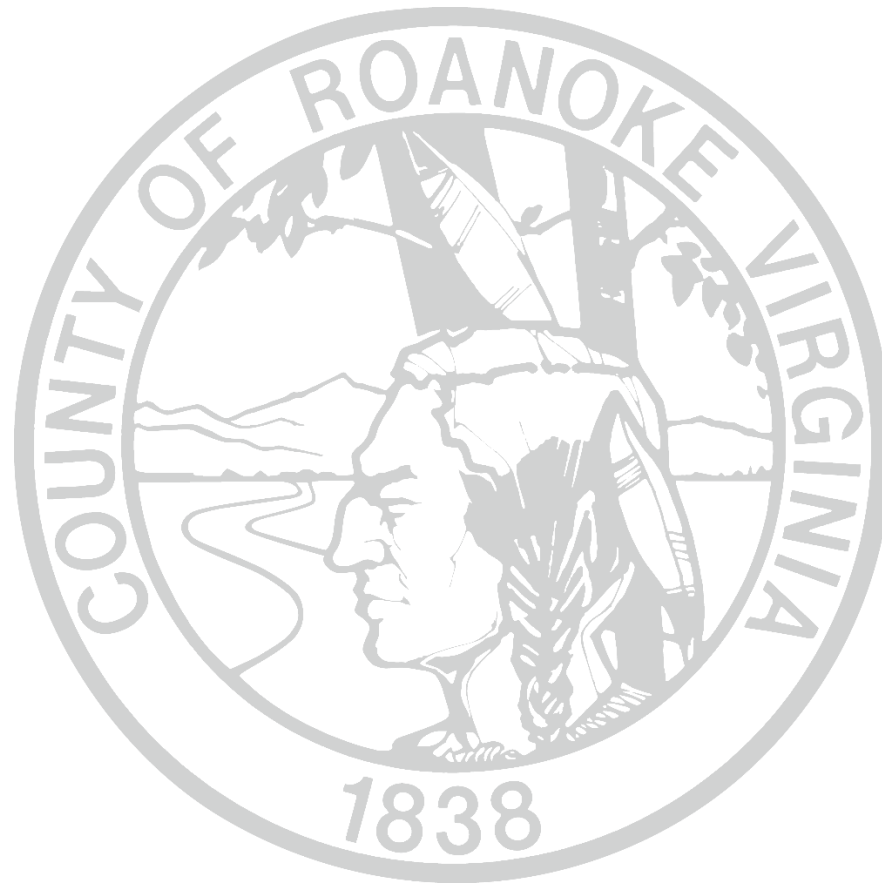




# Appendices





## County of Roanoke, Virginia FY 2022 – FY 2031 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 2022 – FY 2031 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>
<b>Public Safety</b>	
Roanoke County Jail Abatement	This project was planned for bond funding within the Adopted FY 2021 - FY 2030 CIP to occur in FY 2023 to remove VCT tile and mastic flooring in areas throughout the County jail. Due to the deterioration of flooring, Sheriff Capital Maintenance Funds have been used to replace flooring in stages. Remaining flooring will be replaced using Sheriff Capital Maintenance Funds in stages.
Courthouse Parking Lot Renovations	Project planned for funding within the Adopted FY 2021 - FY 2030 CIP to occur in FY 2022 to address ongoing issues with degradation of asphalt and subsurface structural issues. General Services Capital Maintenance Program funding has been utilized to address these issues in FY 2021.
Courthouse and Court Services Carpeting	This project was planned for bond funding within the Adopted FY 2021 - FY 2030 CIP to occur in FY 2023. Upon further evaluation, this project was no longer considered a priority for bond funding. Replacement of sections of carpeting may occur through the Capital Maintenance Program as needed.
<b>Community Services</b>	
Gateway Signs & Landscaping	The Gateway Signs & Landscaping Project began with grant funding from the Community Foundation, in the amount of \$50,000, which required a \$25,000 County match in FY 2020. This project was planned to receive additional funding within the Adopted FY 2021 - FY 2030 CIP to expand signage and landscaping at County gateways. This project continues as a grant project, but no capital funds have been added as originally planned. Therefore, the project is removed from the Capital Improvement Program.



Appendix A: Prior Year Projects Removed (Continued)

<b>Functional Team/Project</b>	<b>Description</b>
<b>Human Services</b>	
Electronic Pollbook Replacement	Electronic Pollbooks received funding in FY 2020 through the use of FY 2019 year end funds. Pollbooks were replaced in the fall of 2020, and the project is considered complete.
<b>Internal Services</b>	
Administration Center Envelope Repairs	Project planned for bond funding in FY 2023, but the repair to the exterior envelope of the building is needed sooner. Restored General Services Capital Maintenance Program funding will be used to address this issue.
Administration Center Carpeting	This project was planned for bond funding within the Adopted FY 2021 - FY 2030 CIP to occur in FY 2023. Upon further evaluation, this project was no longer considered a priority for bond funding. Replacement of sections of carpeting may occur through the Capital Maintenance Program as needed.
Public Safety Center Updates	This project was planned for bond funding within the Adopted FY 2021 - FY 2030 CIP to occur in FY 2026. Staff will conduct studies using Capital Maintenance Program funding to evaluate the most efficient option to address HVAC replacement within the Public Safety Center.
Administration Center Facility Updates	This project was planned for bond funding within the Adopted FY 2021 - FY 2030 CIP to occur in FY 2029. Staff will conduct studies using Capital Maintenance Program funding to evaluate the most efficient option to address HVAC replacement within the Administration Center.



