

FY 2021 ADOPTED CAPITAL IMPROVEMENT PLAN

Arlington will be a diverse and inclusive world-class urban community with secure, attractive residential and commercial neighborhoods where people unite to form a caring, learning, participating, sustainable community in which each person is important.

SUMMARY OF FY 2021 CAPITAL PLAN

For FY 2021, the County proposed and adopted a one-year Capital Improvement Plan (CIP). As the County Manager stated in June 2020, the COVID-19 pandemic has created far too much uncertainty in terms of an unstable financial outlook, an increased need for food, housing and health needs, and supporting the business community and workforce.

The program presented in the adopted CIP considered the uncertain fiscal horizon of the County and focuses on essential investments with a one-year CIP. As part of the adopted FY 2021 budget, the County Board maintained the existing real estate tax rate at \$1.026 per \$100 dollars of assessed value (including stormwater tax). The adopted program centers on projects already in progress, projects that are critical to improving County infrastructure and assets, projects that meet legal and regulatory requirements, technology investments and commitments to invest in the stormwater infrastructure system. Highlights of the adopted CIP include:

- Fire Station Renovations The fire stations will be renovated to accommodate additional staff. Renovations include additional storage, living space, locker room facilities and upgrading decontamination areas.
- Body Worn Cameras The new technology will implement Body Worn Cameras for the Police Department and Sheriff's Office in addition to initial upgrades to four courtrooms to support the program.
- Trail Bridge and Modernization Program This ongoing program will address the replacement of the pedestrian bridges in Glencarlyn and Lubber Run parks, which were destroyed in the July 2019 storm.
- Stormwater Infrastructure Investments The investments for stormwater will provide capacity improvements, water quality projects and maintenance capital. The FY 2020 bond referenda will include \$50.8 million for the voters to consider in November that will address major infrastructure projects that will span across multiple fiscal years.
- Crystal City Metro Station Entrance The new entrance to be built at the east end of the station will provide easier access from Crystal Drive, the Virginia Railway Express (VRE) Station, and a Crystal City Potomac Yard Transitway station on the eastside of Crystal Drive at 18th Street South.
- Transitway Extension to Pentagon City This transitway project provides for the extension of the Crystal City Potomac Yard Transitway from Crystal City to Pentagon City.
- Boundary Channel Drive Interchange This project will improve traffic operations and safety to meet current demands and for future planned growth in Crystal City with multimodal connections and conversion of ramp terminals to roundabouts.
- Bridge Renovation and Replacements This program focuses on the rehabilitation, upgrade, or replacement of bridges owned by Arlington County.

PUBLIC ENGAGEMENT

During the CIP development and consideration process through March, staff had planned a public engagement process to survey and solicit feedback from a wide cross-section of the community. In addition to in-person meetings, CIP engagement and outreach strategies leveraged social media (Facebook, Instagram, Twitter), press releases, paper surveys (libraries, community centers, County buildings and partner locations), County emails, and other communication methods to promote and encourage participation. In mid-March, staff had scheduled an inperson planning meeting with community members to hear feedback on community values, equity and community investment priorities for the CIP. Due to COVID-19, that meeting was cancelled and moving forward, community input on the CIP was sought primarily through online channels of communication and all other in-person CIP engagement plans were discontinued.

In addition to the on-line engagement survey, program specific information was discussed virtually at a joint County-Schools work session on June 23, a CIP public hearing held on June 30, a Planning Commission meeting on July 6, a meeting held on July 8 with Board-appointed Commission and Committee Chairs, and a County Board work session on July 9. Additionally, there was a stormwater information session held on July 1.

The initial paper surveys and online engagement resulted in close to 900 total online and paper responses. While the engagement process looked different from years past, the County believes it provided opportunities throughout to hear from our diverse community.

After adoption of the CIP, any bond referendum that was scheduled to be considered by voters in November could have additional engagement, to include a public notice advertisement and a copy of the referenda questions and explanations provided at each voting location and online. Staff from the department of management and finance also frequently provide bond referenda briefings to County commissions and neighborhood associations that make a request.

ADOPTED 2020 REFERENDA FOR COUNTY GOVERNMENT

Below is the adopted list of projects and amounts requested included on the 2020 Bond Referenda for the County General Fund, Schools, and Stormwater Fund:

2020 General Obligation Bond Referenda		
November 3, 2020		
Community Infrastructure	Amount	
Fire Station Renovations	3,545,000	
Facilities Maintenance Capital	1,940,000	
Courthouse Complex Facilities Improvements	2,000,000	
Total Community Infrastructure Referendum	7,485,000	
Local Parks and Recreation		
Parks Maintenance Capital	485,000	
Rosslyn Highlands Park +	645,000	
Trail and Bridge Modernization Program	2,500,000	
Total Parks and Recreation Referendum	3,630,000	

Metro and Transportation	
Metro	21,300,000
Paving	7,000,000
Bridge Maintenance & Replacement	1,640,000
Total Metro & Transportation Referendum	29,940,000
Total General Fund Bond Referenda	41,055,000
Stormwater Bond Referendum	50,840,000
Total 2020 Arlington County Bond Referenda	91,895,000

OVERVIEW OF THE CIP

Local governments across the country construct, operate, and maintain all kinds of infrastructure on their residents' behalf; everything from roads and bridges, to community centers and school buildings, to large destination parks and small pocket parks, and much more. This work is both complex and expensive and requires a high degree of effort and attention be paid to the financial policies to maintain a sustainable and affordable capital program that addresses all of the County's large infrastructure needs.

Summary of FY 2021 Capital Plan

Program	FY 2021
	(\$ in Millions)
Maintenance Capital	\$15.1
Planning & New / Expansion Projects	20.9
Metro	30.4
Sub-Total	\$66.4
Transportation	155.0
Utilities	41.5
Stormwater	14.6
Subtotal: Dedicated Funding Sources	\$211.1
Total	\$277.5

The County's capital investment and spending in any particular year is a combination of projects authorized in prior years and new funding available for new projects or to add supplemental dollars to existing projects. The amounts shown in the tables in this document and described as the FY 2021 CIP Plan for programs with dedicated funding sources (Transportation, Stormwater and Utilities) reflect previously approved projects and present a "level of effort" for these programs where funding sources are legally restricted in use. All other funds reflect incremental new funding requests; for informational purposes, summaries are included at the end of this document for projects previously authorized by the Board.

PROJECT FUNDING FOR FY 2021

The following pages outline projects organized by program. Each program is divided into planned /one-time projects and maintenance capital.

Planning & New / Expansion Projects

Master-planned projects help meet long-term organizational and community goals and targets by:

- Meeting Board initiatives
- Developing plans for long-term, large-scale projects
- Helping shape and defining organizational work structures
- Developing community amenities and spaces

Funding for Planning & New / Expansion Projects by Program are detailed in the chart below:

Program	FY 2021
	(\$ in millions)
Information Technology	\$6.8
Parks and Recreation	\$1.3
Public/Government Facilities	\$7.7
Neighborhood Conservation	\$0.5
Joint County/School Capacity	\$1.5
Regional Partnership & Contingencies	\$3.1
Total	\$20.9

Capital Maintenance

The maintenance capital program preserves and extends the life of many capital assets. The program focuses on non-expansion projects that do not change the footprint of a building, expand the size of a current asset, expand services, or increase the operating budget. The following section includes maintenance capital for **technology**, **parks**, **facilities**, **and regional partnerships**. The maintenance capital projects for transportation, stormwater, and utilities are included in their respective sections later in the memo. The projects recommended in the FY 2021 CIP focus on:

- infrastructure and technology assets at the end of their useful life,
- repairs that cannot be deferred any longer, and
- projects that improve efficiency (e.g., energy, processes).

Information Technology/Equipment

The Information Technology Program includes the systems and software that serve County departments and the community. The typical useful life for these products is between three and 10 years, with replacement appropriate as systems age and become increasingly costly to maintain and integrate with other systems. Other factors guiding investment decisions include operational and security risk and availability of ongoing support from vendors. Most information technology capital investments are funded with short-term financing.

Project Name	Short Description	Funding* Source	Funding (000's)
Information Technology/Equipment - Planning	g and New/Expansion Projects		
Child Welfare System	Replacement of the 25-year-old DHS system that manages the authorization and payment of adoption and foster care services (Year 1 of a two-year funding requirement)	PAYG	\$500
Human Resource and Financial System Replacement	Deferring the comprehensive replacement of the County's human resource and financial system; funding will support a technical upgrade of the existing system as vendor support of the current release is ending.	Short-Term Financing	\$1,500
Technology COVID contingent	Technology contingent to support mobile workforce and post-COVID needs.	Short-Term Financing, CARES	\$2,500
Fire Command Vehicle Technology	IT upgrades to the Fire Department Command Vehicle	Short-Term Financing	\$120
E-Summons System	The electronic summons system will electronically send citations data to Courts and Police personnel and to ultimately allow violators to prepay fines electronically. The program receives legally dedicated annual funding that is being saved to fund the final project.	PAYG	\$144
Sheriff's Office Wireless Access Assessment	Analysis of the existing wireless system in the Detention Facility to identify areas where new access points are needed to ensure complete coverage throughout the building.	Short-Term Financing	\$100
Voting Machines	Additional voting machines to accommodate early voting and meet Department of Justice ballot image retention requirements.	PAYG	\$120
Body Worn Cameras	Technology to implement Body Worn Cameras for the Police Department and Sheriff's Office in addition to initial upgrades to four courtrooms to support this program.	Other	\$1,048
In-Car Camera System Replacement	Technology to replace the existing in-car camera system compatible with the Body Worn Camera program.	Other	\$755
		TOTAL	\$6,787

Project Name	Short Description	Funding* Source	Funding (000's)
Information Technology/Equipment – Maintenan	nce Capital		
Network Equipment, Worker Mobility, Power Systems, Data Center and Security & Software	Funding to replace end-of-life County network equipment, software and hardware systems, and for network access and access security.	Short-Term Financing	\$2,335
PC Replacement	Replacement of end-of-life end-user computing devices	Short-Term Financing	\$2,699
Server Hardware & Data Storage	Replacement of end-of-life server equipment required to support critical line of business application	Short-Term Financing	\$1,265
Computer Forensic Equipment	Replacement of end-of-life forensic servers and workstation infrastructure.	Short-Term Financing	\$85
In-Car Camera Servers	Replacement of end-of-life servers for the in-car camera video system used in Police vehicles.	Short-Term Financing	\$65
		TOTAL	\$6,449
*Note: Short-Term Financing was approved as part	of the FY 2021 Adopted Budget.		

Parks and Recreation Programs

The Parks and Recreation Program funds the replacement or major renovation of different types of outdoor park and recreation facility assets, including athletic fields and courts, lighting, playgrounds, picnic shelters, restrooms, site amenities, parking, and specialty facilities such as the skate park. The Trail Modernization Program covers design and construction for trail replacement, as well as milling and repaving to extend the life of existing trails. This year, funding recommendations focus primarily on those facilities that have reached end of life, such as the Tuckahoe playground turf as well as on replacing the pedestrian bridges that were destroyed in the July 2019 storm.

