

An aerial photograph of the Arlington, Virginia skyline, featuring several modern high-rise buildings and a dense line of trees. The city is situated behind a large body of water, likely the Potomac River. The sky is clear and blue, with a few birds visible in flight. The overall scene is bright and clear, with a slight haze or soft focus effect.

Proposed Capital Improvement Plan FY 2023 – FY 2032 CIP

- Submission of a 10-Year Plan for Transportation

Transportation Program Advances County Goals

Biophilia

Minimize additional impervious surface in new capital projects and incorporated more biophilic elements, including street trees, nature plantings, and bio-retention infrastructure where feasible

Community Energy Plan

Advance community goals through maximizing sustainable travel options for residents, workers and visitors with continued investments in transit, complete streets and pedestrian, bicycle, and micromobility infrastructure

Equity

Review project locations to ensure we are improving access and mobility for those reliant on transit, walking, and biking; advance studies in areas lacking adequate infrastructure and existing capital improvements

Safety

Ensure Vision Zero goals are incorporated in all capital projects and identify future projects based on data collected and analyzed through the Vision Zero Program, with focus on High Injury Network

Highlights and Key Takeaways

- On-going as well as major projects and initiatives in the 2023 – 2032 timeframe
 - Complete Streets: Columbia Pike, Crystal City/Pentagon City transformation, Rosslyn is next
 - Transit: ART O&M, Crystal City 2nd Entrance, Transitway Extensions, Ballston West Entrance, among other large projects
- Vision Zero goals embedded in most Complete Street projects as well as the Street Safety Improvement program
- Continue to pursue partnerships with third parties and find alternate delivery mechanisms to expedite implementation
- PAYG and Bond requests limited to State of Good Repair (SGR) and bridges
 - November 2022 bond referendum request 50% lower than FY22 Adopted CIP
- Responsive to Board guidance from FY22 Adopted CIP
- Strategic approach to Federal grant opportunities

Response to FY 2022-FY 2024 Board Guidance



Arlington Boulevard Multi-Use Trail Feasibility Study

- ✓ Consultant on board, engagement will begin this summer



Columbia Pike Initiatives

- ✓ Columbia Pike Multimodal Improvements – contract award April 2022
- ✓ Columbia Pike Transit Stations – received 8 stations in late-May / June; installation scheduled for summer 2022



Transit Signal Priority

- ✓ Study of five potential corridors complete, staff is advancing work on implementation on Langston Boulevard and the west end of Columbia Pike with other corridors to follow



Electric Bus Initiative / Alternate Fuel Technologies

- ✓ ZEB/Electric bus pilot – RFI process completed; goal to implement sequential bus pilots with up to 4 vendors starting this fall
- ✓ 2024 replacement bus purchase – ongoing Zero Emission Bus (ZEB) study expected to be complete by end of calendar year; will inform path forward for 2024 bus purchase



Program/project alignment with CEP, MTP, and Vision Zero

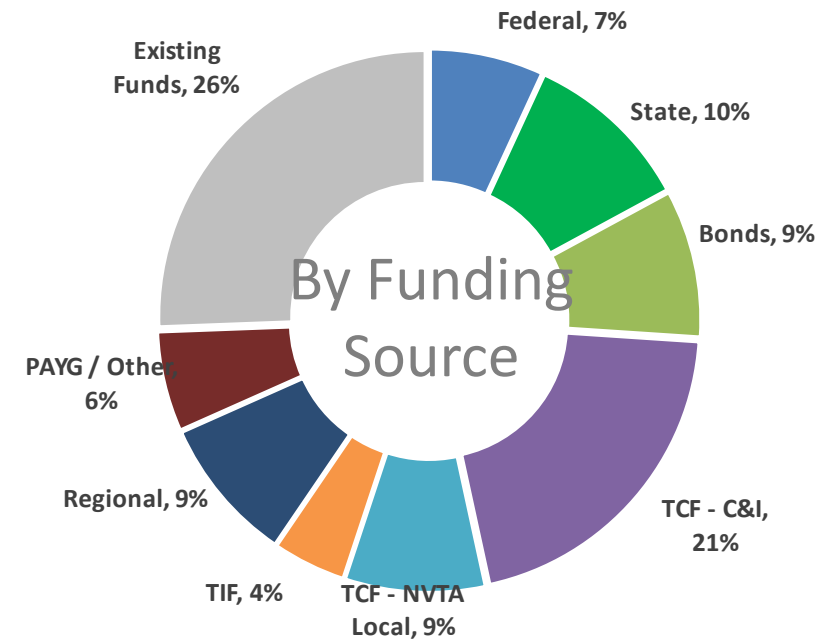
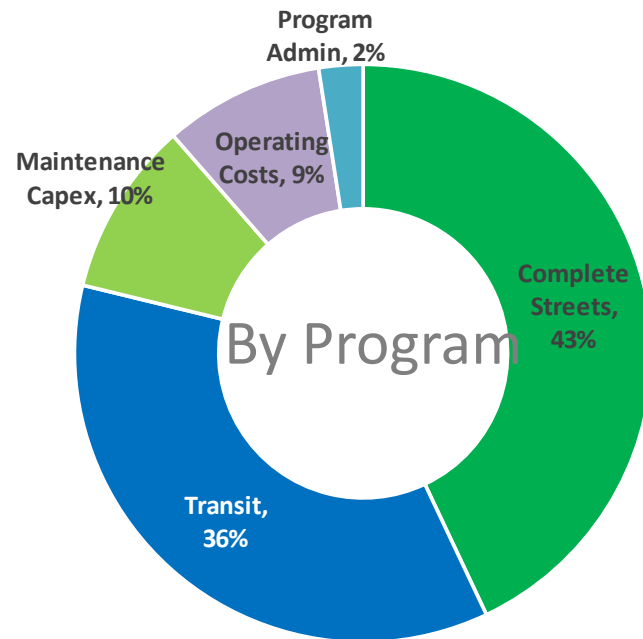
- ✓ Alignment with these policies/programs is included in detail through the CIP map

Proposed 10-Year CIP: \$1.4b

<i>\$000</i>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>FY 2030</u>	<u>FY 2031</u>	<u>FY 2032</u>	<u>10-Yr Total</u>	
Submitted CIP	Complete Streets Arlington	93,278	120,825	127,682	85,311	73,240	51,761	53,256	62,121	46,442	40,364	754,280
	Arlington Transit Program	76,854	164,583	124,982	96,277	49,436	25,029	32,639	15,542	31,332	11,975	628,649
	Maintenance Capital	15,273	13,486	17,324	17,468	17,611	17,767	17,915	18,080	18,248	18,416	171,588
	Transportation Capital Program Administration	3,787	3,900	4,017	4,138	4,262	4,391	4,523	4,658	4,798	4,942	43,416
	Operating Costs	6,794	9,481	9,791	16,471	17,035	17,832	18,641	19,498	20,373	21,230	157,146
Total Submitted CIP	195,986	312,275	283,796	219,665	161,584	116,780	126,974	119,899	121,193	96,927	1,755,079	
Implementation Adjustment	(58,796)	(124,910)	(113,518)	(43,933)	(7,433)	(1,168)	(1,270)	0	0	0	(351,028)	
Proposed CIP	137,190	187,365	170,278	175,732	154,151	115,612	125,704	119,899	121,193	96,927	1,404,051	