## County of Roanoke, Virginia FY 2022 – FY 2031 Adopted Capital Improvement Program Unfunded Projects

The following represent projects that were not funded in the FY 2022 – FY 2031 Capital Improvement Program (CIP), proposed to the Board of Supervisors on January 26, 2021. Some ongoing projects did not receive funding in FY 2022 but are not considered unfunded as they have planned funding within the ten-year CIP.

<i>Functional Team/Project</i>	<i>Description</i>	<i>Estimated Cost</i>
<b>Public Safety</b>		
Commonwealth Attorney Office Renovation Project	The Commonwealth Attorney Renovation Project was requested for funding in FY 2022 to address the limited space in the Commonwealth’s Attorney’s Office and the potential for staff expansion. Further evaluation is needed to estimate costs and develop project scope.	TBD
Courtroom Expansion Project	The Courtroom Expansion Project was requested for funding in FY 2022 to address the limited space in the courtrooms with the current COVID restrictions. Further evaluation is needed to estimate costs and develop project scope.	TBD
Fire & Rescue Vehicle Repeaters	The Fire & Rescue Vehicle Repeaters Project was requested for funding in FY 2022 to install vehicle repeaters in Fire & EMS vehicles to improve the coverage of public safety portable radios operating in large commercial buildings and in geographical locations where portable radios are not strong enough to reach the radio tower. Due to funding limitations, this project was not proposed for funding but will be evaluated with the development of future Capital Improvement Programs.	\$250,000
<b>Community Services</b>		
Minor Transportation and Planning Studies	The Minor Transportation and Planning Studies project was funded in FY 2020 in the amount of \$80,000. Due to reduced revenues and project scope, the project was eliminated, and the \$80,000 funded in FY 2020 was repurposed to support projects adopted in FY 2021. Funding was requested to restore the project, but other specific studies including the 419 Town Center Development Standards and Route 460/Challenger Avenue Study are funded in FY 2022.	\$100,000



**County of Roanoke, Virginia  
FY 2022 – FY 2031 Adopted Capital Improvement Program  
Unfunded Projects (Continued)**

<i>Functional Team/Project</i>	<i>Description</i>	<i>Estimated Cost</i>
<b>Human Services</b>		
South County Library ADA Access & Patio	The South County Library ADA Access & Patio project was requested to install ADA accessible ramps from the trail system surrounding the facility to the sidewalk and parking lot. Additionally, the project was requested to install a covering over the patio to allow for better usage of the outdoor space. Further evaluation is needed to estimate costs and develop project scope. Funds remaining after the completion of the South County Library are available for maintenance of the facility and could be considered to address these items.	TBD
Vinton Library Service Desk	The Vinton Library Service Desk project was requested to relocate the service desk at the Vinton Library to improve access, traffic flow, and security. Further evaluation is needed to estimate costs and develop project scope. Capital Maintenance Program funding could be considered once an estimate and scope are determined.	TBD
Cityworks Upgrade	The Cityworks Upgrade project was requested for funding in FY 2024 to merge the work order systems used by the General Services and Parks, Recreation & Tourism department. Due to funding limitations in the planned years, this project is not planned for funding but will be evaluated with the development of future Capital Improvement Programs.	\$300,000
Vinyard Park Road Parking	The Vinyard Park Road Parking project was requested for funding in FY 2024 to pave the gravel parking lot of Vinyard East park. This project would also install barriers along the road to prevent on road parking. Due to funding limitations in the planned years, this project is not planned for funding but will be evaluated with the development of future Capital Improvement Programs. Funding from the VDOT Recreation Access Funds could be applied toward this project.	\$275,000



**County of Roanoke, Virginia  
FY 2022 – FY 2031 Adopted Capital Improvement Program  
Unfunded Projects (Continued)**

<i>Functional Team/Project</i>	<i>Description</i>	<i>Estimated Cost</i>
<b>Internal Services</b>		
Cybersecurity Enhancement Program	Roanoke County Information Technology requested the project to enhance current measures to secure and protect the technology and data assets used by the community and internally by County departments. Recommended measures include ongoing subscription services, which are better aligned for funding through the operating budget.	TBD
<b>Total, Unfunded Requests</b>		<b>\$925,000</b>