Project Name	Short Description	Funding* Source	Funding (000's)
Local Parks and Recreation Programs – Plannin	g and New/Expansion Projects		
Master Planning/Feasibility Studies	Consultant funds to provide analysis for new planning initiatives for future CIP projects	PAYG	\$150
Rosslyn Highlands Park +	Final installment for the design and construction funds for the Rosslyn Highlands Park, including a multi-purpose court, play spaces, plaza, pathways, landscaping, a lighted synthetic turf athletic field, and a playground. (Total project funding is \$9.8 million, including \$2 million in developer contributions)	New Bonds	\$645
Crystal City Parks and Public Space	Upgrade a portion of the right-of-way at S. Clark and Bell Street for temporary use as a public space.	TIF	\$500
		TOTAL	\$1,295
*Note: PAYG funding was approved as part of the I	TY 2021 Adopted Budget.		_

manage the Parks Capital Asset	PAYG	
	PAYG	
		\$160
construction of synthetic turf c diamond field enhancements revenue source	PAYG	\$225
ruction for the replacement of the und surface	New Bonds	\$485
ne rectangular community Virginia Highlands Park	Existing PAYG	\$773
and update of DPR's capital sting (Year 2 of 3).	PAYG	\$200
ne pedestrian bridges in ubber Run parks, which were uly 2019 storm. Continuation of	New Bonds	\$2,500
inization which includes milling	TOTAL	\$4,343
	ernization which includes milling	ernization which includes milling

Public/Government Facilities

The Facilities Maintenance Capital Program addresses the replacement and renewal of facilities' roofs, finishes, mechanical, electrical, and other systems to maintain good operating condition, present a professional appearance, and meet current code requirements. Projects do not substantially alter the characteristics or enlarge the footprint of the facility but extend the useful life and may include improvements to safety systems and energy performance. Funding recommendations focus on those projects that could not be deferred and/or are strategic priorities, such as continuing to make progress on our energy commitments.

In the post COVID-19 world, it is anticipated that the use of facilities will change. Facility renovations in the Courthouse Complex are funded to address new social distancing work standards in the office space.

Project Name	Short Description	Funding* Source	Funding (000's)
Public Government Facilities – Planning	and New/Expansion Projects		
Facility Planning Studies	Fire Station 10 project management and design drawings for various facility projects	PAYG	\$410
Gender Neutral Restroom Signage	Installation of gender-neutral signage	PAYG	\$145
Energy Assurance Plan	Consultant funds to prepare planning documents for improving resilience to energy outages and cascading events in the County.	PAYG	\$221

Project Name	Short Description	Funding* Source	Funding (000's)
Public Government Facilities – Planning	g and New/Expansion Projects		
Solar Panels at Fire Station 8	Installation of a 60kW solar PV panel system at Fire Station 8 (Lee Highway).	PAYG	\$200
Fire Station Renovations	Renovation of County fire stations to accommodate a fourth shift (Kelly Day). Renovations include additional storage, living space, locker room facilities and upgrading decontamination areas.	New Bonds	\$3,545
Facilities Modifications for the Courthouse Complex for Post-COVID Construction Needs	To address immediate construction projects that will address new social distancing work standards in the office space.	New Bonds	\$2,000
Maintenance/Upgrade of the Dulles Training Facility	Upgrades to the public safety training facility, an 11.5-acre facility at Dulles Airport, which is jointly operated with MWAA.	Existing PAYG	\$1,170
		Total	\$7,691
*Note: PAYG funding was approved as part of the FY 2021 Adopted Budget.			

Project Name	Short Description	Funding* Source	Funding (000's)
Public Government Facilities – Mainte	nance Capital		
2020 14th Street N. Mechanical Room Roof	Upper mechanical room roof replacement including the installation of new drains.	PAYG	\$155
Fire Station 9 Doors Replacement	Replacement of overhead doors at Walter Reed Fire Station (Station 9).	PAYG	\$380
Court Square West Building Improvements	Roof, generator, and transfer switch replacement and the addition of building automation controls to existing fan coil units.	New Bonds/PAYG	\$1,240
Courts Police Building Improvements	Electrical upgrades at the Courts Police Building to replace six Automatic Transfer Switches (ATS) and generator controls.	New Bonds/PAYG	\$1,240
Fort CF Smith Roof Replacement	Roof replacement at Fort C. F. Smith.	New Bonds/PAYG	\$250
Parks and Recreation Building Improvements	Replacement of three boilers at the Parks and Recreation Building at the Trades Center.	New Bonds	\$350
ADA Remediation	ADA improvements at the Detention Facility including garage entrances, lower level offices, and Level 1 public and staff accessible restrooms.	PAYG	\$200
Critical Systems Infrastructure	Replace two Uninterruptable Power Supply (UPS) devices at the Trade Center Network Operations Center.	PAYG	\$480
		Total	\$4,295

Neighborhood Conservation

The Neighborhood Conservation (NC) program enhances residential areas by providing resident-initiated public improvements based upon regularly updated neighborhood plans. Projects include street improvements, residential traffic management, park enhancements, street lighting, and beautification and landscaping projects. While new funding is not provided for this one-year pause, GO bond balances of \$17 million exist from previously authorized unissued bond funds approved in referenda from 2014 to 2018. Of that amount, the NC program plans to execute \$6 million in FY 2021 and the balance in planned projects through FY 2023.

Joint County-Schools Capacity Projects

The Joint County and Schools contingent (\$1.5 million) allows the County to collaboratively address capital needs to address enrollment growth in Arlington Public Schools and will fund the County's commitments for APS projects.

Regional Partnership and Contingencies

Arlington annually contributes capital funding to several regional organizations that provide beneficial services to Arlington residents and visitors. The Regional Partnerships Program represents the County's annual contributions to support the capital efforts of regional programs. The County's share is based on each regional program's allocation formula. The capital contingency fund is to address unforeseen capital costs that may arise during the fiscal year.

Project Name	Short Description	Funding* Source	New Funding (000's)
Regional Partnership and Contingencie	es		
Capital Contingency and Program Administration	Administrative support of capital projects, as well as coverage for unforeseen or unplanned projects	PAYG	\$1,777
Northern Virginia Community College	Arlington's ongoing capital contribution to the Northern Virginia Community College	PAYG	\$542
Northern Virginia Criminal Justice Academy	Arlington's contribution towards the annual debt payments of the Emergency Vehicle Operations Center	PAYG	\$140
Northern Virginia Regional Park Authority	Arlington's contribution to the parks and facilities operated by NVRPA, including Potomac Overlook, Upton Hill, and the W&OD Regional Parks in Arlington.	PAYG	\$629
		Total	\$3,088
*Note: PAYG funding was approved as p	art of the FY 2021 Adopted Budget.		

Stormwater

Arlington and the Washington region experienced repeated intense rainstorms in 2018 and an historic storm on July 8, 2019. These storms impacted numerous properties and businesses in Arlington, highlighting the need for increased investment in the County's stormwater management system. Arlington's strategy for addressing stormwater management, as laid out in the 2014 Stormwater Master Plan and updated in the Adopted CIP, seeks to strike the right investment balance between water quality, improved maintenance of assets, and capacity improvements.

To increase resilience in response to intense rain events and flooding, the County is undertaking a comprehensive review of ways to mitigate flood risks. Design work is already underway for significant investments in watershed-scale solutions in high risk flood areas that have experienced flooding and are identified in the Stormwater Master Plan. Although the Adopted CIP focuses on one year, it lays the foundation for a 10-year stormwater plan that would require funding of between \$180 million and \$200 million. This investment reflects the significant effort that will be required to update the County's stormwater infrastructure.

The County's stormwater infrastructure was installed during the rapid neighborhood development between the 1940s and 1960s in Arlington, when stormwater regulation did not include provision for overland relief and could not have anticipated the acute intensity and frequency of storms brought about by <u>climate change</u>. The FY 2021 and FY 2022 investments are:

Stormwater Adopted CIP (\$ in millions)

	FY 2021	FY 2022	Total Est. Cost
	Funding	Funding	(over 10 years)
Capacity Improvements	\$7.8	\$11.6	\$120.8
Water Quality	\$4.0	\$4.0	\$33.0
Maintenance Capital	\$2.8	\$5.5	\$35.1
Total	\$14.6	\$21.1	\$188.9

Stormwater Funding: To fund the significant investment required in stormwater infrastructure, voters will be asked to fund \$50.84 million in Bond Referenda authority in November. Bonds would be sold to fund the FY 2021 and FY 2022 costs and for additional projects in future years. The current plans for the \$50.84 million are:

Adopted Stormwater Bond Referenda (\$ in millions)

	Adopted Bond
	Funding
Spout Run Watershed ²	\$26.89
Torreyson Run Watershed	\$2.38
Lubber Run Watershed	\$0.75
Flood Risk Reduction & Capacity	\$4.98
Improvements	
Land Acquisition	\$4.80

¹ The linked <u>Story Map</u> illustrates how Arlington's peak 20th century development took place amid few standards for stormwater management — and the ramifications for today's more frequent, intense rainstorms lasting very short periods of time.

² Bond funding is adopted for these projects for FY 2021, FY 2022, and the years beyond to fund the contractual obligations for construction. Construction for these projects will take several years.

Ballston Pond ³	\$3.84
Watershed retrofits and Bioretention	\$0.50
Dumbarton Culverts ³	\$6.70
Total	\$50.84

Operating Budget Impact: The Stormwater capital maintenance plan requires additional ongoing funding to ensure the proper upkeep of our County's stormwater infrastructure. This additional investment will increase \$1.8 million more in annual funding in FY 2022.

As previously mentioned, the large capital improvements in stormwater infrastructure require bond funding to complete these needed projects. The annual debt service expected in FY 2022 is approximately \$481,000. These costs and the other cost increases associated with maintenance capital noted above will either be paid for by increasing the Stormwater tax rate, and/or increasing General Fund net tax support (allocating resources from existing programs).

The County is currently undertaking a Stormwater Utility Feasibility Study to explore alternative rate structures to fund this program. However, whichever funding mechanism is most appropriate to fund the Stormwater Program, additional monies will be required to support the need for additional investment in stormwater capital maintenance and infrastructure. If the current Stormwater tax rate structure remains in place, it is anticipated that the equivalent of a 3/10 of one-cent tax rate would be required in FY 2022 and that the total tax rate for the Stormwater Fund would need to increase by 1.0 to 1.5 cents over the next 10 years (current tax rate is 1.3 cents per \$100 of assessed value).

The following table describes the assumed revenues and expenses and fund balances under the CIP proposal.

	STORM	WATER MAN	IAGEMENT F	UND: CASH F	LOW PROJEC	TION & FUN	D STATEMEN	T (\$ in 1,000:	s)		
	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
	ESTIMATE	PROPOSED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
ADJUSTED BALANCE, JULY 1	14,272	13,203	10,349	8,189	6,084	6,155	6,227	6,301	6,379	6,458	6,539
REVENUE											
Sanitary District Tax	10,194	10,423	9,906	10,055	10,357	10,667	10,987	11,317	11,656	12,006	12,366
Fees, Fines & Other Revenues	1,118	3,742	1,819	1,332	1,345	1,359	1,372	1,386	1,400	1,414	1,428
Bond Proceeds		7,510	15,570	18,044	27,146	24,681	10,101	11,850	11,867	12,673	10,558
Additional funding required											
for Debt Service & additional											
capital maintenance	-	-	2,281	3,277	4,503	6,243	7,825	8,473	9,234	9,996	10,810
TOTAL REVENUE	11,312	21,675	29,576	32,708	43,351	42,950	30,285	33,026	34,157	36,089	35,162
TOTAL REVENUE & BALANCE	25,584	34,878	39,925	40,898	49,435	49,105	36,512	39,328	40,536	42,547	41,701
EXPENSES											
Operating and Maintenance	9,090	9,976	10,247	10,271	10,553	10,842	11,141	11,447	11,763	12,088	12,422
Debt Service			481	1,477	2,632	4,370	5,950	6,597	7,355	8,115	8,926
Capital Projects Total	3,291	14,553	21,008	23,065	30,095	27,665	13,120	14,905	14,960	15,805	13,730
Maintenance Capital	900	2,800	5,490	5,575	1,575	3,195	3,195	3,290	3,290	3,365	3,365
Infrastructure/ Capacity	441	7,760	11,550	12,350	23,030	20,240	7,950	9,590	9,645	10,360	8,285
Streams and Water Quality	1,950	3,993	3,968	5,140	5,490	4,230	1,975	2,025	2,025	2,080	2,080
TOTAL EXPENSES	12,381	24,529	31,736	34,813	43,280	42,878	30,211	32,949	34,078	36,008	35,078
BALANCE, JUNE 30	13,203	10,349	8,189	6,084	6,155	6,227	6,301	6,379	6,458	6,539	6,623
90-Day Operating Reserve	2,272	2,494	2,562	2,568	2,638	2,711	2,785	2,862	2,941	3,022	3,106
Capital Fund Balance	10,931	7,855	5,627	3,517	3,517	3,516	3,516	3,517	3,517	3,517	3,517
TOTAL BALANCE	13,203	10,349	8,189	6,084	6,155	6,227	6,301	6,379	6,458	6,539	6,623

Risk Mitigation and Management Project: The stormwater program is also developing a Risk Mitigation and Management Project (RAMP) which includes updated climate projections and inundation maps to support vulnerability and risk assessments that will inform investments throughout the CIP cycles. Key elements and tools

of the RAMP will be delivered in Q3-Q4 CY 2020 followed by a 13-watershed vulnerability assessment and key watersheds risk assessments in Q1 CY 2021, budgeted to cost approximately \$700,000. An interdepartmental working group was also formed last year to tackle stormwater emergency planning, engineering design, flood mitigation policies, and communications.