By Program and Funding Source

74% of funding is from new sources



November 2022 Proposed Bond Referendum: \$10m

<u>CIP Program</u>	<u>Proposed CIP</u>		<u>Total For Ref</u>
	<u>FY 2023</u>	<u>FY 2024</u>	
Bridge Maintenance	770	700	1,470
Street Lighting	240	905	1,145
Paving	0	7,200	7,200
ITS Device Replacement	0	150	150
Curb & Gutter Missing Links	0	65	65
Total	1,010	9,020	10,030

- 50% lower than FY 2022 Adopted CIP
- Alternate funding sources, including \$15.9m in federal funding, identified for Bridge Renovation
- Reduced Paving ask for FY 2024 resulting from balances built up over mild winters

Federal Funding Opportunities (IIJA)



Transportation – Infrastructure Investment and Jobs Act (IIJA)

Program Name	Program Goals	Potential Competitive Project	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
RAISE	Significant local/regional impact	ANC Wall Trail	X				
Bridge Formula Program	Bridge rehabilitation	Arlington Ridge / Mount Vernon Bridge	X				
Safe Streets and Roads for All	Improvements that reduce crashes for all modes	Multiple complete streets projects	X	X	X		X
Reconnecting Communities	Removal/retrofit of separated roadways	Fort Myer Drive Tunnel Removal		X			
Low / No Emission Program	Purchase of low / no emission buses	Bus replacement / expansion		X		X	
All Stations Accessibility Program	ADA improvements on legacy rail systems	Court House Metrorail Station New Elevators				X	
<i>Road to Zero</i>	<i>Planning studies, run by National Safety Council</i>	<i>Submitted application for shared street design pilot</i>					

Map of Program Investments

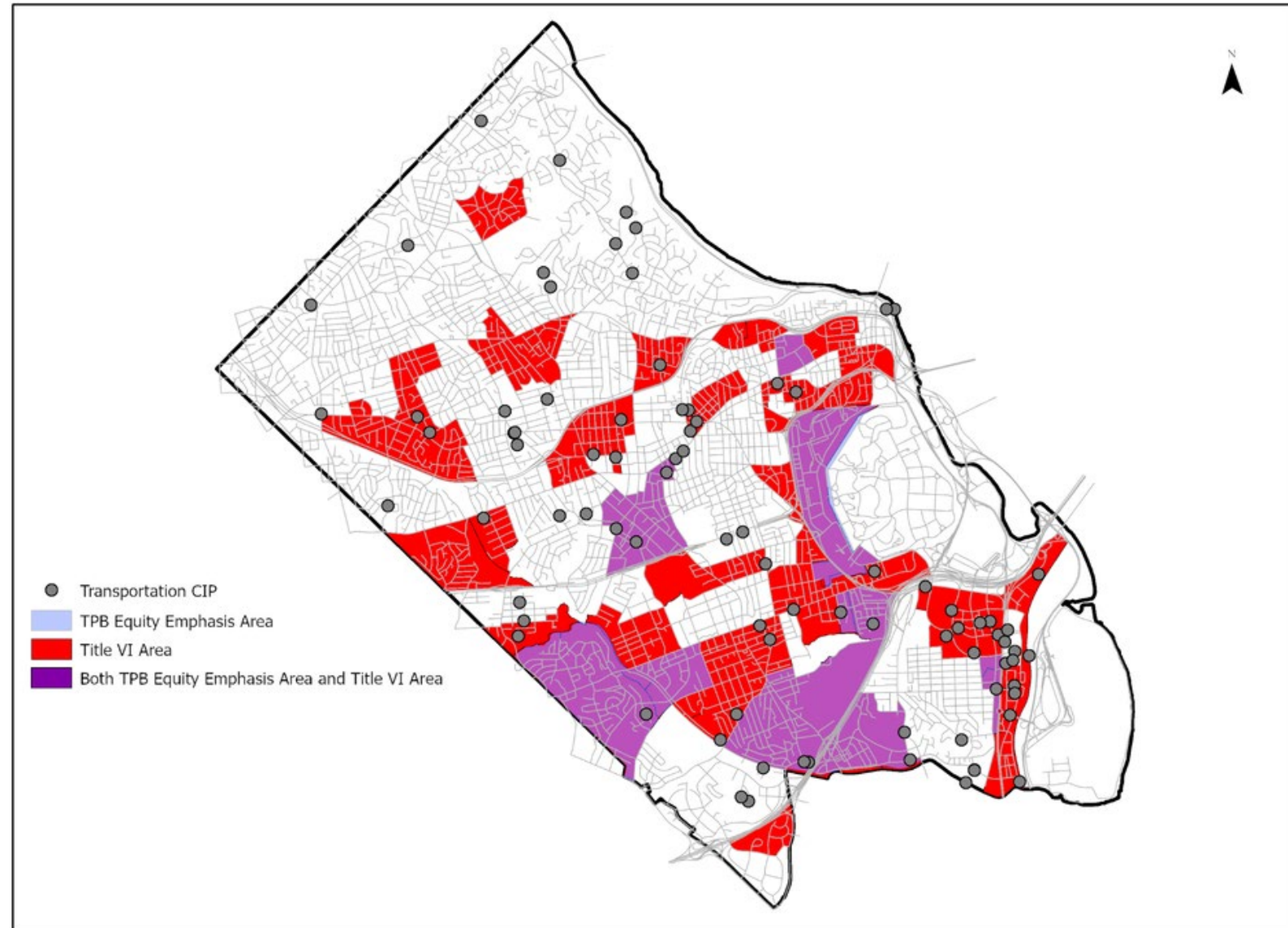
- Multimodal program implements goals of the Master Transportation Plan (MTP)
- Icons represent recent and active complete streets, transit, and signals projects



Achieving Racial Equity in the CIP

- Fulfills commitments along Columbia Pike
- Includes funding for design and implementation of planning guidance along Shirlington Road and Four Mile Run Drive to provide safe, accessible transportation facilities
- Mapping shows us where we need to conduct additional studies and program future resources to ensure multimodal accessibility

Transportation CIP: TPB Equity Emphasis Areas and Title VI Areas



Recent Achievements

Projects that have recently started construction:

- ART Operations and Maintenance Facility (June/July start)
- Crystal City-Potomac Yard (CCPY) Transitway Extension to Pentagon City and 12th Street Complete Street
- 8th Road North and North Lexington Sidewalk
- 15th Street South from Eads Street to Richmond Highway
- 18th Street South from Fern Street to Eads Street
- Columbia Pike: South Orme to DAR project and South Wakefield to South Oakland
- Crystal City Bike Network, Phase 1 and Phase 2
- Potomac Yard Trail Connection
- West Glebe Road Bridge