## 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 2020 (Actual)	FY 2021 (Projected)	FY 2022 (Projected)
Debt Service as a Percentage of General Government Expenditures	<b>10.0%</b>	6.76%	6.52%	5.97%
Debt as a Percentage of Taxable Assessed Value	<b>3.0%</b>	1.71%	1.56%	1.64%

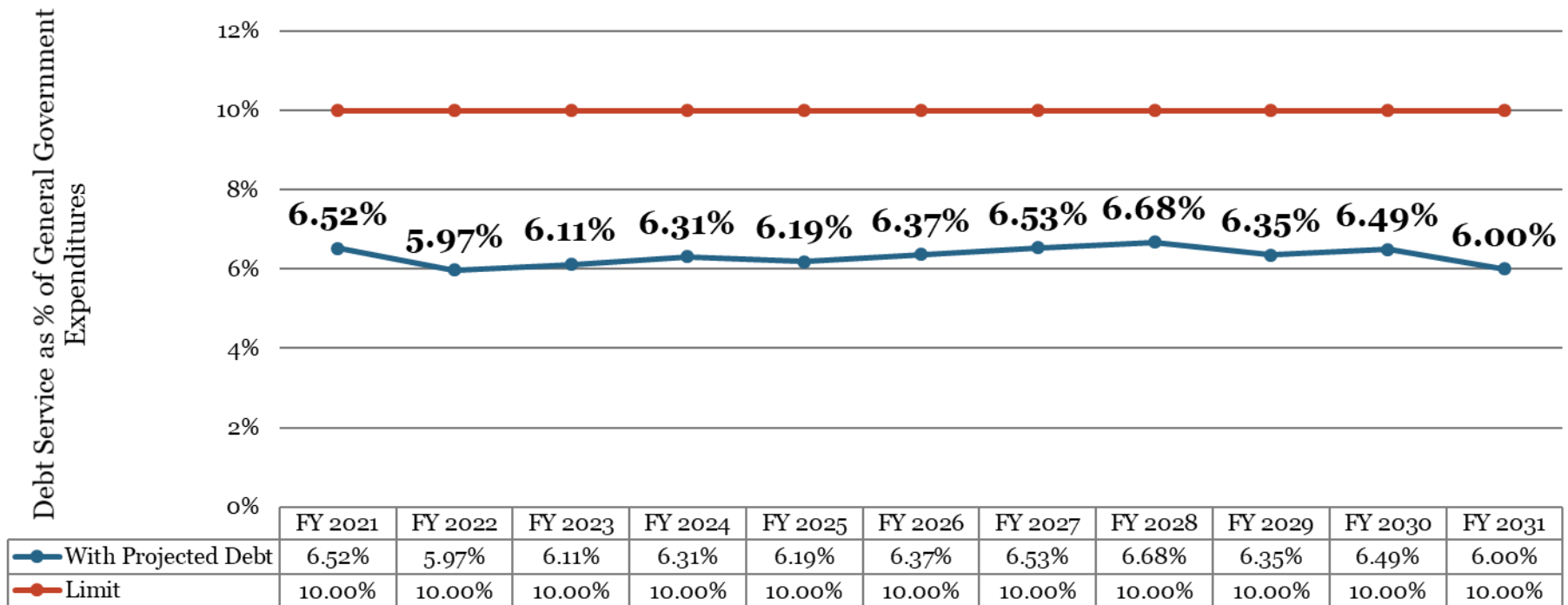




## Debt Service as a Percentage of General Government Expenditures

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

**Debt Services as a Percentage of General Government Expenditures  
FY 2021 - FY 2031**