The summary below details the main programmatic areas of the adopted Stormwater CIP, including capacity improvements, maintenance capital, and water quality.

Capacity Improvements

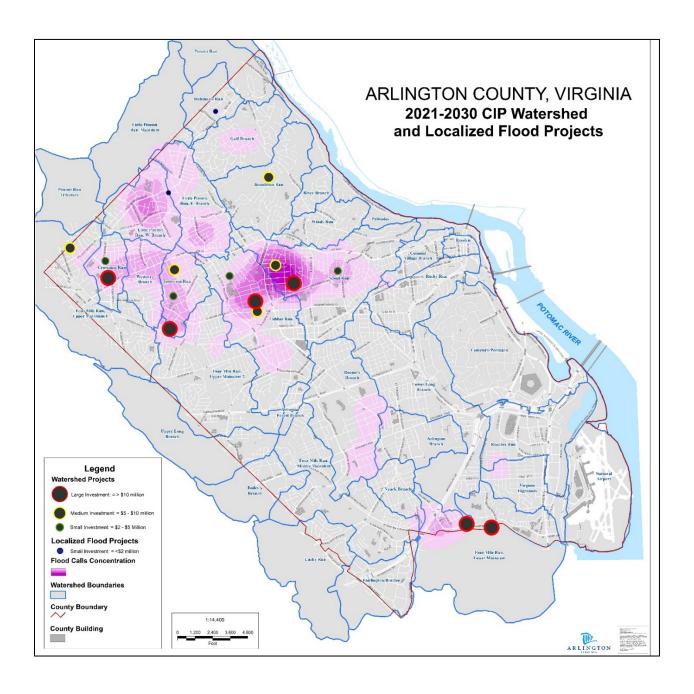
As mentioned above, design work is underway for a number of key projects:

- Spout Run: Phase 1 engineering for distributed detention and overland flow (property acquisition)
- Torreyson Run: surveys and conceptual plan options, potential joint schools project
- Crossman Run: development of joint Transportation/Stormwater Project, surveys and concept plan options
- Land Acquisition: strategic designations in multiple watersheds to establish overland flow
- Localized capacity expansion projects

Capacity Improvements CIP Projects

Engineering design is complex and time-intensive, and execution is multi-phased for watershed-scale capacity improvements. However, the current schedule of design work would align with the availability of bond funding for construction, when approved by voters in November, it includes \$7.8 million in projects for FY 2021 and \$11.6 million in FY 2022 for capacity improvement projects. Over the next 10 years, it is estimated that capacity projects will require over \$120.8 million to execute.

The Capacity Improvements CIP focuses on vulnerable watershed-scale projects and local capacity improvements and expansions in areas that have and are projected to experience repetitive flooding and loss. The current system in some areas can only meet a two-year design storm standard. Given the physical constraints of each watershed (e.g., undergrounded streams, limited overland water relief, physical location of residences) design solutions must use a blended approach. This approach relies on an expanded engineering toolkit that goes beyond the previous "pipes-only" approach. This includes distributed detention elements, such as vaults, to detain large volumes of stormwater for gradual release, expansion of supporting or secondary infrastructure, and property acquisition for overland relief from flood waters in buildings, homes, and transportation venues. These upgrades and additions allow the County to customize watershed-scale projects to their unique characteristics and needs. The map on the next page shows the location of the water-shed and localized flood projects over the 10-year planning period.



Design Standards Shift

The adopted CIP reflects the reality that no reasonable amount of investment can prevent all flooding during all high intensity rainfall events in all types of topography. To achieve a reasonable balance of risk sharing between public and private interests, County staff is including a blended design strategy that considers both the industry standard 10-year storm and the 100-year flood plain. Staff will at a minimum design to the 10-year standard, updated for more intense rainfall events associated with climate change. This data-driven design approach will manage most storms in the infrastructure of pipes, inlets, streams, and detention structures. Additionally, staff will model the 100-year storm events, where the capacity of the system will likely be exceeded, and strategies of overland relief will be employed to the maximum extent practicable.

Ultimately, the goal of these public investments, when combined with private investments, is to reduce flooding so that it does not impact building or home integrity, threaten personal safety, or interfere with the safe and timely transportation of people, goods and services. It is important to note that flood mitigation improvements will vary in immediate impact as the phases of the watershed scale projects progress and that full watershed-scale improvements will take place over a number of years.

Project Execution Changes/Improvements

Staff has been charged to improve the project execution process in order to deliver the CIP. Those execution improvements include:

- Formation of a <u>dedicated</u> engineering team composed of Stormwater Program engineers and a team from the Engineering Bureau.
- Development of performance-based <u>Roles and Responsibilities Plan</u>. This has improved decision-making and execution of projects.
- <u>Needs-Based Investment CIP</u> which will allow staff to accelerate planning and execution of watershedscale projects knowing there is reasonable reliability of funding over a 10-year basis.

The table below includes the capacity projects for funding FY 2021 and the estimated cost over the next 10 years.

	Capacity Improvements (\$ in Mi	llions)		
	Project Description/Scope	FY 2021 Funding	FY 2022 Funding	Total Est. Cost (over 10 yrs)
Spout Run Watershed	Watershed scale capacity improvements. FY 2021 funding for design and land acquisition. Funding required through FY 2025 for construction.	\$1.4	\$4.5	\$29.9
Torreyson Run Watershed	Watershed scale capacity improvements. FY 2021 and FY 2022 funding for design and capacity project at the new Reed School. Funding required through FY 2030 to complete construction.	\$0.7	\$1.7	\$15.7
Lubber Run Watershed	Watershed scale capacity improvements. FY 2021 funding for design. Funding required through FY 2030 to complete construction	\$0.3	\$1.0	\$15.2
Flood Risk Reduction & Capacity Improvements	Localized repetitive flood and drainage improvement projects on a sub-watershed scale as well as installation of tertiary system assets.	\$3.0	\$2.0	\$33.7

Capacity Improvements (\$ in Millions)					
	Project Description/Scope	FY 2021 Funding	FY 2022 Funding	Total Est. Cost (over 10 yrs)	
Land Acquisition	Property purchases in watershed high risk flood areas (HRFAs) to provide critical overland relief or land required for capacity improvements.	\$2.4	\$2.4	\$26.2	
Total		\$7.8	\$11.6	\$120.8	

Note: Numbers in the table may not add due to rounding.

Water Quality

\$4.0 million is adopted for FY 2021 and \$4.0 million in FY 2022 for water quality projects. Over the next 10 years, it is estimated that these projects will require more than \$33.0 million to execute. The Water Quality Program is principally driven by mitigation of erosion, infrastructure, and habitat damage in stream valleys, as well as compliance with the MS4 Permit tied to the Chesapeake Bay TMDL (total maximum daily load) pollutant and sediment reduction requirements. The County's permit covers a wide portfolio of programs, projects and activities including, but not limited to, stream restoration, green infrastructure, and the County's Land Disturbance Activity (LDA) Program, which regulates on-site runoff produced in re/development.

The County recently completed the first of three MS4 permits—each for a term of five years—and slightly exceeded the initial 5 percent pollutant reduction benchmark. The second permit is currently in negotiation with an estimated term of 2020-2025. It is anticipated that current projects in progress, the LDA Program, and all other activities in the program portfolio will meet the second permit benchmark of an additional 35 percent improvement. Staff is also looking to gain MS4 credit for the RAMP, and the potential to make credit purchases from the County's Wastewater Pollution Control Plant as a strategy to transition compliance between the second and third MS4 permits.

The following describes water quality projects for funding in FY 2021 and FY 2022 and the estimated cost over the next 10 years.

	Water Quality (\$ in Millions)				
	Project Description/Scope	FY 2021 Funding	FY 2022 Funding	Total Est. Cost (over 10 yrs)	
Water Quality Credits for MS4 Permit	Contract for nutrient credits at the Washington Golf and Country Club	\$0.9	\$0.9	\$1.9	
Ballston Pond	Watershed retrofit	-	\$2.2	\$4.3	
Donaldson Run Tributary B	Stream restoration	\$2.5	-	\$2.5	
Stream Restoration & Maintenance	Improve stream capacity, bank integrity, erosion controls and upgrades to coexisting infrastructure such as water/sanitary pipes	\$0.3	\$0.3	\$15.9	
Watershed retrofits and Bioretention	Pond habitat and capacity improvements; sediment and erosion control; green streets and green infrastructure	\$0.3	\$0.6	\$8.4	
Total		\$4.0	\$4.0	\$33.0	

Note: Numbers in the table may not add due to rounding.

Maintenance Capital

\$2.8 million was adopted for maintenance capital in projects for FY 2021 and \$5.5 million in FY 2022. Over the next 10 years, our capital maintenance plan would require more than \$35.1 million to execute. The County is conducting an assessment of execution, best practices, and outcomes over the next 3-5 years to greater define and calculate a fully reasoned and supported, regular, ongoing maintenance schedule for the stormwater program. In the meantime, this investment is based on identified needs that are rigorously fact-based using County data and maintenance records, as well as trends that emerged over the past several years of intense storms and flooding.

The table below includes the adopted maintenance capital projects for FY 2021 and FY 2022 and the estimated cost over the next 10 years.

	Maintenance Capital (\$ in Millions)				
		FY 2021	FY 2022	Total Est. Cost	
	Project Description/Scope	Funding	Funding	(over 10 yrs)	
Four Mile Run	Long-term maintenance agreement with	\$1.0	\$1.9	\$3.1	
Dredging/Flood	Alexandria and U.S. Army Corps of				
Control	Engineers				
Dumbarton Culverts	Major integrated infrastructure project, in	-	\$2.1	\$6.7	
	coordination with WSS re-piping project				
RAMP	Risk Mitigation and Management Project	\$0.5	\$0.2	\$0.7	
	to map current and future flood				
	vulnerabilities and inform resiliency				
	planning and engineering				
Tertiary Infrastructure	Repair and replacement of assets to	\$1.3	\$1.3	\$24.7	
and State of Good	maintain state of good repair				
Repair including					
outfall repairs					
Total		\$2.8	\$5.5	\$35.1	

Note: Numbers in the table may not add due to rounding.

Stormwater Utility Feasibility Study

Many Virginia communities have transitioned to a stormwater utility to fund programs instead of a Sanitary District Tax or general fund revenues. There are 21 Virginia Municipal Stormwater Association Jurisdictions (VAMSA), 19 of which have created formal stormwater utilities, leaving Fairfax County and Arlington as districts. A stormwater utility based on parcel impervious areas offers an alternative funding mechanism for recovery of the costs related to the County's stormwater program. Given the increase in funding required for Stormwater over the next 10 years, the County has engaged a consultant, Raftelis, to execute a Stormwater Utility Feasibility Study to explore in more detail the benefits, concerns, and process for moving to a different funding model.