Projects that have been recently bid for contract:

- Army Navy Drive Complete Street (June Board approval)



Completed Projects

- Columbia Pike Multimodal Improvements Project – Segment H/I
- Four Mile Run Bridge at Columbia Pike
- Langston Blvd & N Glebe Rd Intersection Improvements
- 7th Rd. S, S Dinwiddie to S Greenbrier
- 18th Street N & N Glebe Rd
- 23rd St S, S Eads St to Rt 1
- 13th St S, Walter Reed Drive to S Glebe
- Pershing Dr & Washington Blvd
- ART Bus Stop ADA Improvements

**Four Mile Run Bridge at
Columbia Pike (\$0.6m)**

Completed fall 2021



**18th Street / Glebe Rd.
SRTS (\$1.0m)**

Intersection, sidewalks
completed fall 2021



**Langston Blvd / Glebe Rd
(\$8.3m)**

Intersection completed 2021



Coordinating Transportation and Land Use

Rosslyn-Ballston Corridor: 1972



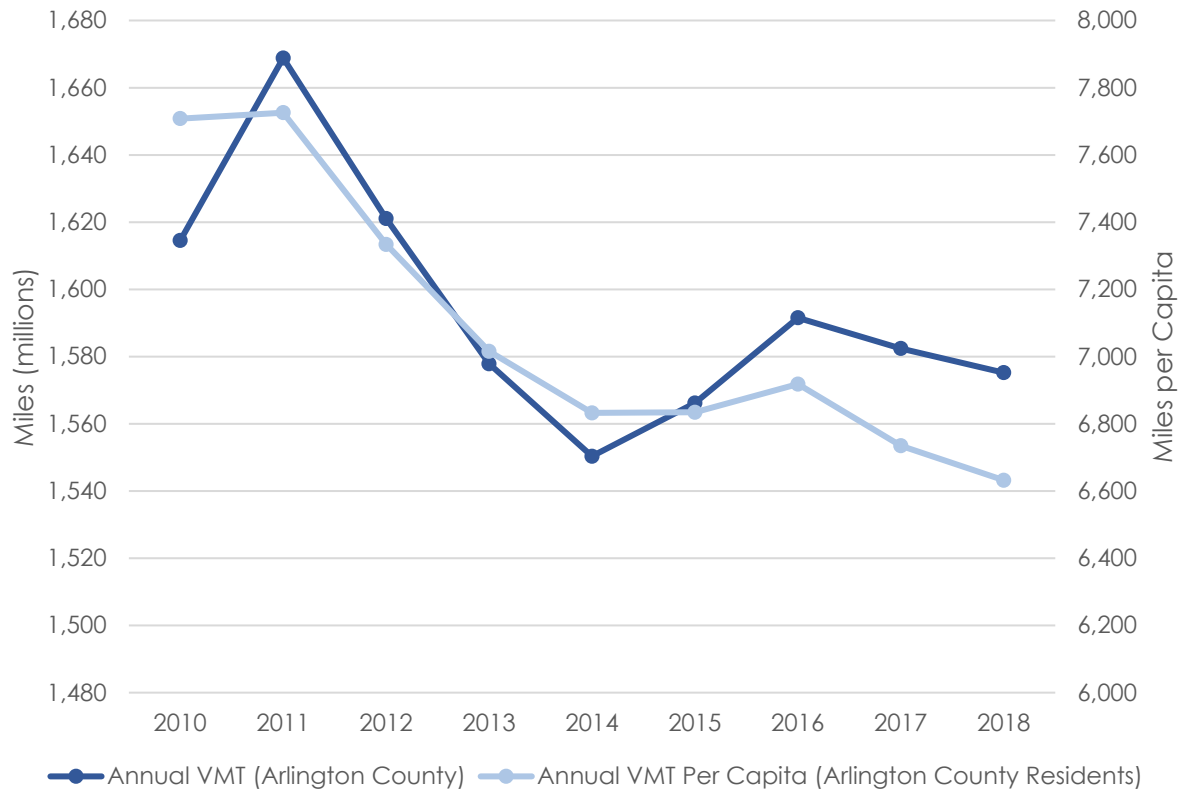
Rosslyn-Ballston Corridor – 2022



Growth Impacts on Traffic

Annual VMT, Daily Traffic Declining Even With Ongoing Growth

Annual / Per Capita Vehicle Miles Traveled (VMT), 2010 to 2018

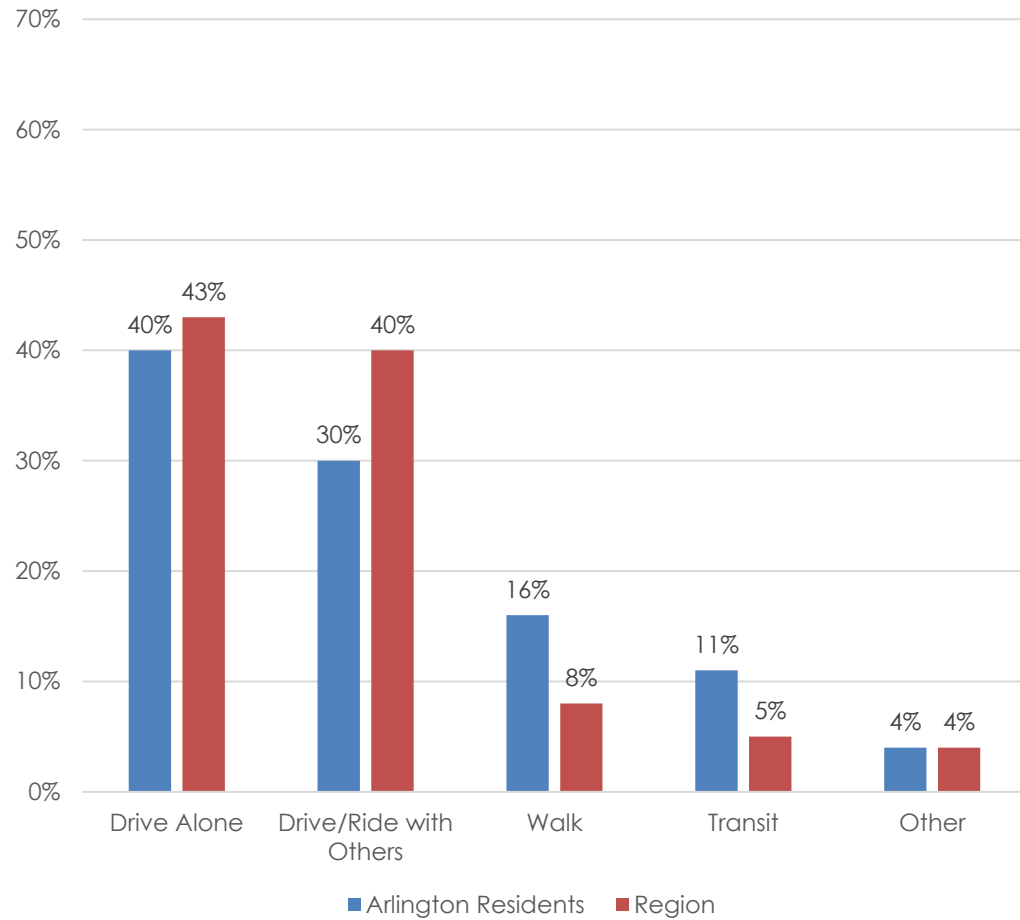


Daily Traffic Estimates (vehicles)