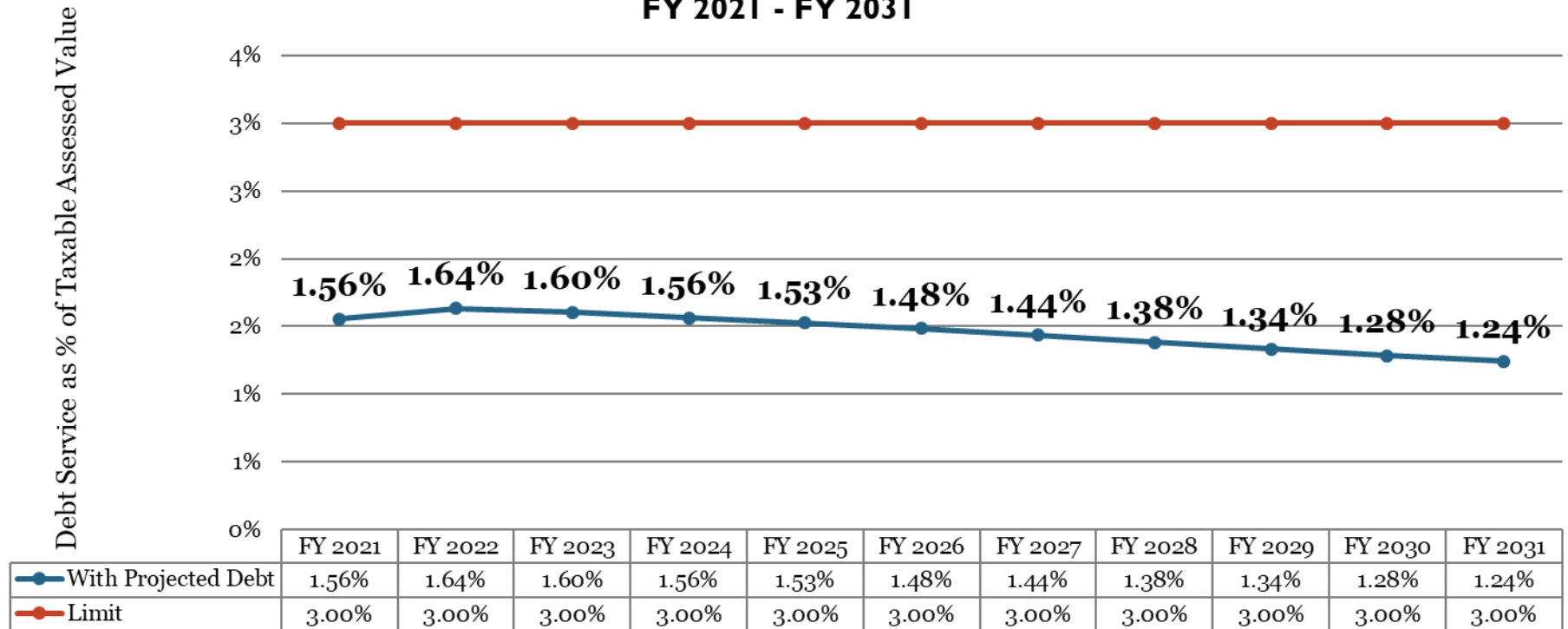




## Debt as a Percentage of Taxable Assessed Value

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

**Debt Services as a Percentage of Taxable Assessed Value  
FY 2021 - FY 2031**

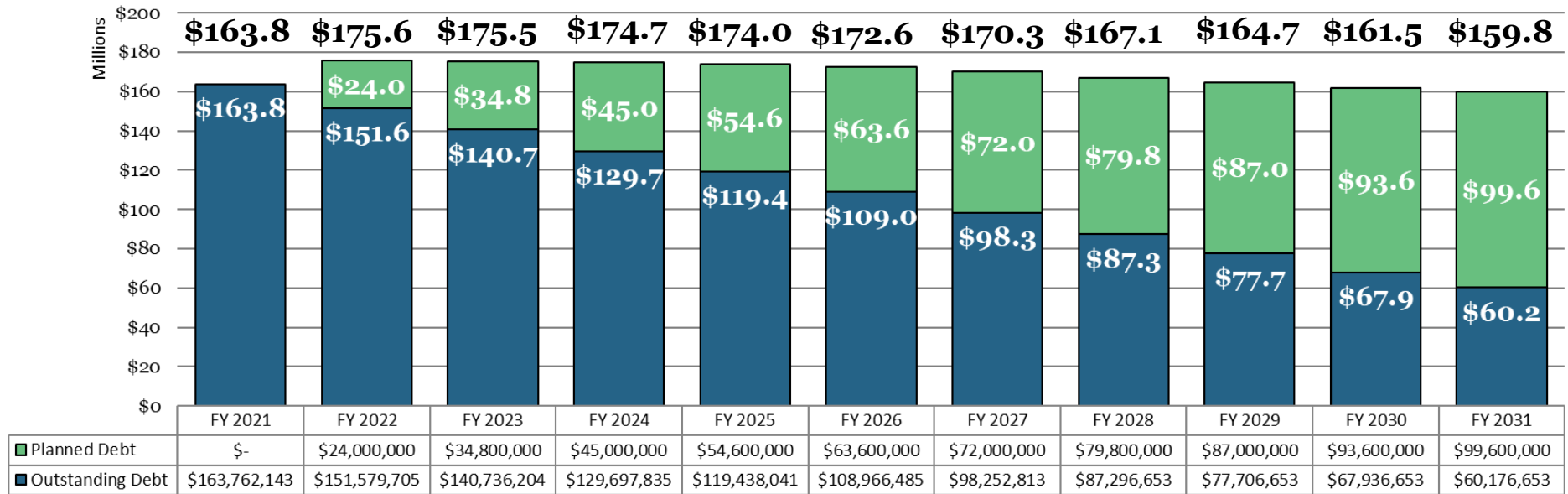




## Outstanding Debt

The below chart outlines the level of outstanding debt for County and Schools from FY 2021 through FY 2031 based on the assumed debt issuance in the FY 2022 – FY 2031 Capital Improvement Program.