Raftelis recently completed an interim deliverable which can be (<u>read here</u>) and includes a snapshot of the current stormwater funding methods and levels and introduces inputs that influence and inform the feasibility of a stormwater user fee model. These inputs include:

- 1. Policy considerations that inform how customers are charged for stormwater
- 2. Benchmarking Arlington County against regional peer utilities
- 3. Analysis of customer impacts using rate structures employed by peer utilities

Below is the overview and timeline of the additional deliverables that will be provided by Raftelis.

- Phase 1: Timing Fall of CY 2020
 - o Impact analysis to customer classes, including residents and commercial customers
 - o Recommendations on rate structures
 - o Initial estimates for implementation and operating costs
- Phase 2 (Optional): *Timing at least 18 months*
 - Optional phase to be executed at the direction of the County Board, informed by results from Phase 1
 - o This phase includes implementation of a stormwater utility, including robust public engagement

Change in Stormwater Financial Policy

As the July 8, 2019, storm demonstrated, our current stormwater infrastructure is not up to the task of handling more frequent intense storms. Over the last year, the County has identified the types of significant investments and the amount of time required to ensure watershed scale stormwater improvement. Given the complexity, scale, and scope of these investments, these projects will take place over at least the next 10 years.

To ensure the long-term fiscal health of the Stormwater Fund, funding these programs with bond proceeds calls for a change to the County's Financial Policies. These policies should be adjusted to enhance our Stormwater Fund reserves, clarify that the fund will be self-supporting, and not count against the County's general obligation debt ratios or capacity. (See Appendix C for redlined version of policies)

Utilities Water and Sewer Infrastructure Program

The focus of the Utilities program is the construction and maintenance of the water and sewer infrastructure, including the facilities and equipment that provide safe, reliable, and regular compliant drinking water, water distribution, sanitary sewer collection, and wastewater treatment for the County's residents, businesses, and visitors. Projects in this one-year adopted CIP are those critical to the safety and reliability of the system and those already under construction or under contract.

The FY 2021 Utilities CIP totals \$41.5 million funded through a combination of existing Utilities capital balances, developer fees, and an annual transfer from the Utilities Operating Fund. The effects of COVID-10 are closely monitored on its impacts on customer revenues that fund the transfer. If revenues fall short, near-term needs can be funded capital fund balances, which had been designated for future year projects. This could necessitate increasing future bond issuances. The program is split into four focus areas:

Program	FY 2021
	(\$ in Millions)
Water-Sewer Maintenance Capital	\$16.7
Water Distribution	\$4.8
Sanitary Sewer Improvements	\$4.5
Water Pollution Control Plant Capital	\$15.6
Total	\$41.5

The Capital Improvement Plan for the water distribution and sanitary sewer collection systems are guided by Master Plans adopted by the Board for the Water Distribution system (2014) and Sanitary Sewer (2002, currently being updated).

	Water-Sewer Maintenance Capital (\$ in Millions)			
Project	Description/Scope	FY 2021 Funding (\$ in millions)		
Water Main Cleaning & Lining	Trenchless technology to improve overall condition of water mains by restoring flow capacity and improving water quality.	\$2.3		
Water main and valve rehabilitations & replacements	Systematic replacement and rehabilitation of large and small water mains and valves to improve system reliability.	\$6.2		
Washington Aqueduct Capital	Per interagency agreement, required investments for the treatment of drinking water.	\$3.6		
Sanitary Sewer Main Lining & Rehabilitations	Systematic lining and replacement of sewer mains to mitigate the intrusion of groundwater and ensure system reliability.	\$4.6		
	Subtotal	\$16.7		

	Water Distribution (\$ in Millions)	
Improvements for Development	Improve the water distribution system as development occurs — ensures water quality, redundancy, and transmission capacity.	\$0.6
Sourcewater Reliability & Interconnection Improvements	Design and construction of an interconnection with the Fairfax Water system to provide a secondary water supply source to enhance system reliability in the event of an emergency.	\$2.5
Fort Myer Heights Water Main	Completing construction of 12-inch water main crossing Route 50 will improve fire flow, system redundancy, and reliability in the Fort Myer Heights neighborhood.	\$1.0
Pump Station Improvements	Upgrade or replacement of various components at pump stations, including motor control center, pumps, and back-up generators.	\$0.5
Gravity Transmission Mains – B2 & B3	Provides redundant water mains to back up existing transmission capacity through our Gravity One pressure zone.	\$0.3
	Subtotal	\$4.8
	Sanitary Sewer Improvements (\$ in Millions)	
Improvements for	Funding for small segments of sewer main installation and	\$0.3
Development	other work directly associated with development work.	
Spout Run	Relining of 3,000-foot section of 33-inch Spout Run sewer main, which runs under the North Highlands neighborhood.	\$1.2
Potomac Interceptor, Phase 2	Relining of 4,000 feet of 54-inch Potomac Interceptor in southern Arlington to ensure long-term viability and reliability of this 50-year-old pipe.	\$3.0
	Subtotal	\$4.5
	Water Pollution Control Plant (\$ in Millions)	
Maintenance Capital	Rehabilitation or replacement of current equipment at the Plant and 15 pumping and metering stations.	\$2.5
2900 South Eads Street Property	Replacement of the failing retaining wall on the property.	\$2.9
Technology Enhancements	Network upgrades and beginning asset management system replacement.	\$1.8
Odor Control, Primary, and Secondary Clarifier rehabilitations and upgrades	Replacing and/or upgrading critical systems for wastewater processing and odor control at the Plant.	\$2.3
Blue Plains	Wastewater treatment at the DC Water facility based on reserved capacity.	\$0.6
Solids Master Plan	See below for more detail	\$5.5
	Subtotal	\$15.6
	TOTAL	\$41.5

Note: Numbers in the table may not add due to rounding.

Solids Master Plan

One of the major initiatives at the Water Pollution Control Plant (WPCP) over the next decade is the upgrade and replacement of the Solids Handling processes. The Solids Master Plan was adopted by the County Board in conjunction with the FY 2019–FY 2028 CIP. The existing treatment processes are at or near end-of-life, and these projects will implement more effective and energy efficient technology, reduce safety risks to staff, reduce truck traffic to and from the WPCP, and contribute to achieving County-wide sustainability goals.

Since the adoption of the Solids Master Plan, staff collaborated with DC Water to determine the feasibility of a regional solution for solids processing at DC Water's Blue Plains facility as an alternative to Arlington County implementing the Phase 2 and 3 projects. In February 2020, DC Water and WPCP collaboratively determined that regionalization is not feasible due to insufficient excess capacity at Blue Plains. Therefore, WPCP will proceed with the full complement of Solids Master Plan projects in three phases to ensure the County's needs are met.

	Solids Master Plan (\$ in Millions)	
	Phase Description/Scope	FY 2021 Funding (\$ in millions)
Phase 1	Immediately needed projects to replace solids-related critical equipment that is failing and costly to maintain. Projects include preliminary treatment process replacements (bar screens and scum concentrator), ventilation improvements and motor control center replacement in the Preliminary Treatment Building, and gravity thickener upgrades. These projects are currently in design or under construction.	\$3.0
Phase 2	Additional equipment replacement and potential demolition of underutilized facilities.	\$0.5
Phase 3	FY 2021 will begin design and project management of either Thermal Hydrolysis Pretreatment or Anaerobic Digestion (THP/AD), to recover energy (and potentially nutrient) resources.	\$2.0
	Total	\$5.5

Metro

Arlington's capital contributions to the Washington Metropolitan Area Transit Authority (WMATA) have remained in line with the projections included in the Adopted FY 2019–FY 2028 CIP. Due to the timing of the approval of bond referenda, typically in November of even-numbered years, the FY 2021 GO bonds for WMATA will fund the County's FY 2022 capital contributions. In FY 2022, the County's capital contribution is currently projected to be \$23.0 million. Additionally, the County is required to fund a portion of Virginia's \$154 million annual WMATA Dedicated Funding obligation. In FY 2022, the County's share is projected to be \$7.4 million, bringing the County's total FY 2022 capital obligations for WMATA to \$30.4 million. Funding will come from a GO bond issuance of \$21.3 million, and from \$9.1 million of state transit aid.

Project Name	Short Description	Funding Source	New Funding (000's)
Metro			
Metro Funding	Arlington County's share of funding of WMATA capital needs per WMATA Compact	GO Bonds, State Aid	\$30,404
	Total		\$30,404

Transportation

The transportation capital program supports Arlington County's commitment to developing, maintaining and managing a multimodal transportation system that expands travel choices and provides equal access for all users. The plan balances maintenance of existing infrastructure with investment in multimodal projects that support the community's long-term growth and sustainability.

The FY 2021 Transportation CIP is \$155.0 million, comprised mostly of previously approved funding and \$40.2 million in new projected revenues. The CIP will focus efforts on projects that are well underway, those that have external funding or other commitments, and maintenance of critical infrastructure. Funding for the Transportation CIP program comes from a mix of federal, state, regional, and local sources. Two primary sources of local revenues for this program are the Transportation Capital Fund (TCF) Commercial and Industrial (C&I) Tax and Crystal City, Potomac Yard, and Pentagon City Tax Increment Financing (TIF).

The \$155.0 million FY 2021 Transportation CIP is distributed across projects in the following categories, including a small amount set aside for program administration and operational costs of select transit programs:

	FY 2021
Program	(\$ in Millions)
Complete Streets	\$95.8
Transit	\$38.4
Maintenance Capital	\$13.2
Program Administration	\$3.2
Operating	\$4.4
Total	\$155.0

Crystal City, Pentagon City, and Potomac Yard TIF Projects

The table below shows the projects funded with TIF funding in FY 2021.

	FY 2021		
	(\$ in	Previous Funding	Total (\$ in
Project	thousands)	(\$ in thousands)	thousands)
Boundary Channel Drive Interchange	\$74	\$3,718	\$3,792
BIKEArlington	\$78	\$198	\$276
Crystal City, Pentagon City, Potomac Yard Streets	\$4,584	\$787	\$5,371
Crystal City Parks and Public Space	\$500		\$500
Transportation Capital Program Administration	\$221		\$221
PrTN: Transitway Extension to Pentagon City		\$18	\$18
Improvements Outside Major Corridors		\$100	\$100
PrTN: Off Vehicle Fare Collection		\$33	\$33
Street Lighting		\$25	\$25
Totals	\$5,457	\$4,879	\$10,336

Note: The funding included here is only the CCTIF portion of the total project funding for any particular project included in this chart. Additional project dollars are included in other transportation fund sources.

The County is closely monitoring the effects of COVID-19 on our funding sources, including real estate taxes in TCF and TIF, regional funds, and capital grants we receive from State and Federal sources and County staff are in regular contact with our funding partners. If revenues fall short, the County will employ a combination of strategies including funding near term needs with capital fund balances which had been designated for future year projects, scaling back the scope of projects where possible, and delaying the start of projects that are not substantively advanced in design. In light of known revenue declines, bike trail enhancements along Arlington Boulevard between Courthouse and Rosslyn have been delayed as the project is unlikely to secure federal grants. Also, per the FY 2021 Adopted Operating Budget, intersection and roadway improvements at N. Sycamore and Lee Highway have been delayed.

Complete Streets

The Complete Streets program continues work on projects that improve the County's right-of-way to accommodate all modes of transportation: widening sidewalks, reducing pedestrian crossing distances, enhancing bicycle facilities, upgrading traffic signal and Intelligent Transportation Systems (ITS) and upgrading other supporting infrastructure. The funding shown in the table below represents the new and previously approved funding for FY 2021 only. As such, the amounts are more indicative of the stage a given project happens to be in during FY 2021 than of what the project is expected to cost in its entirety.