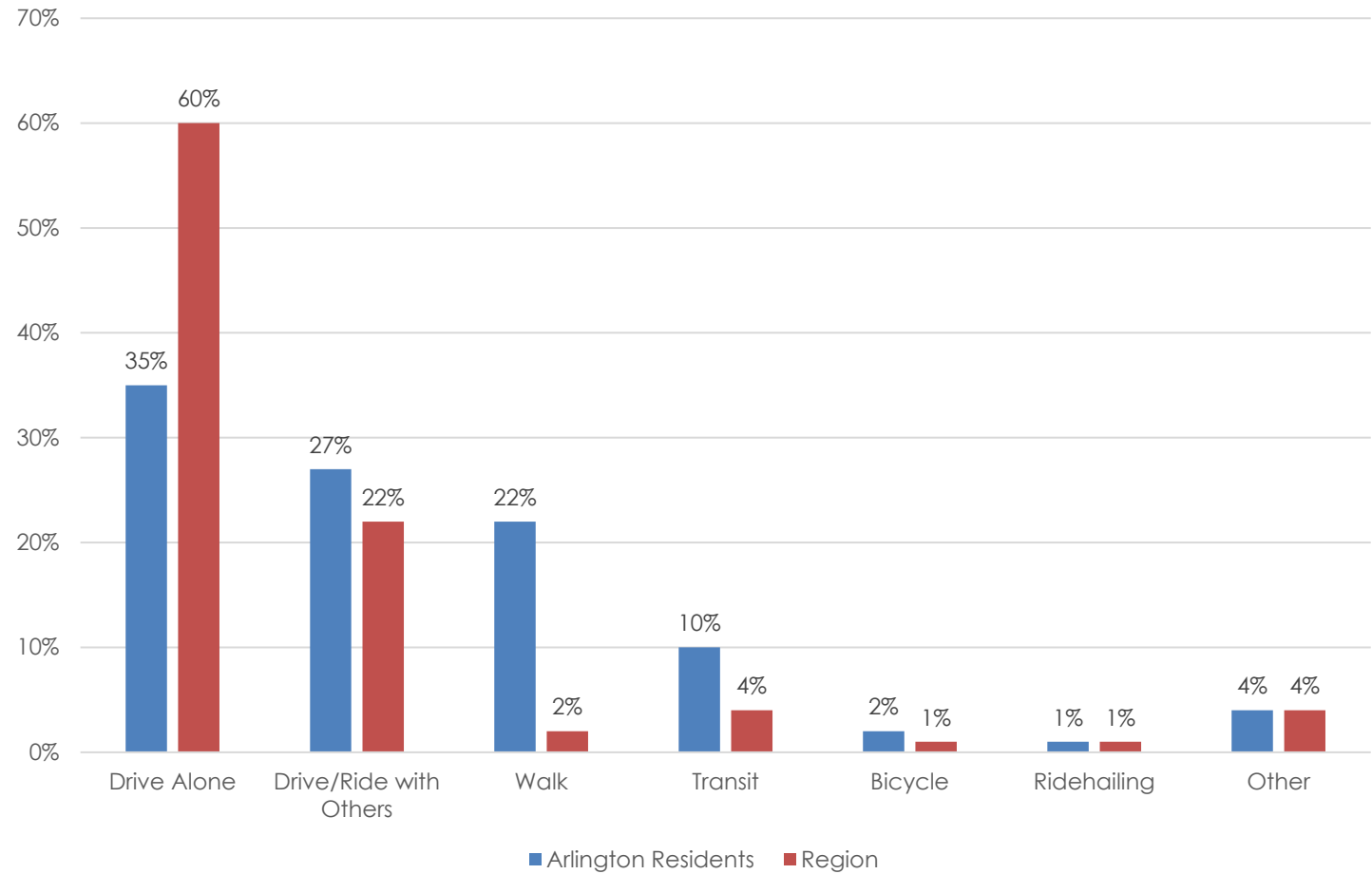
	1996	2019	% Change
Langston Blvd. (@ Rosslyn)	37,770	21,000	-44%
Wilson Blvd. (@ Clarendon)	16,368	10,000	-39%
Wash. Blvd. (@ VA Square)	20,469	14,109	-31%
Clarendon Blvd.	13,980	9,900	-29%
Glebe Rd. (\$ of Columbia Pike)	29,000	22,000	-24%
Glebe Rd. (@ Ballston)	35,230	27,000	-23%
Route 1 (N of Glebe Rd.)	52,000	47,000	-10%
George Mason Dr.	20,002	21,000	5%
Arlington Blvd.	55,865	65,000	16%

Transportation Mode Split: All Daily Trips

2007/2008 Regional Travel Study



2017/2018 Regional Travel Survey



FY 2023-2032 CIP Project Slides

Review of capital project highlights and state of good repair initiatives for the ten-year program:

- Transit capital program
- Complete Streets capital program
- Complete Streets capital maintenance program
- State of good repair initiatives

ART Operations and Maintenance Facility (1)

ART Operations and Maintenance Facility



CIP Spend: \$91M (FY 2025 estimated completion)

Comp Plan or Strategic initiative:

- Transit Development Plan
- Community Energy Plan

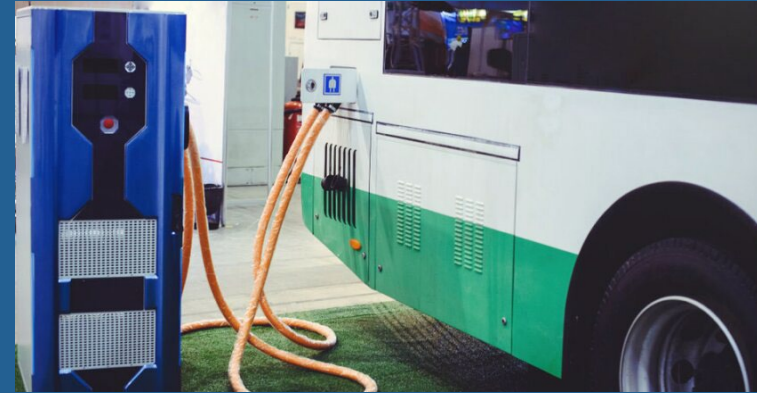
Community benefits:

- Addresses need for an O&M facility for ART
- Includes charging for 16 Battery Electric Buses (BEBs)

Related Projects:

- ART Fleet Replacement

ART O&M Facility Electrification Phase 2



CIP Spend: \$20 million (FY 2026 / FY 2027)

Comp Plan or Strategic initiative:

- Transit Development Plan
- Community Energy Plan

Community benefits:

- Expands infrastructure to support BEBs

Related Projects:

- ART Fleet Replacement
- PrTN: ART Fleet Expansion

ART Operations and Maintenance Facility (2)

- Anticipates transitioning the ART Fleet to Zero Emission Buses (ZEB), currently anticipated to be Battery Electric Buses (BEB)
 - Final decision will be made pending completion of ZEB Study (anticipated December 2022)
 - Electric bus pilot underway, concludes early 2023
- Costs of Facility and Phase 2 Electrification may change significantly based on a variety of factors:
 - Possible need to purchase additional buses to meet service needs
 - Ratio of BEB to CNG replacement is between 1.5 to 2.0 buses to maintain current level of service
 - Possible need to make additional on-street and off-street infrastructure improvements to accommodate BEB

ART Bus Replacement and Expansion

ART Fleet & Equipment Replacement



CIP Spend: \$104.4 million

Highlights:

- Replaces aging buses in ART fleet (78 buses)
- Future bus purchases expected to be BEBs; CIP reflects ~50% higher cost of BEBs vs. CNG buses
- FY 2024 replacement further assumes purchase of 30 BEBs to replace 15 CNG buses due to range limitations of BEBs
- Bus purchases in later years assume a one for one replacement ratio, pending completion of ZEB study
- Battery replacements, BEB infrastructure not included

Related Projects:

- ART Operations and Maintenance Facility

ART Fleet Expansion



CIP Spend: \$13.3 million

Highlights:

- Purchases of additional buses in FY 2026 (7 buses) and FY 2028 (4 buses) to support 10-year service plan for ART
- Bus purchases assumed to be BEBs
- Transit service expansion may be limited due to cost and range limitations and lack of facilities to store and charge buses
- Costs are preliminary and subject to change based on outcome of ZEB study

Related Projects:

- ART Operations and Maintenance Facility

Bus Operations Improvements

East Falls Church Station Bus Bays



CIP Spend: \$7.7M (FY 2024)

Comp Plan or Strategic initiative:

- East Falls Church Station Bus Facilities Study

Community benefits:

- Enhance multimodal hub
- Relieve operational congestion
- Meet accessibility needs

Related Projects:

- N. Sycamore St. Improvements

Bus/HOV Lanes on Langston Blvd.



CIP Spend: \$0.7M (FY 2023)

Comp Plan or Strategic initiative:

- Transit Development Plan

Community benefits:

- Peak-period, peak-direction bus/HOV-only lane between Veitch Street and Lynn Street

Related Projects:

- Langston Boulevard Multimodal Improvements

Shirlington Bus Station Expansion



CIP Spend: \$4.7M (FY 2030)

Comp Plan or Strategic initiative:

- Transit Development Plan

Community benefits:

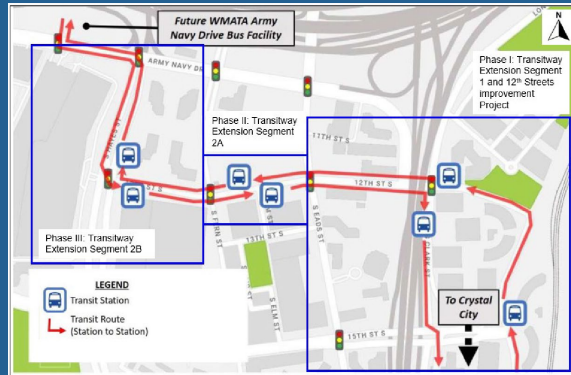
- Add bus bays to Shirlington Station to meet future demand

Related Projects:

- Alexandria West End Transitway

CCPY Transitway

Extension to Pentagon City



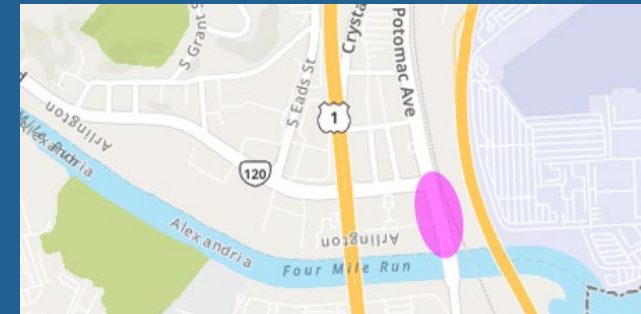
- CIP Spend: \$25.3M (FY 2023-25)
 Comp Plan or Strategic initiative:
- MTP, Crystal City Sector Plan
- Community benefits:
- Dedicated transit lanes
 - Five new transit stations
- Related Projects:
- Extension to Potomac Yard
 - 12th Street Complete Street

12th Street Complete Street




- CIP Spend: \$2.2M(FY 2023)
 Comp Plan or Strategic initiative:
- MTP, Crystal City Sector Plan
- Community benefits:
- Provides enhanced streetscape
 - Completes bus-only lanes
- Related Projects:
- Transitway Extension to Pentagon City

Extension to Alexandria




- CIP Spend: \$7.5M (FY 2026)
 Comp Plan or Strategic initiative:
- MTP, Crystal City Sector Plan
- Community benefits:
- Adds a dedicated southbound transit lane to connect with Alexandria, as well as bicycle and pedestrian improvements
- Related Projects:
- Extension to Pentagon City

Metrorail Station Expansion Projects

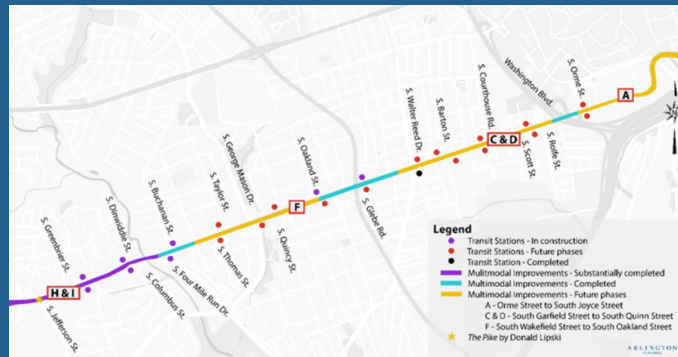
 Transportation			
<i>Project Name</i>	<i>CIP Spend / Expected Completion</i>	<i>Comp Plan or Strategic Initiative</i>	<i>Project Description</i>
Ballston-MU Metrorail Station West Entrance	\$147.5 million FY 2027	Ballston Sector Plan Transit Development Plan	Construction of full second (west) entrance to metro station, improving safety and accessibility, as well as pedestrian connection from points west
Crystal City Metrorail Station East Entrance	\$91.4 million FY 2025 / 26	Crystal City Sector Plan (2010) Transit Development Plan	Construction of full second (east) entrance to metro station, improving safety, accessibility, and connectivity to VRE station
Court House Metrorail Station New Elevators	\$29.1 million FY 2029	Courthouse Sector Plan Transit Development Plan	Construct two high-speed elevators to provide enhanced accessibility
East Falls Church Metrorail Station Second Entrance	\$0.8 million post-CIP	East Falls Church Area Plan Transit Development Plan	Planning/scoping funding for full second (west) entrance to metro station