**Existing and Planned Outstanding Debt  
FY 2021 - FY 2031**

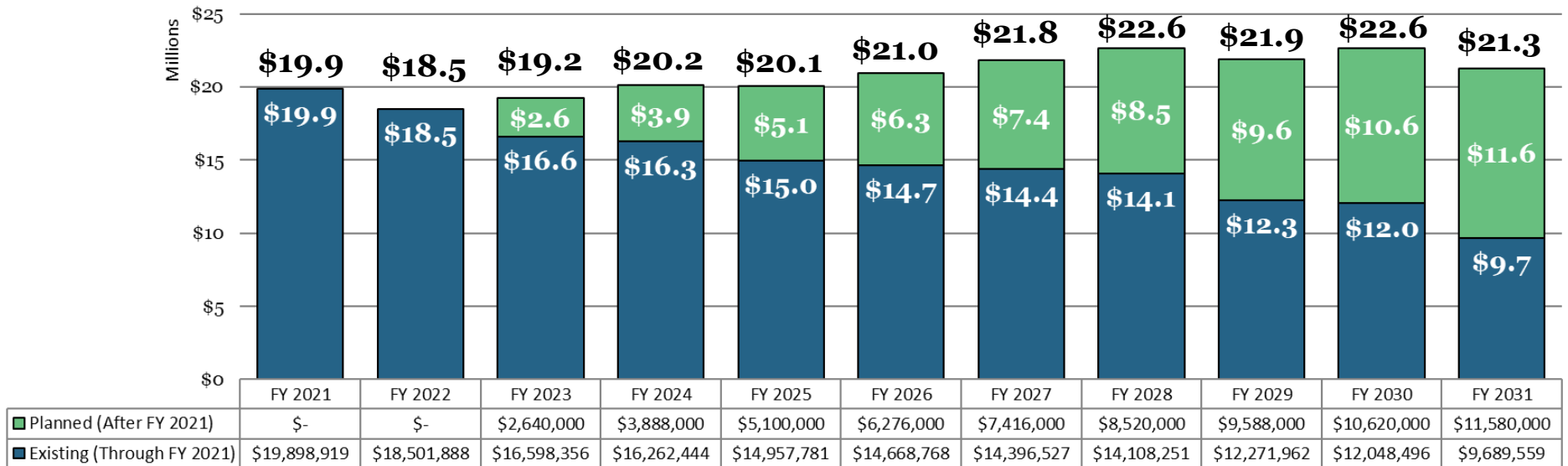




## Projected Debt Service

The below chart outlines the level of projected debt service for County and Schools from FY 2021 through FY 2031 based on the assumed debt issuance in the FY 2022– FY 2031 Capital Improvement Program.

**Projected Debt Service  
FY 2021 - FY 2031**





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

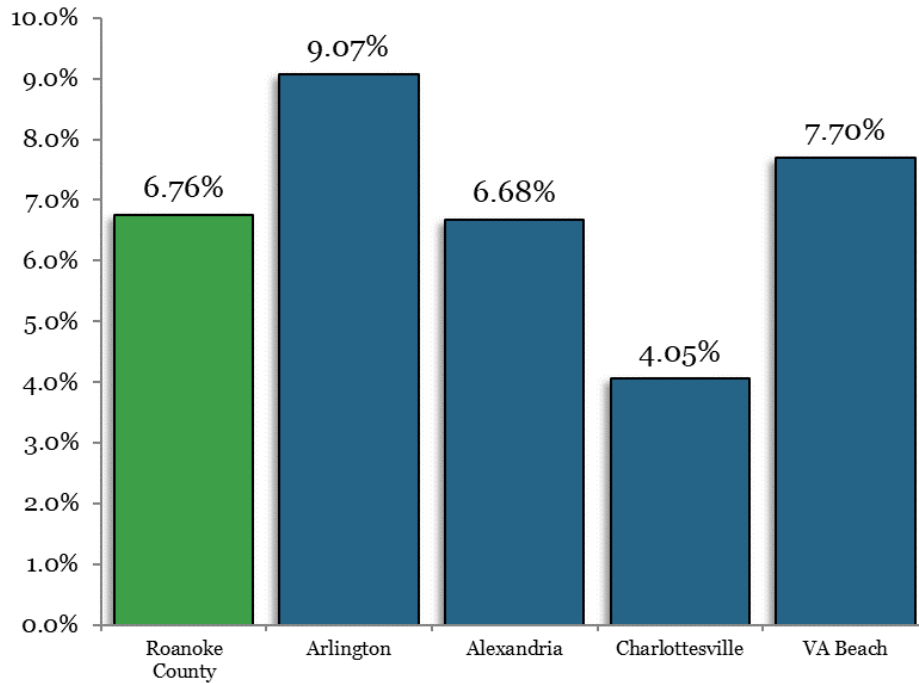
*All information is from each locality’s 2020 Annual Report, FY 2021 Adopted Budget Documents, or Adopted Financial Policies.*