Complete Streets Projects (\$ in Millions)					
Project	Project Description	Fund Sources	FY 2021 Funding (\$ millions)		
Army Navy	Re-build of Army Navy Drive to include protected bike	Previous	\$0.4		
Drive Complete	lanes, safer pedestrian crossings, accommodation for	grant funds			
Street	future high-capacity transit, and green landscaping				
	treatments to reduce stormwater runoff				

	Complete Streets Projects (\$ in Millions)		
Project	Project Description	Fund Sources	FY 2021 Funding (\$ millions)
BIKEArlington	Physical enhancements to Arlington's transportation infrastructure, including trails and streets, to improve conditions for cycling with the goal of making bicycling a more significant travel mode	GO bonds, TCF NVTA local, TIF, grant funds	\$2.2
Boundary Channel Drive Interchange	Improve traffic operations and safety to meet current demands and for future planned growth in Crystal City with multimodal connections and conversion of ramp terminals to roundabouts	GO bonds, TCF C&I, TIF, grants	\$10.5
Bridge Renovation and Replacement	Rehabilitation, upgrade, or replacement of bridges owned by Arlington County	GO bonds, TCF C&I, TIF, Alexandria cost-share	\$7.6
Capital Bikeshare	New stations within the service boundary, larger station sizes for the high demand locations, and ongoing operations and maintenance	TCF NVTA local, grants	\$1.7
Columbia Pike Streets	Multimodal street improvements to include reconstructed streets, shifted curb lines, streetlight, street trees, and wider sidewalks achieved through undergrounding overhead utilities	TCF C&I, grants	\$27.4
Crystal City, Pentagon City, Potomac Yard Streets	Multimodal street improvements at various locations to support the transformation of Crystal City from a primarily office environment to a balanced mixed-use environment as envisioned in the Crystal City Sector Plan	TCF C&I, TIF, grants	\$10.7
Improvements Outside Major Corridors	Various multimodal street improvements to major travel corridors outside principal business districts, including Pershing Drive, Military Road, and Arlington Ridge Road	TCF C&I, NVTA local, TIF, grants	\$6.2
Intelligent Transportation Systems	Leveraging new technologies to improve traffic operations and monitoring capabilities for all modes throughout the County	GO bonds, TCF CVTA local, grants	\$6.8
Neighborhood Complete Streets	Improvements to safety and accessibility on non-arterial neighborhood streets that have critical needs; projects selected by the Neighborhood Complete Streets Commission evaluation process	TCF NVTA local, grants	\$1.5
Parking Technology and Parking Meters	Upgrades to parking management systems to make on- street and off-street facilities easier to use, and modernizing and maintaining parking meter equipment	GO bonds, grants	\$2.4
Rosslyn-Ballston Arterial Street Improvements	Street and sidewalk safety and functionality improvement projects on Clarendon Boulevard, Wilson Boulevard, Fairfax Drive, and nearby intersecting streets	TCF C&I, grants	\$4.9
Street Lighting	Continuing conversion of streetlights to LED and modernizing streetlight communication system	GO Bonds, TCF C&I, TIF, grants	\$2.7
Street Safety Improvements	New program in support of the Vision Zero strategy the County Board adopted in July 2019; will support projects at intersections and streets where safety improvements are needed for pedestrians, bicyclists, transit riders, or motorists	GO bonds, TCF C&I, NVTA local, grants	\$1.2

Complete Streets Projects (\$ in Millions)							
Project	v i						
Transportation Systems and Traffic Signals	Improving the infrastructure, safety, and operations of the various traffic control devices throughout the County	GO bonds, TCF C&I, NVTA local, grants	\$6.4				
WALKArlington	Completion of the planned walkway network, making the pedestrian walkway network fully accessible for all users, and improving pedestrian safety with the goal of increasing walking across the County	GO bonds, TCF C&I, NVTA local grants	\$2.2				
Other Complete Street Projects	This combines the following projects: regulatory signage, strategic network analysis and planning, and transportation asset management	PAYG, TCF C&I, NVTA local, GO bonds	\$1.2				
	Total		\$95.8				

Transit

Transit projects improve access to public transportation, including ART and WMATA. The focus for ART in the near-term is to improve operations, extend transitways where needed, and increase ridership by adding and improving transit stations, including making them ADA compliant, all while keeping the public and operators safe. With regard to WMATA, Arlington continues to increase accessibility to account for long-term demand by adding entrances and elevators to existing stations. Again, the funding shown is for FY 2021 only and does not represent the total cost of any individual project. These projects involve multi-year investments in transit infrastructure that are intended to benefit the community for many years. While the COVID-19 pandemic and associated economic contraction has had a dramatic negative short-term impact on all transit operations nationwide, Arlington's mid-term and long-term community development trajectory requires a robust network of transit facilities and services that will be able to serve many more residents and workers that will be based in Arlington.

	Transit Projects (\$ in Millions)							
Project	v 1							
ART Facilities	Operation and maintenance facility for Arlington's growing fleet of Arlington Transit (ART) to be constructed in Shirlington; will include parking for buses as well as ART administration.	TCF C&I, grants	\$3.4					
Ballston Multimodal Improvements	Construction of surface level transportation facilities, street improvements, and sidewalk improvements around the Ballston-MU Metrorail station. Construction has commenced with expected completion Fall 2021.	TCF C&I, grants	\$3.0					
Ballston-MU Metro Station West Entrance	New entrance to be located at the of the intersection of N. Fairfax Drive and N. Vermont Street, approximately one-quarter mile to the west of the existing entrance to the station. The County will continue to advance design and has committed \$25m in local funding toward the project. This, combined with various grants the County has applied for, will secure full funding for the \$130m estimated cost. Expected completion Summer 2025.	grants	\$1.0					

	Transit Projects (\$ in Millions)	1		
Project	Project Description	Fund Sources	FY 2021 Funding	
Bus Bay Expansion- East Falls Church Metro Station	Expand bus bay capacity by adding up to three new bus bays and replacing the existing shelters in the off-street bus loop at the East Falls Church Metrorail station.	TCF NVTA local, grants	\$2.1	
Bus Stop Accessibility Improvements	Ongoing program to update all of the County's 625 bus stops previously identified as not being Americans with Disabilities Act (ADA) compliant.	TCF C&I, NVTA local	\$0.7	
Crystal City Metro Station East Entrance	New entrance at the east end of the station to provide easier access from Crystal Drive, the Virginia Railway Express (VRE) Station, and a Crystal City Potomac Yard Transitway station on the eastside of Crystal Drive at 18th Street South. The County is working with a private developer to design and build the project. Expected completion Fall 2023.	grants	\$7.8	
Pentagon City Metro Station Second Elevator	Second elevator entrance to the Pentagon City Metrorail Station from the street level to the mezzanine level of the station to be located on the west side of S. Hayes Street near the west side Metrorail escalator. Expected completion Fall 2022.	GO bonds, TCF C&I, grants	\$4.1	
PrTN: Columbia Pike Transit Stations	Design and construction of Transit Stations along Columbia Pike with various passenger amenities such as 9.5-inch curb for near-level boarding, detectable warning strips, enhanced lighting, larger covered waiting area with ample seating, real-time bus information, and improved sidewalks.	GO bonds, TCF C&I, grants	\$2.9	
PrTN: Transit ITS and Security Program	Implementation of real-time information displays at bus stops and other technology-related bus stop amenities, such as LCD or LED displays, E-paper displays, and pull-cord lights.	TCF C&I, grants	\$2.7	
PrTN: Transitway Extension to Pentagon City	Extension of the Crystal City Potomac Yard Transitway from Crystal City to Pentagon City. Expected completion Fall 2023.	TIF, grants	\$9.1	
Other Transit Projects	This combines the following projects: farebox upgrades, ART Light Maintenance Facility Parking Expansion, Bus Stop and Shelter Program, PrTN: Off Vehicle Fare Collection, and Transit Development Plan Updates	TCF C&I, NVTA local, TIF, grants, developer contributions	\$1.6	
	Total	,	\$38.4	

Maintenance Capital

The \$13.2 million earmarked for transportation maintenance capital in FY 2021 will be largely spent on Paving (\$11.3 million) and Bridge Maintenance work (\$1.7 million). The paving program maintains and manages 1,059 miles of paved streets. The bridge maintenance program provides funding for inspection, maintenance and rehabilitation of 36 vehicular and pedestrian bridges in Arlington County to assure an adequate level of safety for pedestrians and vehicular traffic.

The County's Pavement Condition Index (PCI) is directly linked to the level of investment in the paving program. The \$8.5 million paving program funding for the 2021 paving season represents a decline relative to the \$12.4 million in the previous CIP. While there is a reduction in paving funding for 2021 paving season, it is not

expected that the PCI level will dip below 75. The current PCI is 76. The County targets maintaining PCI between 75 and 80 (PCI between 71 and 90 is rated "Good" per the index developed by the US Army Corp of Engineers). Sustained funding cuts, however, will likely result in an erosion of PCI. Many factors influence the overall paving condition, including the severity of winters, deterioration caused by usage, and the global market price of oil which directly impacts the lane miles that can be paved. The County has benchmarked the best practices in the industry in paving roads and have found that the following strategies best meet the needs of resurfacing our roadways: hot-mix resurfacing, slurry seal, micro-surfacing and rebuilding. These strategies ensure that our investment in roadway infrastructure is protected and maximized. The overall long-term goal is to attain general satisfaction with the condition of County streets while ensuring that they are accessible by the various transportation uses by the public.

Significant Projects Underway

Every two years, the County updates and revises its multi-year capital plan. There are many capital projects in the previous capital plan that are on the continuum of planning, designing and building. The table in <u>Appendix D</u> highlights many of the significant projects currently underway.

Projects Delayed or Deferred from Prior Capital Improvement Plan (CIP)

A number of projects that were included in the adopted CIP (FY 2019–FY 2028) will be delayed or deferred due to the current economic uncertainty and will be revisited next spring. The PAYG projects delayed or deferred as part of the FY2021 Operating Budget are in Appendix E. The following projects have also been deferred to a future CIP.

- <u>Neighborhood Conservation</u> The program will use existing balances to finish projects already underway, but no additional funds are included for FY 2021. Previous GO bond balances of \$17 million exist from previous authorized unissued bond funds approved in referenda from 2014 to 2018. Of that amount, the NC program plans to execute \$6 million in FY 2021 and the balance in approved projects through FY 2023.
- <u>Carlin Springs Road and Quincy Street Sites</u> The last CIP included funding for additional planning as
 well as the initial phase of demolition at the Carlin Springs Road site and the initial improvements needed
 for one building at the Quincy St. site for public safety emergency vehicles in order to proceed with
 construction of Jennie Dean Park. These funds remain in place, but no additional funding is included
 while the County and APS continue to work on planning for these sites.
- Land Acquisition There is no new funding for land acquisition included in this CIP.
- <u>Parks & Facilities Maintenance Capital</u> The facilities and parks maintenance capital programs have a combined reduction of \$5.3 million from the previously adopted CIP. This CIP focuses on the replacement or improvement of critical infrastructure.
- <u>Synthetic Turf Conversions & Replacement</u> The Synthetic Turf Program is largely focused on replacement of existing synthetic turf fields that are approaching the end of their useful life as well as possible conversions from grass to synthetic, consistent with the Public Spaces Master Plan. While the CIP includes the replacement of the existing synthetic turf at Virginia Highlands Park as it reaches the end of its useful life and could face operational issues in the next few year, it defers funding of the possible conversion from grass to synthetic for the Kenmore Middle School and Thomas Jefferson Middle School fields which are currently lit and would be in partnership with APS.

- <u>Bike Trail Enhancements</u> Work on Arlington Boulevard between Courthouse and Rosslyn will be delayed. Previously anticipated Federal grants of \$240k are now unlikely.
- <u>Intersection and Roadway Improvements</u> N. Sycamore and Lee Highway intersection and road improvements (\$4.9 million) has been delayed.

Debt Capacity Analysis

In determining the level of capital projects to finance and the method of financing, the County considers its financial ability to undertake these projects. While this year's CIP does not include funding for most capital projects beyond FY 2021, it is based on the same underlying principals included in the County's financial and debt management policies and ensures that the County's overall levels of outstanding debt and debt service remain in compliance with the policies. Together with other County economic and demographic factors, these policies form the framework for maintaining the County's Aaa/AAA/AAA ratings, reaffirmed in 2019, with Moody's Investors Service, Standard & Poor's, and Fitch Ratings.