BIKEArlington / WALKArlington Programs

 Transportation			
<i>Project Name</i>	<i>CIP Spend, Expected Completion</i>	<i>Comp Plan or Strategic Initiative</i>	<i>Project Description</i>
ANC Wall Trail	\$24.3 million FY 2027	MTP Bicycle Element	Design and construct new multi-use trail to connect Memorial Avenue to Columbia Pike at Joyce Street
Arlington Boulevard Trail - multiple phases	\$3.5 million FY 2025-2029	MTP Bicycle Element	Edison Street to Granada Street and George Mason Drive to Edison Street
Capital Bikeshare	\$8.9 million ongoing	MTP Bicycle Element	Expansion of the CaBi in Arlington, purchase new and replacement of additional bikes, e-bikes, and stations
Countywide Pedestrian Spot Improvements	\$4.4 million ongoing	MTP Pedestrian Element Vision Zero Action Plan	Enhance safety and accessibility at locations within existing street system, in partnership with Vision Zero
Lorcom Lane Sidewalk	\$1.3 million FY 2024	MTP Pedestrian Element	Build out existing interim pedestrian path between North Oakland Street and North Quebec Street
Studies – various locations	\$1.2 million ongoing	MTP Bicycle Element	Arlington Blvd. Trail, Jackson to George Mason (now) W&OD Trail Gap at East Falls Church Metro (FY 2023) Custis Trail Renovation and Expansion (FY 2025)

Columbia Pike Improvements

Columbia Pike Multimodal Streets



CIP Spend: \$108.6M (FY 2026)

Comp Plan or Strategic initiative:

- Columbia Pike Multimodal Transportation Study

Community benefits:

- Improved transportation accessibility pedestrians, cyclists, transit users, motorists

Related Projects:

- Columbia Pike Transit Stations

Columbia Pike Transit Stations



CIP Spend: \$8M (FY 2026)

Comp Plan or Strategic initiative:

- Transit Development Plan

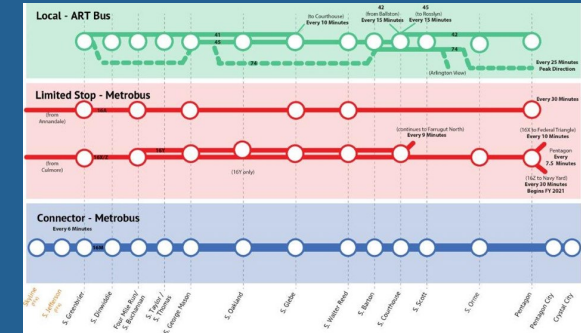
Community benefits:

- Real-time information, near-level boarding, expanded seating and improved lighting

Related Projects:

- Columbia Pike Multimodal

Columbia Pike Service Enhancements



CIP Spend: \$14.5M

Comp Plan or Strategic initiative:

- Transit Development Plan

Community benefits:

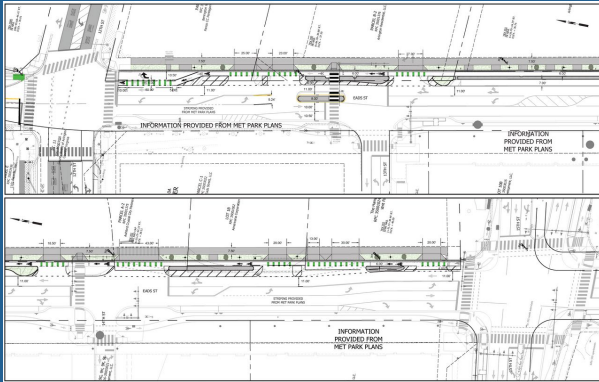
- High-frequency service
- One-seat ride from Skyline to Crystal City

Related Projects:

- Columbia Pike Transit Stations
- Transit signal priority

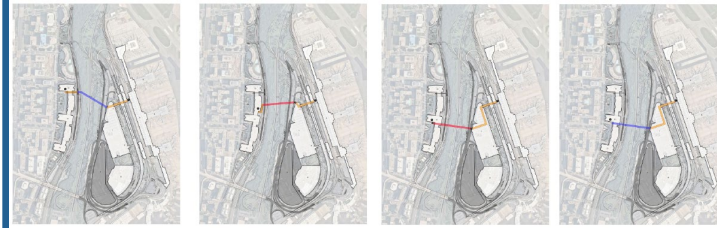
Crystal City / Pentagon City Streets

Eads Street Bicycle Improvements



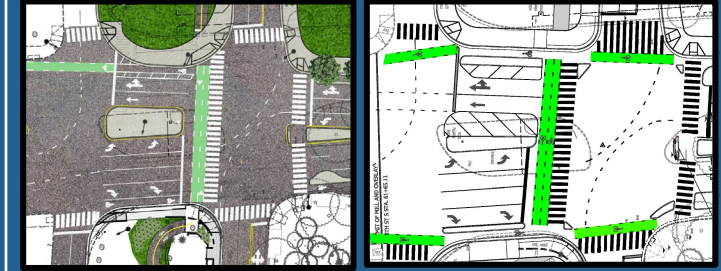
- CIP Spend: \$6.8M (FY 2023-25)
 Comp Plan or Strategic initiative:
- Crystal City Sector Plan (2010)
- Community benefits:
- Improve streetscape on east side of Eads Street, construct protected bike lanes from Army Navy Drive to 15th Street South
- Related Projects:
- Army Navy Drive Complete Street

CC2DCA Multimodal Connection




- CIP Spend: \$34.3M (FY 2028)
 Comp Plan or Strategic initiative:
- Crystal City Sector Plan (2010)
- Community benefits:
- Provides direct pedestrian and bicycle access to DCA
 - Adds a connection to the Mt. Vernon Trail
- Related Projects:
- Crystal City VRE Station (VRE)

15th South & South Clark/Bell St



- CIP Spend: \$11.8M (FY 2025)
 Comp Plan or Strategic initiative:
- Crystal City Sector Plan (2010)
- Community benefits:
- Adds dedicated bicycle facilities
 - Constructs multi-use trail between 12th and 18th Streets South
- Related Projects:
- 15th Street Park (DPR)