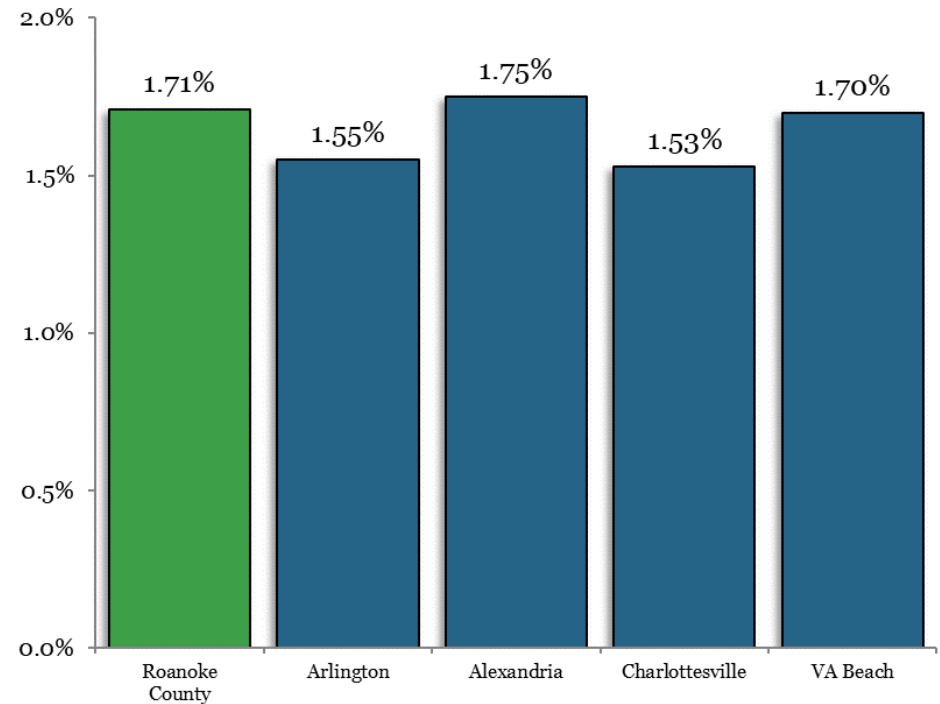
## Comparative Jurisdictions (continued)

Roanoke County is currently rated AA+ by the three major ratings agencies. The below charts compare the County’s actual debt ratios to four AAA rated localities in Virginia. Roanoke County’s ratios compare quite favorably to each of the comparative jurisdictions. This positive comparison shows that the County’s current debt load relative to its expenditures, assessed value, and population is consistent with the levels necessary to acquire AAA rated status. All data below is based on data as of June 30, 2020.

**Debt Service as a % of General Government Expenditures**



**Debt as a % of Taxable Assessed Value**



All information is from each locality’s 2020 Annual Report.



## County of Roanoke, Virginia FY 2022 – FY 2031 Adopted Capital Improvement Program VDOT Transportation Projects

A number of projects within the FY 2022 – FY 2031 Capital Improvement Program (CIP) receive funding from and/or are administered by the Virginia Department of Transportation. Details on VDOT Transportation Projects in the CIP can be found below.

<b>Project Name:</b>	Plantation Road Bicycle, Pedestrian and Streetscape Improvement, Phase II				
<b>Funding Sources:</b>		<b>VDOT UPC:</b>	111366	<b>Project Status:</b>	
Roanoke County CIP	\$200,000	<b>Administered By:</b>	Roanoke County	Preliminary Engineering	Complete
SMART SCALE <sup>4</sup>	\$2,092,142	<b>County-Funded Portion:</b>	8.73%	Right of Way	Complete
<b>Total Project Estimate:</b>	\$2,292,142			Construction	Under Construction
<b>Project Description:</b>	Construct sidewalk, curb, gutter, drainage systems between Walrond Drive and Gander Way on the west side of Plantation. Add pedestrian signals and continental crosswalks to the Gander Way/Friendship Lane traffic signal. The Walrond Drive/Plantation Road intersection will be widened and realigned to provide a turn lane and improve sight distance for drivers turning out of Walrond Drive.				
<b>Project Name:</b>	Fallowater Lane Extension				
<b>Funding Sources:</b>		<b>VDOT UPC:</b>	112304	<b>Project Status:</b>	
County Revenue Sharing	\$1,422,297	<b>Administered By:</b>	Roanoke County	Preliminary Engineering	Complete
VDOT Revenue Sharing <sup>1</sup>	\$1,422,297	<b>County-Funded Portion:</b>	32.77%	Right of Way	Complete
SSYP <sup>5</sup>	\$1,495,521			Construction	Under Construction
<b>Total Project Estimate:</b>	\$4,340,115				
<b>Project Description:</b>	Beginning at Route 419, this project upgrades the private driveway of Chuck E. Cheese to public road standards and constructs a new section between the end of the private driveway and Almond Road, an existing private road. Almond Road will be rebuilt to public standards to the intersection of Chevy Road, an existing public road.				