The County's analysis includes a review of debt capacity factors and the impact of the adopted CIP on these factors. Appendix A includes the County's outstanding debt, projected increase in debt resulting from bonds approved in the Adopted FY 2021 CIP, and the impact on the County debt ratios. Below is a summary of the three primary debt affordability ratios that impact the general fund:

- 1. Ratio of Debt Service to General Expenditures No Greater Than 10% -- The FY 2021 CIP is projecting the debt service to general expenditures to decrease from 8.9 percent in FY 2020 to 8.43 percent in FY 2021.
- 2. Outstanding Debt as Percentage of Market Valuation of Tax Base No Greater than 3% -- The amount of debt that the County carries is moderate when compared to its tax base. This ratio is projected to range from 1.28 percent in FY 2020 to 1.48 percent in FY 2021.
- 3. Ratio of Debt per Capita to Per Capita Income No Greater than 6% -- The County estimates that the Debt to Income ratio will range from 4.9 percent in FY 2020 to 5.6 percent in FY 2021, assuming 1 percent growth in per capita income in FY 2021.

The policies, first adopted in 2008 and updated frequently, also include guidance on bond term and amortization, specifically that bond-funded projects will typically have a useful life at least as long as the period over which the bonds will be repaid (the average life of County bonds is 11-12 years and final maturity is generally 20 years; however, longer terms may be considered on very long useful life projects). Finally, they provide guidance on the use of variable rate debt and derivatives.

While there is no legal limit in Virginia on the level of debt issued by Virginia counties, Arlington has issued and plans to issue its debt prudently. Arlington will remain within the acceptable range of debt capacity factors with the CIP based on conservative assumptions.

Appendix A

FY 2021 Capital Improvement Plan Cost Summary

The Proposed FY 2021 Capital Improvement Plan (CIP) includes typical capital projects such as maintenance capital, parks, transportation, metro, community conservation, government facilities, information technology and regionals. The CIP also includes funding that has been previously approved in prior CIPs to show the full expenditure by fiscal year of each capital project.

Capi	tal Prograi	ms Cost Su	ımmary (0	000s)			
						<u>FY 26 -</u>	
Program Category	<u>FY 21</u>	<u>FY 22</u>	FY 23	<u>FY 24</u>	<u>FY 25</u>	FY 30	<u>Total</u>
Local Parks & Recreation	5,638						5,638
Transportation Initiatives ¹	155,043	3,000					158,043
Metro	30,404						30,404
Community Cons./Economic Development	6,500						6,500
Public / Government Facilities	11,986						11,986
Information Technology & Public Safety	13,236						13,236
Regional Partnerships	3,088						3,088
Joint County & Schools Projects	1,500						1,500
Water & Sewer Infrastructure	41,505						41,505
Stormwater Management ²	14,553	15,570	11,770	7,995	7,995		57,883
Total County Capital Expenditures	283,453	18,570	11,770	7,995	7,995	-	329,783
						<u>FY 26 -</u>	
Capital Funding Sources	FY 21	FY 22	FY 23	<u>FY 24</u>	FY 25	FY 30	<u>Total</u>
Pay-As-You-Go (PAYG)	12,693						12,693
Short Term Financing	9,669						9,669
General Fund GO Bond Issue	38,055	3,000					41,055
Federal Funding	240						240
State Funding	13,848						13,848
Developer Contributions and Partnerships	6,735						6,735
Transportation Capital Fund (TCF) - C&I ¹	7,103						7,103
TCF - HB2313 Local ³	5,873						5,873
HB2313 Regional ³	_						_
Tax Increment Financing	5,457						5,457
Other Funding	8,325						8,325
Utilities PAYG	13,509						13,509
Utility GO Bond Issue	-						-
Sanitary District Tax ²	1,753						1,753
Stormwater GO Bond Funding	7,510	43,330					50,840
Subtotal New Funding	130,770	46,330	-	-	-	-	177,100
Previously Approved Funding							
Authorized but Unissued Bonds	14,500						14,500
Issued but Unspent Bonds	9,153						9,153
Other Previously Approved Funds ⁴	129,030						129,030
Subtotal Previously Approved Funding	152,683	-	-	-	-	-	152,683
Total Capital Funding	283,453	46,330	-	-	-	-	329,783

⁽¹⁾ Transportation Capital Fund is supported by a commercial real estate tax of \$0.125 per \$100 of assessed value and 30% of revenues from a regional sales tax collected at the Northern Virginia Transportation Authority (NVTA). The Transportation Capital Fund is supplemented by County PAYG as well as state and federal revenues.

⁽²⁾ Stormwater Management Fund is funded from the Sanitary District Tax, Watershed Management Fund, State Grants and project cost sharing with US Army Corps of Engineers. The sanitary district tax was increased from \$0.01 to \$0.013 per \$100 of assessed value by the County Board on April 24, 2010.

⁽³⁾ Local and Regional funding for transportation projects from the Northern Virginia Transportation Authority (NVTA). Approved by the General Assembly in 2013.

⁽⁴⁾ Other previously approved funds: Any funds other than GO Bonds that were approved as part of prior CIPs that are to be spent during the FY 2021 CIP.

Appendix B

Outstanding General Fund Debt and Compliance with Fiscal Policies

Outstanding General Fund Debt Service and Estimated FY 2021 GO Bond Debt Service $^{(1)(2)}$

	Existing				FY2021 GO Bond			Total New and Existing		
	Gener	al Fund Debt Sei	rvice ⁽¹⁾	Debt Service(2)			General Fund Debt Service			
Fiscal			Total Debt			Total Debt			Total Debt	
Year	Principal	Interest	Service	Principal	Interest	Service	Principal	Interest	Service	
2020	\$46,068,185	\$27,732,940	\$73,801,125				\$46,068,185	\$27,732,940	\$73,801,125	
2021	42,936,034	26,184,720	69,120,754		\$1,502,900	\$1,502,900	42,936,034	27,687,620	70,623,654	
2022	43,725,352	24,375,690	68,101,042	\$3,412,500	6,398,438	\$9,810,938	47,137,852	30,774,128	77,911,980	
2023	44,039,501	22,407,876	66,447,376	6,825,000	8,360,625	15,185,625	50,864,501	30,768,501	81,633,001	
2024	43,510,000	20,461,858	63,971,858	8,910,417	8,019,375	16,929,792	52,420,417	28,481,233	80,901,649	
2025	42,145,000	18,445,827	60,590,827	8,910,417	7,573,854	16,484,271	51,055,417	26,019,681	77,075,098	
2026	38,600,000	16,556,142	55,156,142	8,910,417	7,128,333	16,038,750	47,510,417	23,684,476	71,194,892	
2027	38,970,000	14,772,311	53,742,311	8,910,417	6,682,813	15,593,229	47,880,417	21,455,123	69,335,540	
2028	36,635,000	13,000,822	49,635,822	8,910,417	6,237,292	15,147,708	45,545,417	19,238,114	64,783,530	
2029	34,820,000	11,443,522	46,263,522	8,910,417	5,791,771	14,702,188	43,730,417	17,235,293	60,965,710	
2030	35,035,000	10,003,697	45,038,697	8,910,417	5,346,250	14,256,667	43,945,417	15,349,947	59,295,364	
2031	34,635,000	8,545,890	43,180,890	8,910,417	4,900,729	13,811,146	43,545,417	13,446,619	56,992,036	
2032	32,940,000	7,172,001	40,112,001	8,910,417	4,455,208	13,365,625	41,850,417	11,627,209	53,477,626	
2033	29,365,000	5,901,725	35,266,725	8,910,417	4,009,688	12,920,104	38,275,417	9,911,412	48,186,829	
2034	24,285,000	4,767,679	29,052,679	8,910,417	3,564,167	12,474,583	33,195,417	8,331,845	41,527,262	
2035	23,020,000	3,721,229	26,741,229	8,910,417	3,118,646	12,029,063	31,930,417	6,839,875	38,770,291	
2036	19,100,000	2,763,704	21,863,704	8,910,417	2,673,125	11,583,542	28,010,417	5,436,829	33,447,246	
2037	17,975,000	1,959,980	19,934,980	8,910,417	2,227,604	11,138,021	26,885,417	4,187,584	31,073,000	
2038	12,310,000	1,297,792	13,607,792	8,910,417	1,782,083	10,692,500	21,220,417	3,079,875	24,300,292	
2039	8,230,000	851,289	9,081,289	8,910,417	1,336,563	10,246,979	17,140,417	2,187,852	19,328,268	
2040	2,880,000	505,715	3,385,715	8,910,417	891,042	9,801,458	11,790,417	1,396,757	13,187,173	
2041	2,945,000	374,067	3,319,067	8,910,417	445,521	9,355,938	11,855,417	819,587	12,675,004	
2042	3,010,000	239,744	3,249,744				3,010,000	239,744	3,249,744	
2043	3,080,000	102,645	3,182,645				3,080,000	102,645	3,182,645	
Total	\$660,259,072	\$243,588,863	\$903,847,934	\$170,625,000	\$92,446,025	\$263,071,025	\$830,884,072	\$336,034,888	\$1,166,918,959	

¹ Includes both general obligation and subject to revenue bonds

² Includes the issuance of the delayed FY 2020 GO bond sale (\$121.5MM), and the planned FY 2021 GO bond issuance (\$57.1MM)

Ratio of Annual Debt Service for General Obligation Debt to Total General Governmental Expenditures Fiscal Years 2017 to 2021 (1)

Principal	Interest	Total Debt Service	Total Expenditures	Ratio of Debt Service to Total Expenditures
76,623,997	30,463,497	107,087,494	1,318,924,936	8.12
87,251,352	34,206,183	121,457,535	1,375,495,727	8.83
85,168,385	40,780,952	125,949,337	1,416,428,904	8.89
84,039,899	48,921,008	132,960,907	1,494,680,404	8.90
79,529,784	47,540,828	127,070,612	1,507,095,043	8.43
	76,623,997 87,251,352 85,168,385 84,039,899	76,623,997 30,463,497 87,251,352 34,206,183 85,168,385 40,780,952 84,039,899 48,921,008	Principal Interest Service 76,623,997 30,463,497 107,087,494 87,251,352 34,206,183 121,457,535 85,168,385 40,780,952 125,949,337 84,039,899 48,921,008 132,960,907	Principal Interest Service Expenditures 76,623,997 30,463,497 107,087,494 1,318,924,936 87,251,352 34,206,183 121,457,535 1,375,495,727 85,168,385 40,780,952 125,949,337 1,416,428,904 84,039,899 48,921,008 132,960,907 1,494,680,404

⁽¹⁾ Does not include debt service on general obligation bonds payable from the Utilities Enterprise Fund, bonds payable by a pledge of the water and wastewater system, debt service on revenue bonds payable from the Ballston Garage Enterprise Fund; includes subject to appropriation financings, including 2011 IDA Bonds, 2013 IDA Bonds, and 2017 IDA Bonds.

Key Debt Ratios Fiscal Years 2017 to 2021⁽⁴⁾

Fiscal Year	Population	Estimated Market Value of Taxable Property Calendar Year Ended December 31 ⁽¹⁾	Net Bonded Indebtedness at June 30 ⁽²⁾	Net Bonded Indebtedness Per Capita	Net Bonded Indebtedness as a Percent of Market Value (3% Cap)	Per Capita Income	Net Bonded Indebtedness as a Percent Per Capita Income (6% Cap)
2017	222,800	76,570,811,625	981,785,078	4,407	1.28%	87,719	5.02%
2018	225,200	77,994,475,377	1,083,889,914	4,813	1.39%	90,893	5.30%
2019	226,400	80,852,761,690	1,167,441,528	5,157	1.44%	95,198	5.42%
2020 (3)	228,660	84,497,343,282	1,079,486,629	4,721	1.28%	96,150	4.91%
2021 (3)	230,950	84,497,343,282	1,222,481,845	5,293	1.45%	97,111	5.45%

Sources: Market value and net bonded indebtedness – Arlington County Department of Management and Finance. Population data – Bureau of Economc Analysis Per Capita Personal Income (CAINC1)

⁽²⁾ Estimated Values for Debt Service and Expenditures for FY 2020 and FY 2021

⁽¹⁾ Includes real property, personal property and public service corporation property.