Improvements Outside Major Corridors

 Transportation			
<i>Project Name</i>	<i>CIP Spend / Expected Completion</i>	<i>Comp Plan or Strategic Initiative</i>	<i>Project Description</i>
Arlington Blvd/ Washington Blvd	\$10.4 million FY 2025-2028	Master Transportation Plan Vision Zero Action Plan	Improve safety for all modes at one of highest crash locations in County; state-funding anticipated
Four Mile Run Valley Corridor Improvements	\$9.6 million FY 2028	4MRV Area Plan, Nauck Village Center Action Plan (2004)	Build out improvements on FMR Drive, implement pedestrian and bicycle improvements on Shirlington Road
Military Road at Nellie Custis Drive	\$1.1 million FY 2025	Master Transportation Plan Vision Zero Action Plan	Install roundabout or traffic signal at intersection to improve safety
North Sycamore Street Improvements	\$5.7 million FY 2025	East Falls Church Area Plan	Enhance sidewalks, crossings, bicycle facilities, and streetscape from Langston to 19 th Street
Pershing Drive Improvements	\$7 million FY 2026-2027	Master Transportation Plan	Various intersection improvements from Barton Street to Nelson Street
Walter Reed Drive – 6 th Street to Columbia Pike	\$4.9 million FY 2024	Master Transportation Plan	Improve pedestrian crossings, bike lanes, and bus stops; add new traffic signal at 9 th Street
West Glebe / South Glebe Intersection	\$4.2 million FY 2025	Vision Zero Action Plan	Reconfigure intersection to improve safety for all modes
Studies – various locations	\$1.6 million ongoing	Master Transportation Plan Vision Zero Action Plan	South George Mason Drive Study (now) FMR Trail over/underpass of Shirlington Road (FY 2023) Carlin Springs Road Corridor Study/Connections (FY 2024)

Neighborhood Complete Streets

13th Street South



CIP Spend: N/A

Comp Plan or Strategic initiative:

- NCS Program ranking guidelines

Community benefits:

- Constructs ADA-compliant sidewalk between South Walter Reed Drive to South Highland Street

Related Projects:

- NCS Program

South Irving Street Sidewalk



CIP Spend: \$666,000 (FY 2024)

Comp Plan or Strategic initiative:

- NCS Program ranking guidelines

Community benefits:

- Construct one block of missing sidewalk on South Irving Street between 6th and 7th Streets South

Related Projects:

- NCS Program

North Fairfax Drive



CIP Spend: \$90,000 (FY 2023)

Comp Plan or Strategic initiative:

- NCS Program ranking guidelines


Community benefits:

- Constructs improved transit stops, mid-block pedestrian crossing improvements, and add new bicycle racks

Related Projects:

- NCS Program

Rosslyn-Ballston Arterial Improvements

 Transportation			
<i>Project Name</i>	<i>CIP Spend / Expected Completion</i>	<i>Comp Plan or Strategic Initiative</i>	<i>Project Description</i>
Fairfax / Kirkwood Intersection	\$4.6 million FY 2025	Clarendon Sector Plan (2022) Vision Zero Action Plan	Improve intersection geometry, improve pedestrian refuges, add bicycle lanes, upgrade traffic signals
Wilson Blvd. from 10 th Street / Kenmore	\$9.7 million FY 2027	Virginia Square Sector Plan (2002)	Wider sidewalks, new crosswalks, streetlights, upgrade traffic signals, stormwater upgrades, and new street trees
Fort Myer Drive Tunnel Removal	\$43.0 million FY 2030	Rosslyn Sector Plan (2015) Core of Rosslyn Study	Remove grade-separation, convert to two-way operations, with wider streetscape and cycle track
Rosslyn Multimodal Street Improvements	\$22.8 million FY 2029-2030	Rosslyn Sector Plan (2015) Core of Rosslyn Study	Various streetscape, sidewalk, and bicycle improvements to support implementation of Fort Myer Drive transformation
Study: Fairfax Drive / 10 th Street Corridor	\$515,000 FY 2024	Vision Zero Action Plan	Establish a multimodal vision for the County-owned section of VA Route 237

Street Safety Improvements - Vision Zero

System Studies / Improvements



CIP Spend: \$5 million

Comp Plan or Strategic initiative:

- Vision Zero Action Plan

Community benefits:

- Systemwide and non-arterial safety improvements and modifications
- May test temporary treatments

Related Projects:

- Vision Zero Pilot Projects

Arterial Studies / Improvements



CIP Spend: \$4.9 million

Comp Plan or Strategic initiative:

- Vision Zero Action Plan

Community benefits:

- Supports safety initiatives at intersections and along arterials identified through crash analysis

Related Projects:

- Vision Zero Pilot Projects
- Complete Streets Program

Capital Program Funding



CIP Spend: \$5.4 million

Comp Plan or Strategic initiative:

- Vision Zero Action Plan


Community benefits:

- Funding to seed future capital projects identified by data-driven safety studies

Related Projects:

- Complete Streets Program






Additional Complete Streets Projects

 Transportation			
<i>Project Name</i>	<i>CIP Spend / Expected Completion</i>	<i>Comp Plan or Strategic Initiative</i>	<i>Project Description</i>
Army Navy Country Club Trail	\$4.9 million FY 2026	MTP Bicycle Element	New multi-use trail connecting Arlington View to Army Navy Drive; May 2022 engagement on options; will not provide emergency access
Army Navy Drive Complete Street	\$14.4 million FY 2026	Master Transportation Plan	Rebuilds Army Navy Drive as a multimodal complete street featuring dedicated two-way bicycle facility; enhanced transit and pedestrian facilities; and street trees
Boundary Channel Drive Interchange	\$3.1 million FY 2024	Master Transportation Plan	Improves safety for all users, addressing weaving movement on I-395; adds multi-use trail and connection to Mt. Vernon Trail; VDOT implementing as design-build
Langston Boulevard Multimodal Improvements	\$22.3 million TBD	Plan Langston Boulevard Initiative (not yet complete)	Placeholder program until specific locations for future multimodal improvements are identified

Additional Projects / Programs



Transportation

Project Name	CIP Spend	Project Description
 <p>Bus Stops and Bus Shelters</p>	\$13.5 million	<ul style="list-style-type: none"> • 1,011 bus stops and 315 bus shelters; shelters have 15-year useful life • 5-10 shelters currently replaced each year under the Bus Stop program • Bus Stop Accessibility program retrofits existing bus stops to be ADA-compliant; about 50% compliant currently
 <p>Intelligent Transportation Systems</p>	\$23.9 million	<ul style="list-style-type: none"> • Leverages technology to improve efficiency of transportation operations • Technology at signals, as well as standalone installations (beacons, sensors)
 <p>Parking Meters and Parking Technology</p>	\$12.2 million	<ul style="list-style-type: none"> • 1,442 parking meters, including 724 multi-space and 718 single-space meters • 10-year useful life, component replacement used as cost-saving alternative
 <p>Streetlights</p>	\$20.1 million	<ul style="list-style-type: none"> • About 7,800 county-owned and 11,000 owned by Dominion Energy (DE) • Replacements done when problems are identified with infrastructure • Conversion to LED technology underway for DE-owned; older generation LEDs being upgraded for further energy savings and to reduce glare
 <p>Traffic Signals</p>	\$36.1 million	<ul style="list-style-type: none"> • 25 to 35-year useful life but repairs can extend life • About 8 signal rebuilds undertaken each year under the Signals program • Additional rebuilds done as part of Complete Streets or third-party projects

Transportation System Snapshot

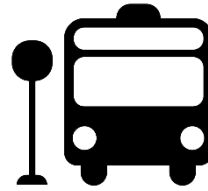
Numbers in green indicate change vs. prior year