<b>Project Name:</b> West Main Street Pedestrian Improvements, Phase 2					
<b>Funding Sources:</b>		<b>VDOT UPC:</b> 108882		<b>Project Status:</b>	
County Revenue Sharing	\$67,000	<b>Administered By:</b>	VDOT	Preliminary Engineering	Complete
VDOT Revenue Sharing <sup>1</sup>	\$67,000	<b>County-Funded Portion:</b>	6.46%	Right of Way	Complete
SMART SCALE <sup>4</sup>	\$902,699			Construction	Summer 2021
<b>Total Project Estimate:</b>	\$1,036,699				
<b>Project Description:</b> Provide sidewalk between the City of Salem and Technology Drive at Valley Tech Park with pedestrian signals and crosswalks at Daugherty Road and Alleghany Drive.					
<b>Project Name:</b> Huffman Lane Reconstruction (Construction Only)					
<b>Funding Sources:</b>		<b>VDOT UPC:</b> 112665		<b>Project Status:</b>	
County Revenue Sharing	\$50,000	<b>Administered By:</b>	VDOT	Preliminary Engineering	N/A
VDOT Revenue Sharing <sup>1</sup>	\$50,000	<b>County-Funded Portion:</b>	50.00%	Right of Way	N/A
<b>Total Project Estimate:</b>	\$100,000			Construction	Late 2021
<b>Project Description:</b> Reconstruct 0.1 miles of Huffman Lane and construct a turnaround.					
<b>Project Name:</b> East Roanoke River Greenway - Water Treatment Plant to Blue Ridge Parkway					
<b>Funding Sources:</b>		<b>VDOT UPC:</b> 91191		<b>Project Status:</b>	
County Match	\$193,250	<b>Administered By:</b>	Roanoke County	Preliminary Engineering	Complete
TE/TAP <sup>2</sup>	\$773,000	<b>County-Funded Portion:</b>	2.80%	Right of Way	Underway
RSTP/STBG <sup>3</sup>	\$5,857,840			Construction	Anticipated in FY 2022
Local Funds	\$81,312				
<b>Total Project Estimate:</b>	\$6,905,402				
<b>Project Description:</b> Project scope has been reduced due to right-of-way acquisition issues. Construction of a 0.50-mile section of the greenway from Roanoke City across properties owned by the Western Virginia Water Authority and AEP. Construction of a 0.50-mile section of the greenway across Explore Park property owned by the Virginia Recreational Facilities Authority adjacent to the Blue Ridge Parkway. A trailhead/parking lot is proposed on Highland Road.					





<b>Project Name:</b> East Roanoke River Greenway - Blue Ridge Parkway Crossing along Highland Road					
<b>Funding Sources:</b>		<b>VDOT UPC:</b>	113356	<b>Project Status:</b>	
County Match	\$141,652	<b>Administered By:</b>	Roanoke County	Preliminary Engineering	Complete
TE/TAP <sup>2</sup>	\$566,606	<b>County-Funded Portion:</b>	20.00%	Right of Way	Underway
<b>Total Project Estimate:</b>	\$708,258			Construction	Anticipated in FY 2022
<b>Project Description:</b> Construction of 0.3 miles of the East Roanoke River Greenway along Highland Road that will cross beneath the Blue Ridge Parkway through an existing overpass.					
<b>Project Name:</b> West Roanoke River Greenway - Riverside Park (Roanoke County) to Green Hill Park (City of Salem)					
<b>Funding Sources:</b>		<b>VDOT UPC:</b>	97171	<b>Project Status:</b>	
RSTP/STBG <sup>3</sup>	\$2,990,760	<b>Administered By:</b>	Roanoke County	Preliminary Engineering	Complete
SMART SCALE <sup>4</sup>	\$4,542,105	<b>County-Funded Portion:</b>	0.00%	Right of Way	Underway
Open Container	\$499,166			Construction	Anticipated in FY 2022
<b>Total Project Estimate:</b>	\$8,032,031				
<b>Project Description:</b> Project scope has been reduced due to right-of-way acquisition issues. Construction of 1.50 miles of the greenway in Roanoke County and the City of Salem from Green Hill Park to the existing greenway along West Riverside Drive. Two bridges are proposed across the Roanoke River and a trailhead/parking lot is proposed on West Riverside Drive.					
<b>Project Name:</b> Williamson Road Pedestrian Improvements, Peters Creek to Plantation					
<b>Funding Sources:</b>		<b>VDOT UPC:</b>	111317	<b>Project Status:</b>	
County match	\$54,356	<b>Administered By:</b>	VDOT	Preliminary Engineering	Underway
TE/TAP <sup>2</sup>	\$217,424	<b>County-Funded Portion:</b>	2.81%	Right of Way	Anticipated in 2022
SMART SCALE <sup>4</sup>	\$1,662,220			Construction	Anticipated in 2023
<b>Total Project Estimate:</b>	\$1,934,000				
<b>Project Description:</b> Construct sidewalk between pedestrian signals under construction at Peters Creek Road and the existing shared use path on Plantation Road.					