⁽²⁾ Excludes general obligation bonds payable from the Utilities Enterprise Fund, bonds payable by a pledge of the water and wastewater system, bonds payable from the Transportation Capital Fund, Ballston Parking Garage revenue bonds payable from the Ballston Garage Enterprise Fund and includes subject to appropriation financings, including the 2011 IDA Bonds, 2013 IDA Bonds, and 2017 IDA Bonds. Excludes unamortized bond premium/discount.

⁽³⁾ Data for Fiscal Years 2020 and 2021 are estimates

Appendix C

Stormwater Fund Financial Policy Adoption Changes

- 1. The County will annually develop a six-year projection of stormwater operating and capital expenses.
- 2. The County will prudently balance the use of new stormwater funding sources between pay-as-you-go funding and leveraging through new bond issuance. Use of leveraging will be dependent on project size, cashflow, and timing projections. If debt is issued for stormwater projects, it will generally follow the debt issuance guidelines contained in this policy.
- 3. The Stormwater Fund will maintain a reserve equivalent to three months' expenses operating and maintenance expenses. The reserve may be used to address emergencies and unexpected declines in revenue. If utilized, the reserve will be replenished over a three-year period to the minimum reserve level. This reserve is in addition to any financing agreement-required debt service reserve funds.
- 4. If the County chooses to issue debt supported by the Stormwater Fund, such debt will be structured to be self-supporting and will not count against the County's general obligation debt ratios or capacity as long as annual net debt service coverage remains above a minimum of 1.25 times. The term on such bonds will not exceed the average useful life of the assets financed, and amortization will be structured to match the supporting revenue stream.
- 5. Prior to each new issuance of stormwater debt, the County will prepare a projection of net debt service coverage demonstrating that the forecasted future net debt service coverage will be no less than 1.35 times, over the life of the bonds.
- 6. Stormwater financial policies will be reviewed as part of the Municipal Separate Storm Sewer System (MS4) permit renewal cycle (every five years) on a periodic basis.
- 7. The Stormwater Fund will be self-supporting.

The County is currently executing a wide variety of capital projects. These projects are in various phases of implementation with anticipated completion dates are soon as fall 2020 and as far as several years in the future, depending on the project's scale. The following table provides brief summaries and updates on the most significant capital projects the County is currently working on.

Project Name	Description	Funding	Project	Remaining	Current	Anticipated
, and the second	-	Source	Cost	Balance	Status	Completion
NEIGHBORHOOD CONS	ERVATON & GREEN VALLE	Y TOWN SQ	UARE			
N. Quintana StArlington East Falls Church	Concrete curb and gutter, sidewalk, streetlights	Bonds	\$1,118,449	\$881,000	Construction	Fall 2020
N. Oakland StAshton Heights	Concrete curb and gutter, sidewalk	Bonds	\$970,364	\$782,000	Design	Fall 2021
13th Street-Lyon Village	Concrete curb and gutter, sidewalk	Bonds	\$875,000	\$758,000	Design	Summer 2021
N. Greenbrier StYorktown	Concrete curb and gutter, sidewalk	Bonds	\$783,900	\$658,000	Construction	Winter 2020
N. Highland StLyon Park	Concrete curb and gutter, sidewalk	Bonds	\$1,095,923	\$955,000	Design	Fall 2021
N. Larrimore StDominion Hills	Intersection improvement and bioretention	Bonds	\$1,179,262	\$1,065,000	Design	Fall 2021
331st. SFairlington	Install sidewalk	Bonds	\$1,716,077	\$1,619,000	Construction	Fall 2020
20th Rd. NWaverly Hills	Concrete curb and gutter, sidewalk	Bonds	\$1,896,043	\$1,751,000	Construction	Winter 2020
N. Ohio StHPOK	Intersection improvement	Bonds	\$500,000	\$444,000	Design	Summer 2021
4th St. SGlencarlyn	Concrete curb and gutter, sidewalk	Bonds	\$1,307,327	\$1,157,000	Design	Winter 2021
George Mason Drive-Waycroft Woodlawn	Pedestrian safety and street improvement	Bonds	\$1,385,806	\$1,258,000	Design	Spring 2021
N. Monroe StCherrydale	Concrete curb and gutter, sidewalk	Bonds	\$1,840,140	\$1,689,000	Design	Winter 2021
12th Street-Madison Manor	Installation of streetlights	Bonds	\$348,987	\$307,000	Design	Summer 2021
S. Oak, S. OdeFoxcroft Heights	Installation of streetlights	Bonds	\$562,704	\$502,000	Design	Fall 2021
Woodlands in Bluemont Park	Invasive plant removal, reforestation, sidewalk connection	Bonds	\$785,000	\$400,000	Construction	Fall 2021
Edison Park	Playground equipment and safety surfacing, paving and access improvements, circulation and accessibility, reforestation and landscaping, fencing and site furnishings.	Bonds	\$1,082,000	\$976,000	Construction	Fall 2020
Lucky Run Stream/Four Mile Run Stream	Invasive plant removal and re-planting	Bonds	\$376,000	\$174,000	Construction	Fall 2021
Nauck Town Square	Construction of Town Square	Bonds	\$6,550,000	\$3,764,000	Construction	Summer 2021

Project Name	Description	Funding Source	Project Cost	Remaining Balance	Current Status	Anticipated Completion
INFORMATION TECHNO	OLOGY					<u> </u>
Computer Aided Dispatch (CAD) Assessment	 Phase I – defining scope and timeline of CAD Design currently underway Delay due to COVID response and emerging priorities 	PAYG	\$4,850,000	\$4,698,000	Planning	Fall 2021
Fire Records Management System (RMS)	 Integrated suite of applications Provides elimination of duplicate data entrys, time reduction to produce required reports, and provides centralized information to help leadership make informed decisions Repository of all fire event institutional records 	Short-Term Financing	\$720,000	\$579,000	Construction	Fall 2020
Internet Protocol (IP) Simulcast (Ph. 1) & Mobile and Portable Radio Project (Ph. 2)	Phase 1 will upgrade the base public safety radio protocols to support IP Simulcast radio traffic Phase 2 will upgrade the base public safety radio protocols to support IP Simulcast radio traffic Delays due to Covid19 Upon completion the system will be hardened and provide redundancy for greater capacity	Short-Term Financing	\$2,155,000	\$1,866,000	Construction	Fall 2020
Sheriff In-Car Camera	System is used in Police and Sheriff's Department vehicles Project includes replacement of Sheriff in-car cameras and server.	Short-Term Financing	\$150,000	\$56,000	Design	Spring 2021
Fire Station Alerting System	Refresh and upgrade of current fire station alerting system Replaces twelve-year-old technology by updating alerting equipment and also expanding on how the Fire resources are alerted All stations will receive the same equipment in order to standardize station alerting	Short-Term Financing	\$2,200,000	\$2,198,000	Design	Fall 2021

Project Name	Description	Funding	Project	Remaining	Current	Anticipated
		Source	Cost	Balance	Status	Completion
PARKS AND RECREATION	ON					
Alcova Heights Park Renovation, Phase 1	Phase 1 of the park redevelopment Includes replacement of one picnic shelter, sand volleyball court, site amenities, paths, right-of-way improvements, new stairs, signage and supplemental landscaping.	Bonds	\$2,395,000	\$2,077,000	Construction	Design Summer 2020/ Construction Summer 2021
Benjamin Banneker Park	Renovation of the park to include replacement of the dog park, athletic field, playground, paved multi-use trails, landscaping and signage	Bonds	\$2,452,000	\$2,004,000	Construction	Fall 2020
Bluemont Junction Trail Repaying	Trail Modernization Program Repave the main trail from the intersection of Wilson Boulevard and George Mason Drive to the bridge over Four Mile Run at the Washington and Old Dominion	Bonds	\$550,000	\$550,000	Construction	Fall 2020
Gunston Bubble Replacement	Design and construction of a structure to replace the air- supported structure ("the Bubble") over the indoor athletic field.	PAYG / Bonds	\$1,297,000	\$1,153,000	Preparing solicitation for construction	Design Summer 2020/ Construction Fall 2020
Henry Clay Park	 Renovation of all park assets Including playground, basketball court, athletic field, shade canopy, site furnishings, walkways, signage and landscaping 	PAYG / Bonds	\$2,777,000	\$2,191,000	Construction	Winter 2020
Jennie Dean Park, Phase 1	Renovation of all park assets Including diamond fields, picnic shelter, restrooms, playground, basketball court, site furnishings, walkways, signage and landscaping	PAYG / Bonds	\$18,374,000	\$17,160,000	Construction	Summer 2021
Long Bridge Park Aquatics/Fitness Center	Construction of an aquatics and fitness facility and seven-acre park to complete the build-out of Long Bridge Park.	PAYG / Bonds	\$67,000,000	\$25,672,000	Construction	Winter 2021

Project Name	Description	Funding	Project	Remaining	Current	Anticipated
		Source	Cost	Balance	Status	Completion
Marcey Road Park Tennis/Basketball Court	Replacement of tennis and basketball courts and associated improvements	Bonds	\$1,785,000	\$1,649,000	Design	Fall 2020
Rosslyn Highlands Park (RHP+)	Construction of a new Rosslyn Highlands Park at the Wilson School site and construction of a children's playground	PAYG / Bonds	\$4,283,000	\$3,794,000	Design	Fall 2020
Towers Park Playground Replacement	 Replacement of the children's playground Final asset to be replaced in the park renovation 	Bonds	\$1,065,000	\$944,000	Preparing solicitation for construction	Design Summer 2021/ Construction Spring 2021
Monroe Park Playground	Design for the replacement of the playground, site circulation, site furnishings and stormwater management improvements	Bonds	\$236,000	\$210,000	Design	Spring 2021
"Teardrop Parcel" in Crystal City	Park master planning process is envisioned for this space and subsequent construction of the park will be managed by the County	Developer Funds	\$3,063,737	\$3,061,000	Planning	Spring 2021
PUBLIC/GOVERNMENT	FACILITIES	4		1	•	•
1212 S. Irving St - Group Home Replacement	Replaces the existing group home at 1212 S. Irving Street New 5 bedroom that will be completely Americans with Disabilities Act (ADA) assessable and equipped to house and provide permanent residency to Arlington adults with developmental disabilities	Grants / Bonds	\$4,660,000	\$4,511,000	Design	Fall 2021

Project Name	Description	Funding Source	Project Cost	Remaining Balance	Current Status	Anticipated Completion
Bozman (CHP) Renovation	Concepts under review given COVID-19. Looking to enhance technology equipped conference rooms, increase elevator capacity and security.	Tenant Improvement and Commission Rebate	\$25,500,000	\$22,767,000	Various phases between design and construction	Fall 2023
Courts Police Building – Phase 1a	 Interior improvements at the Courts Police building Study to assess the condition and expected useful life of the building's heating, ventilation and air conditioner (HVAC) system Create a Victim - Witness space for the Commonwealth Attorney's Office on the 3rd floor Perform minor upgrades to Law Enforcement Waiting Room on the 3rd floor Create Courtroom Technology Prototype in Courtroom 10B Conceptual design for security upgrades and renovations to Judges Chambers on the 12th floor Design renovations to relocate Juvenile & Domestic Relations Judges from 4th floor to the 12th floor Design new integrated technology upgrades for the two 4th floor Juvenile & Domestic Relations Courtrooms. 	Bonds	\$4,600,000	\$4,596,000	Planning	Spring 2022