1,060 Lane-miles of County maintained and managed roads



11 Metrorail stations



78 ART buses
>1,000 Bus stops
>200 Bus shelters
1 Transitway
1 Bus station
1 Multimodal center



36 County-maintained vehicular and pedestrian bridges



104 (+5) Capital Bikeshare stations
825 (+25) Bicycles
 Micro-mobility
(2,000 scooters*
325 eBikes*)

724 (+8) Multi-space parking meters
297 (+15) CCTV cameras
718 (+1) Single space meters
36 (+10) Permanent traffic count stations
298 Signalized intersections
1 Virginia Railway Express station

173 (+41) Uninterruptible power supply units
82 (+52) Pedestrian flashing beacons
31 (+4) Speed indicator signs
7,840 (+40) County-owned streetlights
8 Variable message signs
50,338 (+5,638) Street signs
109 (+12) School zone flashers

Transportation Capital Maintenance

Bridge Maintenance



- CIP Spend: \$15.8M
- 36 county-maintained bridges
- Average age of 48 years vs. life expectancy of 75 years with proper maintenance
- Inspected biennially
- Bridge elements rated on a scale of 0 to 9; county's goal is between 6 and 7 ("Satisfactory" to "Good")
- Average rating currently 6.3; will increase to 6.5 following replacement of West Glebe and Arlington Ridge Road / Mount Vernon bridges

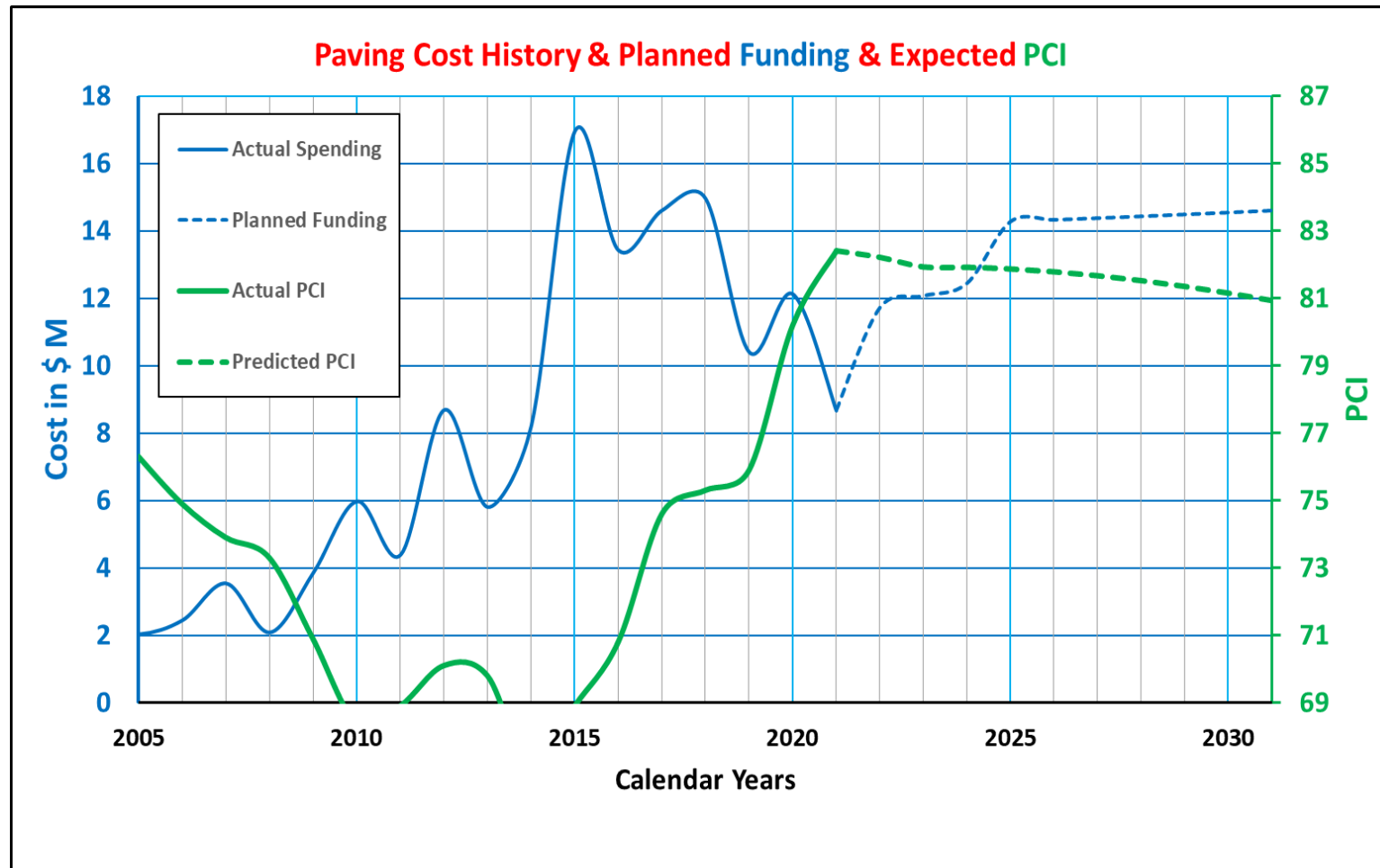
New!

Sidewalks, Curb, Gutter Proactive Zone Maintenance



- CIP Spend: \$11.6M
 - First two years funded through reallocations.
 - \$300k in general fund budget reallocated ongoing
- Funds proactive maintenance of county-maintained curb, gutter, and sidewalks
- Informed by 2022 Sidewalk Survey
- Funding to cover "Tripping Hazard Blitz" in FY 2023.
- Zone maintenance in FY 2024 onward with 10-year maintenance interval
 - 20 total zones, addresses 2 per year
- Will pursue low carbon concrete pilot installations
- Request for a Construction Management position

Paving: Funding and Pavement Condition Index (PCI)



- 1,060 lane miles of county-maintained roads
- About 75 lane miles repaved each year
- PCI measured annually
 - County's goal is between 75 and 80 ("Good")
 - CY 2021 PCI 82.4
- PCI remains above 80 but trend deteriorates; continued flattening of spend may put pressure on PCI
- Resident satisfaction in maintenance of County streets has increased by **17%** since 2018

Summary and Conclusion

- Pressures and constraints
 - Ensuring policy is keeping up with best practice and community values
 - Develop process to identify projects for capital pipeline that balance multiple priorities: biophilia, Community Energy Plan, equity, modal balance, and safety
- Project implementation challenges/risks
 - Evolving supply chain issues and cost of materials
 - Staff/agency capacity throughout project process and impacts to project schedules
- Long-term considerations
 - Mobility Hub Pilot and attention to evolving technology
 - Transit Strategic Plan New Initiatives, outcome of Transit Strategic Plan to be completed end of FY 2023
 - Future planning and study efforts to ensure resources are directed to locations most in need of redesign



Proposed Capital Improvement Plan FY 2023 – FY 2032 CIP

- Submission of a 10-Year Plan for Transportation