<b>Project Name:</b> Dry Hollow Road Safety Improvements					
<b>Funding Sources:</b>		<b>VDOT UPC:</b> 107309		<b>Project Status:</b>	
County Revenue Sharing	\$613,000	<b>Administered By:</b>	VDOT	Preliminary Engineering	Underway
VDOT Revenue Sharing <sup>1</sup>	\$613,000	<b>County-Funded Portion:</b>	28.05%	Right of Way	Anticipated in 2022
SSYP <sup>5</sup>	\$959,000			Construction	Anticipated in 2023
<b>Total Project Estimate:</b>	\$2,185,000				
<b>Project Description:</b>	Improve safety by widening roadway under railroad trestle near the intersection of West River Road.				
<b>Project Name:</b> Starkey Road/Buck Mountain Road Intersection Improvements					
<b>Funding Sources:</b>		<b>VDOT UPC:</b> 113144		<b>Project Status:</b>	
County Revenue Sharing	\$573,278	<b>Administered By:</b>	VDOT	Preliminary Engineering	Complete
VDOT Revenue Sharing <sup>1</sup>	\$573,278	<b>County-Funded Portion:</b>	9.81%	Right of Way	Underway
SSYP <sup>5</sup>	\$13,444			Construction	Anticipated in 2023
RSTP/STBG <sup>3</sup>	\$2,098,115				
SMART SCALE <sup>4</sup>	\$2,583,365				
<b>Total Project Estimate:</b>	\$5,841,480				
<b>Project Description:</b>	This project will convert the unsignalized "T" intersection at Starkey Road and Buck Mountain Road to a single lane roundabout. Pedestrian accommodations are included in the design to extend along each leg and to the Branderwood subdivision.				
<b>Project Name:</b> East Roanoke River Greenway - Explore Park to Rutrough Road					
<b>Funding Sources:</b>		<b>VDOT UPC:</b> 113567		<b>Project Status:</b>	
RSTP/STBG <sup>3</sup>	\$3,020,308	<b>Administered By:</b>	Roanoke County	Preliminary Engineering	Underway
<b>Total Project Estimate:</b>	\$3,020,308	<b>County-Funded Portion:</b>	0.00%	Right of Way	N/A
				Construction	Anticipated in FY 2023
<b>Project Description:</b>	Construction of 1.50 miles of the greenway through Explore Park to Rutrough Road.				



<b>Project Name:</b> East Roanoke River Greenway - Blue Ridge Parkway to Explore Park					
<b>Funding Sources:</b>		<b>VDOT UPC:</b>	110155	<b>Project Status:</b>	
County Match	\$284,750	<b>Administered By:</b>	Roanoke County	Preliminary Engineering	Complete
FLAP <sup>6</sup>	\$1,387,000	<b>County-Funded Portion:</b>	16.42%	Right of Way	Complete
Private Contributions	\$20,000			Construction	Anticipated in FY 2023
RVRA and VRFA Easement Value*	\$42,000				
<b>Total Project Estimate:</b>	<b>\$1,733,750</b>				
<b>Project Description:</b>	This project will construct an approximately 1.8 mile section of the Roanoke River Greenway from the 3400 block of Highland Road near the intersection with Rutrough Road, through property owned by the Roanoke Valley Resource Authority, connecting to a Federal overlook, passing underneath the Roanoke River Parkway, crossing properties owned by the National Park Service and ending at Explore Park. A trailhead/parking lot is proposed on Rutrough Road. *The RVRA and VRFA Easement Value is a non-cash match to receive FLAP funds and is not reflected in County financial system.				

**Description of Funding Sources:**

If a project contains Roanoke County funding or a match provided by the County, it is shown in the first row of funding sources and reflected in *Italics*.

<sup>1</sup>**Revenue Sharing:** 50/50 County/VDOT funding; call for applications in odd years; next due date October 1, 2021 for FY 2027/2028

<sup>2</sup>**Transportation Alternatives (TE/TAP):** 80/20 VDOT/County funding; call for applications in odd years; next due date October 1, 2021 for FY 2023/2024

<sup>3</sup>**Surface Transportation Block Grant (STBG)** previously named Regional Surface Transportation Program (**RSTP**): 100% funding awarded through the Roanoke Valley Transportation Planning Organization; applications due September 2021

<sup>4</sup>**SMART SCALE** previously named **House Bill 2 (HB2)**: 100% funding awarded through the Commonwealth Transportation Board; call for applications in even years; pre-application window opens March 2022 with final applications due August 2022 with awards June 2023 for funding at least five years out

<sup>5</sup>**Secondary Six-Year Program (SSYP):** 100% VDOT funding to improve secondary routes (number 600 and higher); Telefees and District Grant funds (for unpaved roads) available annually; Board of Supervisors adoption required prior to June 30 every year

<sup>6</sup>**FLAP:** Federal Lands Access Program, supplements State and local resources for public roads, transit systems, and other transportation facilities, with an emphasis on high-use recreation sites and economic generators.