Project Name	Description	Funding	Project	Remaining	Current	Anticipated
		Source	Cost	Balance	Status	Completion
Fire Station #8 Rebuild	 Project is to replace the aged and undersized existing Fire Station 8 at 4845 Lee Highway Approximately 20,000 square feet and include four apparatus bays and gender-neutral accommodations for staff Temporary Station that will utilize one of the residential structures acquired for dorms, offices and related support spaces and a tent structure for two, apparatus bays. Conversion from gas to diesel of the Fuel Station located at Fire Station No. 2 to provide temporary service during the construction of the new Fire Station No. 8 project. 	PAYG / Bonds	\$25,040,000	\$21,684,000	Design	Summer 2023
Fire Station #10 Replacement	 Replaces the aged and undersized existing Fire Station 10 New fire station is being constructed by Penzance County staff is responsible for project oversight 	PAYG Developer Contribution	\$600,000	\$570,000	Construction	Fall 2021
Lubber Run Community Center (LRCC)	Replaces the aged and undersized LRCC New community center will be approximately 53,000 square feet and is designed to better suit the communities recreational program needs.	Bonds	\$47,860,000	\$9,409,000	Construction	Fall 2020
STORMWATER MANAGE						
Spout Run Watershed-Scale Multi- Phase Capacity Infrastructure Project	Planned 3-phase project with blended engineering (distributed detention, pipe improvements, tertiary assets installed, and overland relief)	Bonds	\$29,920,000	\$29,830,000	Design	Fall 2025

Project Name	Description	Funding	Project	Remaining	Current	Anticipated
		Source	Cost	Balance	Status	Completion
Donaldson Run Tributary B Stream Restoration.	Comprehensive restoration of 1,800 linear feet of degraded stream channel to mitigate erosion, improve habitat, and protect threatened drinking water, sanitary sewer, and trail infrastructure	Trust and Agency Funds	\$2,600,000	\$2,390,000	Design	Spring 2021
Four Mile Run Restoration/Flood Control/Dredging Project	 Capacity Dredging and maintenance per agreement with US Army Corps of Engineers Collaborative project with City of Alexandria 	Other Previously Approved Funds	\$3,080,000	\$2,941,000	Design	Spring 2022
Torreyson Run Watershed-Scale Project (Phase 1)	Collaborative project with APS for compound use of public lands (schools, Parks) to expand stormwater capacity system (detention) and mitigate flood intensities APS site identified is Reed School.	Bonds	\$1,280,000	\$1,280,000	Design	Summer 2022
Donaldson Run Outfall / Channel	Rehabilitates failing critical assets and improves channel capacity Construction of the revised first phase of this outfall, 110 linear feet of 18-inch storm sewer and related appurtenances, will divert surface flow away from existing retaining walls and acquire improved easements for existing storm drainage infrastructure	Sanitary District Tax	\$1,000,000	\$883,000	Design	Spring 2022
Ballston Pond Watershed Retrofit	 Provides wetland restoration and enhanced water quality treatment for over 300 acres that drain to Lubber Run Improves aesthetics, interpretation, and wildlife habitat 	Grants / Bonds	\$4,340,000	\$3,973,000	Design	Spring 2023

Project Name	Description	Funding	Project	Remaining Balance		Anticipated
Water Quality Credits (MS4 Permit)	County purchased nutrient and sediment credits generated by watershed retrofit and stream restoration project Project was identified, designed, and built by private firm on private property	Other Previously Approved Funds	Cost \$5,936,000	\$3,318,000	Status Substantially Complete	Summer 2021
TRANSPORTATION			l			
Army Navy Drive Complete Street	Re-build Army Navy Drive Includes protected bike lanes, safer pedestrian crossings, accommodation for future high-capacity transit, and green landscaping treatments to reduce stormwater runoff	Regional funds, Federal funds, TCF C&I funds, TIF, Developer Contributions	\$18,501,000	\$17,632,000	Design	Fall 2024
Ballston Multimodal Improvements	Expand and update transit bays, bus shelters, pedestrian circulation, and bicycle parking at the surface level around the Ballston-MU Metro station	State capital grants, TCF C&I funds, Federal funds, GO bonds	\$7,835,100	\$6,564,000	Construction	Fall 2021
Ballston-MU Metro Station West Entrance	Construct a new west entrance to be located at the intersection of N. Fairfax Drive and N. Vermont Street to improve metrorail access	State capital grants, Regional funds, TCF C&I funds, TCF NVTA funds, Developer Contributions	\$130,021,000	\$129,591,000	Design	Summer 2025
Boundary Channel Drive Interchange with I-395	Improve traffic operations and safety to meet current demands and for future planned growth in Crystal City with multimodal connections and conversion of ramp terminals to roundabouts	State capital grants, Regional grants, GO bonds, TCF C&I funds, TIF	\$21,334,000	\$20,457,000	Design	Summer 2023

Project Name	De	escription	Funding	Project	Remaining	Current	Anticipated
			Source	Cost	Balance	Status	Completion
Bridge Renovation: Arlington Ridge / Mt. Vernon Bridge	•	Replace Arlington Ridge Road bridge over Four Mile Run to address structural deficiencies that have necessitated partial closure of sidewalks.	Contributions from the City of Alexandria, State capital grants, GO Bonds, PAYG	\$27,750,000	\$27,538,000	Planning	Summer 2024
Bridge Renovation: West Glebe Bridge	•	Replace West Glebe Road bridge over Four Mile Run to address structural deficiencies that have necessitated imposition of traffic restrictions and closure of sidewalks	Contributions from the City of Alexandria, PAYG, GO Bonds	\$12,000,000	\$11,618,000	Schematic Design	Summer 2022
Columbia Pike Multimodal Street Improvements	•	Multimodal street improvements to include reconstructed streets, shifted curb lines, streetlight, street trees, and wider sidewalks achieved through undergrounding overhead utilities.	State capital grants, Regional Funds, TCF C&I funds, GO bonds	\$69,803,000	\$52,165,000	3 projects: 1 in construction, 2 in design	Winter 2024
Columbia Pike Transit Stations	•	Design and construct transit stations along Columbia Pike to provide safer access to transit, improved bus shelters, increased seating and real-time bus arrival information	TCF C&I funds, Federal funds, State capital grants, and GO bonds	\$16,915,000	\$15,160,000	4 of the 23 in Construction, others in various stages of design	Summer 2024
Crystal City Metro Station East Entrance	•	Construct a new entrance at the east end of the Crystal City metro station to provide easier access from Crystal Drive, the Virginia Railway Express (VRE) Station, and a Crystal City Potomac Yard Transitway station	Federal funds, State capital grants, Regional funds, TCF C&I funds, TCF NVTA local funds, TIF	\$90,765,000	\$90,700,000	Planning	Fall 2023

Project Name	Description	Funding Source	Project Cost	Remaining Balance	Current Status	Anticipated Completion
Crystal City Street Improvements - Various locations	Clark Bell extension at 15th Street Improvements along 23rd Street Rebuild of 18th Street and intersections between South Fern Street and South Eads Street to continue the existing South Hayes Street Protected Bike Lane	Regional funds, TCF C&I funds, TIF	\$27,261,000	\$23,939,000	3 projects: 1 in Construction, 2 in design	Winter 2023
Crystal City to Washington National Airport (CC2DCA) Intermodal Connector	Construct a multimodal connection between Crystal Drive and Ronald Reagan Washington National Airport (DCA). The project will begin the federal regulatory environmental analysis study in 2021.	Federal Funds, Regional funds, TCF C&I funds, TIF	\$36,167,000	\$36,137,000	Planning	Summer 2027
Pentagon City Metro Station Second Elevator	Provide a street-to-mezzanine elevator on the west side of South Hayes Street to improve access to the Metro station, improve ADA access, and provide elevator redundancy	Federal funds, State capital grants, GO bonds, PAYG, and TCF C&I funds	\$6,649,000	\$5,067,000	Design	Fall 2022
PrTN: Transitway Extension to Pentagon City	Extend Crystal City-Potomac Yard Transitway as a bus facility to Pentagon City Extension will serve local travel demand within the corridor, including Amazon's HQ2, as well as enhance connections to Metrorail and improve connections to Columbia Pike	State capital grants, Regional funds, TCF C&I funds, TIF	\$27,667,000	\$26,973,000	Design	Summer 2023

Project Name	Description	Funding	Project	Remaining	Current	Anticipated
		Source	Cost	Balance	Status	Completion
Rosslyn-Ballston Street Improvements: Washington Blvd and 13th Street North	Reconstruct Washington Boulevard and 13th Street to remove the existing reversible center lane and reorient the intersection to become a conventional "T" intersection Redevelop the adjacent property into County Parks and Recreation maintained open space. Integrate with recent improvements at Clarendon Circle.	TCF C&I funds, developer Contributions	\$6,420,000	\$6,113,000	Construction	Fall 2022
WATER AND SEWER IN	FRASTRUCTURE			I		I
Solids Master Plan (Phase 1)	Planned Phase I projects include preliminary treatment process replacements (bar screens and scum concentrator), ventilation improvements and motor control center replacement in the Preliminary Treatment Building, and gravity thickener upgrades	Utilities PAYG	\$10,000,000	\$9,051,000	Design	Summer 2023
N Glebe Road 36" Prestressed Concrete Cylinder Pipe (PCCP)	Water main rehabilitation from Old Glebe Road to Little Falls Road Rehabilitation by way of re-lining of a transmission main to bring it back into service and provide redundancy	Utilities PAYG, GO bonds	\$1,035,000	\$580,000	Construction	Summer 2021
Gravity Transmission Mains - B1 (Phase 2)	Completes a water main that will provide redundant transmission capacity through the Gravity One pressure zone Project will provide an additional large diameter supply for the Old Dominion, Langston, Leeway, and Williamsburg areas Provides redundancy and additional transmission capacity to pressure zones serving much of the R-B corridor.	Utilities PAYG, GO bonds	\$3,900,000	\$3,771,000	Design	Spring 2022

Project Name	Description	Funding	Project	Remaining	Current	Anticipated
		Source	Cost	Balance	Status	Completion
Fairfax Water Interconnection	Interconnection with adjacent water system to provide an emergency water supply	Utilities PAYG	\$2,012,500	\$2,013,000	Design	Winter 2021
Spout Run Sanitary Sewer Relining	Covers a 3,000 foot section of a 1930s sewer main that runs under the North Highlands neighborhood and is over 100 feet deep in some area The sewer line was inspected and will be rehabilitated through lining the main	Utilities PAYG	\$2,185,000	\$1,722,000	Design	Summer 2021

APPENDIX E

School Board's Adopted FY 2021 Capital Improvement Plan

Every two years, the School Board typically adopts a Capital Improvement Plan (CIP) addressing capital needs over the next ten years. This approach to capital planning anticipates needs for the next decade, while providing flexibility to adjust to changing circumstances. During the CIP development process that began in the fall of 2019, the School Board focused on providing seats for students in the areas of most critical need in light of the continued, sustained growth in student enrollment. However, beginning in March 2020, the Coronavirus pandemic caused major economic uncertainties in Arlington and across the nation. This resulted in the need for the School Board to approach the development of this biennial CIP differently.

The School Board recognized that its priority in this CIP was to identify funding needs for the 2020 bond referendum, in order to begin work on the areas of most critical need. With this in mind, and to align with Arlington County's CIP process this year, the School Board developed a one-year CIP.

The School's Adopted FY 2021 CIP totals \$186.8 million and includes a 2020 referendum request of \$52.65 million. The CIP continues to focus on enrollment growth, with a planned 1,575 new seats coming online in FY 2022. The new seats include a new elementary school at the Reed site and renovation of the Education Center and Career Center/Arlington Tech.

The County's General Fund debt policies include the combined County and Schools outstanding debt and associated debt service. The Schools 2020 referendum request, and planned issuance of general obligation bonds, remains in compliance with the County's debt affordability criteria, including the 10% limit on outstanding debt service as a percentage of general fund expenditures.

School Adopted CIP link here